

Chapter 5

Alternatives

Introduction

This chapter presents a variety of alternatives for Howard County and RTA to consider when planning for the next five-years of public transit service. While some of the alternatives were generated through Howard County and RTA's ongoing strategic planning efforts, most were developed to address transportation needs that were identified through the TDP's planning process.

The TDP alternatives presented in this chapter were based on input collected through rider surveys, community surveys, online surveys, public meetings, Anne Arundel, Howard, Prince George's Counties, and the City of Laurel staff, and stakeholders representing local agencies and advocacy groups.

Review of the 2018 TDP's Proposed Alternatives

Review of Service Proposals

In the 2018 Central Maryland TDP, 14 service alternatives were proposed for Howard County routes (400 series). Seven of these alternatives were changes in the current routing or service characteristics while seven were new routes. Two of the new proposed routes, Route 403 and 505 (Columbia to Catonsville) were implemented.

For Prince George's County routes (300 series), there were two proposed service alternatives that included modifications to the current routes. While they were not implemented, other modifications were made to serve the residents of Laurel.

Regional routes (500 series) that cover parts of Anne Arundel or Prince George's Counties, modifications were fully or partially made to the current routing for three routes. These modifications include no longer serving BWI Airport. A proposed new route to serve BWI Airport from Columbia Mall was also not implemented. However, the new RTA Route 505 (Ellicott City to Catonsville) was implemented in July 2023.

The 2018 TDP also contained modifications for Anne Arundel County routes, including proposed fixed-route and demand response service alternatives, which at the time were operated by RTA of Central Maryland. Since then, Anne Arundel County's Office of Transportation has expanded its services to incorporate previous RTA routes and other fixed-route and demand response expansions. As a result, this section will not cover the previously proposed alternatives for Anne Arundel County.

Table 5-1: Status of Previous Alternatives

Prince George's County Routes (300 series)		
Route or Service	Alternative Type	Current Status
Route 301 – Town Centre Laurel to Konterra and Maryland City	Route modification	Route extension to Konterra and Maryland City not implemented. However, route modified to serve Laurel Municipal Center, Main St and Baltimore Ave. Route still serves South Laurel.
Route 302 – Town Centre Laurel to College Park Metro Station	Route modification	Route extension to Konterra not implemented. Route no longer serves College Park, but still serves Greenbelt five days a week.
Howard County Routes (400 series)		
Route or Service	Alternative Type	Current Status
Route 401 – Columbia Mall to Clary's Forest	More frequency Extended hours	30 min. headways for Saturday AM/PM Peak and midday runs. No changes to service hours but Sunday hours slightly reduced.
Route 402 – Ellicott City to Snowden Square	New route	Not implemented. Stops proposed include Walmart in Ellicott City, Long Gate, Columbia Crossing, Dobbin Center, Snowden Square.
Route 403 – Columbia Mall to Red Branch Way	New route	Implemented, renamed Route 403 Executive Park Dr.
Route 404 – Columbia Mall to Hickory Ridge	Route modifications Extended hours	Route no longer serves Kings Contrivance, but still serves the hospital. Service hours were reduced on weekdays, Saturdays and Sundays.
Route 405 – Columbia Mall to Ellicott City	Route modifications Add Sunday service Modified hours	Route no longer serves Dorsey's Search Village Center, Selborne House, Executive Park Dr or Red Branch Way, and is now a more direct connection to Ellicott City. Added Sunday service and modified evening service to serve Columbia Mall & Ellicott City.

Howard County Routes (400 series) Continued		
Route or Service	Alternative Type	Current Status
Route 406 – Columbia Mall to Gateway	Route modifications Modified service hours Saturday service	Route no longer serves Little Patuxent Pkwy, Long Reach Village, Columbia Crossing & Snowden Square. Now, the route runs on Broken Land Pkwy through Owen Brown Village before serving Snowden Square & the County Complex. Service modified to begin & end at Snowden Square. No Saturday service.
Route 407 – Columbia Mall to Kings Contrivance	More service frequency Extended service hours	No change to weekday or Saturday frequency, but improved Sunday morning headways to 60 min. No change to weekend service hours but first run begins at Owen Brown Village Center and ends there. Second run and second-to-last run begins at Kings Contrivance Village Center and ends there.
Route 408 – Columbia Mall to Sherwood Crossing	Route modifications Extended service hours Sunday service	Current route does not follow exact proposed alignment, but no longer serves Oakland Mills Village Center, instead it runs down Rouse Pkwy, goes up Phelps Luck Dr, goes down High Tor Hill, and serves Dobbin Center and Snowden Square with Waterloo Park (Sherwood) as the final destination. Weekday and Saturday service hours were not extended but the first run begins at Tamar Dr / Cloudleap Ct ends there at the last run. Implemented Sunday service.
Route 409 – Town Centre Laurel to Elkridge Corners	Route modifications More frequency	Combine Routes 409A and 409B to make Route 409. Improved headways to 60 min. on weekday and Saturday evenings for the whole route.
Route 410 – Columbia Mall and Long Reach Village Center	New route	Not implemented. Stops proposed include Columbia Medical Plan and Long Reach Village Center. However, Columbia Mall to Long Reach is now served by Route 408. An extension to Elkridge was also not implemented.
Route 411 – Columbia Mall and King's Contrivance	New route	Not implemented (provides more direct connection to Columbia Mall compared to 407). Stops proposed include Kings Contrivance Village Center.
Route 412 – Columbia Mall to Clarksville	New route	Not implemented. Stops proposed include River Hill Village Center, and Howard County Board of Education. Would return route that previously existed.

Howard County Routes (400 series) Continued		
Route or Service	Alternative Type	Current Status
Route 413 – Columbia Mall to Turf Valley / Wavery Woods	New route	Not implemented. Stops proposed include Turf Valley Village Center, Waverly Woods Village Center, US 40 (Goodwill) and Centennial High School. Turf Valley was cited as a residential employment growth area.
Route 414 – Columbia Mall and Cedar Lane School	New route	Not implemented. Stops proposed include Advance Physics Lab (APL), one of the county's largest employers, Maple Lawn Village Center and Cedar Lane School. APL mentioned interest in transit alternatives during TDP meetings including a connection to the MARC station in Laurel. Maple Lawn was described as a mixed-use community close to buildout and includes a substantial higher density residential population.
Regional Routes (500 series)		
Route or Service	Alternative Type	Current Status
Route 501 – Columbia to Arundel Mills	Route modifications	Route alignment modification implemented, no longer serves Owen Brown Village Center or BWI Airport. Hours are mostly the same, but Sunday hours were slightly reduced, beginning one hour later. The first run begins at Arundel Mills and the last run ends there too. No changes to headways.
	Extended service hours	
	More frequency	
Route 502 – Town Centre to BWI Airport	Route modifications	Partially implemented, the route does not serve BWI Airport anymore, ending at Arundel Mills, but still serves National Business Pkwy, modified service to Russett Green on weekdays. Route was proposed by PG county staff to serve Fort Meade, which did not happen as service is contingent on bus accessing the base with general public riders onboard.
Route 503 – Columbia Mall to Town Centre Laurel	Route modifications	Partially implemented, the route does not serve Park View at Owen Brown Village Center anymore, continues to serve Cherry Ln and Ashford Blvd in Laurel.
Route 504 – Savage MARC to Crofton Village	Route modifications	Implemented in October 2017 during the TDP study, route would serve Odenton but not Crofton. However, the route was cancelled.

Regional Routes (500 series) Continued

Route or Service	Alternative Type	Current Status
Route 505 – Columbia Mall to BWI Airport	New route	Not implemented. Riders who want to reach BWI Airport can transfer to free County Connector shuttle at Arundel Mills.
Ellicott City to Catonsville	New route	Implemented as Route 505 from Columbia Mall to Ellicott City and Catonsville Walmart.
Demand response		
Service Type	Alternative Type	Current Status
General Paratransit (GPT)	Fare adjustments	One-way ADA fares increased from \$2.50 to \$4.00, while GPT fares increased from \$2.50 to \$5.00 in Howard County; however, paratransit in Anne Arundel is now free for county residents.
	Better fixed routes	
	Service adjustments	Overall, there were some adjustments and improvements to the RTA fixed route system, but many proposed alternatives such as route extensions and expanded service hours were not implemented.
	Other	

Other Considerations from the 2018 TDP

The 2018 TDP described a phased implementation plan for each county jurisdiction that is part of RTA. Phase I was a comprehensive restructuring of the routes, with a goal of shortening routes and increasing frequencies, largely by having multiple routes serve many of the same stops which would increase transfer opportunities. Meanwhile, Phase II would expand service hours and add more routes, which would depend on local needs and funding.

While some routes were restructured and increased by frequency, service hours were generally reduced due to the Covid-19 Pandemic and the establishment of Anne Arundel County Transit which took over services previously operated by RTA. Frequency / headway improvements were made to several routes including Routes 401 (Clary's Forest), 407 (King's Contrivance) and 409 (Elkridge – Laurel). As mentioned, service hours were partially reduced instead of expanding, such as for the 401 and 404 (Hickory Ridge). However, some routes added Sunday service, including the 405 (Ellicott City) and 408 (Sherwood Crossing / Waterloo Park). A few routes were modified or shortened such as the 302 (Laurel – Greenbelt), 403 (Executive Park Dr), 404, 405, 406 (Gateway), and 408. For example, Route 302 no longer serves College Park, but has maintained service to Greenbelt five days a week. Route 404 is no longer served by Kings Contrivance; however, it is still served by Route 407. Proposed route 411 would have provided a more direct connection from King's Contrivance to Columbia Mall, however it was not implemented.

Of the nine new proposed routes in 2018, one has been implemented (Route 403 - Executive Park Dr) while another (Route 405 (implemented as 505) - Catonsville) was implemented in July 2023. Proposed routes or route extensions that have not been implemented include new service for Ellicott City, Clarksville, Kings Contrivance, Maple Lawn, West Laurel / Konterra, Maryland City, and BWI Airport.

Several alternative options for General Paratransit (GPT) in Howard County were provided in addition to fare increases and changes to the fixed route system to incentivize paratransit riders to use fixed route service and to limit rides on GPT. GPT service now starts an hour later, from 9am – 5pm.

Other GPT alternative options included the following options, which were not implemented:

- Providing travel training on how to use the fixed route system.
- Limiting the number of trips per month (trips are still limited to one per day).
- Limiting service in western Howard County, southern Anne Arundel.
- Redirecting some trip types if fixed route is available.
- Using taxi vouchers / subsidies in lieu of providing RTA trips.

Summary of Issues and Opportunities

- Fixed route coverage is very good, serving most areas with high density and for areas of high need.
- Direct (single-seat) cross-county connections between Howard and Anne Arundel County have been reduced since the last TDP. While Anne Arundel County Office of Transportation provides some fixed route service in northwest Anne Arundel County, Howard County residents traveling to Severn or Fort Meade must wait for a transfer at Arundel Mills.
- Areas of high transit need with limited RTA service include Greenbelt, Beltsville and South Laurel in Prince George's County; and Ellicott City and Hickory Ridge (Columbia) in Howard County.
- Due to the pandemic, route ridership has dropped significantly since FY2018 and FY2022. The 401 Clary's Forest route transported 10 passengers per hour, which was the most among all routes. However, this is still about a 50% decrease in passengers since 2018. Many routes centered around job centers remain low in ridership since the onset of the COVID-19 pandemic, and are among the lowest performing routes, such as Route 406 (Columbia Gateway) and Route 402 (Dobbin Center).
- Most RTA routes do not meet any current MTA Performance Standards (**last updated in 2017**). An exception was Route 502 (Laurel – Arundel Mills), which met performance standards with a cost per trip of \$3.71 but did not meet performance standards for ridership or farebox recovery.
- On-time performance varies greatly between the routes; for example, Route 401 has an 81% on-time performance rate while Route 409 has the lowest at 51%. While overall performance exceeds its regional peers, on-time performance must remain a priority to increase public confidence in the system and boost ridership.
- A majority of RTA fixed-route rider comments dealt with reliability (on-time performance), while other top categories involved requests for more schedule frequency, and more weekend service.
- Community members (not necessarily current riders) cited lack of connections to other transit systems such as WMATA and MTA, and low frequency, as the main hurdles keeping them from riding transit.
- The general public, riders and RTA stakeholders all mentioned a few destinations consistently as places they would like to see served by RTA. The top unserved destination mentioned was BWI Airport. Maple Lawn, Scaggsville, and Clarksville were also mentioned frequently.
- RTA Mobility customers were most satisfied with the courtesy or friendliness of the drivers and were most dissatisfied with Sunday service hours.

Issues identified with specific routes include:

Route 301: Laurel Town Centre – South Laurel

- Low ridership outside of Town Centre.
- Bus arrives 5-10 min. late 22% of the time, which exceeds the average.

Route 302*: Laurel Town Centre – Greenbelt Metro Station

- Low ridership between Greenbelt and Beltsville.
- Most ridership concentrated at Greenbelt and Laurel Town Centre.
- Bus arrives > 10 min. late 9% of the time.
- **This route was modified in November 2022.*

Route 401: Mall in Columbia – Clary's Forest (Howard County Hospital)

- Lower ridership along Hickory Ridge Rd.

Route 402: Mall in Columbia – Dobbin Center

- Low ridership including at the mall.
- Activity centers such as Dobbin Center have dropped significantly in ridership and do not attract high numbers of riders.
- Below-average on-time performance rate.

Route 403: Mall in Columbia – Executive Park Dr

- Below average ridership and on-time performance.
- No activity or stops on segment between Selborne House and Columbia 100 Pkwy.

Route 404: Mall in Columbia – Hickory Ridge

- Low activity along Sunny Spring Rd. and Quarterstaff Rd.
- Below average ridership and farebox recovery.
- Bus is late by 5-10 min. 25% of the time.
- Trip generators at the end of the route do generate moderate ridership (The Giant, Atholton High School), but most trips are taken along Little Patuxent Pkwy between Campus Dr and the mall.

Route 405*: Mall in Columbia – Ellicott City

- Long route and span of service.
- Second lowest boardings per service hour.
- Second-highest operating cost per trip among all routes.
- Stops throughout Ellicott City are low and dispersed evenly outside of the Walmart.
- **This route was modified July 2023.*

Route 406: Mall in Columbia – Columbia Gateway

- Very low ridership due to the closure of Howard County offices, including some social services that were previously located here.
- Highest operating cost per trip among all routes.
- Limited activity throughout the route including the county complex and Columbia Mall.

Route 407: Mall in Columbia – Kings Contrivance

- Many stops with high activity. on-time performance is above average, Route 408: Mall in Columbia – Lark Brown / Waterloo.
- Low ridership at end of route near Waterloo Park and at Phelps Luck Dr.
- Strong ridership but average farebox recovery and operating cost.

Route 409: Mall in Columbia – Elkridge Corners

- Long route with many stops.
- Below average farebox recovery and low ridership in Elkridge.
- No Sunday service.

Route 501: Mall in Columbia – Arundel Mills Mall

- Low activity along stretches such as between Columbia Mall and Dobbin Center. Most activity concentrated at key stops.
- Bus arrives late by 1-10 min (30%) more than average, which could affect the ability for riders to transfer to other routes on time.

Route 502: Town Centre Laurel – Arundel Mills Mall

- Low activity along Fort Meade Rd. between Walmart and Arundel Mills Mall.
- On-time performance is average; Route 503: Town Centre Laurel – Mall in Columbia.
- Very long cycle time (180 minutes).
- On-time performance is average.

Route 503: Town Centre Laurel – Mall in Columbia

- Long cycle time.
- Long route with many stops.
- High stop activity on both ends of the route.
- Second highest ridership among all routes but exhibits average farebox recovery.

Route 505: Columbia / Catonsville

- New route, launched in July 2023.
- Well received in the community.
- Performance review should be conducted following 12 months of service.

Service Alternatives

Service alternative options including new routes and increasing frequency of service are summarized in the section below. Analyses will include the following regions or categories, which have been identified as areas that currently have high interest for improved or future transit service or high existing transit ridership. These alternatives also would significantly improve regional connections and provide service to key transfer locations such as Laurel and Arundel Mills. Options selected for inclusion in this TDP are indicated below with a (*) and a timeframe for improvements is provided in Chapter 6.

- **Improved Service to BWI and Regional Transit Services**
 - Option 1: Double Frequency for Route 501
 - Option 2: Extend Route 501 to BWI Train Station/Terminal/Light RailLink*
 - Option 3: Express Service from Columbia to BWI
- **Service between Columbia and Laurel/Greenbelt**
 - Option 1: Double Frequency for Route 503
 - Option 2: Express Service from Columbia to Laurel
 - Option 3: Extend Route 503 from Laurel to Greenbelt
- **Service between Laurel and Bowie**
 - Option: Extend Route 301 to Bowie*
- **Service between Laurel and Elkridge**
 - Option 1: Extend Route 409 to Lansdowne*
 - Option 2: Express Route from Elkridge Corners to Laurel
- **Service between Columbia and Elkridge**
 - Option: New Route to Elkridge*
- **Service between Columbia and Fort Meade / NSA**
 - Option 1: New Route from Columbia to Odenton MARC via Fort Meade
 - Option 2: New Route from Columbia to New NSA Visitors Center at Fort Meade*
 - Option 3: Laurel to Ft. Meade
- **Service to Maple Lawn and John Hopkins Applied Physics Lab**
 - Option: New Route from Columbia to Maple Lawn via John Hopkin's APL*
- **Service between Columbia and Silver Spring (FLASH Extension to Columbia)**
- **Service to Clarksville**
 - Option 1: Phase 1: ARL/Homewood*
 - Option 2: Phase 2: Extension to Clarksville*
- **Expanding Service Frequencies on Key Routes**

Improved Service to BWI and Other Regional Transit Services

The community outreach process identified BWI Airport as the number one desired destination which RTA does not currently serve. In the past, RTA's Route 501 provided direct service to BWI's passenger terminal. Currently, Route 501 provides service to Arundel Mills Mall, where riders must transfer to the County Connector shuttle to reach BWI Airport and other major stops in-between (e.g., BWI Train Station and distribution facilities on Mathison Way). Current on-time performance for Route 501 is below-average, which can lead to longer wait times for transferring customers. Most route activity is also concentrated at key stops, including Snowden Square, Maryland Food Center, stops along Washington Boulevard, and Arundel Mills. The following service alternatives aim to improve current service reliability and performance while also improving access to BWI Airport for RTA customers.

Option 1: Double Frequency on Route 501

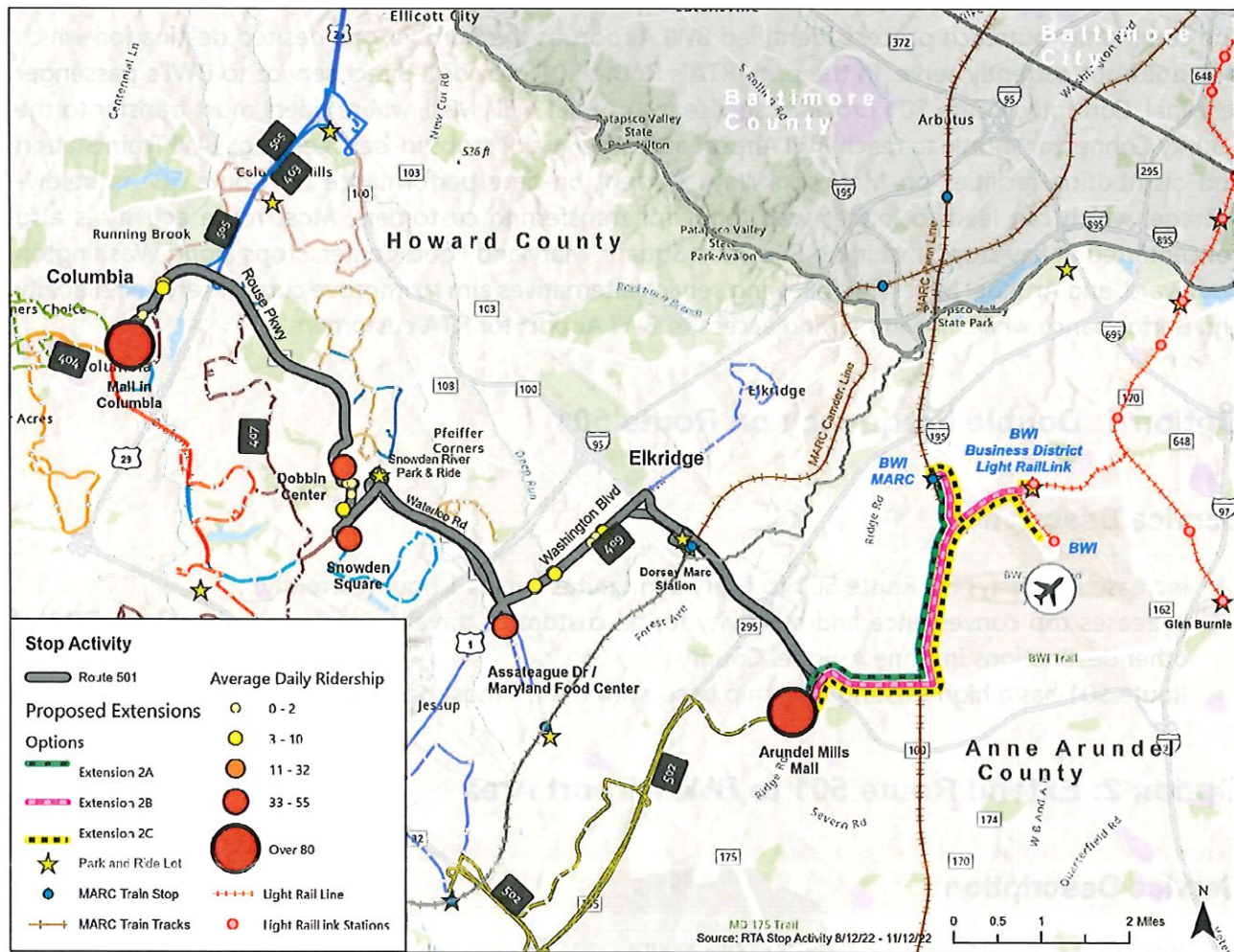
Service Description

- Increase headways for Route 501 to every 30 minutes versus 1 hour (currently).
- Increases trip convenience and reliability for all customers traveling to/from Columbia to BWI or other destinations in Anne Arundel County.
- Route 501 has a high existing ridership base, with the 2nd most passengers / service hours

Option 2: Extend Route 501 to BWI Airport Area

Service Description

- Extends Route 501 beyond Arundel Mills Mall to the BWI Airport area.
- Option 2A: Extend Route 501 to BWI Train Station
 - Offers an improved connection to BWI (via BWI Courtesy Shuttles) without directly serving the congested passenger terminal.
 - BWI's Amtrak/MARC Courtesy Shuttle operates 24/7 on an approximate 10 to 15 minute frequency – providing more opportunities for connections.
- Option 2B: Extend Route 501 to BWI Business District Light RailLink
 - Provides an improved connection to BWI and Baltimore (via Light RailLink) without directly serving the congested passenger terminal.
 - Routing provides the option to serve BWI Train Station.
- Option 2C: Extend Route 501 to BWI Passenger Terminal
 - Most direct connection to BWI Airport for RTA customers.
 - Concerns regarding congestion in the terminal area and potential for schedule delays.
 - Routing provides an option to serve BWI Train Station and BWI Business District Light RailLink

Figure 5-1: Route 501 Extension to BWI MARC (Option #2)

Option 3: New Express Route from Columbia to BWI Airport

Service Description

- This is a new proposed route. The bus would travel along Maryland State Rt 100 and stop at Long Gate Shopping Center, Dorsey MARC, Arundel Mills Mall, and BWI.
- A one-way trip from Columbia Mall to BWI trip is about 31-36 min compared to 20 min. (no traffic) for driving.

Table 5-2: Proposed Service Characteristics for Alternatives from Columbia to BWI

Alternatives	Service Periods	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Ridership	Estimated Operating Cost
Option #1: Double Frequency on Route 501									
Current Service (60 min. frequency)	Monday - Friday	2	6:00am	10:00pm	34	528	6,630	74,224	\$1,215,047
	Saturday	2	7:00am	9:00pm	30	466	1,248		
	Sunday	2	9:00am	7:00pm	21	327	780		
Doubled 30 Minute Frequency	Monday - Friday	4	6:00am	10:00pm	66	1,025	12,750	118,758	\$2,430,094
	Saturday	4	7:00am	9:00pm	58	901	2,236		
	Sunday	4	9:00am	7:00pm	42	653	1,508		
Weekday Peak Hour 30 Minute Frequency	Monday - Friday	4	6:00am	10:00am	50	777	9,690	84,615	\$1,359,895
	Monday - Friday	2	10:00am	2:00pm					
	Monday - Friday	4	2:00pm	6:00pm					
	Monday - Friday	2	6:00pm	10:00pm					
Option #2: Extend Route 501 to BWI Airport Area									
Option #2A: BWI Train Station	Monday - Friday	3	6:00am	10:00pm	34	655	8,160	79,420	\$1,488,165
	Saturday	3	7:00am	9:00pm	30	578	1,456		
	Sunday	3	9:00am	7:00pm	22	424	988		
Option #2B: BWI Bus. Dist. Light RailLink	Monday - Friday	3	6:00am	10:00pm	34	670	8,415	80,162	\$1,523,952
	Saturday	3	7:00am	9:00pm	30	591	1,456		
	Sunday	3	9:00am	7:00pm	22	433	988		
Option #2C: BWI Passenger Terminal	Monday - Friday	3	6:00am	10:00pm	34	682	8,415	80,904	\$1,531,250
	Saturday	3	7:00am	9:00pm	30	602	1,508		
	Sunday	3	9:00am	7:00pm	22	442	988		
Option #3: New Express Route to BWI Airport									
Weekday Peak Hour Express Service	Monday - Friday	3	6:00am	10:00pm	9	199	3,570	22,267	\$1,002,028
	Monday - Friday	3	2:00pm	6:00pm	9	199	3,570		

Service Alternatives from Columbia to Laurel / Greenbelt

Currently RTA provides service between Columbia to Laurel via Route 503. While Route 503 has the second-highest ridership among all routes, it has just average on-time performance and farebox recovery. Route reliability and ridership could be increased by considering alternatives that serve in place of the existing route or in addition to it. These alternatives would help decrease trip time and meet the demand of Howard County riders trying to reach Laurel or Greenbelt Metro Station.

Option 1: Double Frequency for Route 503

- Increase headways for current Route 503 to every 30 minutes vs. 1 hour (currently).
- Increase trip convenience and reliability along only north-south route from Columbia to Laurel while maintaining coverage.

Option 2: New Express Service from Columbia to Laurel

- This is a proposed route that is a modified version of Route 503, "503B," decreasing the overall trip length between Columbia and Laurel by removing the stops along Cradlerock Way including Owen Brown Village Center (10-minute walk to Broken Land Parkway), and serving stops between Route 1 between Savage and Laurel instead of stops between Savage and North Laurel.
- The route also stops at Broken Land Park and Ride (East Lot) and on Guilford Rd, connecting to Kings Contrivance Village.
- The original route length of 25 miles roundtrip is reduced by 13 miles, which reduces a one-way trip time by potentially 20 minutes, compared to the previous 70-minute trip.

Option 3: Extend Express Route Service to Greenbelt

- This is a similar route to Option 2 but extends service further south to Greenbelt.
- (Proposed) Stops would be limited to higher activity stops; which are generally those that served more than 3 riders per day (200 riders over 3 months) in 2022.
- There are just seven stops along the current Route 503 which on average serve more than 6 riders per day, including Mall in Columbia, Owen Brown Village Center, the Community Resources Campus / Board of Elections, North Laurel Community Center, and three stops near Laurel Town Centre.
- The route would significantly reduce the total time spent for riders traveling between Columbia and Greenbelt.

Options 2 and 3 are displayed in **Figure 5-2**, along with the existing RTA network.

Figure 5-2: Peak Express Route Columbia – Laurel (Option 2)

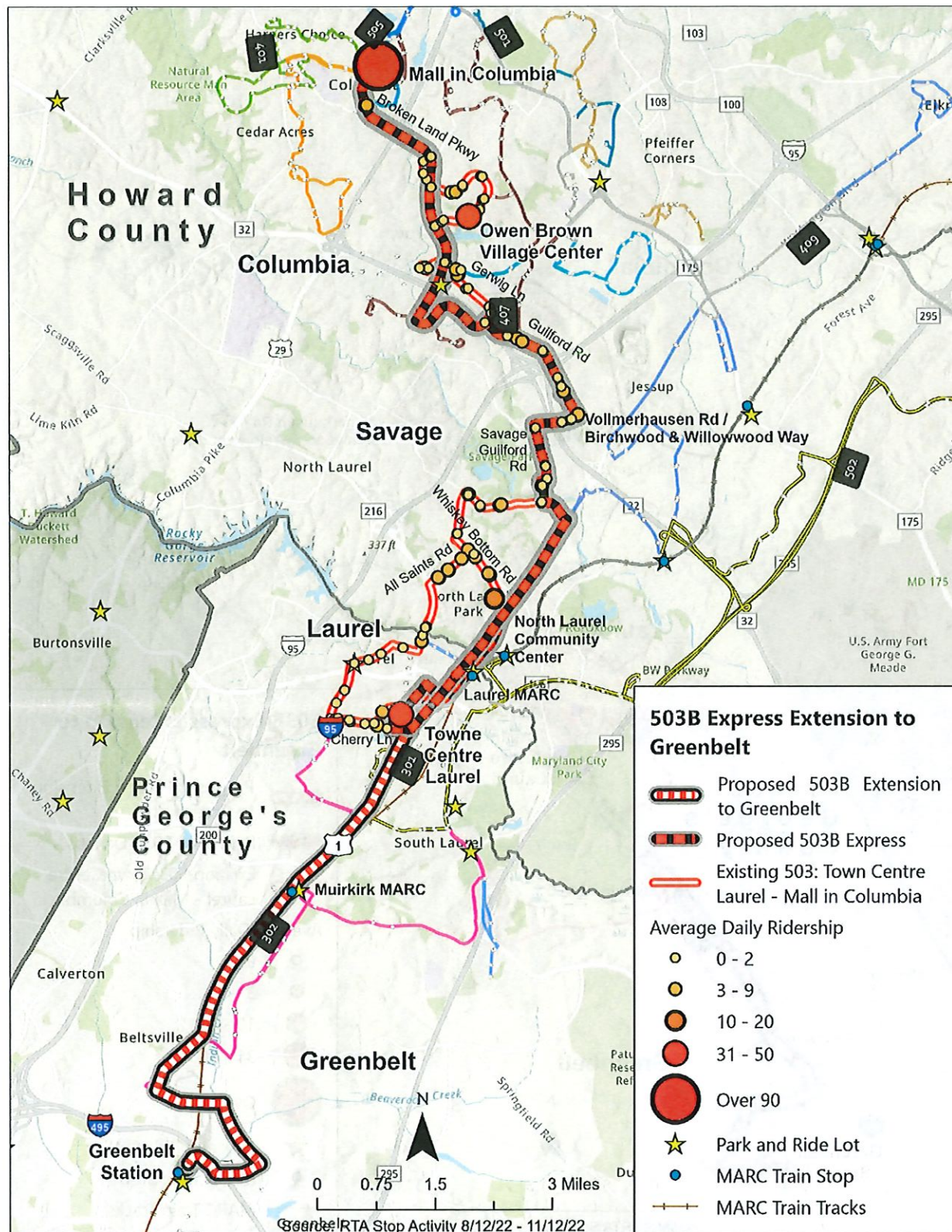


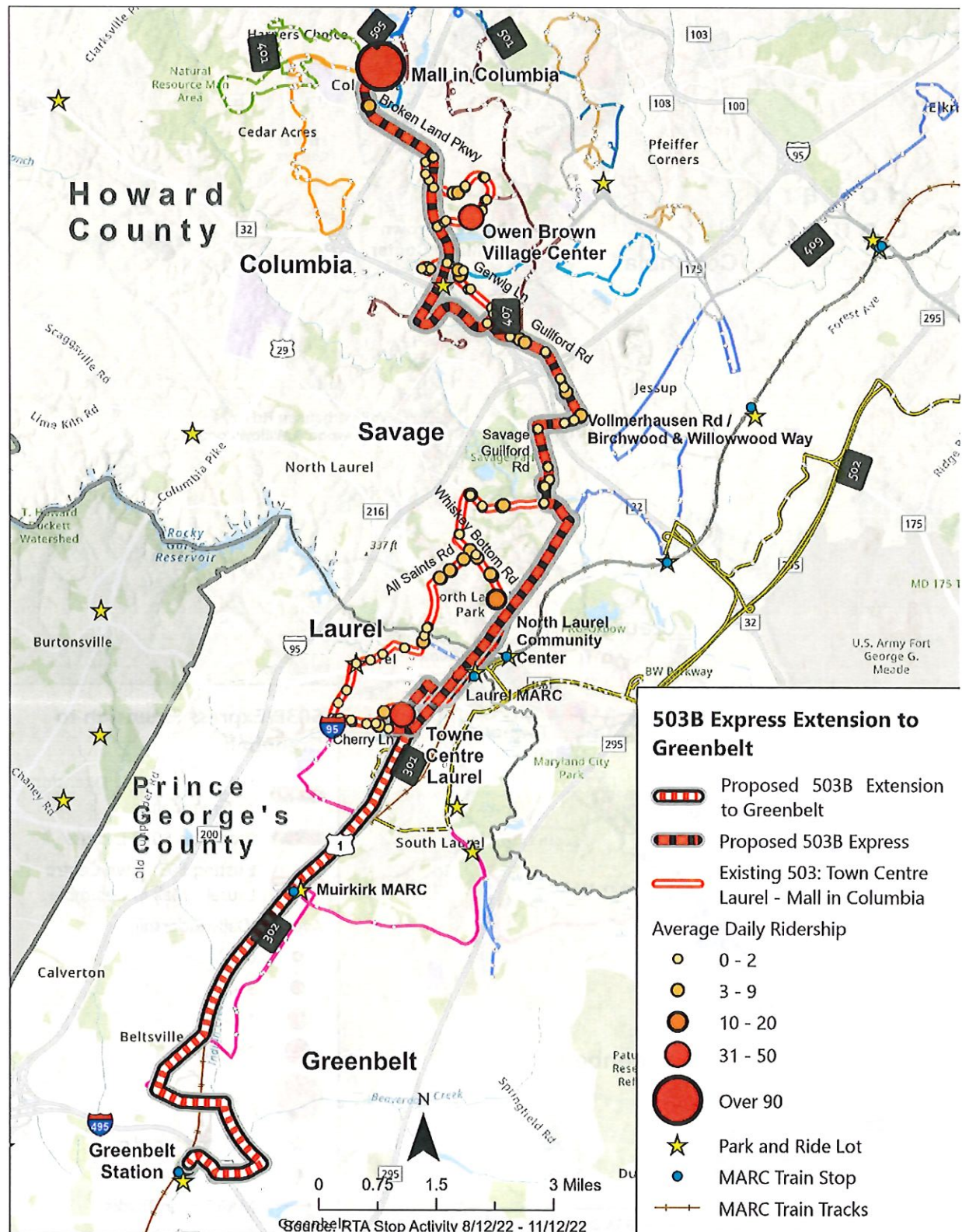
Figure 5-3: Peak Express Extension Columbia – Laurel – Greenbelt (Option 3)

Table 5-3: Proposed Service Characteristics for Alternatives from Columbia to Laurel/Greenbelt

Alternatives	Service Spans	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Ridership	Estimated Operating Cost
Option #1: Double Frequency on Route 503									
Current Service (60 min. frequency)	Monday - Friday	2	5:30am	7:30pm	30	574	7,395	74,224	\$1,214,851
	Saturday	2	8:30am	7:30pm	24	459	1,196		
Doubled 30 Minute Frequency	Monday - Friday	4	5:30am	7:30pm	58	1,109	14,535	118,758	\$2,429,702
	Saturday	4	8:30am	7:30pm	46	880	2,288		
Weekday Peak Hour 30 Minute Frequency	Monday - Friday	4	5:30am	9:30am				92,780	\$1,694,799
	Monday - Friday	2	9:30am	2:30pm	48	918	11,985		
	Monday - Friday	4	2:30pm	7:30pm					
Option #2: New Express Service from Columbia to Laurel									
Weekday Peak Hour Express Service	Monday - Friday	2	5:30am	9:30am	11	152	2,040	25,978	\$576,953
	Monday - Friday	2	2:30pm	7:30pm	11	152	2,040		
Option #3: Extend Route 503B Express Service to Greenbelt									
Weekday Peak Hour Express Service	Monday - Friday	3	5:30am	9:30am	11	222	3,060	35,071	\$865,429
	Monday - Friday	3	2:30pm	7:30pm	11	222	3,060		

Service Alternatives from Laurel to Bowie

Option: Extension of Route 301 (South Laurel) to Bowie

- This option is an extension of Route 301 to the Bowie MARC station and to Bowie St. University.
- The trip from the last stop in South Laurel to Bowie MARC is about ten additional minutes.
- Transfers are available to/from Bowie St. University via WMATA Route B21, B22, B27 to New Carrollton Metro Station (WMATA Blue/Orange lines, Amtrak and MARC).

Figure 5-4: Extension of Route 301 to Bowie

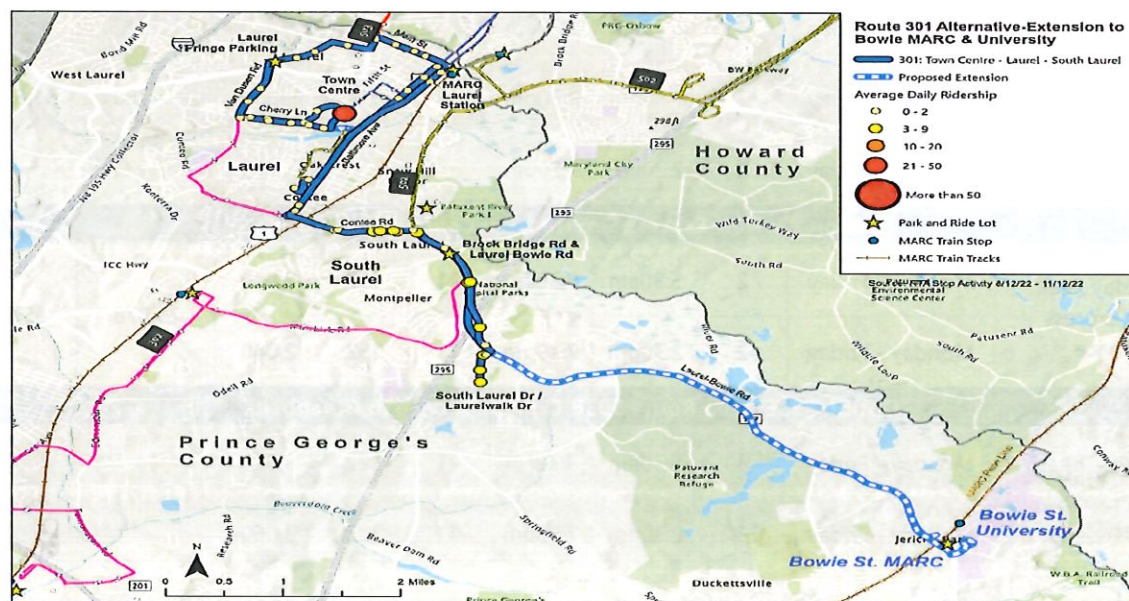


Table 5-4: Proposed Service Characteristics for Alternatives from Laurel to Bowie

Alternatives	Service Spans	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Ridership	Estimated Operating Cost
Extend Route 301 to Bowie State University									
Current Service (60 min. frequency)	Monday - Friday	1	6:30am	7:30pm	28	212	2,295	18,278	\$394,619
	Saturday	1	9:30am	7:30pm	22	167	364		
Extended to Bowie (60 min. frequency)	Monday - Friday	2	6:30am	7:30pm	28	363	4,080	22,848	\$698,121
	Saturday	2	9:30am	7:30pm	22	285	624		

Service Alternatives between Laurel and Elkridge

A [Route 1 Corridor Small Area Plan FINAL.pdf \(howardcountymd.gov\)](#) prepared by the Maryland Transit Administration previously identified recommendations for this corridor. Two specific options are outlined below.

Option 1: Extend Route 409 to Lansdowne

- Extending Route 409 to Lansdowne will provide a more direct connection to MTA Local Link service and easier access to the greater Baltimore area.
- Expand Route 409 to serve the new Guilford Park High School along US Route 1.
- Requires additional resources including an additional vehicle and approximately 4,000 additional annual service hours.
- Demand should be closely monitored following the extension. This alternative proposes 60 minute frequencies whereas the US 1 Small Area Transit Plan calls for 30 minute service frequency.

Option 2: Express Route from Elkridge Corners to Laurel

- A current trip from Elkridge Corners to Laurel Town Centre is about 1 hour 6 minutes.
- This service option would reduce the trip to an estimated 46 minutes.
- New route would stay primarily on US Route 1 / Washington Blvd.
 - This service option involves two major changes. First, after the bus stops at Assateague Dr / Maryland Food Center, it would turn around back onto US Route 1, instead of serving stops extending to Oceano Avenue.
 - Secondly, a new stop would be created at Route 1 / Guilford Rd, so that the bus can serve existing riders on Guilford Rd. The bus would then continue south along Route 1 instead of turning east onto Guilford Rd to the Savage MARC station.
- Only serving stops which served more than 170 riders for Route 409 over a three-month period (which averages to about 2 stop per day).
 - Only seven stops serve on average more than 3 riders per day. These stops include the Elkridge Corners shopping center, the Maryland Food Center on Assateague Dr., Guilford Rd and Rt. 1, Savage MARC Station, Town Centre Laurel, and two other stops near the Town Centre.

Figure 5-5: Extension of Route 409 to Lansdowne

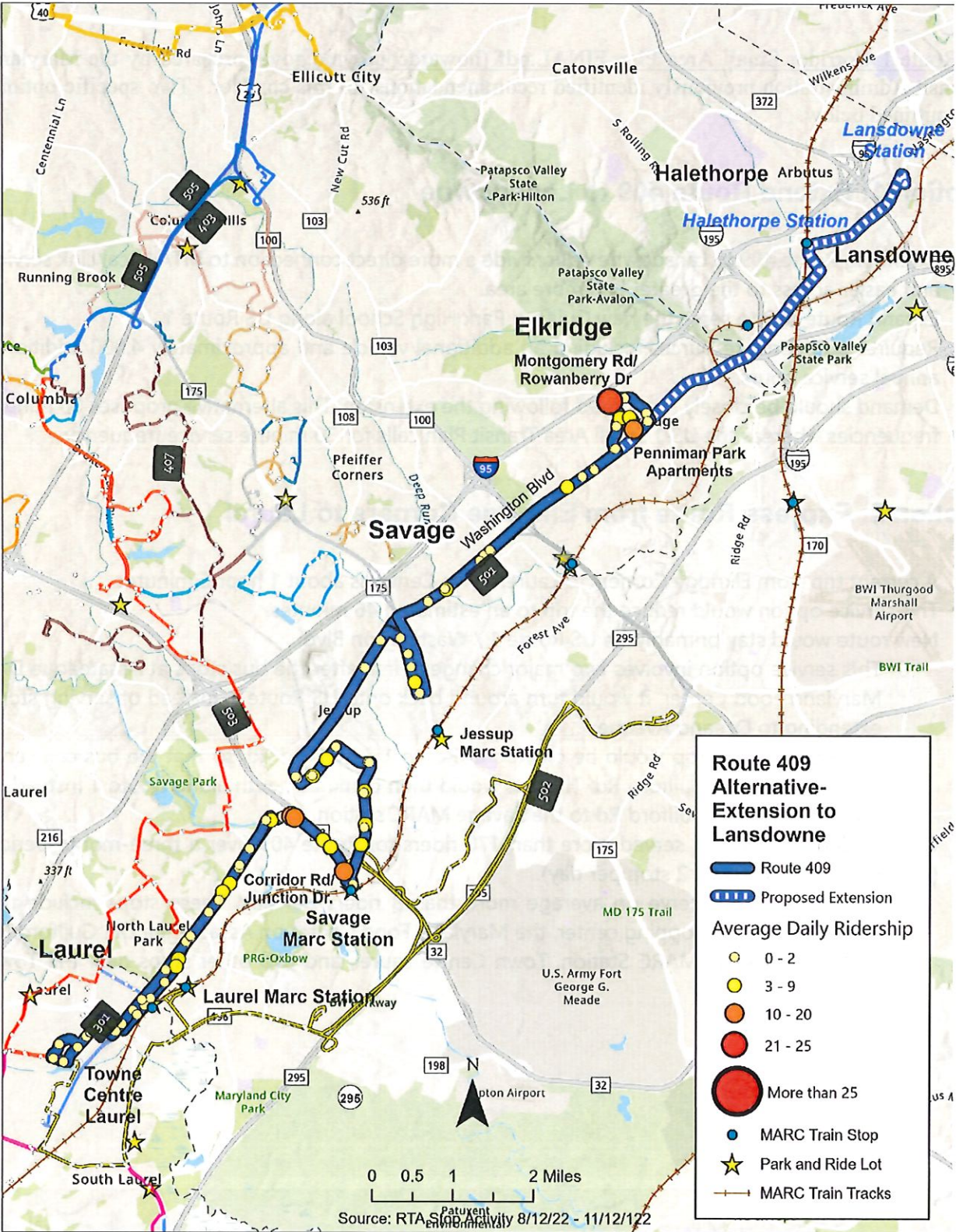


Table 5-5: Proposed Service Characteristics for Alternatives from Laurel to Elkridge

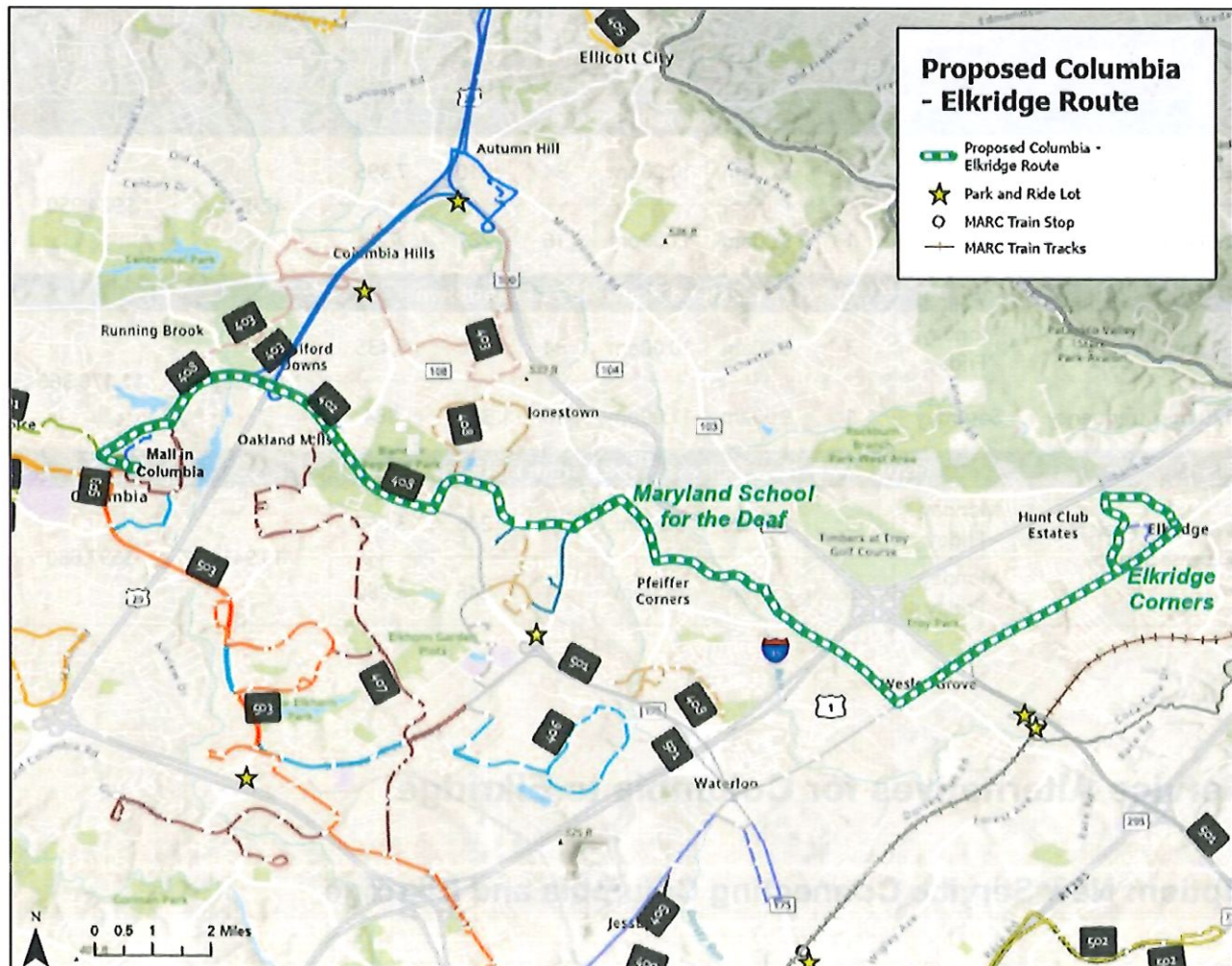
Alternatives	Service Spans	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Ridership	Estimated Operating Cost
Current Service									
60 min. frequency	Monday - Friday	2	6:00am	10:00pm	34	610	7,395	42,428	\$924,950
120 min. frequency	Saturday	1	9:00am	11:00pm	16	287	728		
Option #1: Extend Route 409 to Lansdowne									
60 min. frequency	Monday - Friday	3	6:00am	10:00pm	34	760	9,435	50,489	\$1,176,366
120 min. frequency	Saturday	1	9:00am	11:00pm	16	358	884		
Option #2: New Express Service from Elkridge to Laurel									
Weekday Peak Hour Express Service	Monday - Friday	3	5:30am	9:30am	11	246	3,060	19,941	\$697,680
	Monday - Friday	3	2:30pm	7:30pm	11	246	3,060		

Service Alternatives for Columbia to Elkridge

Option: New Service Connecting Columbia and Elkridge

Service Description

- Provides direct and easy access between Elkridge and Columbia, removing the need for a transfer.
- With the potential extension of Route 409, this new service would feed into the 409 to make connections to destinations in the Baltimore area.

Figure 5-6: Proposed Service from Columbia to Elkridge**Table 5-6: Proposed Service Characteristics for Alternatives from Columbia to Elkridge**

Alternatives	Service Spans	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Ridership	Estimated Operating Cost
New Service from Columbia to Elkridge									
60 min. frequency	Monday - Friday	2	6:00am	9:00pm	30	336	6,630	31,584	\$826,956
120 min. frequency	Saturday	1	9:00am	10:00pm	12	157	624		

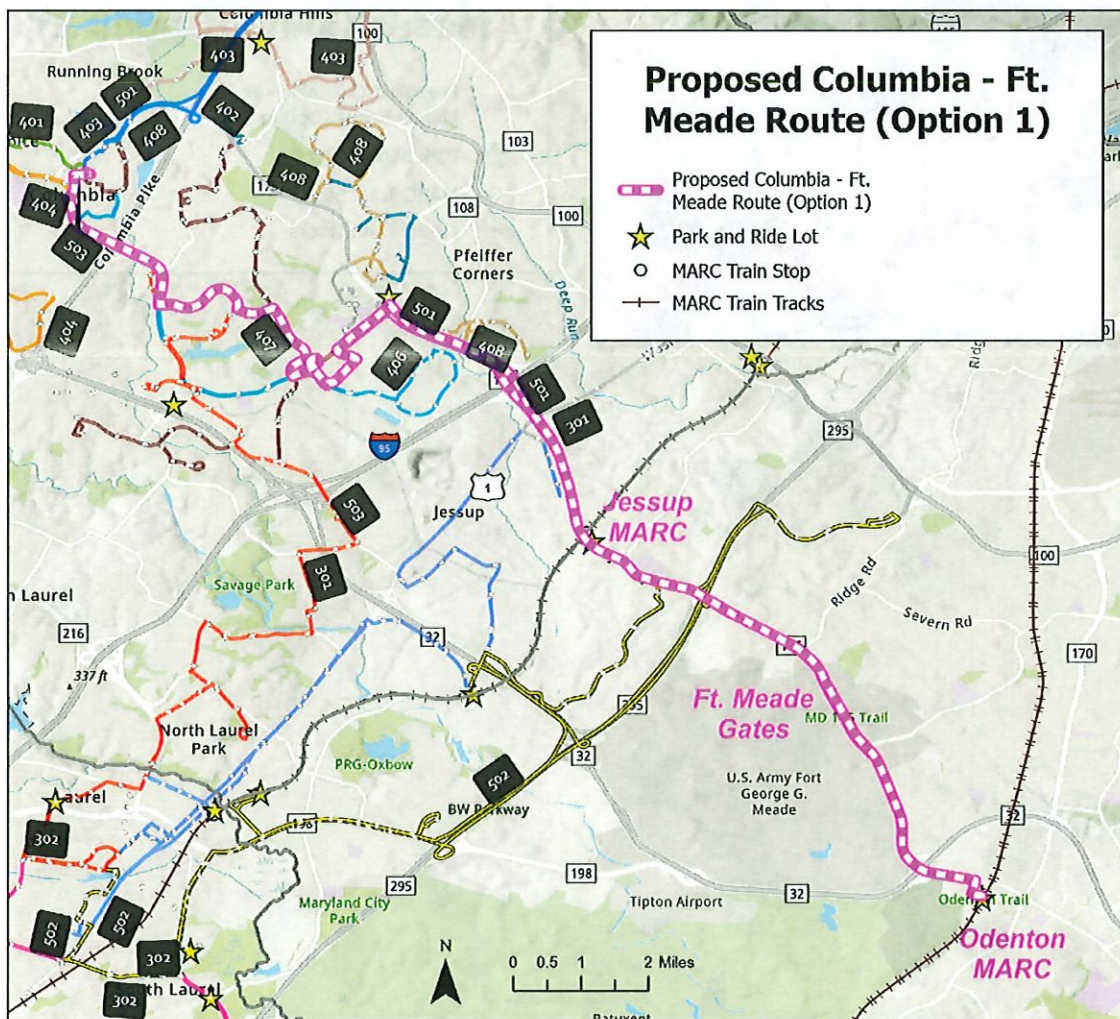
New Service to Fort Meade / NSA

Option 1: New Route from Columbia to Odenton MARC

Service Description

- New route from Columbia to Fort Meade.
- Connects Columbia, Snowden Square, Owen Brown, Ft Meade, and Odenton MARC.
- Stops at three Ft Meade access gates at Reece Rd, Mapes Rd, Llewellyn Ave.
- Stops at Jessup MARC Station and continues onward to Odenton MARC Station.
- Estimated to cost \$926k per year.
- Runs at hourly frequency.

Figure 5-7: New Service – Columbia to Odenton MARC via Fort Meade (Option 1)

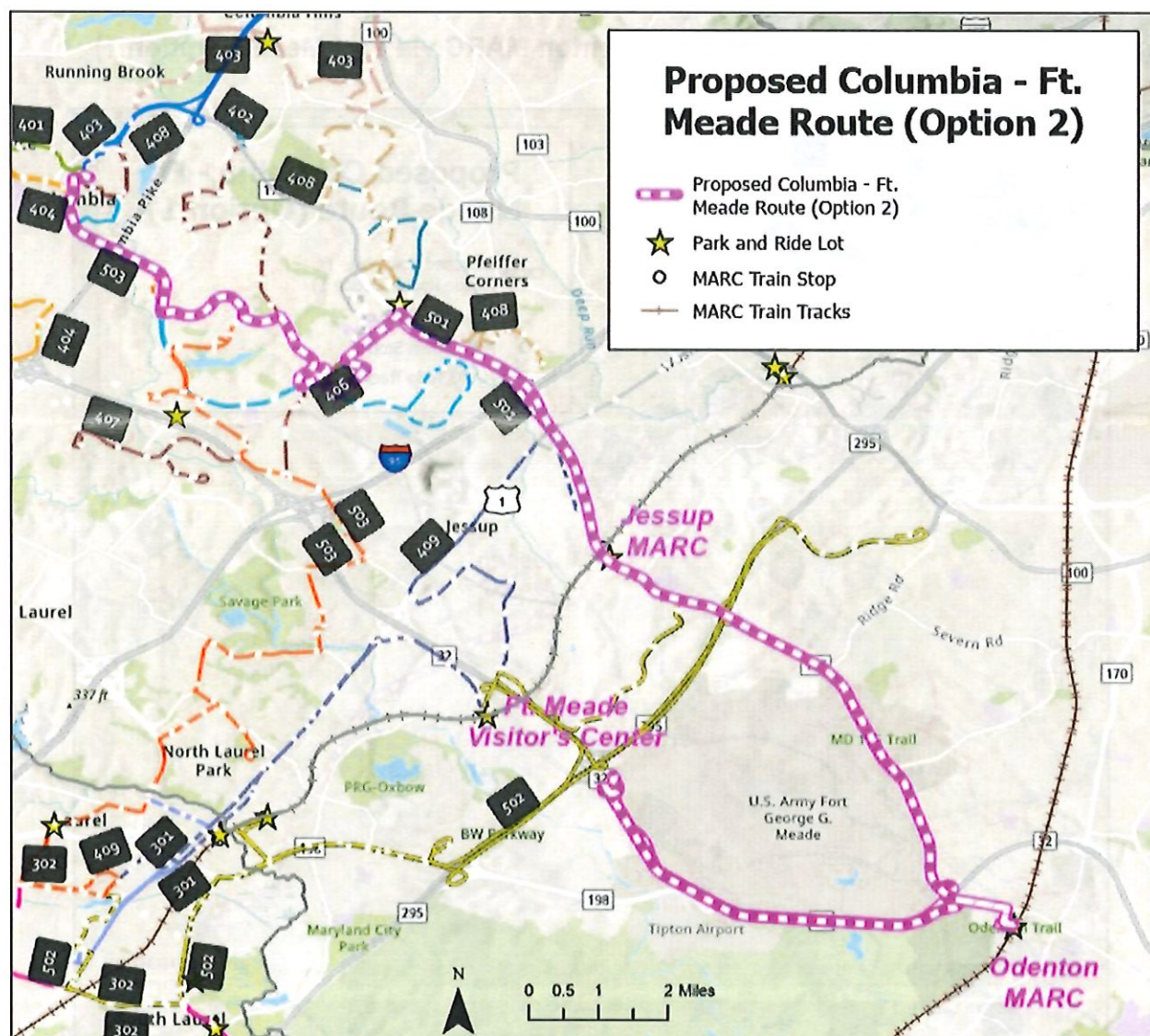


Option 2: New Route from Columbia to New NSA Visitor's Center at Ft Meade

Service Description

- Same route as Option 1 but extends west down MD-32 to the Ft. Meade visitor's center, currently under construction.
- Additional 5.5 miles, one way, 11 miles roundtrip to Odenton MARC Station.
- Same service pattern and frequency.
- Estimated \$1.2M per year.

Figure 5-8: New Service – Columbia – Ft. Meade (Option 2)



Option 3: New Route from Laurel to Fort Meade

Service Description

- Expands service from Laurel to the Odenton MARC Station via Ft. Meade
- Supports alternatives included in Anne Arundel County's TDP.
- Estimated \$581k per year.

Figure 5-9: New Service Laurel – Ft. Meade (Option 3)

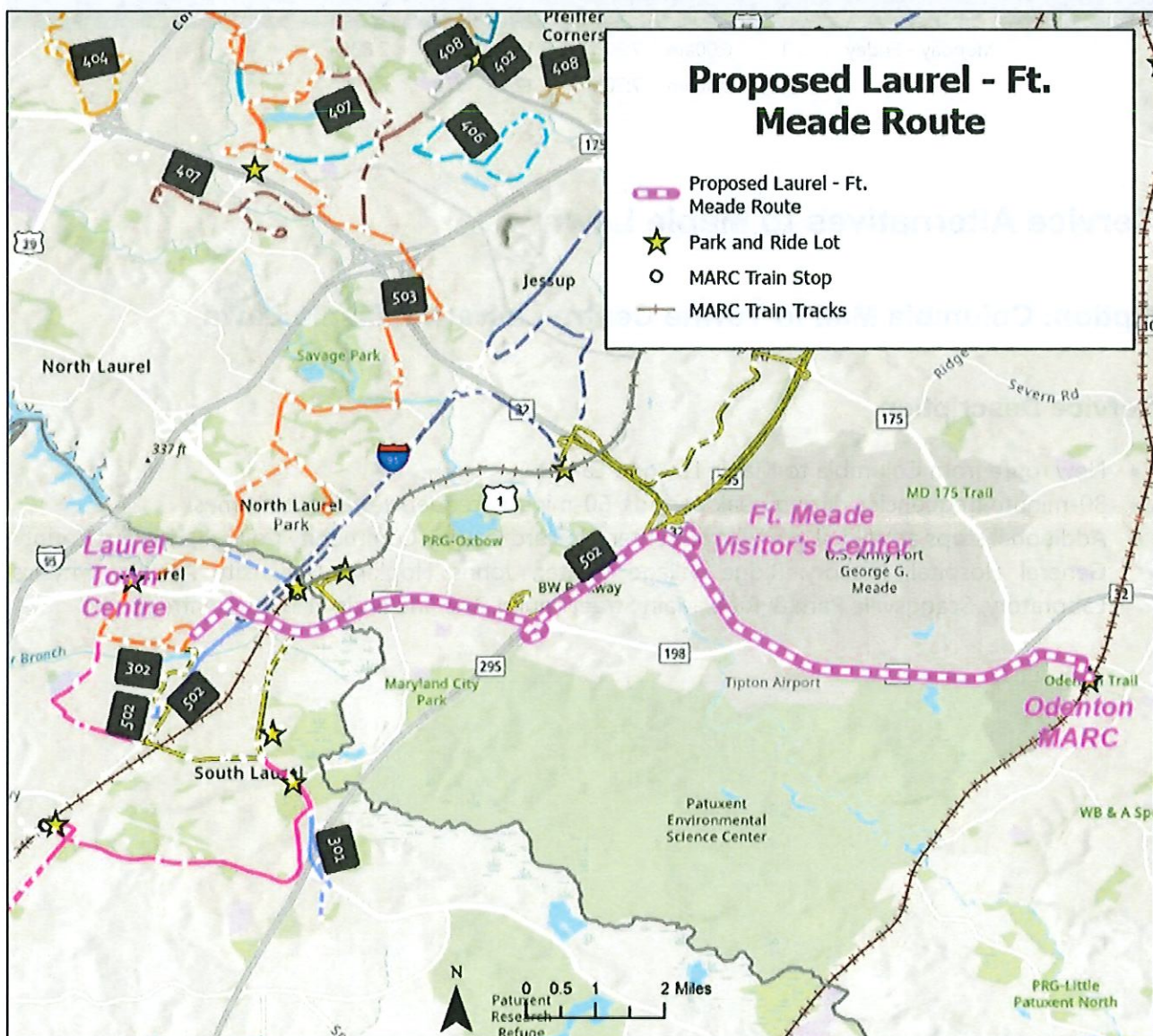


Table 5-7: Proposed Service Characteristics for New Routes to Ft. Meade

Alternatives	Service Spans	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Ridership	Estimated Operating Cost
Option #1: New Route from Columbia to Odenton MARC									
	Monday - Friday	2	6:00am	7:30pm	60	102	7,140	24,538	\$926,592
	Saturday	1	8:30am	7:30pm	46	78	988		
Option #2: New Route from Columbia to New Visitor's Center at Fort Meade									
	Monday - Friday	2	5:30am	9:30am	56	135	6,630	27,257	\$1,279,080
	Saturday	1	8:30am	7:00pm	30	78	4,590		
Option #3: New Route from Laurel to Fort Meade									
	Monday - Friday	1	6:00am	7:30pm	14	161	2,805	30,600	\$581,400
	Saturday	1	8:30am	7:30pm	12	138	2,295		

Service Alternatives to Maple Lawn

Option: Columbia Mall to Towne Centre Laurel via Maple Lawn

Service Description

- New route from Columbia to Maple Lawn to Laurel.
- 30-minute frequencies during peak periods, 60-minute frequencies all other times.
- Additional stops at Wilde Lake Village Center, Howard County Community College, Howard County General Hospital, Hickory Ridge Village Center, Johns Hopkins University Applied Physics Laboratory, Scaggsville Park & Ride, Main Street Laurel. The line ends at Town Centre Laurel.

