Eastern Panhandle Transit Authority

Hagerstown Eastern Panhandle MPO

Transit Development Plan

FY 2020

Transit Development Plan created by:

and

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1. Introduction

The 2020 Eastern Panhandle Transit Authority (EPTA) Transit Development Plan (TDP) is an opportunity to review the existing services that EPTA provides and reassess the transit market in which it operates. Much has changed since the 2015 TDP effort, which resulted in a drastically altered transit system for the agency and an unprecedented growth in service utilization across the system. The efforts to modernize the EPTA system will continue through this effort, with the hope that these recommendations will be similarly as impactful for the residents and employees who live and work within and beyond EPTA's service area, including the City of Martinsburg, Charles Town, Ranson, Shepherdstown, and Inwood, and hopefully soon, Spring Mills.

This effort includes a market assessment of EPTA's service area using a transit propensity tool which details areas that are likely to support transit services in Chapter 2: Market Analysis; a review of the existing EPTA bus routes, fares and rider programs, EPTA facilities and fleet, stop details and financial information, among other details, in Chapter 3: Existing Conditions; detailed service recommendations per route, including an illustration of the recommended alignment, service level information and justifications for the recommended changes in Chapter 4: Service Recommendations; details on capital investments in Chapter 5: Capital Recommendations; the expected financial impacts to EPTA are presented, along with a priority list of recommendations and a proposed implementation plan, in Chapter 6: Costs, Priority, and Implementation; and a list of potential funding sources are provided through Chapter 7: Potential Funding Sources.

2. Market Analysis

The purpose of the market analysis is to help determine the different types of transit service that would be the most successful in the Eastern Panhandle Transit Authority (EPTA) service area. The market analysis uses four different transit indexes to determine where (geographically) potential transit origins and destinations are located and then a travel flow analysis to determine the connections needed between them.

2.1. Transit Need Analysis

In order to determine transit need in the EPTA service area, a transit need analysis was performed. This analysis uses a number of different demographic factors to determine geographic areas of high transit origin and destination need. The analysis consists of four transit indexes: Commuter, Transit-Oriented Populations, Employment, and Service/Activity. These four indexes combine to show two types of transit need: all-day service and peak service. The analysis focuses on identifying where high concentrations of commuters, transit-dependent populations, jobs, and services are located. The analysis was performed on all of the jurisdictions in Jefferson and Berkeley Counties.

Each index is comprised of weighted categories, and each weighted category is comprised of individual data sets obtained from the 2013 – 2017 American Community Survey (ACS) or the Longitudinal Employer-Household Dynamic (LEHD) at the block group level. Weighting is based on the expected overall contribution of each category to the overall index. Data sets typically include both raw totals and densities to ensure the most comprehensive scoring. The result for each index is a score from 0 to 100 for each block group in Jefferson and Berkeley Counties.

2.1.1. All-Day Service Need

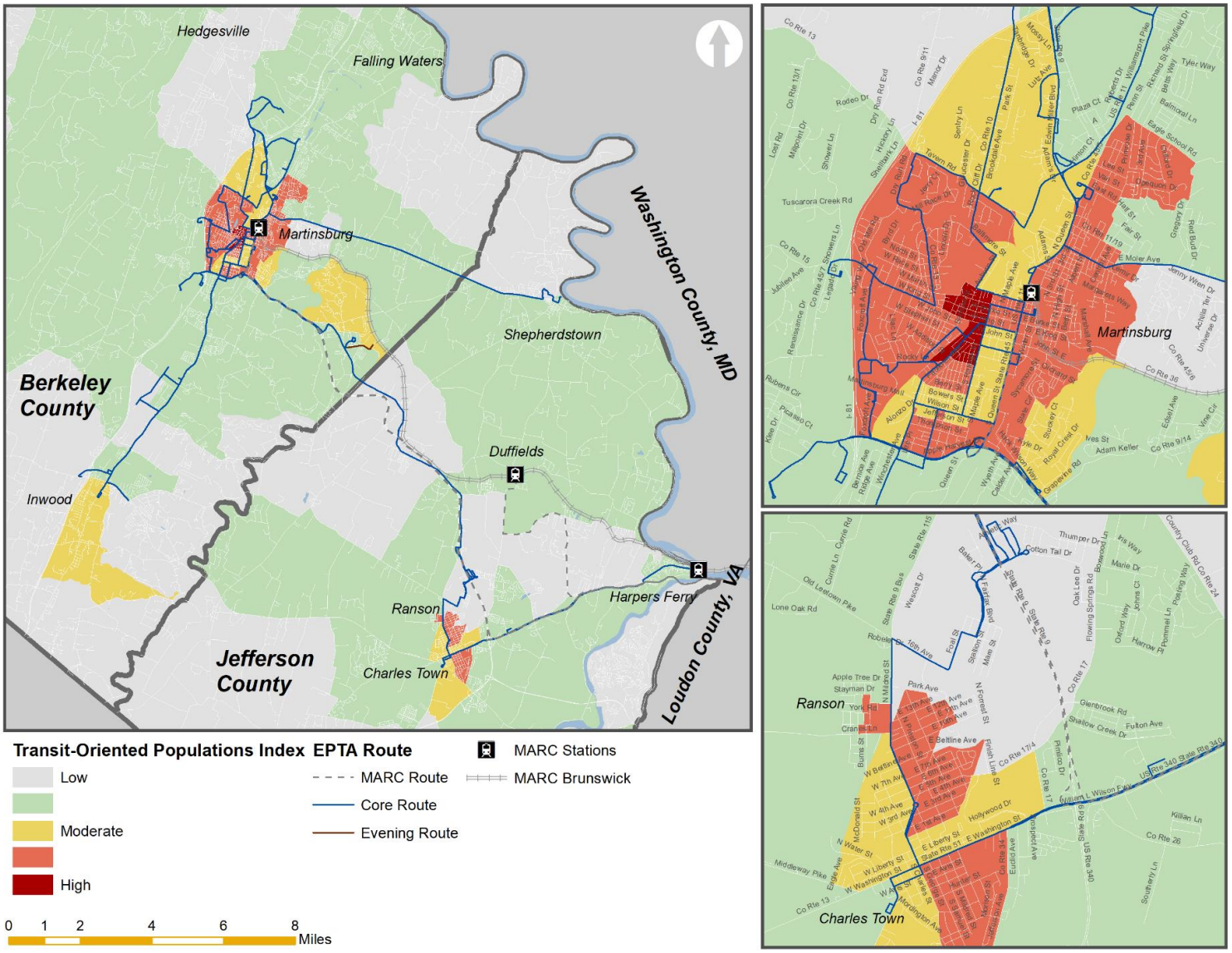
The need for All-Day Service is determined using two transit indexes: the Transit-Oriented Population Index and the Service/Activity Index. When combined, these two indexes show where populations that are more likely to use transit live and what non-work destinations transit riders will likely want to access.

Transit-Oriented Population Index

The transit-oriented population index consists of six categories: age, income, vehicle ownership, disabled population, and minority population. The data sets that contribute to these categories are all indicative of persons that are likely to be more reliant on transit. Therefore, this index is indicative of where transit-dependent populations live. The weights for each category are based on the projected impact of each in defining transit-oriented populations.

Figure 1: Transit-Oriented Population Index Results shows the results of a transit-oriented population index by census block group. The most significant concentrations of transit-oriented populations in the study area are located in the census block groups of downtown Martinsburg, Ranson, and Charles Town. The areas surrounding these downtowns also have moderate concentrations of transit-oriented populations.

Figure 1: Transit-Oriented Population Index Results

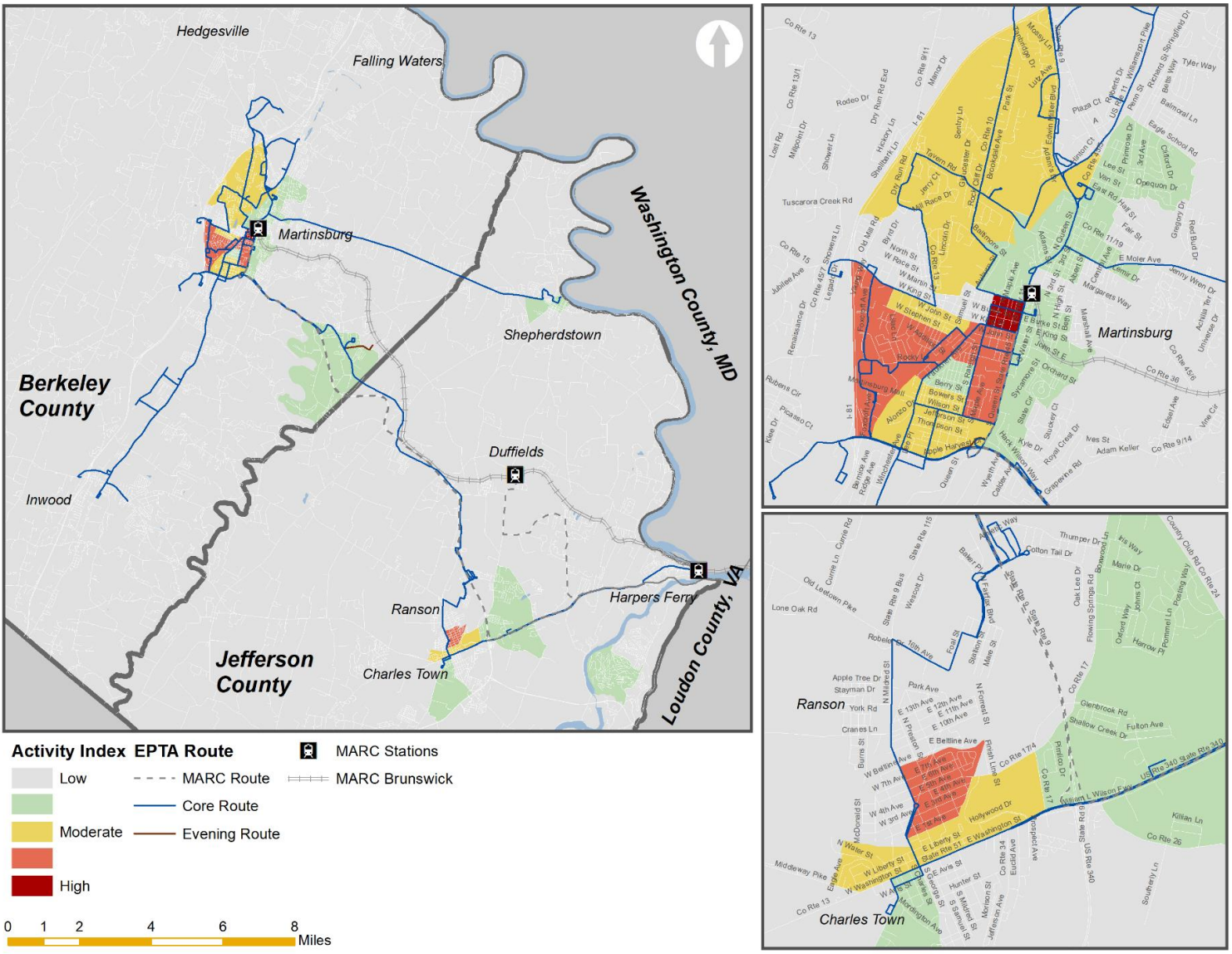


Service/Activity Index

The Service/Activity index has five categories: retail/restaurant, recreation, healthcare/social assistance, education, and government. These categories are weighted based on the typical trip purpose proportions for transit users. The data sets that make up these categories are employment in the sectors represented by these categories (i.e. the recreation category contains data sets from the entertainment sector and the recreation sector). The employment-by-sector data sets serve as proxies for how much travel demand businesses that fall into these sectors would produce, and therefore, this index is indicative of where people make non-work trips.

Figure 2: Service/Activity Index Results illustrates the results of the Service/Activity index by census block group. The highest concentrations of services in the study area are in downtown Martinsburg and the Foxcroft Towne Center Avenue/WV-45 area in Martinsburg, as well as moderate concentrations of services in northwest Martinsburg near Berkeley Medical Center. There are also concentrations in Charles Town along WV-51, near the Jefferson Medical Center in Ranson, and around the Hollywood Casino at Charles Town Races, where a number of retail and restaurant establishments are located. While the Commons in Martinsburg does not show up, this is likely only because this development is located in a large block group.

Figure 2: Service/Activity Index Results



2.1.2. Peak Hour Service Need

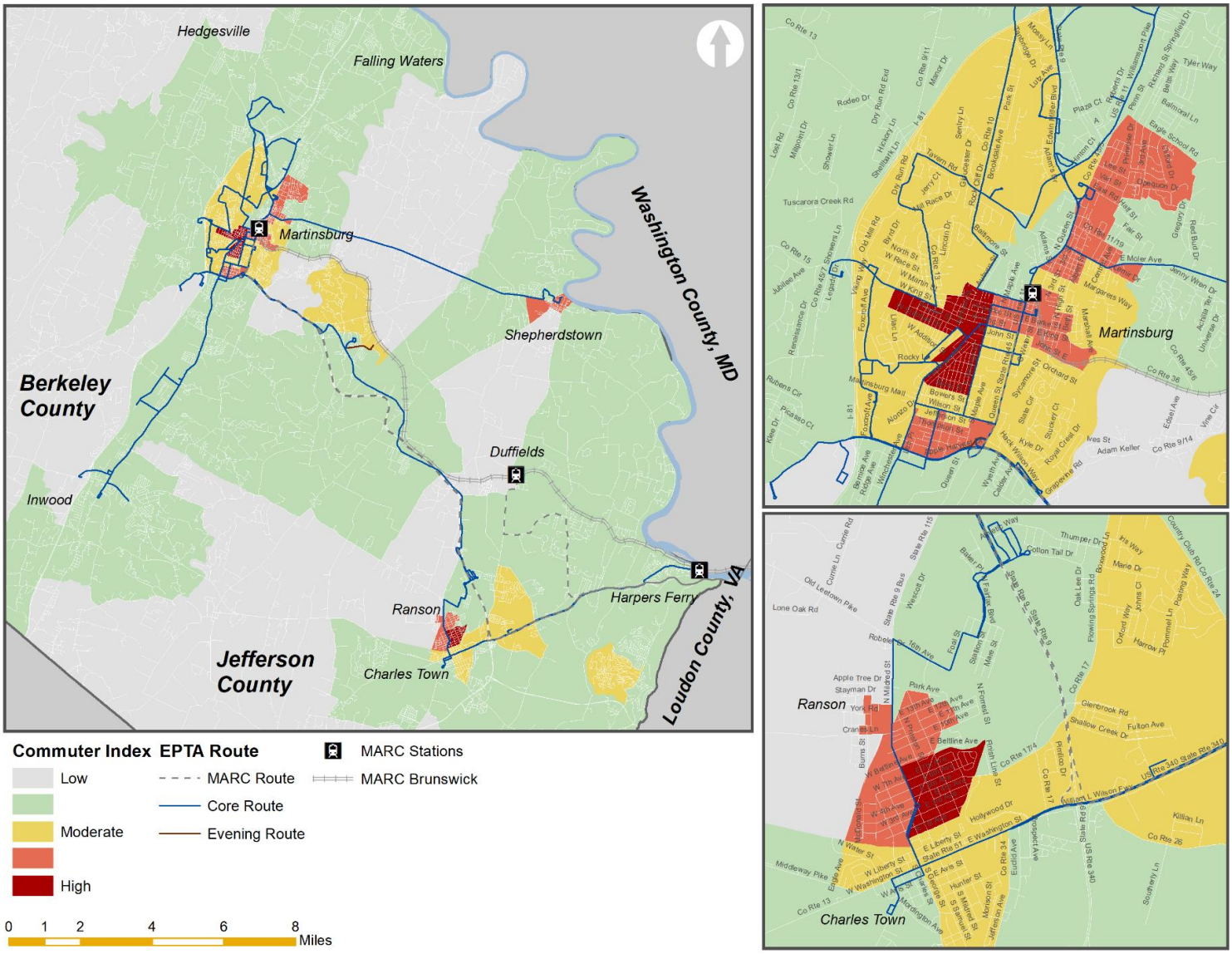
The need for Peak Hour commuter service is determined using two transit indexes: the Commuter Index and the Workplace Index. When combined, these two indexes show where commuter populations live and work.

Commuter Index

The commuter index combines employed persons, commuters, and transit commuters. This index is indicative of where traditional peak hour commuters live, and where those that currently use transit to commute live.