Figure 5-10: New Service – Columbia – Maple Lawn – Laurel**Table 5-8: Proposed Service Characteristics for New Route from Columbia – Maple Lawn**

Alternatives	Service Spans	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Ridership	Estimated Operating Cost
New Maple Lawn Service									
Weekday Peak Hour Express Service	Monday - Friday	2	6:45am	9:45am	24	172	3,060	20232	\$384,408
	Monday - Friday	1	10:00am	4:30pm					
	Monday - Friday	2	4:15pm	7:15pm					
	Monday - Friday	1	7:30pm	11:00pm					
Saturday Service	Saturday	1	8:30am	7:30pm	12	86	312		

New Service to Silver Spring

Option: Peak Express Bus Rapid Transit Route

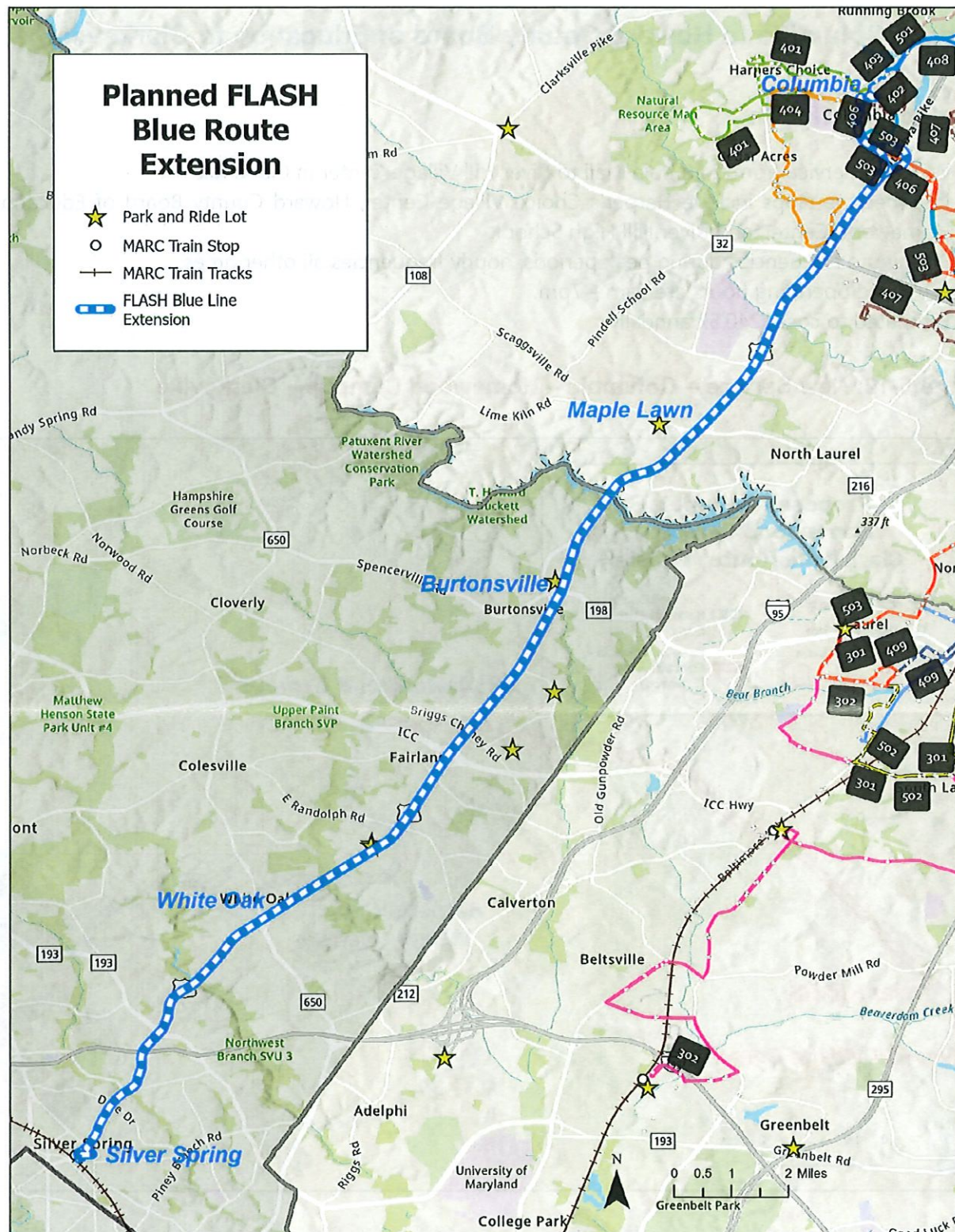
Service Description

- Extension of existing FLASH Blue Route from Montgomery County.
- Continues north on US-29 to Mall in Columbia.
- Additional stops at Johns Hopkins University Applied Physics Laboratory and Maple Lawn.
- Uses articulated buses that will run in mixed traffic for now. By 2030, US29 in Montgomery County should have dedicated lanes.
- 30-minute frequencies during peak periods, through-running to Silver Spring.
- Service to begin January 2026.
- Estimated to cost \$671.9k per year.
- Terminates at Paul S. Sarbanes Transit in Silver Spring.
- Connection is available to WMATA Metrorail Red Line, MARC Brunswick Line at Silver Spring.

Table 5-9: Proposed Service Characteristics for FLASH BRT Extension

Alternatives	Service Spans	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Operating Cost
FLASH Blue Route Extension								
Weekday Peak Hour Express Service	Monday - Friday	4	5:30am	8:30am	34	43	2,295	\$671,900
	Monday - Friday	4	3:30pm	7:30pm	34	43	2,295	

Figure 5-11: New Service – FLASH BRT Extension



Service Alternatives from Clarksville

Option: Columbia to Howard County Board of Education to Clarksville

Service Description

- Weekday service from Columbia Mall to River Hill Village Center in Clarksville.
- Intermediate stops include Harper's Choice Village Center, Howard County Board of Education, Homewood Center, and River Hill High School.
- 30-minute frequencies during peak periods, hourly frequencies all other times.
- Proposed operating hours are 6am – 7pm.
- Estimated to cost \$246.5k annually.

Figure 5-12: New Service – Columbia – Homewood Campus – Clarksville

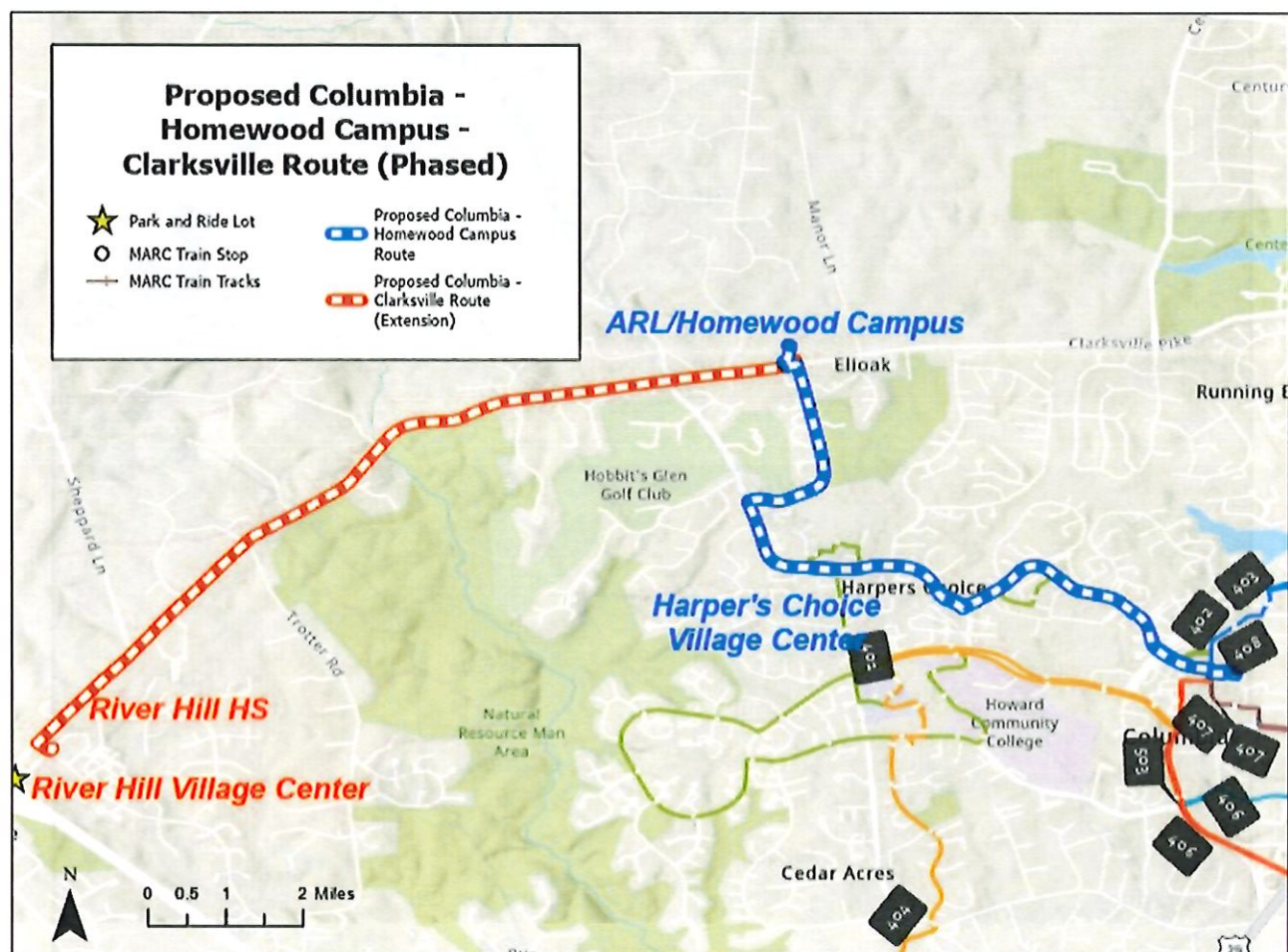


Table 5-10: Proposed Service Characteristics for New Route from Columbia – Clarksville

Alternatives	Service Spans	Peak Buses	Start	End	Trips	Miles	Annual Hours	Estimated Ridership	Estimated Operating Cost
New Clarksville Service									
Phase 1: Columbia - Homewood Campus	Monday - Friday	1	6:00am	7:00pm	20	63	1,547	6,375	116,280
Phase 2: Columbia - Clarksville	Monday - Friday	1	6:00am	7:00pm	20	141	2,652	12,049	261,630

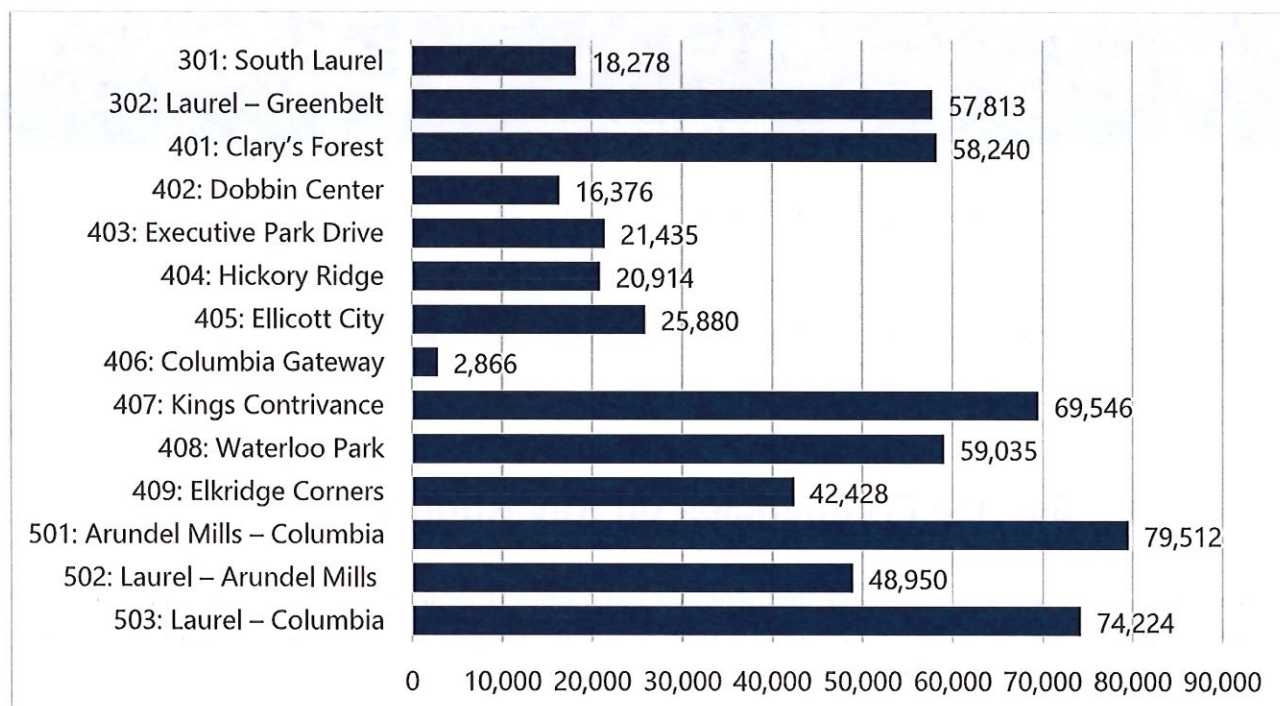
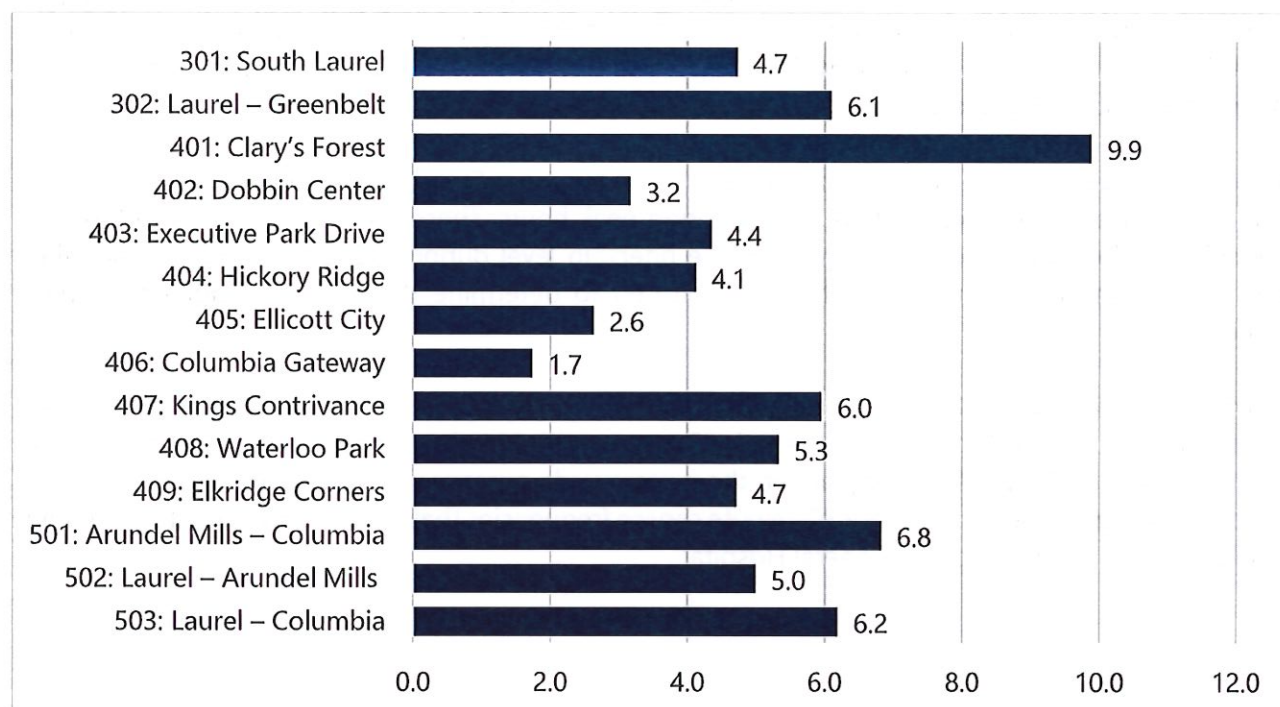
Expanding Service Frequencies on Key Routes

As previously noted, expanding service frequency was a common theme during the community outreach process. This desire is reflected in two of the previous alternatives that propose doubling the service frequency on Routes 501 and 503.

Additional frequency should be considered for routes with strong ridership and performance metrics – those that can support additional frequency. Doubling frequencies (e.g., 60 minutes to 30 minutes) requires double the number of vehicles, drivers, and other associated costs. However, ridership is unlikely to double as a result. Therefore, expanded service will result in a near-term drop in productivity. Expanding frequencies may attract new ridership due to convenience, but this strategy should be viewed as a proactive step to address future growth in ridership.

Based on FY2022 data, shown in **Figures 5-13** and **5-14**, Routes 501, 503, and 302 would be the likely candidates for expanded service frequencies during peak hours. These three routes stand-out in total ridership and boardings per service hour. While ridership level during FY2022 were still rebounding, these routes and other should be closely monitored to determine the need for additional service frequency.

Conveniently, **Figures 5-13** and **5-14** illustrate the successful implementation of expanded service frequency on Route 401. Route 401 is the only RTA route with 30-minute peak service frequency. While the route's total ridership is slightly above the system-wide average, its hourly productivity tops the chart. This is largely due to peak hour 30-minute service frequencies that connect to Howard Community College and the Howard County General Hospital.

Figure 5-13: RTA Fixed Route Ridership by Route (FY2022)**Figure 5-14: Passenger Boardings per Service Hour by Route (FY2022)**

Chapter 6

Transit Plan

Introduction

The Transit Plan is the result of the TDP's planning process, providing a blueprint to guide the development and expansion of public transit in and around Howard County.

The Transit Plan is organized into the following sections:

- **Service Plan** – Proposed improvements grouped into short, mid, and long-term priorities.
- **Conceptual Financial Plan for Operating** – Cost estimates for the operation of the service plan.
- **Conceptual Financial Plan for Capital** – Estimated capital costs for the five year service plan including information from Howard County's most recent Annual Transportation Plan.

Service Plan

The service plan is organized into three phases: short, mid, and long-term. Each of the proposed improvements were derived from the review of alternatives provided in Chapter 5.

Descriptions of each proposed improvement are provided in this section; however, additional details can be found in Chapter 5.

Short-Term Improvements (FY2024)

Short-term improvements, targeted for FY2024, include:

- Realignment of Route 405
- New Route 505 to Catonsville
- Extension of Route 409 to Lansdowne (Spring '24)

Mid-Term Improvements (FY2025 – FY2026)

Mid-term improvements, with proposed implementation during fiscal years 2025 and 2026, include:

- New Route – Columbia to Board of Education/Homewood/ARL (2025)
- Extend 501 to BWI (2026)
- New Route – Columbia to Elkridge (2026)
- Integration of FLASH BRT Extension to Columbia (2026)

Long-Term Improvements (FY2027 – FY2028)

Long-term improvements are proposed during fiscal years 2027 or 2028 and are listed below.

- New Route – Columbia/Laurel to Ft. Meade (2027)
- Extension of Columbia to Board of Education to Clarksville (2027)
- New Route – Laurel to Bowie (2028)
- New Route – Columbia to Maple Lawn/John Hopkins APL (2028)
- Consider frequency expansions on the top two highest productivity routes.

Ridership Estimate Analysis

Ridership estimates were developed for each of the selected alternatives outlined above. These estimates are summarized in **Table 6-1**. It is important to note that these estimates are based on ridership projections for one to two years following implementation. It can take up to 12 or 18 months for a service to establish a regular customer base. Estimating ridership is not an exact science, existing RTA ridership data is available for areas that have transit service. However, many of the alternatives include new areas/markets where the true demand is unknown.

To apply a systematic approach for the estimates, RTA's system-wide average of 5.4 trips per service hour was used to estimate the average ridership column. For route extensions (301, 409, and 501), the existing route's actual FY22 average trips per hour were used. The low and high estimates were determined based on comparable RTA routes and anticipated ridership boosts from major trip generators (e.g., BWI Train Station, Home Center, etc.).

Table 6-1: Ridership Estimates for Selected Alternatives

Planned Year	Recommended Service Improvements for RTA	Annual Hours	Annual Ridership	Ridership Estimates		
				Low Estimate	Average Estimate	High Estimate
FY2024	Extension of Route 409 to Lansdowne					
	*Route 409 Actual FY2022	8,123	42,428	-	-	-
	Extended to Lansdowne	10,319		47,918	53,659	56,755
FY2025	New Route Columbia-Homewood Center					
	Columbia-Homewood Center	1,547		3,868	8,354	15,315
FY2026	Extension of Route 501 to BWI Area					
	*Route 501 Actual FY2022	8,658	74,224	-	-	-
	Option 1: BWI Train Station	10,604		79,089	90,876	104,980
FY2026	New Route Columbia-Elkridge					
	Columbia-Elkridge	7,254		18,135	39,172	71,815
FY2027	New Route Columbia/Laurel-Fort Meade					
	Columbia-Fort Meade-Odenton MARC	8,128		20,320	43,891	72,339
FY2027	Extension of New Route Columbia-Homewood Center to Clarksville					
	Columbia-Homewood Center-Clarksville	2,652		2,763	5,967	10,940
FY2028	Extension of Route 301 (South Laurel) to Bowie					
	*Route 301 Actual FY2022	2,659	18,278	-	-	-
	Extended to Bowie	4,704		23,391	31,987	46,570
FY2028	New Route Columbia-Maple Lawn via John Hopkins APL					
	Columbia-Maple Lawn	3,372		8,430	18,209	33,383

*ACTUAL FY2022 ROUTE PERFORMANCE

NOTE: RIDERSHIP ESTIMATES ARE BASED ON THE PERFORMANCE OF ACTUAL ROUTES AND RTA'S SYSTEMWIDE PERFORMANCE.

Conceptual Financial Plan for Operating

Howard County develops an annual grant application to MDOT MTA that includes operating and capital grant programs. Maryland's transit program combines available federal and state funds to provide local assistance, and a conceptual financial plan will be developed based on MDOT MTA projections and anticipated allocations. Therefore, any estimate for grant funding available to Howard County is somewhat speculative. However, the TDP serves an important role in the MTA's annual process of reviewing grant applications; typically, the projects proposed in Howard County's annual grant application must have been identified in the TDP in order to receive funding. This section will present the conceptual financial plan for transit operations covering the TDP's five-year period. The estimated total budget for each year will assume that all service improvements occur in the year planned and the current level of service remains unchanged. The actual implementation will be based on several factors, primarily community input, detailed service planning, and funding availability.

The following assumptions were used in developing the operating cost estimates:

- Operating costs, to maintain the current level of service, assume a 3% annual inflation rate.
- The initial year's (FY2024) expenses are based on the most recent budget submitted to MDOT MTA.
- Projected funding sources are not guaranteed and will need to be developed through consultation with MDOT MTA and local officials.

Table 6-1: Conceptual Financial Plan for Operating

Proposed Operating Requests	Fiscal Year				
	2024	2025	2026	2027	2028
Proposed Future Projects					
Baseline Operating Cost with Inflation	\$21,646,482	\$22,295,876	\$22,964,752	\$23,653,695	\$24,363,306
Extension Route 409 to Lansdowne	\$83,522	\$344,108	\$354,432	\$365,065	\$376,017
New Route Columbia to Homewood Campus		\$155,177	\$159,832	\$164,627	\$169,566
Extension Route 501 to BWI Airport			\$334,847	\$344,892	\$355,239
New Route Columbia to Elkridge			\$1,103,579	\$1,136,686	\$1,170,787
Integrate Flash BRT Blue Route Extension			\$650,000	\$669,500	\$689,585
New Route Columbia/Laurel to Ft. Meade				\$1,233,501	\$1,270,506
Extension Columbia-Homewood Campus to Clarksville				\$155,177	\$159,832
Extension Route 301 to Bowie					\$311,114
New Route Columbia to Maple Lawn					\$512,995
New Operating Expenses	\$83,522	\$499,285	\$2,602,690	\$4,069,448	\$5,015,641
Total Proposed Operating Expenses	\$21,730,004	\$22,795,161	\$25,567,442	\$27,723,143	\$29,378,947
Anticipated Funding Sources for Operating					
ARPA	\$1,469,000				
State/Federal					
Large Urban	\$1,445,255	\$1,498,544	\$1,635,559	\$1,773,501	\$1,879,449
Section 5307	\$406,478	\$421,465	\$460,001	\$498,797	\$528,595
ADA	\$474,224	\$491,710	\$536,668	\$581,930	\$616,694
SSTAP	\$162,520	\$162,520	\$162,520	\$162,520	\$162,520
Total State Funding	\$3,957,207	\$2,573,969	\$2,794,478	\$3,016,478	\$3,186,988
Local					
Fares, Advertising Revenue, Local Match	\$17,772,797	\$20,221,192	\$22,772,964	\$24,706,665	\$26,191,959
Total Local Funding	\$17,772,797	\$20,221,192	\$22,772,964	\$24,706,665	\$26,191,959
Total Projected/Proposed Operating Revenues	\$21,730,004	\$22,795,161	\$25,567,442	\$27,723,143	\$29,378,947

Conceptual Financial Plan for Capital

The capital plan provides the basis for maintaining, replacing, and expanding the capital infrastructure needed to maintain the current level of service and to implement the TDP's service plan. The capital plan focuses on vehicle replacement and other capital expenses.

Transit Vehicle Useful Life Standards

MDOT MTA has designated statewide useful life standards based on the vehicle manufacturer's designed life cycle and the results of independent FTA testing.

If vehicles are allowed to exceed their useful life they may become much more susceptible to breakdowns which may result in increased operating costs and a decrease in service reliability.

Vehicle useful life policy standards, shown below in **Table 6-2**, are defined in MDOT MTA's Locally Operated Transit System Program Manual.

Table 6-2: MDOT MTA's Vehicle Useful Life Policy

Vehicle Classification	Useful Life	
	Years	Miles
Revenue Specialized Vehicles (Accessible Minivans, Vans, Accessible Taxicabs & Sedans)	4	100,000
Light Duty Small Bus (25' to 35')	5	150,000
Medium Duty Bus (25' to 35')	7	200,000
Heavy Duty Bus (Medium Size, 30' to 35')	10	350,000
Heavy Duty Bus (Large Size, Over 35')	12	500,000
Non-Revenue Specialized/Fleet Support Vehicles (Pick-Up trucks, Utility Vehicles & Sedans)	10	200,000

SOURCE: MDOT MTA, LOCALLY OPERATED TRANSIT SYSTEM (LOTS) PROGRAM MANUAL, APRIL 2017, REV. 3 01.2019

Low/No Emission Vehicle Strategies

County Policy—Howard County Forward

Howard County adopted its Climate Forward: Climate Action and Resiliency Plan on June 13 of this year. It addresses many of the issues resulting from climate change and their effects on the planet and on Howard County. It includes a number of specific mitigation strategies, and the transit fleet operated by RTA is addressed in the Transportation section.

Mitigation Strategies: Transition to a Zero-Emissions Transit Fleet

“Action 3: Transition to a zero-emissions transit vehicle fleet” calls for the county to develop (and implement) a transition plan to convert the passenger vehicle fleet serving the County to a low- or no-emission fleet. While it focuses on electric vehicles as the solution, it does allow for interim use of other technologies such as clean diesel and natural gas.

The mitigation strategy of transitioning does recognize that there is need for planning and study of the available vehicles/technologies in light of the specific requirements of the different routes and services offered by the RTA. It also recognizes, correctly, that infrastructure needs are a key part of the transition, including charging (or refueling) facilities.

Tracking Progress

The objective of this action is to convert the Howard County RTA public transit fleet to electric buses by 2045 and the plan provides a timeline and metrics to evaluate progress. The metrics used to track progress toward this objective in the Howard County Forward plan include the actual number of EV buses, cutaways, and automobiles in the Howard County fleet that are used for passenger transportation, and the percentage of the fleet that represents.

The baseline is the current situation, which is listed as three vehicles, or 4% of the fleet (though this does not recognize the existing hybrid sedans as contributing to the overall goal). The goal is that 40 of the vehicles (48%) will be electric vehicles by 2030, and all 82 (100%) by 2045.

Baseline: Experience to Date

Howard County currently operates 15 fixed-routes, Americans with Disabilities Act (ADA) complementary paratransit, and demand-response services for seniors and persons with disabilities over the age of 18 (General Public Paratransit). Currently (2023) the fleet providing this service includes 89 vehicles, of which 14 are non-revenue support vehicles that do not provide passenger transportation,

and thirteen of which are inactive but are being replaced by 17 new vehicles, leaving a passenger fleet of 79 vehicles. Of those, 38 are transit buses, 30 are cut-a-ways, five are vans, and eight are sedans. Three of the transit buses are BYD fully electric vehicles, and all eight sedans are hybrids.

The three BYD electric transit buses were part of an earlier demonstration grant to the County. It included the three buses, charging stations for them at the Central Maryland Transit Operations Facility, a backup diesel generator to charge the electric buses if utility power was not available, and an opportunity charging station at the main transfer center at Columbia Mall. This project provided some lessons regarding electrification, including the importance of vehicle design and manufacturer support in maintaining reliable service, the importance of working with the utility to develop the infrastructure, and the likelihood that more electric vehicles will be needed to provide equivalent service.

Howard County also used clean diesel as a means of reducing air pollution. They are only moderately effective for GHG emissions reduction compared to electric buses as the clean diesel buses decrease particulate matter, NOx, and other air pollutants that impact human health.

MDOT MTA LOTS ZEV Study

The Office of Local Transit Support (OLTS) at the Maryland Department of Transportation's Maryland Transit Administration (MDOT-MTA) is also preparing for a transition to a zero-emissions transit fleet statewide. It recently completed a statewide project to develop rough order-of-magnitude cost estimates for each of the Locally Operated Transit Systems (LOTS) across the state. This project provided a Summary Report for each LOTS across the state. While not a transition plan, it's a basis for considering issues and developing a transition plan. Common thresholds and benchmarks were applied to each of the LOTS to assess the potential for using battery electric vehicles (BEV) transit vehicles to deliver service, to assess utility requirements, and to consider facility needs for supporting BEVs. It included a review of existing conditions, looking at the types of services operated (mode—fixed-route bus, demand-response), route/service characteristics (number of routes, length, "blocks"), fleet characteristics and relation to services, basis utility configuration information, and an overview of the facilities used to support the fleet.

The ZEV Study included an assessment of whether BEV buses of size appropriate to the services would be able to serve the existing route structures (it did not examine demand-response services using small vehicles). The blocks that could not be served by current BEV transit vehicles were identified, and of this group of "failed blocks" and those that were close to potentially being served were also identified. General strategies for addressing "failed blocks" were presented, but no county-specific plan or strategy developed.

The MDOT-MTA study also did an assessment of utility requirements, although there was no participation by Maryland's utility providers. It looked at the likely electrical capacity needs and compared them to the existing situation, identifying general electrical infrastructure and equipment requirements for the amount of service to be provided.

The study examined each of the facilities used by the LOTS to identify the type of infrastructure that would be required if all services were operated by BEVs, including a look at the vehicle storage plan and layout and how charging stations could be integrated (or not). Proposed layouts for utility equipment (transformers, etc.) and charging equipment were developed for each LOTS.

Based on the overall fleet requirements (but with no adjustment from current fleet sizes), the likely utility requirements and the facility and infrastructure upgrades, MDOT MTA estimated the capital costs and annual operating costs for a BEV transit fleet for each of the LOTS.

Recommendations and next steps were provided for each system.

Howard County Specific Findings

The Howard County RTA report was released in May of 2023, and it provides a framework for the County to begin the transition by identifying a number of key issues based on its analysis and application of standardized costs. Some key findings address cost, service design for electric vehicle implementation, infrastructure design and facilities.

Costs

The MDOT-MTA study estimated the total cost of shifting the RTA services to electric vehicles would be approximately \$77.5 million dollars in (FY 2022 dollars and prices). This includes vehicle capital, utility infrastructure, utility equipment (assuming Howard County would have to provide), chargers and plug-in equipment and installation. The report does not make clear if the vehicle capital cost includes all the paratransit vehicles as well as the fixed-route fleet. The report also estimates that the associated annual operating costs (approximated) for training, electric power for charging, vehicle maintenance and charger maintenance would be \$4.7 million. Again, the reference fleet is not clearly spelled out—is it the entire fleet or just the fixed-route vehicles?

This is a snapshot of the total cost for implementation now (2023), using standardized values. A transition plan would address these costs with a phased approach over the next 22 years, to meet the County's goals. A transition plan would also spread the large dollar amount over a period that is more manageable, and it is likely that the fleet requirements will differ, affecting all of the other costs. The MDOT-MTA study also notes that a full life-cycle cost analysis would factor in differences in operating costs and the cost of replacement vehicles.

Service

A significant finding is that based on the current schedules used, none of the existing fixed-routes could be operated by existing BEV transit vehicles of the appropriate size. In the study, the "blocks" used to establish the daily mileage requirement for each route are based on the daily span and route length,

taken from GTFS feeds, assuming the bus stays on the route the entire day—i.e. no evaluation of the potential for swapping in a charged bus during the day (but they noted that the system has 22 spare vehicles, if they were electric some number of them would be available for split blocks).

Their analysis of the RTA routes also looked at both a “typical” energy usage pattern, and “intensive” pattern with higher energy consumption (hills, traffic, heat, untrained drivers, etc.).—in Howard none of the blocks could be completed in either the typical or intensive usage patterns. However, in the typical scenario nearly half (11 out of 23) of the blocks the bus could complete at least 50% of the block, and in the intensive mode half the block could be completed in only four of the 23 routes). The ability to complete the block varied by vehicle size because the range of different classes of transit vehicles varies—in Howard’s case the 30’ buses could complete at least 50% of all the blocks operated by that class of vehicles.

They did not analyze the ability to substitute BEV paratransit vehicles because each vehicles daily operations vary with the scheduled blocks—but noted that the standard cutaway used for the test has a range of only 78 miles before needing to be recharged.

The study suggested several strategies to make the transition feasible:

- Reassessing the existing schedules and blocks in detail to fully understand if some of the long routes are actually split, and if so where driver/vehicle changes take place. It may be that some of the “failed blocks” are not actually a problem for current BEV buses, or they could be served with minor changes.
- Phasing the implementation of BEV transit vehicles, focusing on early implementation of the service blocks that would be easiest for existing or near-term technology to meet. These would be shorter routes, shorter spans, perhaps routes with enough dead time at transfer points for opportunity charging. The study also suggested ongoing monitoring of technology development to identify new vehicle options that could operate the existing blocks.
- Alternative technologies were also suggested, particularly the use of vehicles with auxiliary diesel heaters (keeping the batteries warm adds range), fuel cell vehicles, or greater use of opportunity charging en route.
- Increasing fleet size to allow deployment of fully-charged vehicles on split blocks.

Utility Considerations

The MDOT-MTA study used a very generic approach to estimating utility requirements, largely based on fleet size, and it recommends that an initial step in a transition to a BEV fleet should involve the electric utility to review the current conditions and determine what needs to be upgraded. Howard County and RTA have made some initial upgrades as part of the previous electric bus demonstration,

and it may be possible to build upon those or use them during the early implementation. The MDOT-MTA study assumed that in the case of Howard County the scale of the needed upgrades would require the County to pay for them, and a figure was included in the cost estimate for these upgrades. But there was no input from BGE in that study, and there would be a need to work closely with BGE to determine needs and phasing for a transition.

Facility Considerations

The MDOT-MTA study examined the current RTA garage and vehicle storage to provide some indication of whether there is room for placing additional equipment, and how charging stations could be integrated into existing fleet storage. One of their key findings is that the vehicle storage at the Howard facility is tight, and it would require overhead structures covering the entire lot to support charging points because there is not enough room between the vehicle tracks and no room to widen them. This is a significant cost element—though it does offer the opportunity to place solar above the vehicle storage, storing the power from the solar to charge vehicles at night. Again, a more detailed and specific analysis is needed to determine the requirements and options and link them to a phased approach—the entire system may not be needed for some time.

The MDOT-MTA study has provided a framework for analyzing the costs and issues involved in a transition to a fully BEV transit fleet, but it is not the transition plan envisioned in Howard County Forward. MDOT-MTA had intended for its study to allow local decision-makers to consider their policies going forward—Howard County has apparently already adopted a policy calling for a full transition by 2045, and what is needed is the detailed transition plan based on the particular conditions in Howard County.

Federal Transit Administration Policy and Programs

Federal policy regarding the transition to a zero emission transit fleet nationwide is important because it is likely that much of the capital funding needed will ultimately be federal dollars, though it will likely flow through MDOT-MTA. There is currently a strong federal policy favoring this transition, and projects are underway around the country—on June 26, 2023 the FTA announced it was providing \$1.69 billion in FY 2023 funding for Low and No-Emission buses and bus facilities, among 130 projects.

Section 5339C Low or No Emission Transit Capital Program

The program providing these funds is the Low or No Emission Section 5339C competitive program which provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities. It is likely that there will be future Notices of Funding Opportunities (NOFO) for Low or No Emission transit vehicles and facilities. Howard County should position themselves to respond to these opportunities, working with MDOT-MTA should there be state initiatives as well.

Eligible applicants for this FTA program include direct or designated recipients of FTA grants; States; local governmental authorities; and Indian Tribes. FTA guidance notes that except for projects proposed by Indian Tribes, proposals for funding eligible projects in rural (non-urbanized) areas must be submitted as part of a consolidated state proposal—which would seem to call for MDOT-MTA to take a lead in a statewide grant application. FTA notes that states and other eligible applicants also may submit consolidated proposals for projects in urbanized areas.

Eligible activities under the FTA program include all of the elements that would be needed in Howard County to accomplish the transition:

- purchasing or leasing low- or no-emission buses
- acquiring low- or no-emission buses with a leased power source
- constructing or leasing facilities and related equipment (including intelligent technology and software) for low- or no-emission buses
- constructing new public transportation facility to accommodate low- or no-emission buses
- rehabilitating or improving existing public transportation facilities to accommodate low- or no-emission buses
- training, specified as 5% of their award on workforce development and training as outlined in their Zero-Emission Transition Plan, (unless the applicant certifies that their financial need is less)¹.

The last item mentions a Zero-Emission Transition Plan. The [Bipartisan Infrastructure Law](#) amended the statutory provisions for the [Grants for Buses and Bus Facilities Competitive Program](#) (49 U.S.C. § 5339(b)) and the [Low or No Emission Program](#) (49 U.S.C. § 5339(c)) to include a requirement that any application for projects related to zero-emission vehicles include a Zero-Emission Transition Plan. The cost of the plan is not eligible under either of these programs, but is an eligible expense under either the Section 5307 Urbanized Area program or the Section 5311 rural program, or as a Section 5305 planning project.

FTA's Zero-Emission Transition Plan

As defined in federal statute, the Zero-Emission Transition Plan must:

- "Demonstrate a long-term fleet management plan with a strategy for how the applicant intends to use the current request for resources and future acquisitions.
- Address the availability of current and future resources to meet costs for the transition and implementation.
- Consider policy and legislation impacting relevant technologies.
- Include an evaluation of existing and future facilities and their relationship to the technology transition.
- Describe the partnership of the applicant with the utility or alternative fuel provider.
- Examine the impact of the transition on the applicant's current workforce by identifying skill gaps,

¹ 0.5% of a request may be for workforce development training and an additional 0.5% may be for training at the National Transit Institute (NTI).

training needs, and retraining needs of the existing workers of the applicant to operate and maintain zero-emission vehicles and related infrastructure and avoid displacement of the existing workforce.”

FTA says that it recognizes that the plans will reflect the size of the agency, its fleet, service types, etc. and may not all be lengthy or complex, but the federal agency will be looking for the required content.

Recommendations

Howard County has adopted a policy calling for half of its transit fleet to be zero emission (electric) by 2030, and the entire fleet to be transitioned by 2045. It must be recognized that fleet replacement involving federal and state funds takes into account the expected life of the vehicle, and given that fleet replacement has been ongoing it may not be that half the fleet will be replaced between now and 2030. The County can position itself to address these policy goals in several ways:

Initiate Work on a Federally-Compliant Transition Plan

Consulting assistance will be required to develop a Howard-specific detailed transition plan. In addition to the elements spelled out for compliance with the Federal plan requirement, the Howard plan should include:

- Detailed analysis of the existing and near-term planned routes to determine the actual blocks and the potential for implementing BEV transit vehicles given current technology through vehicle assignment strategies, splitting blocks, opportunity charging or other means. This analysis should also consider the increased feasibility of implementing BEV service with improvements in vehicle range, which are likely even in the short term. For example, Proterra is already claiming a 245 mile range for its 35' z5x transit bus, well above the 150 mile range used in the MDOT MTA study. It should also address whether or not fleet expansion would be required to begin the transition, and whether charge management software could make the transition more feasible.
- Similarly, it should examine the paratransit fleet operations in detail to determine if any schedules and services could be provided by BEV paratransit vehicles at current range technologies, and what ranges would be required to facilitate transition. Paratransit vehicles have the shortest service life, and are likely to be replaced sooner, offering opportunities to move toward the county's goals sooner. The MDOT-MTA study did not address the paratransit fleet and its service patterns at all.
- Phased fleet implementation plans, based on vehicle size requirements and FTA/MDOT-MTA useful life replacement schedules, with alternative assumptions based on potential technology improvements.

- Input from BGE regarding the capabilities of the existing electrical infrastructure, near-term requirements, and the overall requirements for full implementation—based on the potential fleet transition phasing. BGE will likely not provide speculative information, but will need data on the desired implementation phasing before they will respond.
- Facility requirements and opportunities, given the current operations facility and the potential phasing—if overhead structures will be required, is there a phased way to construct and implement? Are there opportunities for solar generation and storage as part of these structures?

Begin The Transition with Available Technology

Given the County's policy, the lowest-hanging fruit in the transition would be replacing the paratransit sedans (when they have reached their useful life) with BEV automobiles or SUVs. The range for these vehicles is increasing, the charging points are being implemented in many locations, and with higher KWH ratings charge times are declining. This should be achievable in the near-term.

The County should watch the implementation of BEV technology for paratransit vans and cutaways—although the MDOT-MTA study assumed that the range for these vehicles is only 78 miles, this is likely to change quickly. These vehicles are largely based on delivery vehicles, and the businesses that use these vehicles in large numbers will be requiring BEV versions that are commercially useful sooner rather than later. This technology should be available to manufacturers of paratransit vehicles in the near future. Again, the increased availability of charging stations and faster charging should make opportunity charging very feasible.

Although the proposed transition plan will address the relationship of the service requirements to the fleet replacement plan, very near-term vehicle replacements should be evaluated in terms of the opportunity to use existing technology BEV vehicles in service on current routes that are appropriate—shorter routes, split runs, etc. If there are opportunities to do so, transition may be facilitated by beginning the transition before all the answers are known.

Finally, given the possibility that LOTS across the state may be adopting similar policies to start on transitioning to BEV operations, MDOT-MTA may be considering including such vehicles in the state procurement process, which would greatly facilitate the statewide transition by removing the need for each system to develop specifications. In addition, the manufacturers may be more responsive for larger potential orders. If statewide procurement emerges, Howard County should work with MDOT-MTA on the development of the procurement and take advantage of any options it might offer.

Vehicle Capital – Baseline Estimates

RTA operates a number of different vehicle types including support vehicles, small cutaways, heavy duty – medium and heavy-duty large buses. MDOT-MTA's useful life policy was applied to the existing fleet to develop an estimate of the capital needs needed to maintain current service levels for the next five years. **Table 6-3** is a complete listing of RTA's existing vehicle inventory with an estimated replacement year for each vehicle.

Table 6-3: Vehicle Inventory with Projected Replacement Years

Fleet #	Year	Vehicle Make/Model	Vehicle Type	Miles	Minimum Useful Life (Miles)	Minimum Useful Life (Years)	Estimated Useful Life Remaining (Miles)	Estimated Useful Life Remaining (Years)	Earliest Possible Replacement Year
Revenue Vehicles									
12	2015	Ford, Fusion Hybrid	Accessible Car	225,773	100,000	4	-125,773	-4	2019
14	2015	Ford, Fusion Hybrid	Accessible Car	197,218	100,000	4	-97,218	-4	2019
16	2021	Toyota, Camry Hybrid	Accessible Car	7,264	100,000	4	92,736	2	2025
17	2021	Toyota, Camry Hybrid	Accessible Car	126	100,000	4	99,874	2	2025
18	2021	Toyota, Camry Hybrid	Accessible Car	0	100,000	4	100,000	2	2025
19	2021	Toyota, Camry Hybrid	Accessible Car	0	100,000	4	100,000	2	2025
20	2021	Toyota, Camry Hybrid	Accessible Car	0	100,000	4	100,000	2	2025
21	2021	Toyota, Camry Hybrid	Accessible Car	0	100,000	4	100,000	2	2025
200	2014	Ford, Cutaway	Light Duty	399,667	150,000	5	-249,667	-4	2019
201	2014	Ford, Cutaway	Light Duty	398,768	150,000	5	-248,768	-4	2019
202	2014	Ford, Cutaway	Light Duty	402,502	150,000	5	-252,502	-4	2019
203	2014	Ford, Cutaway	Light Duty	402,103	150,000	5	-252,103	-4	2019
204	2014	Ford, Cutaway	Light Duty	439,396	150,000	5	-289,396	-4	2019
205	2015	Ford, Cutaway	Light Duty	350,655	150,000	5	-200,655	-3	2020
206	2015	Ford, Cutaway	Light Duty	298,028	150,000	5	-148,028	-3	2020
207	2015	Ford, Cutaway	Light Duty	285,414	150,000	5	-135,414	-3	2020
208	2015	Ford, Cutaway	Light Duty	298,441	150,000	5	-148,441	-3	2020
209	2015	Ford, Cutaway	Light Duty	325,829	150,000	5	-175,829	-3	2020
210	2015	Ford, Cutaway	Light Duty	295,096	150,000	5	-145,096	-3	2020
211	2015	Ford, Cutaway	Light Duty	301,219	150,000	5	-151,219	-3	2020
212	2015	Ford, Cutaway	Light Duty	295,732	150,000	5	-145,732	-3	2020
213	2017	Ford, Cutaway	Light Duty	190,539	150,000	5	-40,539	-1	2022
214	2017	Ford, Cutaway	Light Duty	206,684	150,000	5	-56,684	-1	2022
215	2017	Ford, Cutaway	Light Duty	212,479	150,000	5	-62,479	-1	2022
216	2017	Ford, Cutaway	Light Duty	286,337	150,000	5	-136,337	-1	2022
217	2017	Ford, Cutaway	Light Duty	233,203	150,000	5	-83,203	-1	2022
218	2017	Ford, Cutaway	Light Duty	193,235	150,000	5	-43,235	-1	2022
219	2017	Ford, Cutaway	Light Duty	238,265	150,000	5	-88,265	-1	2022

Fleet #	Year	Vehicle Make/Model	Vehicle Type	Miles	Minimum Useful Life (Miles)	Minimum Useful Life (Years)	Estimated Useful Life Remaining (Miles)	Estimated Useful Life Remaining (Years)	Earliest Possible Replacement Year
220	2017	Ford, Cutaway	Light Duty	246,515	150,000	5	-96,515	-1	2022
225	2019	Ford, Transit Van	Accessible Van	34,618	100,000	4	65,382	0	2023
226	2019	Ford, Transit Van	Accessible Van	77,620	100,000	4	22,380	0	2023
227	2019	Ford, Transit Van	Accessible Van	75,455	100,000	4	24,545	0	2023
228	2019	Ford, Transit Van	Accessible Van	55,269	100,000	4	44,731	0	2023
229	2019	Ford, Transit Van	Accessible Van	63,796	100,000	4	36,204	0	2023
230	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
231	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
232	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
233	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
234	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
235	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
236	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
237	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
238	2023	Ford, Cutaway	Light Duty	N/A	150,000	5	N/A	5	2028
1701	2016	BYD, Transit Bus	Heavy Duty Large	42,528	500,000	12	457,472	5	2028
1702	2016	BYD, Transit Bus	Heavy Duty Large	91,183	500,000	12	408,817	5	2028
1703	2016	BYD, Transit Bus	Heavy Duty Large	76,477	500,000	12	423,523	5	2028
1704	2017	El Dorado, Transit Bus	Heavy Duty Medium	289,322	350,000	10	60,678	4	2027
1705	2017	El Dorado, Transit Bus	Heavy Duty Medium	259,522	350,000	10	90,478	4	2027
1706	2017	El Dorado, Transit Bus	Heavy Duty Medium	242,943	350,000	10	107,057	4	2027
1707	2017	El Dorado, Transit Bus	Heavy Duty Medium	238,876	350,000	10	111,124	4	2027
1708	2017	El Dorado, Transit Bus	Heavy Duty Medium	264,562	350,000	10	85,438	4	2027
1709	2017	El Dorado, Transit Bus	Heavy Duty Medium	265,211	350,000	10	84,789	4	2027
1710	2017	El Dorado, Transit Bus	Heavy Duty Medium	239,681	350,000	10	110,319	4	2027
1801	2018	El Dorado, Transit Bus	Heavy Duty Medium	182,212	350,000	10	167,788	5	2028
1802	2018	El Dorado, Transit Bus	Heavy Duty Medium	188,799	350,000	10	161,201	5	2028
1803	2018	El Dorado, Transit Bus	Heavy Duty Medium	204,317	350,000	10	145,683	5	2028
1804	2018	El Dorado, Transit Bus	Heavy Duty Medium	229,928	350,000	10	120,072	5	2028
1805	2018	El Dorado, Transit Bus	Heavy Duty Medium	187,782	350,000	10	162,218	5	2028
1806	2018	El Dorado, Transit Bus	Heavy Duty Medium	197,536	350,000	10	152,464	5	2028
1901	2019	El Dorado, Transit Bus	Heavy Duty Medium	155,169	350,000	10	194,831	6	2029
1902	2019	El Dorado, Transit Bus	Heavy Duty Medium	139,331	350,000	10	210,669	6	2029
2201	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2202	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2203	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032

Fleet #	Year	Vehicle Make/Model	Vehicle Type	Miles	Minimum Useful Life (Miles)	Minimum Useful Life (Years)	Estimated Useful Life Remaining (Miles)	Estimated Useful Life Remaining (Years)	Earliest Possible Replacement Year
2204	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2205	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2206	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2207	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2208	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2209	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2210	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
2211	2022	El Dorado, Transit Bus	Heavy Duty Medium	N/A	350,000	10	N/A	9	2032
9520	2008	Gillig Hybrid, Transit Bus	Heavy Duty Large	681,069	500,000	12	-181,069	-3	2020
9521	2008	Gillig Hybrid, Transit Bus	Heavy Duty Large	629,574	500,000	12	-129,574	-3	2020
9525	2009	Gillig Hybrid, Transit Bus	Heavy Duty Large	632,979	500,000	12	-132,979	-2	2021
9534	2011	Gillig Hybrid, Transit Bus	Heavy Duty Large	617,339	500,000	12	-117,339	0	2023
9535	2011	Gillig Hybrid, Transit Bus	Heavy Duty Large	561,484	500,000	12	-61,484	0	2023
9536	2011	Gillig Hybrid, Transit Bus	Heavy Duty Large	508,812	500,000	12	-8,812	0	2023
9543	2014	International, Truck Bus	Light Duty	336,128	150,000	5	-186,128	-4	2019
9545	2002	Gillig, Transit Bus	Heavy Duty Large	N/A	500,000	12	N/A	-9	2014
9547	2002	Gillig, Transit Bus	Heavy Duty Large	N/A	500,000	12	N/A	-9	2014
9550	2002	Gillig, Transit Bus	Heavy Duty Large	N/A	500,000	12	N/A	-9	2014
Support (Non-Revenue) Vehicles									
8	2014	Ford, Fusion Hybrid	Support Vehicle	261,689	200,000	10	-61,689	1	2024
M1	2015	Ford, Pickup F-250	Support Truck	85,360	200,000	10	114,640	2	2025
M3	2017	Chevy, Pickup 2500	Support Truck	71,050	200,000	10	128,950	4	2027
M4	2019	Ford, Pickup F-350	Support Truck	17,948	200,000	10	182,052	6	2029
M5	2023	Ford, Pickup F-150	Support Truck	N/A	200,000	10	N/A	10	2033
S2	2014	Chevy, Malibu	Support Vehicle	157,645	200,000	10	42,355	1	2024
S3	2014	Chevy, Malibu	Support Vehicle	138,740	200,000	10	61,260	1	2024
S13	2019	Ford, Transit 150	Support Van	35,042	200,000	10	164,958	6	2029
S14	2019	Ford, Transit 150	Support Van	36,848	200,000	10	163,152	6	2029
S20	2018	Ford, Escape	Support Vehicle	60,512	200,000	10	139,488	5	2028
S21	2018	Ford, Escape	Support Vehicle	77,104	200,000	10	122,896	5	2028
S22	2018	Ford, Escape	Support Vehicle	61,801	200,000	10	138,199	5	2028
S23	2018	Ford, Escape	Support Vehicle	64,235	200,000	10	135,765	5	2028
S24	2018	Ford, Escape	Support Vehicle	81,233	200,000	10	118,767	5	2028

Financial Plan for Capital

Table 6-4 provides a financial plan for vehicle replacement and expansion. The plan is based on the vehicle replacement needs identified in the baseline estimate, beginning with FY 2024. The financial plan incorporates RTA's proposed replacement schedule and the expansion vehicles required for the successful implementation of the service plan. To meet the vehicle requirements of the service plan, an expansion vehicle will be needed every fiscal year of the plan.

Table 6-4: Conceptual Financial Plan for Capital*

Projected Vehicle Requests	Fiscal Year				
	2024	2025	2026	2027	2028
Replacement Vehicles					
30' Heavy Duty Bus	4	4	4	4	4
Small Cutaway	1				
Accessible Van		5			
Total	5	9	4	4	4
Expansion Vehicles					
30' Heavy Duty Bus	0	3	2	2	3
Total	0	3	2	2	3
Projected Vehicle Costs					
Replacement	\$2,100,000	\$2,250,000	\$2,000,000	\$2,000,000	\$2,000,000
Expansion	\$0	\$1,500,000	\$1,000,000	\$1,000,000	\$1,500,000
Total	\$2,100,000	\$3,750,000	\$3,000,000	\$3,000,000	\$3,500,000
Anticipated Funding Sources					
Federal	\$1,200,000	\$3,000,000	\$2,400,000	\$2,400,000	\$2,800,000
State	\$150,000	\$375,000	\$300,000	\$300,000	\$350,000
Local	\$750,000	\$375,000	\$300,000	\$300,000	\$350,000
Total Capital Project Funding	\$2,100,000	\$3,750,000	\$3,000,000	\$3,000,000	\$3,500,000

*does not include FLASH extension or US1 Micro-transit pilot program

Conclusion

This TDP provides recommendations for the expansion of existing and new public transportation services in the central Maryland region. The TDP specifically focuses on addressing community desires and local initiatives including:

- Improving overall service through progressive route and schedule designs that make transit more attractive and convenient.
- Meeting the intra-county and out-of-county travel needs for work, school, medical services, and personal business.
- Providing transit infrastructure improvements to support continued growth in transit services.
- Generating local support and broadening financial support for transit.

The TDP aims to improve services at a steady rate over the next five years given the challenges of addressing transit operating budget increases above normal inflation. New services and improvements that require additional funding were developed to address issues identified during the review of needs; they are dependent on the future availability of new or additional funding.

As noted in the TDP, this plan was developed when the impacts of the Covid-19 pandemic were still being felt. RTA, like many transit systems across the country, was still rebounding from significant ridership decreases. Following the completion of the draft TDP, RTA reported that Fiscal Year 2023 ridership surpassed pre-pandemic levels. However, there are still uncertainties related to work-from-home jobs and future development plans. The TDP was developed to address future growth and expand current RTA services.

With uncertain budgets and non-guaranteed financial resources, it is important to remember that public transportation can contribute to the local and regional economy by providing a way for residents to get to work and school, access necessary medical services, and support local businesses and economic development.

Regional Transportation Agency of Central Maryland Transit Development Plan

Appendix A RTA Route Profiles

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Appendix A

RTA Route Profiles

Introduction

The RTA operates 14 fixed routes throughout its service area. The following route profiles include detailed maps of each route with call-outs for major destinations. The profiles also include route characteristics including service days and hours, daily round trips, and headways. The routes are divided into numbering sequences:

- **300 Series:** routes serving the City of Laurel; the Town Centre at Laurel serves as a transfer location.
- **400 Series:** routes primarily serve Howard County; the Mall in Columbia serves as the primary transfer location.
- **500 Series:** routes that provide regional connections between counties.

The stop activity displayed in the following profiles was gathered by RTA between August 12, 2022 – November 12, 2022. Therefore, stop activity represents daily average ridership for a 90-day period.

Route 301: Laurel Town Centre – South Laurel

Route 301 South Laurel operates weekday service in northern Prince George's County. The route originates at the Town Centre at Laurel, providing connections to RTA routes 302, 502, 503, and 409. In addition, there are connections to WMATA routes 89M and ZT. From the Laurel Town Centre, the route travels along Cherry Lane, Van Dusen Road, Main Street, and Baltimore Avenue / Route 1 before continuing along Contee Road and Laurel Bowie Road to the terminus at the intersection of South Laurel Drive and Laurelwalk Drive. The primary transfer point is Town Centre Laurel.

Table A-1: Route 301 Strengths and Challenges

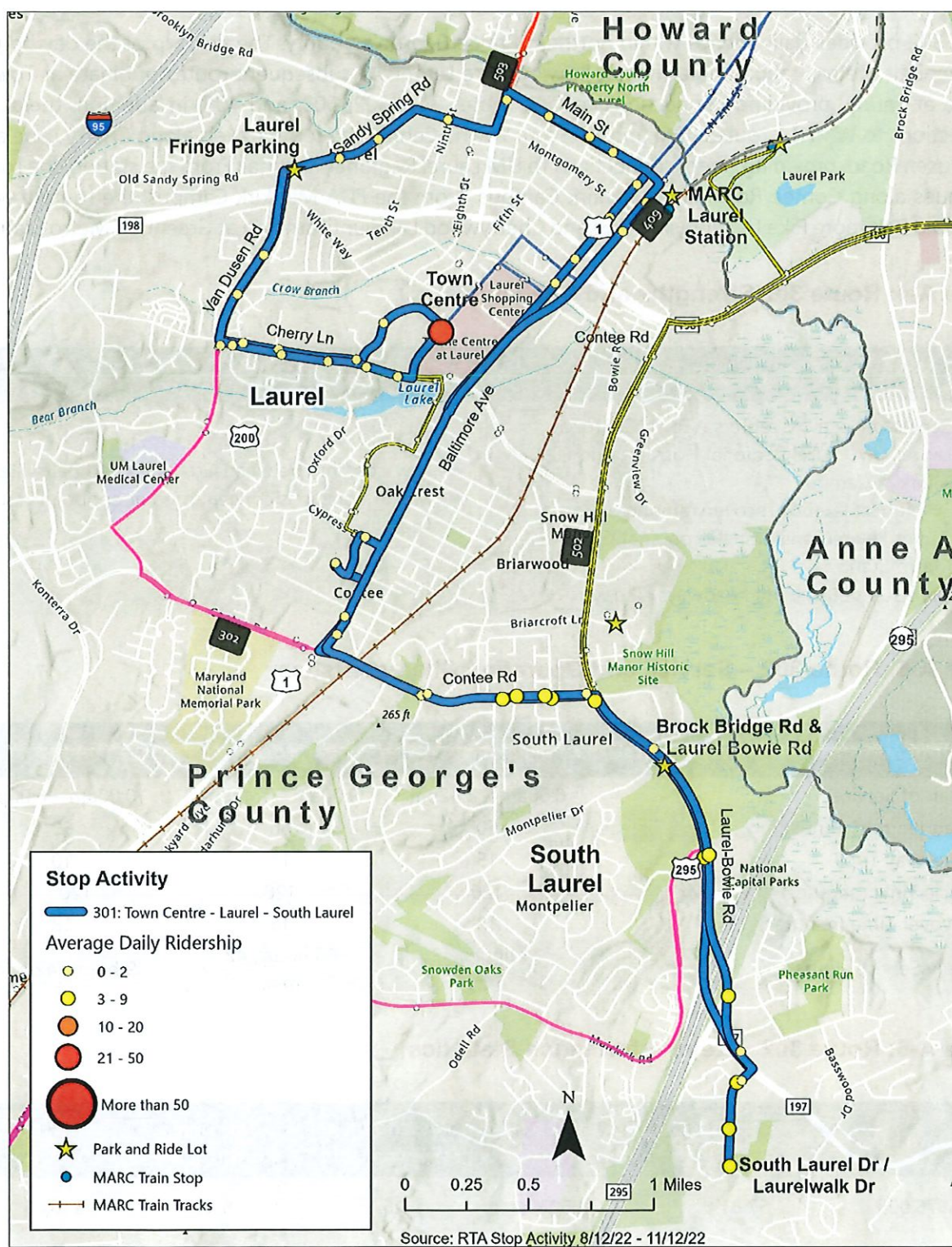
Strengths	Challenges
<ul style="list-style-type: none"> Serves Town Centre at Laurel, connecting with RTA and WMATA routes. Provides local service in Laurel. 	<ul style="list-style-type: none"> Low ridership outside of the Town Centre. Rate for arriving 5-10 min. late exceeds average

Table A-2: Route 301 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays
Span of Service	7:00am – 6:54pm
Frequency (minutes)	60
One-Way Trips	12
Cycle Time (minutes)	60
Layover Time (minutes)	6
Daily Service Hours	11 hours, 54 min.

Table A-3: Route 301 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$394,619	18,278	3.60%	4.7	68%	\$21.59

Figure A-1: RTA Route 301: Town Centre – South Laurel

Route 302: Laurel – Greenbelt Metro Station

Route 302 provides daily service within northern Prince George's County. The first trip of the day begins at Greenbelt Metro Station and arrives at Town Centre Laurel. All subsequent routes originate at Towne Centre at Laurel, providing connections to RTA routes 302, 502, 503, and 409. In addition, there are connections to WMATA routes 89M and ZT. From Towne Centre, the route travels along Cherry Lane and Van Dusen Road, providing direct connections to UM Laurel Regional Hospital. From the station, the route continues along Contee Rd to FDA Muirkirk Campus. From the FDA Muirkirk Campus, the route travels along Old Baltimore Pike to Sunnyside Ave and Cherrywood Land until arriving at Greenbelt Metro Station.

Table A-4: Route 302 Strengths and Challenges

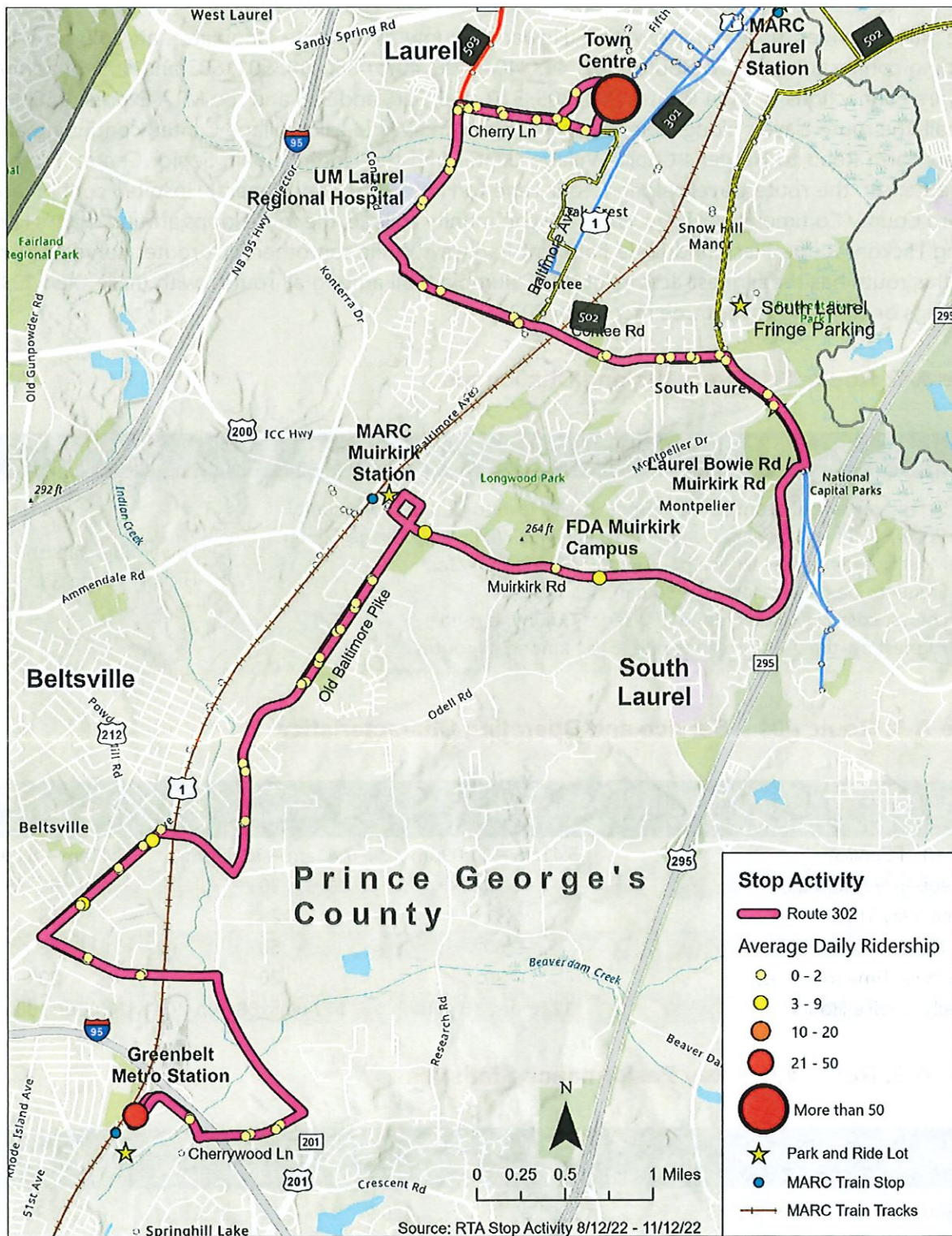
Strengths	Challenges
<ul style="list-style-type: none"> Serves key activity centers - Town Centre at Laurel, UM Laurel Regional Hospital, and FDA Muirkirk Campus. 3rd highest farebox recovery among all routes. Serves key regional transfer point at Greenbelt Metro Station. Consistent 60-minute headways all day. 	<ul style="list-style-type: none"> Low ridership between Greenbelt and Beltsville. Most ridership is concentrated at endpoints and Laurel.

Table A-5: Route 302 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturday	Sunday
Span of Service	6:00am – 8:42pm	9:00am – 7:42pm	10:00am – 6:00pm
Frequency (minutes)	60	60	60
One-Way Trips	15	11	10
Cycle Time (minutes)	120	120	120
Layover Time (minutes)	18	18	18
Daily Service Hours	14 hours, 42 min.	10 hours, 42 min.	9 hours, 42 min.

Table A-6: Route 302 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$975,003	57,813	4.60%	6.1	62%	\$16.86

Figure A-2: RTA Route 302: Town Centre Laurel - Greenbelt Metro Station

Route 401: Mall in Columbia – Harper’s Choice/Clary’s Forest

Route 401 provides daily service within Howard County. The route originates at Columbia Mall, providing connections to RTA Routes 402, 403, 404, 406, 407, 408, 414, 501, 503 and 505. In addition, there are connections to MTA Routes 203, 305, 310, 315, 320, and 325 and the MTA Express 150. 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 Florence Bain Senior 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 serving Hickory Ridge Place and Little Patuxent Parkway. While ten other RTA routes serve Columbia Mall, this route has the highest activity at the Columbia Mall among all routes, with more than 12,000 boardings or alightings over three months in 2022.

Table A-7: Route 401 Strengths and Challenges

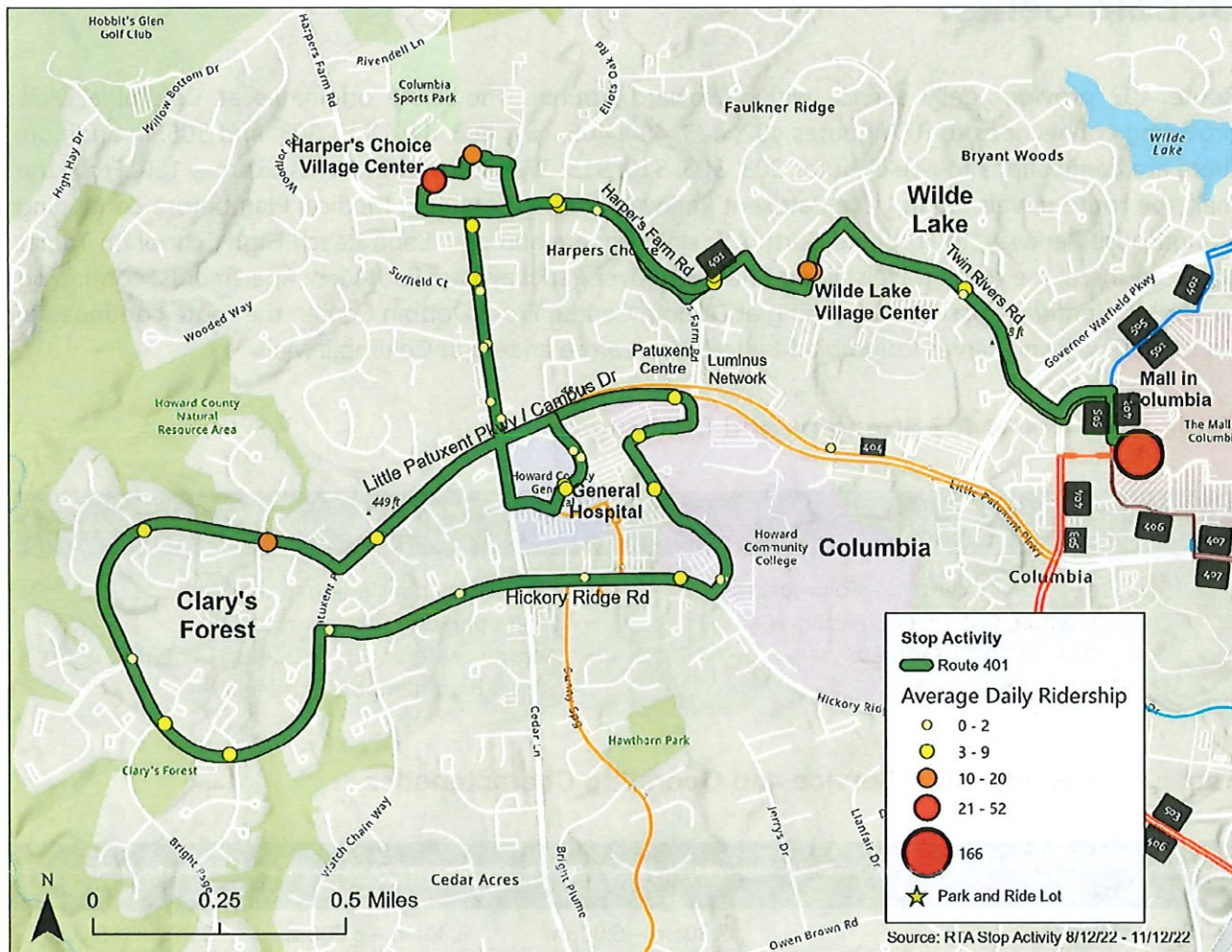
Strengths	Challenges
<ul style="list-style-type: none"> Serves key activity centers – Columbia Mall, Howard County Community College, Howard County General Hospital, and Wilde Lake Village Center. Most boardings per service hour among all routes by far. Frequent peak hour service – 30 min. headways. Lowest cost per route among 400 series Columbia routes. Highest on-time performance rate (81%) among all routes 	<ul style="list-style-type: none"> Lower ridership on Hickory Ridge Rd.

Table A-8: Route 401 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturday	Sunday
Span of Service	5:41am – 11:09pm	7:41am – 10:09pm	8:41am – 8:09pm
Frequency (minutes)	30	30	60
One-Way Trips	31	29	13
Cycle Time (minutes)	60	60	60
Layover Time (minutes)	20	20	20
Daily Service Hours	17 hours, 38 min.	14 hours, 38 min.	11 hours, 38 min.

Table A-9: Route 401 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$605,087	58,240	5.90%	9.9	81%	\$10.39

Figure A-3: RTA Route 401: Mall in Columbia – Harper's Choice / Clary's Forest

Route 402: Mall in Columbia – Columbia Crossing – Dobbin Center

Route 402 provides daily service within Howard County. The route originates at Columbia Mall, providing connections to RTA Routes 402, 403, 404, 406, 407, 408, 414, 501, 503, and 505. In addition, there are connections to MTA Routes 203, 305, 310, 315, 320, 325 and the MTA Express 150. From the mall, the route travels along Little Patuxent Parkway serving Columbia Medical Plan before continuing along Rouse Parkway, to Foreland Garth / Shalom Square and past Long Reach High School on Tamar Dr. From there, the route travels along Snowden River Parkway past Park View Apartments, continuing through Columbia Crossing and ending at Dobbin Center. From Dobbin Center, the route continues to Rouse Parkway and serves Columbia Medical Plan before ending at Columbia Mall.

Table A-10: Route 402 Strengths and Challenges

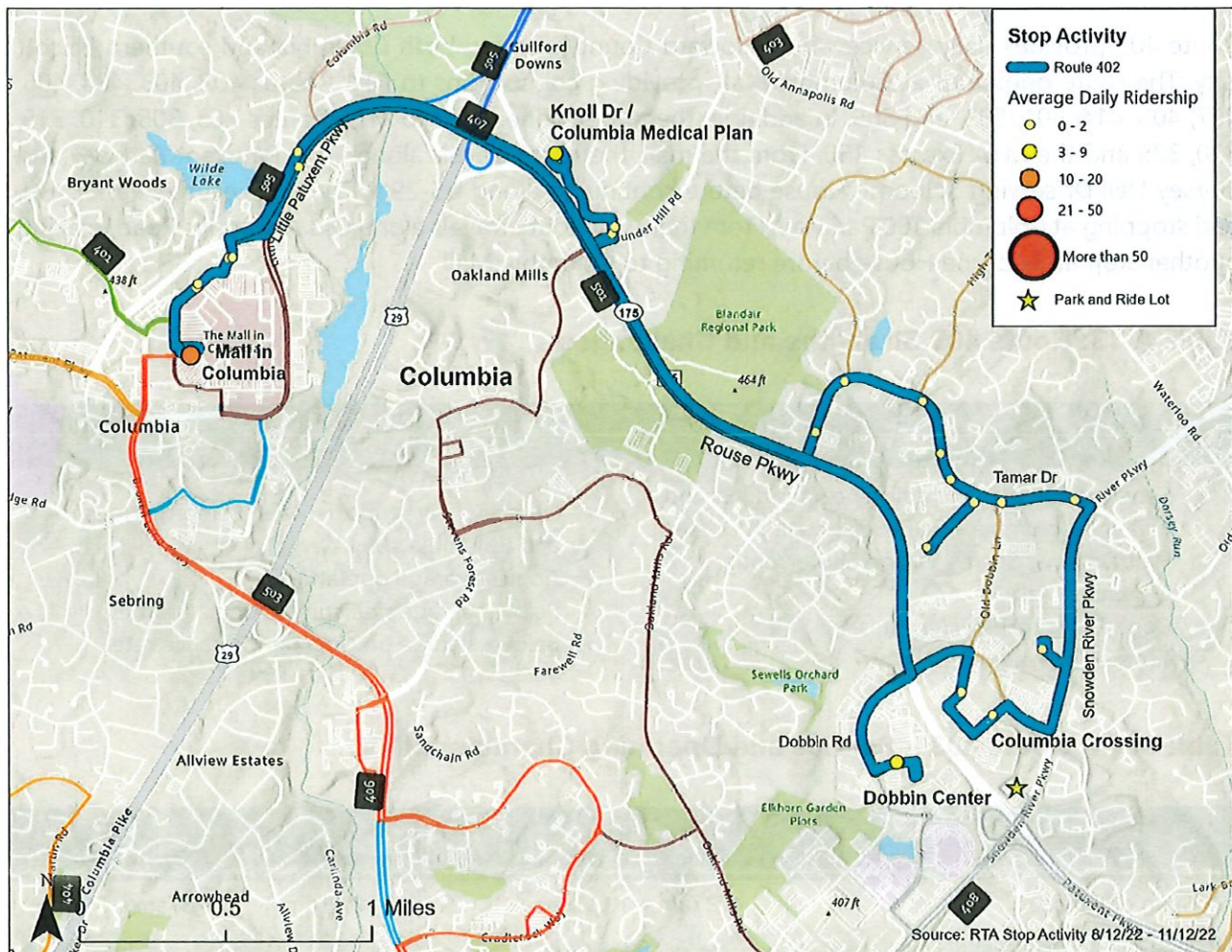
Strengths	Challenges
<ul style="list-style-type: none"> Serves key activity centers – Columbia Mall, Dobbin Center, Columbia Crossing Connects with 10 RTA routes. Consistent 1-hour headways 	<ul style="list-style-type: none"> Low ridership including at the Mall. High operating cost per route. Activity centers such as Dobbin Center do not attract high numbers of riders.

Table A-11: Route 402 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturday	Sunday
Span of Service	7:30am – 6:00pm	8:30am – 6:00pm	9:30am – 6:00pm
Frequency (minutes)	60	60	60
One-Way Trips	11	10	9
Cycle Time (minutes)	60	60	60
Layover Time (minutes)	16	16	16
Daily Service Hours	10 hours, 30 min.	9 hours, 30 min.	8 hours, 30 min.

Table A-12: Route 402 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$424,018	16,376	2.4%	4	62%	\$25.89

Figure A-4: RTA Route 402: Mall in Columbia – Columbia Crossing – Dobbin Center

Route 403: Mall in Columbia – Executive Park Drive

Route 403 provides daily service within Howard County, serving both Columbia and southern Ellicott City. The route originates at Columbia Mall, providing connections to RTA Routes 402, 403, 404, 406, 407, 408, 414, 501, 503, and 505. In addition, there are connections to MTA Routes 203, 305, 310, 315, 320, 325 and the MTA Express 150. From the mall, the route travels along Little Patuxent Parkway and Dorsey Hall Dr serving Selborne House before continuing along US-29, MD-100, Executive Park Drive, and stopping at Columbia 100 Parkway. From there, the route travels along Old Annapolis Road, making another stop at Selborne House before returning to Columbia Mall.

Table A-13: Route 403 Strengths and Challenges

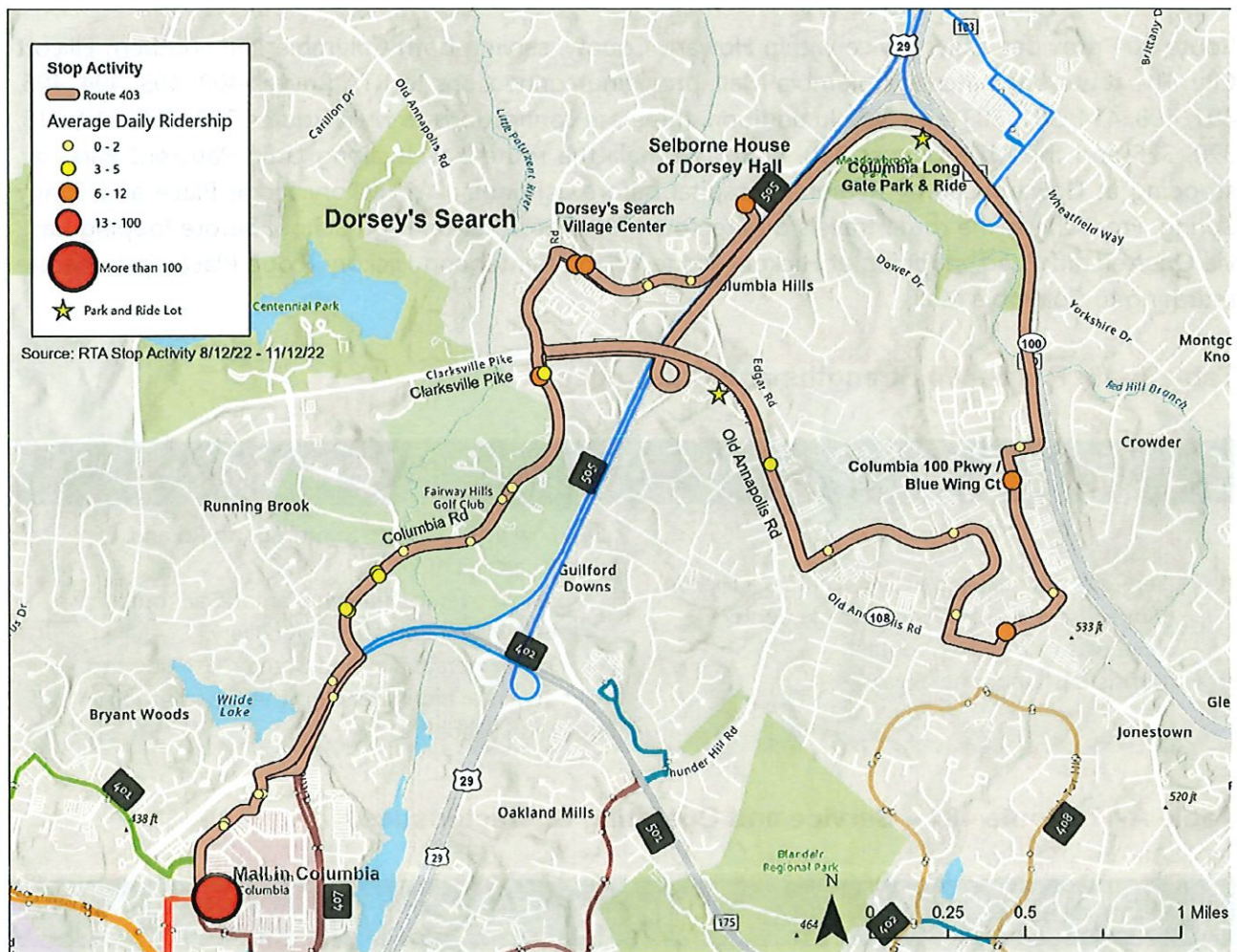
Strengths	Challenges
<ul style="list-style-type: none"> Serves residential and activity centers in Ellicott City and Columbia – Selborne House of Dorsey Hall, Dorsey's Search Village Center, and Columbia Mall Connects with 10 RTA routes. Consistent 1-hour headways 	<ul style="list-style-type: none"> No activity or stops between Selborne House and Columbia 100 Pkwy. Above-average operating cost. Below-average ridership among all routes. Below-average on-time performance rate.

Table A-14: Route 403 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturday	Sunday
Span of Service	5:37am – 10:11pm	7:37am – 8:11pm	9:37am – 5:11pm
Frequency (minutes)	60	60	60
One-Way Trips	18	14	9
Cycle Time (minutes)	60	60	60
Layover Time (minutes)	18	18	18
Daily Service Hours	16 hours, 34 min.	12 hours, 34 min.	7 hours, 34 min.

Table A-15: Route 403 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$499,784	21,435	2.6%	4.4	74%	\$23.32

Figure A-5: RTA Route 403: Mall in Columbia – Executive Park Drive

Route 404: Mall in Columbia – Hickory Ridge

Route 404 provides daily service within Howard County, serving both Columbia and southern Ellicott City. The route originates at Columbia Mall, providing connections to RTA Routes 402, 403, 404, 406, 407, 408, 414, 501, 503, and 505. In addition, there are connections to MTA Routes 203, 305, 310, 315, 320, 325 and the MTA Express 150. From the mall, the route travels along Little Patuxent Parkway, stopping at Howard County Regional Hospital before continuing to Hickory Ridge Place and Sunny Spring. From there, the route travels on Freetown Road at Atholton High School before looping back via Quarterstaff Road, stopping at Hickory Ridge Village Center and Hickory Ridge Place again before returning to Columbia Mall.

Table A-16: Route 404 Strengths and Challenges

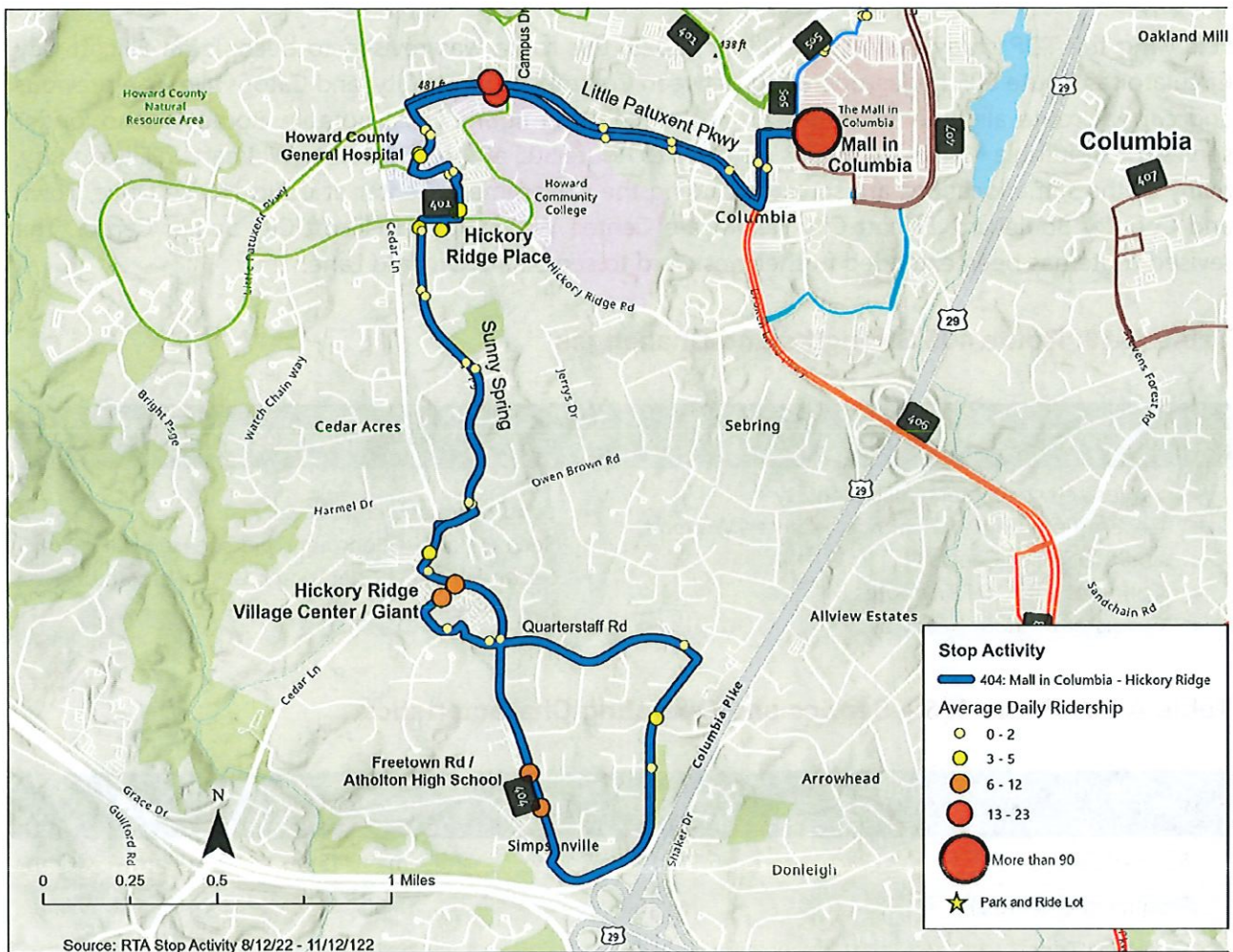
Strengths	Challenges
<ul style="list-style-type: none"> Serves residential and activity centers – Hickory Ridge Place, Hickory Ridge Village Center Connects with 10 RTA routes. Consistent 1-hour headways 	<ul style="list-style-type: none"> Low activity along Sunny Spring Rd and Quarterstaff Rd. Below-average ridership among all routes. Below-average farebox recovery. Trip generators at end of the route do not generate high ridership (The Giant, Atholton High School).

Table A-17: Route 404 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturday	Sunday
Span of Service	6:00am – 9:32pm	8:00am – 7:32pm	9:00am – 5:32pm
Frequency (minutes)	60	60	60
One-Way Trips	16	12	9
Cycle Time (minutes)	60	60	60
Layover Time (minutes)	28	28	28
Daily Service Hours	15 hours, 32 min.	11 hours, 32 min.	8 hours, 32 min.

Table A-18: Route 404 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$516,242	20,914	2.50%	4.1	67%	\$24.68

Figure A-6: RTA Route 404: Mall in Columbia – Hickory Ridge

Route 405: Mall in Columbia – Ellicott City

Following the TDP study period, on July 9th, 2023, this route was revised to become an Ellicott City Circulator as Route 505 began operating between Columbia, Ellicott City, and Catonsville. The previous and current route alignments are shown in the following figure. Most notably, Route 405 no longer serves the Columbia Mall but provides transfers to Route 505 at the Ellicott City Walmart. In Ellicott City, many of the same locations are served including the Government Center at Court House Drive, Town and Country Boulevard, Ellicott City Healthcare Center, Walmart, and Ellicott City Senior Center. The revised route has been extended further westward to serve Pine Orchard Lane.

Table A-19: Route 405 Strengths and Challenges

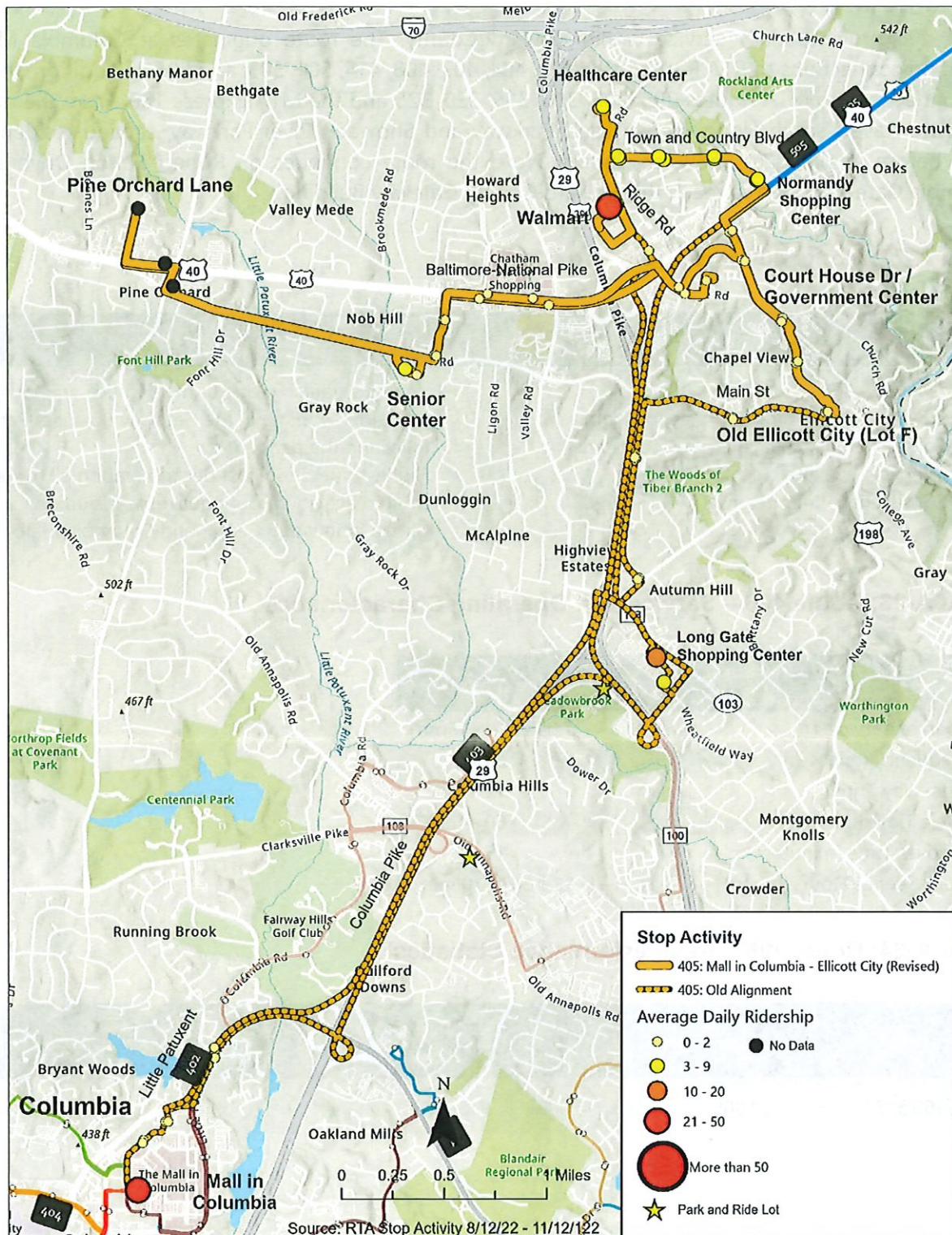
Strengths	Challenges
<ul style="list-style-type: none"> Serves activity centers in Ellicott City – Government Center, Healthcare Center, Walmart, and the Senior Center Connects with 10 RTA routes. Consistent 1-hour headways 	<ul style="list-style-type: none"> Long route and span of service. Second-lowest boardings per service hour. Second-highest operating cost per trip among all routes.

Table A-20: Route 405 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturday	Sunday
Span of Service	6:15am– 9:45pm	7:00am – 9:45pm	9:00am – 5:46pm
Frequency (minutes)	60	60	60
One-Way Trips	16	16	9
Cycle Time (minutes)	120	120	120
Layover Time (minutes)	17	17	14
Daily Service Hours	12 hours, 30 min.	12 hours, 30 min.	8 hours, 46 min.

Table A-21: Route 405 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$1,006,576	25,880	1.60%	2.6	65%	\$38.89

Figure A-7: RTA Route 405: Mall in Columbia – Ellicott City

Route 406: Mall in Columbia – Columbia Gateway

Route 406 provides daily service within Howard County. The route originates at Columbia Mall, providing connections to RTA Routes 402, 403, 404, 407, 408, 414, 501, 503, and 505. In addition, there are connections to MTA Routes 203, 305, 310, 315, 320, 325 and the MTA Express 150. From the mall, the route travels south along Broken Land Parkway and Snowden River Parkway, serving residential areas before stopping at Snowden Square. Next, the route continues on Robert Fulton Drive and Columbia Gateway Drive to reach the Howard County Gateway Building.

Table A-22: Route 406 Strengths and Challenges

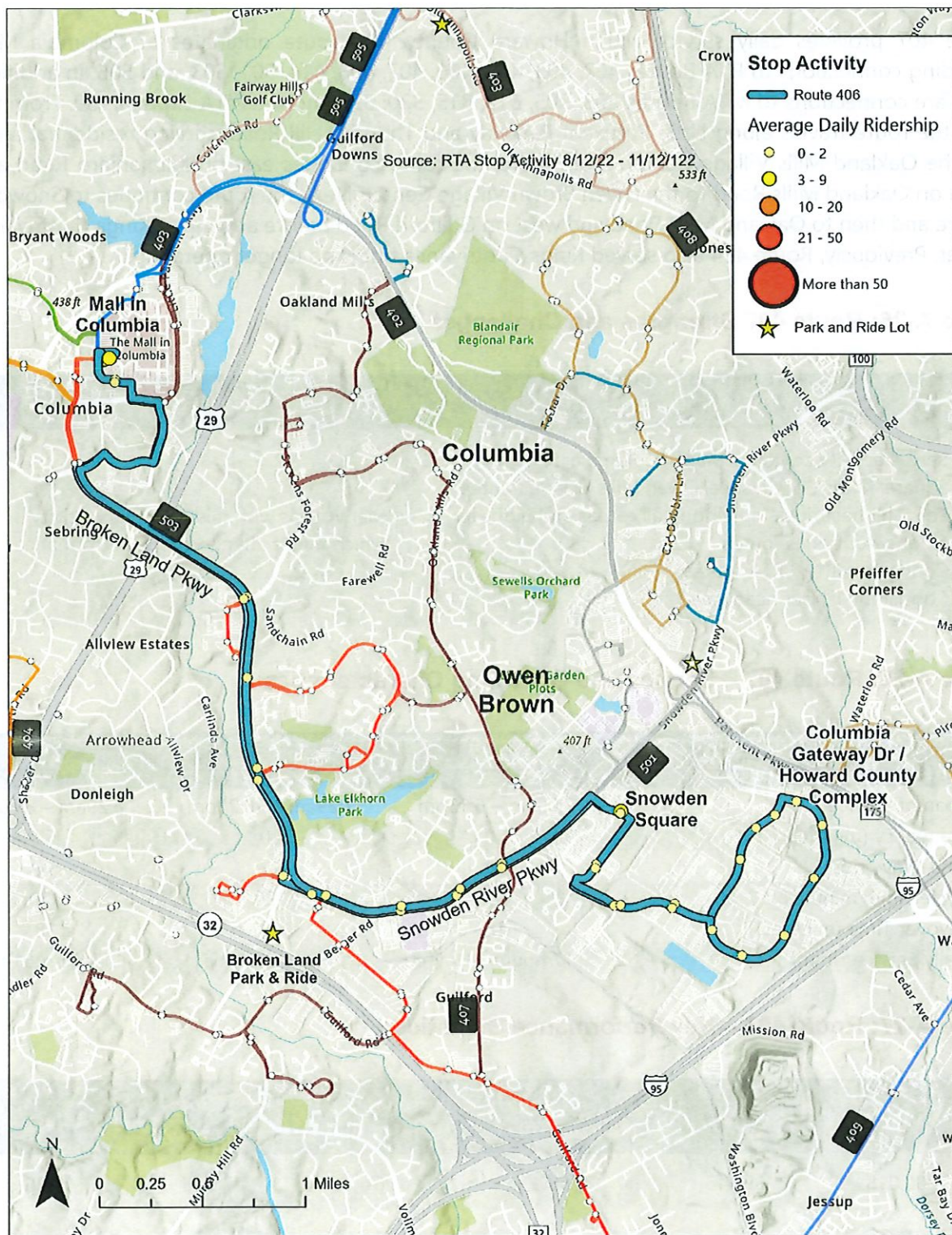
Strengths	Challenges
<ul style="list-style-type: none"> Provides a more direct connection from Columbia Mall to Gateway Business Park Connects with 10 RTA routes. Consistent 1-hour headways 	<ul style="list-style-type: none"> Very low ridership due to many office employees no longer working in the Gateway Business Park following the pandemic. Highest operating cost per trip among all routes. Limited activity throughout route including Ulman Innovation Center and Columbia Mall.

Table A-23: Route 406 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays
Span of Service	7:05am – 6:15pm
Frequency (minutes)	60
One-Way Trips	12
Cycle Time (minutes)	60
Layover Time (minutes)	15
Daily Service Hours	11 hours, 10 min.

Table A-24: Route 406 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$160,883	2,866	1.00%	1.7	69%	\$56.13

Figure A-8: RTA Route 406: Mall in Columbia – Columbia Gateway

Route 407: Mall in Columbia – Kings Contrivance

Route 407 provides daily service within Howard County. The route originates at Columbia Mall, providing connections to RTA Routes 402, 403, 404, 406, 407, 408, 414, 501, 503, and 505. In addition, there are connections to MTA Routes 203, 305, 310, 315, 320, 325 and the MTA Express 150. From the mall, the route travels along Little Patuxent Parkway and Thunder Hill Road, serving residential areas and the Oakland Mills Village Center. From there, the route continues east on Kilimanjaro Road and south on Oakland Mills Road to the Owen Brown Village Center. Next, the route continues to Snowden Square and then to Oakland Mills Road and west on Guilford Road before arriving at Kings Contrivance Center. Previously, Route 414 also served Kings Contrivance but is no longer operating.

Table A-25: Route 407 Strengths and Challenges

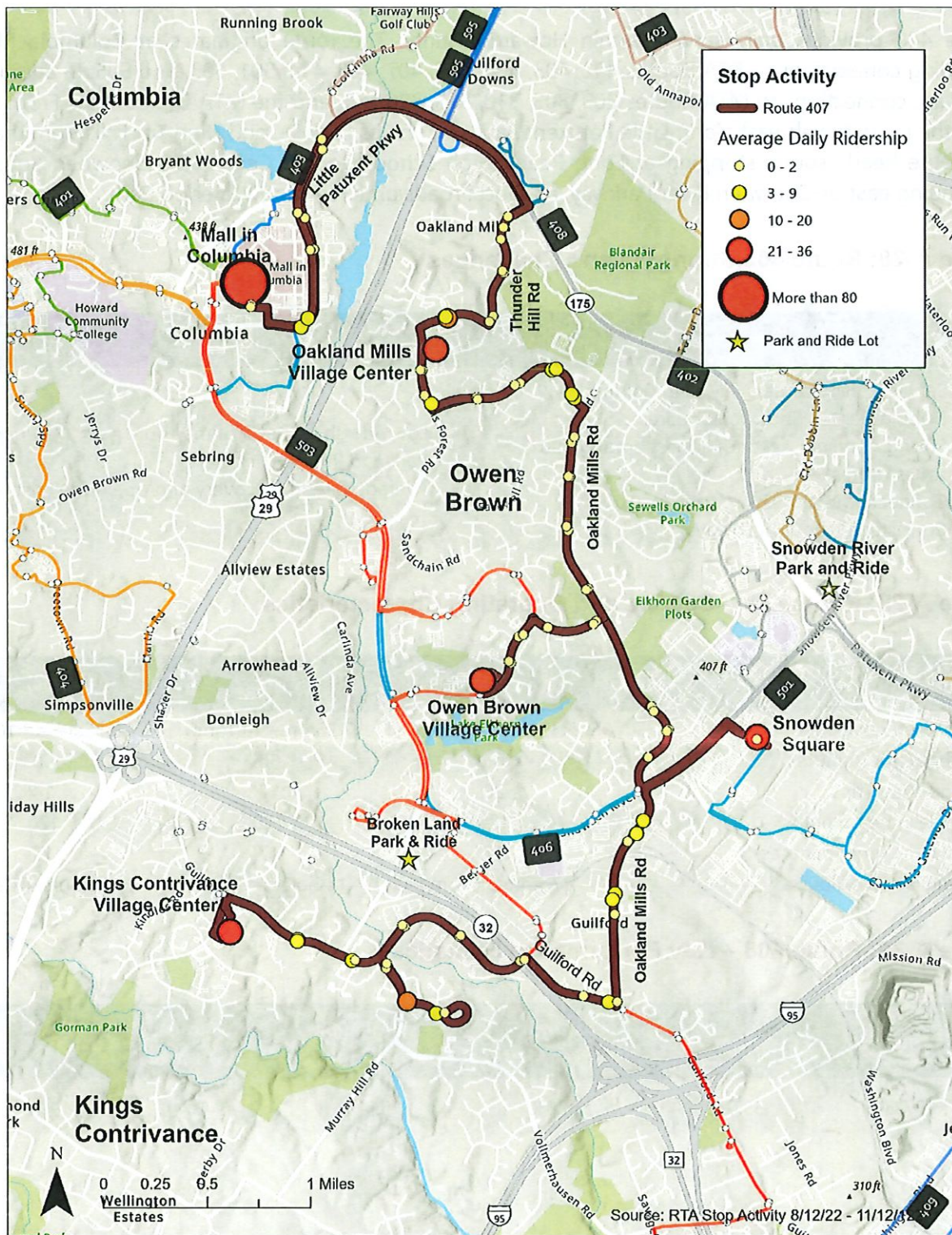
Strengths	Challenges
<ul style="list-style-type: none"> Serves activity centers – Mall in Columbia, Snowden Square, Kings Contrivance, Owen Mills Village Center. Third-highest ridership among all routes and highest among 400 series routes. Connects with 10 RTA routes. Consistent 1-hour headways. 	<ul style="list-style-type: none"> Many stops with relatively high activity which might affect on-time performance.

Table A-26: Route 407 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturdays	Sundays
Span of Service	7:05am – 6:15pm	7:29am – 10:20pm	8:29am – 8:20pm
Frequency (minutes)	60	60	60
One-Way Trips	20	17	14
Cycle Time (minutes)	120	120	120
Layover Time (minutes)	18	18	18
Daily Service Hours	17 hours, 51 min.	14 hours, 51 min.	11 hours, 51 min.

Table A-27: Route 407 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$1,200,018	69,546	3.60%	6	70%	\$17.26

Figure A-9: RTA Route 407: Mall in Columbia – Kings Contrivance

Route 408: Mall in Columbia – Lark Brown / Waterloo

Route 408 provides daily service within Howard County. The route originates at Columbia Mall, providing connections to RTA Routes 402, 403, 404, 406, 407, 408, 414, 501, 503, and 505. In addition, there are connections to MTA Routes 203, 305, 310, 315, 320, 325 and the MTA Express 150. From the mall, the route travels east along Little Patuxent Parkway, Phelps Luck Dr, and High Tor Hill. From there, the route heads south, stopping at Long Reach High School Dobbin Center and Snowden Square, continuing east on Snowden River Parkway, and local roads until reaching Waterloo Park.

Table A-28: Route 408 Strengths and Challenges

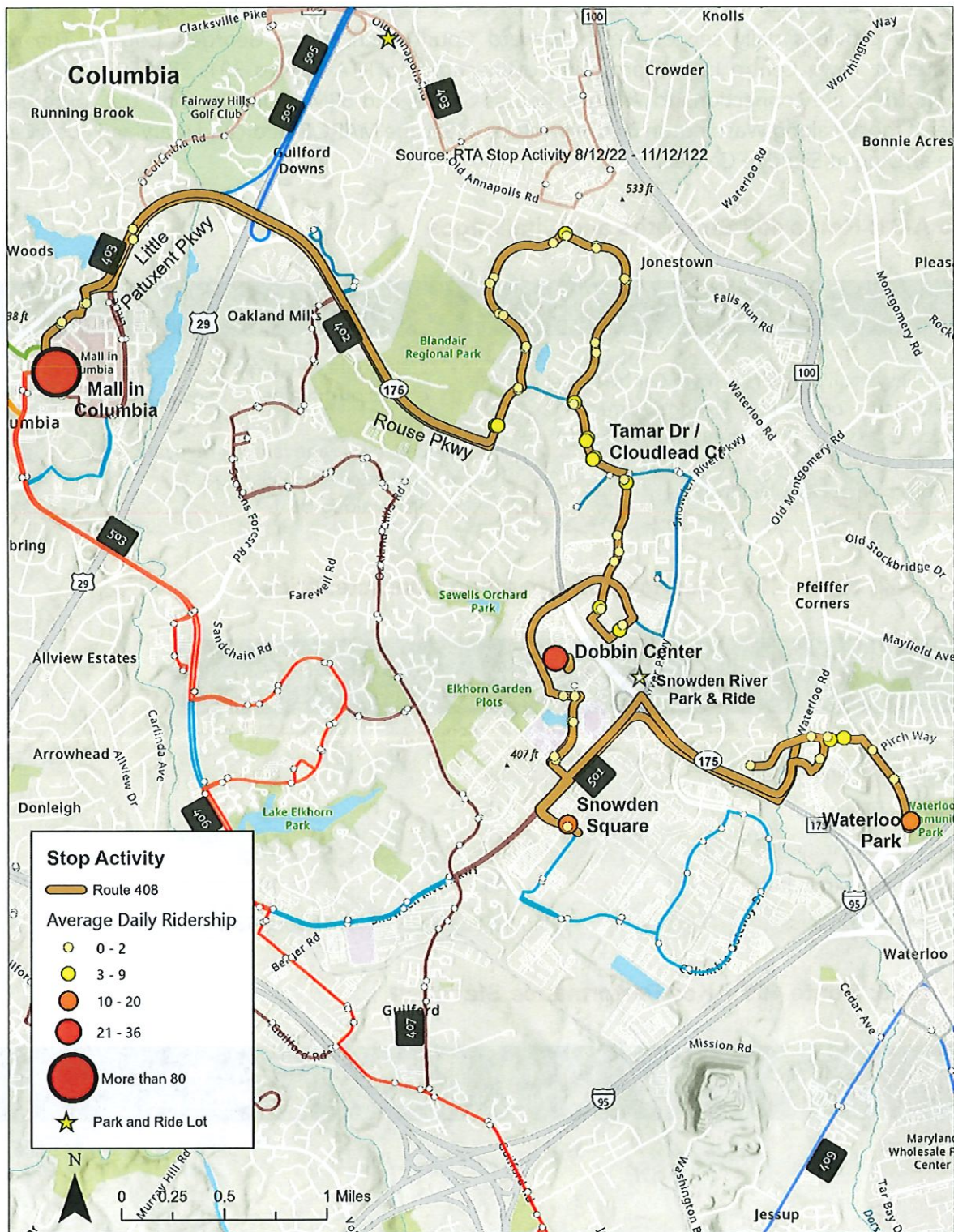
Strengths	Challenges
<ul style="list-style-type: none"> Serves activity centers – Mall in Columbia, Dobbin Center, Snowden Square. Strong ridership, second highest among 400 series routes. Connects with 10 RTA routes. Consistent 1-hour headways. 	<ul style="list-style-type: none"> Low ridership at end of the route near Waterloo Park and Phelps Luck Dr. Average farebox recovery and operating cost.

Table A-29: Route 408 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturdays	Sundays
Span of Service	5:35am – 11:16am	7:35am – 10:16pm	8:35am – 8:16pm
Frequency (minutes)	60	60	60
One-Way Trips	20	17	14
Cycle Time (minutes)	120	120	120
Layover Time (minutes)	17	17	17
Daily Service Hours	17 hours, 41 min.	14 hours, 41 min.	11 hours, 41 min.

Table A-30: Route 408 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$1,137,218	59,035	3.20%	5.3	67%	\$19.26

Figure A-10: RTA Route 408: Mall in Columbia – Lark Brown / Waterloo

Route 409: Town Centre Laurel – Elkridge Corners

Route 409 provides daily service within Howard County and Prince George's County. The route originates at Town Centre Laurel, providing connections to RTA Routes 301, 302, 502, and 503. In addition, there are connections to WMATA Routes 87, 89, and 89M. From the mall, the route travels northeast mostly along Washington Blvd, with stops at Savage MARC Station and Maryland Food Center before arriving at Elkridge Corners.

Table A-31: Route 409 Strengths and Challenges

Strengths	Challenges
<ul style="list-style-type: none"> Serves activity centers – Town Centre Laurel, Maryland Food Center, Elkridge Corners. Connects with 4 RTA routes and 3 WMATA Routes. Consistent 1-hour headways 	<ul style="list-style-type: none"> Long route with many stops which probably effects on-time performance (lowest of all routes). Below average farebox recovery. Low ridership in Elkridge. Stops along US 1.

Table A-32: Route 409 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturdays
Span of Service	5:58am – 7:50pm	7:58am – 6:50pm
Frequency (minutes)	60	60
One-Way Trips	15	12
Cycle Time (minutes)	120	120
Layover Time (minutes)	10	10
Daily Service Hours	13 hours, 52 min.	10 hours, 52 min.

Table A-33: Route 409 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$924,950	42,428	3.10%	4.7	49%	\$21.80



Route 501: Mall in Columbia – Arundel Mills Mall

Route 501 provides daily service within Howard and Anne Arundel County. The route originates at Town Mall in Columbia, providing connections to RTA Routes 301, 302, 502, and 503. In addition, there are connections to WMATA Routes 87, 89, and 89M. From the mall, the route travels east along Little Patuxent Parkway, and south along Rouse Parkway and Dobbin Road with stops at Dobbin Center, Snowden Square, and Snowden Park and Ride (weekdays only). From there, the route travels south along Waterloo Road to the Maryland Food Center, east to the Dorsey MARC Station, and finally southeast along County Road 100 to Arundel Mills Mall. From there, connections are available to RTA Routes 502, MTA 75 and 201, Anne Arundel County Routes 201 and 202, and WMATA Route B30.

Table A-34: Route 501 Strengths and Challenges

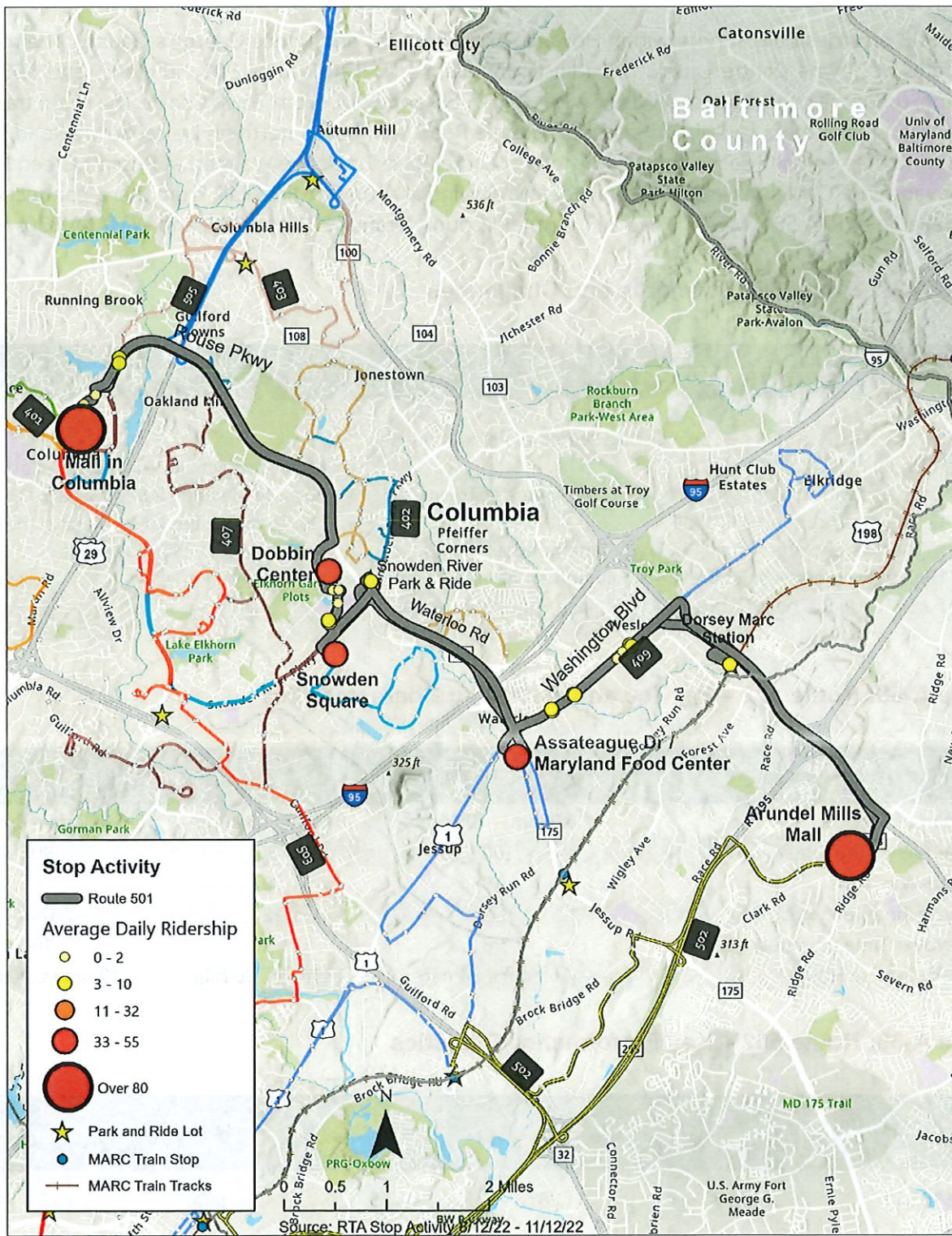
Strengths	Challenges
<ul style="list-style-type: none"> Serves activity centers – Columbia Mall, Dobbin Center, Snowden Square, and Arundel Mills Mall Connects with 10 RTA routes at Columbia Mall, and multiple routes at Arundel Mills Mall. Connected to regional routes at both ends. High stop activity particularly at the Columbia Mall and Arundel Mills Mall Second most boardings per service hour among all routes. 	<ul style="list-style-type: none"> High activity at key stops but low activity along stretches of MD 175 which has no business or housing fronting the roadway. Below-average on-time performance.

Table A-35: Route 501 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturdays
Span of Service	5:55am – 10:37pm	7:04am – 10:37pm
Frequency (minutes)	60	60
One-Way Trips	18	17
Cycle Time (minutes)	120	120
Layover Time (minutes)	12	13
Daily Service Hours	16 hours, 42 min.	15 hours, 33 min.

Table A-36: Route 501 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$1,198,065	79,5212	4.40%	6.8	57%	\$16.37

Figure A-12: RTA Route 501: Mall in Columbia – Arundel Mills Mall

Route 502: Town Centre Laurel – Arundel Mills Mall

Route 502 provides daily service within Howard, Anne Arundel, and Prince George's County. The route originates at Towne Centre Laurel, providing connections to RTA Routes 301, 409, 502, and 503. In addition, there are connections to WMATA Routes 87, 89, and 89M. From Town Centre, the route travels south through southern Laurel, turns east on Contee Road, and heads north on Laurel Bowie Road. The route continues on Fort Meade Road with stops at Laurel Race Track, the Walmart at Russett Green East, and Savage MARC Station (weekdays only) before arriving at Arundel Mills Mall. From there, connections are available at RTA 501, MTA 75 and 201, Arundel County Transit 201 and 202, and WMATA B30.

Table A-37: Route 502 Strengths and Challenges

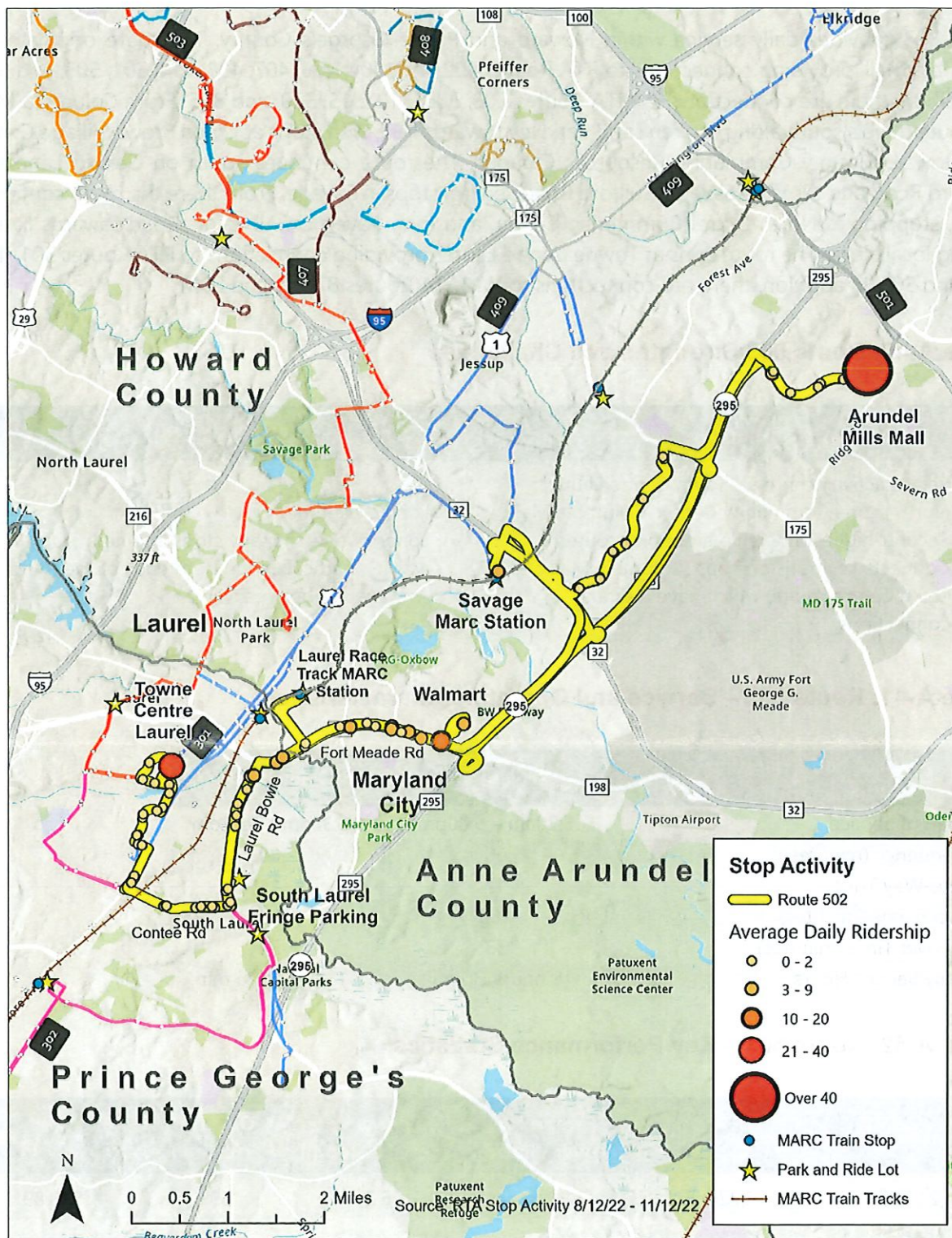
Strengths	Challenges
<ul style="list-style-type: none"> Serves activity centers – Town Centre Laurel, Walmart, and Arundel Mills Mall. Connects with multiple RTA and regional routes at Towne Centre and Arundel Mills Mall. Highest farebox recovery (11.2%) by far among all routes. High activity between Laurel MARC station and Walmart on Fort Meade Rd. near Corridor Marketplace Shopping Center 	<ul style="list-style-type: none"> Most stop activity concentrated on Fort Meade and Laurel Bowie Rd. No opportunities to stop along the stretch of MD 295/ Baltimore Washington Parkway.

Table A-38: Route 502 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturdays	Sundays
Span of Service	6:00am – 10:34pm	9:00am – 8:20pm	10:00am – 8:20pm
Frequency (minutes)	60	90	90
One-Way Trips	19	9	7
Cycle Time (minutes)	120	120	120
Layover Time (minutes)	16	16	16
Daily Service Hours	16 hours, 34 min.	13 hours, 20 min.	10 hours, 20 min.

Table A-39: Route 502 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$181,711	48,950	11.20%	5	66%	\$3.71

Figure A-13: RTA Route 502: Town Centre Laurel – Arundel Mills Mall

Route 503: Town Centre Laurel – Mall in Columbia

Route 503 provides daily service within Howard and Prince George's County. The route originates at Columbia Mall, providing connections to RTA Routes 402, 403, 404, 406, 407, 408, 414, 501, 503, and 505. In addition, there are connections to MTA Routes 203, 305, 310, 315, 320, and 325. From Columbia Mall, the route travels south along Broken Land Parkway towards I-95, with stops at Owen Brown Village Center and Howard County Community Resources Campus. The route continues south on Gerwig Lane and Guilford Road and turns on Savage Guilford Road serving stops in Savage. From there the route continues south, stopping at North Laurel Community Center, and then travels on All Saints Road towards Laurel, serving local stops. The route ends at Towne Centre Laurel, providing connections to RTA Routes 301, 409, 502, and 503. In addition, there are connections to WMATA Routes 87, 89, and 89M.

Table A-40: Route 503 Strengths and Challenges

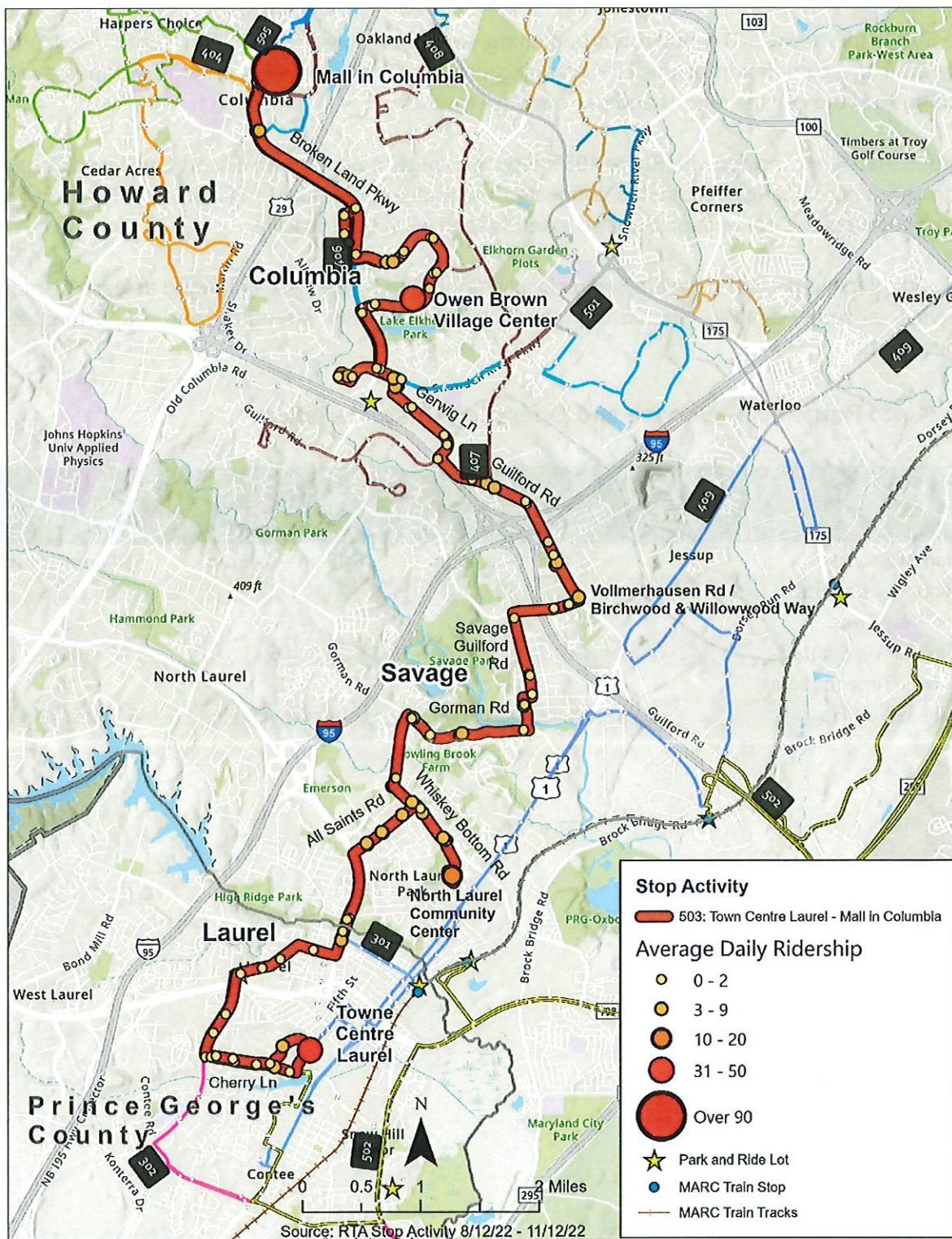
Strengths	Challenges
<ul style="list-style-type: none"> Serves activity centers – Town Centre Laurel, North Laurel Community Center, Columbia Mall. Second-highest ridership among all routes. Connects key transfer stops (Columbia Mall and Town Centre Laurel) which have regional connections. 	<ul style="list-style-type: none"> Long cycle time. Long route with many stops and high stop activity, particularly on both ends of the route. Average farebox recovery.

Table A-41: Route 503 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturdays
Span of Service	5:30am – 9:00pm	8:30am – 7:56pm
Frequency (minutes)	60	60
One-Way Trips	17	13
Cycle Time (minutes)	180	180
Layover Time (minutes)	33	34
Daily Service Hours	15 hours, 30 min.	11 hours, 26 min.

Table A-42: Route 503 – Key Performance Statistics

Operating Cost	Passenger Trips	Farebox Recovery Ratio	Passengers per Service Hour	On-Time Performance	Cost per Trip
\$1,214,851	74,224	3.90%	6.2	69%	\$18.89

Figure A-14: RTA Route 503: Town Centre Laurel – Mall in Columbia

Route 505: Mall in Columbia – Catonsville

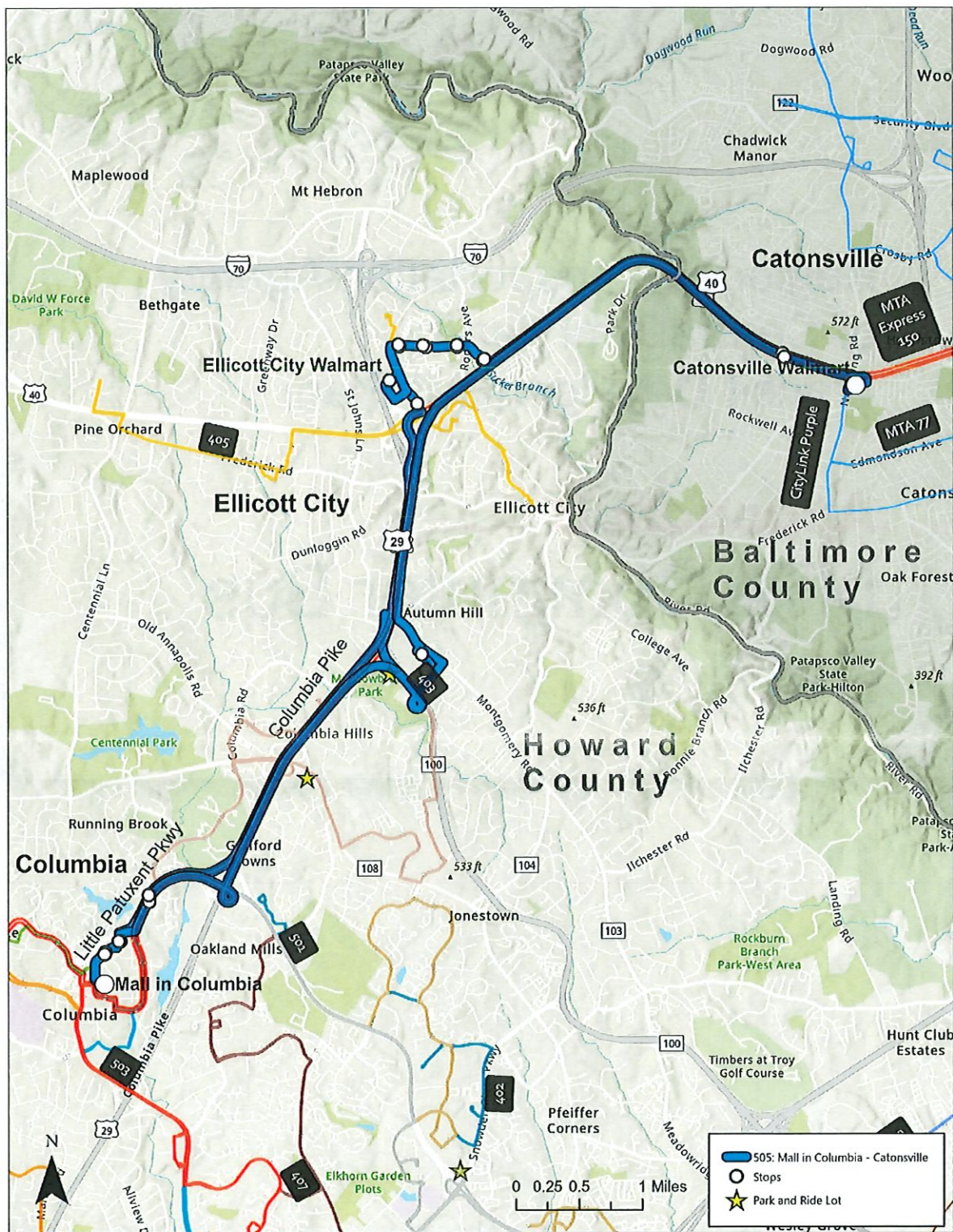
Route 505 is the newest RTA bus route beginning service on July 9th, 2023. The route was launched shortly after the completion of the TDP planning process. Therefore, limited information is available pertaining to route considerations and performance metrics.

Route 505's launch coincides with Route 405's service change to become an Ellicott City based circulator. Prior to the service change, Route 405 connected the Mall in Columbia to Ellicott City. The new Route 505 now provides this connection but also extends service into Catonsville.

Route and ridership performance are being closely monitored by the RTA. Following at least 12-months of service, a route analysis should be conducted to identify strengths and opportunities for improvements.

Table A-43: Route 505 – Service and Operating Characteristics

Service and Operating Characteristics	Weekdays	Saturdays	Sundays
Span of Service	6:00am – 9:45pm	8:00am – 9:45pm	9:00am – 5:45pm
Frequency (minutes)	60	60	60
One-Way Trips	15	13	8
Cycle Time (minutes)	105	105	105
Layover Time (minutes)	15	15	15
Daily Service Hours	15 hours, 45 min.	13 hours, 45 min.	8 hours, 45 min.

Figure A-15: RTA Route 505: Town Centre Laurel – Mall in Columbia

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Appendix B

MTA Commuter Bus
Profiles

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Appendix B

MTA Commuter Bus Profiles

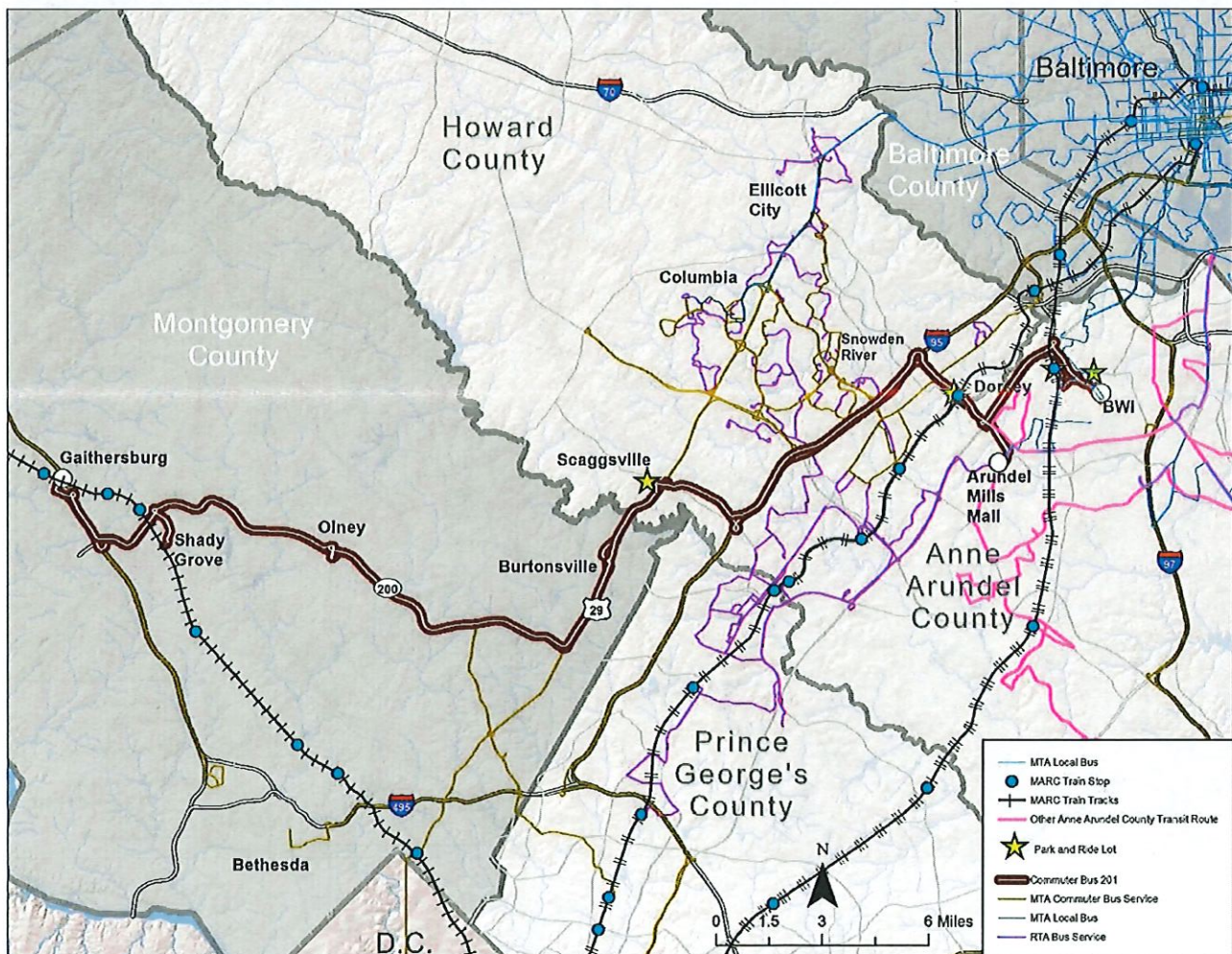
Introduction

In Howard County, MTA provides two types of service: "Express" and "Commuter." Express service is a 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 vehicles are all owned by contractors. Commuter bus fares for each zone increased by \$1.00 since the 2018 Central Maryland TDP. For all commuter routes, a Transit Link Card is available offering unlimited use of the commuter bus (up to the indicated zone), Metrorail, Metrobus, and Ride-On during the indicated month. All routes offer senior/disability fares, ten-ride tickets, and monthly passes are available. A Guaranteed Ride Home program is available if users register with Commuter Connections. The Howard County services include the following 10 routes.