Figure 3 illustrates the commuter index results by census block group, where the concentrations of the labor force who are more likely to commute via transit are located. Similar to transit-oriented populations, there are high concentrations of commuters in Ranson, Charles Town, and Martinsburg. To a lesser extent, there are also concentrations of commuters near the VA Hospital in Berkeley County and on the eastern side of Jefferson County along US-340 and WV-9.

Figure 3: Commuter Index Results

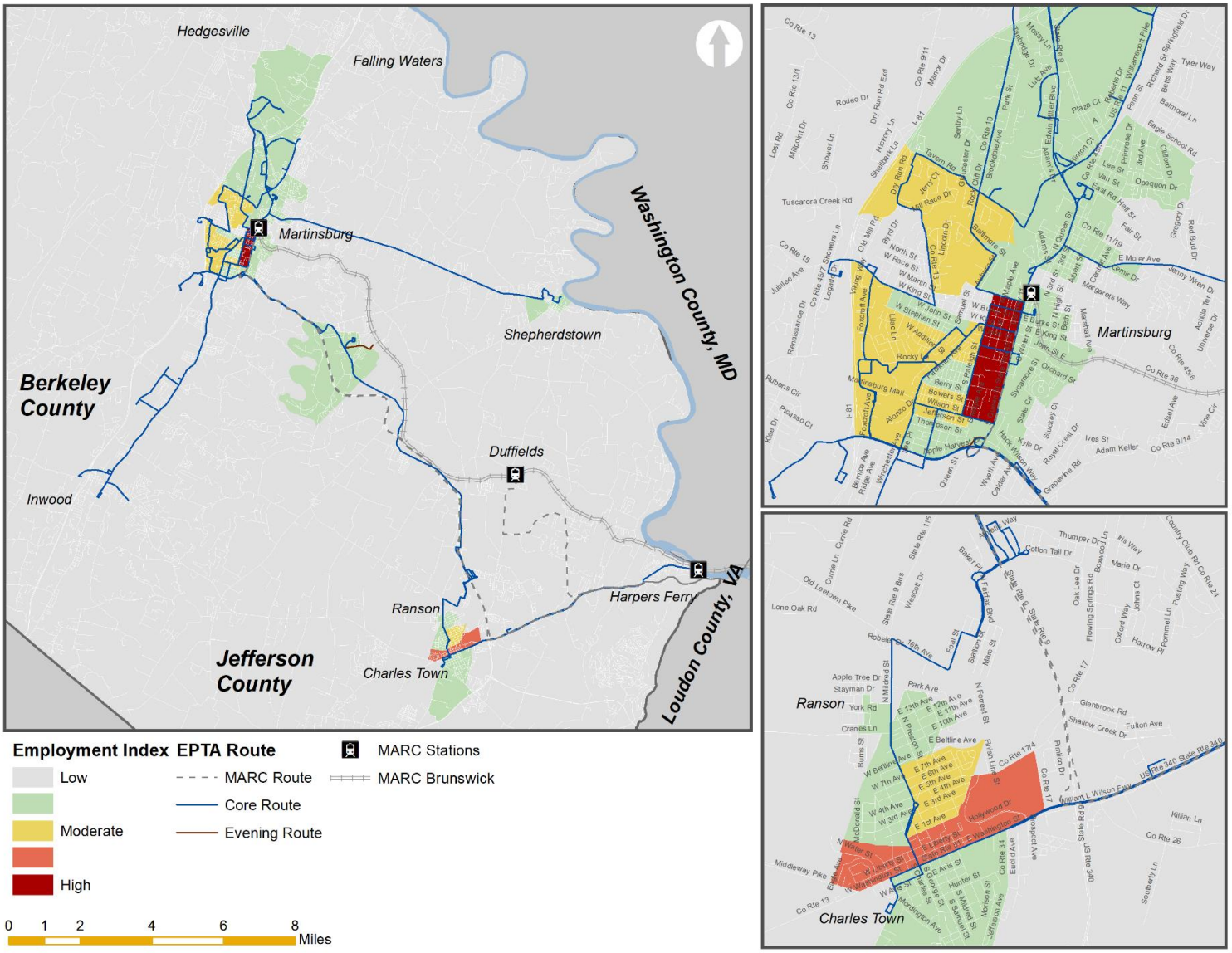


Employment Index

The Employment index includes total employment and employment density. This index is indicative of where people commute for work purposes.

Error! Not a valid bookmark self-reference. illustrates the results of the Employment index by census block group. The highest concentrations of employment in the study area are found in two main clusters: Martinsburg and Charles Town. In Martinsburg, there is a large cluster of businesses in the downtown area blocks bounded by W. Race Street, Queen Street, Wilson Street, and Raleigh Street. There is also a concentration of employment around the mall in Martinsburg. In Charles Town, there is a high concentration of employment north of WV-51 and around the Hollywood Casino at Charles Town Races and adjacent retail and restaurants.

Figure 4: Employment Index Results



To supplement the Employment Index, state workforce data was also analyzed to see if the same geographic concentrations of employment were present (**Figure 5**: State Workforce Employment Data, 2019). Given that this data is at the individual employer location level it is much more fine-grained and therefore highlights additional areas of high employment density - particularly around the Cumbo Yard Industrial Park (Caperton Boulevard), Edwin Miller Boulevard in Martinsburg, The Commons in Martinsburg, and Augustine Avenue in Charles Town.

Figure 5: State Workforce Employment Data, 2019

2.2. Future Growth

In order to determine potential future changes in transit demand in the study area, projected growth in population and employment was analyzed. Household and employment projections for 2045 were developed for the Hagerstown/Eastern Panhandle Metropolitan Planning Organization (HEPMPO) Regional Travel Demand Model. The household projections by traffic analysis zone (TAZ) are illustrated in **Figure 6**, while employment projections are illustrated in **Figure 7**.

2.2.1. Household Growth

In Berkeley County, household growth is projected to be highest around the edges of the county, with the most growth taking place in the Spring Mills area near the Potomac River. Other areas of relatively high projected population growth are on the outskirts of Martinsburg. In Jefferson County, most growth is projected to take place around the edges of Charles Town and Ranson, particularly the areas just north of Charles Town and just east of Ranson. Most of the rest of the county is projected to have little or no population growth; however, there are several developers in the region either constructing or considering new residential developments that may be more impactful in future years.

2.2.2. Employment Growth

Figure 7 shows projections of employment growth (and loss) in the EPTA service area between the present and 2045. In Berkeley County, employment growth is projected to be concentrated along the US-11 corridor south of Martinsburg, with additional pockets of growth just north of the city and around the VA Hospital. This includes further expansions at Procter & Gamble and also a new Clorox manufacturing plant planned at the end of Corning Way just southwest of the regional airport. The rest of the county is projected for job losses or minimal gains.

In Jefferson County, employment growth is projected to be concentrated along Route 9 just north-east of Ranson, in and around an existing industrial park, as well as along the US-340 corridor in between Charles Town and Harpers Ferry. The rest of the county is projected for job losses or minimal gains.

Overall, some of the higher growth areas also show a need for transit service based on the transit needs analysis, including southwest Martinsburg, northeast Charles Town, and Spring Mills.

Figure 6: Projected Raw Household Growth from HEPMPO Model, 2017 – 2045

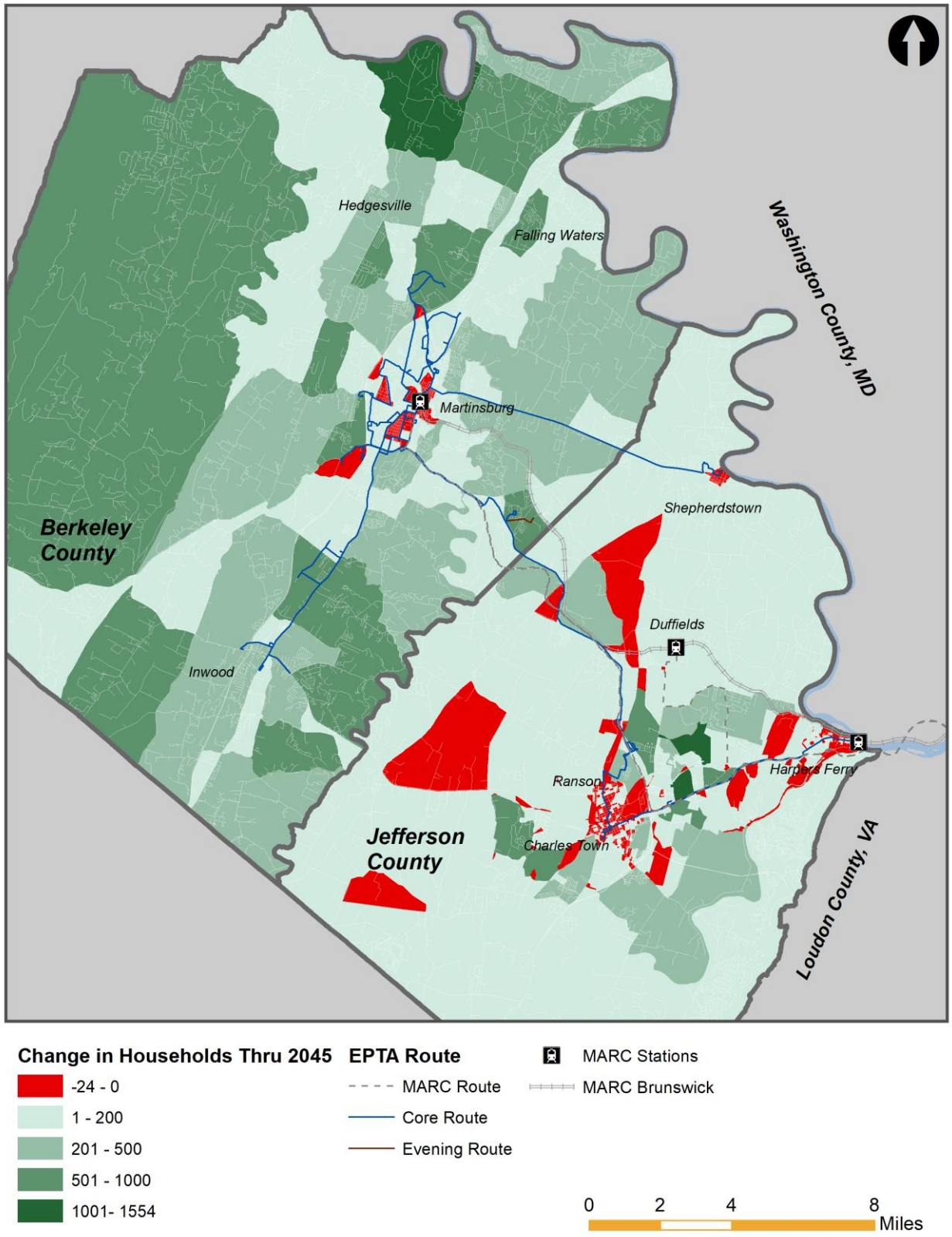
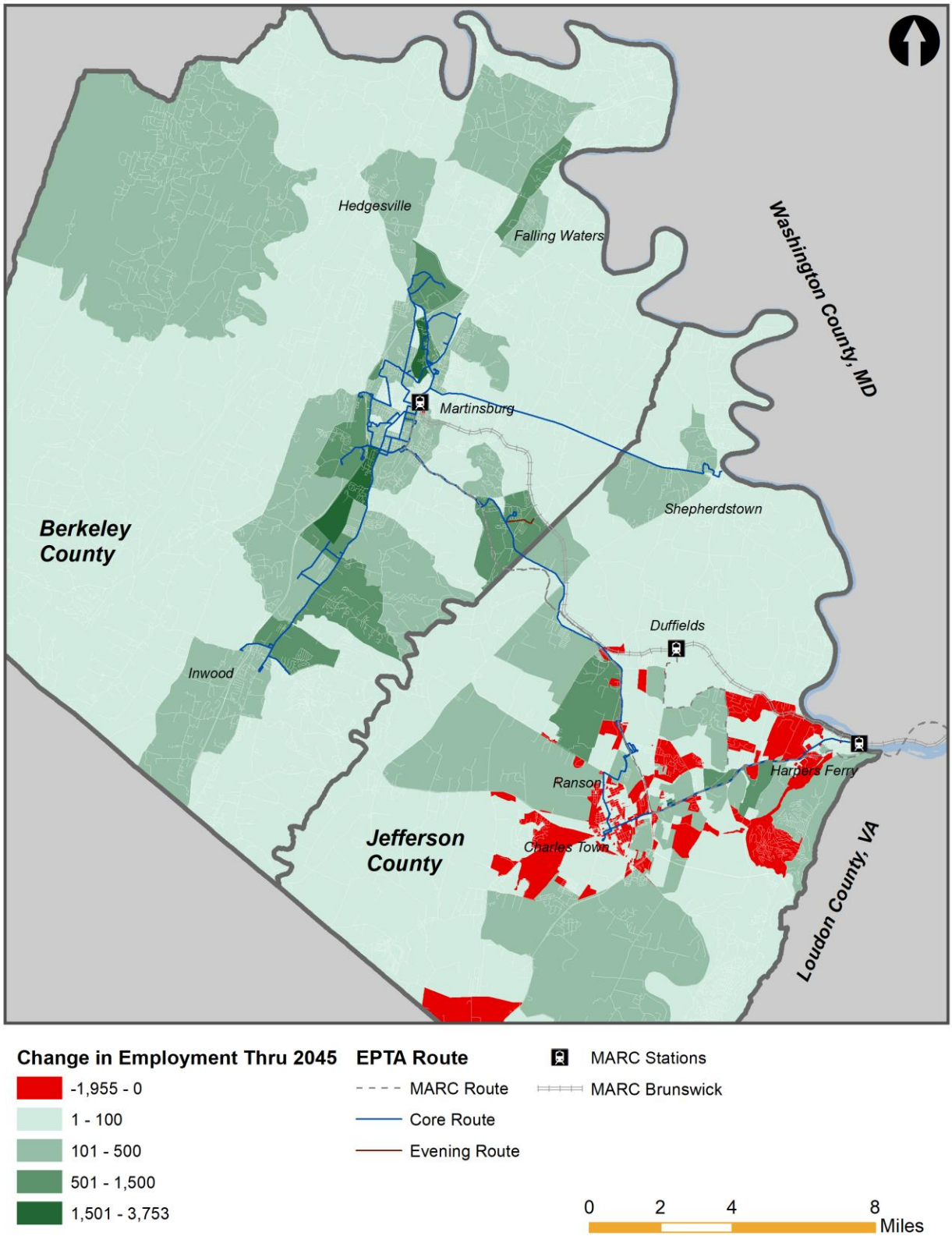


Figure 7: Projected Raw Employment Growth from HEPMPO Model, 2017 - 2045



2.3. Current Travel Flows

In order to further determine the demand for transit service in the EPTA service area, a travel flow analysis was conducted that combines travel flows from the LEHD Origin-Destination Employment Statistics (LODES) with the transit need analysis. Since LODES only captures work trips, it can only be effectively combined with the Commuter and Workplace indices. The LODES travel flows between block groups are coupled with these indices to gauge which connections warrant at least peak period commuter service.

LODES travel flows were analyzed for the EPTA service area using both 2015 data (**Figure 8**) and 2017 data (**Figure 9**). 2017 data lacks federal employment, and therefore lacks flows to the VA Hospital.

2.3.1. 2015 Travel Flow

Overall, home to work travel flows are highest in Jefferson County between Charles Town and Ranson and the areas just outside those towns (including to the southwest and southeast), as well as between Ranson and Shepherdstown. Travel flows in Berkeley County are highest in between the center of Martinsburg and the VA Hospital to its southeast, as well as between that hospital and the areas surrounding Martinsburg.

When paired with the peak period transit need analysis, demand for several new services becomes evident, including:

- Service to southeast Charles Town and southwest Charles Town.
- Service between eastern Berkeley County (along Route 51) and Martinsburg.
- Service between Martinsburg and Spring Mills/Hagerstown.
- Service between Shepherdstown and Charles Town/Ranson.
- Service to southwest Martinsburg, including the Delmar Orchards Area.
- Service between Clear Spring and Hagerstown.

While this analysis shows peak period demand, all-day demand would also exist in several of these areas, including southeast Charles Town, between Martinsburg and Spring Mills, and in southwest Martinsburg.