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

Route 201 operates from Gaithersburg in Montgomery County to Arundel Mills Mall and BWI Marshall Airport. Route 201 traverses Howard County but has just one stop in the county at the Dorsey MARC station. It also stops in Anne Arundel County (at BWI and Arundel Mills Mall) and Montgomery County at Gaithersburg, Shady Grove Metro, and Burtonsville. Although this route operates on weekends, the Dorsey stops are on weekdays only because that is when MARC trains are operating. On weekdays there are six eastbound stops at Dorsey Station between 2:01 pm and 7:01 pm., and six westbound stops: four between 5:30 a.m. and 8:30 a.m., one at 1:30 p.m. and one at 10:30 p.m. Fares are MTA Zone 3 commuter fares which are \$6.00 for a one-way full fare. MTA 201 is shown in Figure B-1.

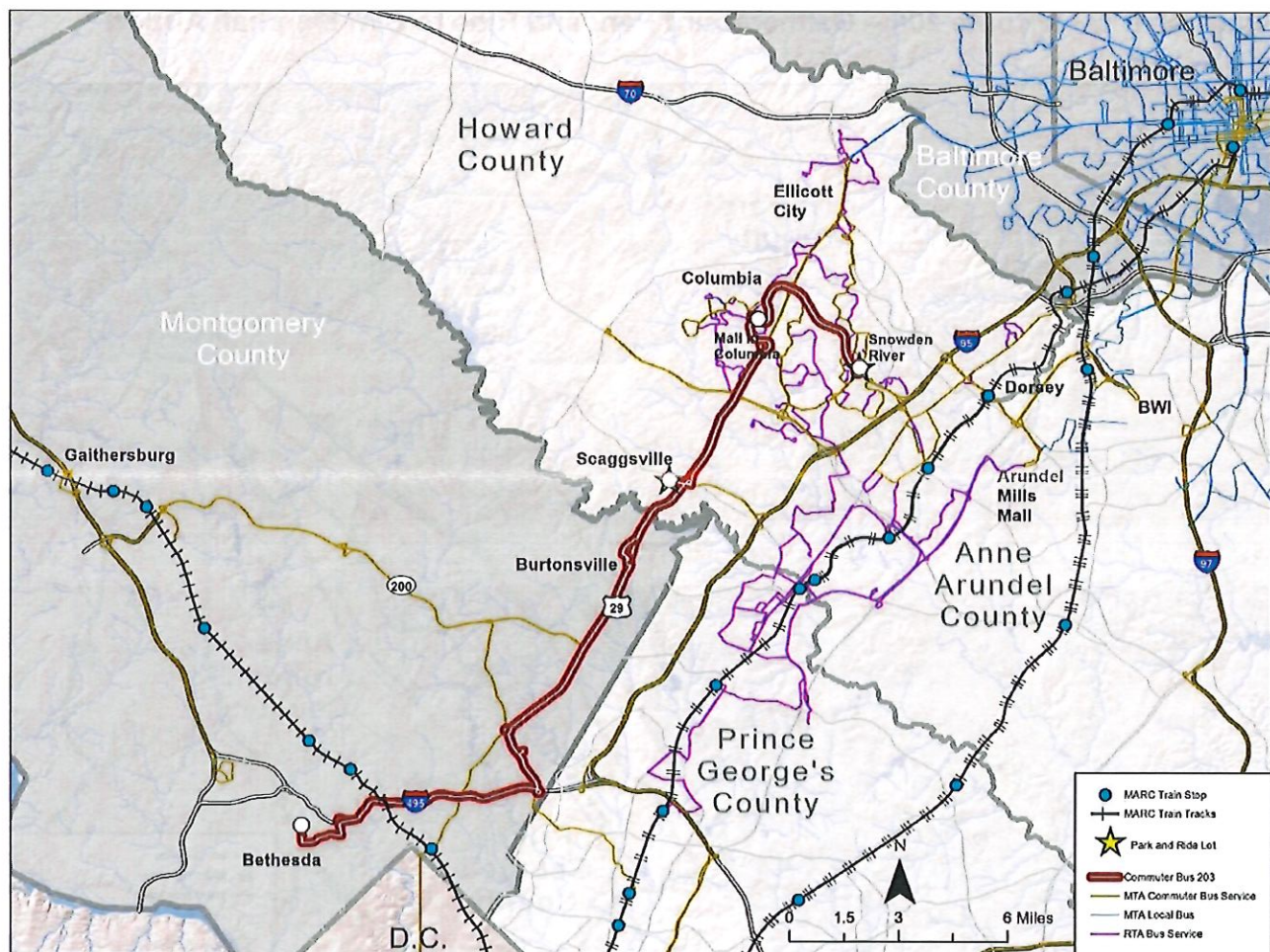
Figure B-1: MTA Route 201 – Gaithersburg Park and Ride to BWI Marshall Airport



MTA Commuter Route 203: Snowden River Park and Ride to Bethesda

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. It runs weekdays only; with five southbound trips between 5:20 a.m. and 7:20 a.m., and five northbound trips between 3:40 p.m. and 5:40 p.m. Fares are MTA Zone 3 commuter fares; \$6.00 for a one-way full fare. MTA 203 is shown in Figure B-2.

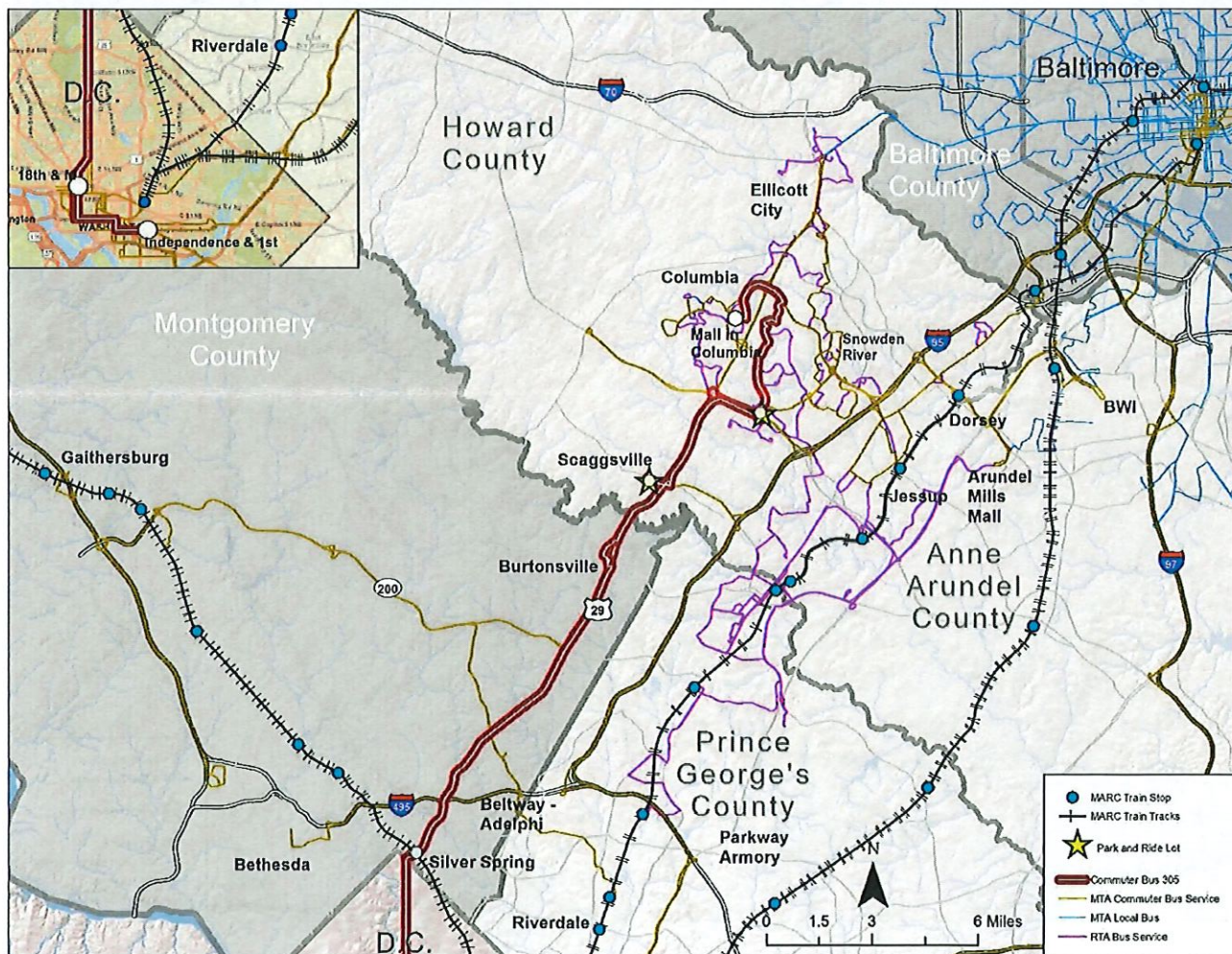
Figure B-2: MTA Route 203 – Snowden River Park and Ride to Bethesda



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

This bus route connects Howard County stops at the Mall in Columbia, 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 Martz Gold Line, Inc. and service is weekday only, with eleven 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; \$5.00 for a one-way full fare, while trips to downtown Washington, D.C. are MTA Zone 3 commuter fares; \$6.00 for a one-way full fare. Free transfers are available to MTA Commuter buses at the Columbia Mall and Broken Land Parkway. MTA 305 is shown in Figure B-3.

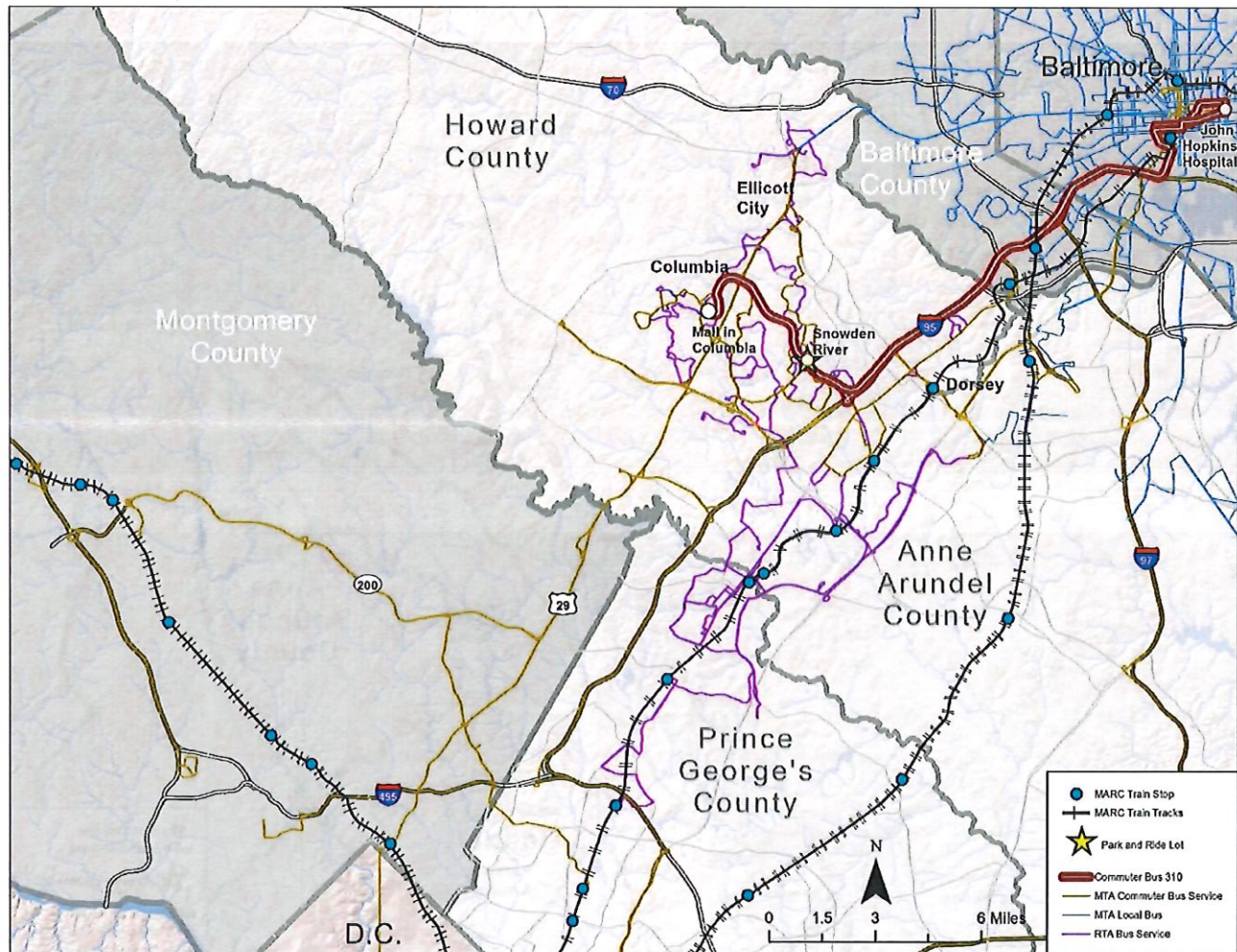
Figure B-3: MTA Route 305 – Columbia to Silver Spring and Washington, D.C.



MTA Commuter Route 310: Columbia to Baltimore (John Hopkins Hospital)

Commuter Route 310 connects Columbia Mall and the Snowden River Park and Ride with the University of Maryland at Baltimore, the Charles Center, and the Johns Hopkins Hospital in Baltimore. There are four morning northbound 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 southbound evening trips between 1:00 p.m. and 6:35 p.m., three terminating at Snowden River and four continuing to Columbia. The service is operated under contract by Dillon's Bus Service, Inc. Service is provided on weekdays only, and fares are MTA commuter Zone 2 fares. MTA 310 is shown in Figure B-4.

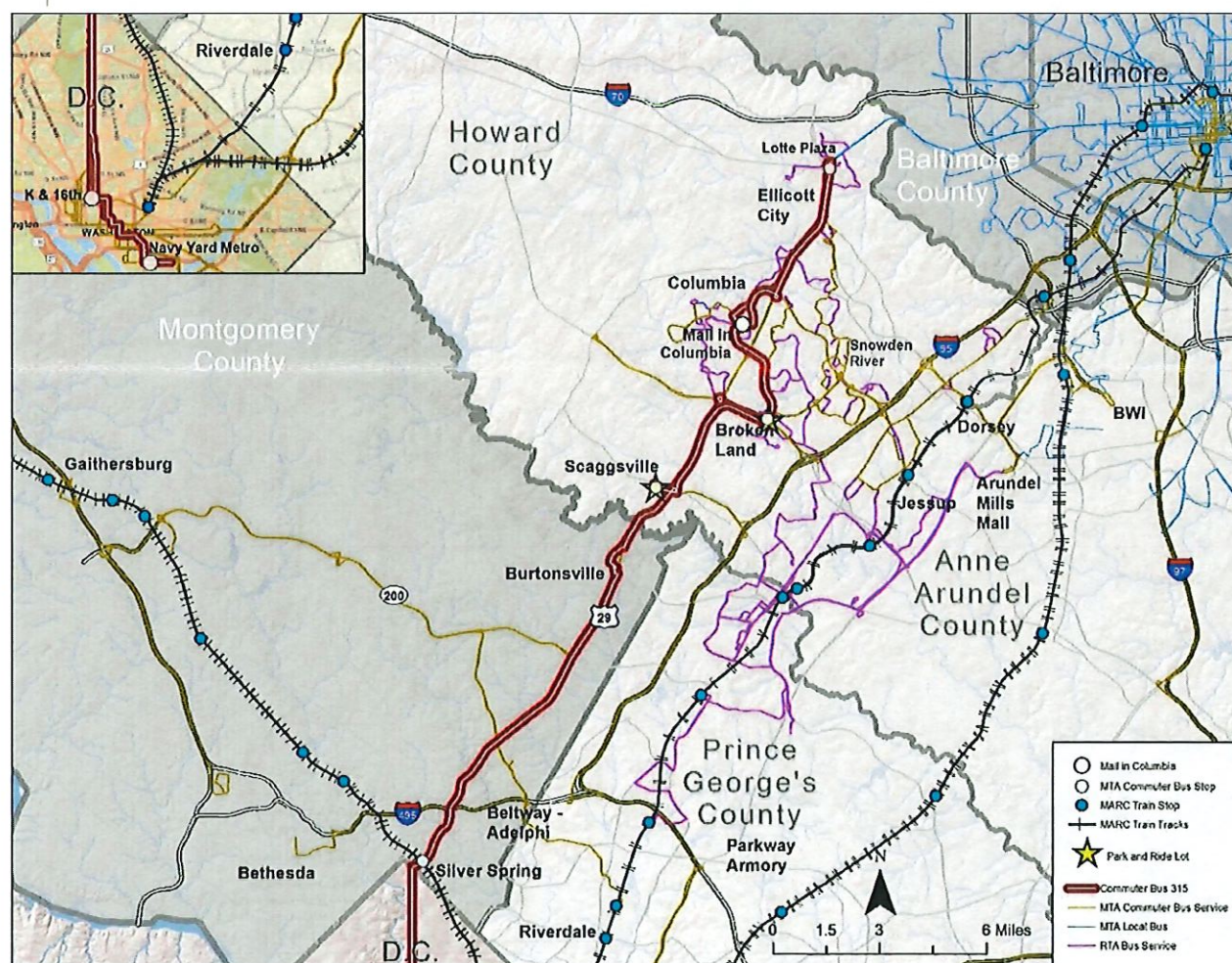
Figure B-4: MTA Route 310 – Columbia to Baltimore



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

This bus route connects Howard County stops at Lotte Plaza in Ellicott City, Columbia Mall, 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 Martz Gold Line, Inc. Service is weekday only, with ten southbound trips between 4:45 a.m. and 7:45 a.m., three of which originate at Lotte Plaza and seven 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; \$5.00 for a one-way full fare, while trips to downtown Washington, D.C. are MTA Zone 3 commuter fares; \$6.00 for a one-way full fare. Free transfers are available to MTA Commuter buses at Columbia Mall and Broken Land Parkway. MTA 315 is shown in Figure B-5.

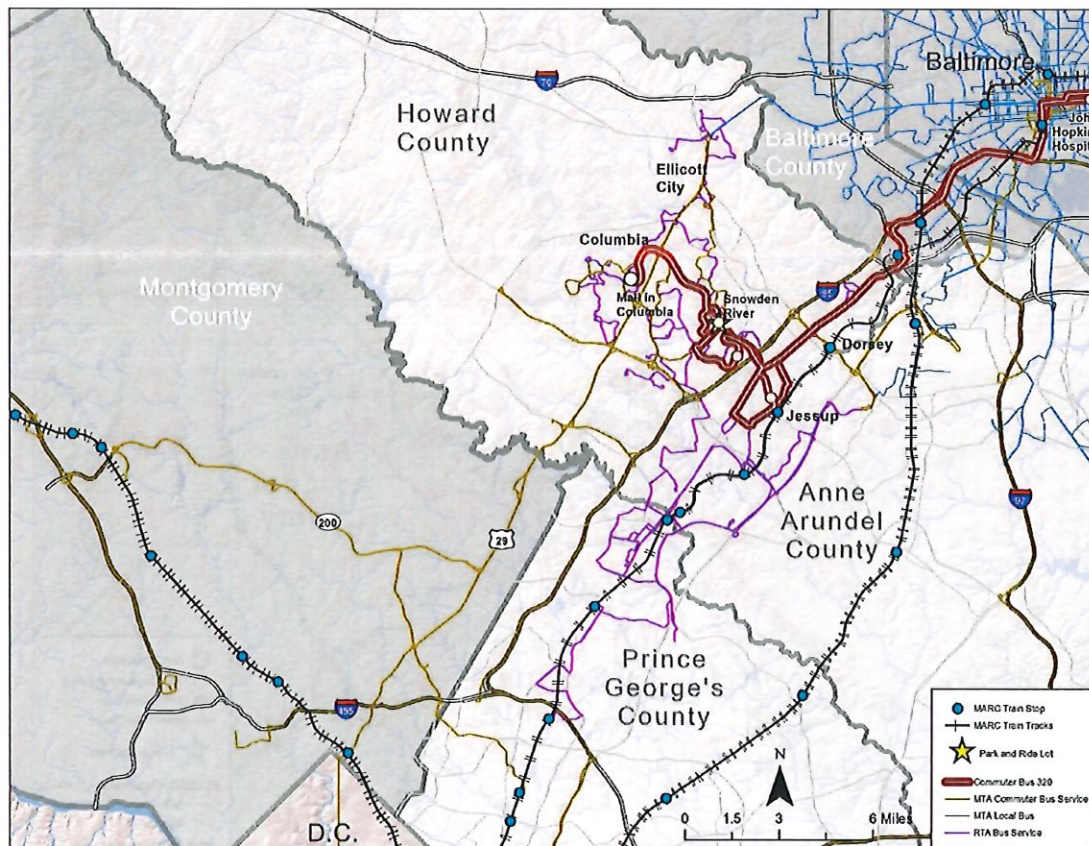
Figure B-5: MTA Route 315 – Ellicott City to Silver Spring and Washington, D.C.



MTA Commuter Route 320: Downtown Baltimore to Jessup/Columbia

Route 320 provides service connecting Columbia, Jessup, Baltimore, and Johns Hopkins Hospital. The route operates similarly to Route 310 but stops in Jessup and Elkrige as well. The stops in Howard County include Columbia Mall, Snowden River Park and Ride, the Gateway area, Jessup (not at the MARC station), and Route 1 in Elkrige. Service is operated under contract by Dillon's 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 three going to Snowden River Park and Ride and four going to Columbia Mall. 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, Elkrige, and Jessup are MTA Zone 1, and longer trips are Zone 2. Zone 1 fares begin with a \$4.00 one-way full fare, compared to the \$5.00 Zone 2 fare. MTA 320 is shown in Figure B-6.

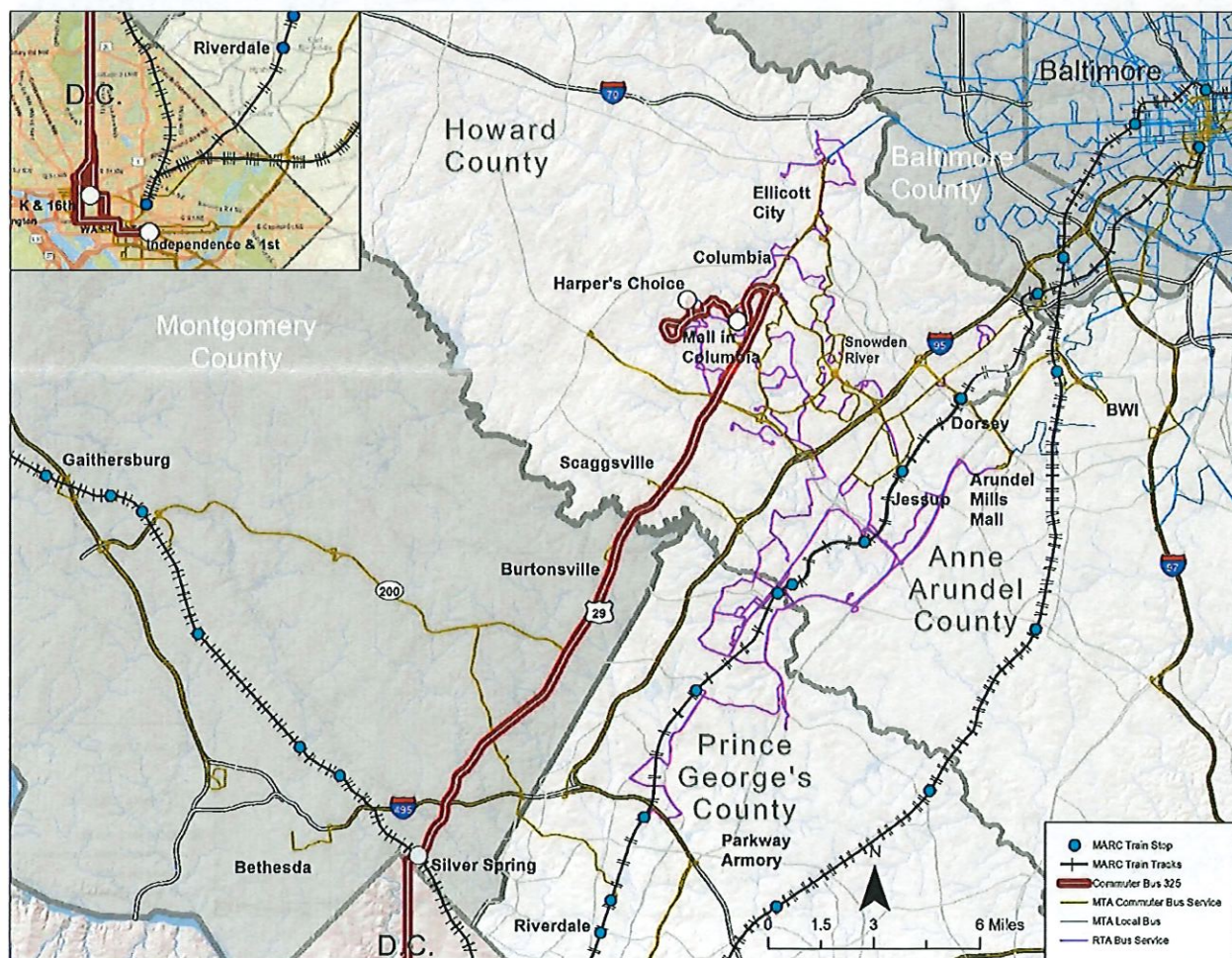
Figure B-6: MTA Route 320 – Downtown Baltimore to Jessup/Columbia



MTA Commuter Route 325: Columbia to Silver Spring & 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. Service is operated under contract by Martz Gold Line, Inc. Two different routings are used to go to Capitol Hill and 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; \$5.00 for a one-way full fare, while trips to downtown Washington, D.C. are MTA Zone 3 commuter fares; \$6.00 for a one-way full fare. Free transfers are available to MTA Commuter buses at Columbia Mall and Broken Land Parkway. MTA 325 is shown in Figure B-7.

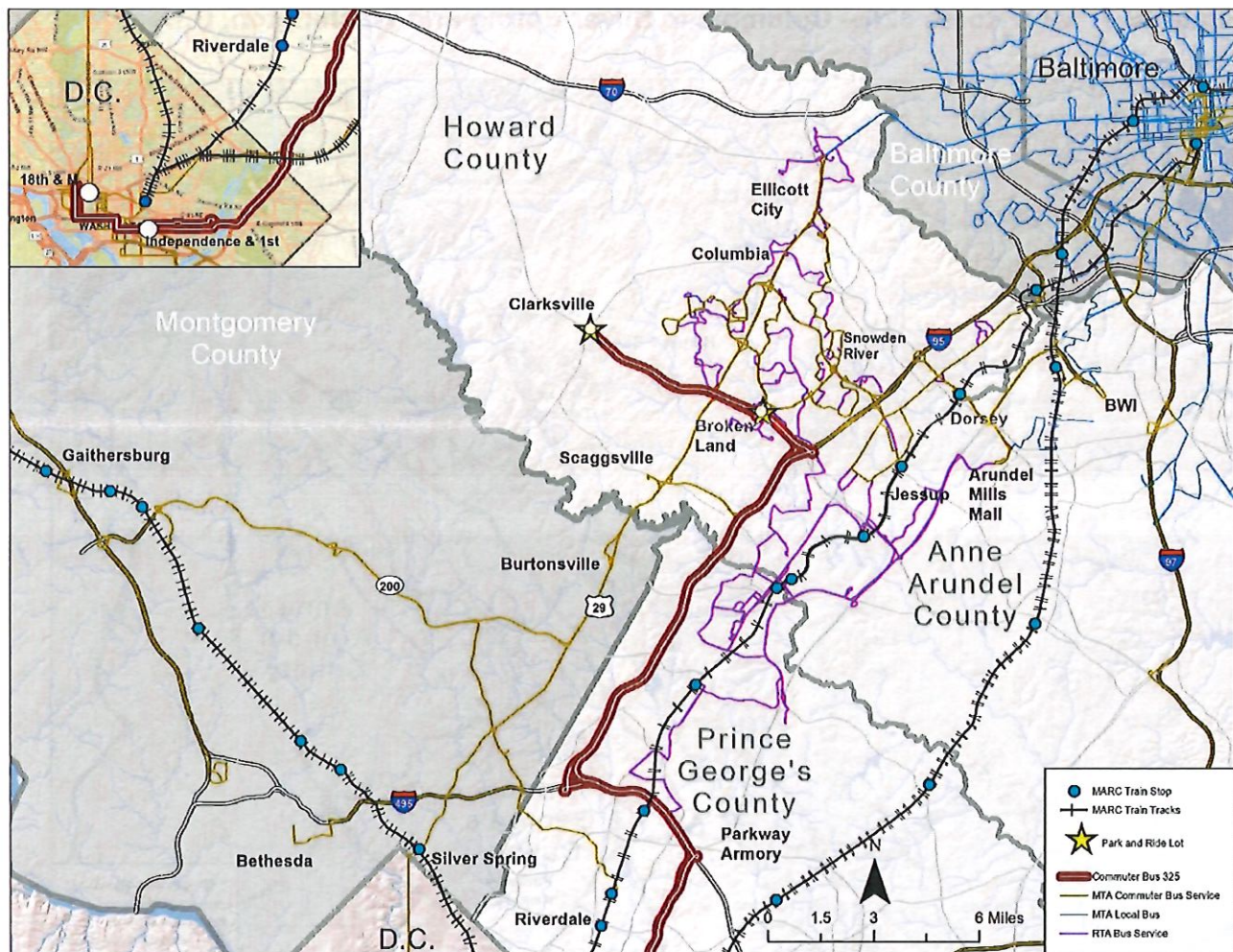
Figure B-7: MTA Route 325 – Columbia to Silver Spring and Washington, D.C.



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

Another MTA 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 B-8). The service is operated under contract by Dillon's Bus Service. There are seven southbound trips between 5:08 a.m. and 7:13 a.m. In the afternoon, there are seven northbound trips between 2:45 p.m. and 5:15 p.m. plus two Route 345 trips (that make local stops in Howard County) at 12:15 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.

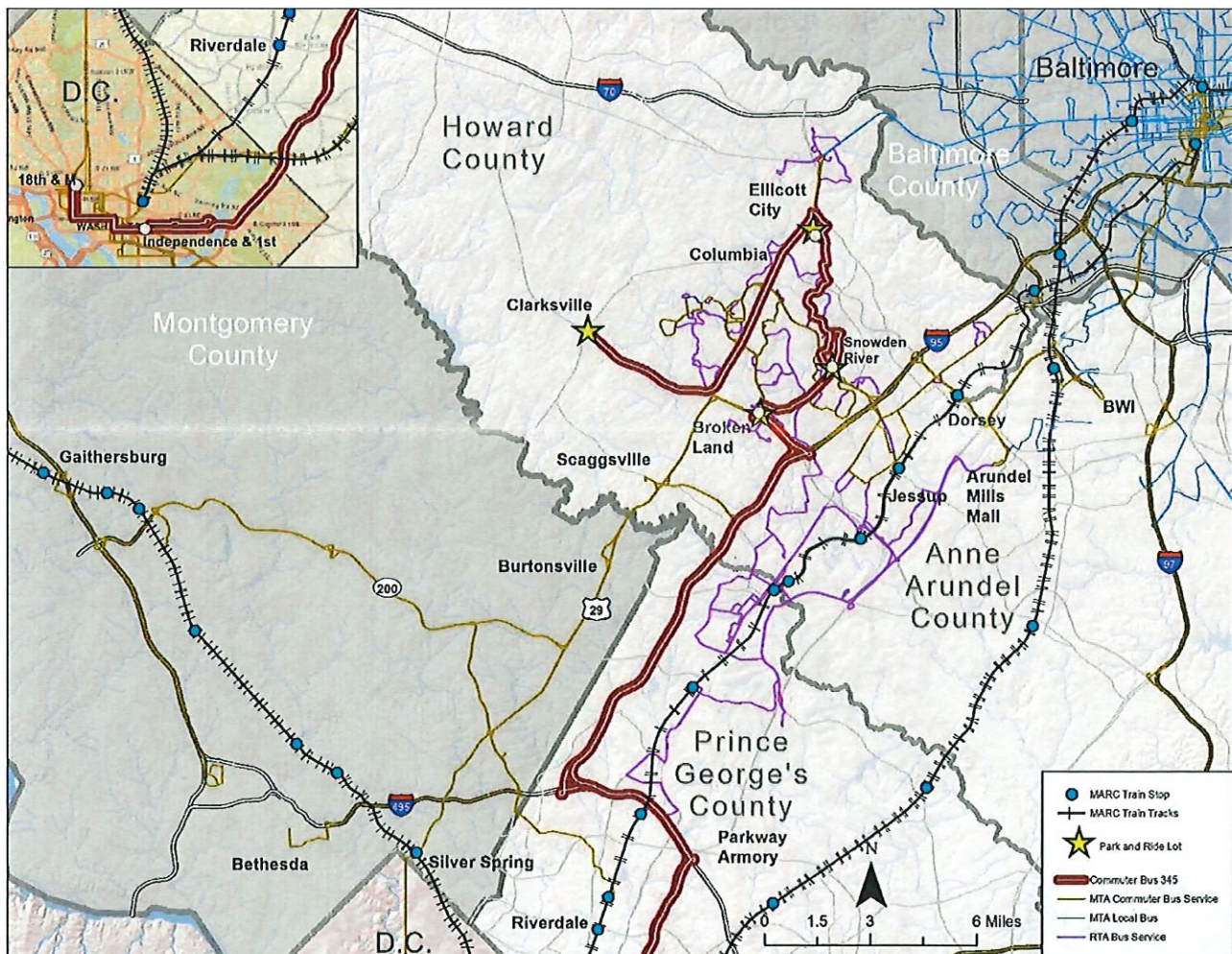
Figure B-8: MTA Route 335 – Clarksville/Columbia to Washington, D.C.



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

Route 345 (Figure B-9) 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. On northbound trips, there are two stops at Clarksville Park and Ride. In addition to the park and ride lots there are several on-street stops in the Long Reach area. On weekdays only, there are seven southbound morning departures between 5:00 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.

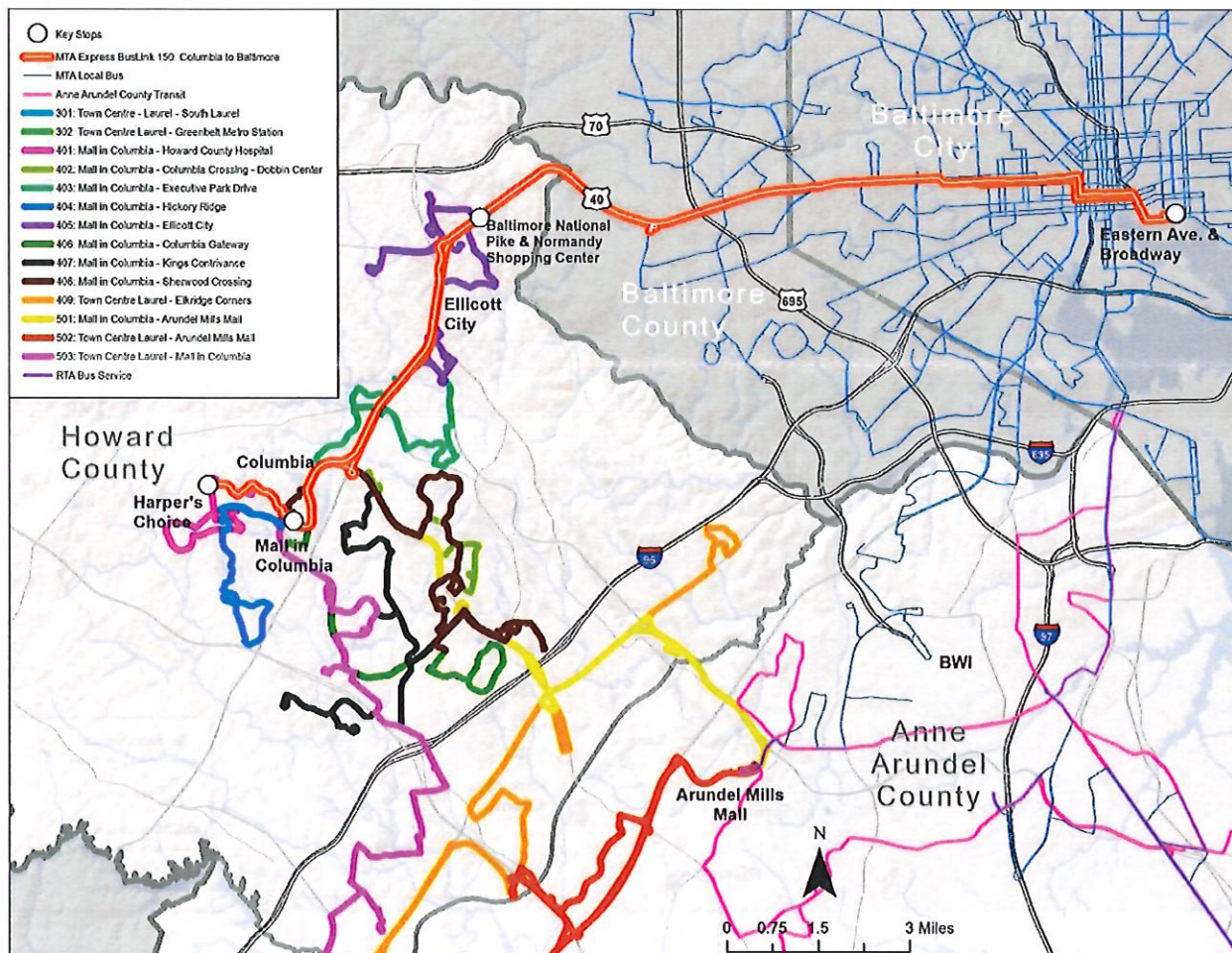
Figure B-9: MTA Route 345 – Ellicott City/Columbia to Washington, D.C. via I-95



MTA Express BusLink 150: Columbia (Harper's Choice) to Baltimore

Express Route 150 operates from Harper's Choice Village Center and the Mall in Columbia with additional stops on U.S. 40 in Ellicott City, to downtown Baltimore and Harbor East as the final destination. 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 evening inbound trips; two morning outbound trips (to Columbia) and three early evening inbound trips. Fares are the standard MTA \$2.00 one-way single cash fare with a day pass at \$4.60. There are also multi-ride fares, a weekly pass at \$22.00 or \$77.00 per month, and senior/disabled fares at a reduced rate. There is connecting service to multiple RTA routes from Harper's Choice and at the Mall in Columbia, including Routes 401, 402, 403, 404, 405, 406, 407, 408, and 503. MTA 150 is shown in Figure B-10.

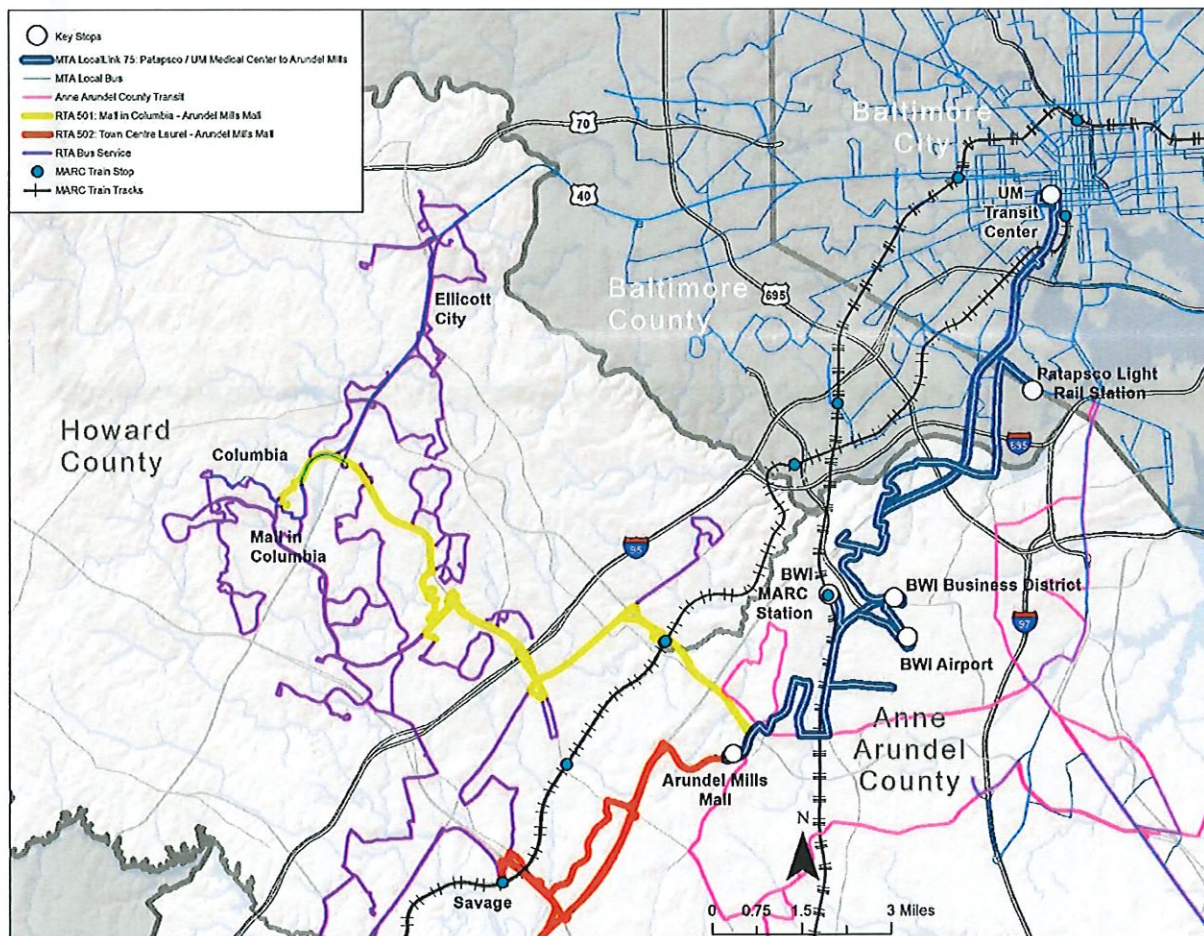
Figure B-10: MTA Route 150 – Columbia to Baltimore



MTA LocalLink 75: Patapsco Light Rail Station / UM Transit Center to Arundel Mills Mall

Local Route 75 links the Patapsco Light Rail Station with the Nursery Road business area, BWI Technology Park, BWI Marshall Airport, BWI Business District, BWI Amtrak/MARC Rail Station, and Arundel Mills Mall. The span of service is 24 hours, and there is an extension to downtown 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. In the late night, service operates from the University of Maryland Transit Center downtown (rather than Patapsco Light Rail) to BWI Marshall Airport to Arundel Mills Mall. Fares are MTA local bus fares. There is connecting service to RTA's Routes 501 and 502 and Anne Arundel County's Route 201 and 202 (formerly RTA Route 202). MTA Route 75 alignment is shown in Figure B-11.

Figure B-11: MTA Route 75 – Patapsco Light Rail Station / UM Transit Center to Arundel Mills Mall



Regional Transportation Agency
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Appendix C
RTA Fixed Route
Customer Survey

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Appendix C

RTA Fixed Route Customer Survey..... 1

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Q2: Where did your trip start? Please indicate the street address, intersection, or landmark (example: if your trip started at home, put your address or a close intersection).....	5
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Q5: If you are transferring on this trip, what service did you transfer from or will you be transferring to?	8
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Q14: Please indicate your age:	21
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Q16: What is your annual household income?	23
Q17: Are you of Hispanic or Latino origin?	24
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Q19: Do you speak a language other than English at home?	26
Q20: Please provide any comments you may have regarding public transportation:.....	27

Appendix C

RTA Fixed Route Customer Survey

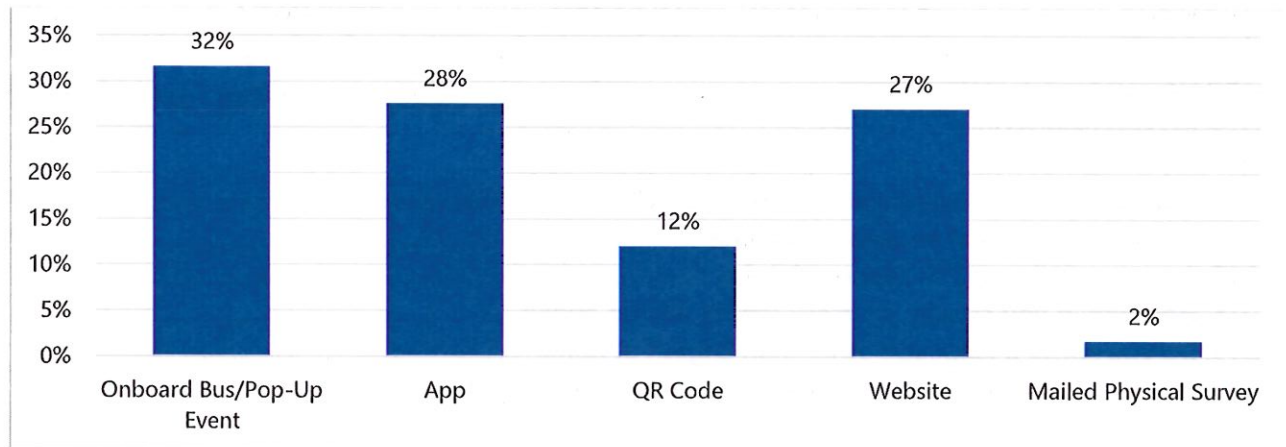
Introduction

The RTA Customer Survey was available starting on December 5, 2022 and closed on March 31, 2023 – providing a 116 day survey period. The survey closing date was extended due to a relatively low response rate and in order to accommodate additional outreach, including a survey pop-up event at The Mall in Columbia.

Out of the three TDP surveys (RTA Customer, RTA Mobility, and Community), the customer survey had the highest number of responses at 174 (out of 370 total surveys received).

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

RTA Fixed Route Customer Survey Collection Methods



A copy of the paper survey is provided on the following pages along with detailed survey responses for each question.

RTA Fixed Route Customer Survey – Front



RTA Customer Survey

Help us to serve you better! The RTA of Central Maryland, in partnership with Howard County, Anne Arundel County, the City of Laurel and Northern Prince George's County, wants your input on public transit services. Please complete the following survey to provide us with your feedback about our services and possible improvements. Your answers are anonymous. Thank you for your input! For more information, visit: www.rta.centralmdtransitplan.com

Win a

\$200 or

\$100 Gift Card

Complete this survey and write your name and phone/email in the comments section!

How to Submit your survey:

Onboard the Bus

Drop your completed survey into the drop box located in the front of the bus

Take this Survey Online



surveymonkey.com/r/rtacustomer

Submit by Mail/Email

Mail to: RTA Survey c/o KFH Group
7200 Wisconsin Ave, Suite 320
Bethesda, MD 20814

Email a photo or PDF to:
admin@kfgroup.com

- What bus route are you currently riding?

<input type="checkbox"/> 301 South Laurel	<input type="checkbox"/> 404 Hickory Ridge	<input type="checkbox"/> 409 US Route 1 Corridor
<input type="checkbox"/> 302 Greenbelt Metro Station	<input type="checkbox"/> 405 Ellicott City	<input type="checkbox"/> 501 Columbia / Arundel Mills
<input type="checkbox"/> 401 Harper's Choice / Clary's Forest	<input type="checkbox"/> 406 Columbia Gateway	<input type="checkbox"/> 502 Laurel / Arundel Mills
<input type="checkbox"/> 402 Columbia Crossing / Dobbin Center	<input type="checkbox"/> 407 Owen Brown / Kings Contrivance	<input type="checkbox"/> 503 Laurel / Columbia
<input type="checkbox"/> 403 Executive Park Drive	<input type="checkbox"/> 408 Lark Brown / Waterloo	
- Where did your trip start? Please indicate the street address, intersection, or landmark (example: if your trip started at home, put your address or a close intersection)

- What is your final destination? Please indicate the street address, intersection, or landmark (example: Arundel Mills Mall)

- Did you or will you have to transfer to another bus in order to complete this trip?
☐ No transfers ☐ Yes, one transfer ☐ Yes, two transfers ☐ Yes, three or more transfers
- If you are transferring on this trip, what service did you transfer from or will you be transferring to?

<input type="checkbox"/> RTA	<input type="checkbox"/> Anne Arundel County Transit	<input type="checkbox"/> Prince George's County's TheBus
<input type="checkbox"/> MTA Commuter Bus	<input type="checkbox"/> MTA Local / Express Bus	<input type="checkbox"/> MARC Train
<input type="checkbox"/> WMATA Metrorail	<input type="checkbox"/> WMATA Metrobus	<input type="checkbox"/> Neighbor Ride
<input type="checkbox"/> Other: _____		
- Are there specific destinations you need to go to on a regular basis that transit does not serve? ☐ Yes ☐ No
If Yes, please describe: _____
- What is the purpose of your trip today? You may check more than one.
☐ Work ☐ School ☐ Medical ☐ Shopping ☐ Social/Recreation ☐ Dining
☐ Government/Service Agency ☐ Other: _____
- How often do you take public transit?
☐ 5 days/week or more ☐ 3-4 days/week ☐ 1-2 days/week ☐ Less than 1 day/week

Survey continues on reverse >



RTA Fixed Route Customer Survey – Back

9. Please rate RTA's service in the following areas:

	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied
a. Frequency of Bus Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Hours of Bus Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Areas Served by Bus Routes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Bus Running On-Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Saturday Service Hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Sunday Service Hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Ride Time/Time Spent on Bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Availability of Schedule Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Cost of Bus Fare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Safety and Security on Buses/at Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Cleanliness of Buses and Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Courtesy/Friendliness of Bus Drivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Customer Service and Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Reliability and Condition of Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Comfort of Ride	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Response/Precautions for COVID-19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Overall Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Which of the following technological improvements would you benefit from?

- ☐ Wi-Fi onboard buses ☐ USB charger ports ☐ Real-time arrival screens at bus stops ☐ Other: _____

11. What is your home zip code? _____

12. Do you have a car? ☐ Yes ☐ No If Yes, was a car available for this trip? ☐ Yes ☐ No

13. Do you have a driver's license? ☐ Yes ☐ No

14. Please indicate your age:

- ☐ 17 or under ☐ 18-24 ☐ 25-49 ☐ 50-64 ☐ 65 or above

15. What is your employment status? You may check more than one.

- ☐ Employed, full-time ☐ Student, full-time ☐ Unemployed
☐ Employed, part-time ☐ Student, part-time ☐ Retired
☐ Other: _____

16. What is your annual household income?

- ☐ \$20,000 or less ☐ \$21,000 to \$40,000 ☐ \$41,000 to \$60,000
☐ \$61,000 to \$80,000 ☐ \$81,000 to \$100,000 ☐ More than \$100,000

17. Are you of Hispanic or Latino origin? ☐ Yes ☐ No

18. How would you classify yourself? Please check all that apply.

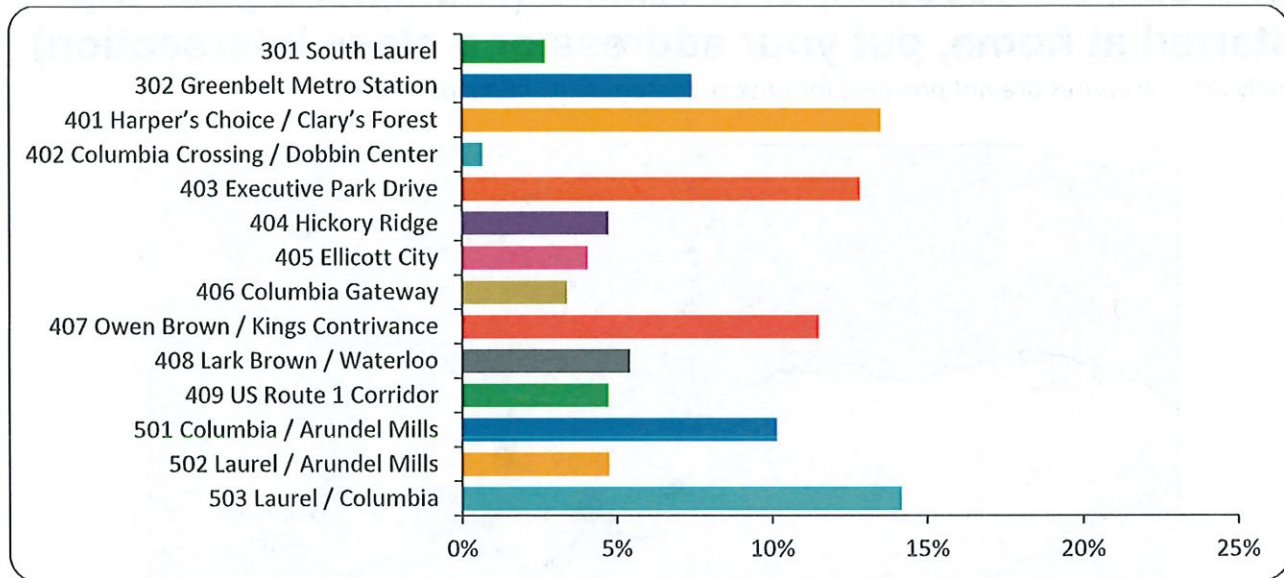
- ☐ African American/Black ☐ Caucasian/White ☐ Asian
☐ American Indian/Alaska Native ☐ Native Hawaiian/Other Pacific Islander ☐ Prefer not to answer

19. Do you speak a language other than English at home? ☐ Yes ☐ No

If Yes, what is this language? _____ For example, Spanish, Korean, Chinese.

20. Please provide any comments you may have regarding public transportation **and your name/contact info for the raffle.**

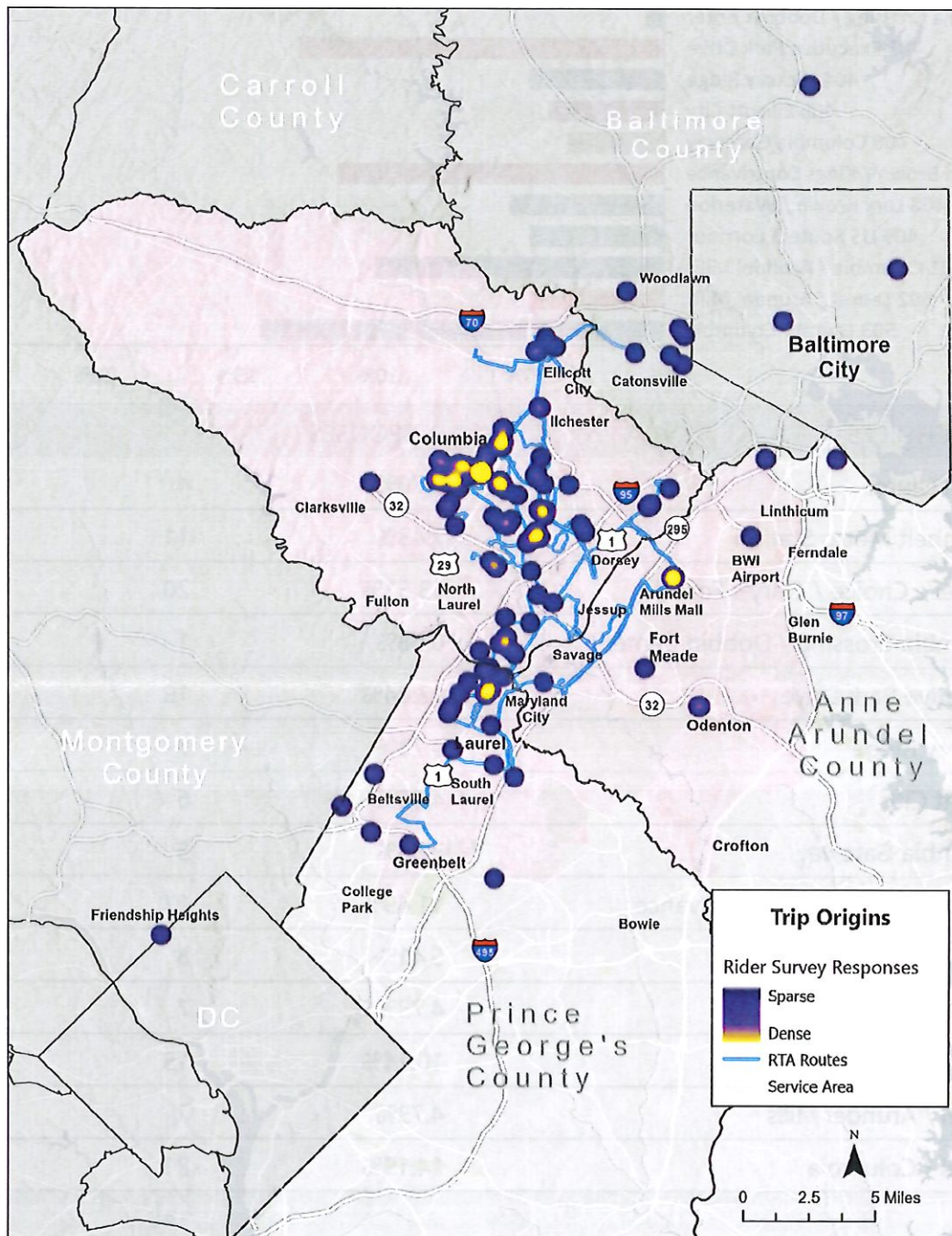
Q1: Which bus route are you currently riding?



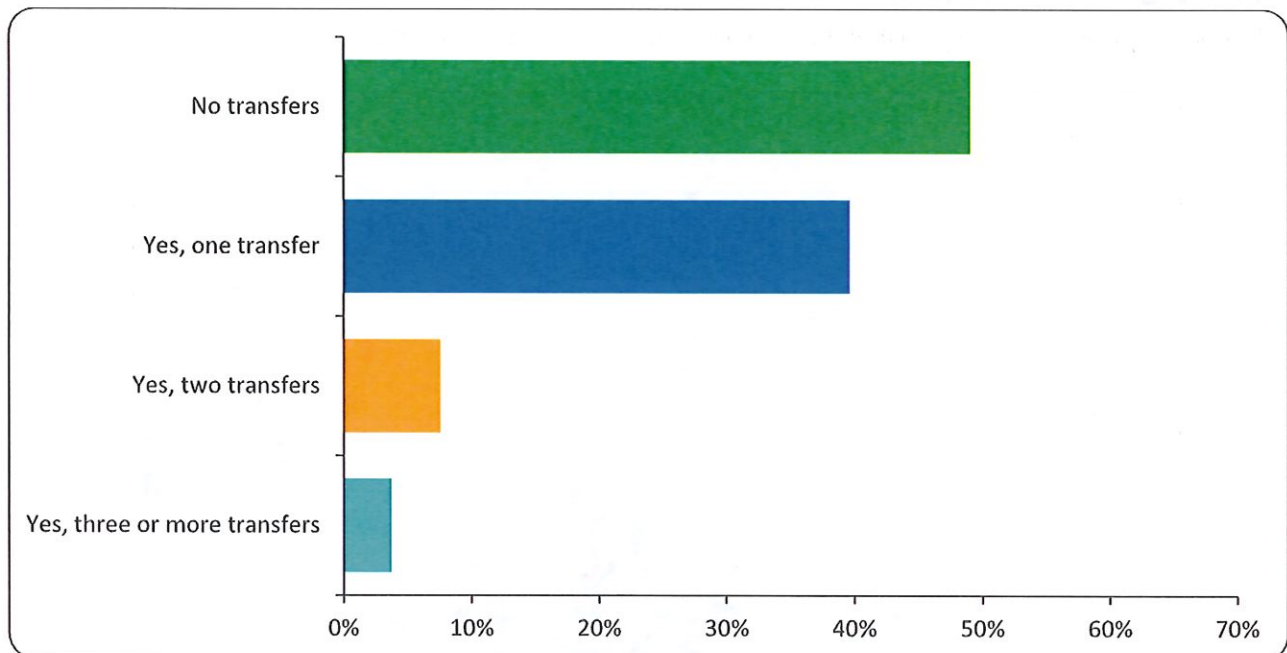
ANSWER CHOICES	RESPONSES	
301 South Laurel	2.70%	4
302 Greenbelt Metro Station	7.43%	11
401 Harper's Choice / Clary's Forest	13.51%	20
402 Columbia Crossing / Dobbin Center	0.68%	1
403 Executive Park Drive	12.84%	19
404 Hickory Ridge	4.73%	7
405 Ellicott City	4.05%	6
406 Columbia Gateway	3.38%	5
407 Owen Brown / Kings Contrivance	11.49%	17
408 Lark Brown / Waterloo	5.41%	8
409 US Route 1 Corridor	4.73%	7
501 Columbia / Arundel Mills	10.14%	15
502 Laurel / Arundel Mills	4.73%	7
503 Laurel / Columbia	14.19%	21
TOTAL		148

Q2: Where did your trip start? Please indicate the street address, intersection, or landmark (example: if your trip started at home, put your address or a close intersection)

Individual responses are not provided for privacy reasons (e.g., home addresses).

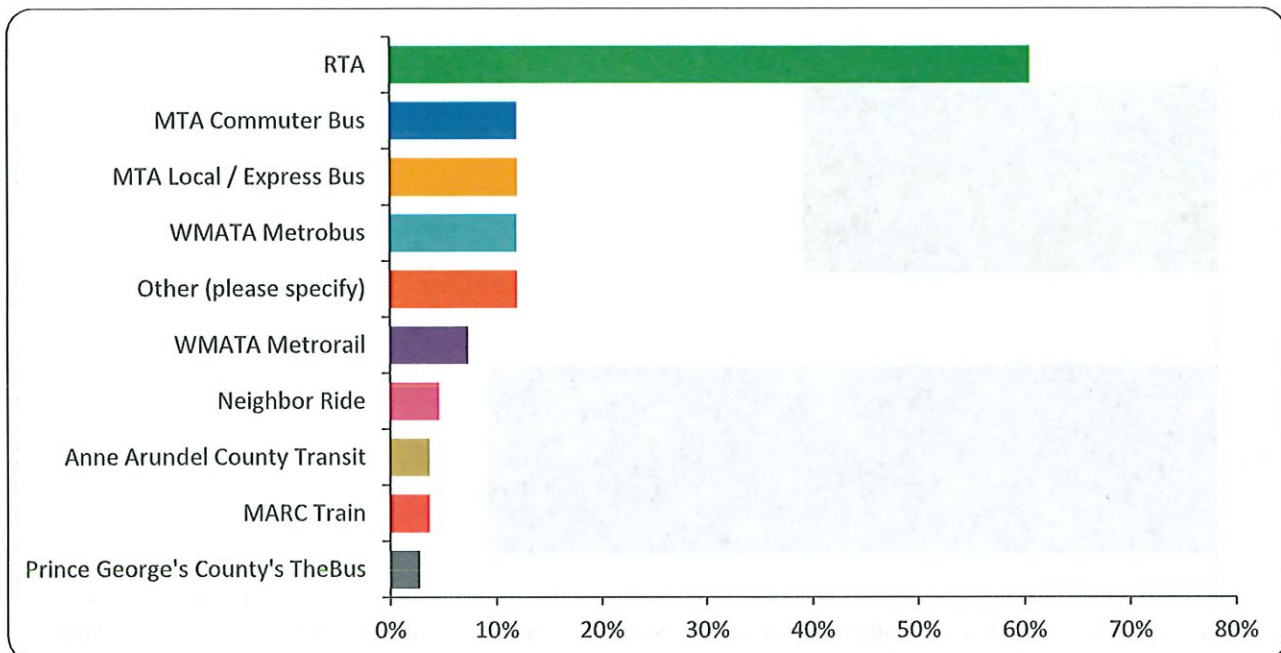


Q4: Did or will you Transfer to another bus to complete this trip?



ANSWER CHOICES	RESPONSES	
No transfers	49.06%	78
Yes, one transfer	39.62%	63
Yes, two transfers	7.55%	12
Yes, three or more transfers	3.77%	6
TOTAL		159

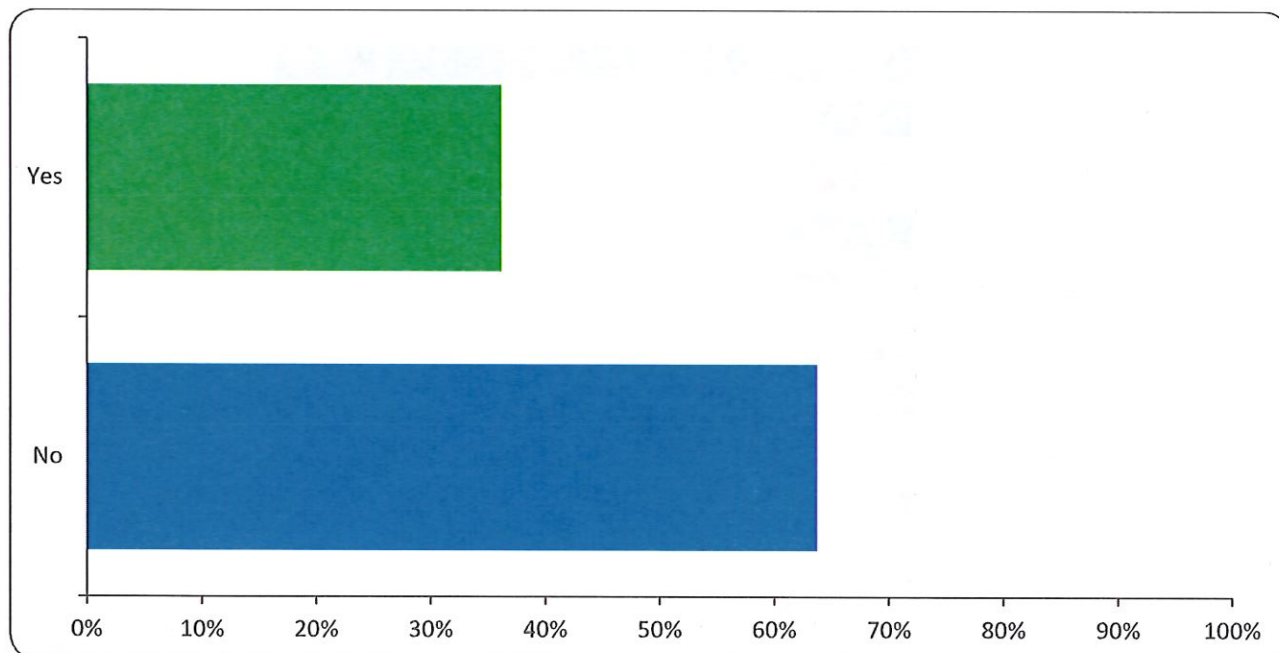
Q5: If you are transferring on this trip, what service did you transfer from or will you be transferring to?