2.3.2. 2017 Travel Flow

The major differences between the 2015 data and the 2017 data stem from the fact that federal jobs are excluded from 2017 data and therefore the VA Hospital has significantly less flows ending at it. Additionally, the concentrations of flows to Hedgesville are slightly less, and the concentrations of flows to the Charles Town casino area are slightly more.

Figure 8: Travel Flow 2015

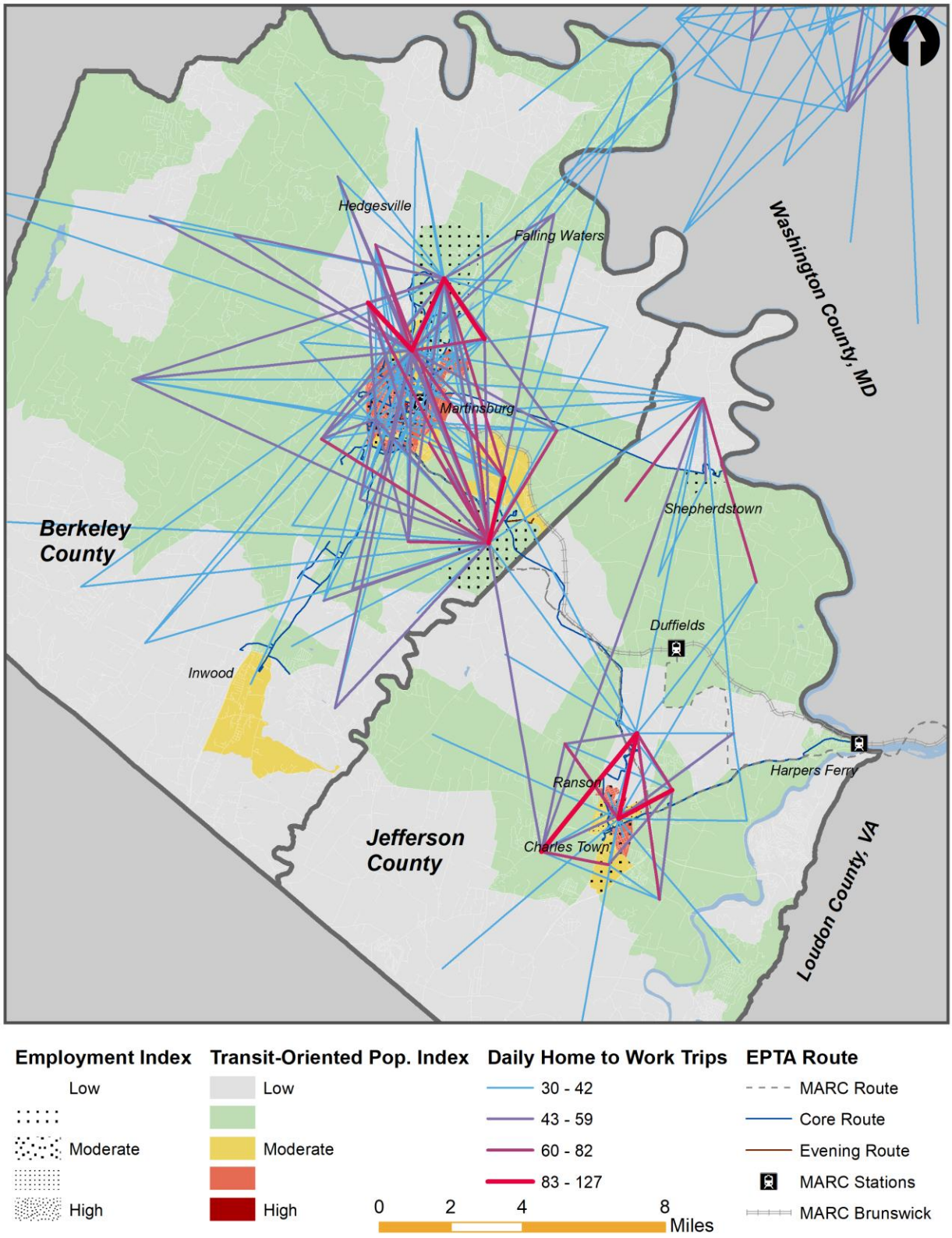
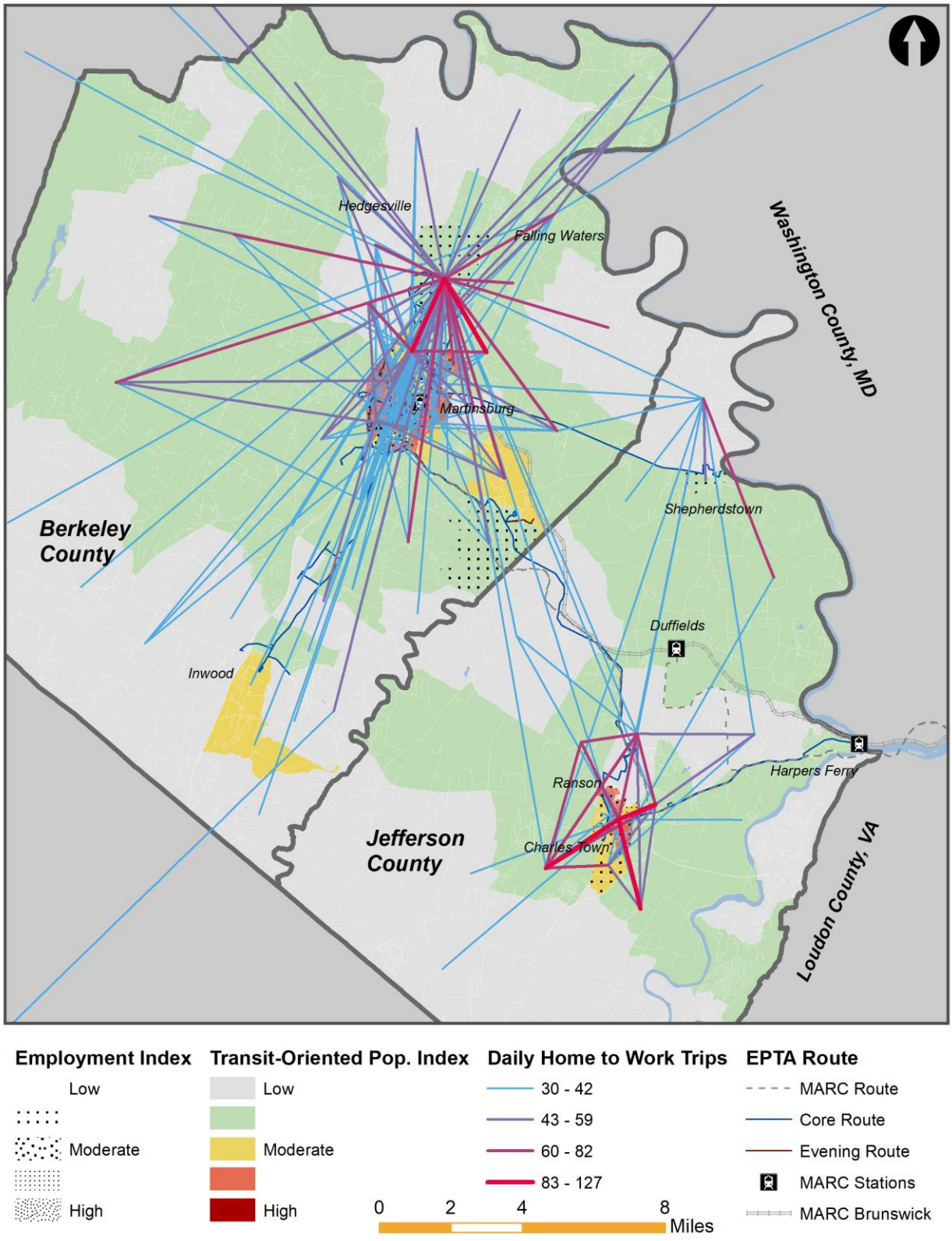


Figure 9: Travel Flow 2017



2.4. Key Findings

Overall, key findings from the Market Analysis include the following:

- There are high concentrations of transit-oriented populations and commuters in and around Martinsburg, Charles Town, and Ranson.
- There are also high concentrations of commuters along the US-340 corridor and WV-9 corridor in eastern Jefferson County.
- There are high concentrations of services and employment in southwest Martinsburg and in Charles Town.
- There are high concentrations of home to work travel to the VA Hospital, the Cumbo Yard Industrial Park, and the Charles Town casino area.
- There is significant household growth projected along the US-11 corridor and western portions of Berkeley County.
- There is significant employment growth projected along the southern US-11, WV-9, and US-340 corridors

3. Existing Conditions

This section describes EPTA's current service in terms of service levels, ridership, and overall performance. It also includes a gap analysis, which will form the basis for developing service and capital recommendations. The gap analysis is a comparison of existing service to the demand found in the market analysis and a summary of deficiencies found in the evaluation of existing service in this section.

3.1. Routes and Service Levels

EPTA currently operates 13 fixed routes and demand-response service. Deviations from fixed-routes up to ¾-mile can be scheduled the previous business day. EPTA limits the number of scheduled deviations on a given trip to ensure on-time performance is acceptable.

3.1.1. Fixed Route Service

Table 1 describes EPTA's current routes. Routes 25 and 30 only operate during weekday evenings and Routes 35 and 40 only operate on Saturdays and holidays. These routes generally cover all the major bus stops in the EPTA service area.

Table 2 and **Figure 10** summarize span of service and the most common headways for each route in the EPTA system. Most EPTA routes have hourly headways that vary slightly early in the day and late in the day. Spans of service varies by route, however most routes end service around 5:00pm when Routes 25 and 30 begin service.

Table 1: Current EPTA Route Descriptions

Route	From/To	Service Type
10	Caperton Station to Berkeley Medical Center	Weekday all-day
11	Caperton Station to VA Medical Center	Weekday all-day
12	Caperton Station to Department of Health and Human Services	Weekday all-day
14	Caperton Station to Commons/Foxcroft Towne Center	Weekday all-day
16	VA Medical Center to Ranson and Charles Town	Weekday all-day
18	Gabes to Inwood Plaza	Weekday all-day
19	Caperton Station to Caperton Industrial Park	Weekday peak only
20	Charles Town to Harper's Ferry	Weekday all-day
25	Martinsburg Circulator	Weekday evening only
30	Martinsburg Circulator	Weekday evening only
Shepherd	Shepherd University Circulator	Weekday, school only
35	Caperton Station to Berkeley Medical Center and VA Medical Center	Weekend and holidays only
40	Caperton Station to Commons	Weekend and holidays only

Table 2: Service Levels by Route

	Weekday					Saturday/Holiday				
Route	Beginning of Service	End of Service	Minimum Headway	Maximum Headway	Average Headway	Beginning of Service	End of Service	Minimum Headway	Maximum Headway	Average Headway
10	7:00 AM	5:24 P.M.	60	125	71	-	-	-	-	-
11	9:20 AM	4:24 P.M.	10	80	53	-	-	-	-	-
12	8:00 AM	5:45 P.M.	40	150	70	-	-	-	-	-
14	6:00 AM	7:23 P.M.	20	90	56	-	-	-	-	-
16	5:40 AM	5:24 P.M.	30	121	63	-	-	-	-	-
18	7:45 A.M.	3:52 P.M.	60	60	60	-	-	-	-	-
19	4:50 A.M.	6:45 P.M.	10	60	39	-	-	-	-	-
20	6:00 A.M.	8:40 P.M.	60	210	77	-	-	-	-	-
25	5:30 P.M.	8:25 P.M.	-	-	1 trip	-	-	-	-	-
30	5:30 P.M.	8:40 P.M.	-	-	1 trip	-	-	-	-	-
Shepherd	7:30 A.M.	9:17 P.M.	12	45	21	-	-	-	-	-
35	-	-	-	-	-	9:00 A.M.	4:40 P.M.	20	105	71
40	-	-	-	-	-	10:00 A.M.	5:40 P.M.	15	232	111

Figure 10: Service Levels by Route

	Weekdays																	Saturdays/Holidays																
Route	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM
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Headways:

<60
60
60-90
90+

3.1.2. Demand-Response Service

EPTA offers demand-response service daily between 8:00 a.m. and 5:00 p.m. in select areas of Berkeley and Jefferson Counties. Trips must be scheduled on the previous business day, and fares vary by trip length. Half-fare trips are available to those who qualify for fixed-route half-fares.

3.2. Fares

EPTA fixed-route fares use a zone system meaning fares are based on how far riders travel within the system. There is a base fare of $2.00 to board a bus and then each time you cross a zone the fare increases by $0.50. The zones include Martinsburg, the VA Medical Center and Inwood, Jefferson County, and Harpers Ferry/Bolivar. The maximum fare, therefore, from Martinsburg to Harpers Ferry, is $3.50. Unlimited ride monthly passes are also available for $60.00. EPTA also offers half-price fares for riders with disabilities, and free rides on the Shepherd University Circulator for Shepherd University students with their student identification card. Fixed-route deviations cost an additional $2.00.

Riders can purchase fares on-board buses or by using the Token Transit mobile application. Monthly passes, $10.00 punch cards, and $2.50 and $1.00 can be purchase on the EPTA website or by calling the EPTA office.

Demand-response service ranges in the price per trip to the passenger from $4.00 to $6.00, depending on where the passenger is picked up and dropped off.

3.3. Rider Programs

EPTA offers several rider programs that reduce the cost of using transit services for the passenger. These programs include the $5.00 Day Pass, Student Discount, Get a Job Get a Ride, and Half-Fare programs.

3.3.1. $5.00 Day Pass

The $5.00 day pass is available for a single day of unlimited travel on EPTA fixed routes. No route deviations can be requested using the pass.

3.3.2. Student Discount

Under this program, students enrolled at a high school, college, or technical school with proof of enrollment are eligible to purchase an EPTA Monthly Pass at a discount of 25 percent off the current published Monthly Pass rate. The Student Discount cannot be used in association with any other fare structure and/or ridership program.

3.3.3. Get a Job Get a Ride

Under this program, new employees of a current corporate partner can get 20 roundtrip rides passes to ride to work for 30 days. The program is only available for EPTA's fixed-routes and riders must be at least 18 years old, West Virginia residents, and must work at least 20 hours per week. The program is only available one time per person.

3.3.4. Half-Fare

EPTA offers a half-fare program for seniors and people with disabilities. To qualify, you must successfully complete the ETPA applications process and be 60 years or older, have a Medicare card, or have a verifiable disability. Once a Half-Fare Card is issued, holders of the card will receive a 50 percent discount on cash fare transactons for all EPTA routes during regular operating hours. The holder must present the EPTA Half-Fare Card (which will be a photo ID card) to the bus driver to receive the discount.

3.4. Facilities

EPTA currently uses the Caperton Transportation Center to facilitate the majority of transfers between routes. The EPTA administrative and maintenance facility is located in south Martinsburg near the Eastern West Virginia Regional Airport.

3.4.1. Current Facilities

Caperton Transportation Center

Caperton Transportation Center is a major transit hub and trip generator in the EPTA service area located in downtown Martinsburg. Caperton Transportation Center provides connections to the Maryland Area Regional Commuter (MARC) system's Brunswick Line and Amtrak service, both of which are passenger rail lines that provide service to the greater Washington, DC area. Additionally, Caperton Transportation Center is the main transfer hub for bus operations, serving all existing routes in the EPTA system, including Route 20, which runs between Martinsburg and Harpers Ferry, and select trips on the Shepherd Circulator.

Administrative and Maintenance Facility

EPTA currently performs its administrative and operative work entirely out of an 11,000 square foot facility on Novak Drive in Martinsburg. This facility, situated on two acres of land, was built in 2001 and includes a 7,000 square foot garage and maintenance facility, a 3,300 square foot office, and a 500 square foot meeting space. The garage contains storage for 12 transit vehicles, one office, two storage spaces, one supply lift, one transit lift, one wash bay, and maintenance equipment. The facility has a fueling station and 23 parking spaces enclosed with security fencing and a coded entrance for transit vehicles.

3.4.2. New EPTA Transit Center

In conjunction with HEPMPO, EPTA conducted a transfer center relocation study in 2016 that identified potential sites to relocate the current transfer center located at the Caperton Transportation Center. The transfer center would also house EPTA's administration building and garage and maintenance facility. The ideal facility would be approximately four acres in size and contain the following elements:

- 24,000 square foot vehicle storage building
- 5,400 square foot maintenance area with bus wash
- Two-pump fuel station
- 70 surface parking spaces for employees, visitors, and potential park and ride
- 6,700 to 7,200 square foot administration building
- Six to eight bay transit center.