ANSWER CHOICES	RESPONSES	
RTA	60.55%	66
MTA Commuter Bus	11.93%	13
MTA Local / Express Bus	11.93%	13
WMATA Metrobus	11.93%	13
Other (please specify)	11.93%	13
WMATA Metrorail	7.34%	8
Neighbor Ride	4.59%	5
Anne Arundel County Transit	3.67%	4
MARC Train	3.67%	4
Prince George's County's TheBus	2.75%	3
TOTAL		142

Other: N/A 6, Metrobus 2, Baltimore County Connector 2, MTA CityLink 1, RTA 1, Uber/Lyft 1

Q6: Are there specific destinations you need to go to on a regular basis that transit does not serve?



ANSWER CHOICES	RESPONSES	
Yes	36.24%	54
No	63.76%	95
TOTAL		149

Desired Destinations not Currently Served by Transit

Baltimore National Parkway

HCC

Inside the Shopping Center L.A. Fitness

Scaggsville and Fulton, MD (Food Lion area and Maple Lawn area)

BWI

Courthouse, commissioners office, Jessup, Security Mall, Hanover

Workforce/school

Meadowbrook Park

Washington, DC, Baltimore

Jessup to Columbia

Dorsey Station on Wed nights

Food Lion, Laurel (Scaggsville, Maryland)

Airport

Washington, DC

BWI

CVS old waterloo rd. Elkridge md

Hcc, All saints rd bourbon street, Columbia mall

Greenbelt station

Maple Lawn Farmers Market 8356 sand cherry land laurel md

work and one store

Ft. Meade

Burtonsville, Merriweather District, Maple Lawn

BWI Airport

408 Old Waterloo Rd. there is no bus stop across Sherwood Crossing Apartments going towards Old Waterloo Rd.

Montgomery Run Rd is a 1.5 mile from the nearest RTA stop, which is either 408 or 403

Church, but no service on Sundays.

9292 Cherry Lane, Laurel

Church, actual place of work

Home- Clarksville

It used to go near 7090 Samuel Morse Drive where I work and a lot of my coworkers had also used the bus. It was canceled permanently and now I need to take RTA mobility or get rides. my job

Tastee Diner

Bus to Metro station does not operate over the weekend

Baltimore Avenue then get on c8 to metzerot rd

BWI Airport

Post Office

I go to and from work and this bus is always late and always leaving me

Broken land to royal farms

Clarksville, off the 108. Years ago the blue bus used to go there

Downtown

Staples Columbia, planet fitness Dobbin center

Catonsville, Elkridge, Ellicott City

Work

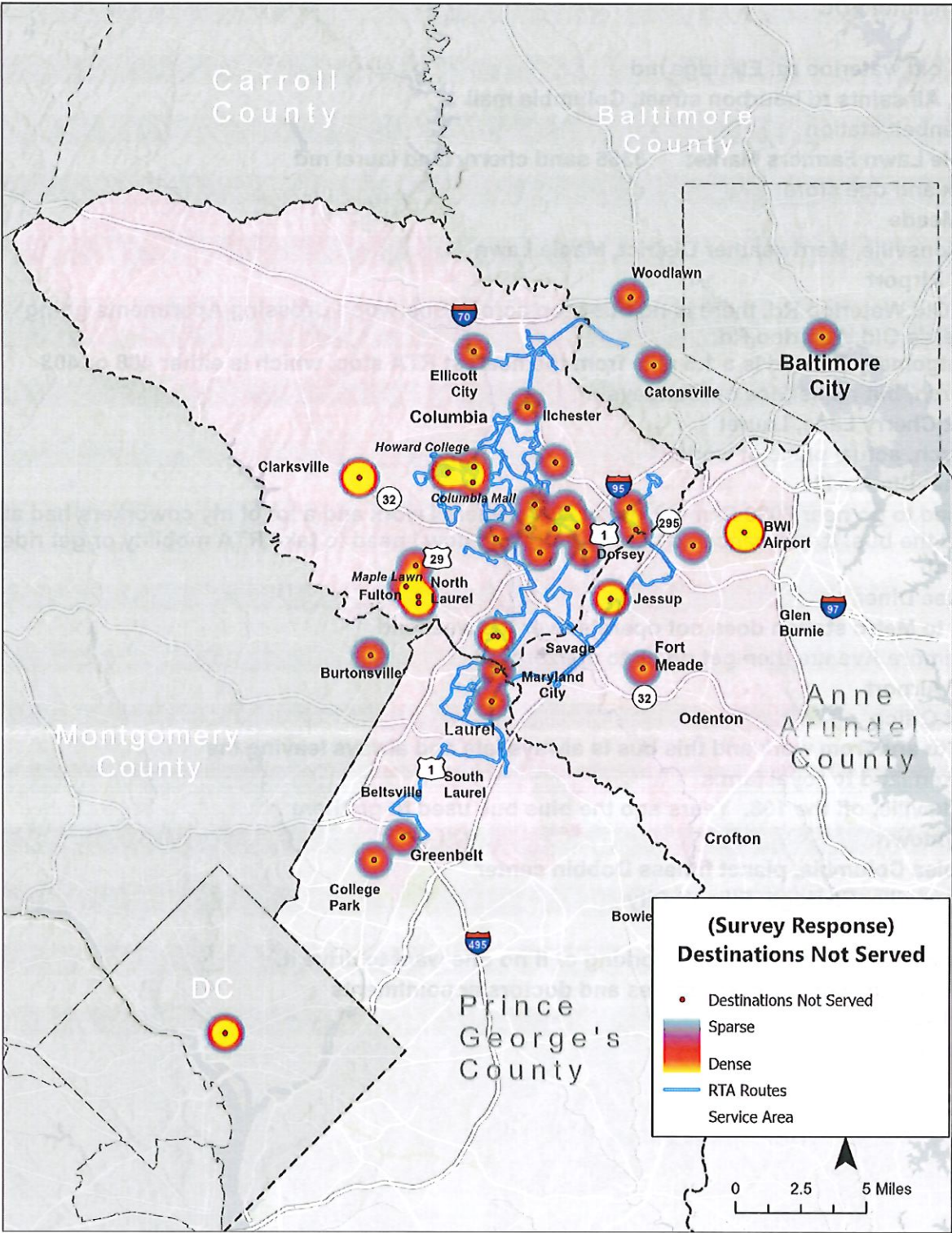
This bus only runs if the bus working or if no one want to drive it.

To and from work, grocery stores and doctors appointments

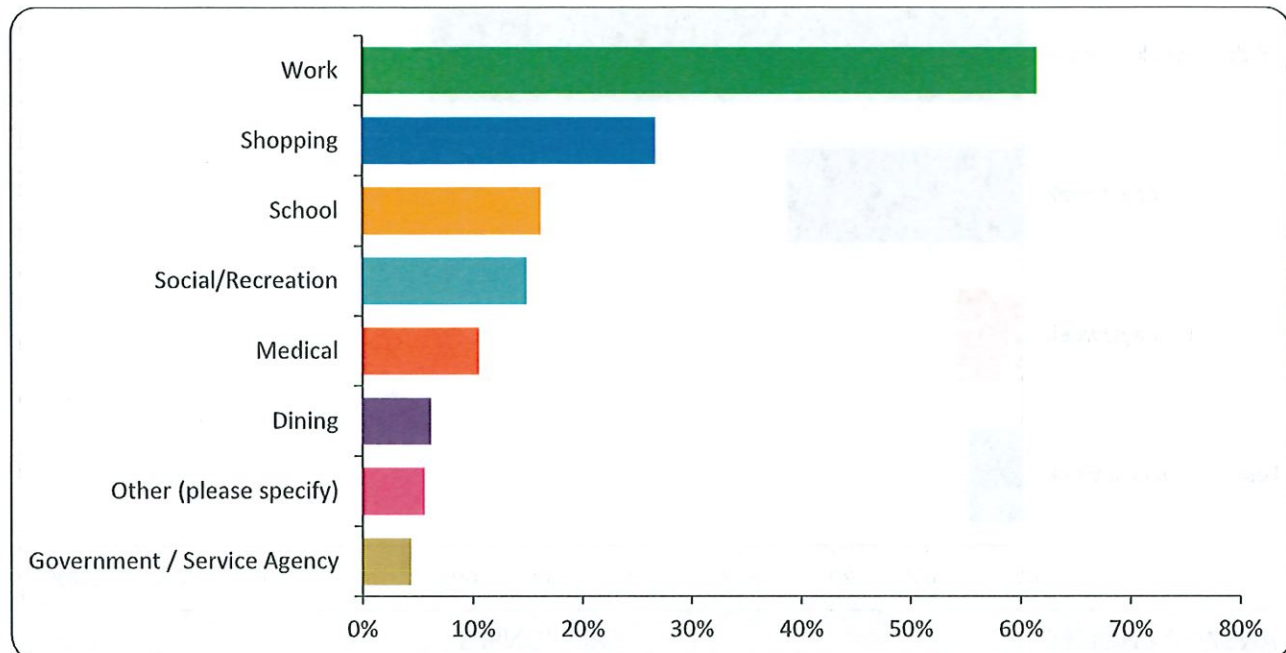
Clarksville

school

Distribution of Desired Destinations Not Served by Transit



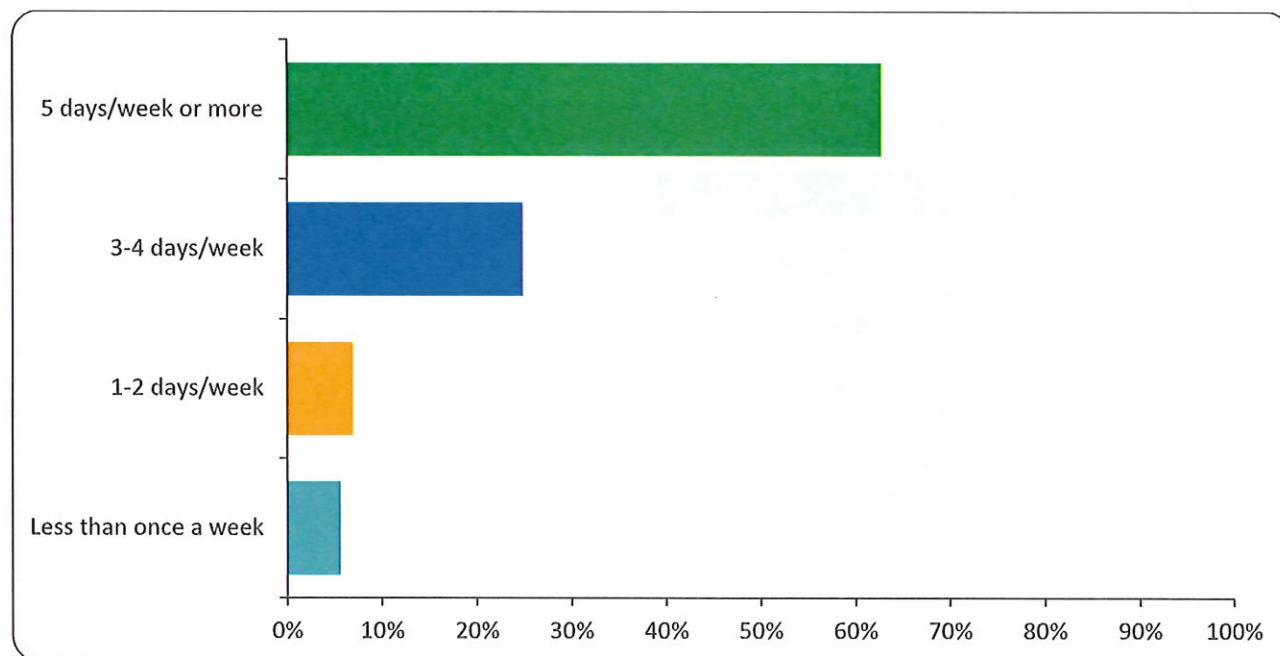
Q7: What is the purpose of your trip today? Check all that apply.



ANSWER CHOICES	RESPONSES	
Work	61.49%	99
Shopping	26.71%	43
School	16.15%	26
Social/Recreation	14.91%	24
Medical	10.56%	17
Dining	6.21%	10
Other (please specify)	5.59%	9
Government / Service Agency	4.35%	7
TOTAL		235

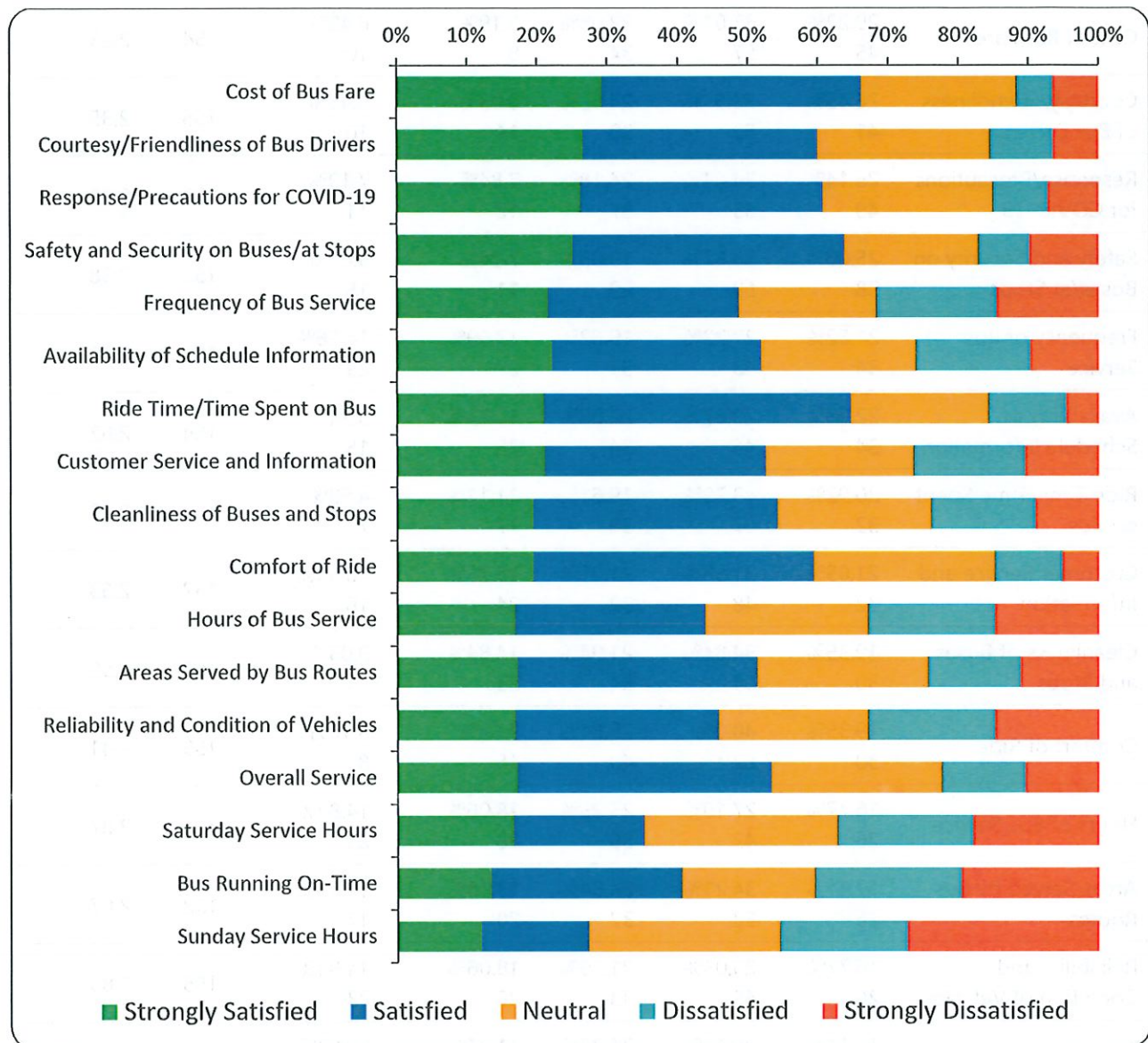
Other: Going Home 3, N/A 1, Exploring – new to area 1, Gym 1, Business 1, Medical and Food Marketing 1, and Friend 1.

Q8: How often do you take public transit?



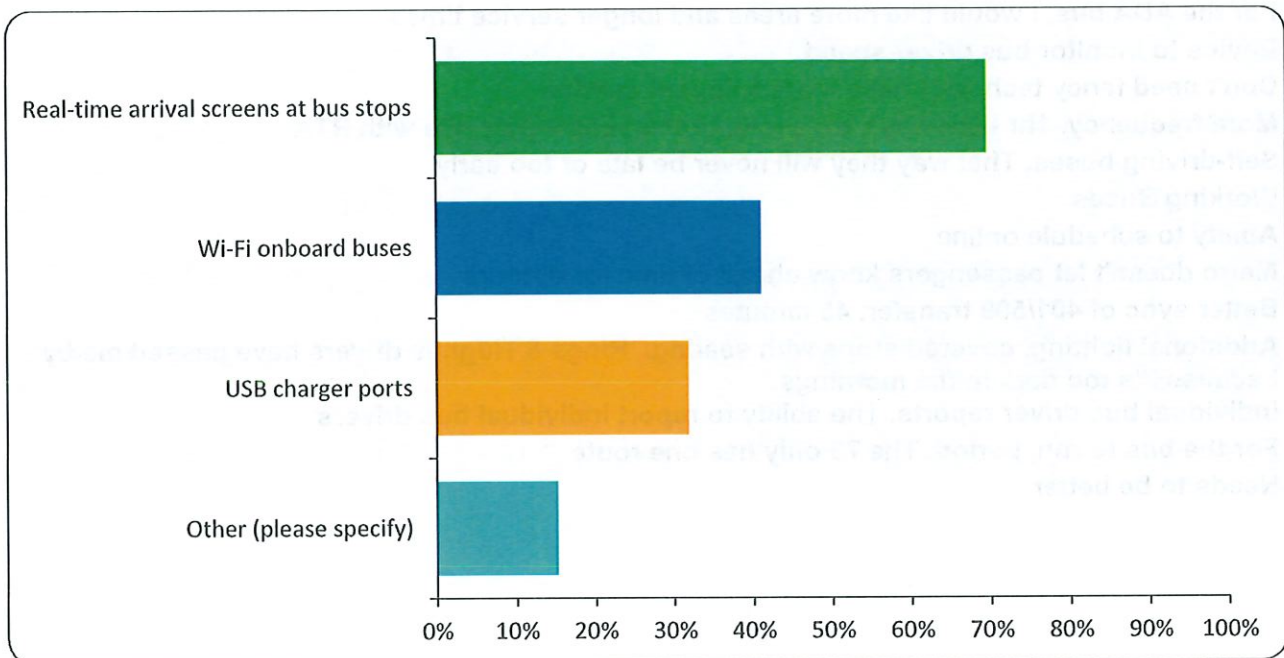
ANSWER CHOICES	RESPONSES	
5 days/week or more	62.73%	101
3-4 days/week	24.84%	40
1-2 days/week	6.83%	11
Less than once a week	5.59%	9
TOTAL		161

Q9: Please rate RTA's service in the following areas:



	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied	Total	Weighted Average
Cost of Bus Fare	29.22% 45	37.01% 57	22.08% 34	5.19% 8	6.49% 10	154	2.23
Courtesy/Friendliness of Bus Drivers	26.45% 41	33.55% 52	24.52% 38	9.03% 14	6.45% 10	155	2.35
Response/Precautions for COVID-19	26.14% 40	34.64% 53	24.18% 37	7.84% 12	7.19% 11	153	2.35
Safety and Security on Buses/at Stops	25.00% 38	38.82% 59	19.08% 29	7.24% 11	9.87% 15	152	2.38
Frequency of Bus Service	21.52% 34	27.22% 43	19.62% 31	17.09% 27	14.56% 23	158	2.76
Availability of Schedule Information	22.08% 34	29.87% 46	22.08% 34	16.23% 25	9.74% 15	154	2.62
Ride Time/Time Spent on Bus	20.92% 32	43.79% 67	19.61% 30	11.11% 17	4.58% 7	153	2.35
Customer Service and Information	21.05% 32	31.58% 48	21.05% 32	15.79% 24	10.53% 16	152	2.63
Cleanliness of Buses and Stops	19.35% 30	34.84% 54	21.94% 34	14.84% 23	9.03% 14	155	2.59
Comfort of Ride	19.35% 30	40.0% 62	25.81% 40	9.68% 15	5.16% 8	155	2.41
Hours of Bus Service	16.77% 26	27.10% 42	23.23% 36	18.06% 28	14.84% 23	155	2.87
Areas Served by Bus Routes	17.11% 26	34.21% 52	24.34% 37	13.16% 20	11.18% 17	152	2.67
Reliability and Condition of Vehicles	16.77% 26	29.03% 45	21.29% 33	18.06% 28	14.84% 23	155	2.85
Overall Service	17.11% 26	36.18% 55	24.34% 37	11.84% 18	10.53% 16	152	2.62
Saturday Service Hours	16.55% 24	18.62% 27	27.59% 40	19.31% 28	17.93% 26	145	3.03
Bus Running On-Time	13.29% 21	27.22% 43	18.99% 30	20.89% 33	19.62% 31	158	3.06
Sunday Service Hours	11.89% 17	15.38% 22	27.27% 39	18.18% 26	27.27% 39	143	3.34

Q10: Which of the following technological improvements would you benefit from?



ANSWER CHOICES	RESPONSES	
Real-time arrival screens at bus stops	69.54%	105
Wi-Fi onboard buses	41.06%	62
USB charger ports	31.79%	48
Other (please specify)	15.23%	23
TOTAL		238

“Other” Suggested Technological Improvements

The Real Time Transit App Actually Working

409 on Sunday

Being on time

courtesy for seniors with disabilities

skip the route, not on time

Electronic bus passes

Instead of fancy technology I would prefer more frequency of service

Trackers for the internet are the best thing you have after the actual buses. It seems not every bus has one yet. You should get them on every bus.

App and real time arrival

Smoother driving bus drivers

For the ADA bus, I would like more areas and longer service times

Device to monitor bus driver speed

Don't need fancy tech, just need more frequent service

More frequency. 1hr headways are a joke to the people that ride with RTA.

Self-driving buses. That way they will never be late or too early

Working Buses

Ability to schedule online

Metro doesn't let passengers know ahead of time for detours

Better sync of 401/509 transfer. 45 minutes

Additional lighting, covered stops with seating. Riggs & Hughes drivers have passed me by because it's too dark in the mornings.

Individual bus driver reports. The ability to report individual bus drivers

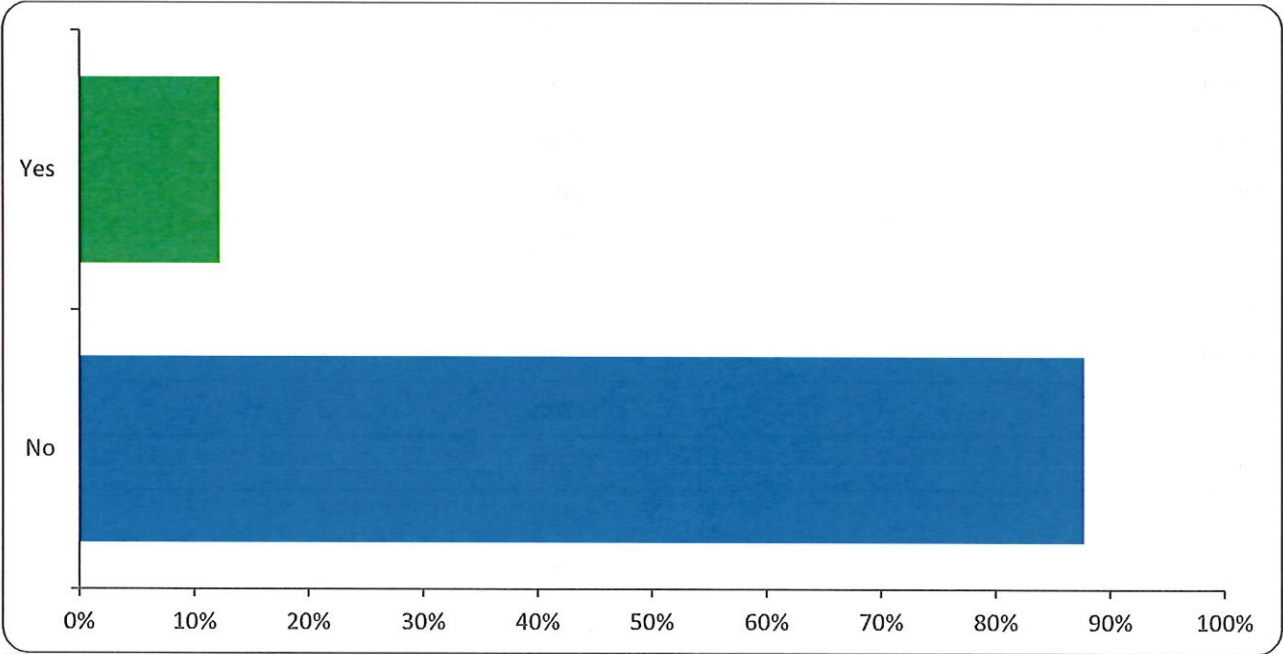
For the bus to run, period. The 75 only has one route

Needs to be better

Q11: What is your zip code?

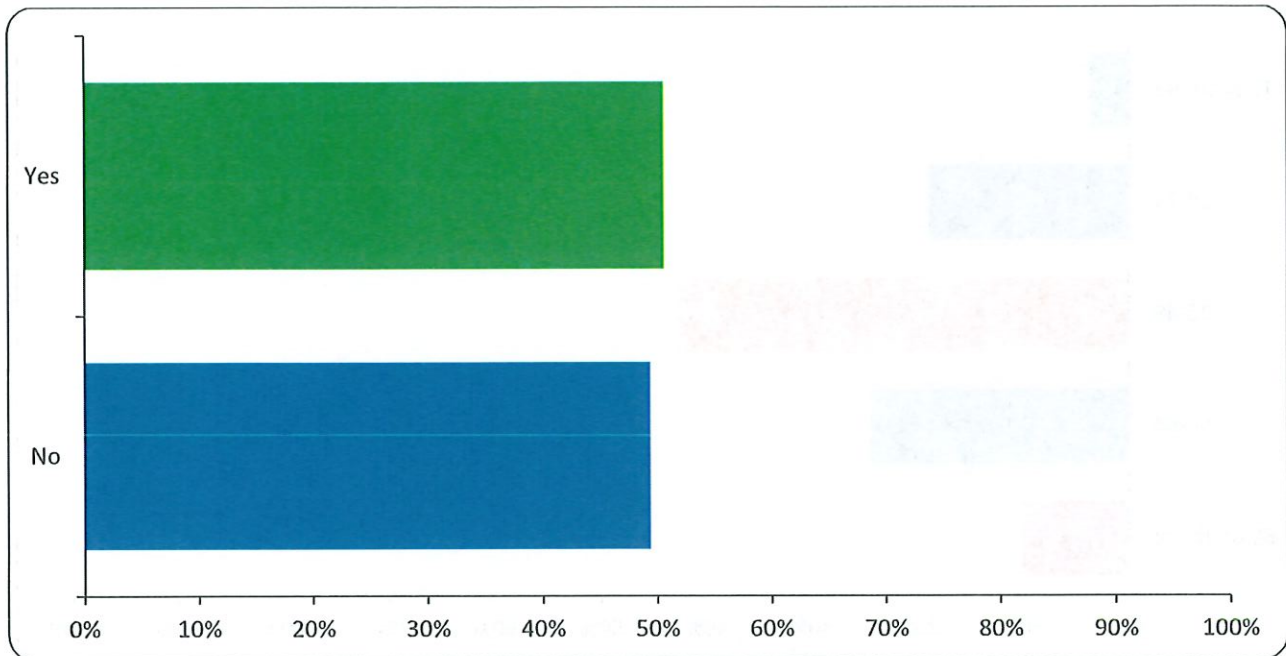
ANSWER CHOICES	RESPONSES	
21044	21.43%	33
21045	17.53%	27
21043	5.84%	9
21046	5.84%	9
20707	5.19%	8
20708	5.19%	8
20723	5.19%	8
21075	4.55%	7
20794	1.95%	3
21076	1.95%	3
21229	1.95%	3
20705	1.30%	2
20724	1.30%	2
20740	1.30%	2
20770	1.30%	2
21207	1.30%	2
21217	1.30%	2
21228	1.30%	2
Zip Codes with only one response: 20020, 20763, 20780, 20783, 20866, 21029, 21036, 21042, 21060, 21074, 21093, 21133, 21202, 21206, 21213, 21225, 21227, 21230, 21234, 21244, 27083, 94210		
	14.29%	22
TOTAL		154

Q12: Do you have a car?



ANSWER CHOICES	RESPONSES	
Yes	12.27%	20
No	87.73%	143
TOTAL		163

Q13: Do you have a driver's license?



ANSWER CHOICES

RESPONSES

Yes

50.62%

81

No

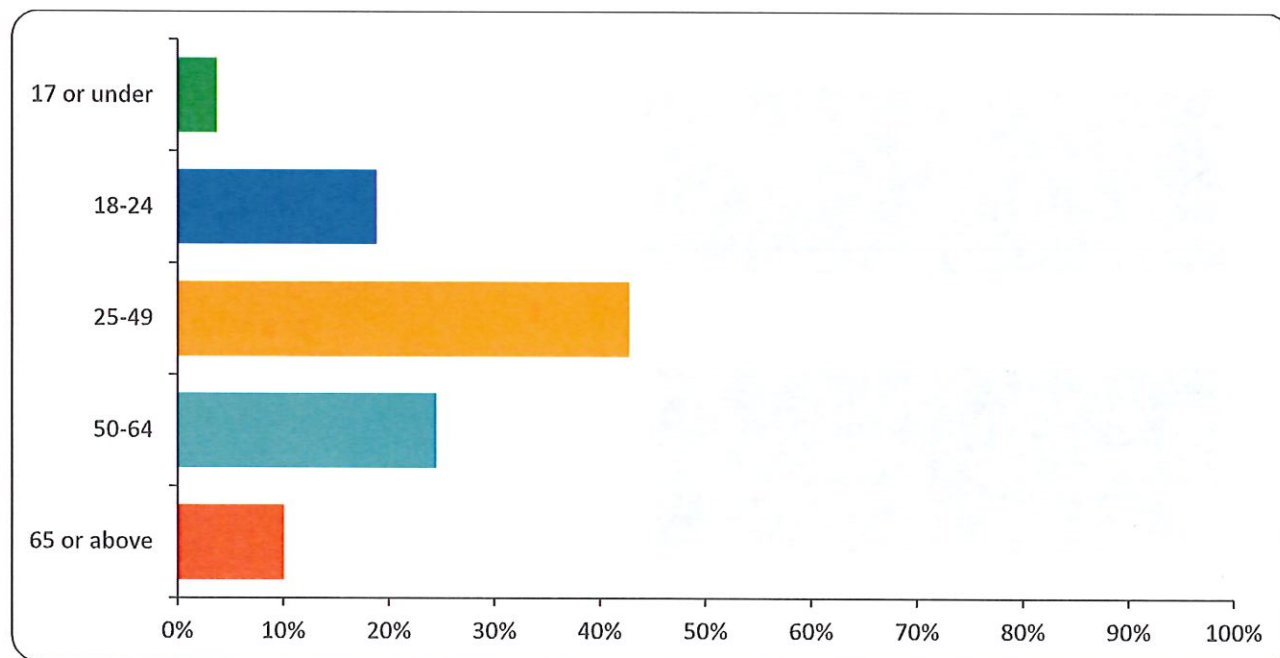
49.38%

79

TOTAL

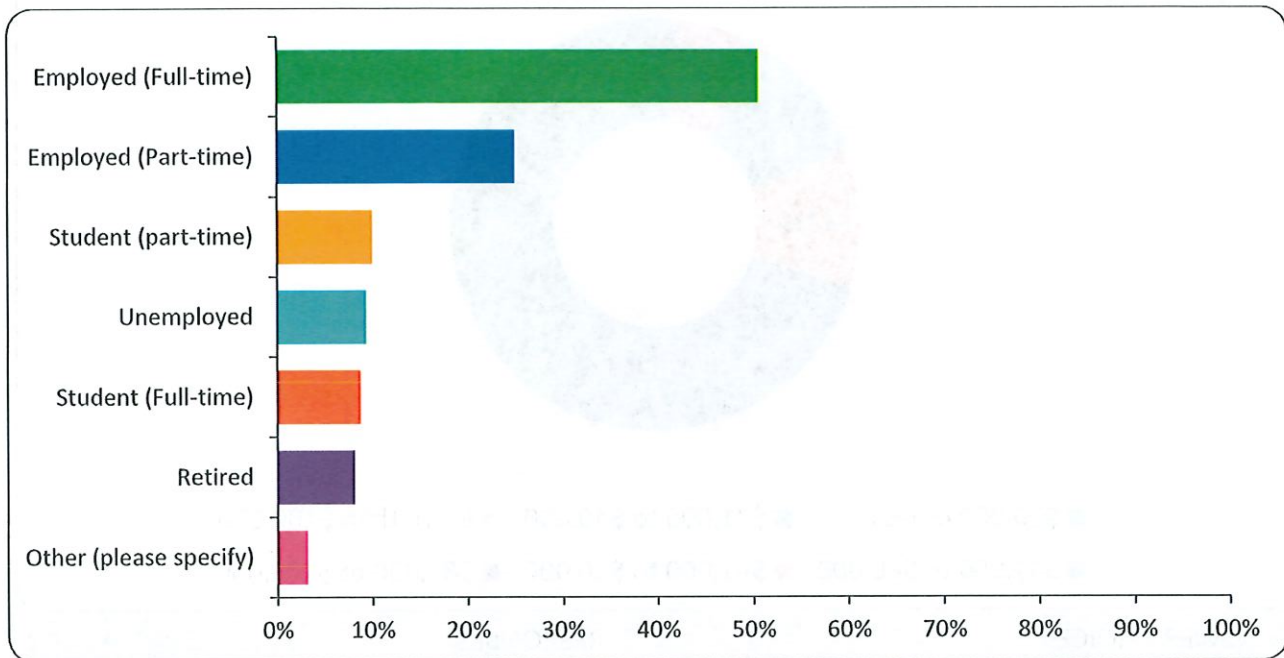
160

Q14: Please indicate your age:



ANSWER CHOICES	RESPONSES	
17 or under	3.77%	6
18-24	18.87%	30
25-49	42.77%	68
50-64	24.53%	39
65 or above	10.06%	16
TOTAL		159

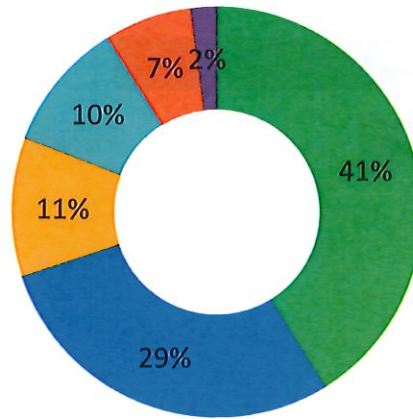
Q15: What is your employment status? You may check more than one.



ANSWER CHOICES	RESPONSES	
Employed (Full-time)	50.62%	81
Employed (Part-time)	25.00%	40
Student (part-time)	10.0%	16
Unemployed	9.38%	15
Student (Full-time)	8.75%	14
Retired	8.12%	13
Other (please specify)	3.12%	5
TOTAL		184

Other: Disabled 3, Freelance 1, Work from Home 1

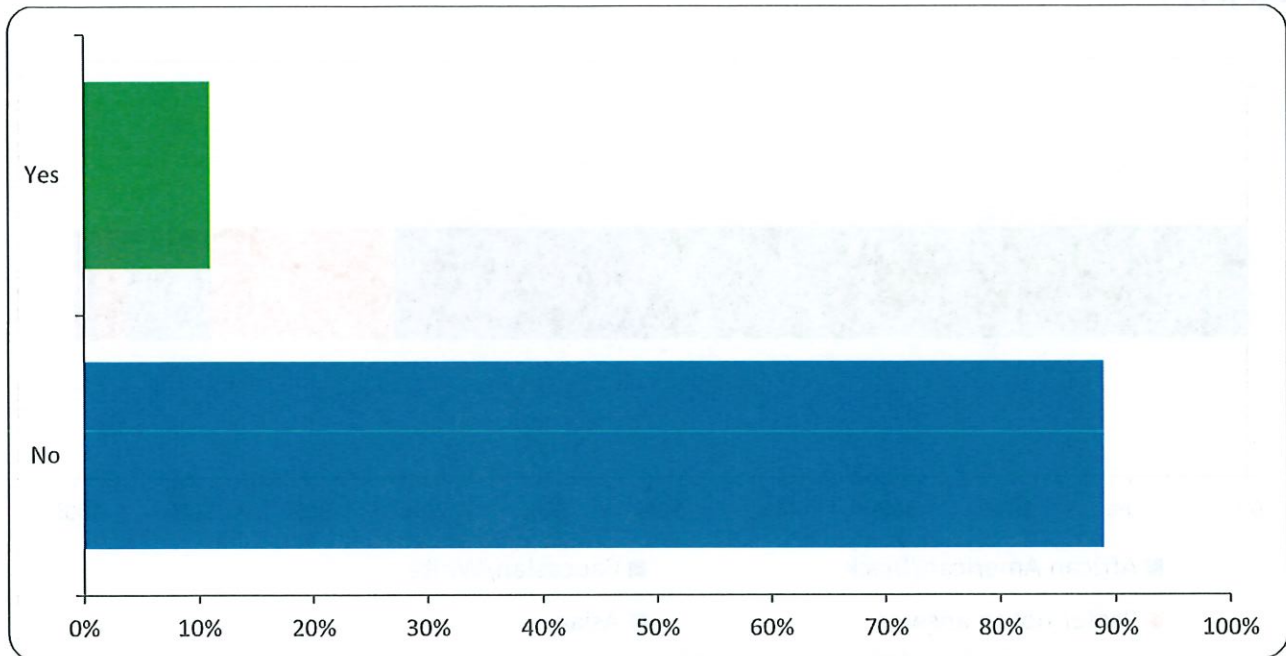
Q16: What is your annual household income?



■ \$20,000 or less ■ \$21,000 to \$40,000 ■ More than \$100,000
■ \$41,000 to \$60,000 ■ \$61,000 to \$80,000 ■ \$81,000 to \$100,000

ANSWER CHOICES	RESPONSES	
\$20,000 or less	41.10%	60
\$21,000 to \$40,000	28.77%	42
More than \$100,000	10.96%	16
\$41,000 to \$60,000	10.27%	15
\$61,000 to \$80,000	6.85%	10
\$81,000 to \$100,000	2.05%	3
TOTAL		146

Q17: Are you of Hispanic or Latino origin?



ANSWER CHOICES

RESPONSES

Yes

11.04%

17

No

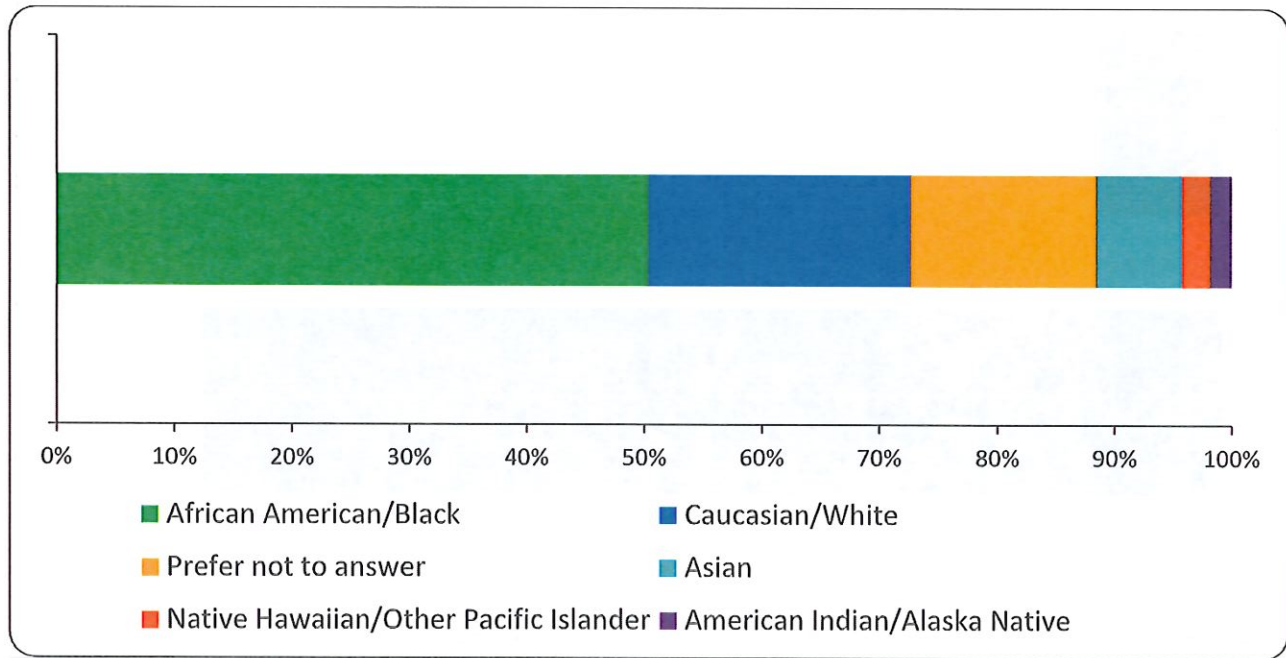
88.96%

137

TOTAL

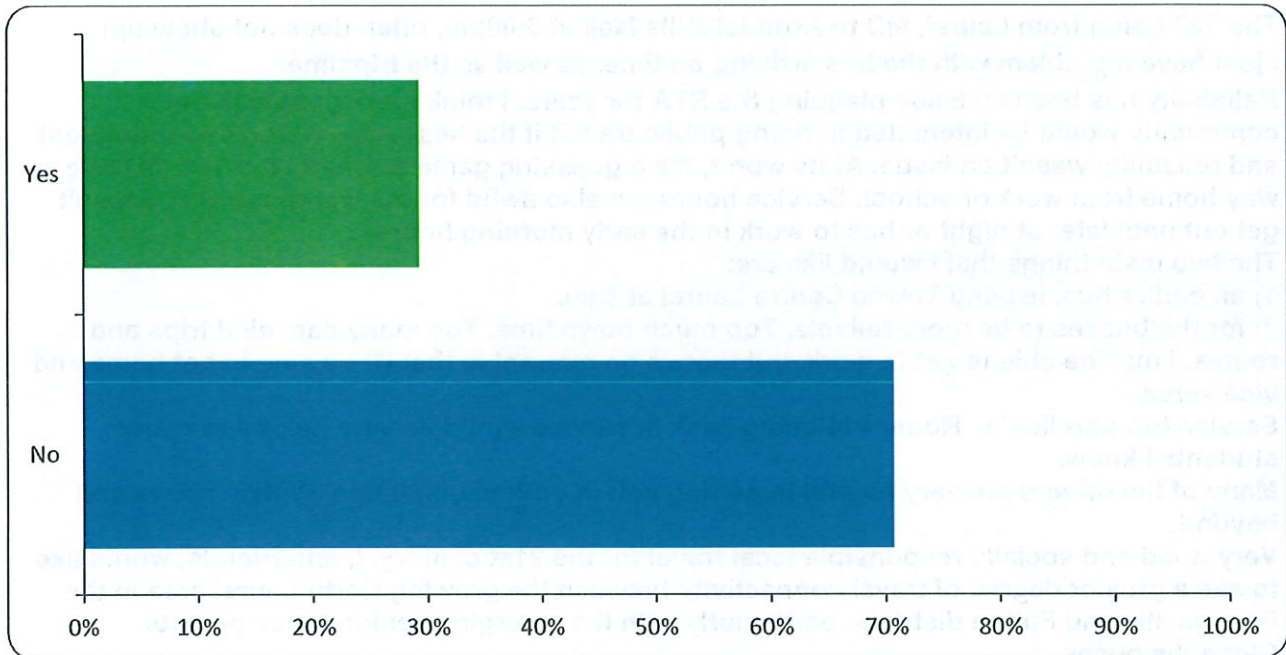
154

Q18: How would you classify yourself? (check all that apply)



ANSWER CHOICES	RESPONSES	
African American/Black	53.21%	83
Caucasian/White	23.72%	37
Prefer not to answer	16.67%	26
Asian	7.69%	12
Native Hawaiian/Other Pacific Islander	2.56%	4
American Indian/Alaska Native	1.92%	3
TOTAL		165

Q19: Do you speak a language other than English at home?



ANSWER CHOICES	RESPONSES	
Yes	29.30%	46
No	70.70%	111
TOTAL		157

Q20: Please provide any comments you may have regarding public transportation:

The 502 going from Laurel, MD to Arundel Mills Mall at 6:00pm, often does not show up!
I just have a problem with the bus arriving on time, as well as the trip time.

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

The two main things that I would like are:

- 1) an earlier bus, leaving Towne Centre Laurel at 6am.
- 2) for the busses to be more reliable. Too much down time. Too many canceled trips and routes. I may be able to get to work, but there's no guarantee that I'll be able to get home and vice versa.

Service too unreliable. Route 414 being back in service would be very helpful to many students I know.

Many of the drivers are very helpful in getting you to your destinations. Will go above and beyond.

Very good and socially responsible local travel for the 21st century. I, and friends, would like to see a greater degree of travel connectivity between the growing North Laurel area in the Scaggsville and Fulton districts, particularly with the emerging senior developments.

Clean the buses

Real-time arrival/departure

Constantly rout 407 - been riding for 13 years "Rider says she will be late for work (again). "Gold" route was more reliable. Sometimes the notices are inaccurate - not reliable.

Buses are so dirty.

Driver courtesy is bad (zero)

I think some of the bus drivers should be more friendly. Some of them when you ask them something, they give you a nasty answer.

Cleaner and driver courtesy is a big issue. Drivers should know route. 503 yesterday - bad driver [illegible]

Ga and Twi

The traffic is very good. Thank you!

Needs more improvement.

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

Satisfied with customer service 100%

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

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

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

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

Given the population increase and senior citizen housing in the Scaggsville and Maple Law area, having bus stops in the Maple Lawn and Ice Crystal Drive area would benefit many. Ridership would be frequent and often, I suspect.

I wish the 501 go back at the airport.

Transfers are no longer available, the cost of round trips on a regular trip is costly. I don't have a way to get to RTA offices for passes.

Sometimes no arriving the bus on time. It can be skipping any route.

Have bus drivers to not leave early.

Bus route Food Lion (Laurel) - also in Fulton (Maple Drive/or Farm?); and sand cheery lane.

Better customer service, accurate info when calling the office

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

Once a week I have a moment where I go "I need to learn how to drive". It always happens when some bullshit happens on the bus.

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

I would like the 503 to run 2 times on sundays to arrive at Columbia mall at 11:30 and the other to leave at 6 or 7pm. Also to have the Saturday bus for the 503 go from Columbia to laurel town center at 8pm instead of 7pm.

It should be free of charge.

N/a

Don't like how there's only 1 bus that goes to Ellicott city

More buses needed. One every hour is too few

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

I am pleased with RTA services in my area. I don't work on the weekends. The 409 Laurel/Elkridge isn't available on Sunday. It's probably the only minor issue that exists. I'm never in a rush so I don't mind a late bus.

Today I spent over 2 hours at the bus stop waiting for the 502 that never came. There was no update on the website or transit apps to inform us the bus is not running today. Which resulted in me being extremely late for work. As well as that line is constantly late. Every other day the 12:00 bus does not show.

I would like a bus for traveling to Laurel. The area around Maple Lawn for the farmers market. the area around Lion King store to visit my brother in that area on Sand Cherry Lane and shop at the Lion King Food Store. The drivers are all nice courteous and drive very defensively and do a good job driving. =

I would like to see the RTA Route 409 and the RTA Route 503 gets more Sunday service that will run from 9:00AM to 8:00PM.

More of my coworkers would utilize the bus service if it ran more frequently and had more drivers so you could provide reliable service to Ft. Meade. Additionally, the departure and arrival times should better align with the MARC schedule. Thanks!

Bus drivers need to start driving buses smoother; RTA should use only large buses during COVID, RSV, and flu to slow spread of disease; drivers should control rowdy passengers or ask them to leave the bus; drivers should depart on time.

I love and appreciate my ADA-Mobility bus. I would not have a job or be a functioning member of society if it were not for this bus. However, they need more help!!!

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

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

The proven way to make public transit more successful and widely used is to make it frequent and reliable. Most RTA buses run every hour only which is just not practical for most people with busy and specific schedules. Simple induced demand concept, more frequency = more ridership.

Induced demand. More frequency = more people will ride with RTA.

Schedules and routes do not list all bus stops, making it difficult to plan a commute. Please add all stops to the schedules and/or route maps.

Some bus stops are often located in a grassy area, on a steep hillside, etc., nowhere near a sidewalk. More of a city planning issue, than RTA issue, but hopefully the feedback is helpful.

Some information about me: I mostly work from home and am not commuting daily like in 2020 and earlier. I also take the 401 and 404 regularly, as well as other bus lines.

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

Public transportation is great. There are very great drivers I like that are great 100%, but there are a few who won't even speak to you nor respond to a request. It's public service. Let them leave their attitude at home or quit.

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

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

502 - Saturday/Sunday hours should be every hour instead of every hour and a half.

I also ride Mobility -Legally Blind

Make sure the drivers are 100% on time and not getting to stops too early or late

I ride RTA Mobility, so these questions do not apply to me. It is unfortunate as I would have wanted to fill out a survey.

Service is highly unreliable and customer service never responds, limiting my use of RTA

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

I exclusively use the Mobility/paratransit services, and my drivers are first rate professionals

I visit Virginia a few times a year. You should set up a system that allows for free bus transfers for patrons who don't use cellphones.

I think RTA is a great service. I'd like if they were to add more routes but that's no big thing

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

It would be helpful if there was a survey for those of us who use RTA mobility.

More frequency of RTA & they should be running on time

No comment

There is NO bus service near my house in Dayton, MD. The RTA Paratransit service does NOT allow me to use it for anything other than dr/dental/work/social svcs/sr centers and that is also only on weekdays from 9 - 5. If I want to do anything else, I'm not able to. I am mentally disabled, so mostly homebound because of this. I would like to just go to a shopping mall or a movie/restaurant sometimes but can't go anywhere because of no transportation. The RTA Mobility/ParaTransit svc is for disabled people, but it doesn't service my area enough which is a HUGE problem. Increasing the places I can go and the days of week would HUGELY improve my quality of life.

I USE RTA MOBILITY 100% OF THE TIME.

THIS SURVEY REALLY DOESNT APPLY.

IN GENERAL WOULD RATE THE SERVICE A GRADE OF "A"

I purchased an RTA card for my daughter in MD to use for work last summer. I never received the card and never received a refund.

I need to have public transportation, but do not have access to my home. This has affected my ability to hold down a job because the RTA mobility was not available when I needed to get to work. Please add a route to Clarksville.

There needs to be a lot more public funding to support mass transit and public transportation, especially for people with disabilities like me.

Some of the buses I ride look like they have never been cleaned since they have been on the road. Need more attention to that issue.

During rush hour it seems that the bus doesn't run as frequently, find myself waiting about an hour when I just missed the bus.

Better service overall and all over

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

No Comments

There are a lot of ghost buses abd not showing up on time.

Every time the bus ain't supposed to be here at a certain time and don't never show either your bus schedule screen board isn't correct like it feel as though you have no respect for the public especially going cold weather seasons.

Buses on Sundays so I can get to work

I wish you to always be available at all times during the day and please provide departures and arrivals at each stop in the app

V.good service just need the 503 route more often in service

Your buses frequently breakdowns so I have to take Uber a lot to get to work or home. The 406 bus/van needs to have the app to show where the bus. I will be late for work. I do not like to cross my fingers if the bus is going to run or not

They need to stop canceling the buses it makes me late for work

Its really good at this time

8 realize that ridership is low on my routes because buses are not full. I wish buses run in 1/2 hr. Increments, especially the 501 which has more riders

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

Transit needs to do alot better with those bus arrival times ASAP

need to have a way to have accurate arrival times because i have experienced only this bus being late or not arriving

Letting all riders get on the busses 10 min early in fall and freezing conditions

They need to stop canceling bus at the last minute because people need to get to work.

They need to fire the super vision

Bus needs to come when it schedule to come. Instead of making up bunch of excuses and lies

It is good. Very dependable in the morning. Afternoon routes are not as dependable. The real time is very reliable.

Some Buses need a really good cleaning

I'm pretty satisfied overall. But the other day, I decided to take the Metro to NASA Headquarters in DC. I rode my motorcycle to the Greenbelt station and parked in the Park and Ride lot. To get there and back on the Metrorail and exit the lot, it cost me nearly \$13.00. I had planned for \$4.00 (\$2 there and \$2 back), so that really surprised me. I didn't realize that it cost \$5 to exit the lot and not sure why the train was so expensive. I feel like I made a huge mistake in taking the WMATA and I will not be doing that again. Not sure why you'd dissuade people from taking the Metro by charging for parking. I could have driven and paid for parking near Headquarters for less. I just realized that it was costing me \$3.55 each way to get to and from work riding the rail. Clearly, I misunderstood the fare system and should have done more research. Now, instead of riding the train, I am just transferring around on various buses because it's actually \$2.00 each way. So, I guess this turned into a bit of a rant, but mostly, I am just discouraged because I put \$200 on my Smartrip card and I feel like I blew through it in record time because I wasn't paying attention to how much these trips were costing me. This is my fault - not WMATA's - and I am changing my travel behaviors accordingly. Just bummed that I feel like I have to. I often get frustrated that I pay and so few others seem to. They literally just walk onto the bus, no questions asked. Even though this seems to be a huge whining session, I would like to note that I am overall very happy with the service that WMATA provides. Some of the drivers are superb. (Mr. King on the 4:35 p.m. 15X from NASA to Greenbelt deserves a freaking commendation and the guy who drives the BRO1 R2 bus in the mornings is awesome, too.) Keep up the good work. Sorry for the complaints. I just don't know where else to voice them. I'm actually extremely pleased with the service overall.

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

Bus doesn't run on the weekends, i walk an hour just to catch a bus on weekends. The 301 is never on time. The bus should come more frequently. Hire more drivers and get more bus after 2 hours into service get 2 people on one route like metro.

On Friday December 16th on the 5 o'clock 405 to Columbia mall. The bus driver was driving aggressively cutting people off in traffic he also didn't respond to me saying hello when I got on the bus instead he immediately turned off the heat and rolled down the windows as if I stunk or something. I work at a bank where hygiene and professionalism is required so I know I did not smell. Also I've had other encounters where bus drivers are just rude or not responsive for example I asked a bus driver if the 404 was

The 75 runs when it wants to. You canceled the second route on this line and now it runs when they feel like it. God forbid you have to rely on it on Sunday. They cancel BACK TO BACK TO BACK at least half the day EVERY week. Saturdays are not all that better. it's the best

Regional Transportation Agency of Central Maryland Transit Development Plan

Appendix C RTA Fixed Route Customer Survey

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Appendix C

RTA Fixed Route Customer Survey

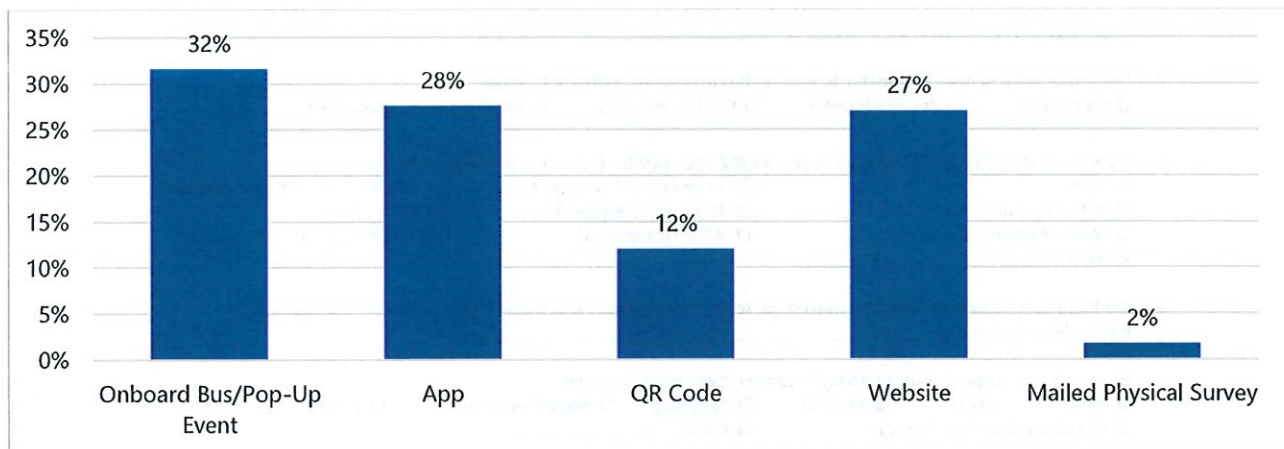
Introduction

The RTA Customer Survey was available starting on December 5, 2022 and closed on March 31, 2023 – providing a 116 day survey period. The survey closing date was extended due to a relatively low response rate and in order to accommodate additional outreach, including a survey pop-up event at The Mall in Columbia.

Out of the three TDP surveys (RTA Customer, RTA Mobility, and Community), the customer survey had the highest number of responses at 174 (out of 370 total surveys received).

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

RTA Fixed Route Customer Survey Collection Methods



A copy of the paper survey is provided on the following pages along with detailed survey responses for each question.

RTA Fixed Route Customer Survey – Front



RTA Customer Survey

Help us to serve you better! The RTA of Central Maryland, in partnership with Howard County, Anne Arundel County, the City of Laurel and Northern Prince George's County, wants your input on public transit services. Please complete the following survey to provide us with your feedback about our services and possible improvements. Your answers are anonymous. Thank you for your input! For more information, visit: www.rtacentralmdtransitplan.com

Win a

\$200 or

\$100 Gift Card

Complete this survey and write your name and phone/email in the comments section!

How to Submit your survey:

Onboard the Bus

Drop your completed survey into the drop box located in the front of the bus

Take this Survey Online



surveymonkey.com/r/rtacustomer

Submit by Mail/Email

Mail to: RTA Survey c/o KFH Group
7200 Wisconsin Ave, Suite 320
Bethesda, MD 20814

Email a photo or PDF to:
admin@kfhgroup.com

- What bus route are you currently riding?

<input type="checkbox"/> 301 South Laurel	<input type="checkbox"/> 404 Hickory Ridge	<input type="checkbox"/> 409 US Route 1 Corridor
<input type="checkbox"/> 302 Greenbelt Metro Station	<input type="checkbox"/> 405 Ellicott City	<input type="checkbox"/> 501 Columbia / Arundel Mills
<input type="checkbox"/> 401 Harper's Choice / Clary's Forest	<input type="checkbox"/> 406 Columbia Gateway	<input type="checkbox"/> 502 Laurel / Arundel Mills
<input type="checkbox"/> 402 Columbia Crossing / Dobbin Center	<input type="checkbox"/> 407 Owen Brown / Kings Contrivance	<input type="checkbox"/> 503 Laurel / Columbia
<input type="checkbox"/> 403 Executive Park Drive	<input type="checkbox"/> 408 Lark Brown / Waterloo	
- Where did your trip start? Please indicate the street address, intersection, or landmark (example: if your trip started at home, put your address or a close intersection)

- What is your final destination? Please indicate the street address, intersection, or landmark (example: Arundel Mills Mall)

- Did you or will you have to transfer to another bus in order to complete this trip?
☐ No transfers ☐ Yes, one transfer ☐ Yes, two transfers ☐ Yes, three or more transfers
- If you are transferring on this trip, what service did you transfer from or will you be transferring to?

<input type="checkbox"/> RTA	<input type="checkbox"/> Anne Arundel County Transit	<input type="checkbox"/> Prince George's County's TheBus
<input type="checkbox"/> MTA Commuter Bus	<input type="checkbox"/> MTA Local / Express Bus	<input type="checkbox"/> MARC Train
<input type="checkbox"/> WMATA Metrorail	<input type="checkbox"/> WMATA Metrobus	<input type="checkbox"/> Neighbor Ride
<input type="checkbox"/> Other: _____		
- Are there specific destinations you need to go to on a regular basis that transit does not serve? ☐ Yes ☐ No
If Yes, please describe: _____
- What is the purpose of your trip today? You may check more than one.
☐ Work ☐ School ☐ Medical ☐ Shopping ☐ Social/Recreation ☐ Dining
☐ Government/Service Agency ☐ Other: _____
- How often do you take public transit?
☐ 5 days/week or more ☐ 3-4 days/week ☐ 1-2 days/week ☐ Less than 1 day/week

Survey continues on reverse >



ANNE ARUNDEL
COUNTY
MARYLAND



HOWARD COUNTY
MARYLAND



RTA Fixed Route Customer Survey – Back

9. Please rate RTA's service in the following areas:

	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied
a. Frequency of Bus Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Hours of Bus Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Areas Served by Bus Routes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Bus Running On-Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Saturday Service Hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Sunday Service Hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Ride Time/Time Spent on Bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Availability of Schedule Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Cost of Bus Fare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Safety and Security on Buses/at Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Cleanliness of Buses and Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Courtesy/Friendliness of Bus Drivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Customer Service and Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Reliability and Condition of Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Comfort of Ride	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Response/Precautions for COVID-19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Overall Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Which of the following technological improvements would you benefit from?

- ☐ Wi-Fi onboard buses ☐ USB charger ports ☐ Real-time arrival screens at bus stops ☐ Other: _____

11. What is your home zip code? _____

12. Do you have a car? ☐ Yes ☐ No If Yes, was a car available for this trip? ☐ Yes ☐ No

13. Do you have a driver's license? ☐ Yes ☐ No

14. Please indicate your age:

- ☐ 17 or under ☐ 18-24 ☐ 25-49 ☐ 50-64 ☐ 65 or above

15. What is your employment status? You may check more than one.

- ☐ Employed, full-time ☐ Student, full-time ☐ Unemployed
☐ Employed, part-time ☐ Student, part-time ☐ Retired
☐ Other: _____

16. What is your annual household income?

- ☐ \$20,000 or less ☐ \$21,000 to \$40,000 ☐ \$41,000 to \$60,000
☐ \$61,000 to \$80,000 ☐ \$81,000 to \$100,000 ☐ More than \$100,000

17. Are you of Hispanic or Latino origin? ☐ Yes ☐ No

18. How would you classify yourself? Please check all that apply.

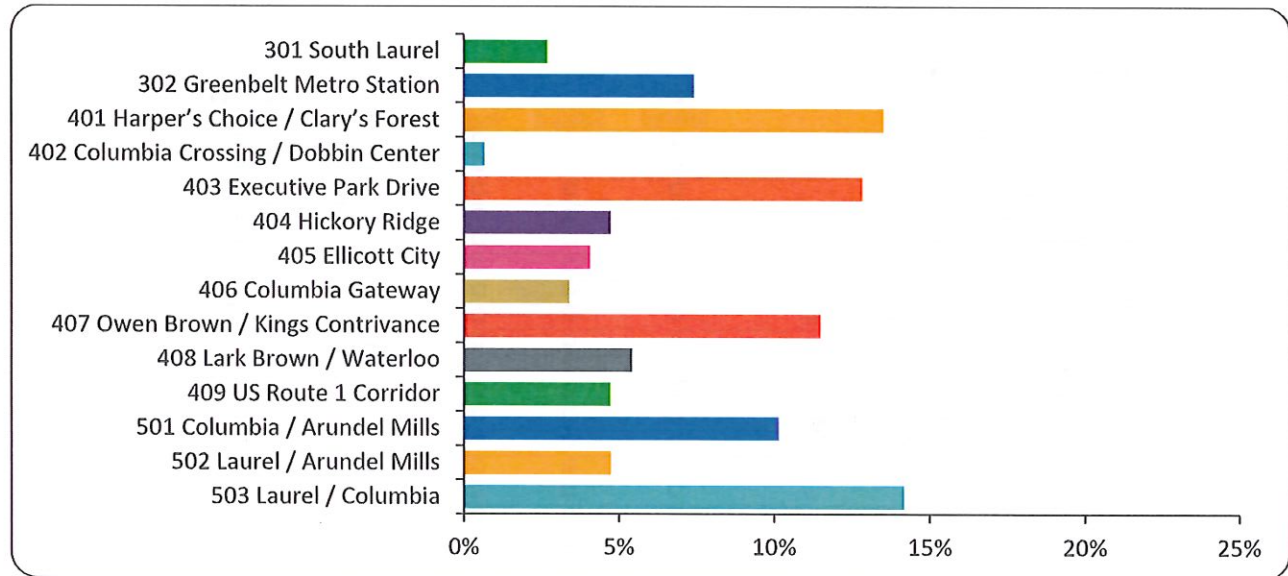
- ☐ African American/Black ☐ Caucasian/White ☐ Asian
☐ American Indian/Alaska Native ☐ Native Hawaiian/Other Pacific Islander ☐ Prefer not to answer

19. Do you speak a language other than English at home? ☐ Yes ☐ No

If Yes, what is this language? _____ For example, Spanish, Korean, Chinese.