Figure 11: New EPTA Transit Center Location

In Fall 2019, the EPTA acquired 412 W. Race Street in Martinsburg as the anticipated site for the new facility (**Figure 11).** The planned expansion is expected to include a 5,400 square foot facility for administration and training, a six-bay transfer station, administration parking, and a "kiss-and-ride" area. The EPTA was awarded $4.5 million dollars from the Federal Transit Administration's (FTA) Grants for Bus and Bus Facilities program (49 U.S.C. 5339), covering Phase I costs (a new administrative facility and six-bay transfer station). Phase II will involve the development of a 32-storage bay maintenance facility and the grant for this funding was awarded in late 2019 for $6.08 million. The new facility is expected to accommodate future increases to fleet size, the addition of larger-sized vehicles in the fleet, and increased opportunities for timed transfers between routes.

3.5. Fleet

EPTA's current operational fleet includes 23 revenue vehicles, of which 18 are cutaway buses and 5 are vans. Passenger capacity of cutaway buses ranges from eight passengers to 24 passengers. Overall, three cutaway vehicles can carry eight passengers, one can carry 12 passengers, one can carry 12 passengers and accommodate up to two wheelchair passengers, six can carry 18 passengers, five can carry 24 passengers and accommodate up to two wheelchair passengers, and two can carry up to 30 passengers. Based on the Federal Transit Administration's default Useful Life Benchmark (ULB), most vehicles will not need to be replaced until 2027 or later. Overall, only one vehicle has exceeded its useful life according to FTA standards (Bus #219). **Table 3** details EPTA's current fleet characteristics.

Table 3: Current EPTA fleet characteristics.

Bus Number	Type	Seats	Year in Service	Mileage December 2019	Replacement Year
DR2	Van	5	2015	173,600	2023
DR3	Van	5	2017	97,600	2025
DR4	Van	5	2017	85,600	2025
DR5	Van	5	2019	3,400	2027
DR6	Van	5	2019	2,200	2027
219	Cutaway	8	2006	165,100	2016
617	Cutaway	8	2017	66,500	2027
119	Cutaway	8	2018	33,400	2028
115	Cutaway	12	2015	165,700	2025
215	Cutaway	18	2015	170,300	2025
315	Cutaway	18	2015	165,100	2025
117	Cutaway	18	2017	96,800	2027
217	Cutaway	18	2017	77,100	2027
317	Cutaway	18	2017	77,300	2027
417	Cutaway	18	2017	100,200	2027
415	Cutaway	30	2015	145,400	2025
515	Cutaway	30	2015	134,400	2025
319	Cutaway	12+2	2019	9,900	2029
419	Cutaway	24+2	2019	8,900	2029
519	Cutaway	24+2	2019	7,600	2029
619	Cutaway	24+2	2019	6,600	2029
719	Cutaway	24+2	2019	4,900	2029
819	Cutaway	24+2	2019	4,900	2029

3.6. Stop Details

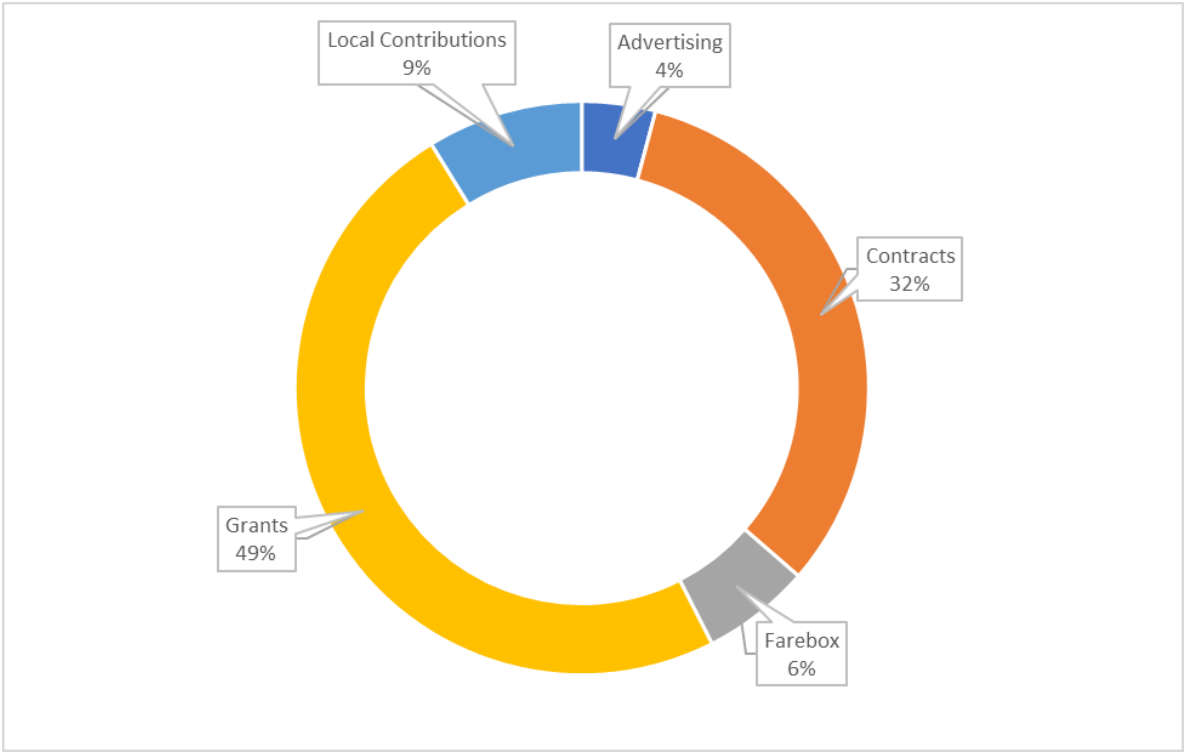
EPTA has formal stops at 76 locations throughout Berkeley and Jefferson Counties, with a variety of amenities installed at certain stops for the safety and convenience of riders. Amenities are not planned for frequent off-route stops, but off-route stops can become formal stops, at which point they could be considered for amenity upgrades.

Three EPTA stops currently have shelters, of which, two have pads, ramps, and benches. Bus stop amenities have been purchased and are currently being installed at the Martinsburg Court House Complex, including a shelter and bench. Eight stops are planned to have amenities ordered in FY 2019, and an additional 26 are in future consideration for shelter amenities based on funding, seven of which are in Jefferson County and 19 are in Berkeley County. EPTA is also considering implementing bike racks at 28 stops based on future funding, of which 22 are planned for Berkeley County and six are planned for Jefferson County. There are 39 bus stop signs budgeted to be ordered in FY 2020 for Berkeley and Jefferson County.

3.7. Financial Information

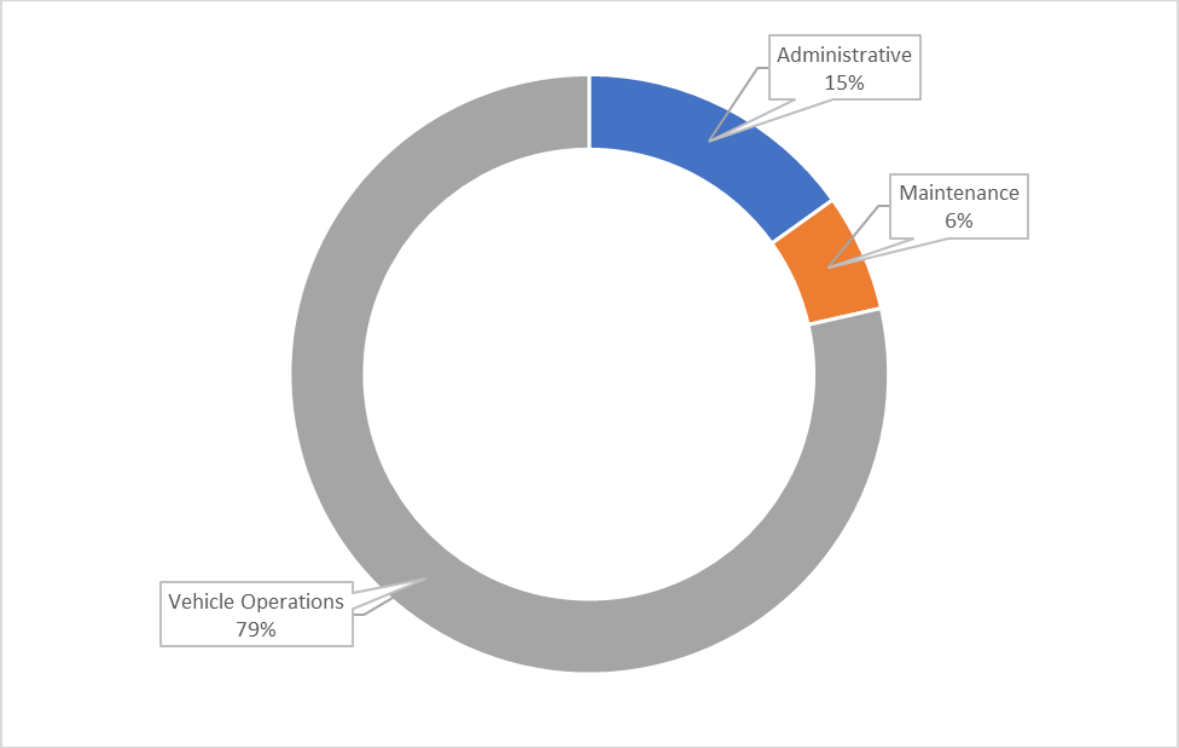
In Fiscal Year (FY) 2019, EPTA's total revenue was $2.2 million, while expenses were approximately $2.1 million. Federal and state grants from FY 2018 and FY 2019 contributed to nearly half of EPTA's total revenue, and contract revenue from entities including Harpers Ferry National Park Service, Shepherd University, LogistiCare, and others contributed 32 percent. Local jurisdictions utilizing EPTA services contributed to eight percent of total revenue, and farebox contributions including cash and ticket transactions were an additional six percent. **Figure 12** summarizes FY 2019 revenue by category.

Figure 12: FY 2019 Revenue



Expenses in FY 2019 totaled $2.1 million and approximately 79 percent of total expenses were related to vehicle operations. Administrative and maintenance costs made up the remaining expenses. **Figure 13** shows the distribution of expenses in Fiscal Year 2019 by category.

Figure 13: FY 2019 Expenses



3.8. Rider Survey

An on-board rider survey was available in November 2019 to solicit riders for input on their demographics, ridership tendencies, and satisfaction with the system. The survey results are summarized in **Appendix B: EPTA 2019 Passenger Survey Results**.

In addition, a Shepherd University student survey effort provided additional details regarding transit service wants and needs at the University; further detail on this effort are summarized in **Appendix C: Shepherd University Survey Results**.

3.9. Previous Studies

Previous studies that are relevant to this Transit Development Plan include the previous Transit Development Plan (2015), the Transfer Center Study, and the HEPMPO Long-Range Transportation Plan.

3.9.1. 2015 Transit Development Plan

The 2015 Transit Development Plan included a significant assessment of the EPTA service area and system and included a peer review, transit need analysis, and detailed performance analysis of existing routes. It recommended several new routes, including:

- Yellow (Route 14) between the Caperton Transportation Center, the Martinsburg Mall, and the Commons
- Orange (Route 20) between Ranson and Harper's Ferry to supplement the longer Orange Route
- Silver (Route 19) to Hedgesville and Industrial Park
- Green (Route 18) to South Martinsburg (Procter & Gamble)
- Brown Route to Spring Mills (not implemented).

The plan also recommended capital improvements to support the new services, including new stops, stop amenities, and new vehicles.

3.9.2. Transfer Center Study

In early 2016, sites through Martinsburg, including the existing Caperton station location, were evaluated as potential sites for the new EPTA transfer center. Sites were evaluated based on households and employment within ½-mile, access to the site, effects on route alignments, and other factors. This work guided EPTA ultimately to the selection and purchase of 412 W. Race Street in Martinsburg as the new transfer center location.

3.9.3. HEPMPO Long-Range Transportation Plan

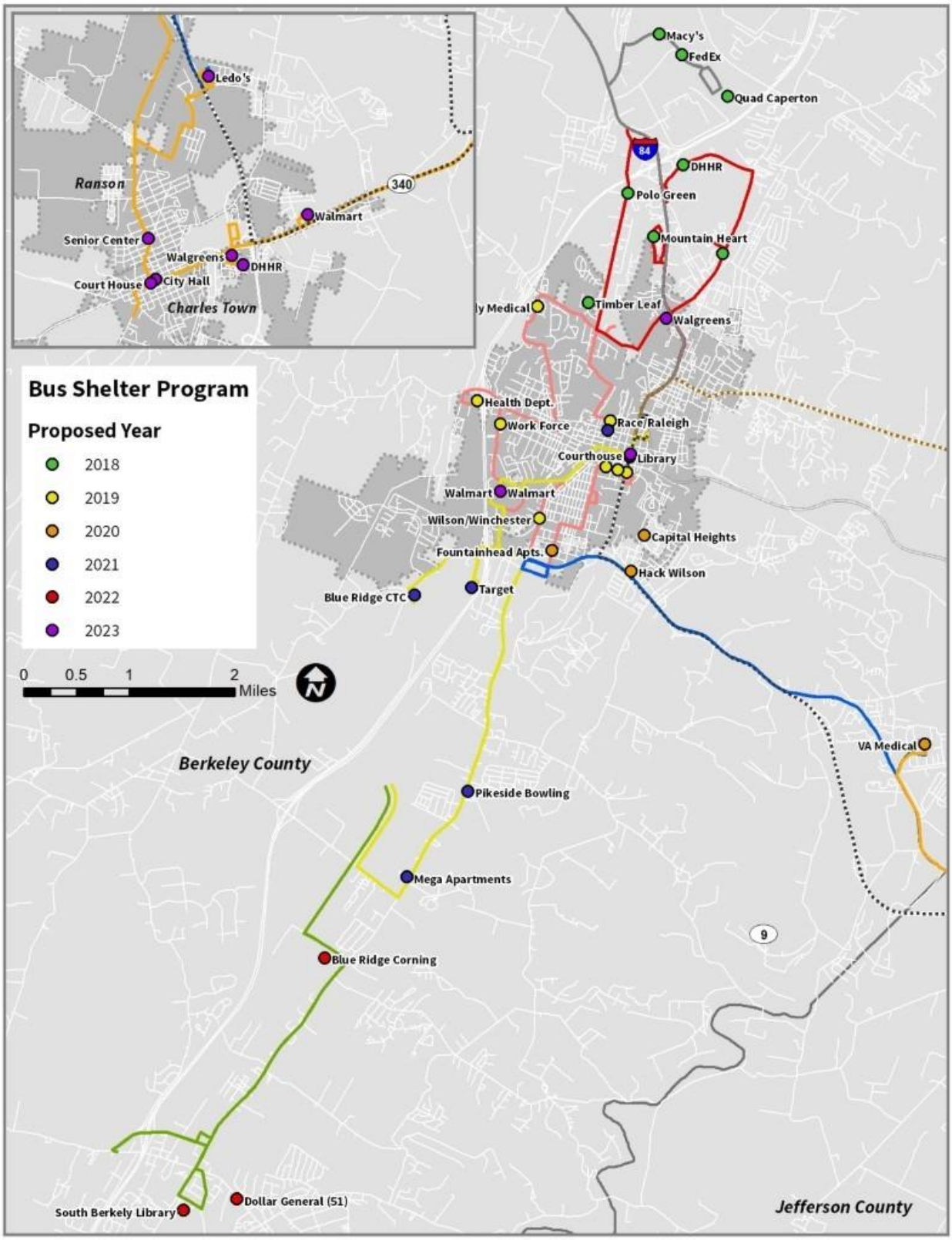
The HEPMPO Long-Range Transportation Plan outlined recommendations to improve transit in the EPTA region through 2045. These recommendations are summarized in **Table 4** and include a number of recommendations that could help mitigate issues outlined in the Gap Analysis.

Table 4: EPTA Recommendations from the HEPMPO Long-Range Transportation Plan

Location	Necessary Improvement
Delmar Orchards area of Martinsburg	All-day service on weekdays
Charles Town	Provide service along Augustine Ave
Charles Town	Provide service along Charles Town Road southeast of Charles Tower.
Martinsburg to Spring Mills Walmart	All-day service on weekdays
Martinsburg to Hagerstown	Peak period service on weekdays
EPTA Yellow Route (Route 14	Improve weekday headway
EPTA Yellow Route (Route 14)	Add Sunday service
EPTA Shepherdstown Route	Peak period service on weekdays
Charles Town to Shepherdstown	Peak period service on weekdays

In addition to service recommendations, the plan recommended a shelter installation program to increase the number of stops with bus shelters throughout the service area. These locations and the proposed installation year are illustrated in **Figure 14**.

Figure 14: Proposed Bus Shelter Installations by Year from HEPMPO Long-Range Transportation Plan



3.10. Ridership and Performance

Ridership statistics were generated using EPTA's automated ridership reporting system. Route level statistics are from August and September of 2019.

3.10.1. Ridership by Route

Figure 15 shows the daily ridership by route in the system. Ridership is highest on Routes 10, 11, 12, and 14. Of the weekday routes, the route to Inwood (Route 18) has the lowest ridership. The evening routes, Route 25 and Route 30, have the lowest daily ridership of all routes in the system. The Saturday routes have robust ridership compared to the weekday routes.

Figure 15: Daily Ridership by Route (August and September 2019)

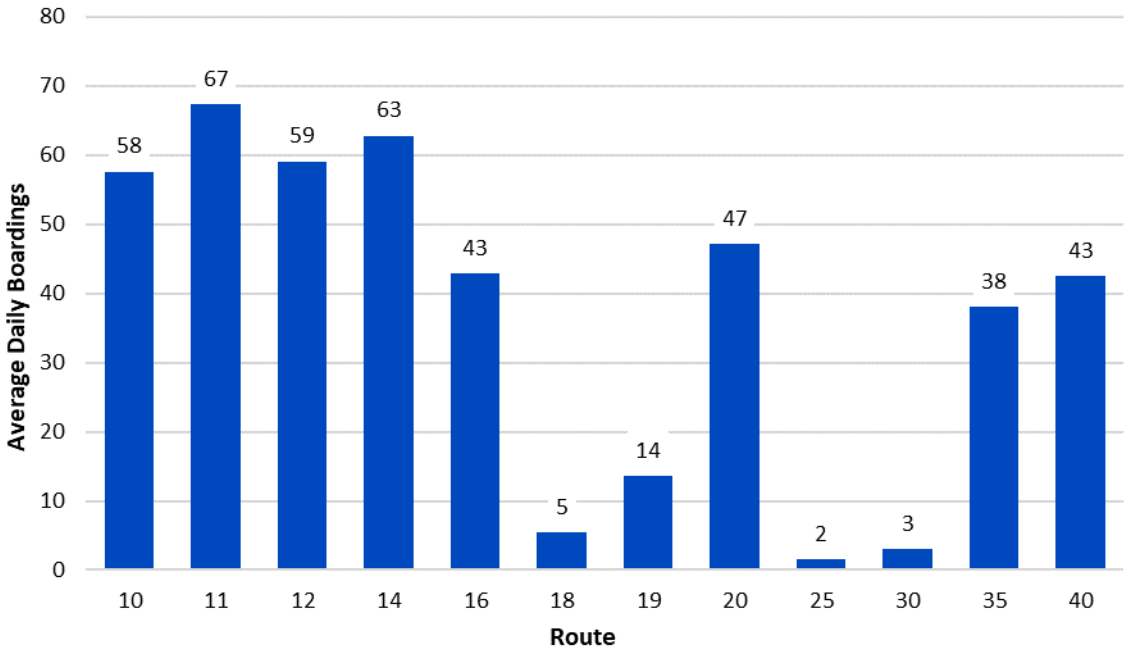


Figure 16 shows the weekday daily ridership by hour of the system. Ridership peaks in the midday between 10:00 a.m. and 2:00 p.m., dropping off after 4:00 p.m.

Figure 16: Weekday Daily Ridership by Hour (August and September 2019)

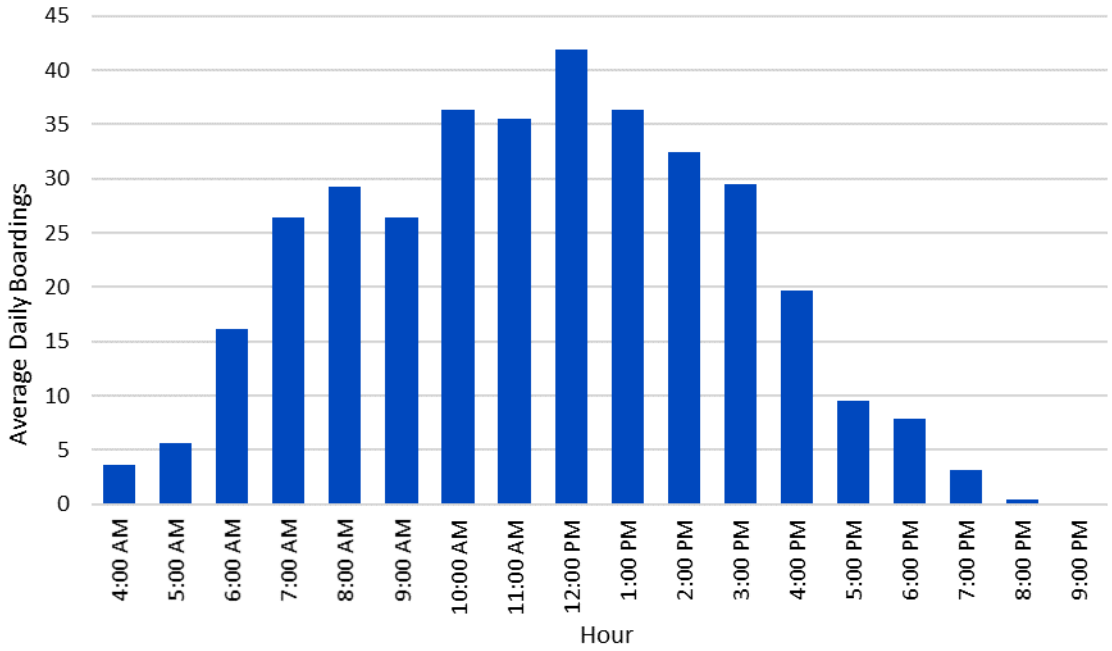
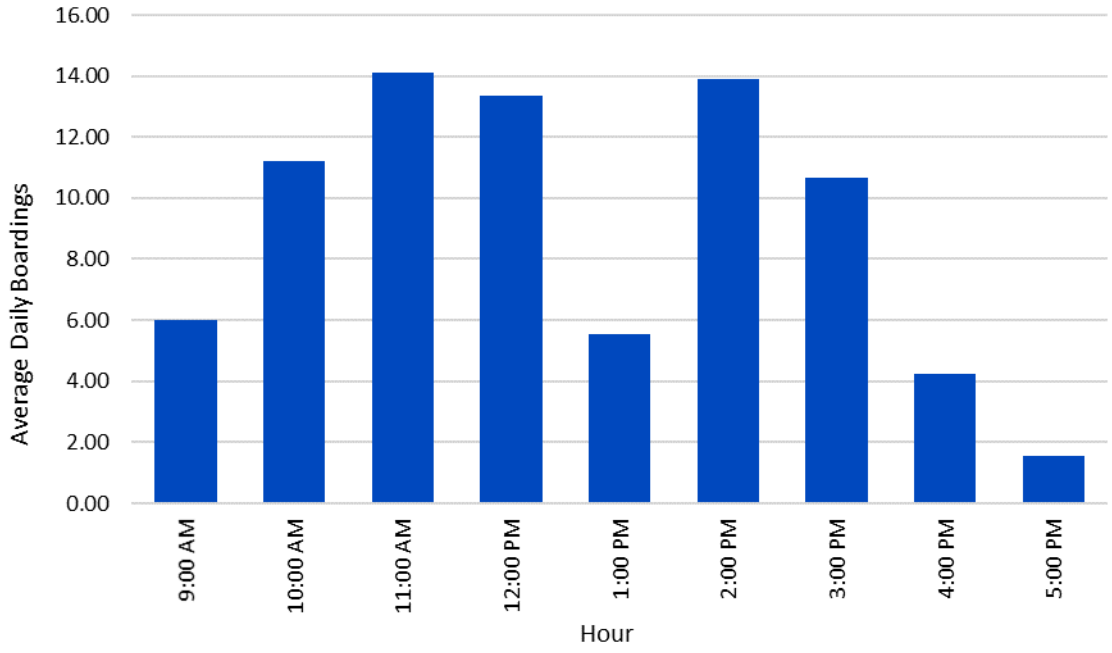


Figure 17 shows the Saturday daily ridership by hour of the system; ridership remains steady in the midday hours, though the data in the 1:00 p.m. hour suggests a data discrepancy.

Figure 17: Saturday Daily Ridership by Hour (August and September 2019)



Further details on hourly ridership by route can be found in **Appendix A: Ridership per Route Details**.

3.10.2. Ridership by Stop

During the weekday period, as shown in **Figure 18**, on weekdays, there are notable daily boardings at ten stops (**Table 5**): Ambrose Towers, Caperton Transportation Center, Gabes, Hack Wilson Way, the Martinsburg Library, Martins in north Martinsburg, Save-A-Lot in Charles Town, the VA Medical Center, and the Walmart at Foxcroft Towne Center and the Walmart in Charles Town.

Table 5: Stops with Significant Weekday Boardings

Stop	Routes	Average Daily Boardings
Caperton Train Station	10, 11, 12, 14, 16, 19, 20, 25, 30, 35, 40	89
Walmart at Foxcroft Towne Center	10, 14, 25, 30, 35, 40	40
VA Medical Center	11, 16, 20, 25, 35	37
Gabes	10, 11, 14, 18, 25, 30, 40	16
Library	10, 16, 25, 35	11
Walmart (Charles Town)	20	11
Save-A-Lot (Charles Town)	16, 20	9
Ambrose Towers	14, 16, 30, 35, 40	9
Hack Wilson Way	11, 16, 35	9
Martins (Martinsburg)	12, 30, 40	8

On Saturday (**Figure 19**), there are notable boardings (**Table 6**) at the VA Medical Center, Caperton Transportation Center, and Walmart at Foxcroft Towne Center. Currently, the Saturday routes, Route 35 and Route 40, do not serve Charles Town and Harpers Ferry.

Table 6: Stops With Significant Saturday Boardings

Stop	Routes	Average Daily Boardings
Caperton Train Station	35, 40	20
Walmart (Martinsburg)	35, 40	17
VA Medical Center	35	10

Further details on ridership by route and stop can be found in **Appendix A: Ridership per Route Details**.

Figure 18: August and September 2019 Daily Weekday Ridership by Stop

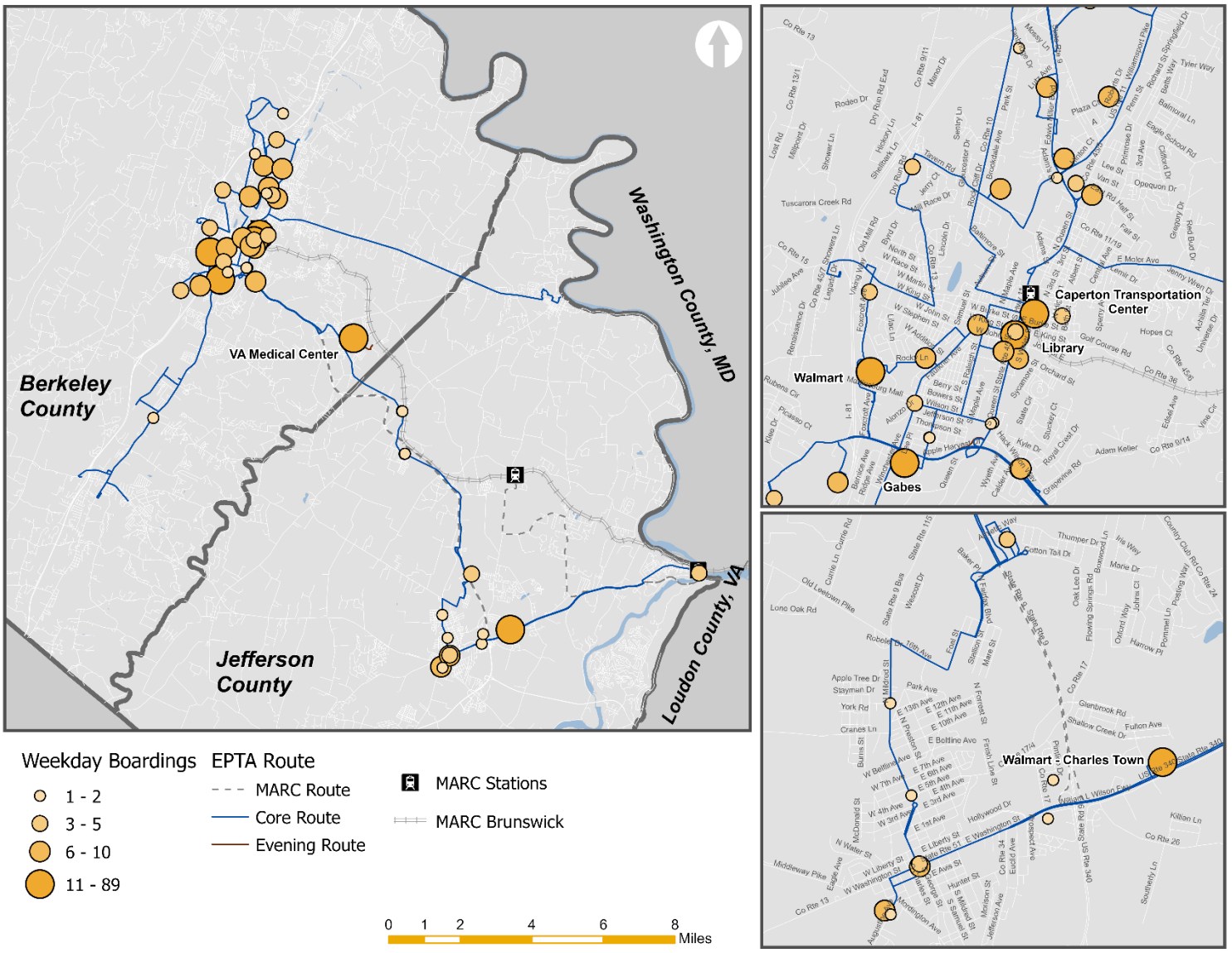
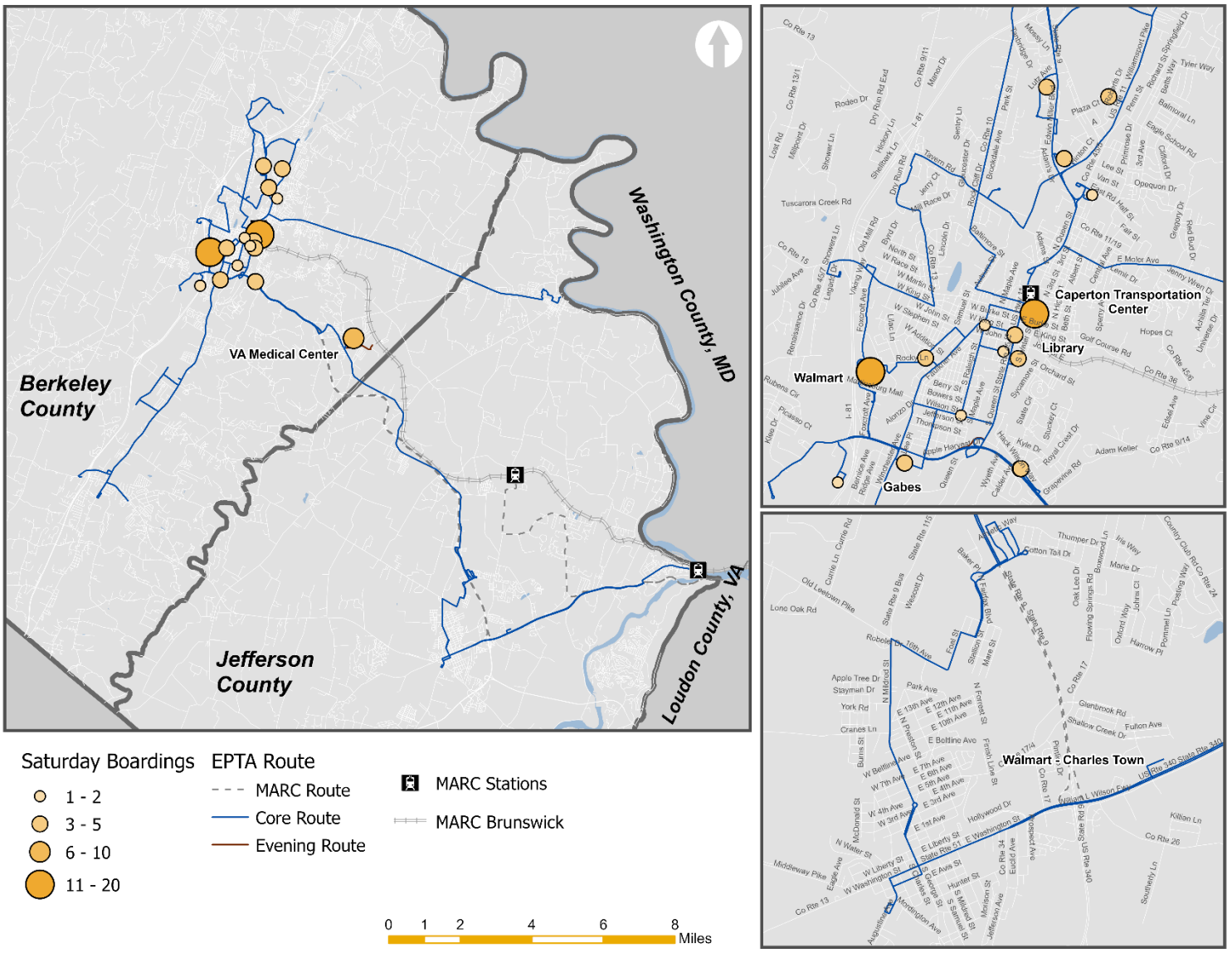


Figure 19: August and September 2019 Daily Saturday Ridership by Stop



3.10.3. Performance Trends

EPTA reports performance metrics to the National Transit Database (NTD) for each fiscal year. The following figures reflect system trends from FY2014 through FY2019.