20. Please provide any comments you may have regarding public transportation **and your name/contact info for the raffle:**

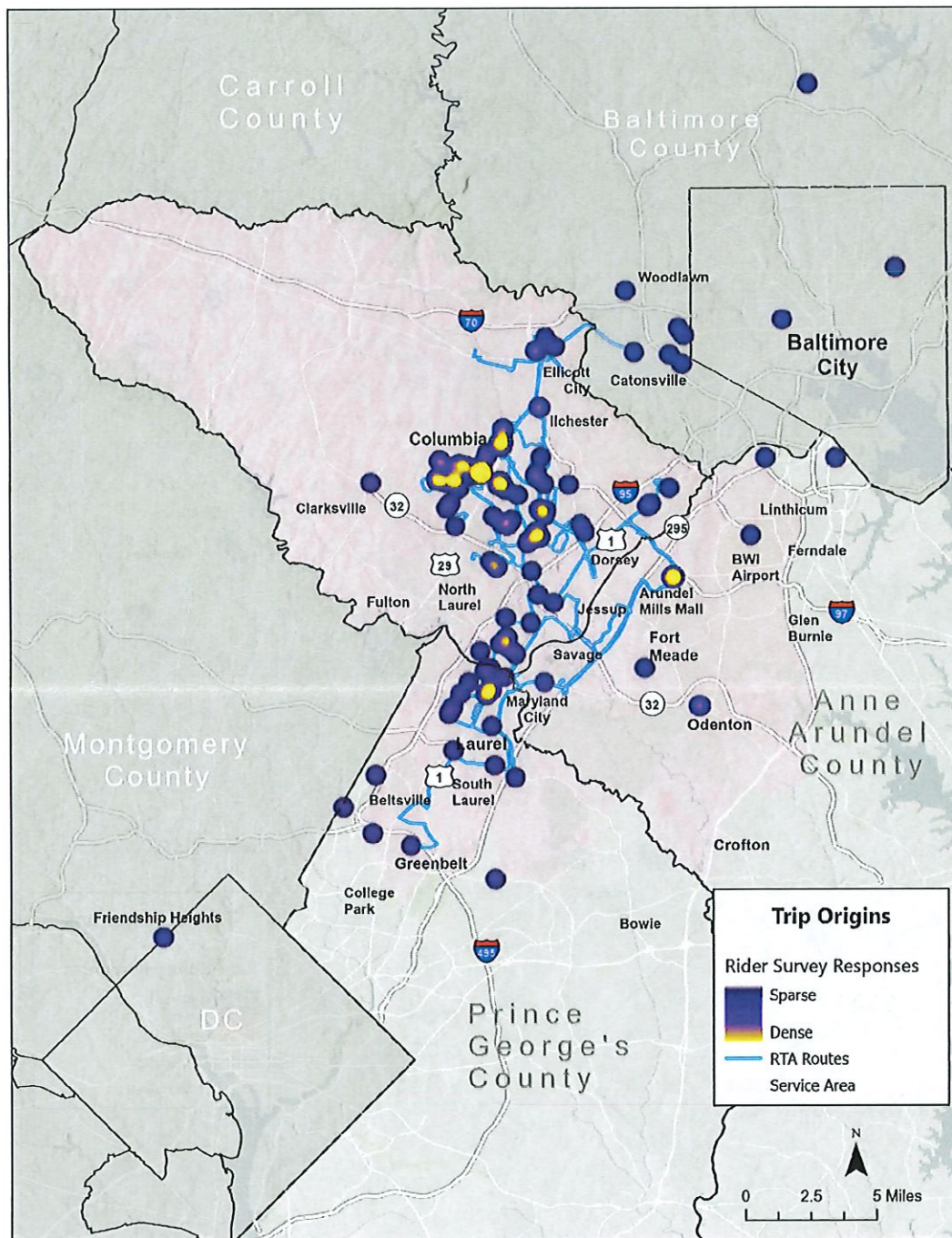
Q1: Which bus route are you currently riding?



ANSWER CHOICES	RESPONSES	
301 South Laurel	2.70%	4
302 Greenbelt Metro Station	7.43%	11
401 Harper's Choice / Clary's Forest	13.51%	20
402 Columbia Crossing / Dobbin Center	0.68%	1
403 Executive Park Drive	12.84%	19
404 Hickory Ridge	4.73%	7
405 Ellicott City	4.05%	6
406 Columbia Gateway	3.38%	5
407 Owen Brown / Kings Contrivance	11.49%	17
408 Lark Brown / Waterloo	5.41%	8
409 US Route 1 Corridor	4.73%	7
501 Columbia / Arundel Mills	10.14%	15
502 Laurel / Arundel Mills	4.73%	7
503 Laurel / Columbia	14.19%	21
TOTAL		148

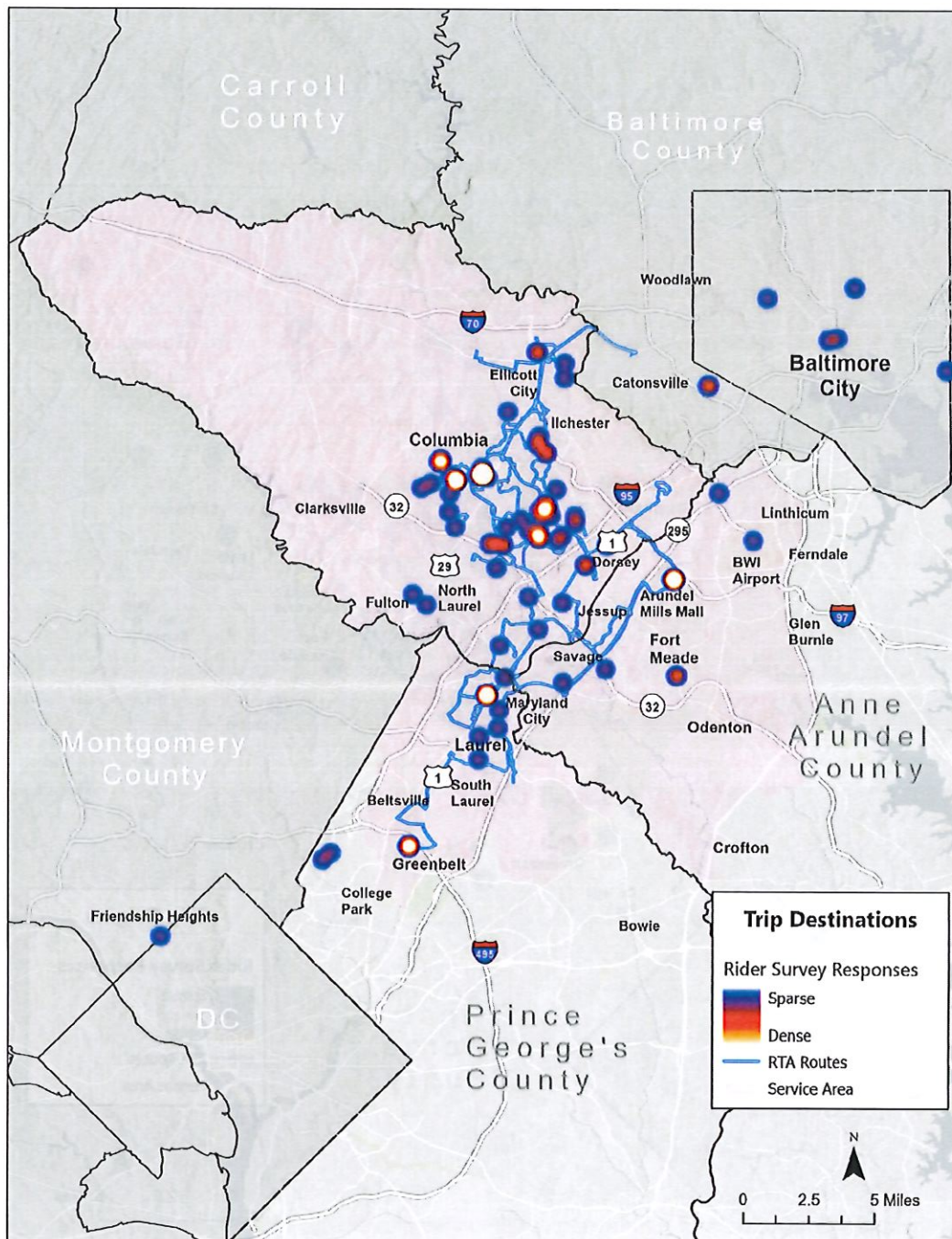
Q2: Where did your trip start? Please indicate the street address, intersection, or landmark (example: if your trip started at home, put your address or a close intersection)

Individual responses are not provided for privacy reasons (e.g., home addresses).

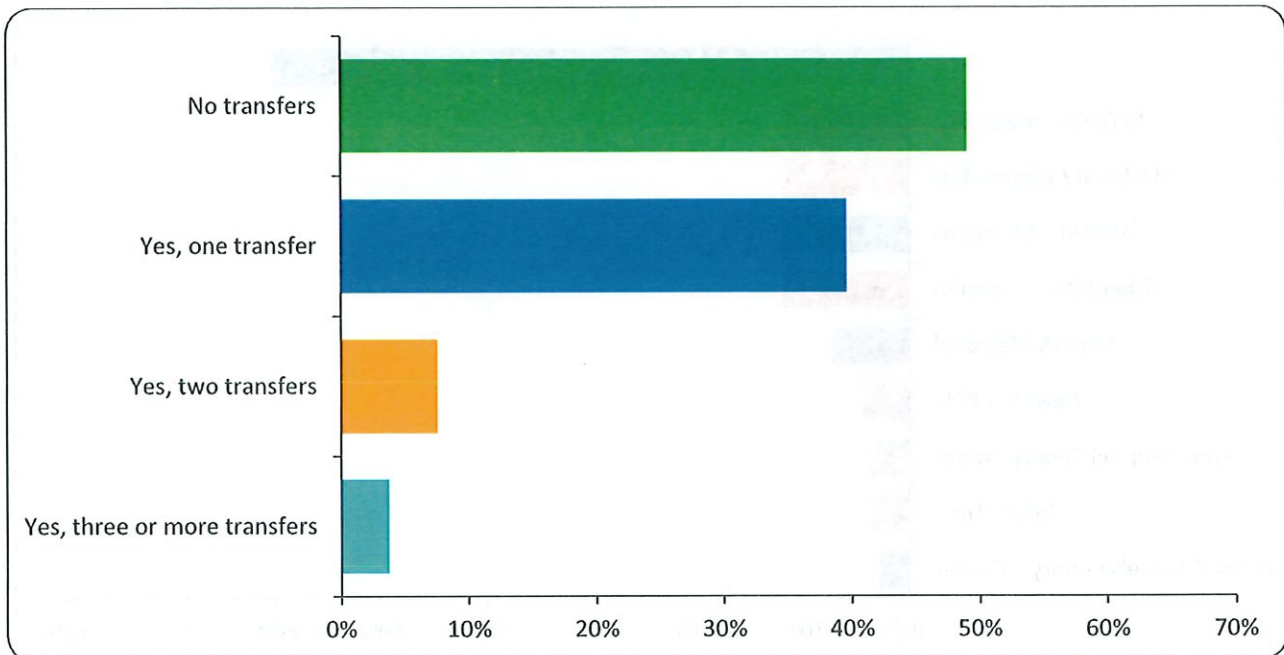


Q3: What is your final destination? Please indicate the street address, intersection, or landmark (example: Arundel Mills Mall)

Individual responses are not provided for privacy reasons (e.g., home addresses).

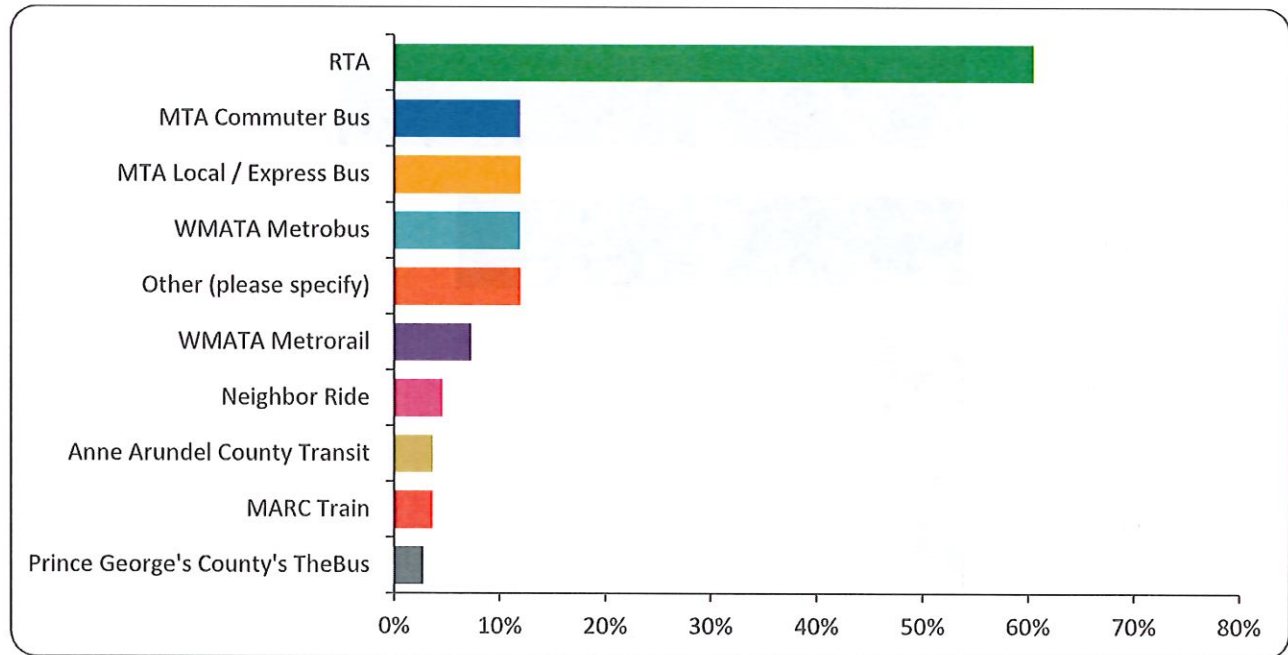


Q4: Did or will you Transfer to another bus to complete this trip?



ANSWER CHOICES	PERCENTAGE	RESPONSES
No transfers	49.06%	78
Yes, one transfer	39.62%	63
Yes, two transfers	7.55%	12
Yes, three or more transfers	3.77%	6
TOTAL		159

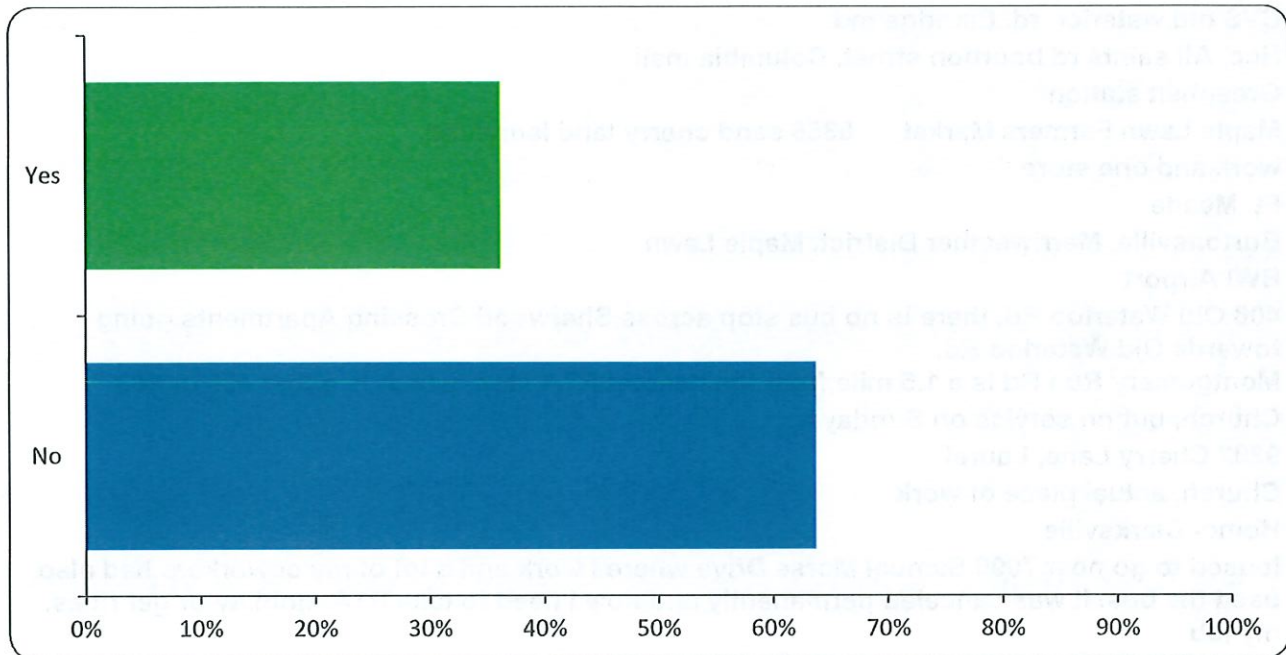
Q5: If you are transferring on this trip, what service did you transfer from or will you be transferring to?



ANSWER CHOICES	RESPONSES	
RTA	60.55%	66
MTA Commuter Bus	11.93%	13
MTA Local / Express Bus	11.93%	13
WMATA Metrobus	11.93%	13
Other (please specify)	11.93%	13
WMATA Metrorail	7.34%	8
Neighbor Ride	4.59%	5
Anne Arundel County Transit	3.67%	4
MARC Train	3.67%	4
Prince George's County's TheBus	2.75%	3
TOTAL		142

Other: N/A 6, Metrobus 2, Baltimore County Connector 2, MTA CityLink 1, RTA 1, Uber/Lyft 1

Q6: Are there specific destinations you need to go to on a regular basis that transit does not serve?



ANSWER CHOICES	RESPONSES	
Yes	36.24%	54
No	63.76%	95
TOTAL		149

Desired Destinations not Currently Served by Transit

Baltimore National Parkway

HCC

Inside the Shopping Center L.A. Fitness

Scaggsville and Fulton, MD (Food Lion area and Maple Lawn area)

BWI

Courthouse, commissioners office, Jessup, Security Mall, Hanover

Workforce/school

Meadowbrook Park

Washington, DC, Baltimore

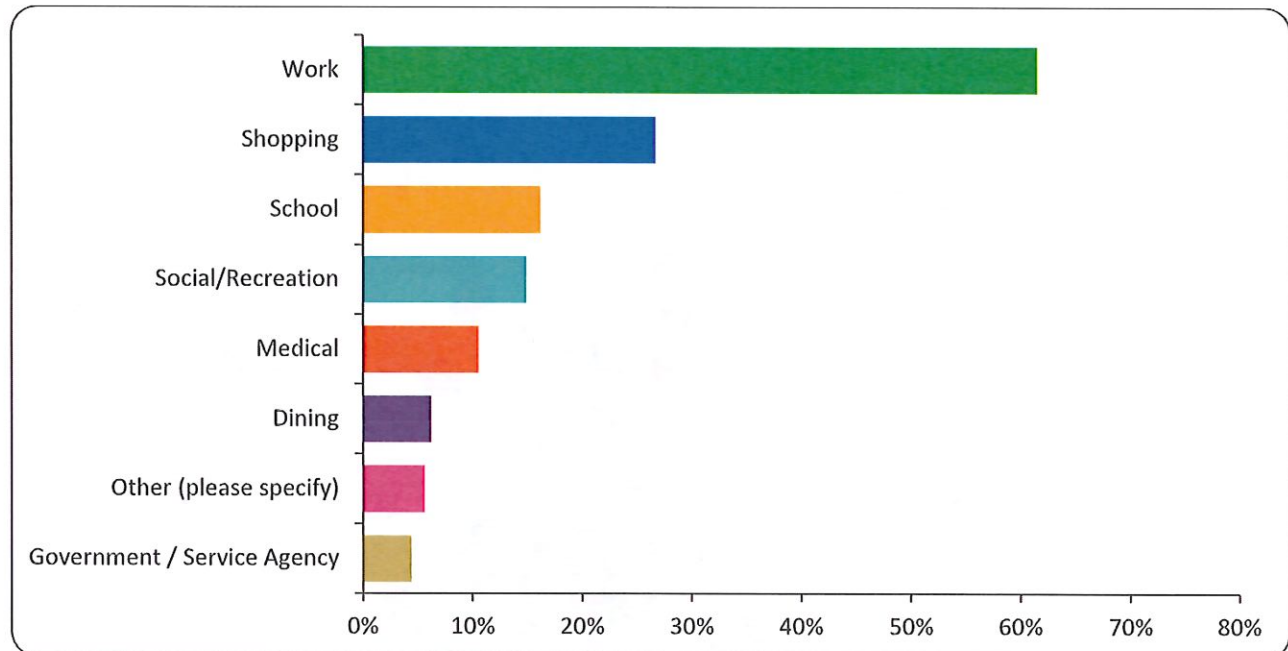
Jessup to Columbia

Dorsey Station on Wed nights

Food Lion, Laurel (Scaggsville, Maryland)
 Airport
 Washington, DC
 BWI
 CVS old waterloo rd. Elkridge md
 Hcc, All saints rd bourbon street, Columbia mall
 Greenbelt station
 Maple Lawn Farmers Market 8356 sand cherry land laurel md
 work and one store
 Ft. Meade
 Burtonsville, Merriweather District, Maple Lawn
 BWI Airport
 408 Old Waterloo Rd. there is no bus stop across Sherwood Crossing Apartments going
 towards Old Waterloo Rd.
 Montgomery Run Rd is a 1.5 mile from the nearest RTA stop, which is either 408 or 403
 Church, but no service on Sundays.
 9292 Cherry Lane, Laurel
 Church, actual place of work
 Home- Clarksville
 It used to go near 7090 Samuel Morse Drive where I work and a lot of my coworkers had also
 used the bus. It was canceled permanently and now I need to take RTA mobility or get rides.
 my job
 Tastee Diner
 Bus to Metro station does not operate over the weekend
 Baltimore Avenue then get on c8 to metzerot rd
 BWI Airport
 Post Office
 I go to and from work and this bus is always late and always leaving me
 Broken land to royal farms
 Clarksville, off the 108. Years ago the blue bus used to go there
 Downtown
 Staples Columbia, planet fitness Dobbin center
 Catonsville, Elkridge, Ellicott City
 Work
 This bus only runs if the bus working or if no one want to drive it.
 To and from work, grocery stores and doctors appointments
 Clarksville
 school



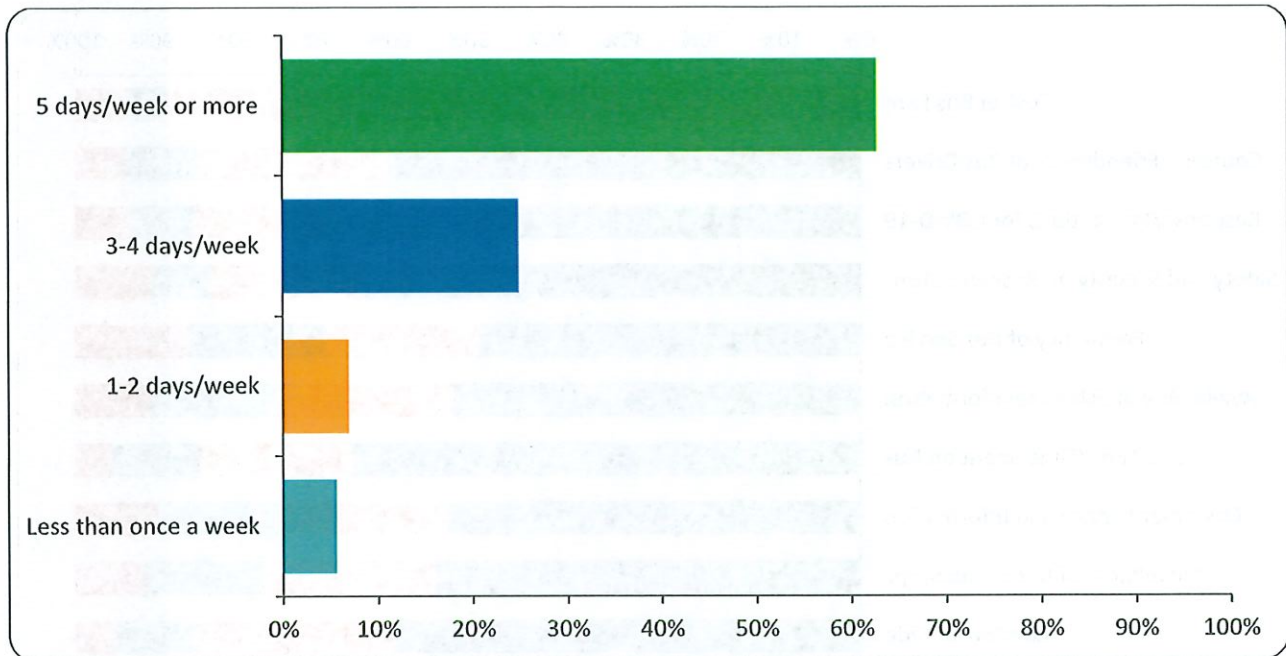
Q7: What is the purpose of your trip today? Check all that apply.



ANSWER CHOICES	RESPONSES	
Work	61.49%	99
Shopping	26.71%	43
School	16.15%	26
Social/Recreation	14.91%	24
Medical	10.56%	17
Dining	6.21%	10
Other (please specify)	5.59%	9
Government / Service Agency	4.35%	7
TOTAL		235

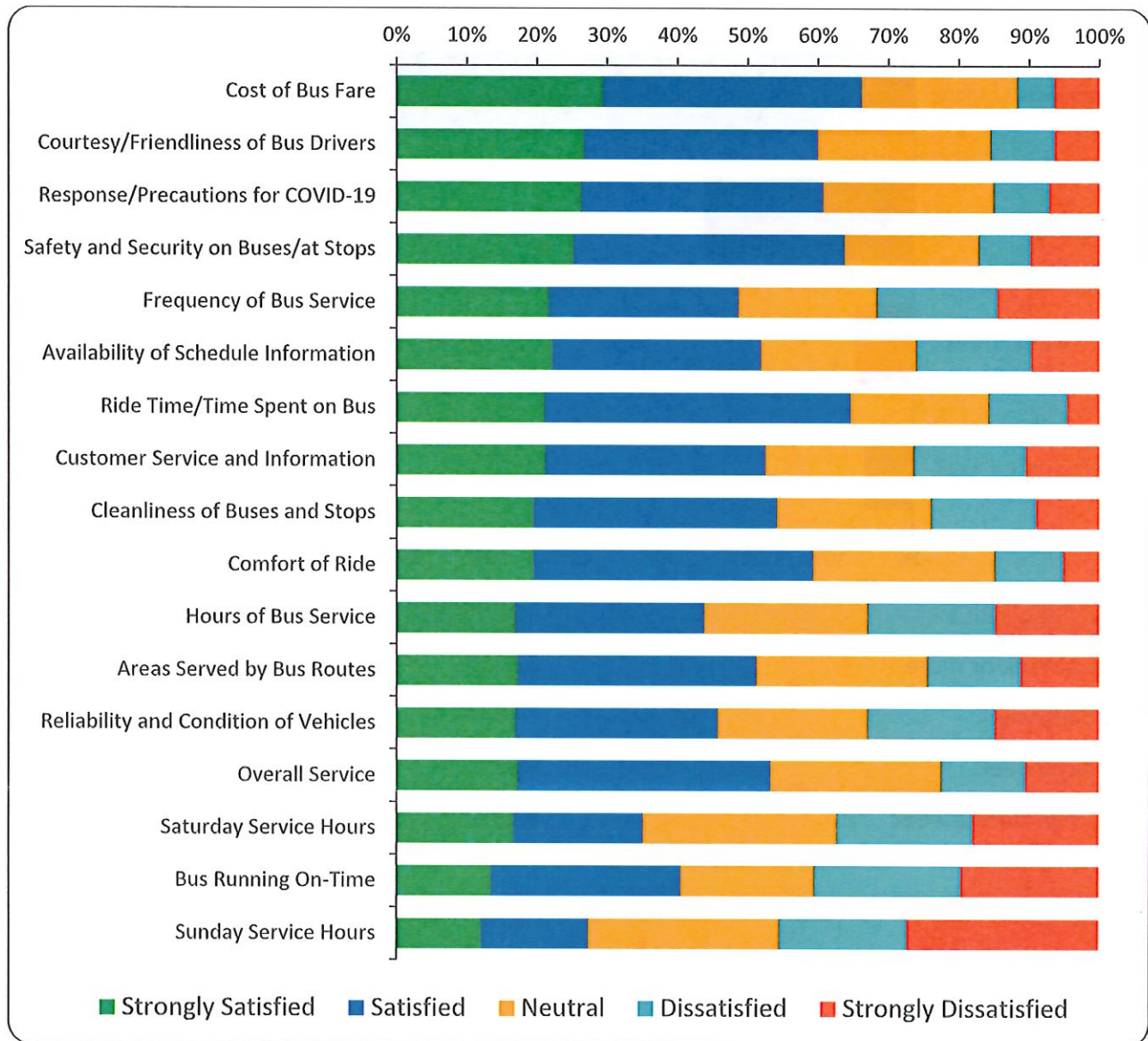
Other: Going Home 3, N/A 1, Exploring – new to area 1, Gym 1, Business 1, Medical and Food Marketing 1, and Friend 1.

Q8: How often do you take public transit?



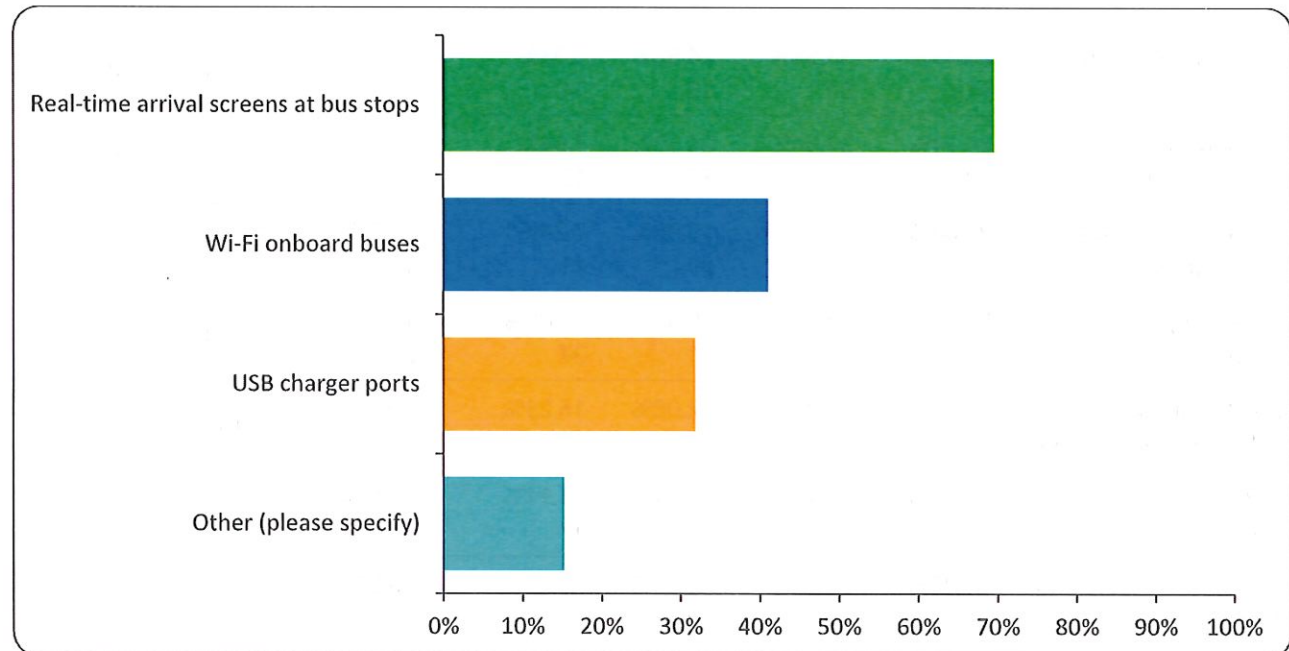
ANSWER CHOICES	RESPONSES	
5 days/week or more	62.73%	101
3-4 days/week	24.84%	40
1-2 days/week	6.83%	11
Less than once a week	5.59%	9
TOTAL		161

Q9: Please rate RTA's service in the following areas:



	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied	Total	Weighted Average
Cost of Bus Fare	29.22% 45	37.01% 57	22.08% 34	5.19% 8	6.49% 10	154	2.23
Courtesy/Friendliness of Bus Drivers	26.45% 41	33.55% 52	24.52% 38	9.03% 14	6.45% 10	155	2.35
Response/Precautions for COVID-19	26.14% 40	34.64% 53	24.18% 37	7.84% 12	7.19% 11	153	2.35
Safety and Security on Buses/at Stops	25.00% 38	38.82% 59	19.08% 29	7.24% 11	9.87% 15	152	2.38
Frequency of Bus Service	21.52% 34	27.22% 43	19.62% 31	17.09% 27	14.56% 23	158	2.76
Availability of Schedule Information	22.08% 34	29.87% 46	22.08% 34	16.23% 25	9.74% 15	154	2.62
Ride Time/Time Spent on Bus	20.92% 32	43.79% 67	19.61% 30	11.11% 17	4.58% 7	153	2.35
Customer Service and Information	21.05% 32	31.58% 48	21.05% 32	15.79% 24	10.53% 16	152	2.63
Cleanliness of Buses and Stops	19.35% 30	34.84% 54	21.94% 34	14.84% 23	9.03% 14	155	2.59
Comfort of Ride	19.35% 30	40.0% 62	25.81% 40	9.68% 15	5.16% 8	155	2.41
Hours of Bus Service	16.77% 26	27.10% 42	23.23% 36	18.06% 28	14.84% 23	155	2.87
Areas Served by Bus Routes	17.11% 26	34.21% 52	24.34% 37	13.16% 20	11.18% 17	152	2.67
Reliability and Condition of Vehicles	16.77% 26	29.03% 45	21.29% 33	18.06% 28	14.84% 23	155	2.85
Overall Service	17.11% 26	36.18% 55	24.34% 37	11.84% 18	10.53% 16	152	2.62
Saturday Service Hours	16.55% 24	18.62% 27	27.59% 40	19.31% 28	17.93% 26	145	3.03
Bus Running On-Time	13.29% 21	27.22% 43	18.99% 30	20.89% 33	19.62% 31	158	3.06
Sunday Service Hours	11.89% 17	15.38% 22	27.27% 39	18.18% 26	27.27% 39	143	3.34

Q10: Which of the following technological improvements would you benefit from?



ANSWER CHOICES	RESPONSES	
Real-time arrival screens at bus stops	69.54%	105
Wi-Fi onboard buses	41.06%	62
USB charger ports	31.79%	48
Other (please specify)	15.23%	23
TOTAL		238

“Other” Suggested Technological Improvements

The Real Time Transit App Actually Working

409 on Sunday

Being on time

courtesy for seniors with disabilities

skip the route, not on time

Electronic bus passes

Instead of fancy technology I would prefer more frequency of service

Trackers for the internet are the best thing you have after the actual buses. It seems not every bus has one yet. You should get them on every bus.

App and real time arrival

Smoother driving bus drivers

For the ADA bus, I would like more areas and longer service times

Device to monitor bus driver speed

Don't need fancy tech, just need more frequent service

More frequency. 1hr headways are a joke to the people that ride with RTA.

Self-driving buses. That way they will never be late or too early

Working Buses

Ability to schedule online

Metro doesn't let passengers know ahead of time for detours

Better sync of 401/509 transfer. 45 minutes

Additional lighting, covered stops with seating. Riggs & Hughes drivers have passed me by because it's too dark in the mornings.

Individual bus driver reports. The ability to report individual bus drivers

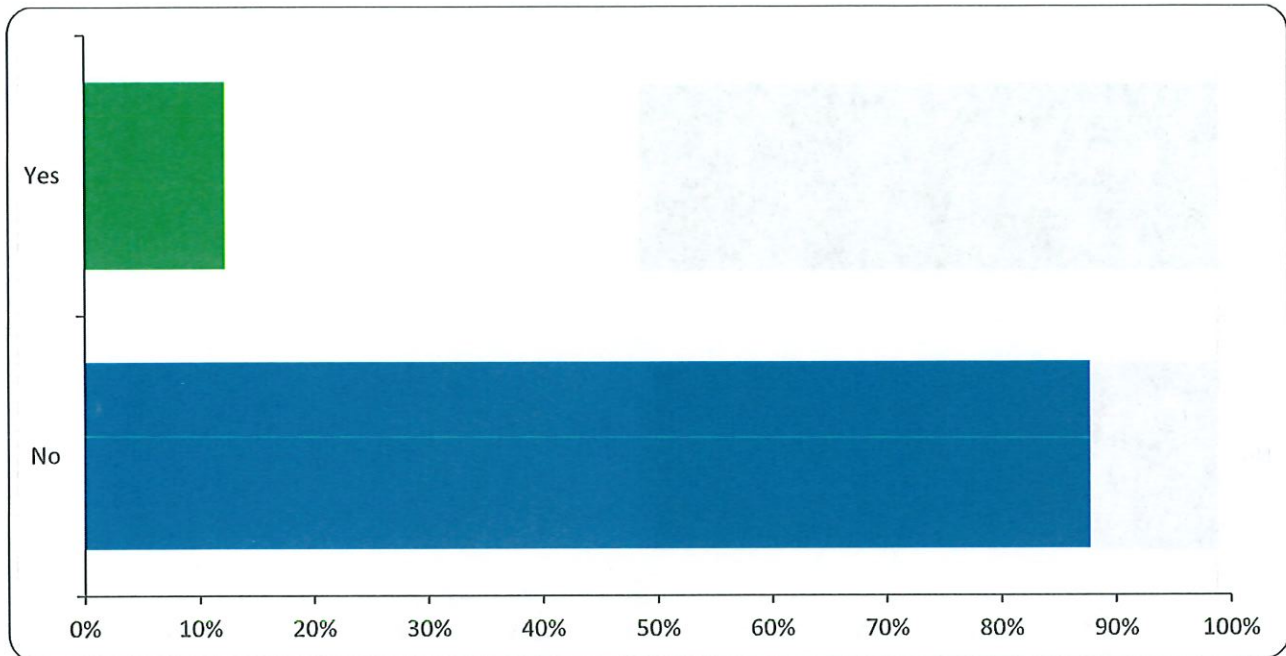
For the bus to run, period. The 75 only has one route

Needs to be better

Q11: What is your zip code?

ANSWER CHOICES	RESPONSES	
21044	21.43%	33
21045	17.53%	27
21043	5.84%	9
21046	5.84%	9
20707	5.19%	8
20708	5.19%	8
20723	5.19%	8
21075	4.55%	7
20794	1.95%	3
21076	1.95%	3
21229	1.95%	3
20705	1.30%	2
20724	1.30%	2
20740	1.30%	2
20770	1.30%	2
21207	1.30%	2
21217	1.30%	2
21228	1.30%	2
Zip Codes with only one response: 20020, 20763, 20780, 20783, 20866, 21029, 21036, 21042, 21060, 21074, 21093, 21133, 21202, 21206, 21213, 21225, 21227, 21230, 21234, 21244, 27083, 94210	14.29%	22
TOTAL		154

Q12: Do you have a car?



ANSWER CHOICES

RESPONSES

Yes

12.27%

20

No

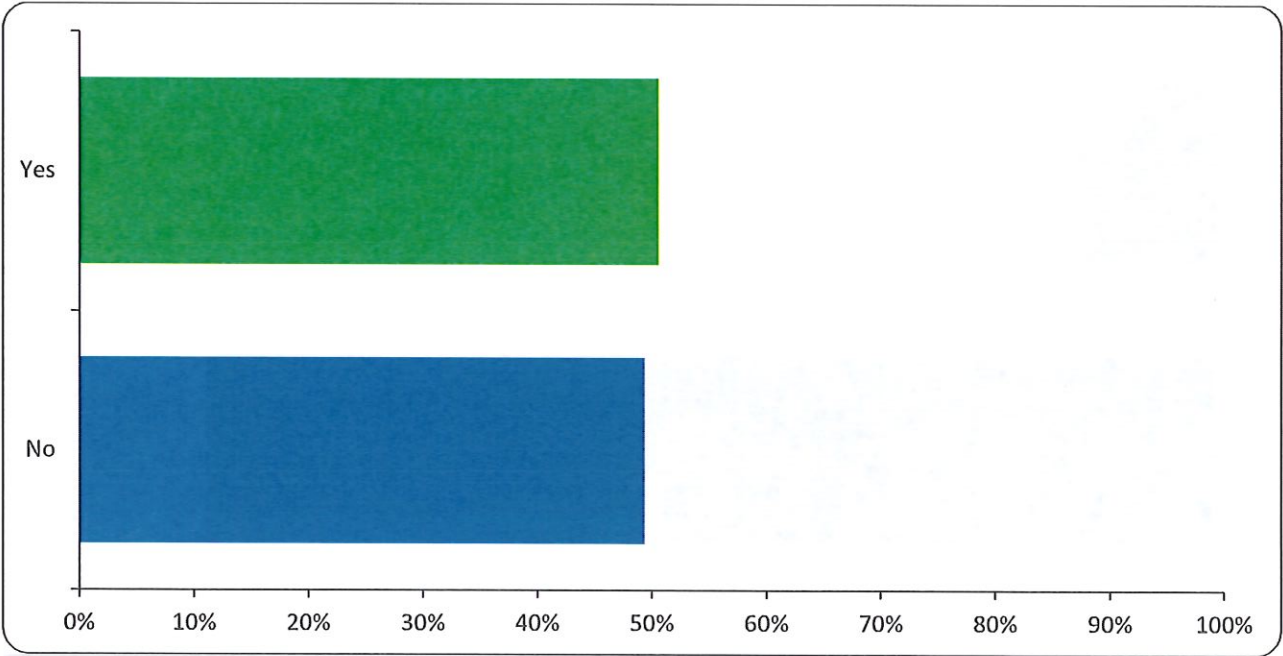
87.73%

143

TOTAL

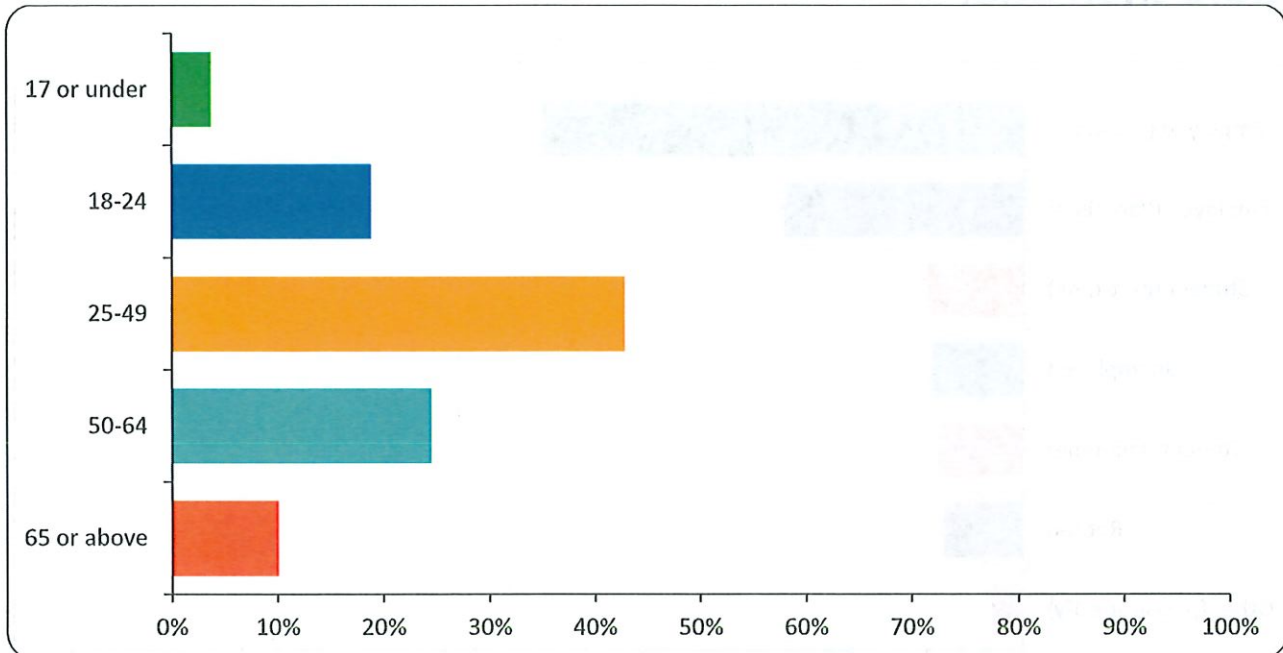
163

Q13: Do you have a driver's license?



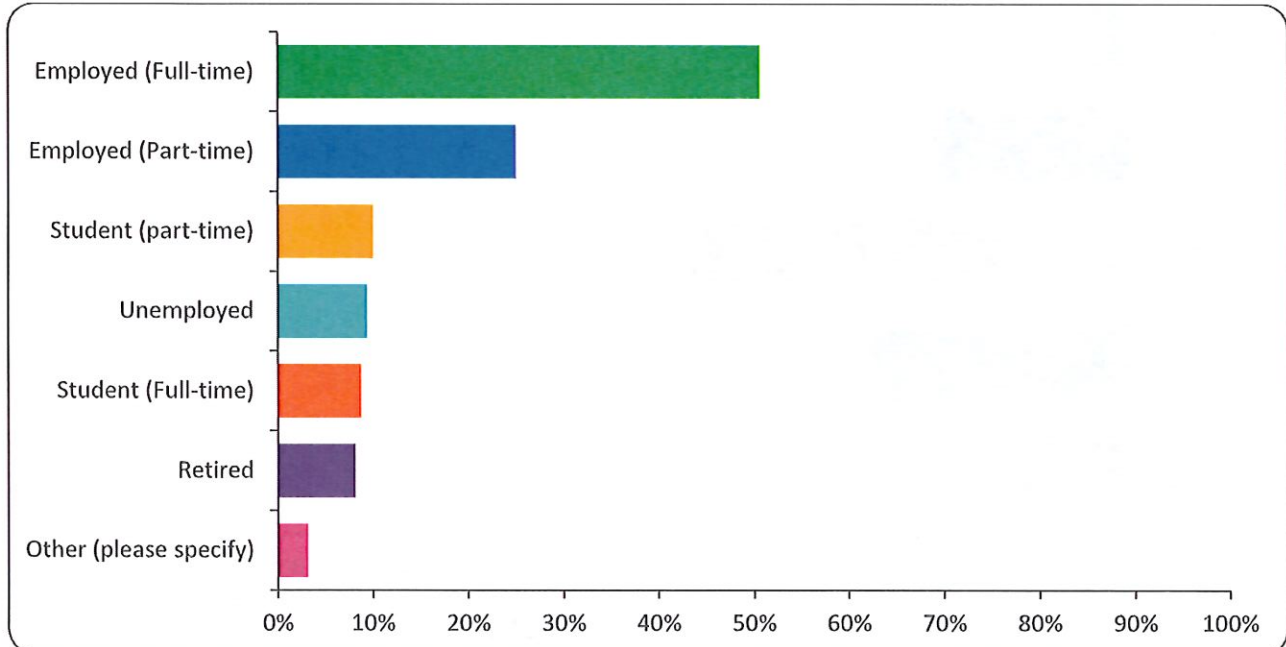
ANSWER CHOICES	RESPONSES	
Yes	50.62%	81
No	49.38%	79
TOTAL		160

Q14: Please indicate your age:



ANSWER CHOICES	RESPONSES	
17 or under	3.77%	6
18-24	18.87%	30
25-49	42.77%	68
50-64	24.53%	39
65 or above	10.06%	16
TOTAL		159

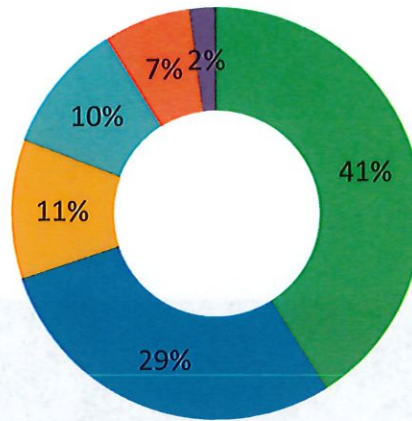
Q15: What is your employment status? You may check more than one.



ANSWER CHOICES	RESPONSES	
Employed (Full-time)	50.62%	81
Employed (Part-time)	25.00%	40
Student (part-time)	10.0%	16
Unemployed	9.38%	15
Student (Full-time)	8.75%	14
Retired	8.12%	13
Other (please specify)	3.12%	5
TOTAL		184

Other: Disabled 3, Freelance 1, Work from Home 1

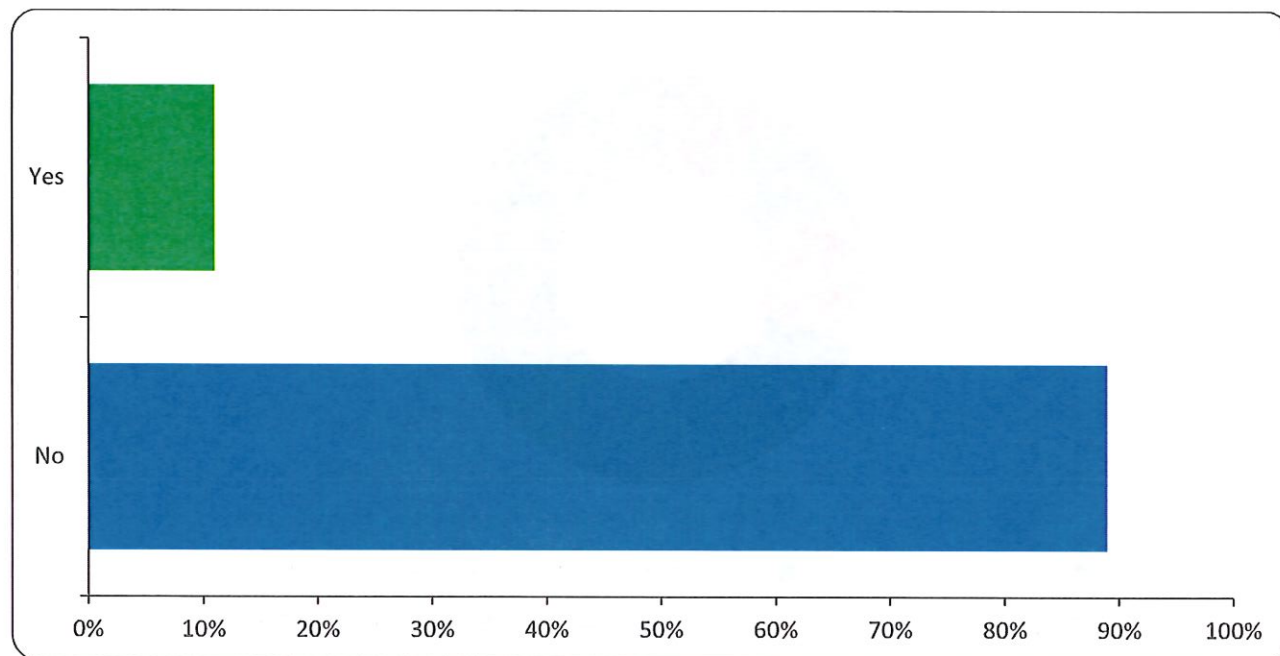
Q16: What is your annual household income?



■ \$20,000 or less
 ■ \$21,000 to \$40,000
 ■ More than \$100,000
■ \$41,000 to \$60,000
 ■ \$61,000 to \$80,000
 ■ \$81,000 to \$100,000

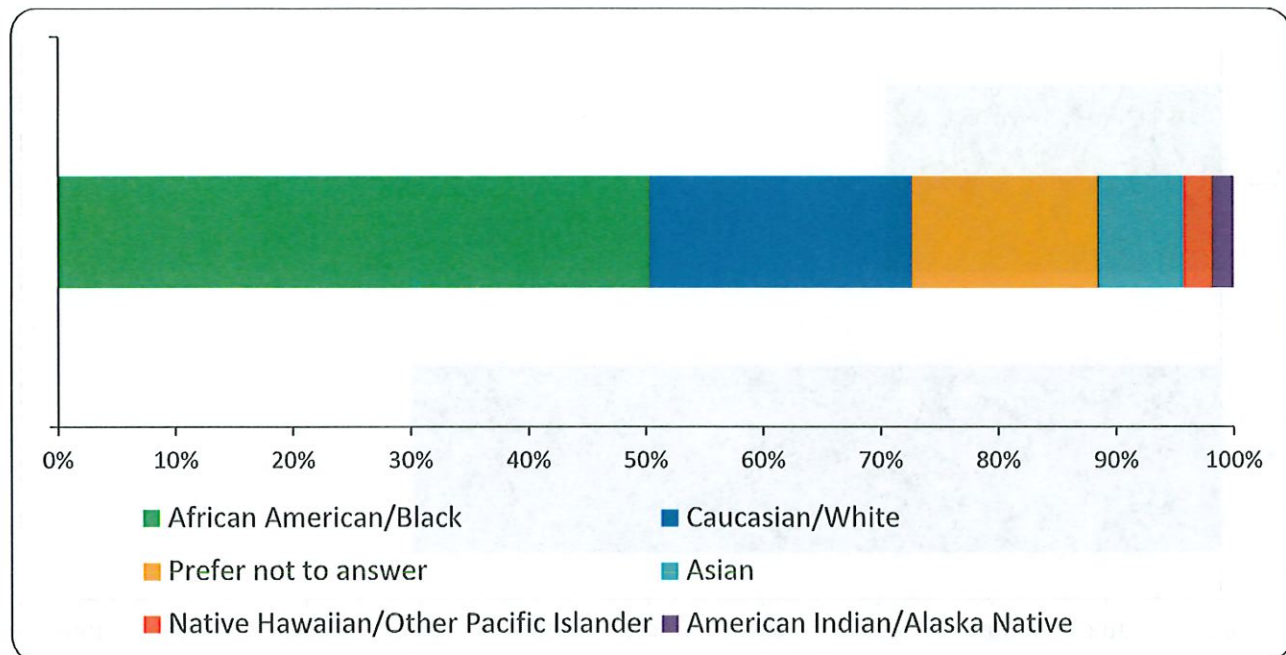
ANSWER CHOICES	RESPONSES	
\$20,000 or less	41.10%	60
\$21,000 to \$40,000	28.77%	42
More than \$100,000	10.96%	16
\$41,000 to \$60,000	10.27%	15
\$61,000 to \$80,000	6.85%	10
\$81,000 to \$100,000	2.05%	3
TOTAL		146

Q17: Are you of Hispanic or Latino origin?



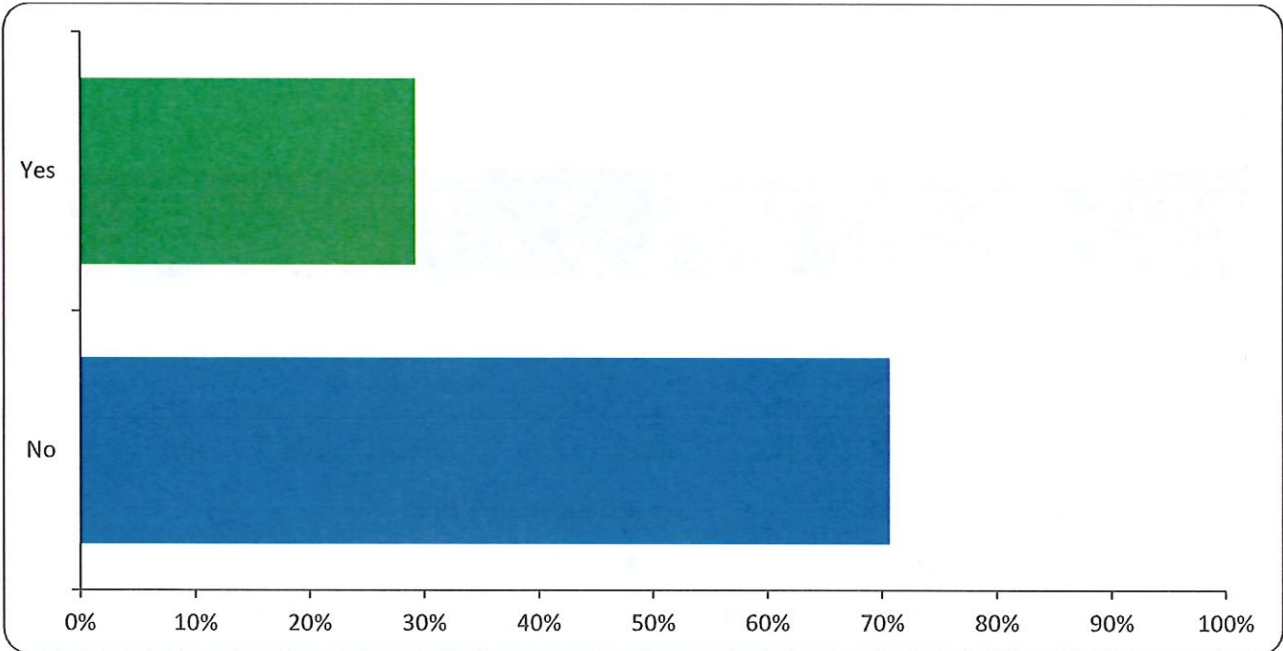
ANSWER CHOICES	RESPONSES	
Yes	11.04%	17
No	88.96%	137
TOTAL		154

Q18: How would you classify yourself? (check all that apply)



ANSWER CHOICES	RESPONSES	
African American/Black	53.21%	83
Caucasian/White	23.72%	37
Prefer not to answer	16.67%	26
Asian	7.69%	12
Native Hawaiian/Other Pacific Islander	2.56%	4
American Indian/Alaska Native	1.92%	3
TOTAL		165

Q19: Do you speak a language other than English at home?



ANSWER CHOICES	RESPONSES	
Yes	29.30%	46
No	70.70%	111
TOTAL		157

Q20: Please provide any comments you may have regarding public transportation:

The 502 going from Laurel, MD to Arundel Mills Mall at 6:00pm, often does not show up!

I just have a problem with the bus arriving on time, as well as the trip time.

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

The two main things that I would like are:

- 1) an earlier bus, leaving Towne Centre Laurel at 6am.
- 2) for the busses to be more reliable. Too much down time. Too many canceled trips and routes. I may be able to get to work, but there's no guarantee that I'll be able to get home and vice versa.

Service too unreliable. Route 414 being back in service would be very helpful to many students I know.

Many of the drivers are very helpful in getting you to your destinations. Will go above and beyond.

Very good and socially responsible local travel for the 21st century. I, and friends, would like to see a greater degree of travel connectivity between the growing North Laurel area in the Scaggsville and Fulton districts, particularly with the emerging senior developments.

Clean the buses

Real-time arrival/departure

Constantly rout 407 - been riding for 13 years "Rider says she will be late for work (again). "Gold" route was more reliable. Sometimes the notices are inaccurate - not reliable.

Buses are so dirty.

Driver courtesy is bad (zero)

I think some of the bus drivers should be more friendly. Some of them when you ask them something, they give you a nasty answer.

Cleaner and driver courtesy is a big issue. Drivers should know route. 503 yesterday - bad driver [illegible]

Ga and Twi

The traffic is very good. Thank you!

Needs more improvement.

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

Satisfied with customer service 100%

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

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

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

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

Given the population increase and senior citizen housing in the Scaggsville and Maple Law area, having bus stops in the Maple Lawn and Ice Crystal Drive area would benefit many. Ridership would be frequent and often, I suspect.

I wish the 501 go back at the airport.

Transfers are no longer available, the cost of round trips on a regular trip is costly. I don't have a way to get to RTA offices for passes.

Sometimes no arriving the bus on time. It can be skipping any route.

Have bus drivers to not leave early.

Bus route Food Lion (Laurel) - also in Fulton (Maple Drive/or Farm?); and sand cheery lane.

Better customer service, accurate info when calling the office

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

Once a week I have a moment where I go "I need to learn how to drive". It always happens when some bullshit happens on the bus.

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

I would like the 503 to run 2 times on sundays to arrive at Columbia mall at 11:30 and the other to leave at 6 or 7pm. Also to have the Saturday bus for the 503 go from Columbia to laurel town center at 8pm instead of 7pm.

It should be free of charge.

N/a

Don't like how there's only 1 bus that goes to Ellicott city

More buses needed. One every hour is too few

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

I am pleased with RTA services in my area. I don't work on the weekends. The 409 Laurel/Elkridge isn't available on Sunday. It's probably the only minor issue that exists. I'm never in a rush so I don't mind a late bus.

Today I spent over 2 hours at the bus stop waiting for the 502 that never came. There was no update on the website or transit apps to inform us the bus is not running today. Which resulted in me being extremely late for work. As well as that line is constantly late. Every other day the 12:00 bus does not show.

I would like a bus for traveling to Laurel. The area around Maple Lawn for the farmers market. the area around Lion King store to visit my brother in that area on Sand Cherry Lane and shop at the Lion King Food Store. The drivers are all nice courteous and drive very defensively and do a good job driving. =

I would like to see the RTA Route 409 and the RTA Route 503 gets more Sunday service that will run from 9:00AM to 8:00PM.

More of my coworkers would utilize the bus service if it ran more frequently and had more drivers so you could provide reliable service to Ft. Meade. Additionally, the departure and arrival times should better align with the MARC schedule. Thanks!

Bus drivers need to start driving buses smoother; RTA should use only large buses during COVID, RSV, and flu to slow spread of disease; drivers should control rowdy passengers or ask them to leave the bus; drivers should depart on time.

I love and appreciate my ADA-Mobility bus. I would not have a job or be a functioning member of society if it were not for this bus. However, they need more help!!!

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

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

The proven way to make public transit more successful and widely used is to make it frequent and reliable. Most RTA buses run every hour only which is just not practical for most people with busy and specific schedules. Simple induced demand concept, more frequency = more ridership.

Induced demand. More frequency = more people will ride with RTA.

Schedules and routes do not list all bus stops, making it difficult to plan a commute. Please add all stops to the schedules and/or route maps.

Some bus stops are often located in a grassy area, on a steep hillside, etc., nowhere near a sidewalk. More of a city planning issue, than RTA issue, but hopefully the feedback is helpful.

Some information about me: I mostly work from home and am not commuting daily like in 2020 and earlier. I also take the 401 and 404 regularly, as well as other bus lines.

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

Public transportation is great. There are very great drivers I like that are great 100%, but there are a few who won't even speak to you nor respond to a request. It's public service. Let them leave their attitude at home or quit.

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

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

502 - Saturday/Sunday hours should be every hour instead of every hour and a half.

I also ride Mobility -Legally Blind

Make sure the drivers are 100% on time and not getting to stops too early or late

I ride RTA Mobility, so these questions do not apply to me. It is unfortunate as I would have wanted to fill out a survey.

Service is highly unreliable and customer service never responds, limiting my use of RTA

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

I exclusively use the Mobility/paratransit services, and my drivers are first rate professionals

I visit Virginia a few times a year. You should set up a system that allows for free bus transfers for patrons who don't use cellphones.

I think RTA is a great service. I'd like if they were to add more routes but that's no big thing

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

It would be helpful if there was a survey for those of us who use RTA mobility.

More frequency of RTA & they should be running on time

No comment

There is NO bus service near my house in Dayton, MD. The RTA Paratransit service does NOT allow me to use it for anything other than dr/dental/work/social svcs/sr centers and that is also only on weekdays from 9 - 5. If I want to do anything else, I'm not able to. I am mentally disabled, so mostly homebound because of this. I would like to just go to a shopping mall or a movie/restaurant sometimes but can't go anywhere because of no transportation. The RTA Mobility/ParaTransit svc is for disabled people, but it doesn't service my area enough which is a HUGE problem. Increasing the places I can go and the days of week would HUGELY improve my quality of life.

I USE RTA MOBILITY 100% OF THE TIME.

THIS SURVEY REALLY DOESNT APPLY.

IN GENERAL WOULD RATE THE SERVICE A GRADE OF "A"

I purchased an RTA card for my daughter in MD to use for work last summer. I never received the card and never received a refund.

I need to have public transportation, but do not have access to my home. This has affected my ability to hold down a job because the RTA mobility was not available when I needed to get to work. Please add a route to Clarksville.

There needs to be a lot more public funding to support mass transit and public transportation, especially for people with disabilities like me.

Some of the buses I ride look like they have never been cleaned since they have been on the road. Need more attention to that issue.

During rush hour it seems that the bus doesn't run as frequently, find myself waiting about an hour when I just missed the bus.

Better service overall and all over

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

No Comments

There are a lot of ghost buses abd not showing up on time.

Every time the bus ain't supposed to be here at a certain time and don't never show either your bus schedule screen board isn't correct like it feel as though you have no respect for the public especially going cold weather seasons.

Buses on Sundays so I can get to work

I wish you to always be available at all times during the day and please provide departures and arrivals at each stop in the app

V.good service just need the 503 route more often in service

Your buses frequently breakdowns so I have to take Uber a lot to get to work or home. The 406 bus/van needs to have the app to show where the bus. I will be late for work. I do not like to cross my fingers if the bus is going to run or not

They need to stop canceling the buses it makes me late for work

Its really good at this time

8 realize that ridership is low on my routes because buses are not full. I wish buses run in 1/2 hr. Increments, especially the 501 which has more riders

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

Transit needs to do alot better with those bus arrival times ASAP

need to have a way to have accurate arrival times because i have experienced only this bus being late or not arriving

Letting all riders get on the busses 10 min early in fall and freezing conditions

They need to stop canceling bus at the last minute because people need to get to work.

They need to fire the super vision

Bus needs to come when it schedule to come. Instead of making up bunch of excuses and lies

It is good. Very dependable in the morning. Afternoon routes are not as dependable. The real time is very reliable.

Some Buses need a really good cleaning

I'm pretty satisfied overall. But the other day, I decided to take the Metro to NASA Headquarters in DC. I rode my motorcycle to the Greenbelt station and parked in the Park and Ride lot. To get there and back on the Metrorail and exit the lot, it cost me nearly \$13.00. I had planned for \$4.00 (\$2 there and \$2 back), so that really surprised me. I didn't realize that it cost \$5 to exit the lot and not sure why the train was so expensive. I feel like I made a huge mistake in taking the WMATA and I will not be doing that again. Not sure why you'd dissuade people from taking the Metro by charging for parking. I could have driven and paid for parking near Headquarters for less. I just realized that it was costing me \$3.55 each way to get to and from work riding the rail. Clearly, I misunderstood the fare system and should have done more research. Now, instead of riding the train, I am just transferring around on various buses because it's actually \$2.00 each way. So, I guess this turned into a bit of a rant, but mostly, I am just discouraged because I put \$200 on my Smartrip card and I feel like I blew through it in record time because I wasn't paying attention to how much these trips were costing me. This is my fault - not WMATA's - and I am changing my travel behaviors accordingly. Just bummed that I feel like I have to. I often get frustrated that I pay and so few others seem to. They literally just walk onto the bus, no questions asked. Even though this seems to be a huge whining session, I would like to note that I am overall very happy with the service that WMATA provides. Some of the drivers are superb. (Mr. King on the 4:35 p.m. 15X from NASA to Greenbelt deserves a freaking commendation and the guy who drives the BRO1 R2 bus in the mornings is awesome, too.) Keep up the good work. Sorry for the complaints. I just don't know where else to voice them. I'm actually extremely pleased with the service overall.

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

Bus doesn't run on the weekends, i walk an hour just to catch a bus on weekends. The 301 is never on time. The bus should come more frequently. Hire more drivers and get more bus after 2 hours into service get 2 people on one route like metro.