Figure 20 shows a steady increase in annual bus ridership, up over thirty percent in 2019 from 2014. Demand response annual ridership increased over 400% in the same time frame. **Figure 21** shows an increase in peak number of operating vehicles for both bus and demand response starting in 2016.

Figure 20: Annual Ridership Trend, FY2014-FY2019

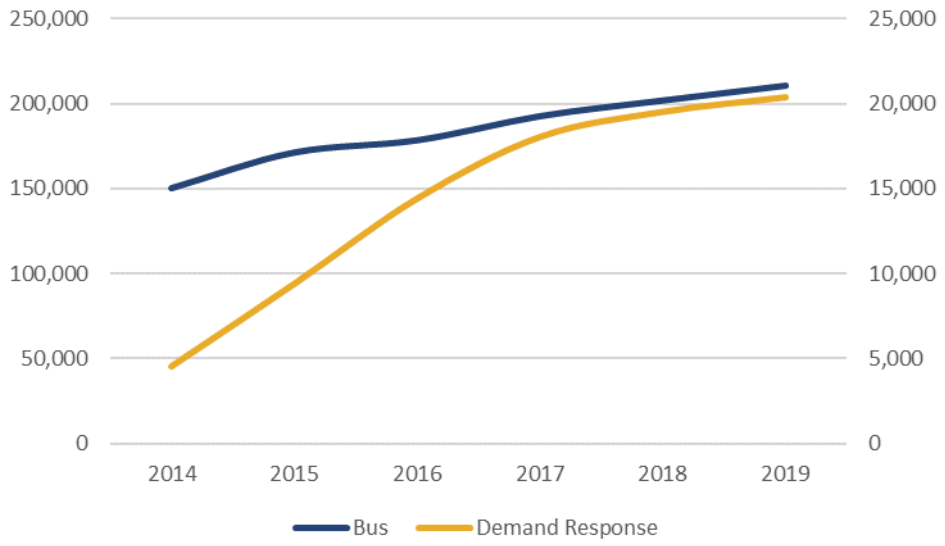


Figure 21: Peak Vehicle Trend, FY2014-FY2019

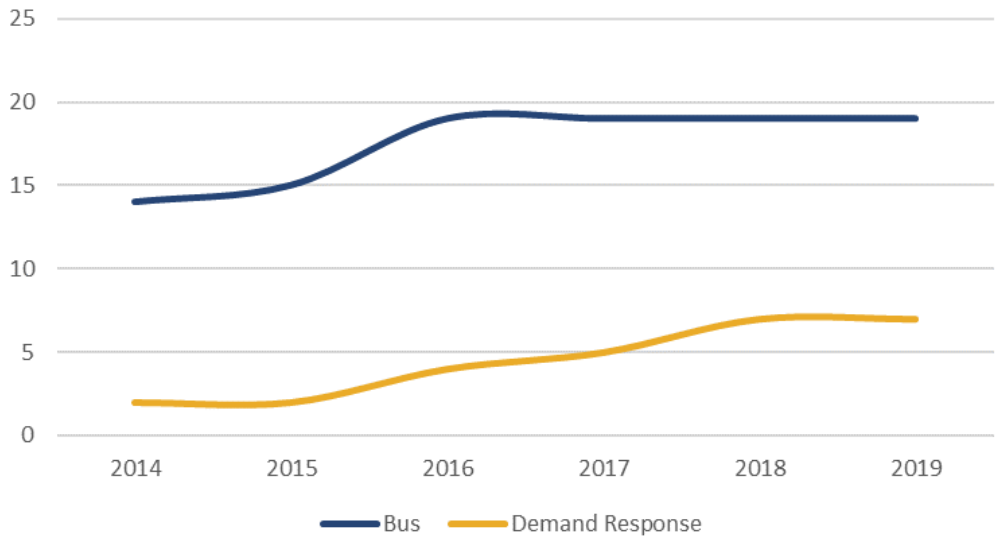


Figure 22 shows minimal change in the number of riders by revenue hour for demand response. After major gains between 2014 and 2015, bus ridership by revenue hour has fluctuated in recent years. **Figure 23** shows a generally flat trend for ridership by revenue mile in demand response and slight fluctuation in bus between 2014 and 2019.

Figure 22: Ridership by Revenue Hour Trend, FY2014-FY2019

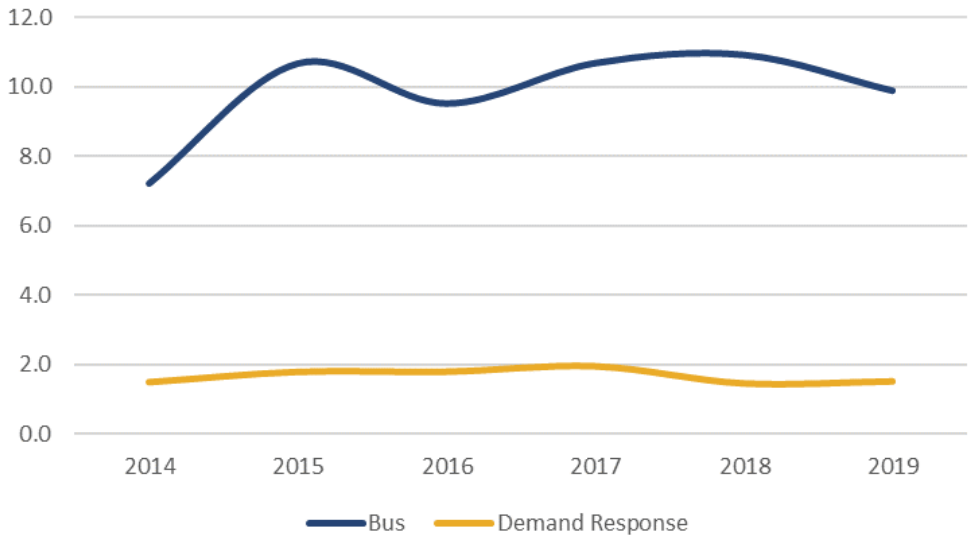
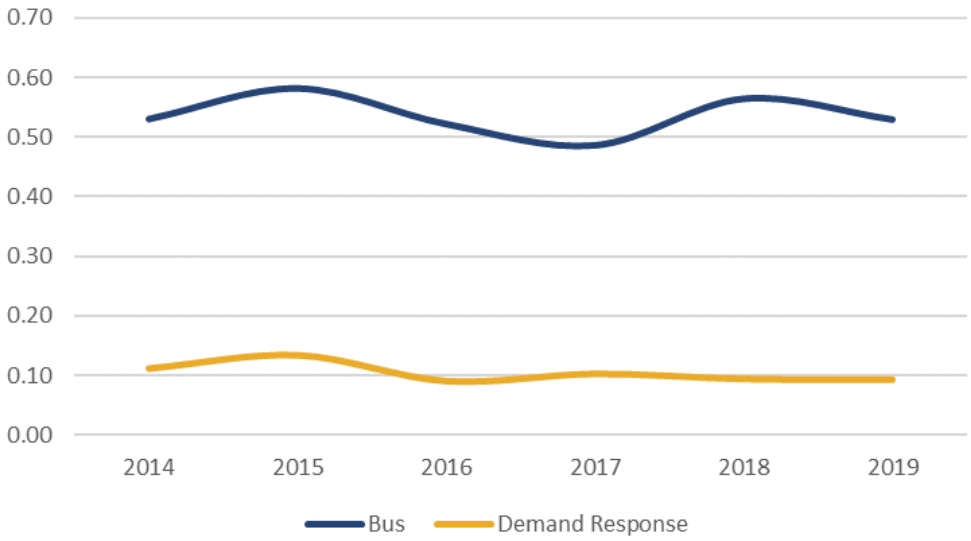


Figure 23: Ridership by Revenue Mile Trend, FY2014-FY2019



In **Figure 24**, farebox recovery for demand response remains unchanged since 2014. The trend for bus farebox recovery follows a similar trend in riders per revenue hour with large gains between 2014 and 2015 and fluctuation since. As shown in **Figure 25**, the subsidy per demand response passenger fell by about fifty percent between 2014 and 2015 and has remained flat since then with a slight recent increase in 2019. Subsidy per bus passenger also fell between 2014 and 2015, though it has fluctuated in the years since.

Figure 24: Farebox Recovery Trend, FY2014-FY2019

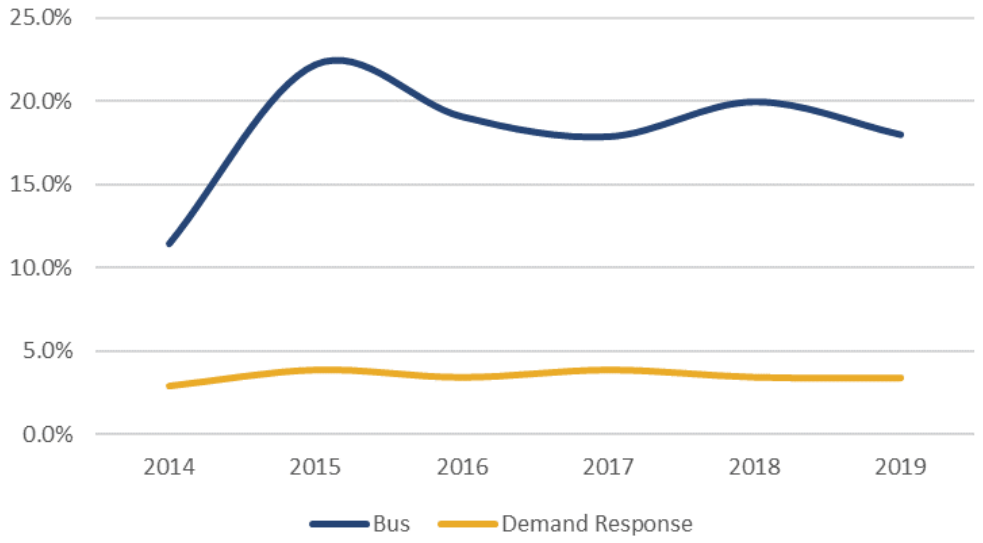
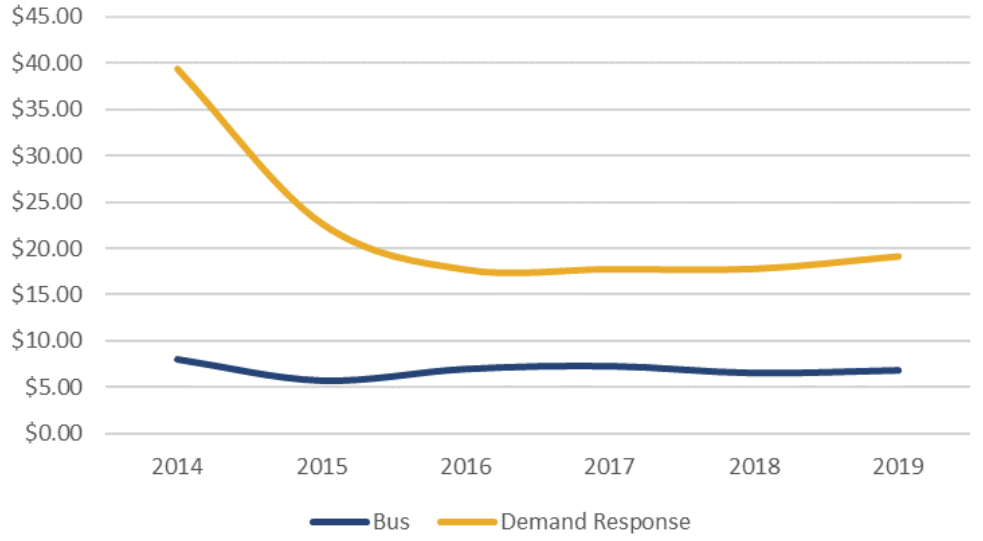


Figure 25: Subsidy per Passenger Trend, FY2014-FY2019



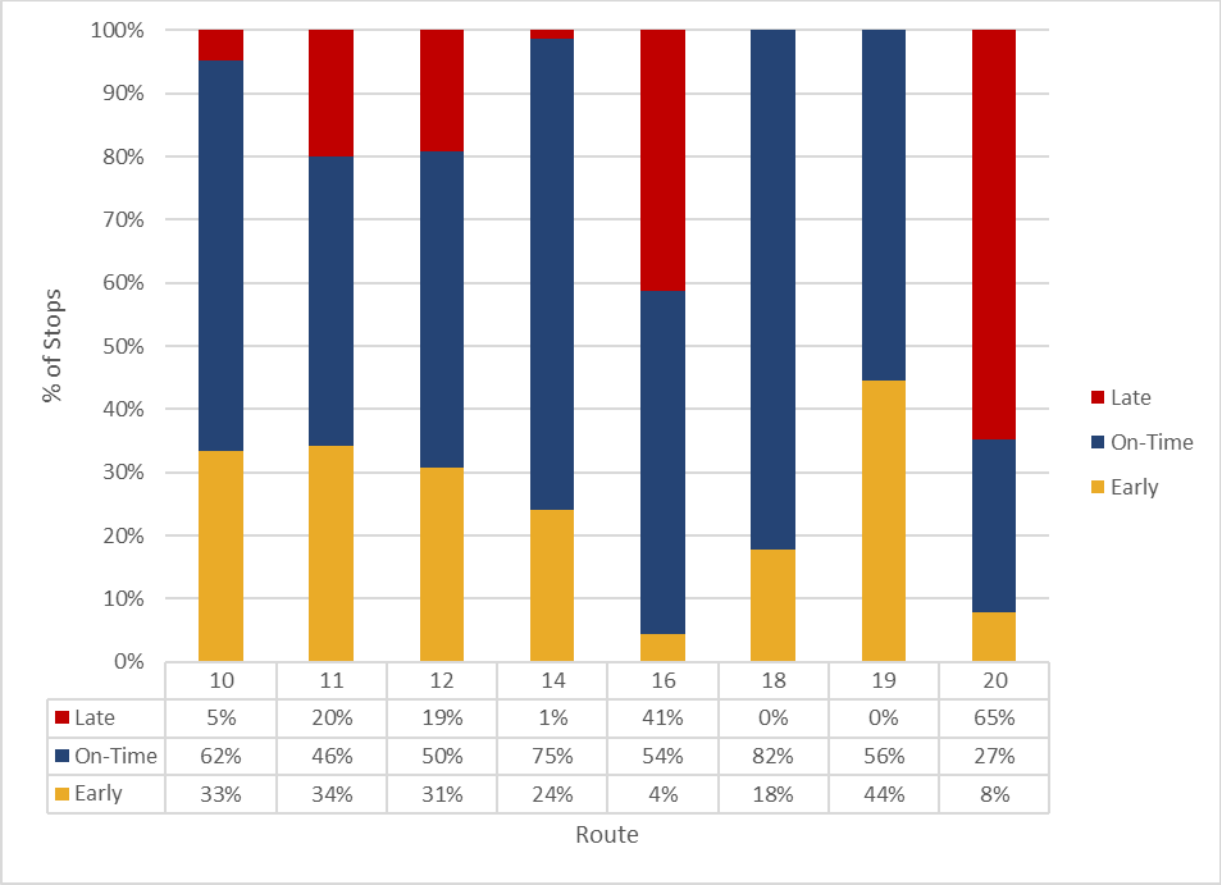
3.10.5. Performance Analysis

On-time performance (or schedule adherence) on EPTA's fixed routes was measured during manual ride-checks conducted in November of 2019. On-time performance measurements can vary between agencies, but EPTA does not define on-time performance, as it is difficult to sustain on-time standards with a system that provides service deviations on request, so an industry standard of one minute early to five minutes late was used for the assessment. The time each route departed from a scheduled stop was recorded, measured against the scheduled departure time, and assessed according to the industry standard for on-time performance.

Overall, only 57 percent of timepoints measured were considered on-time, with 18 percent departing early and another 25 percent departing late. Additionally, on-time performance varied greatly between routes; Route 14 departed from 75 percent of timepoints on-time, whereas Route 20 only departed from 27 percent of stops on-time. **Figure 26** summarizes the weekday on-time performance for each of the major routes in the EPTA system.

Aggressive runtimes can result in routes falling behind schedule with few opportunities to make up for lost time. Often, if a route falls behind schedule on a trip, it will remain behind schedule for the remainder of the trip. Early departures are consequential to potential riders, as they may show up to a stop before the scheduled departure, but after the bus has departed.

Figure 26: On-Time Performance Sample by Route

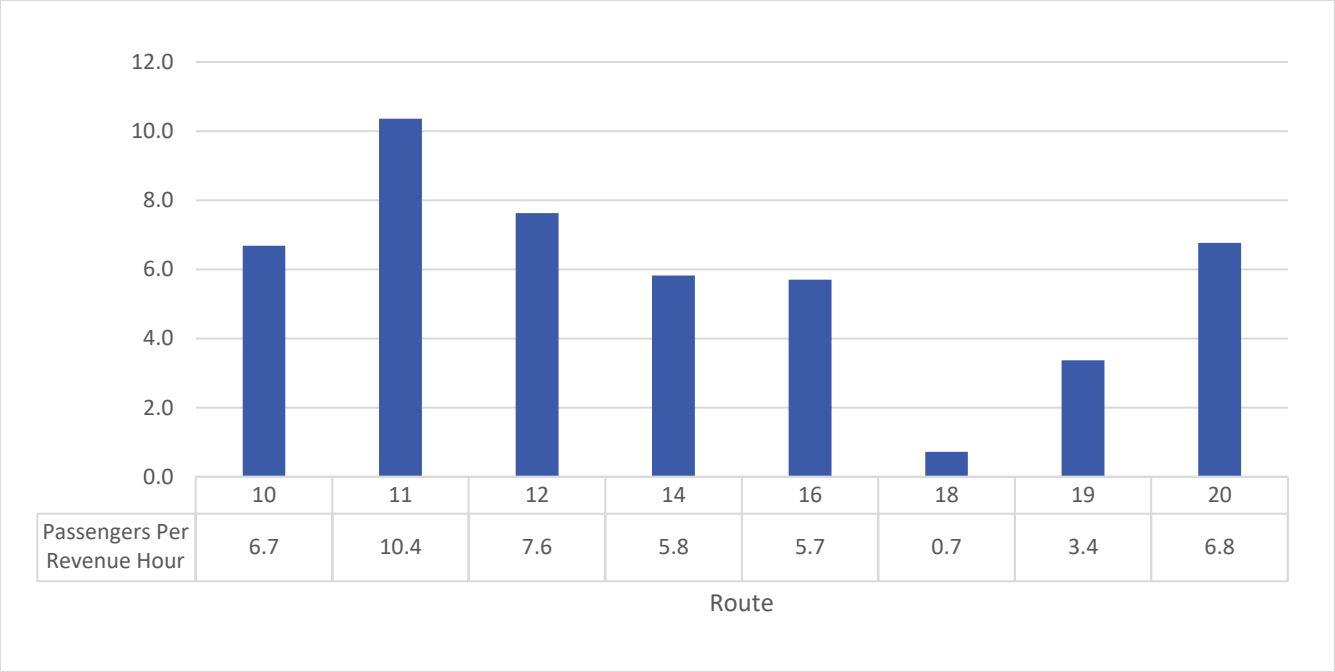


	10	11	12	14	16	18	19	20
Late	5%	20%	19%	1%	41%	0%	0%	65%
On-Time	62%	46%	50%	75%	54%	82%	56%	27%
Early	33%	34%	31%	24%	4%	18%	44%	8%

Fixed-route ridership surpassed 210,000 passengers in FY 2019**. Figure 27**, **Figure 28** and **Figure 29** summarize ridership per revenue hour, revenue mile, and trip, respectively for each of EPTA's eight primary routes. These measures the performance (as a measure of ridership) on common terms against other factors such as the length of route or span of the route's service hours. Findings from the performance analysis of EPTA's fixed routes reveal

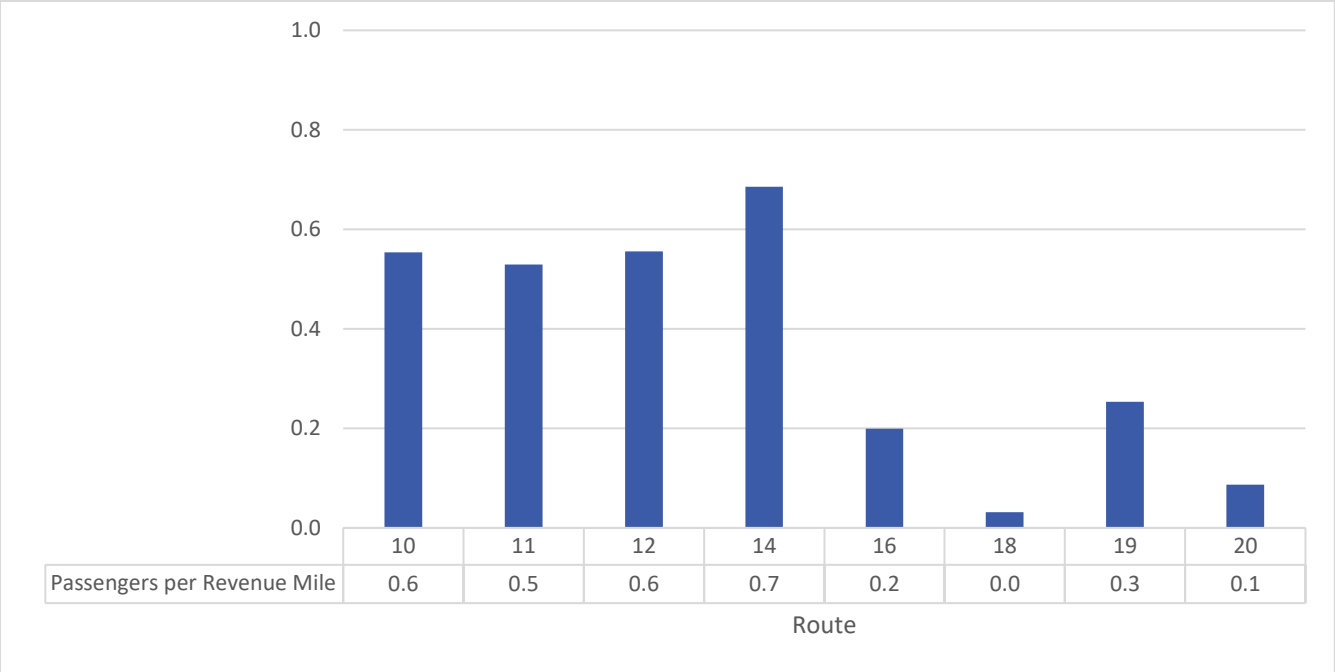
that routes 10, 11, 12, which operate primarily in-and-around Downtown Martinsburg, perform relatively high; additionally, Route 20 (operating between Martinsburg, Charles Town, and Harpers Ferry) has moderate-to-high ridership performance relative to other routes despite its route length being nearly five times as long as most routes in the system. Comparatively, Route 18, which runs primarily on Winchester Avenue between Gabes and Musselman Drive, performs below the system average by all metrics.

Figure 27: Ridership per Revenue Hour by Route



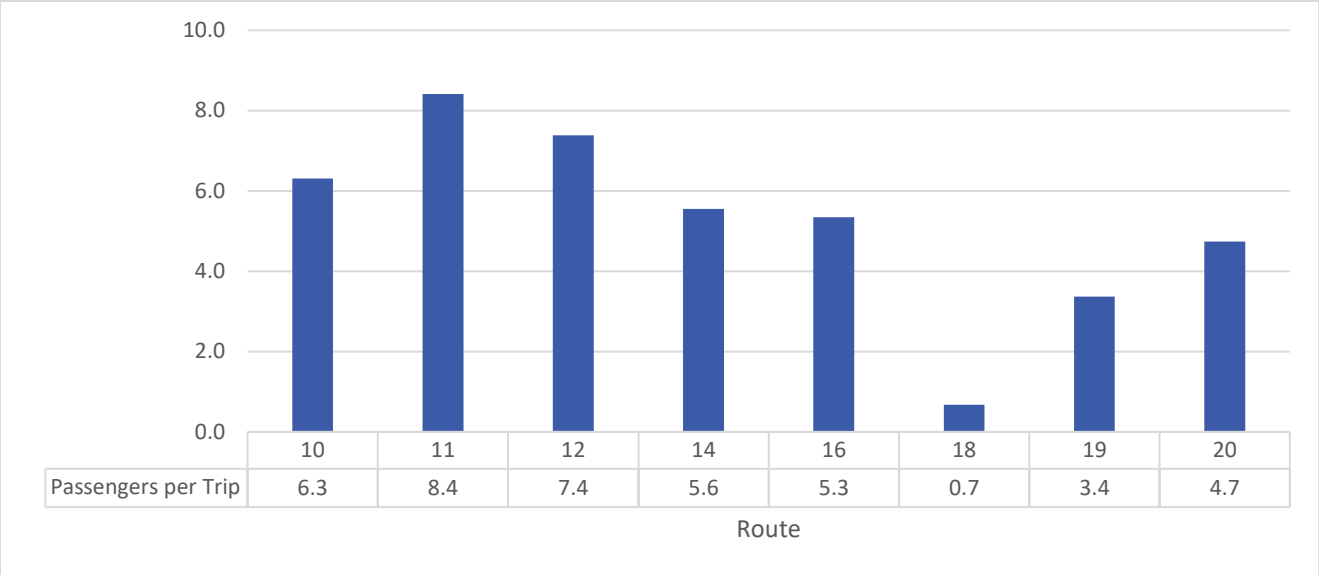
	10	11	12	14	16	18	19	20
Passengers Per Revenue Hour	6.7	10.4	7.6	5.8	5.7	0.7	3.4	6.8

Figure 28: Ridership per Revenue Mile by Route



	10	11	12	14	16	18	19	20
Passengers per Revenue Mile	0.6	0.5	0.6	0.7	0.2	0.0	0.3	0.1

Figure 29: Ridership per Trip by Route



3.10.6. Gap Analysis

To form a baseline for potential transit service modifications that would benefit residents and employees of the EPTA service area, a gap analysis was conducted. The gap analysis compares the demand for transit service to the current service offered to see if there are mismatches between service levels offered and connections offered. It also summarizes any improvements needed to current routes to increase their performance.

In similar settings, areas in the highest tier of the transit-oriented population (TOP) and commuter indices can typically support transit service operating at least every 30 minutes. While the EPTA service area has several areas with scores in the highest tier in both indices (central Martinsburg and Ranson along Fairfax Boulevard), these areas are served by multiple routes which when combined create 30-minute frequencies. Additionally, high transit-oriented population scores indicate the potential need for expansion of evening and weekend service, since these types of sub-groups often need to access jobs and services during non-traditional commuting times. Both central Martinsburg and Ranson currently have evening service, however Ranson lacks weekend service.

When considering transit connectivity, the highest demand connections from the travel flow analysis should be able to be made on the transit network with minimal transfers and with the shortest travel time feasible. Opportunities for route modifications and new routes to improve transit travel will also be explored.

Table 7 summarizes the transit gaps that will be explored in more detail in the service and capital recommendations.

Table 7: Gap Analysis Summary

Type	Term	Gap	Justification	Applicable Route(s)
Peak	Near	Martinsburg to VA	Work Trips	12, 16
	Near	US-9 corridor in eastern Jefferson County	Moderate Commuter Need	-
	Mid	US-11 corridor south	Employment Growth (Clorox)	14, 18
	Mid	Martinsburg to Industrial Park (Caperton Blvd)	Work Trips	19
	Mid	Shepherdstown to Charles Town	Work Trips	-
All-Day	Near	Route 11	Passengers/Trip > 8	11
	Near	Burke St/High St/Rte 45	High TOP Need	
	Near	Ranson/Charles Towne	High TOP Need	16, 20
	Near	Southwest Charles Towne (Augustine Ave and Charles Towne Rd)	Moderate TOP Need	-
	Mid	Martinsburg to Spring Mills, Falling Waters	Employment Growth, Work Trips	-
	Long	Southwest Martinsburg	Population Growth	10, 14
Weekend	Mid	Ranson	High TOP	16, 20

3.11. Key Findings

Overall, the EPTA system continues to grow its ridership and maintain its overall productivity levels post 2016. Key takeaways from the analysis of ridership and performance include:

- Fixed-route ridership has grown by 39 percent since FY2014 while demand-response ridership has grown by over 400% percent in the same period.
- Riders per revenue hour on fixed-route service peaked in FY2018 however has remained well above FY2014 levels.
- The busiest routes in the system are Routes 10, 11, 12, and 14. These routes represent the core of EPTA's service, and most of their alignments have been in existence since 2014.
- The busiest stops in the system continue to be major destinations or transfer points, including the Caperton Transportation Center, the Walmart at Foxcroft Towne Center, and the VA Hospital.
- There are numerous opportunities to expand service to new destinations and to create new connections.

4. Service Recommendations

4.1. Service Planning Goals and Objectives

The most recent EPTA Transit Development Plan defined five service recommendation goals to enhance service operations. These goals ranged from increasing efficiency by concentrating services in areas of high transit demand to providing more direct service to and from strong trip generators; however, they did not explicitly define planning goals and objectives for system and service improvement. This edition establishes goals and objectives to facilitate a focused review of existing services while assuring sufficient coverage where needed in the service area.

These goals and objectives were designed to guide improvements to service and the system as a whole, and were defined based on existing gaps in service as well as areas of opportunity to improve service availability and efficiency in the short- and long-term. Additionally, these goals were developed in consideration of the Hagerstown-Eastern Panhandle Metropolitan Planning Organization (HEPMPO) regional goals and objectives outlined in their long-range transportation plan, *Direction 2045.* Overall, goals of the service planning process for this EPTA TDP focused primarily on targeting opportunities for strategic expansion of service and growth in ridership.

4.1.1. Goals For Service and System Improvement

The goals listed below are intended to be used to help direct and influence service planning decisions, thoughts and ideas regarding capital investments that could help expand EPTA's brand and marketability, and a reminder that EPTA has a new Transit Center, Administrative Office, and Maintenance Facility (Transit Center) under development that will continue to help improve transit possibilities within and beyond the Martinsburg area.