On Friday December 16th on the 5 o'clock 405 to Columbia mall. The bus driver was driving aggressively cutting people off in traffic he also didn't respond to me saying hello when I got on the bus instead he immediately turned off the heat and rolled down the windows as if I stunk or something. I work at a bank where hygiene and professionalism is required so I know I did not smell. Also I've had other encounters where bus drivers are just rude or not responsive for example I asked a bus driver if the 404 was

The 75 runs when it wants to. You canceled the second route on this line and now it runs when they feel like it. God forbid you have to rely on it on Sunday. They cancel BACK TO BACK TO BACK at least half the day EVERY week. Saturdays are not all that better.

it's the best

Regional Transportation Agency of Central Maryland Transit Development Plan

Appendix D RTA Mobility Customer Survey

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Appendix D

RTA Mobility Customer Survey

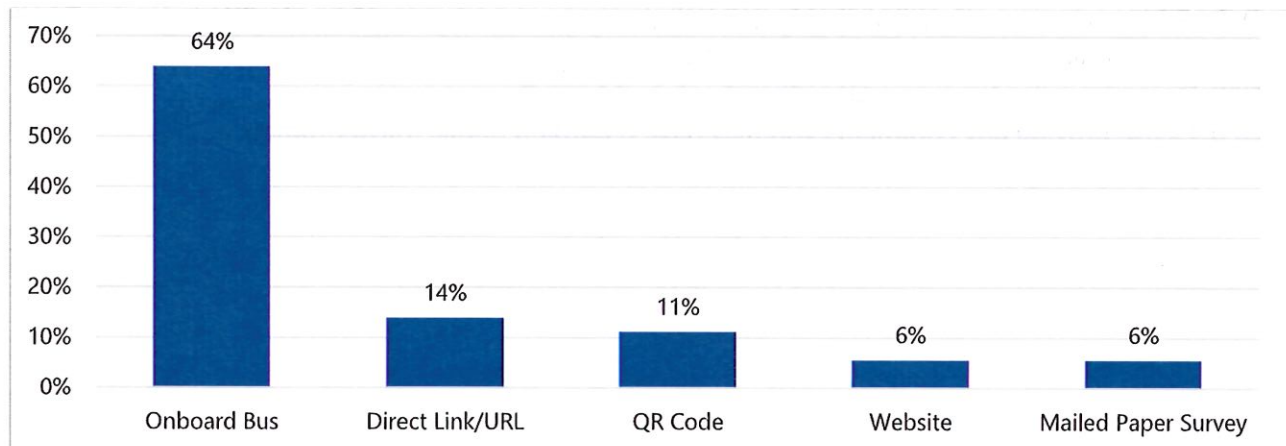
Introduction

The RTA Mobility (ADA and General Paratransit) Customer Survey was available starting on December 5, 2022, and closed on March 31, 2023 – providing a 116 day survey period. Most of the Mobility customer surveys were received in December and January; however, the survey closing date was extended to run concurrently with the fixed route customer survey.

Out of the three TDP surveys (RTA Customer, RTA Mobility, and Community), the Mobility customer survey had the lowest number of responses at 36 (almost 10% of the 370 total surveys received). However, several of the comments included in the fixed route customer survey appeared to have come from Mobility customers. This suggests that Mobility customers may have completed the fixed route customer survey rather than the Mobility specific version.

The Mobility customer survey was placed onboard all RTA vehicles along with a survey drop box. Surveys were also advertised through public outreach materials including QR codes on posters and handouts as well as a website link to the survey. The response rates for each of these methods are shown below.

RTA Mobility Customer Survey Collection Methods



A copy of the paper survey is provided on the following pages along with detailed survey responses for each question.

RTA Mobility Customer Survey – Front



RTA Mobility (ADA & Paratransit) Customer Survey

Help us to serve you better! The RTA of Central Maryland, in partnership with Howard County, Anne Arundel County, the City of Laurel and Northern Prince George's County, wants your input on public transit services. Please complete the following survey to provide us with your feedback about our services and possible improvements. Your answers are anonymous. Thank you for your input! For more information, visit: www.rtacentralmdtransitplan.com

Win a

\$200 or
\$100 Gift Card

Complete this survey and write
your name and phone/email in
the comments section!

How to Submit your survey:

Onboard the Bus

Drop your completed survey into
the drop box located in the front
of the bus

Take this Survey Online



surveymonkey.com/r/rtamobility

Submit by Mail/Email

Mail to: RTA Survey c/o KFH Group
7200 Wisconsin Ave, Suite 320
Bethesda, MD 20814

Email a photo or PDF to:
admin@kfgroup.com

1. What type of rider are you?
☐ Americans with Disabilities Act (ADA) rider
☐ General Paratransit (GPT) rider
☐ Both
2. What do you normally use this service for?
You may check more than one.
☐ Work ☐ School
☐ Medical ☐ Social/Recreation
☐ Senior Center ☐ Government / Service Agency
☐ Shopping / Errands ☐ Other: _____
3. How often do you ride this service?
☐ 5 days/week or more ☐ 3-4 days/week
☐ 1-2 days/week ☐ Less than 1 day/week
4. What fare do you normally pay for a one-way trip?
☐ \$4.00 ☐ \$35 ADA 10-Ride Ticket Book
☐ \$5.00 ☐ \$50 GPT 10-Ride Ticket Book
5. How long have you been using this service?
☐ 0 - 6 months ☐ 1 - 2 years
☐ 6 - 12 months ☐ More than 2 years
6. Do you use any other transportation services that operate in the region?
☐ RTA Fixed Routes ☐ Anne Arundel Transit
☐ Prince George's TheBus ☐ Neighbor Ride
☐ MTA Commuter Bus ☐ WMATA Metrobus
☐ MTA Local/Express Bus ☐ WMATA Metrorail
☐ MTA Mobility/Paratransit ☐ WMATA MetroAccess
☐ MARC Train ☐ Other: _____

7. Please rate the RTA Mobility paratransit service in the following areas:

	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied
a. Trip Scheduling Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Telephone Customer Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Phone Wait Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. On-Time Performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Saturday Service Hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Sunday Service Hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Cost of the Fare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Ride Time/Time Spent on Bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Safety and Security on Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Comfort of Ride	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Cleanliness of Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Reliability and Condition of Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Courtesy/Friendliness of Drivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Response/Precautions for COVID-19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Overall Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Survey continues on reverse >

RTA Mobility Customer Survey – Back

8. Please rate the cab services contracted through RTA Mobility in the following areas:

	<u>Strongly Satisfied</u>	<u>Satisfied</u>	<u>Neutral</u>	<u>Dissatisfied</u>	<u>Strongly Dissatisfied</u>
a. Safety and Security on Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cleanliness of Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Reliability and Condition of Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Properly Identified Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Courtesy/Friendliness of Drivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Are there specific destinations you need to go to on a regular basis that transit does not serve?

☐ Yes ☐ No

If Yes, please describe: _____

10. Which of the following technological improvements would you benefit from?

- ☐ Wi-Fi onboard buses
☐ USB charger ports
☐ Online booking and trip management
☐ Other: _____

11. What is your zip code? _____

12. Do you have a car?

☐ Yes ☐ No

If Yes, was a car available for this trip? ☐ Yes ☐ No

13. Do you have a driver's license?

☐ Yes ☐ No

14. Please indicate your age:

- ☐ 17 or under ☐ 18 - 24 ☐ 25 - 49 ☐ 50 - 54
☐ 55 - 59 ☐ 60 - 64 ☐ 65 or above

15. What is your current employment status? You may check more than one.

- ☐ Employed, full time ☐ Student, full time
☐ Employed, part time ☐ Student, part time
☐ Retired ☐ Other: _____
☐ Unemployed

16. What is your annual household income?

- ☐ \$20,000 or less ☐ \$21,000 - \$40,000
☐ \$41,000 - \$60,000 ☐ \$61,000 - \$80,000
☐ \$81,000 - \$100,000 ☐ More than \$100,000

17. Are you of Hispanic or Latino origin?

☐ Yes ☐ No

18. How would you classify yourself?

Please check all that apply.

- ☐ Caucasian/White ☐ African American/Black
☐ American Indian/Alaska Native ☐ Asian
☐ Native Hawaiian/Other Pacific Islander

19. Do you speak a language other than English at home?

☐ Yes ☐ No

If Yes, what is this language? _____

For example, Spanish, Korean, Chinese.

20. Please provide any comments you may have regarding public transportation and your name/contact info for the raffle:

Thank You!



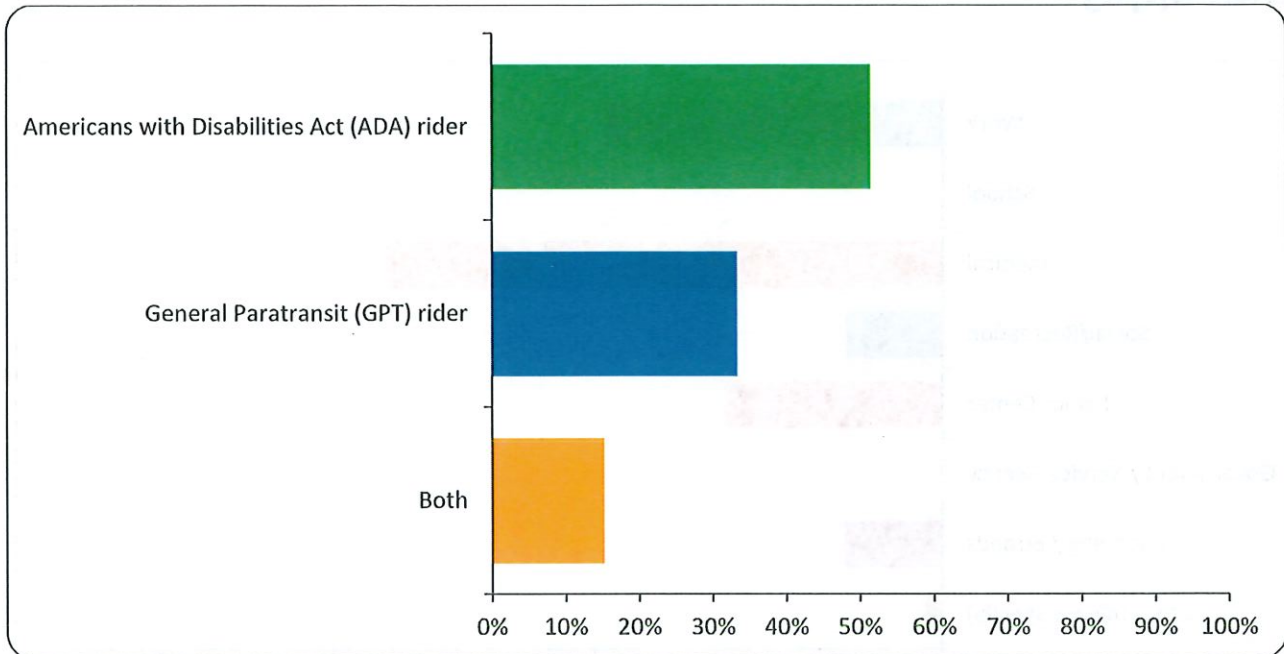
ANNE ARUNDEL
COUNTY
MARYLAND



HOWARD COUNTY
MARYLAND

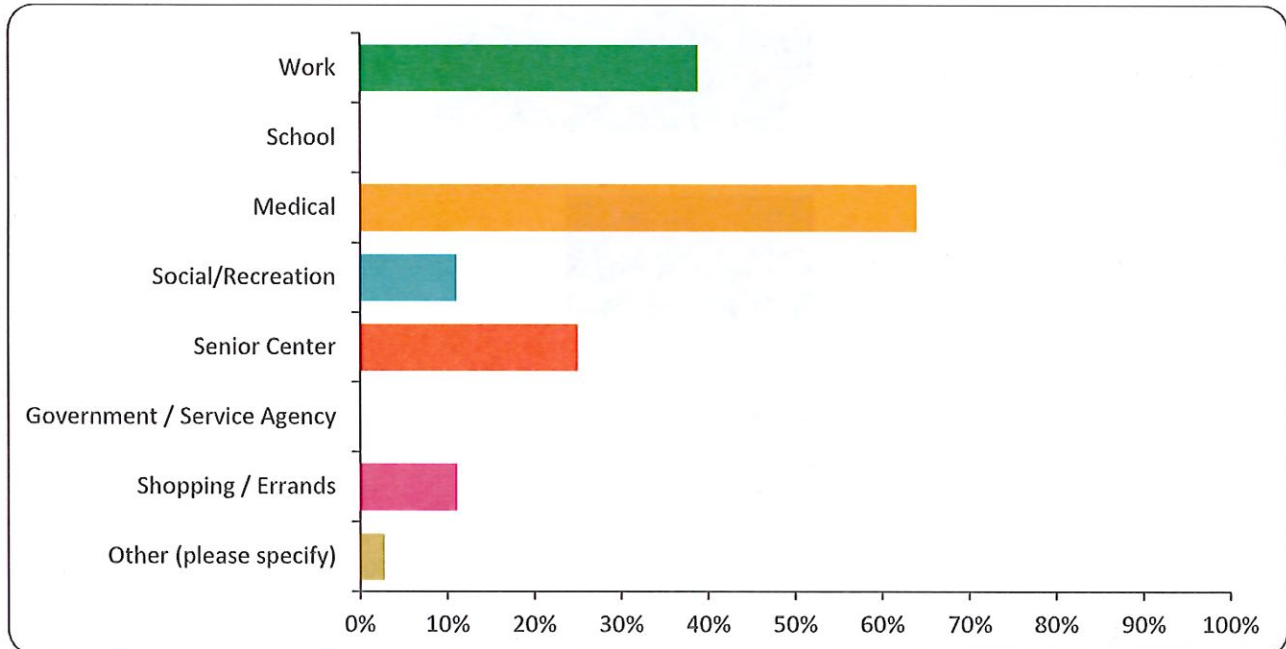


Q1: What type of rider are you?



ANSWER CHOICES	RESPONSES	
Americans with Disabilities Act (ADA) rider	51.52%	17
General Paratransit (GPT) rider	33.33%	11
Both	15.15%	5
TOTAL		33

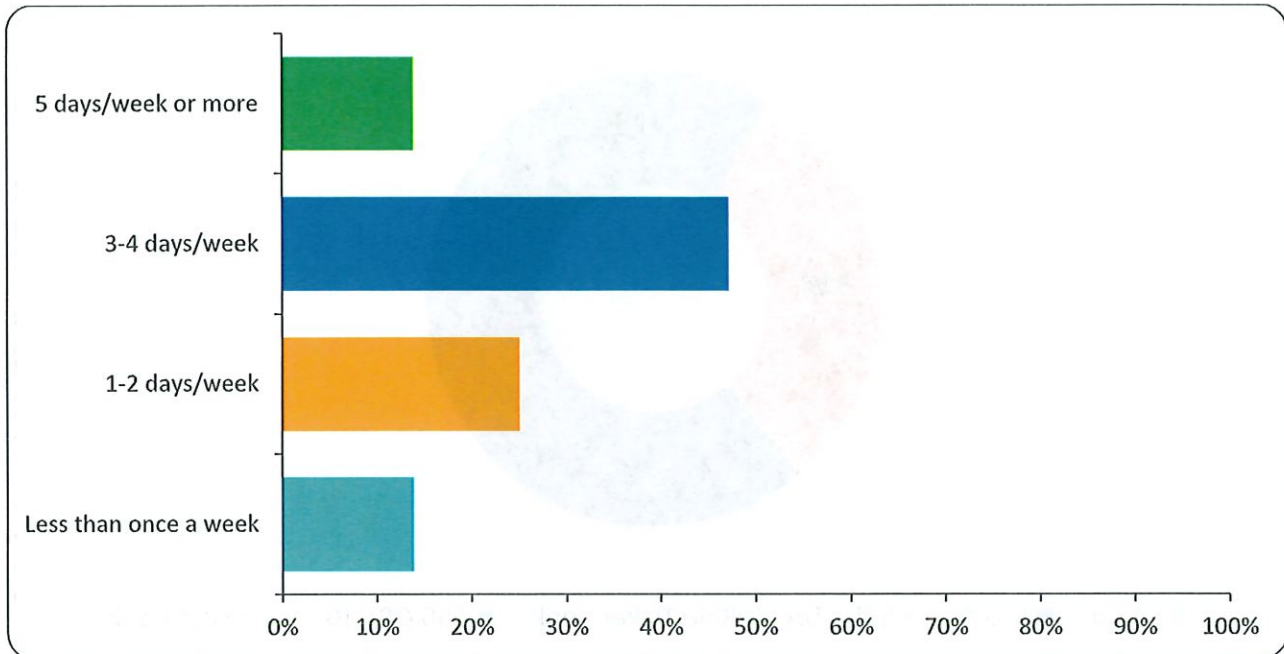
Q2: What do you normally use this service for? Check all that apply.



ANSWER CHOICES	RESPONSES	
Work	38.89%	14
School	0%	0
Medical	63.89%	23
Social/Recreation	11.11%	4
Senior Center	25.00%	9
Government / Service Agency	0%	0
Shopping / Errands	11.11%	4
Other (please specify)	2.78%	1
TOTAL		55

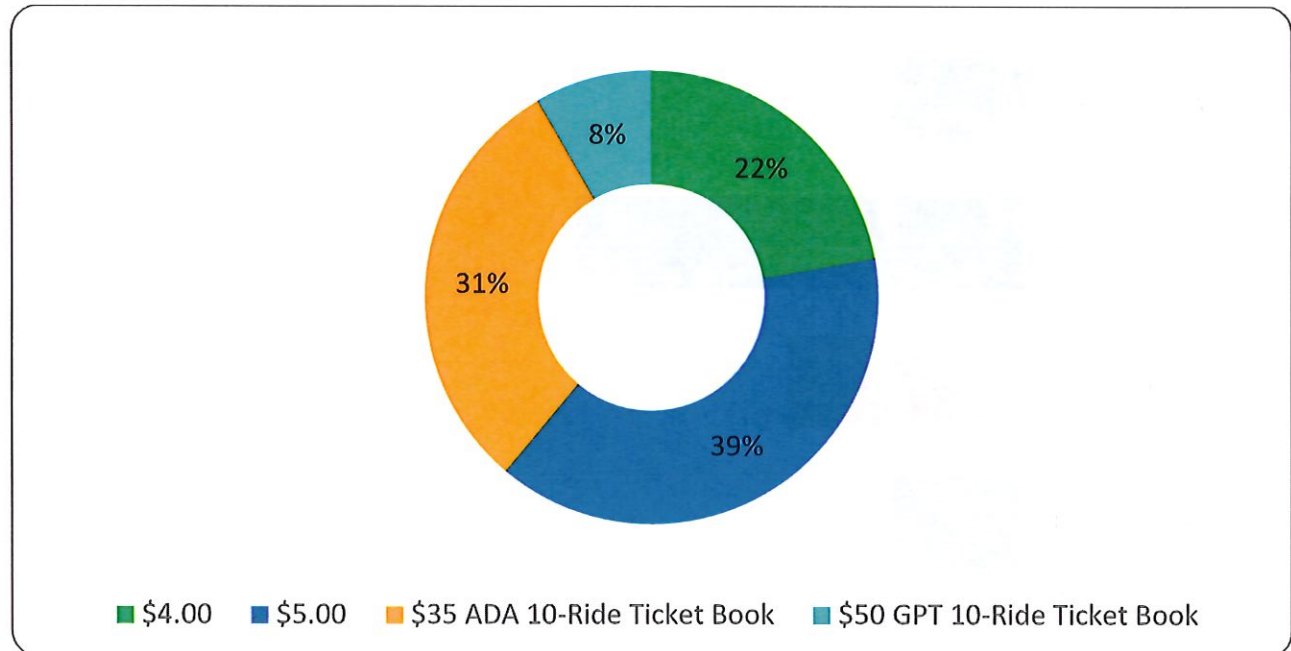
Other: Voting 1

Q3: How often do you ride this service?



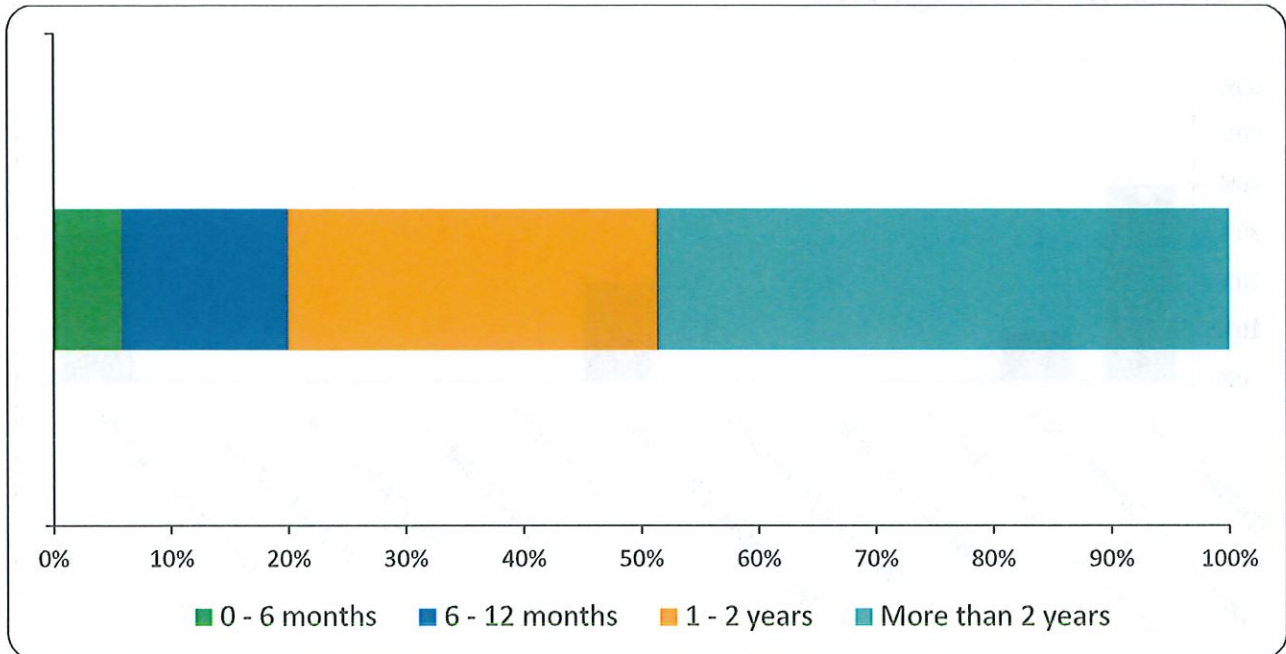
ANSWER CHOICES	RESPONSES
5 days/week or more	13.89% 5
3-4 days/week	47.22% 17
1-2 days/week	25.00% 9
Less than once a week	13.89% 5
TOTAL	36

Q4: What fare do you normally pay for a one-way trip?



ANSWER CHOICES	RESPONSES	
\$4.00	22.22%	8
\$5.00	38.89%	14
\$35 ADA 10-Ride Ticket Book	30.56%	11
\$50 GPT 10-Ride Ticket Book	8.33%	3
TOTAL		36

Q5: How long have you been using this service?



ANSWER CHOICES

RESPONSES

0 - 6 months

5.71%

2

6 - 12 months

14.29%

5

1 - 2 years

31.43%

11

More than 2 years

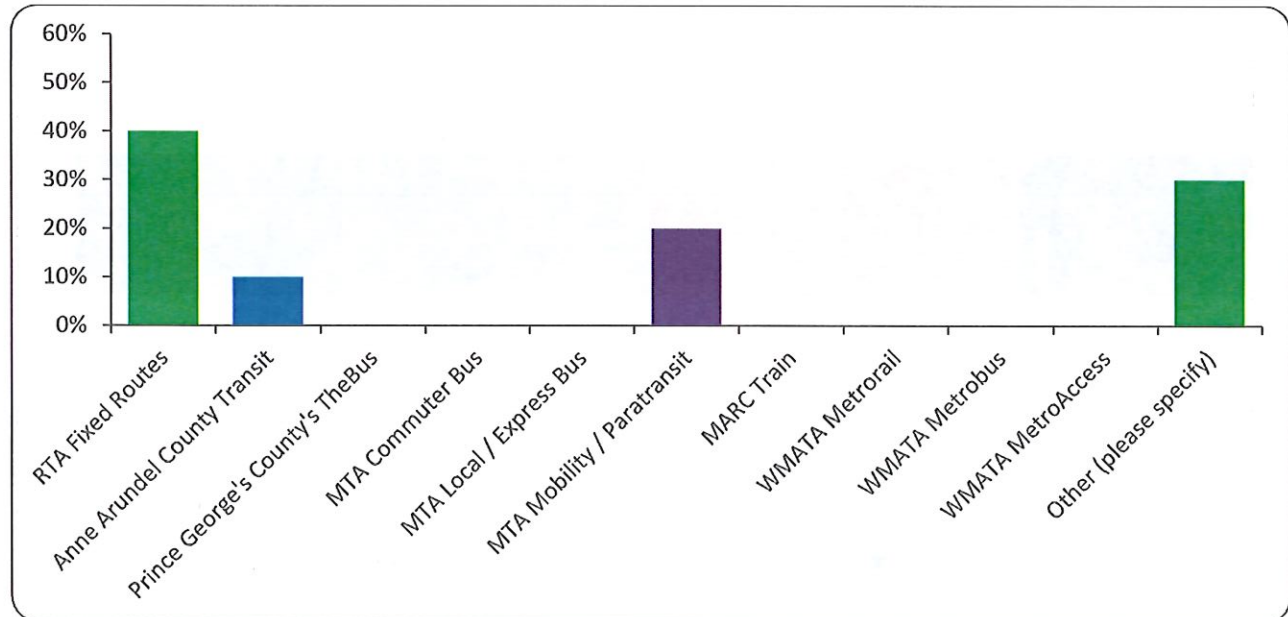
48.57%

17

TOTAL

35

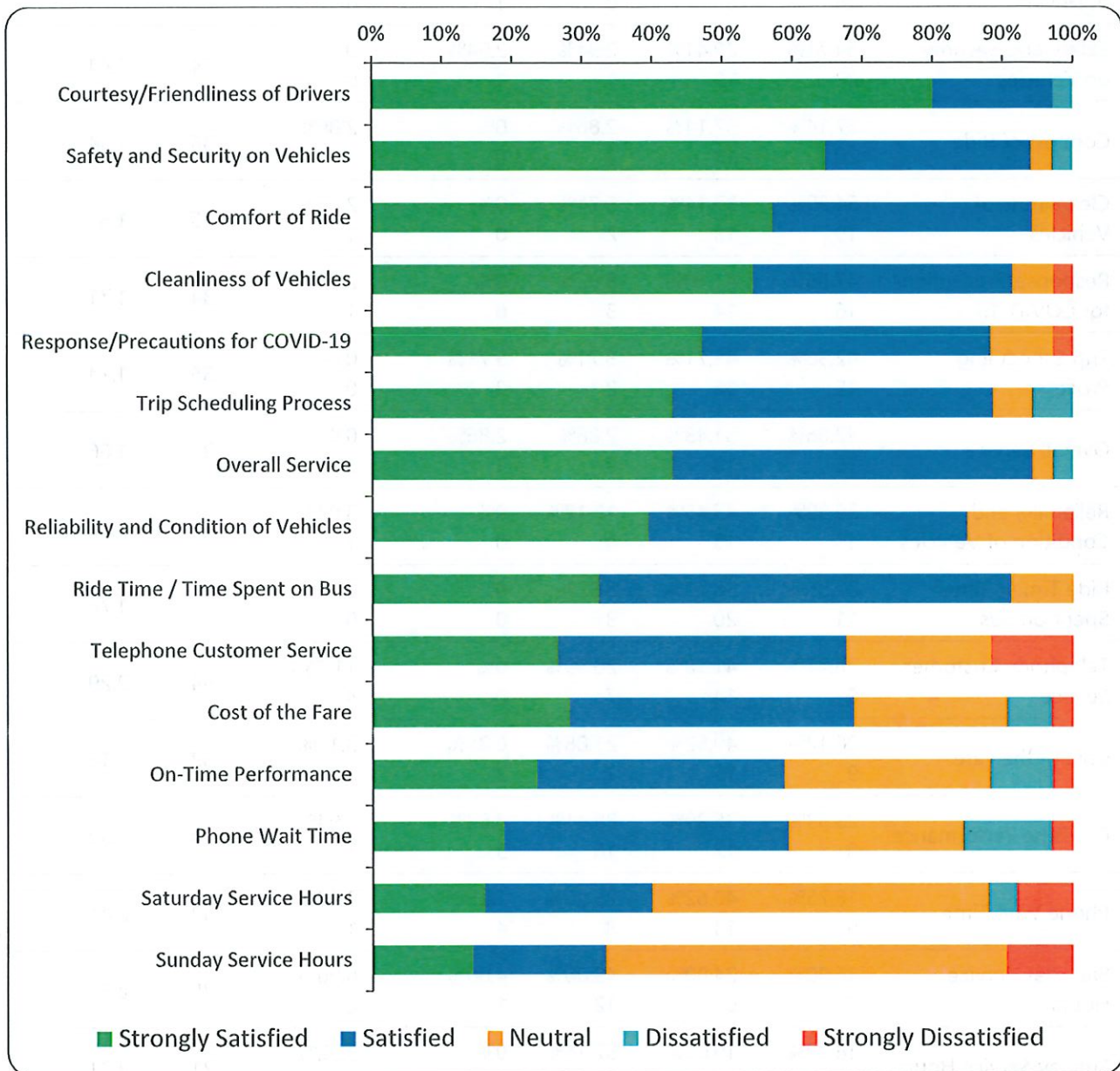
Q6: Do you use any other transportation services that operate in the region?



ANSWER CHOICES	RESPONSES	
RTA Fixed Routes	40.0%	4
Anne Arundel County Transit	10.0%	1
Prince George's County's TheBus	0%	0
MTA Commuter Bus	0%	0
MTA Local / Express Bus	0%	0
MTA Mobility / Paratransit	20.0%	2
MARC Train	0%	0
WMATA Metrorail	0%	0
WMATA Metrobus	0%	0
WMATA MetroAccess	0%	0
Other (please specify)	30.0%	3
TOTAL		10

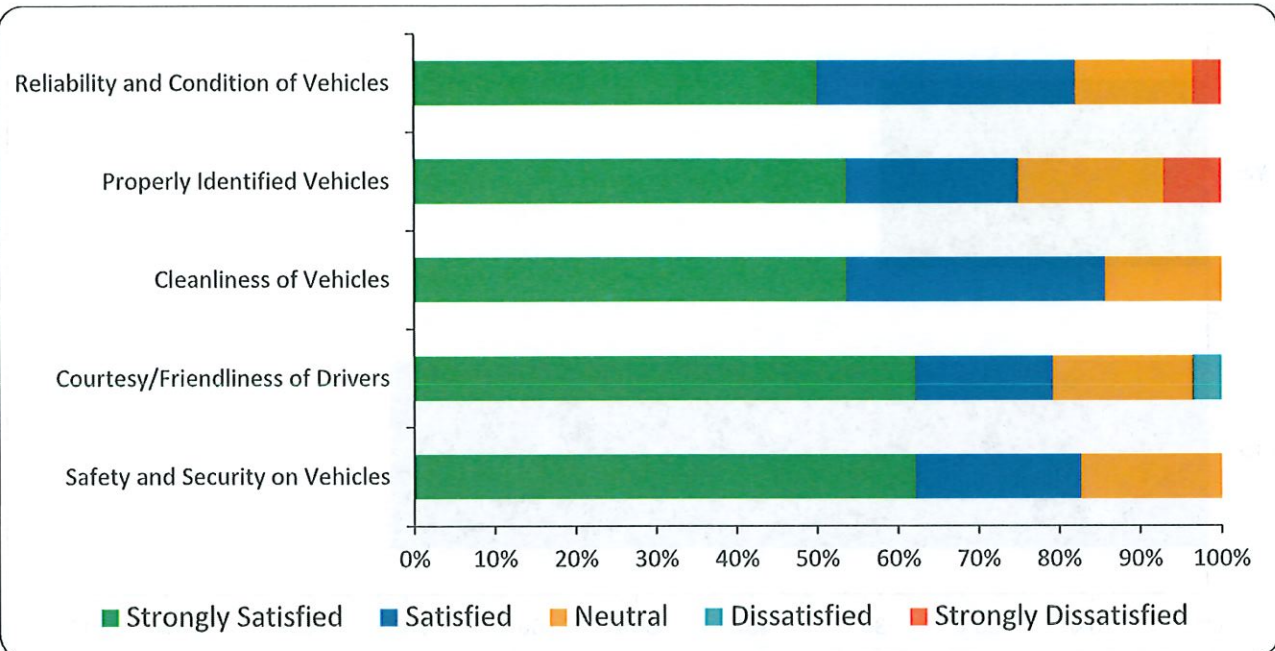
Other: Lyft 2, RTA Mobility 1

Q7: Please rate the RTA Mobility paratransit service in the following areas:



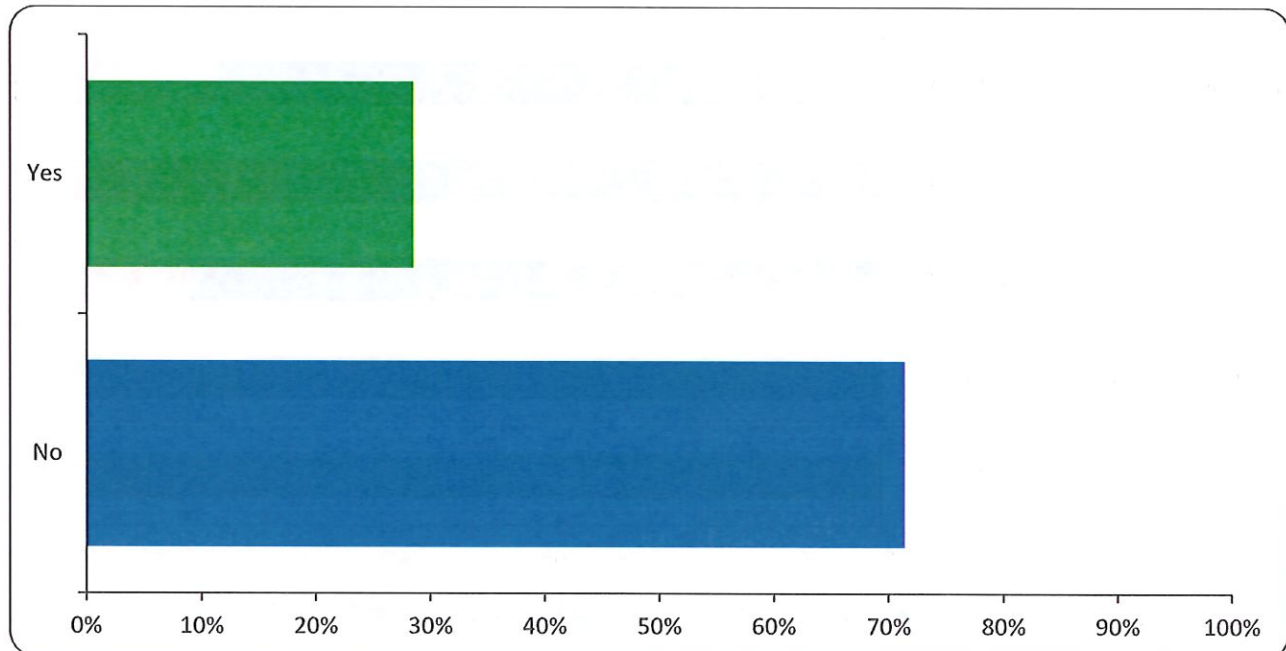
	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied	Total	Weighted Average
Courtesy/Friendliness of Drivers	80.0% 28	17.14% 6	0% 0	2.86% 1	0% 0	35	1.26
Safety and Security on Vehicles	64.71% 22	29.41% 10	2.94% 1	2.94% 1	0% 0	34	1.44
Comfort of Ride	57.14% 20	37.14% 13	2.86% 1	0% 0	2.86% 1	35	1.54
Cleanliness of Vehicles	54.29% 19	37.14% 13	5.71% 2	0% 0	2.86% 1	35	1.6
Response/Precautions for COVID-19	47.06% 16	41.18% 14	8.82% 3	0% 0	2.94% 1	34	1.71
Trip Scheduling Process	42.86% 15	45.71% 16	5.71% 2	5.71% 2	0% 0	35	1.74
Overall Service	42.86% 15	51.43% 18	2.86% 1	2.86% 1	0% 0	35	1.66
Reliability and Condition of Vehicles	39.39% 13	45.45% 15	12.12% 4	0% 0	3.03% 1	33	1.82
Ride Time / Time Spent on Bus	32.35% 11	58.82% 20	8.82% 3	0% 0	0% 0	34	1.76
Telephone Customer Service	26.47% 9	41.18% 14	20.59% 7	0% 0	11.76% 4	34	2.29
Cost of the Fare	28.12% 9	40.62% 13	21.88% 7	6.25% 2	3.12% 1	32	2.16
On-Time Performance	23.53% 8	35.29% 12	29.41% 10	8.82% 3	2.94% 1	34	2.32
Phone Wait Time	18.75% 6	40.62% 13	25.00% 8	12.50% 4	3.12% 1	32	2.41
Saturday Service Hours	16.00% 4	24.00% 6	48.00% 12	4.00% 1	8.00% 2	25	2.64
Sunday Service Hours	14.29% 3	19.05% 4	57.14% 12	0% 0	9.52% 2	21	2.71

Q8: Please rate the cab services contracted through RTA Mobility in the following areas:



	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied	Total	Weighted Average
Safety and Security on Vehicles	62.07% 18	20.69% 6	17.24% 5	0% 0	0% 0	29	1.55
Courtesy/Friendliness of Drivers	62.07% 18	17.24% 5	17.24% 5	3.45% 1	0% 0	29	1.62
Cleanliness of Vehicles	53.57% 15	32.14% 9	14.29% 4	0% 0	0% 0	28	1.61
Properly Identified Vehicles	53.57% 15	21.43% 6	17.86% 5	0% 0	7.14% 2	28	1.86
Reliability and Condition of Vehicles	50.0% 14	32.14% 9	14.29% 4	0% 0	3.57% 1	28	1.75

Q9: Are there specific destinations you need to go to on a regular basis that transit does not serve?



ANSWER CHOICES	RESPONSES	
Yes	28.57%	10
No	71.43%	25
TOTAL		35

Desired Destinations not Currently Served by Transit

Doesn't go to south Baltimore

For going to shopping centers, pharmacies, and library

Baltimore City for RTA

Doctor Appointment

Dialysis

Anne Arundel County

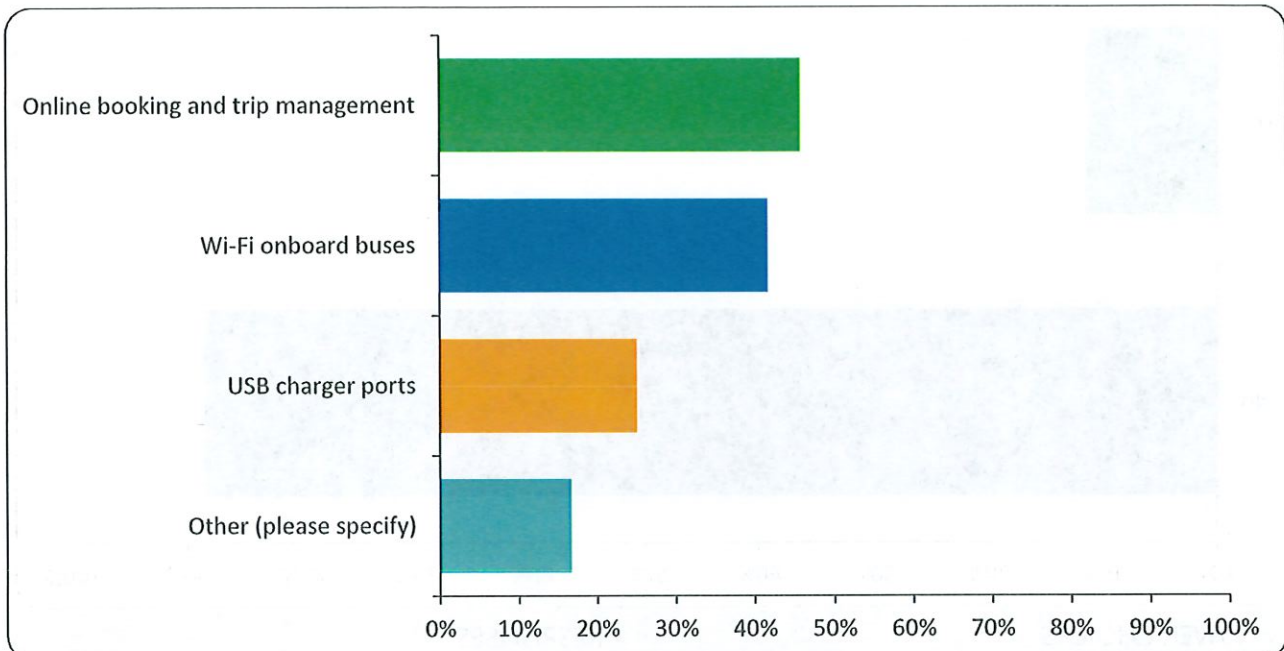
Cannot get to work on weekend days. Cannot get picked up from work in the evening.

Cannot get to any social activities, like shopping, movies, restaurants, friends.

Medical centers in Baltimore County

Dr appts in Catonsville

Q10: Which of the following technological improvements would you benefit from?



ANSWER CHOICES	RESPONSES	
Online booking and trip management	45.83%	11
Wi-Fi onboard buses	41.67%	10
USB charger ports	25.00%	6
Other (please specify)	16.67%	4
TOTAL		31

"Other" Suggested Technological Improvements

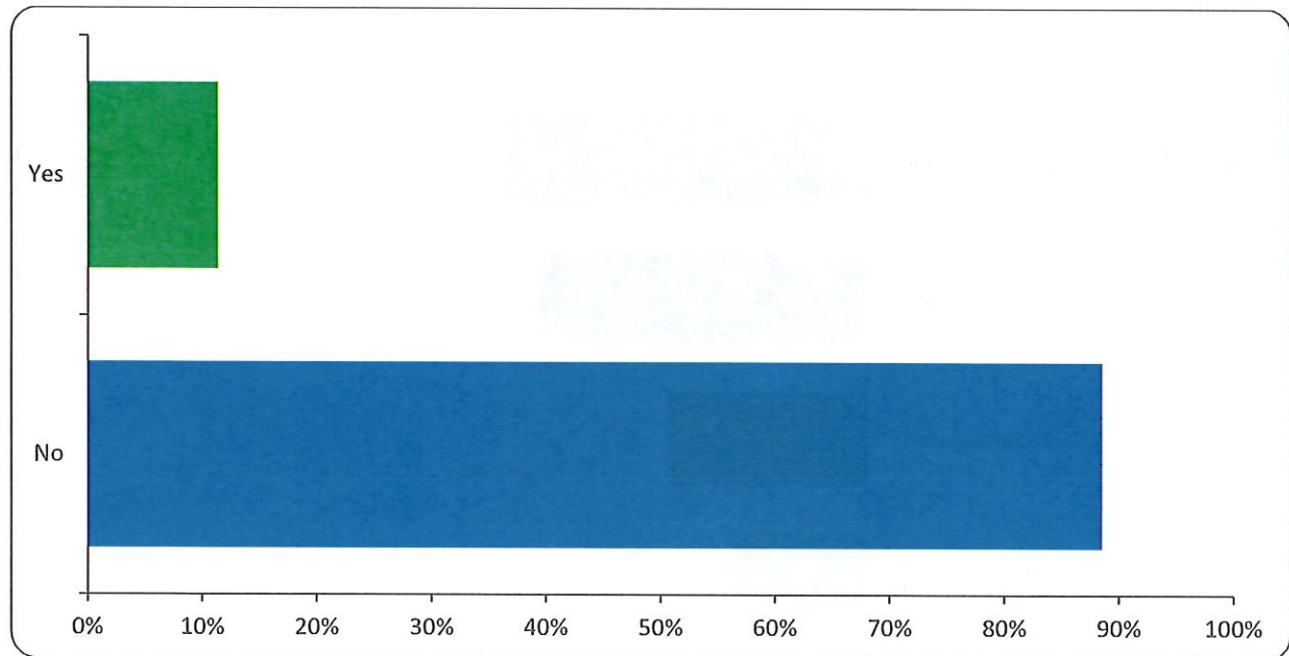
Picking up person as promised

Ok with what is here

weekend/evening service, service to places other than work/medical/sr center

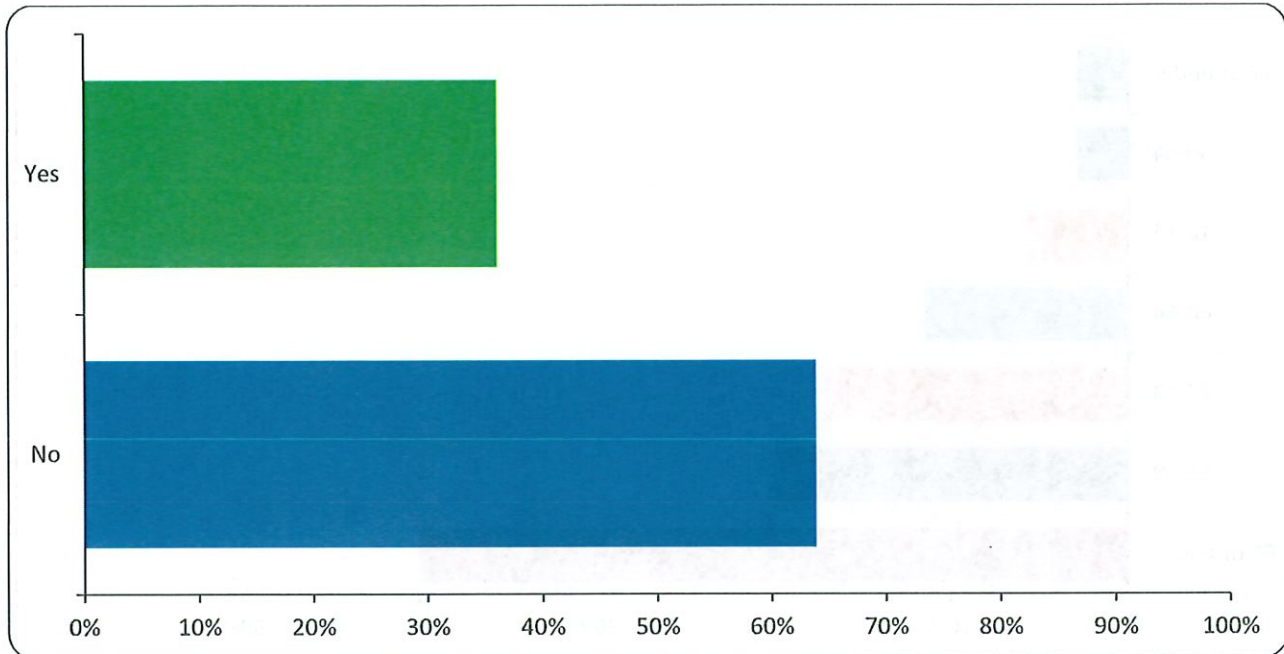
MUSIC

Q12: Do you have a car?



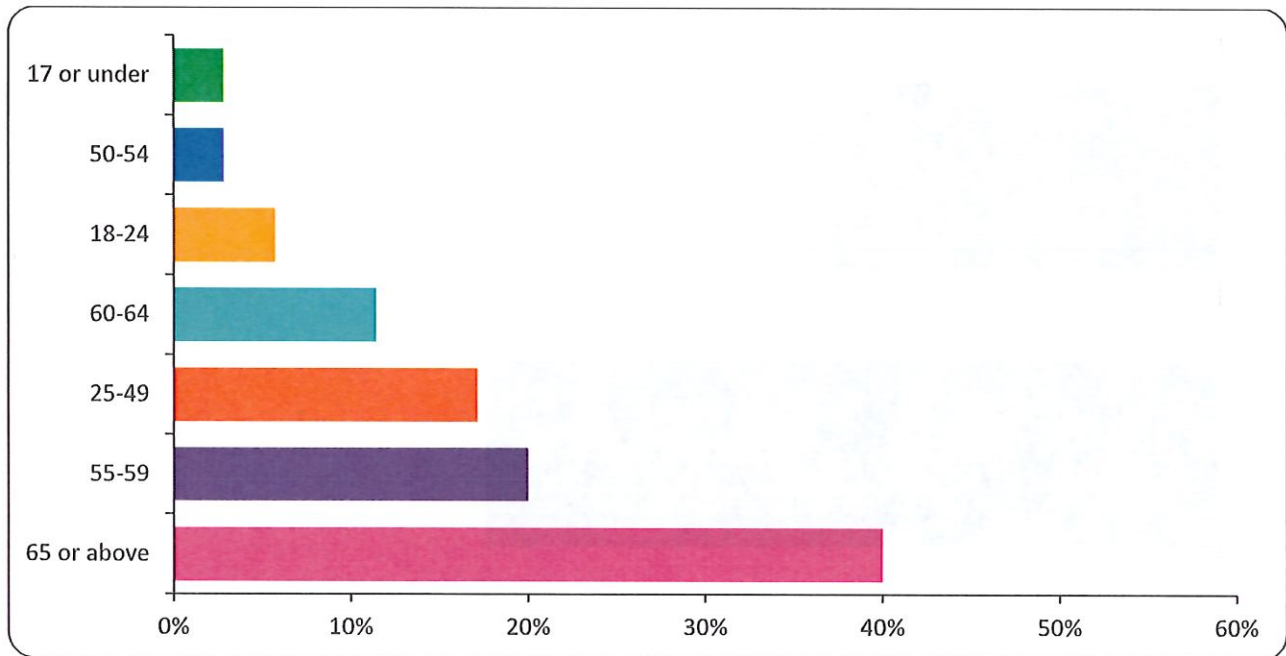
ANSWER CHOICES	RESPONSES	
Yes	11.43%	4
No	88.57%	31
TOTAL		35

Q13: Do you have a driver's license?



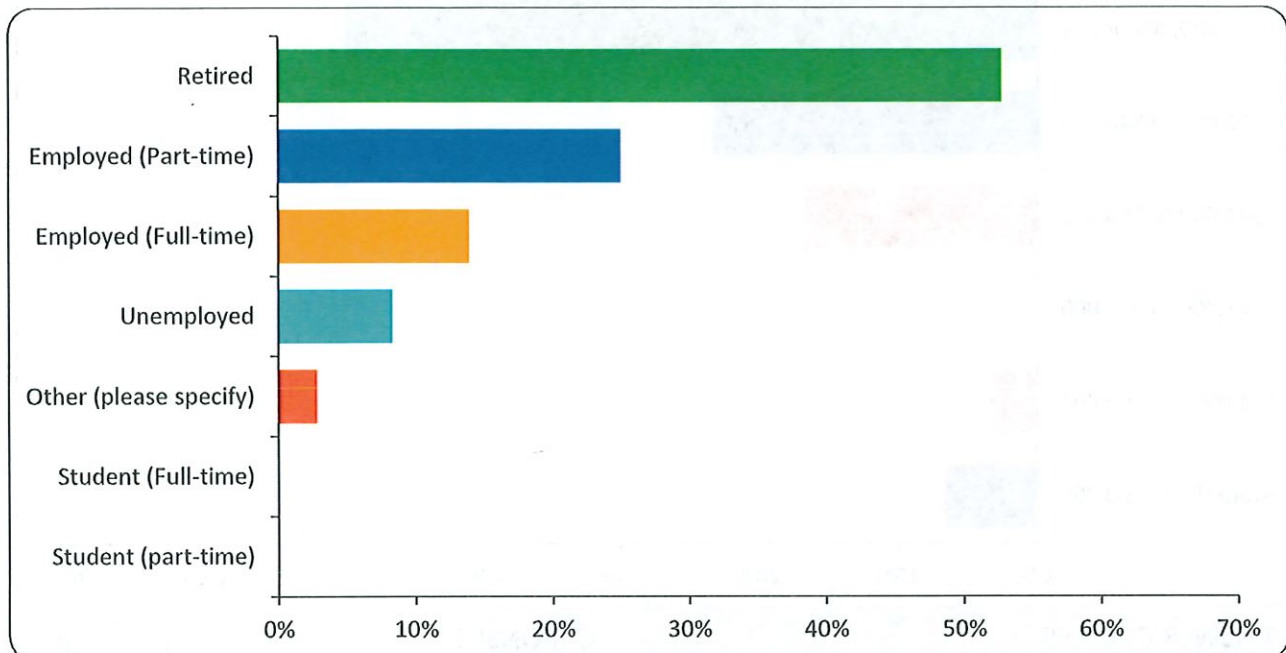
ANSWER CHOICES		RESPONSES	
Yes		36.11%	13
No		63.89%	23
TOTAL			36

Q14: Please indicate your age:



ANSWER CHOICES	RESPONSES	
17 or under	2.86%	1
50-54	2.86%	1
18-24	5.71%	2
60-64	11.43%	4
25-49	17.14%	6
55-59	20.0%	7
65 or above	40.0%	14
TOTAL		35

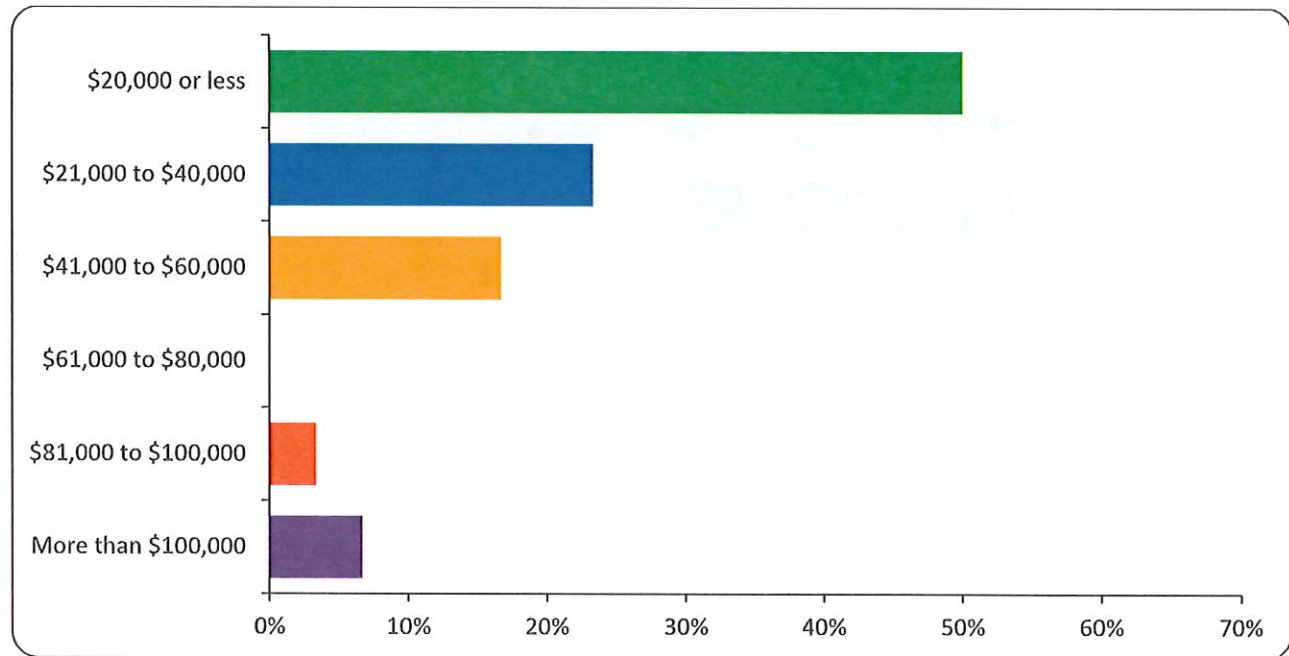
Q15: What is your employment status? You may check more than one.



ANSWER CHOICES	RESPONSES	
Retired	52.78%	19
Employed (Part-time)	25.00%	9
Employed (Full-time)	13.89%	5
Unemployed	8.33%	3
Other (please specify)	2.78%	1
Student (Full-time)	0%	0
Student (part-time)	0%	0
TOTAL		37

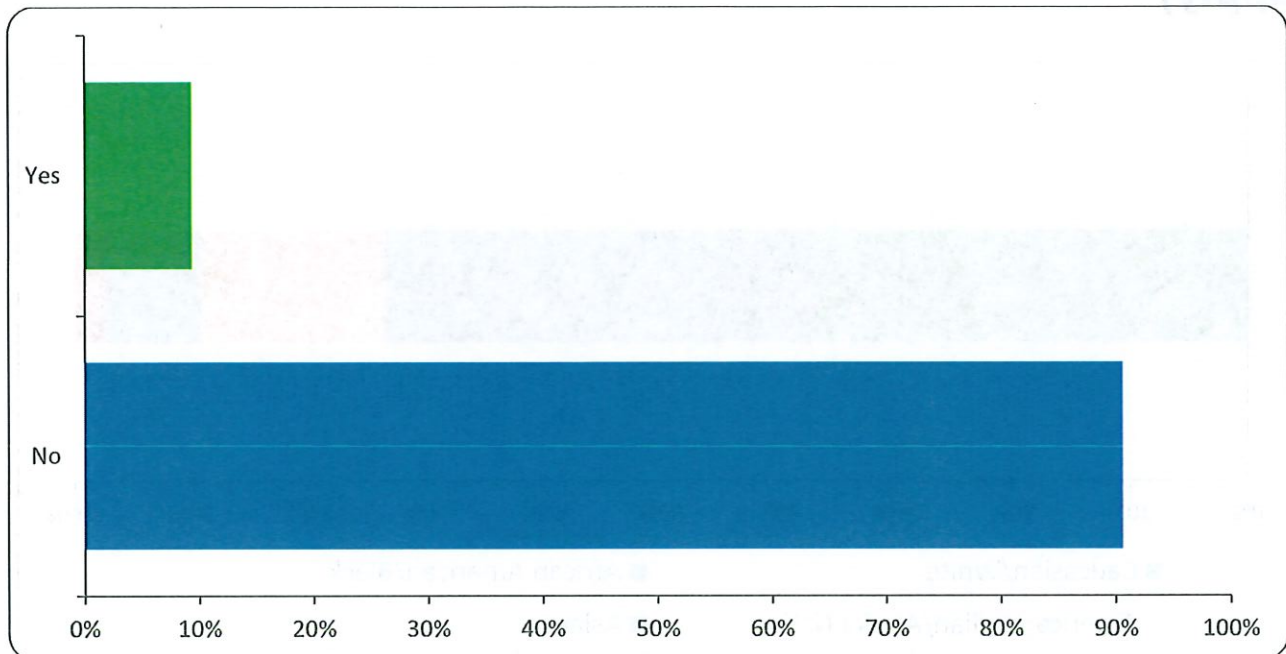
Other: Disabled 1

Q16: What is your annual household income?



ANSWER CHOICES	RESPONSES	
\$20,000 or less	50.0%	15
\$21,000 to \$40,000	23.33%	7
\$41,000 to \$60,000	16.67%	5
\$61,000 to \$80,000	0%	0
\$81,000 to \$100,000	3.33%	1
More than \$100,000	6.67%	2
TOTAL		30

Q17: Are you of Hispanic or Latino origin?



ANSWER CHOICES

RESPONSES

Yes

9.38%

3

No

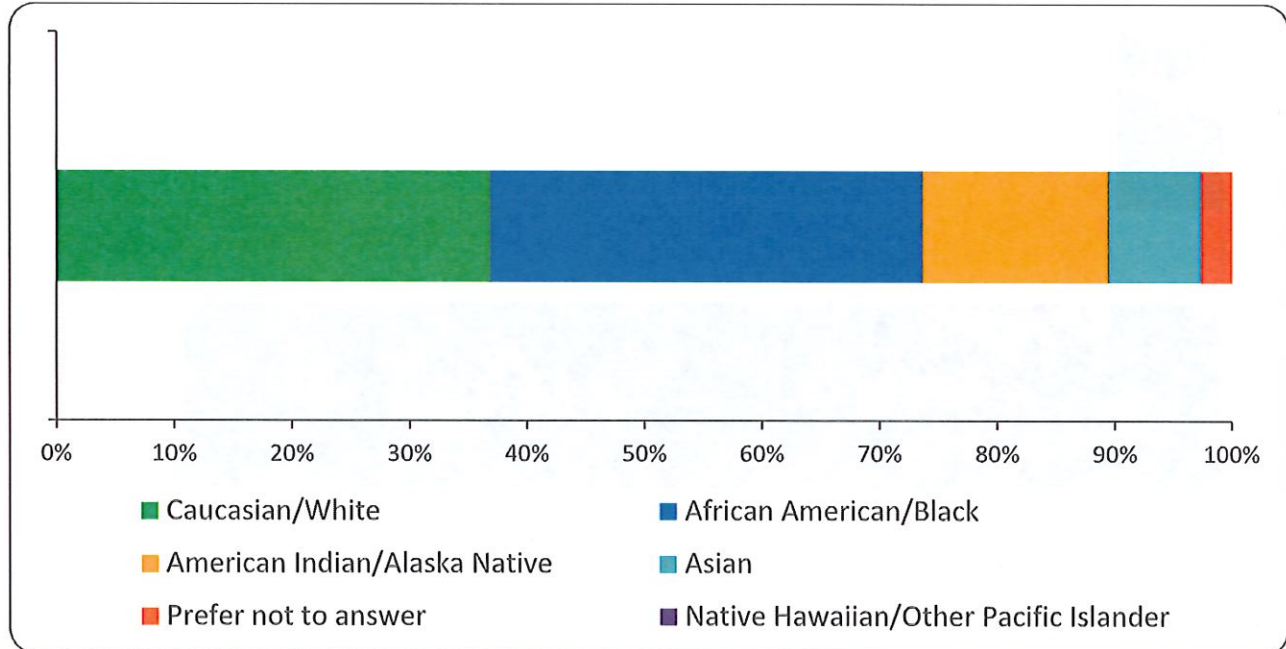
90.62%

29

TOTAL

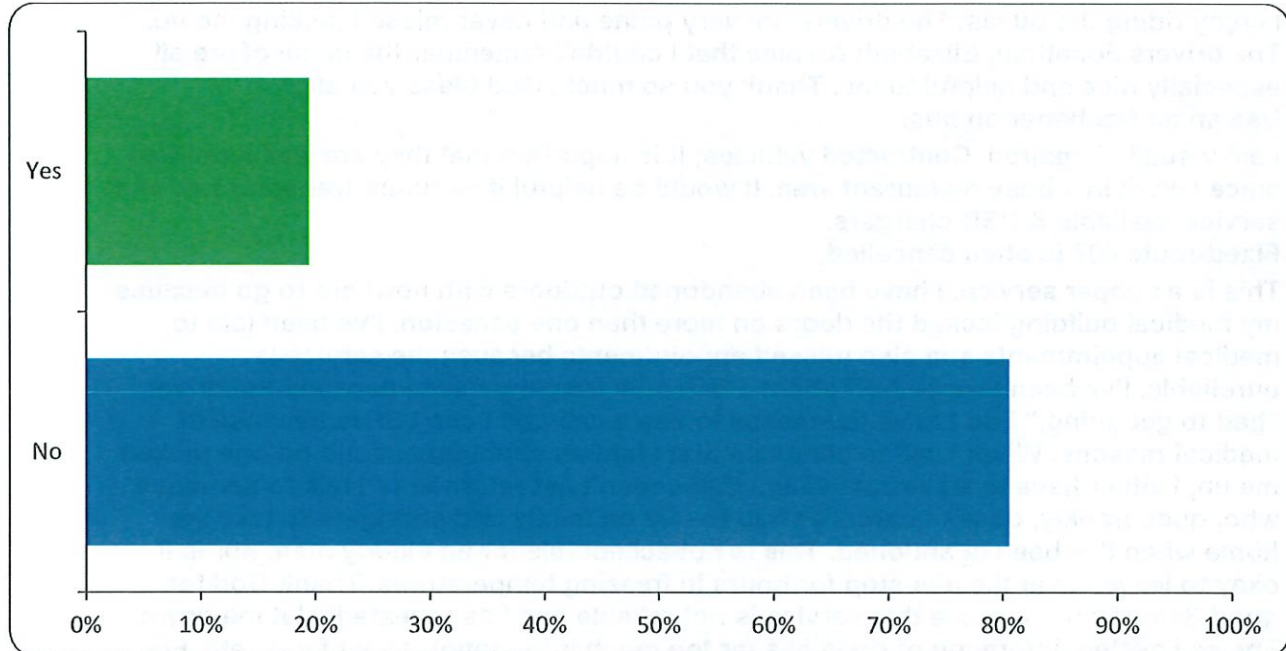
32

Q18: How would you classify yourself? (check all that apply)



ANSWER CHOICES	RESPONSES	
Caucasian/White	40.0%	14
African American/Black	40.0%	14
American Indian/Alaska Native	17.14%	6
Asian	8.57%	3
Prefer not to answer	2.86%	1
Native Hawaiian/Other Pacific Islander	0%	0
TOTAL		38

Q19: Do you speak a language other than English at home?



ANSWER CHOICES

RESPONSES

Yes

19.44%

7

No

80.56%

29

TOTAL

36

Languages:

Tagalog

Tamil, Hindi

Spanish

Spanish

Various

Q20: Please provide any comments you may have regarding public transportation:

I enjoy riding the buses. The drivers are very polite and never missed picking me up. The drivers Jonathan, Elizabeth & some that I couldn't remember the name of are all especially nice and helpful to me. Thank you so much. God bless you all.

Use an air freshener on bus.

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

Fixed-route 407 is often cancelled.

This is a subpar service. I have been abandoned outdoors with nowhere to go because my medical building locked the doors on more than one occasion. I've been late to medical appointments and also missed appointments because the service is unreliable. I've been dropped off about a half mile from my house because the driver "had to get going." I do not have the means to use a cab and I can't drive because of medical reasons. When I call to complain that I had an appointment and no one picked me up, I either have to leave a message that doesn't get returned or I talk to someone who, quite frankly, doesn't care. I've had to rely on family and strangers to take me home when I've been abandoned. This is not acceptable for an elderly man, nor is it okay to leave me at the bus stop for hours in freezing temperatures. Thank God for good Samaritans because this service is not reliable and has repeatedly let me down. The call system informing of rides has far too much information about fares, etc. For someone with a disability, they get lost in all that information.

I would like you to reduce the fare or no fare at all considering my age and as the oldest customer, I would like to have rides permitted for shopping, pharmacies, and library, and post office. I already use for medical appointments and going to senior center once a month and found it expensive.

I think the transportation drivers are cool and very friendly to their passengers. I don't have anything else to say about this transportation.

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

I have enjoyed the service of RTA. All of the drivers are very nice. Thank you.

I hate when they pick me up late.

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

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

Dispatch team "once in a while" have a problem with scheduling pickups/drop offs in a logical order. But it is probably only "new" employees who have this problem :)

Also: the recorded schedule for out answering machine only comes thru about 2/3 of the time. Thank you!

You do a very good job.

David is homebound and has NO mode of transportation, so if RTA can expand their service to go to places other than work/medical/sr centers, it would be a HUGE quality

of life benefit for him. He also can't get to work on weekends or evenings and must rely on my, his sister, for that and I am not always available and it is VERY difficult! PLEASE consider expanding this service. He cannot take the regular bus service either as he is mentally disabled and gets lost. RTA also does not allow a ride home if I were to take David someplace in Columbia and ask them to pick him up from a different place. David also cannot participate in Special Olympics because of our transportation issue. He has no social life because of the RTA limitations.

You should have asked questions about the drivers and telephone operators...you could write a book.

Just a very big thank you

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

Thanks for your Assistance

Sometimes when we call RTA to cancel or to find out a pickup time, it goes to voice mail that is full so we can not talk to anyone.

no

Regional Transportation Agency
of Central Maryland
Transit Development Plan

Appendix E
Community
Transportation Survey

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Appendix E

Community Transportation Survey

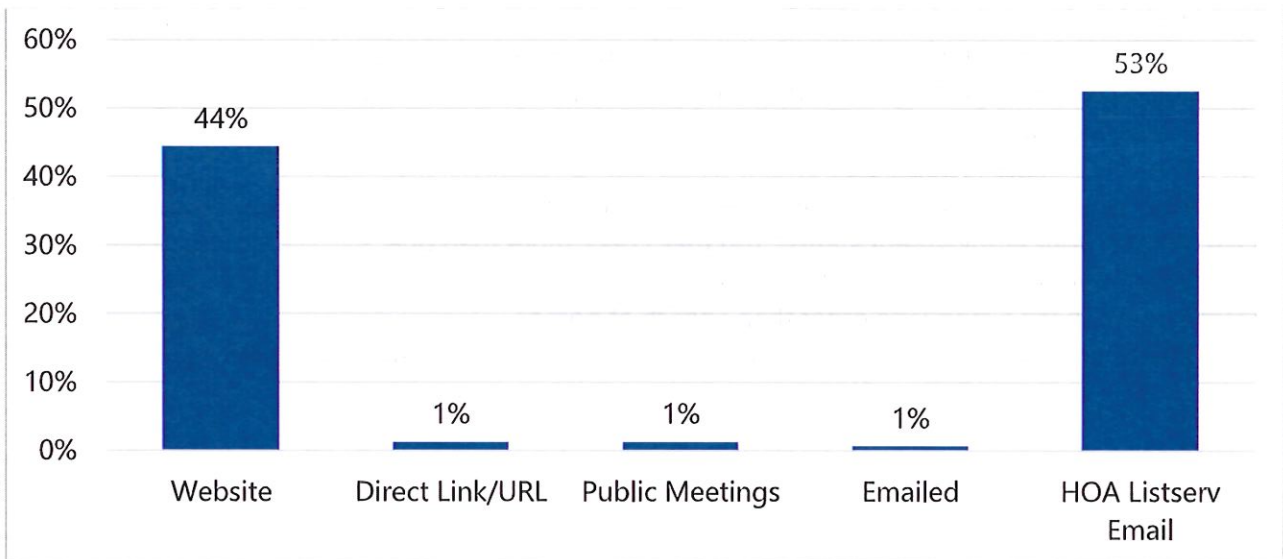
Introduction

The Community Transportation Survey was available starting on December 5, 2022 and closed on March 31, 2023 – providing a 116 day survey period. The survey closing date was extended due to a relatively low response rate and in order to accommodate additional outreach, including an email blast to the Howard County Homeowners Association email listserv.

Out of the three TDP surveys (RTA Customer, RTA Mobility, and Community), the customer survey had the second highest number of responses at 160 (43% of the 370 total surveys received).

The community survey was primarily marketed through the TDP project website but was also available during public meetings and other in person outreach events. The most successful marketing of the community survey was through the Howard County Homeowners Association email listserv. The response rates for each of these methods are shown below.

Community Transportation Survey Collection Methods



A copy of the paper survey is provided on the following pages along with detailed survey responses for each question.

Community Transportation Survey – Front



Community Transportation Survey

Help us to serve you better! The RTA of Central Maryland, in partnership with Howard County, Anne Arundel County, the City of Laurel and Northern Prince George's County, wants your input on public transit services. Please complete the following survey to provide us with your feedback about our services and possible improvements. Your answers are anonymous. Thank you for your input! For more information, visit: www.rtacentralmdtransitplan.com

How to Submit your survey:

Submit by Email

Take a photo or scan of both sides of your completed survey and email the files to admin@kfhgroup.com with the subject **RTA Survey**

Take this Survey Online



surveymonkey.com/r/rtacommunity

Submit by Mail

RTA Survey c/o KFH Group
7200 Wisconsin Ave, Suite 320
Bethesda, MD 20814

1. What is your primary mode of transportation?
(Please check only one.)

- ☐ Car ☐ Taxi ☐ Walk ☐ Bicycle ☐ Uber/Lyft
☐ Public transportation
☐ A friend or family member drives
☐ Other: _____

2. Are you aware of the services provided by the Regional Transportation Agency (RTA)?

- ☐ Yes ☐ No

Please rate your overall impression of RTA's services:
☐ Positive ☐ Neutral ☐ Negative

3. Do you use any of the following public transportation services? (Please check all that apply.)

- ☐ RTA ☐ Anne Arundel Transit
☐ Prince George's TheBus ☐ Neighbor Ride
☐ MTA Commuter Bus ☐ MTA Local/Express Bus
☐ WMATA Metrobus ☐ WMATA Metrorail
☐ MARC Train ☐ Vanpools or carpools
☐ Taxis ☐ Uber/Lyft ☐ Other: _____

4. If you do currently use public transportation services, how frequently do you use them?

- ☐ 5 days/week or more ☐ 3-4 days/week
☐ 1-2 days/week ☐ Less than 1 day/week

5. Are there specific destinations you need to go to on a regular basis that transit does not serve?

- ☐ Yes ☐ No

If yes, where: _____

6. What is your zip code? _____

7. Do you have a driver's license? ☐ Yes ☐ No

8. Do you have a car? ☐ Yes ☐ No

9. If you **DO NOT** currently use public transportation, please indicate why not. (Please check all that apply.)

- ☐ I prefer to drive
☐ Need a vehicle for work/school or daily errands
☐ Transit is not available near my home/work/school
☐ Unaware if transit service is available
☐ I have limited mobility that makes transit difficult to use
☐ I do not feel safe using transit
☐ Transit is too expensive
☐ Transit is too confusing
☐ Trips via transit take too much time
☐ Transit services are unreliable
☐ The hours of operation are too limited
☐ Other: _____

10. If you **DO NOT** currently use public transportation, what improvements would be needed for you to ride public transportation? (Please check all that apply.)

- ☐ More frequent service ☐ Shorter travel time
☐ Longer hours of service ☐ Fewer transfers
☐ Better service reliability ☐ Improved information
☐ Safer vehicles ☐ Less crowded vehicles
☐ Guaranteed ride home for emergencies/overtime
☐ Additional park and ride facilities
☐ Bus stop shelters
☐ Other: _____

11. How would you prefer to receive information about public transportation? (Please check all that apply.)

- ☐ Website ☐ Bus Stops ☐ Brochure
☐ Email ☐ Direct Mail ☐ City/County Office
☐ TV ☐ Social Media ☐ Smartphone
☐ Radio ☐ Newspaper ☐ Friends/Family
☐ Outdoor Ads ☐ Other: _____

Survey continues on reverse >

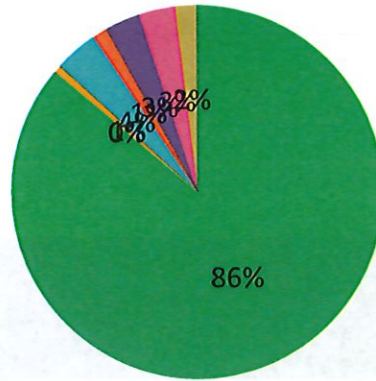
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**ANNE ARUNDEL
COUNTY**
MARYLAND

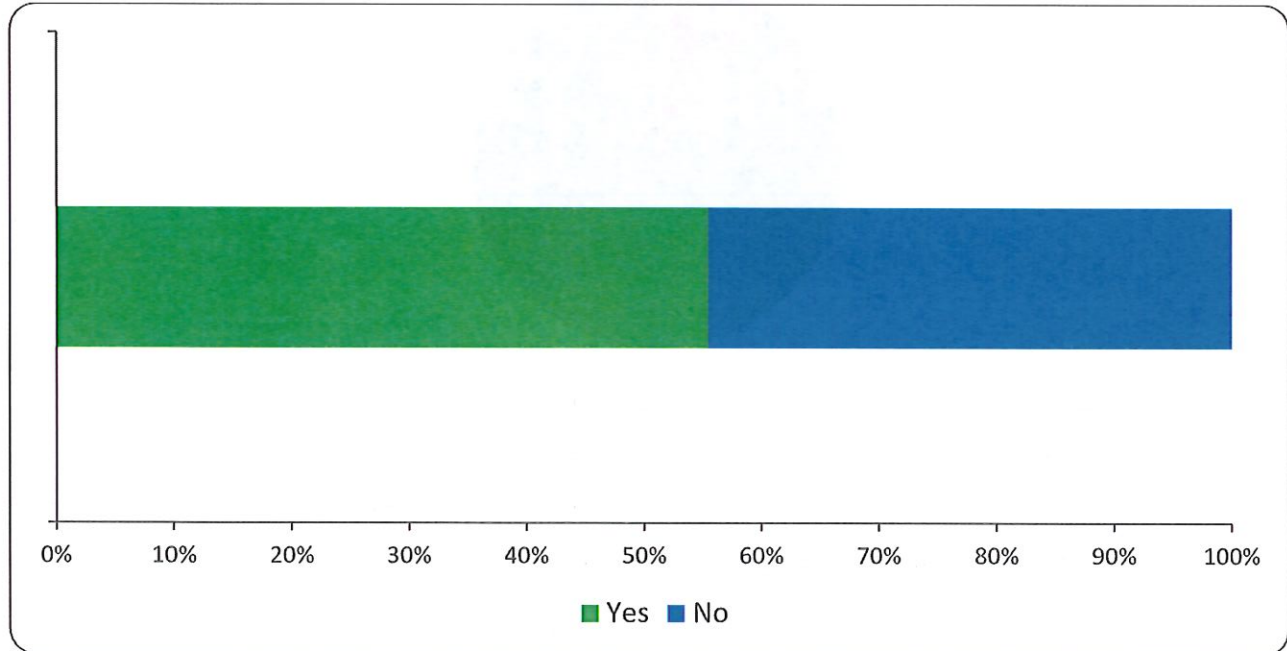


Q1: What is your primary mode of transportation?



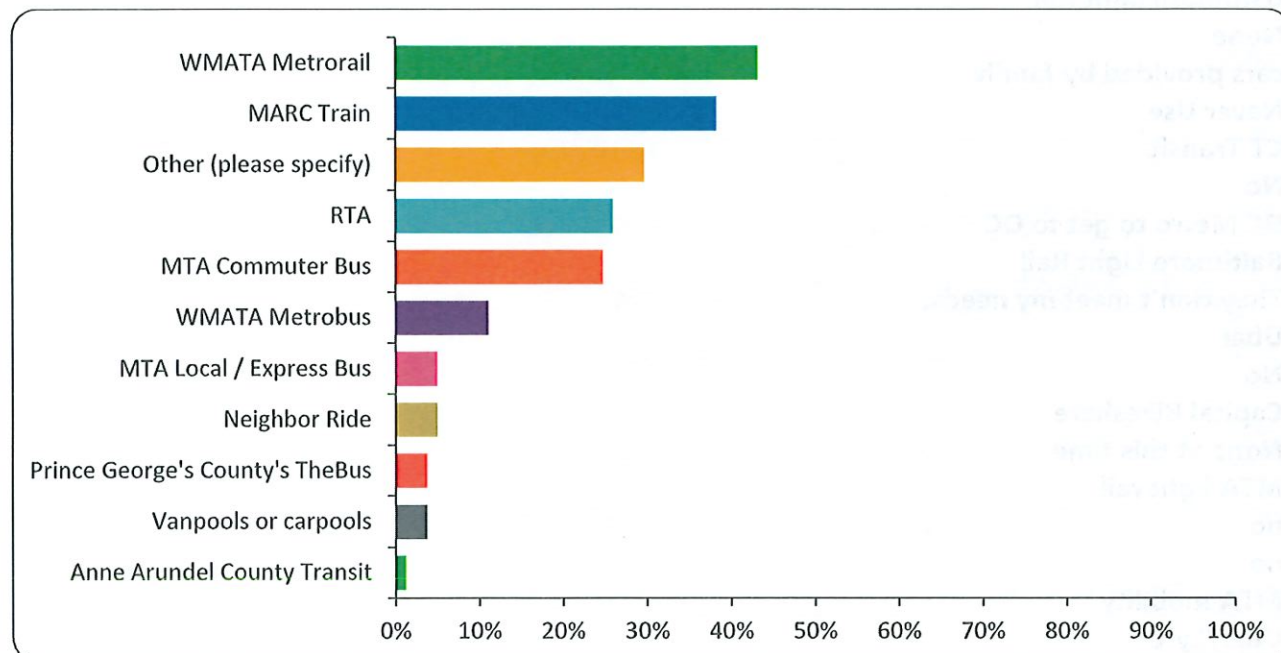
ANSWER CHOICES	RESPONSES	
Car	86.16%	137
Taxi	0%	0
Walk	0.63%	1
Bicycle	3.77%	6
Uber/Lyft	1.26%	2
Public transportation	3.14%	5
A friend or family member drives	3.14%	5
Other (please specify)	1.89%	3
TOTAL		159

Q2: Are you aware of the services provided by the Regional Transportation Agency (RTA)?



ANSWER CHOICES		RESPONSES	
Yes		55.41%	87
No		44.59%	70
TOTAL			157

Q3: Do you use any of the following public transportation services? (Please check all that apply.)



ANSWER CHOICES	RESPONSES	
WMATA Metrorail	43.21%	35
MARC Train	38.27%	31
Other (please specify)	29.63%	24
RTA	25.93%	21
MTA Commuter Bus	24.69%	20
WMATA Metrobus	11.11%	9
MTA Local / Express Bus	4.94%	4
Neighbor Ride	4.94%	4
Prince George's County's TheBus	3.70%	3
Vanpools or carpools	3.70%	3
Anne Arundel County Transit	1.23%	1
TOTAL		155

Other Used Public Transportation Services

I prefer to use rail, when possible, not a regular user

Baltimore light rail

None

cars provided by family

Never Use

CT Transit

No

DC Metro to get to DC

Baltimore Light Rail

They don't meet my needs.

Uber

No

Capital Bikeshare

None at this time

MTA light rail

no

no

MTA mobility

Uber/Lyft

RTA Mobility Bus

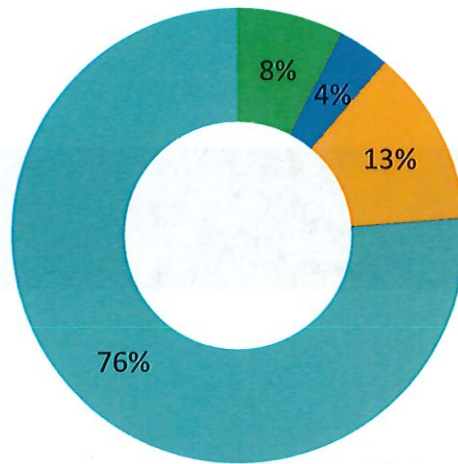
Uber/Lyft

RideOn Flash

Ad-hoc carpooling with friends

No

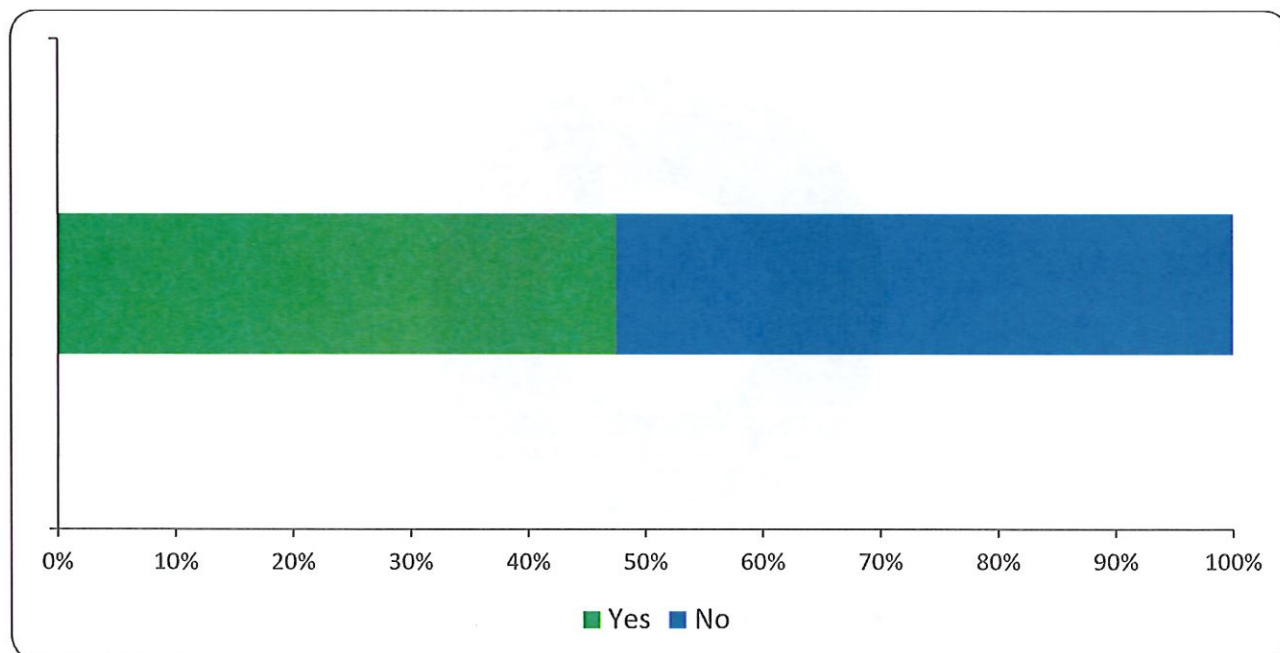
Q4: If you do currently use public transportation services, how frequently do you use them?



■ 5 days/week or more ■ 3-4 days/week ■ 1-2 days/week ■ Less than once a week

ANSWER CHOICES	RESPONSES	
5 days/week or more	7.50%	6
3-4 days/week	3.75%	3
1-2 days/week	12.50%	10
Less than once a week	76.25%	61
TOTAL		80

Q5: Are there specific destinations you need to go to on a regular basis that transit does not serve?

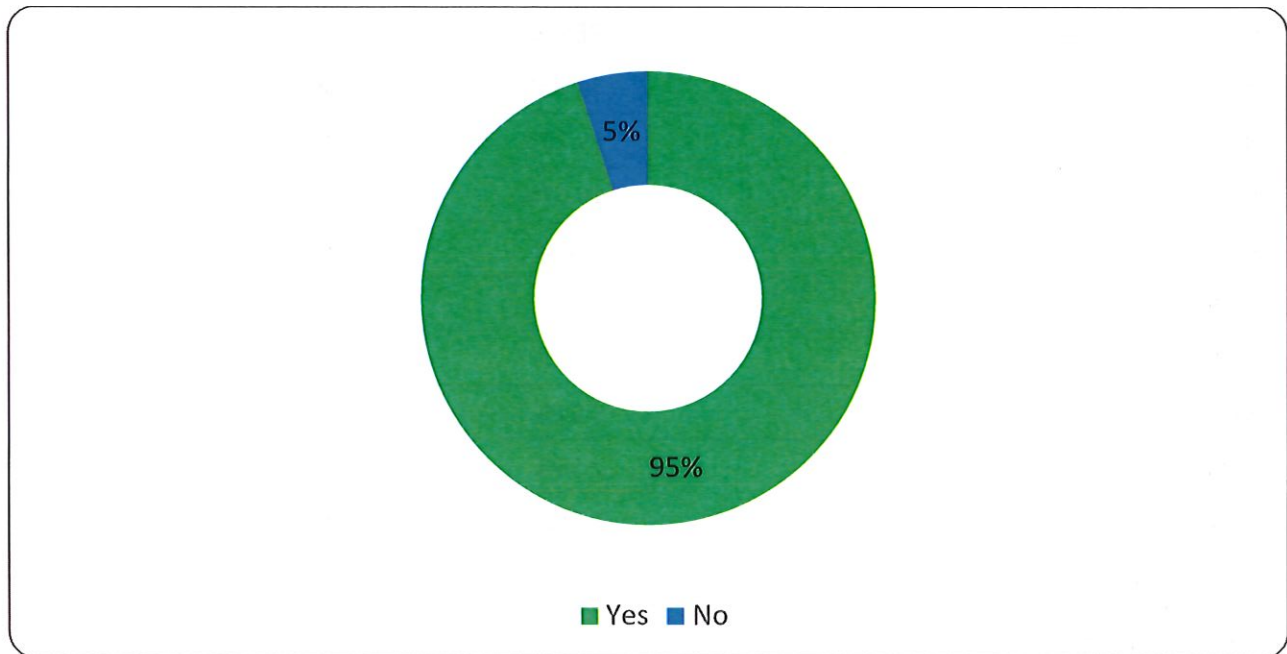


ANSWER CHOICES	RESPONSES	
Yes	47.46%	56
No	52.54%	62
TOTAL		118

Q6: What is your zip code?

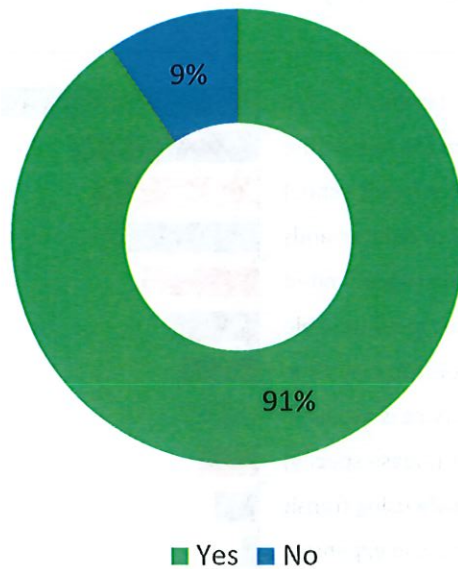
ANSWER CHOICES	RESPONSES	
21044	34.62%	54
21043	19.23%	30
21045	16.67%	26
21042	7.69%	12
21046	4.49%	7
21075	3.85%	6
21076	3.21%	5
20723	2.56%	4
20777	1.28%	2
Zip Codes with only one response: 20759, 20763, 20768, 21004, 21036, 21104, 21113, 21201, 21230, 21794	6.41%	10
TOTAL		156

Q7: Do you have a driver's license?



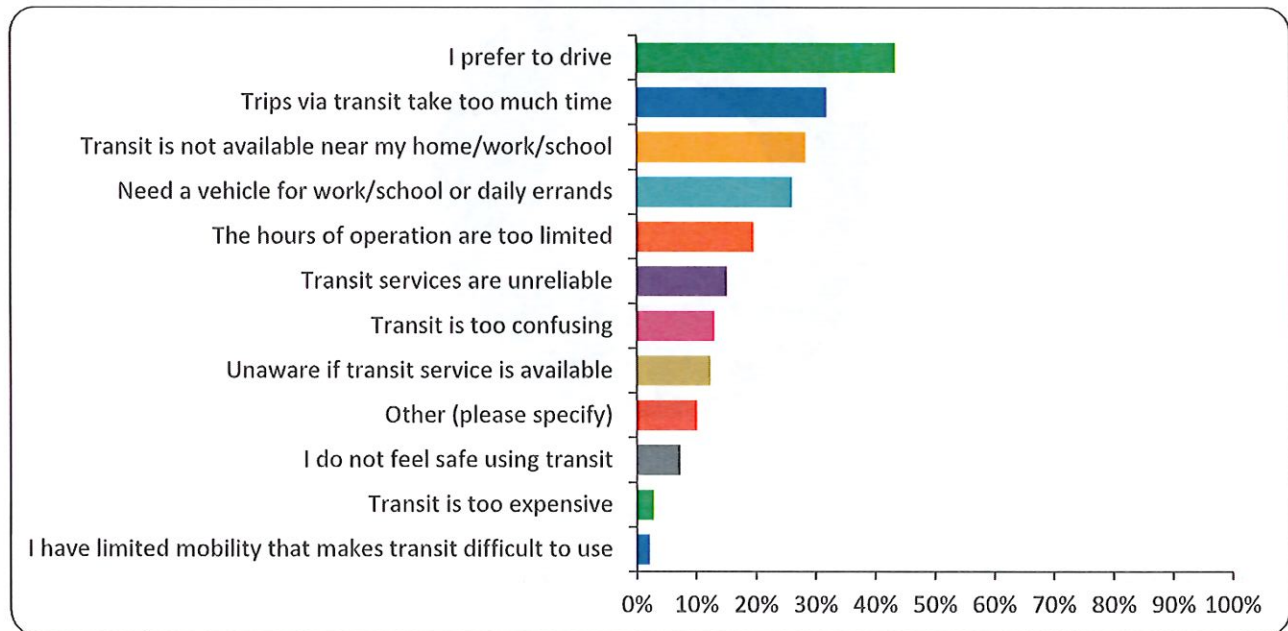
ANSWER CHOICES	RESPONSES	
Yes	94.94%	150
No	5.06%	8
TOTAL		158

Q8: Do you have a car?



ANSWER CHOICES	RESPONSES	
Yes	90.51%	143
No	9.49%	15
TOTAL		158

Q9: If you DO NOT currently use public transportation, please indicate why not. (If you use public transportation, please skip this question)



ANSWER CHOICES	RESPONSES	
I prefer to drive	43.48%	60
Trips via transit take too much time	31.88%	44
Transit is not available near my home/work/school	28.26%	39
Need a vehicle for work/school or daily errands	26.09%	36
The hours of operation are too limited	19.57%	27
Transit services are unreliable	15.22%	21
Transit is too confusing	13.04%	18
Unaware if transit service is available	12.32%	17
Other (please specify)	10.14%	14
I do not feel safe using transit	7.25%	10
Transit is too expensive	2.90%	4
I have limited mobility that makes transit difficult to use	2.17%	3
TOTAL		293

“Other” Reasons Why Respondents Do Not Currently Use Public Transportation

Need to change several buses to get anywhere

I consider public transportation dangerous.

At this time I am teleworking and I have no use for public transportation

transit not available where I need to travel

Have 2 small children

Direct fast streamlined transit is not available.

I don't drive very much

They don't go to where I would like to go to. I would transit more if it went to DC and Towson University

Transit takes too long for me to use it regularly.

I can drive or walk directly to where I need to go without waiting for public transit.

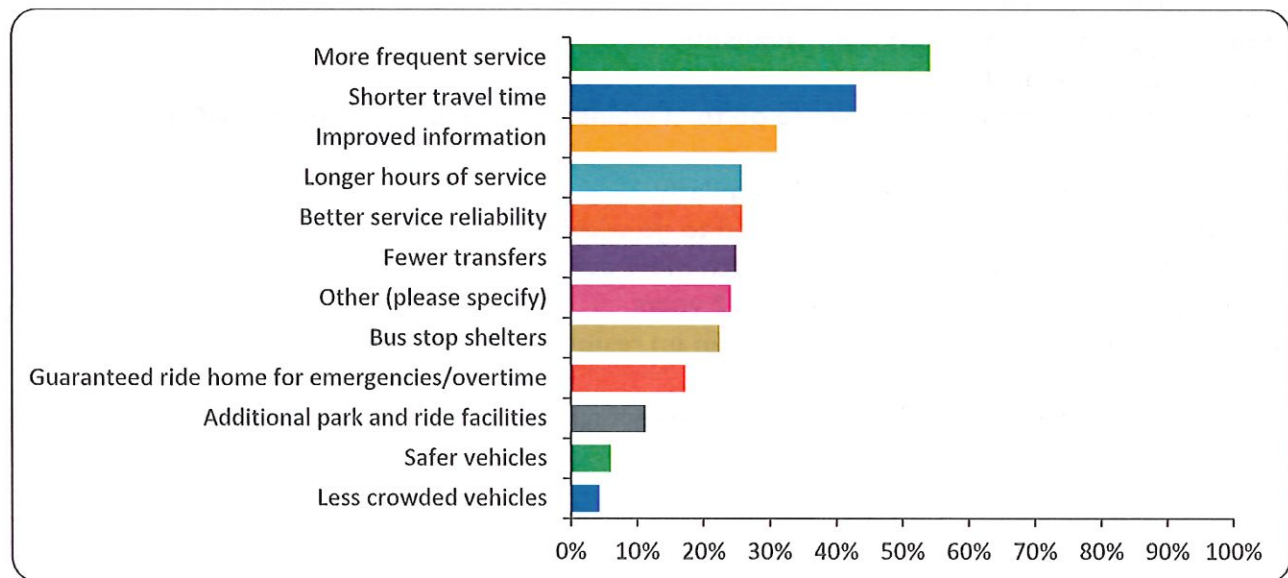
I always used public transit in Boston, much more available. Until COVI, I'd hoped to use public transit more often in retirement in 2 years

Covid has limited my trips into DC but I plan on resuming this Spring.

take MTA mobility

Bus times are far apart and there aren't very direct routes to places like BWI

Q10: If you DO NOT currently use public transportation, what improvements would be needed for you to ride public transportation? (If you use public transportation, please skip this question)



ANSWER CHOICES	RESPONSES	
More frequent service	54.31%	63
Shorter travel time	43.10%	50
Improved information	31.03%	36
Longer hours of service	25.86%	30
Better service reliability	25.86%	30
Fewer transfers	25.00%	29
Other (please specify)	24.14%	28
Bus stop shelters	22.41%	26
Guaranteed ride home for emergencies/overtime	17.24%	20
Additional park and ride facilities	11.21%	13
Safer vehicles	6.03%	7
Less crowded vehicles	4.31%	5
TOTAL		337

“Other” Improvements Needed for Respondents to Use Public Transportation

Secured, covered bike parking at a central station

A stop I could walk to.

I live in Hearthstone at Village Crest. There are no transit stops near me. I would use RTA to go to Longgate and OEC for sure if there were a stop within walking distance on Village Crest Dr. near me

Haven't been on a bus since 1970. Only need a ride to places that I don't feel safe going alone. For example, to see a show downtown, a ride to an airport with assistance or the DMV.

Additional stops

Better access - more stops

None

Don't intend to use RTA

there are no buses that stop at my area

Long term I would like to see local rail options instead of busses for all major destinations. Maybe starting in the downtown Columbia and surrounding areas.

Don't know how it works

Need more metro rail train stations. Would like to extend to Columbia and Olney

More information

accessible to areas where I travel

Unsure now, but as I age I may need services

More regular service on the Rt. 29 corridor from Howard County to DC

Handicap accessible

serving all areas of Howard and have a service that even if it is not on a given route service can still be provided

better integration between RTA and MTA/METRO (a single fare car for example)

closer access and parking where I would catch transport

Not interested

Stops closer to my home

Better & more locations

I don't want public transportation in my area.

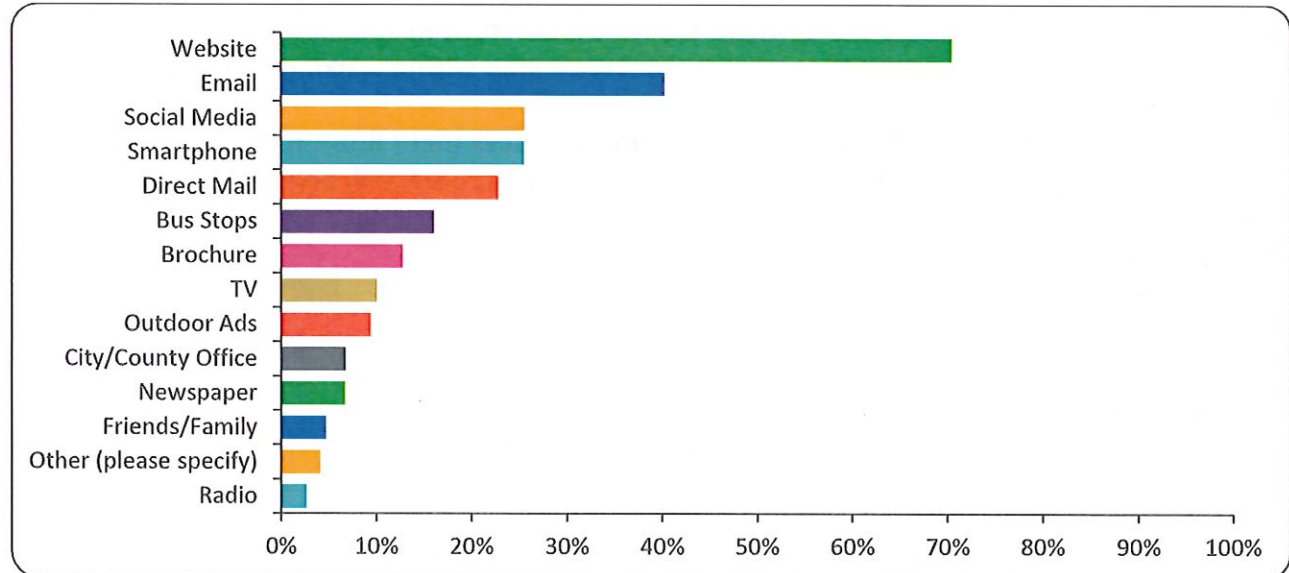
Somehow get into DC from Columbia on weekends and non-rush hour hours.

UMBC route from Howard County

more stops in rural areas

Service to my community

Q11: How would you prefer to receive information about public transportation? (Please check all that apply.)



ANSWER CHOICES	RESPONSES	
Website	70.47%	105
Email	40.27%	60
Social Media	25.50%	38
Smartphone	25.50%	38
Direct Mail	22.82%	34
Bus Stops	16.11%	24
Brochure	12.75%	19
TV	10.07%	15
Outdoor Ads	9.40%	14
City/County Office	6.71%	10
Newspaper	6.71%	10
Friends/Family	4.70%	7
Other (please specify)	4.03%	6
Radio	2.68%	4
TOTAL		384

“Other” Methods to Receive Information about Public Transportation

Don't need it

app

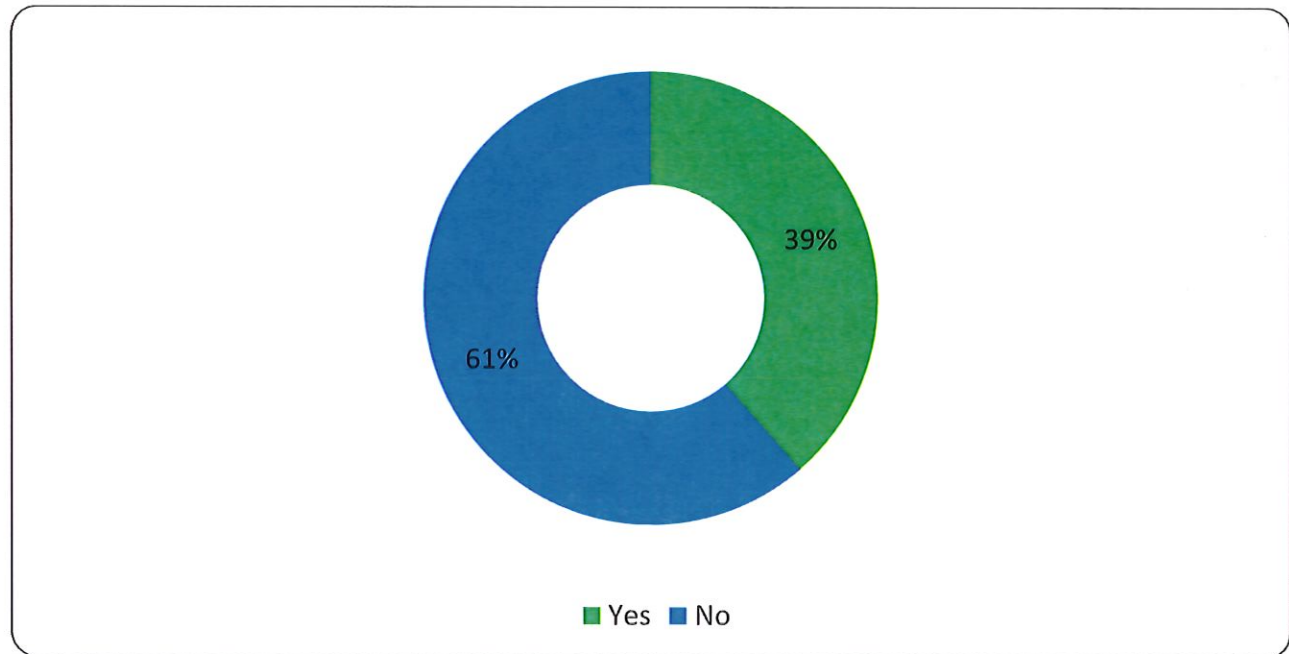
Employer (JHU-APL) or local businesses (Costco, Wegmans, etc.)

From my employer

apple maps

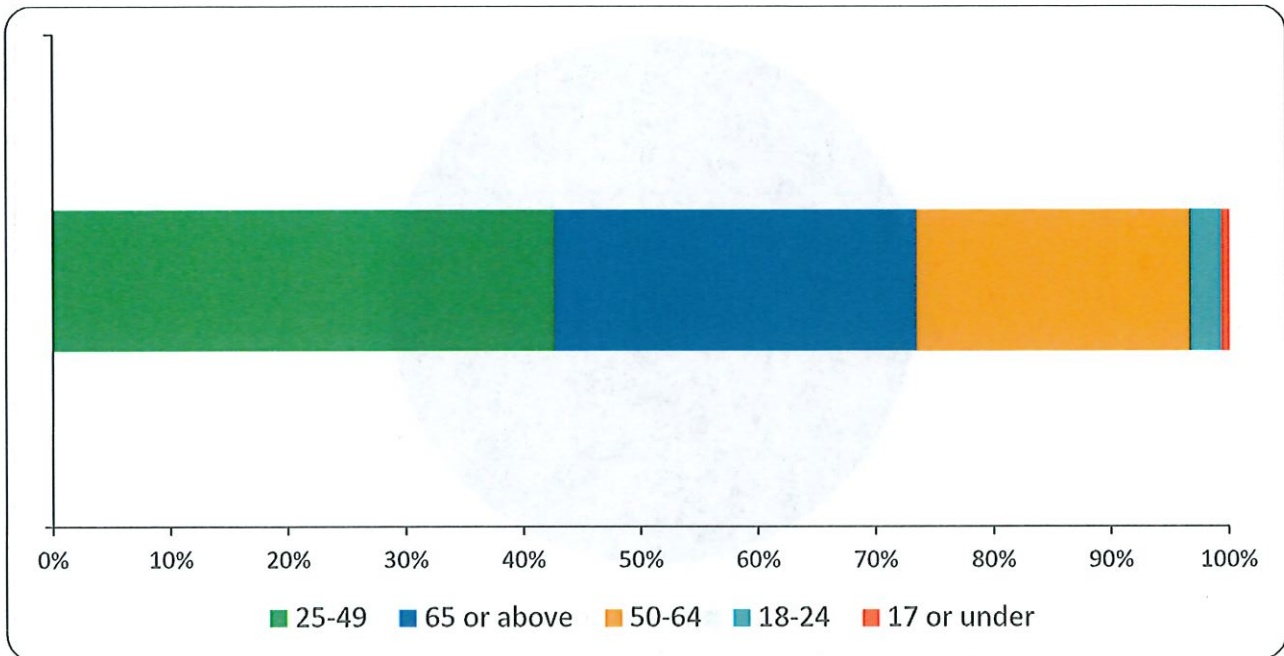
Text

Q12: Did you know that you can find real-time RTA bus information on the Transit App (transitapp.com), Google Maps, and Apple Maps?



ANSWER CHOICES	RESPONSES	
Yes	38.56%	59
No	61.44%	94
TOTAL		153

Q13: Please indicate your age:



ANSWER CHOICES

RESPONSES

25-49

42.58%

66

65 or above

30.97%

48

50-64

23.23%

36

18-24

2.58%

4

17 or under

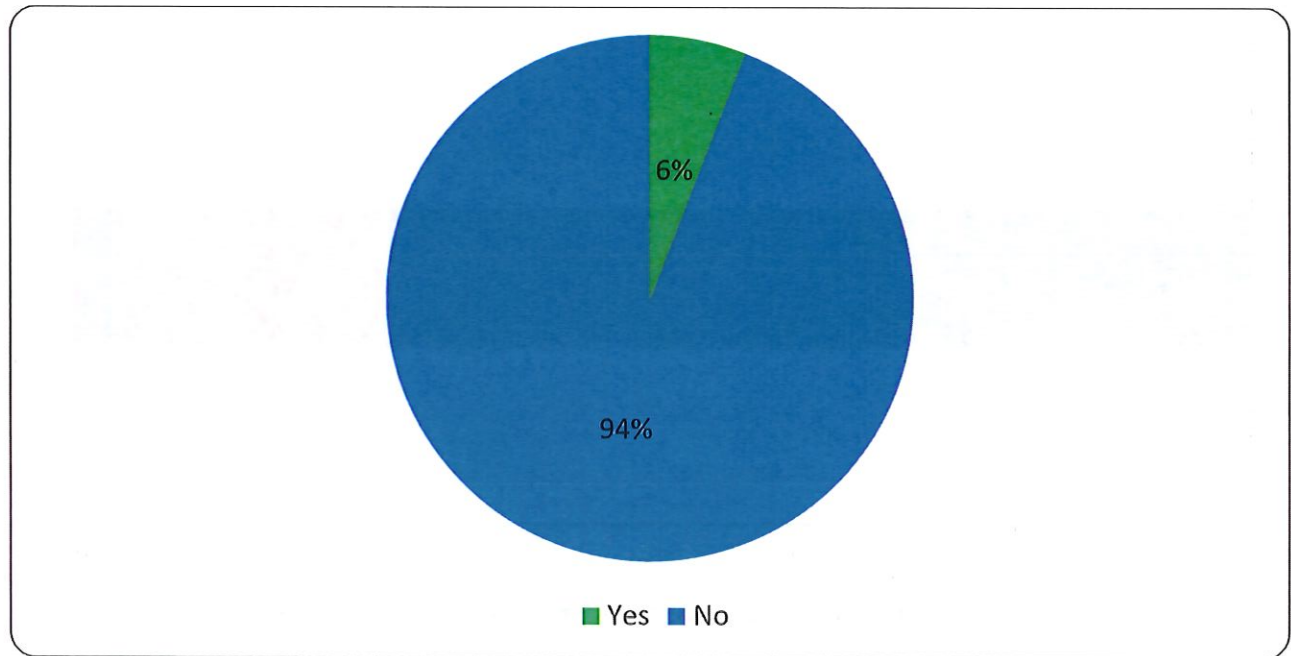
0.65%

1

TOTAL

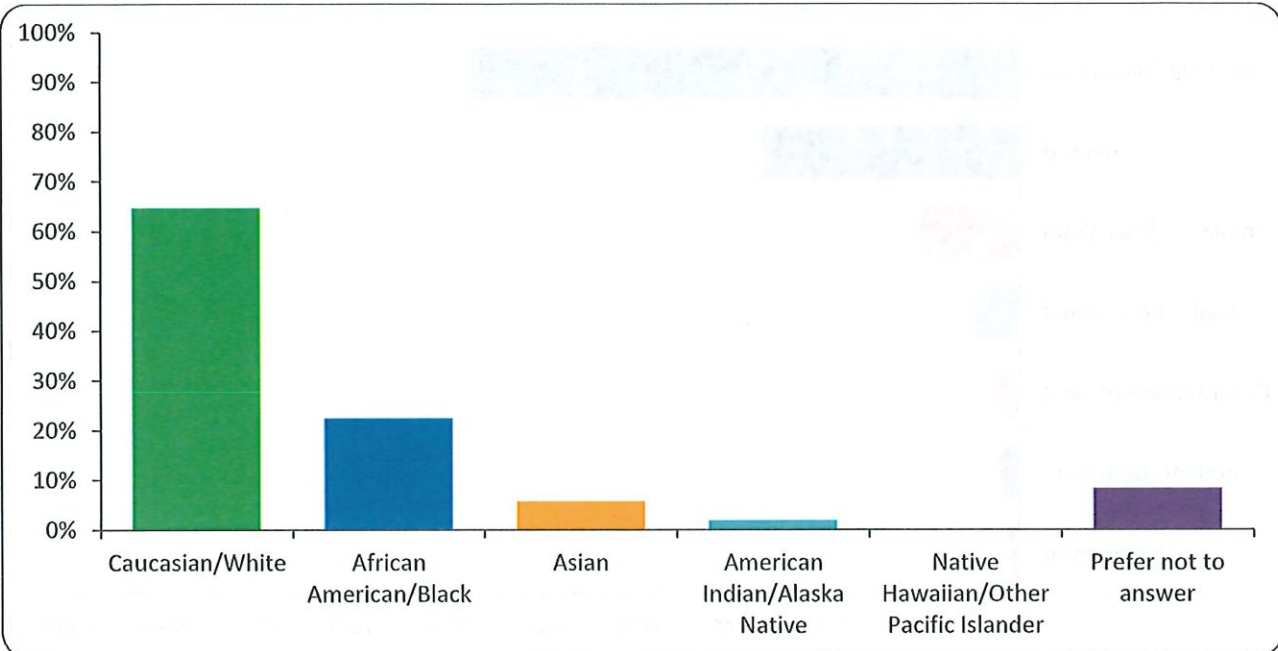
155

Q14: Are you of Hispanic or Latino origin?



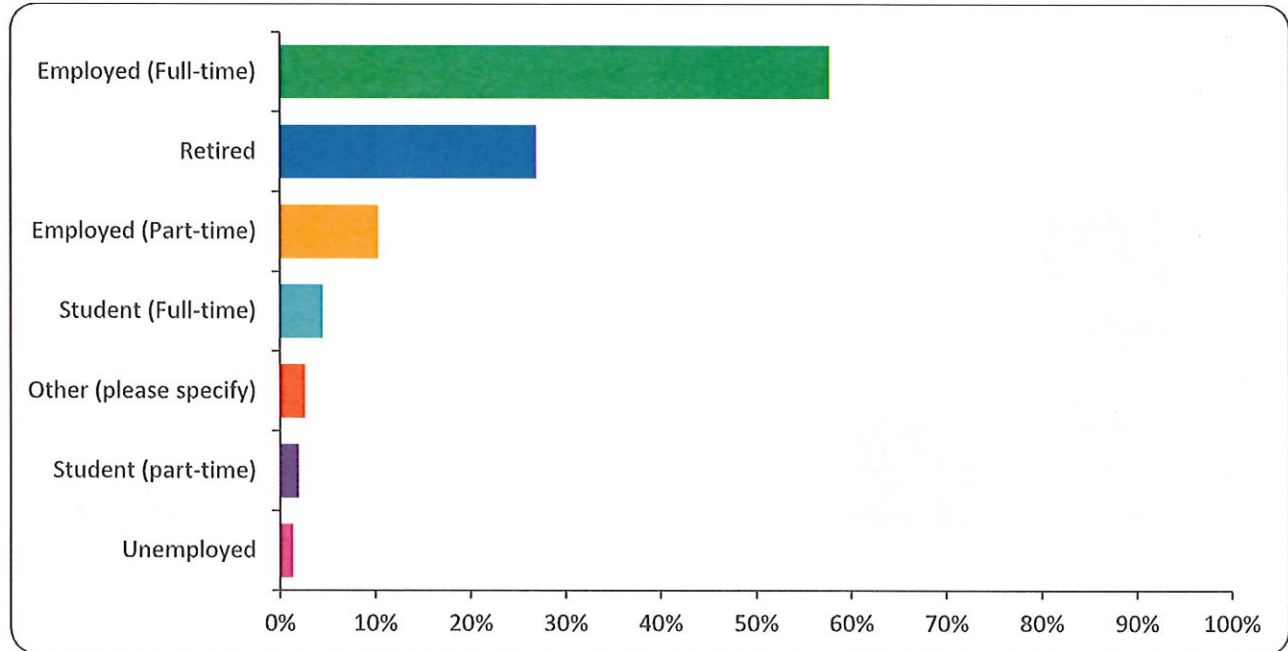
ANSWER CHOICES	RESPONSES	
Yes	5.88%	9
No	94.12%	144
TOTAL		153

Q15: How would you classify yourself? (check all that apply)



ANSWER CHOICES	RESPONSES	
Caucasian/White	64.74%	101
African American/Black	22.44%	35
Asian	5.77%	9
American Indian/Alaska Native	1.92%	3
Native Hawaiian/Other Pacific Islander	0%	0
Prefer not to answer	8.33%	13
TOTAL		161

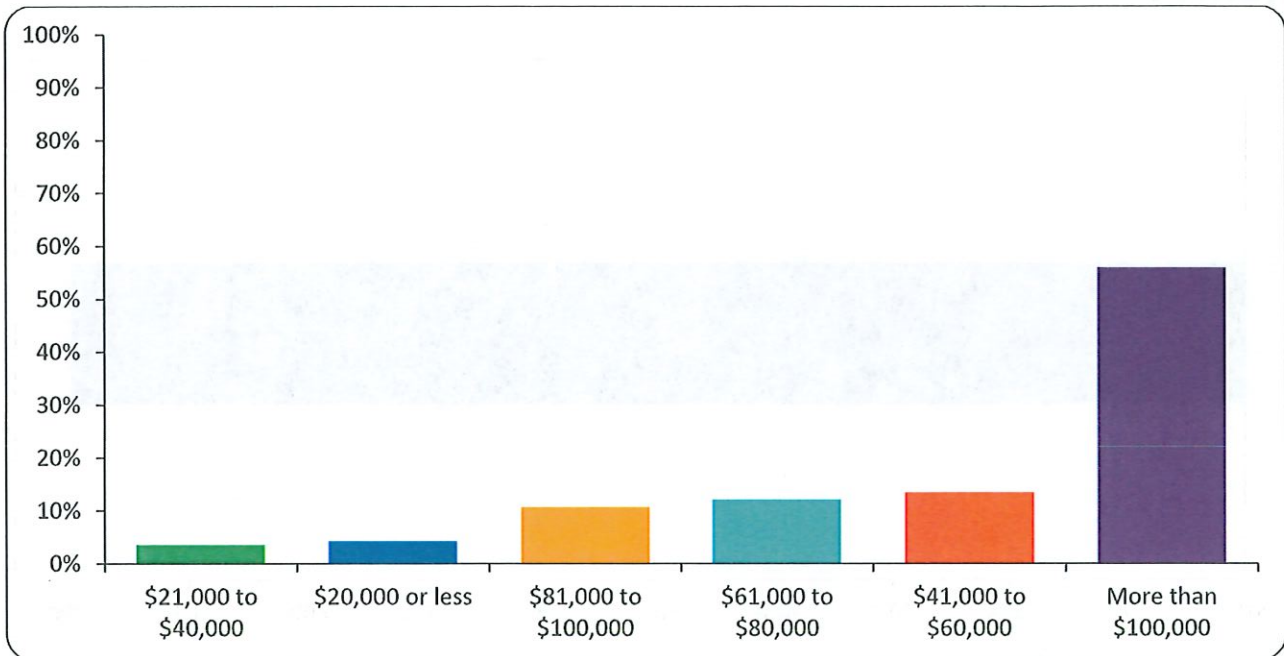
Q16: What is your employment status? You may check more than one.



ANSWER CHOICES	RESPONSES	
Employed (Full-time)	57.69%	90
Retired	26.92%	42
Employed (Part-time)	10.26%	16
Student (Full-time)	4.49%	7
Other (please specify)	2.56%	4
Student (part-time)	1.92%	3
Unemployed	1.28%	2
TOTAL		164

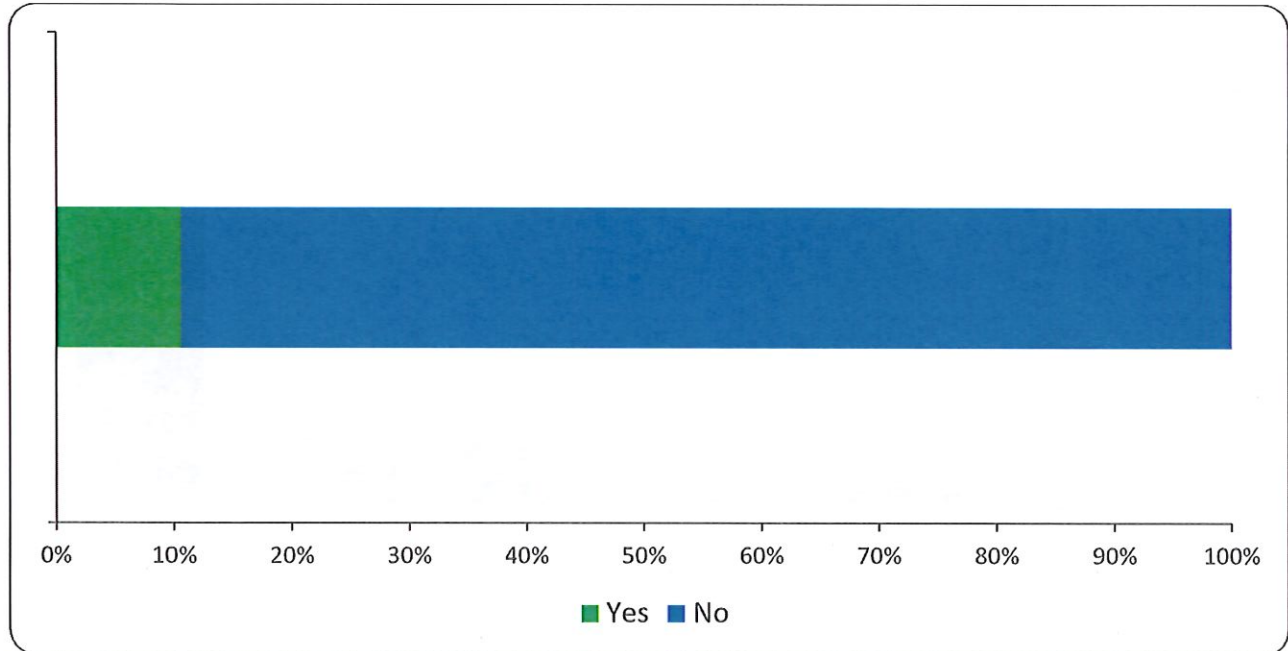
Other: Domestic Engineer 2, Disabled 1, Self-Employed 1

Q17: What is your annual household income?



ANSWER CHOICES	RESPONSES	
\$21,000 to \$40,000	3.55%	5
\$20,000 or less	4.26%	6
\$81,000 to \$100,000	10.64%	15
\$61,000 to \$80,000	12.06%	17
\$41,000 to \$60,000	13.48%	19
More than \$100,000	56.03%	79
TOTAL		141

Q18: Do you speak a language other than English at home?



ANSWER CHOICES	RESPONSES	
Yes	10.53%	16
No	89.47%	136
TOTAL		152

Languages Spoken at Home

Amharic (x2)
 English
 Japanese
 Marathi and Hindi
 Portuguese, Spanish and French
 Russian
 Spanish (x5)
 Thai

Q19: Please provide any comments you may have regarding public transportation:

Howard County needs to plan a central multimodal transit station that provides links to Baltimore, BWI and DC via frequent, dependable, rapid service. Rail preferred, but some integration with both adjacent metropolitan areas is essential for the economic future of Howard County.

Train service from Columbia to either (or both!) downtown dc and/or Baltimore should be a top priority for the region.

I haven't used it in my lifetime but might give it a try if it were available.

There are far too few bus routes to get around Columbia. It should be easier to get around Columbia by bus without going through the mall. Buses should come every 10 minutes or quicker. It should be easier to get to a MARC station by bus from my home. I should be able to take the bus to work when it's essentially only a couple miles down the same busy street right next to my home.

It needs to be handicap friendly, as well as easy for elderly to use.

Bus stops to/from old Ellicott City, to/from Taylor Village.

I did use public transit for several months commuting into Baltimore. It took over an 1 1/2 hours with four transfers. Still required car to reach first public stop to access.

Sorry but I have no intention of using public transportation.

Thank You

RTA busses are important for the community for those who can't drive.

I would like better transportation into Baltimore and DC from the counties (specifically Howard County), similar to the metro system from the neighboring counties into DC.

Busses are nice for out of way areas or areas with few riders, i think it's time the US catches up to European and Asian countries in the terms train and rail services. It's bad when I can go to a foreign country, not speak the language, and easily figure out how to ride the local transportation as well as feel safe and efficient doing so compared to in the US. I would like to see Howard County on the forefront of this in the US.

The development of light rail transportation would be a blessing

For 9/10, why not ask current public transportation users why we don't use public transportation MORE? For me, that's infrequent and slow service. An extension of MoCo's Flash BRT up US-29 would be useful to me.

I would like to have RTA transportation. This is for my daughter who a disability

Would be interested in using "public transportation@, directions not very clear/user friendly.

Would like to have a metro station or more buses in the Columbia, Maryland area so that public transportation is easier to use and have an an option.

Please extend Metrorail to Laurel, BWI, Columbia and Olney

Has any thought or planning been put in place for connecting across the Rt 103 corridor from Rt 1 to Long Gate with public transportation? Currently there are no options to connect or transfer to RTA which services Long Gate and goes to the Ellicott City Walmart, Senior Center/library and Columbia Mall. There are numerous residential communities and 55+ housing abutting Rt 103 that would benefit from this option. It seems a East-West route makes sense to connect with all the other RTA routes available one could transfer to, particularly the Ellicott City one.

Please make getting into DC & Baltimore via public transit more accessible. Connecting a dedicated BRT or light rail from Silver Spring metro up 29 is a dream of mine

Not convenient for my transportation needs.

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

I love if bus would've come out Bowie Md

I think public transportation is very important.

No interested in flexible public transportation in my neighborhood.

It is tough to take public transit for a 2 hour and 15 min drive when a drive takes ~25 min.

Improved access and routes need to be improved in the Northeast area of Elkridge. RTA services need to be a direct partner with the school bus system. RTA should take over bus stops for high school students in areas where it is feasible, and the RTA infrastructure is developed i.e. Columbia. I would like to see a real partnership form which could then promote ridership of students as they become adults as they are familiar and comfortable with the bus system. They are also a generation of students who want to promote environmental interventions so may be more likely to choose transit over cars.

Thanks for the survey. As we get older, we are interested in transit for elders. We would use Neighbor Ride and other local transit as available.

We stayed home during Covid and I haven't started going out very much yet

Public transportation in suburban areas like Columbia are a waste of tax payers money. I rarely see a bus with more than 2 people on it. With Uber and Lyft, people have safer and affordable options.

Public transportation has never been something I'm open to do. It looks unsafe and many parents don't seem to realize how bad their teenagers can be. The transit options seem overall unsafe.

I would so love it if we had a bus that went to DC directly and to Towson University. Also, if we would could get a metro station service here in Columbia, that would be awesome! It would eliminate all the congestion and provide Howard for future growth.

I live and work in Columbia, on opposite sides of the Columbia area (Wilde Lake to Columbia Gateway). I like the idea of taking the bus to work every morning but the current route (406) is too infrequent and takes too long for it to be convenient for me.

I would really love to use public transit but past experiences have been very negative (tons of long stops that make a short trip take forever, buses not on schedule, buses not coming frequently).

It would be nice if there was a service to keep bus stops clean. People that board buses near Millrace Ct in Columbia always leave food & drink trash all over the ground, as well as abandoned shopping carts.

Really need Bus rapid transit on Route 29!

I come from NYC where bus and subway were well thought out. Our red, orange, etc. lines make no sense. We do not have enough routes to make it convenient.

Let's integrate bikes into public transit

More routes along Route 103. Please make real bus stops in all stop locations. Some are just a sign with no sidewalk or pedestrian infrastructure to them.

More frequent and longer hours for residents who are out later.

Public transit and pedestrian safety are cornerstones to more livable, sustainable communities for everyone. Howard County and the entire state of Maryland should be focusing efforts on reducing car emissions/usage, increasing walkability and public transit availability around HoCo and into DC and Baltimore. Bus frequency should be increased, driver wages need to be higher to not only make the role attractive but retain good drivers. An effort to shut down smaller roads to cars and allow/encourage pedestrian usage. Increase taxes on privately-owned vehicles over a certain weight/size/age to discourage the use of large automobiles (more associated with car accidents, especially those involving pedestrians) as well as cut back on the amount of high-fuel usage. Use those taxes to go toward funding walkable streets and cities, decrease bus fare and improve the conditions of public transportation currently in use.

We have not considered public transportation, even though it might be to our advantage. Service must be the same no matter where you reside in Howard County. Drivers should be respectful and on time (have had clients late or no show due to transportation no show and no call).

Would like to be able to connect to MTA routes by riding RTA more easily in the Ellicott City area

None

Please more protected (!!!!) bike lanes and micro mobility such as scooters and ebikes for the community to borrow. I would also love to see a community rental car so we can get rid of our car.

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

No public transport in HC

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

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

I would like to use transit as an environmentally friendly alternative to driving in Howard County between home and work, but service is too sporadic, and there are no direct routes North and South on Snowden River Parkway.

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

I have and always takes RTA mobility, the dispatch is unprofessional and bad customer service, they turn the phones off when they don't feel like working. Also leave you on hold 10 plus minutes

RTA needs to expand service as on a more frequent basis and expand routes to feed into MTA and Metro

Needs better reliability. I know people that would use the service, but they cannot trust the bus will arrive.

I rode the 503 bus five times this past Fall. 2 or 3 out of 5 times there was no bike rack. The bike rack should be more reliable. I would like to have an efficient way to go by bus from Kings Contrivance to Columbia Crossing/Dobbin Center. I would like the RTA service to run more frequently. It would be nice to have a stop on the 503 at the corner of Guilford and Gerwig. The existing stops in each direction are both uphill from that intersection.

Timely high frequency regional connections are vital

Have no way of getting to work on weekends or weeknights. RTA paratransit does not run in my area at those times and will never take my brother to shopping, restaurants, library or anywhere else that is not work/medical/sr center. My brother has NO social life because he can't get anywhere unless I drive him which is VERY difficult.

I'm so grateful for the RTA Mobility bus. The drivers are generally on time and very helpful. The only suggestion I have is that I wish the Columbia Cab drivers you sometimes use had "Columbia Cab" signs on the outside of their cars.

many seniors and other non-driving individuals along the Rt1 corridor (specifically in Laurel) continue to express a desire to get to Giant Food in Elkridge but the busses don't run to that location. Thank-you for your consideration

MD public transportation site is EXTREMELY confusing compared with WMATA. Public transportation does not seem to be a priority in Howard County, as there aren't even many sidewalks outside of Columbia. Also, I have to point out the irony of planning multiple public meetings, most of which are not accessible virtually, held in destinations not necessarily accessible by existing transportation, in the evening -- excluding the very population you purport to seek input from. Either by design or due to ableism, outcome is same either way. I used to take the bus from Rogers Ave to North Ridge Road for my part-time job after school, but the bus service was unreliable.

RTA service to Maple Lawn Park & ride

We need more public transit to meet carbon reduction targets and reduce traffic-related injuries and fatalities.

Many of my friends have to scramble to find transportation to UMBC. Howard county is very close to the campus but there is no realistic, efficient way to get there via public transportation.

As someone who has a car and can afford to drive it anywhere, I need, I would still love to be able to take transit places if it was not as inconvenient. I bike and walk when I can, but for farther places like DC or Baltimore, it takes far longer for me to take a bus or train than to take my car so it's just not worth it to me. For other trips like if I'm going to downtown Columbia and it's too cold for me to bike the whole way, I would still consider transit if it was free. I pay more for my partner and I if we took a bus there vs driving my own car. We took the bus a few times during Oct when there were no fares just because although it took about 5 min longer, we didn't need to pay and it was more environmentally friendly. It was still somewhat inconvenient though since the bus service isn't very frequent so we had to plan around when we would wait for the bus and wait quite a while since if we missed it, we would need to wait even longer. We also go to DC for leisure/tourism instead of work, so the commuter busses are not relevant to us.

i wish we would have more available public transportation everywhere and more transit-oriented developments to reduce cars on the road and make sure public transportation is reliable

RTA is a good system and has made lots of progress in the past few years, but it still desperately needs more frequent service



Howard County Maryland
Department of Planning and Zoning

3430 Courthouse Drive, Ellicott City, MD 21043 (410) 313-2350

PERMITTED USE CONFIRMATION APPLICATION

This application is used to request a letter from the Department of Planning and Zoning which confirms that a use is permitted by the Howard County Zoning Regulations at a specific location. Please provide the following information and submit to 3430 Courthouse Drive Ellicott City, MD 21043-4350.

Applications are typically processed within 5 business days.

Applicant Information

Name: Kalena Griffin Costa

Address: 2066 st james rd

City: marriottsville

State: md

Zip: 21104

E-Mail Address: kalena@highlandplayschool.com

Phone Number: 917-434-1095

Property Information

Property Address: 133432 clarksville, highland, MD 20777

Tax Map: 040

Grid:

Parcel:

Lot:

Business Information

Business Name: highland play school

Existing Business Type (ex. Retail, office, etc.): daycare

Proposed Business Type: daycare

Sq. ft.: 4,143

Employees: 3

Students: 0

For Department of Planning & Zoning Use

Zoning District: _____ **Use Category:** _____

FDP # _____ **SDP#:** _____

Comments: _____

Reviewed by: _____

PUL - _____ - _____



HOWARD COUNTY OFFICE OF TRANSPORTATION

3430 Courthouse Drive ■ Ellicott City, Maryland 21043 ■ 410-313-0702

Bruce Gartner, Administrator

bgartner@howardcountymd.gov

FAX 410-313-3467

TDD 410-313-2323

Memorandum

To: Brandee Ganz, Chief Administrative Officer, Department of County Administration

From: Bruce Gartner, Administrator, Office of Transportation 

Date: October 31, 2023

Subject: Supplement to Testimony in support of Council Resolution No. 182-2023

There is no fiscal impact to **Council Resolution No. 182-2023**.

Every five years, on behalf of Howard County, the Office of Transportation (OOT) prepares a Transportation Development Plan (TDP) for submission to the Maryland Transit Administration (MTA) of the Maryland Department of Transportation. Through the TDP process, the RTA & Howard County identify and describe transportation improvements that further Howard County's transportation goals. The TDP is utilized to support funding requests for operating and capital grant funds that subsidize Howard County's portion of the expenses for the Regional Transportation Agency of Central Maryland (RTA), which provides the County's local bus and paratransit service. The TDP does not obligate Howard County funds, but makes recommendations for future spending and includes estimates of the capital and operating costs associated with various recommendations.