Goal #1 – Expand and Improve Systemwide Service Efficiency

Objective #1:	Provide more direct service to major trip generators (i.e., shopping centers and hospitals)
Objective #2:	Identify opportunities for expanding service to emerging trip generators (i.e., employment locations)
Objective #3:	Match appropriate level of service and coverage with the transit demand for specific areas
Objective #4:	Coordinate trip patterns with commuter needs (e.g., time schedules)
Objective #5:	Encourage major employers to sponsor transit for employees

Goal #2 – Expand Availability of Weekend and Evening Service

Objective #1:	Provide more direct service to major trip generators (i.e. shopping centers and hospitals)
Objective #2:	Eliminate confusing nighttime and weekend patterns and replace with extended service on existing routes
Objective #3:	Add weekend service between Berkeley and Jefferson Counties

Goal #3 – Explore Locations for New Transit Infrastructure

Objective #1:	Identify new locations for shelters, benches, bike racks, and other infrastructure
Objective #2:	Identify locations to share transit-related information
Objective #3:	Explore interest from jurisdictions in the EPTA service area for making transit capital investments

Goal #4 – Incorporate New Transit Center and Administrative Facility into Future Plans

Objective #1:	Develop specific set of recommendations to redesign EPTA transit around new Transit Center
Objective #3:	Realign existing and planned routes to utilize new Transit Center
Objective #2:	Incorporate stakeholder feedback into plans for future uses

Goal #5 – Improve Branding and Technology

Objective #1:	Ensure that schedules published online are up-to-date with most recent operating characteristics
Objective #2:	Identify locations to share transit-related information
Objective #3:	Advertise mobile ticketing service and host workshops or training opportunities to educate riders on available resources

4.1.2. Systemwide Service Opportunities

Several systemwide opportunities have been identified through the development of the EPTA TDP Existing Conditions report and through the creation of these goals and objectives which could help to enhance the overall efficiency of EPTA transit service and make transit more accessible for the transit-dependent population.

Simplify and Expand Evening and Weekend Service

Existing EPTA evening and weekend service is provided in a distinctly different manner than weekday daytime service. On evenings, eight weekday route alignments are collapsed into two circuitous routes that operate from 5:30 pm to 8:30 pm and comprise EPTA's evening service. It is recommended that EPTA expand service availability by eliminating these routes and gradually expanding the operation of existing weekday routes to include weekend and evening service. Through a phased implementation plan, beginning with a short-term expansion of evening service, then Saturday service and eventually Sunday service, changes could be implemented, analyzed, and adjusted to ensure an appropriate expansion of service hours and days.

Continue to Foster Partnerships with Businesses Operating in the EPTA Service Area

Berkeley County has become a hub for manufacturing and warehousing services for large national employers including FedEx, Macy's, Procter & Gamble, Clorox, and more. EPTA has been partnering with local and regional employers since 2014 with great success! EPTA does a good job approaching new employers as they consider moving into the region and has helped some local organizations achieve specific and noteworthy environmental stewardship goals. EPTA should continue these impressive efforts, but also encourage employers to help subsidize transit expenses for employees or the system at-large.

There are two likely options EPTA could consider for funding sources through local employers: dedicated pass purchases for employees or direct service funding. If employers chose to purchase passes in bulk for their employees, they could benefit by qualifying for LEED certification and seeing improved productivity and retention[1]. Additionally, EPTA may be able to offer discounted pass rates for employers buying in bulk. The bulk options could include "I.D. as Good as Fare," in which employees would show their identification cards at boarding, or as monthly or other time-limited passes which are distributed to employees. The Transit Authority of River City (TARC) in greater Louisville, Kentucky utilizes this program[2].

[1] *A Study of Sources Used for Local Revenue for Transit,* Texas Department of Transportation, Pages 32-39, https://ftp.dot.state.tx.us/pub/txdot-info/ptn/matching-funds-resource-guide.pdf

[2] TARC Means Business Employer Discount Programs, https://www.ridetarc.org/employer-discount-programs/

The second option for private-sector operating assistance would be through direct service funding. In State College, Pennsylvania, private partnerships contribute to the Centre Area Transportation Authority's (CATA) local operating assistance. While CATA's partnership strategy centers on agreements with major student housing complexes to provide residents free access to CATA[3], CATA used a fixed fee model per complex before switching to a ridership-based contract in 2013. EPTA could implement this strategy with major employers in their service area, choosing the type of fee model that best fits their needs.

Make Information Easier to Access for Potential Riders

Strong and seamless access to information makes using transit services simpler and convenient for riders and encourages new riders by reducing the learning curve. Some comments collected from residents and employees of the area, consisting of existing passengers and non-riders, exclaimed that the existing EPTA downloadable maps are a bit confusing and that information about the system and routes is difficult to find. To increase rider access to information while eliminating existing and potential confusion, EPTA can ensure that only one schedule per route is available on the website. Additionally, as new bus stop shelter locations are planned and implemented, a process should be developed to determine how best to include relevant transit information with the development of shelters.

4.1.3. Local and Regional Transportation Goals

In addition to the goals outlined in the plan, objectives and strategies were detailed to complement the implementation of each goal. To ensure a unified vision of transit and land development in the region, the goals and objectives of several local and regional planning jurisdictions were also considered.

Regional Planning Goals

Hagerstown/Eastern Panhandle Metropolitan Planning Organization (HEPMPO)

The Hagerstown/Eastern Panhandle Metropolitan Planning Organization (HEPMPO) is the region's metropolitan planning organization and coordinator of interagency goals and strategies for implementation. In April 2018 the HEPMPO published *Direction 2045*, the region's long-range transportation plan (LRTP) which outlined seven goals of regional transportation listed below:

- *System Preservation*: Improve the efficiency and quality of the transportation network through proactive planning, technology, and maintenance.
- *System Mobility*: Improve the reliability of the transportation system and promote efficient system management and operations.
- *Multimodal Transportation*: Encourage alternative modes of transportation through multimodal network improvements and innovative marketing strategies.
- *Economic Prosperity*: Improve access to social and economic opportunities.
- *Land Use and Transportation Integration:* Align local planning efforts with regional transportation initiatives and promote smart growth practices.
- *Environmental Stewardship*: Minimize the impacts of the transportation network on the environment and increase the resiliency of transportation assets.
- Safety and Security: Promote a safe and secure regional transportation network that will support emergency preparedness and evacuation planning.

Countywide Planning Goals

Berkeley and Jefferson Counties

The EPTA service area helps connect the population centers of Berkeley and Jefferson Counties so residents of both counties can access the jobs and services they need. Comprehensive planning efforts in Berkeley and

[3] Centre Area Transportation Authority Budget, FY2019/2020, http://catabus.com/wp-content/uploads/Final-FY-2019-20-Budget.pdf

Jefferson Counties focus primarily on growth management and the tools available for ensuring sustainable future development. In *Envision Jefferson 2035,* a major economic development goal is to enhance mobility and accessibility for residents within the county and between surrounding counties, citing coordination with EPTA as a primary way to increase accessibility. Though the Berkeley County Transportation Plan does not explicitly cite the expansion of public transportation as a goal, public transportation can play a key role in growth management by incentivizing denser development

Local Jurisdiction Planning Goals

City of Martinsburg, West Virginia

The following goals and objectives comprise the City of Martinsburg's vision for future development as laid out in the City's 2018 Comprehensive Plan update. As the area with the highest residential density in the EPTA service area, and with connectivity to the MARC commuter train, the goals of the City of Martinsburg were considered during the development of EPTA's service improvement goals.

- **Demographics:** Proactively provide for the health, safety, and welfare of both existing and future Martinsburg residents and visitors.
  - Provide services to support the needs of seniors, youth, and individuals with special needs.
  - Work with the school system to increase educational attainment and to promote trade education.
  - Support local business creation and retention to reduce poverty and out-commuting.
  - Explore and implement innovative ways to address community health issues including drug rehabilitation, mental health, crime, and homelessness.

- **Land Use:** Coordinate land use plans and regulations to achieve a balanced mix of commercial, residential, industrial, civic, cultural, and recreational land uses throughout the City.
  - Explore the potential for new residential and commercial development in the City's west end.
  - Adjust land use regulations to better achieve the City's desired balance of land uses.
  - Protect and promote the City's historic districts and resources as important economic and cultural assets.
  - Increase the proportion of property devoted to recreation and open space, and ensure the interconnectedness and accessibility of these areas.
  - Pursue incentives for investment and redevelopment.

- **Housing: Offer a variety of quality housing opportunities, including a diverse mix of both affordable and** market rate units for residents of all ages, interests, and family sizes.
  - Increase property maintenance enforcement to promote clean and attractive neighborhoods.
  - Increase the share of owner occupied housing in the City.
  - Promote and incentivize residential uses in the Downtown to enhance street life and strengthen Downtown businesses.
  - Seek available funding for the rehabilitation of substandard housing and the provision of affordable housing.
  - Participate in local and regional efforts to alleviate homelessness and poverty.
  - Convert vacant or underutilized commercial and industrial buildings into residential and mixed-use space, including desired housing types such as affordable and senior housing.

- **Transportation:** Build a transportation network that safely and efficiently serves all modes, including automobile, bicycle, and pedestrian travel.
  - Increase road and sidewalk maintenance.
  - Increase access to Downtown and West End redevelopment zones.
  - Study and improve traffic congestion points.
  - Work toward a complete network that allows convenient pedestrian and/or bicycle travel to all areas of the City.

- Explore increased public transit, addressing convenience, efficiency, and user-friendly accessibility.
- Improve Ride-Share and Park & Ride solutions for commuters.

- **Economic Development:** Cultivate a business-friendly atmosphere that focuses on Downtown, and on new development in the West End, to increase the City's tax base through both local and visitor commerce.
  - Cultivate the city's role as a regional center of government, education, culture, arts, and professional services.
  - Promote Downtown Martinsburg as a destination for tourists, residents, and other visitors.
  - Continue development of the West End to orient this area toward regional housing, office, and retail markets.

- **Community Facilities and Services:** Provide state of the art public safety, government administration, utilities, and recreational facilities for the City's residents and businesses.
  - Increase public safety resources to address drug abuse and community health.
  - Continue to improve and expand City facilities to meet current and projected needs.
  - Add to the City's tock of recreational amenities.
  - Provide public facilities to the West End to support growth in this area.

City of Charles Town

Charles Town is the county seat of Jefferson County with historically-popular, regional attractions. The Charles Town comprehensive plan (Historically Hip Charles Town 2040 Comprehensive Plan) was considered in the development of EPTA goals and objectives, as two of EPTA's higher ridership routes currently connect Charles Town to Martinsburg, Harpers Ferry, and other local activity centers. In consideration of future development, the plan calls for a balance between new growth and opportunities for infill development, citing multi-mobility and public transit as means for fostering a vibrant, sustainable, and livable physical environment. To achieve these goals, Charles Town planned to collaborate with EPTA to identify opportunities for new transit stops and amenities such as shelters to encourage growth in ridership.

City of Ranson

The City of Ranson is growing and developing alongside the rest of the Eastern Panhandle and a major component of the city's 2012 Comprehensive Plan was to make public transit a viable alternative to private automobile use by making dense, appropriate land uses alongside existing or planned public transit stops a high priority for future development. Its goals for encouraging infill development as opposed to expansive development were considered in the development of these goals and objectives because of the unique role EPTA can play in providing the public transit service needed to encourage denser development and reuse of urban land in Ranson.

Shepherdstown

Shepherdstown is a community that continues to develop and thrive. Shepherd University students have expressed interest in additional EPTA service via a student survey about campus transportation. Additionally, support for transit in Shepherdstown has been heard from the Shepherdstown Area Independent Living, Inc. (SAIL). A new library is also being designed for the area, and there are several other generators within and near Shepherdstown, including the Shepherdstown Food Lion, which would attract people to use transit, if given the opportunity.

4.2. Recommendations for Existing EPTA Services

Recommendations for improving the EPTA system are included in this section. There are recommendations suggested for every route with the exception of the Shepherd University route, including somewhat significant alignment changes to Routes 12, 18, and 19, and recommendations to replace evening and Saturday service with most of the routes that EPTA operates during weekdays.

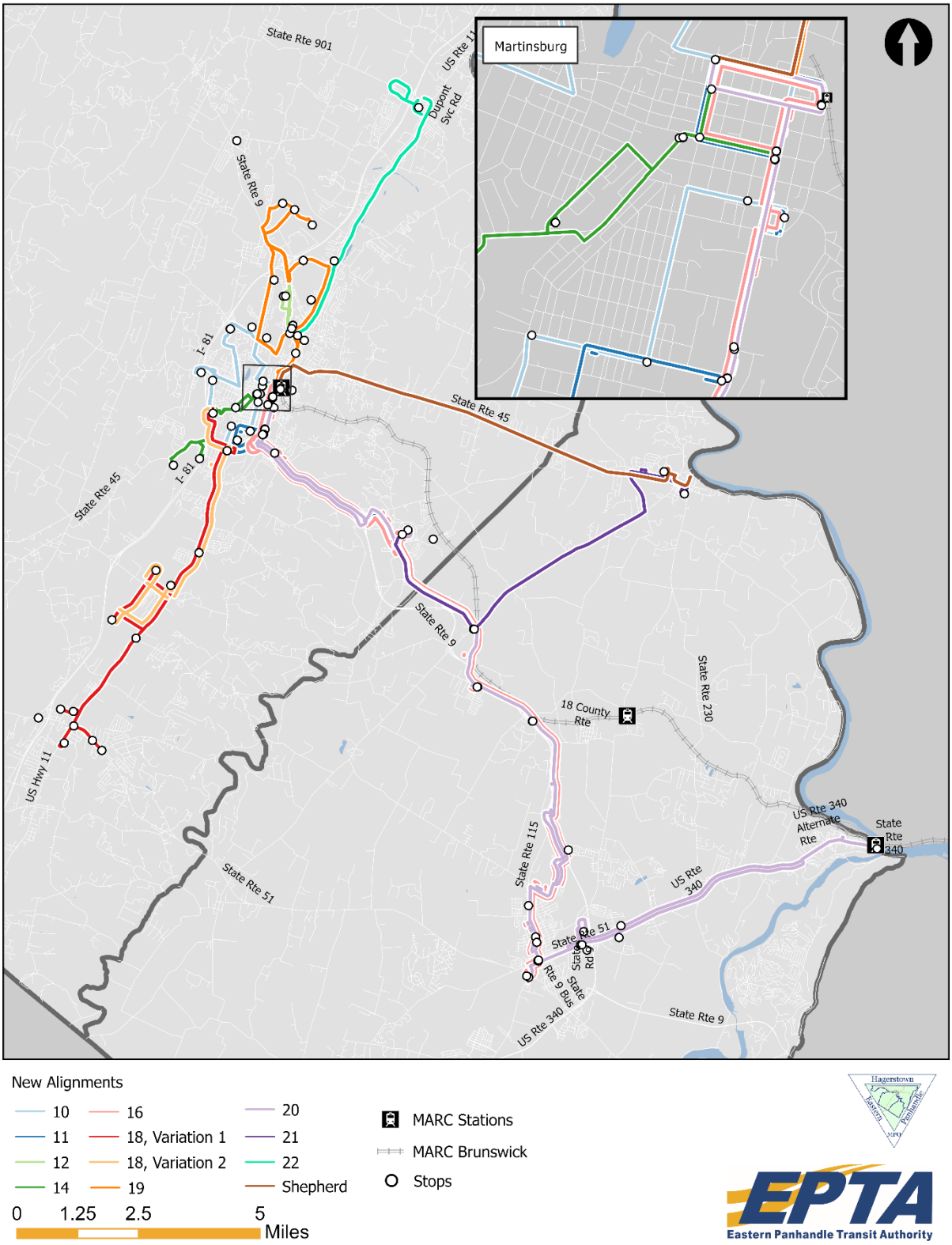
Additionally, two new weekday routes are recommended in the following pages, one for a service operating between the VA Medical Center and Shepherdstown, and the other for service between Martinsburg and Spring Mills. These service recommendations, along with the recommendations for capital improvements and potential funding sources, help to accomplish the five previously listed goals and their myriad objectives.

In the following pages, each of the existing EPTA routes are presented in terms of their current route structure, service performance, activity generators served and ridership characteristics, along with comments or suggestions received regarding that specific route. Each route contains service recommendations, proposed service levels, a list of recommended stops, and future route considerations. Maps are used to show the current route alignments and stop ridership data, as well as the recommended changes for that route. Service performance is measured at the route level in terms of ridership per revenue hour (previously presented in **Figure 27**), ridership per revenue mile (previously presented in

Figure 28), on-time performance (previously presented in **Figure 26**), and average daily ridership (previously presented in Figure 15). Every route's specific value for each of the measures is shared and ranked against the other EPTA routes.

Figure 30 on the following page presents what the EPTA system would look like if all of the service planning changes are implemented over the life of this TDP. The cost, prioritization and implementation plan are presented later in the document; however, the priority level (i.e., higher, medium, or lower priority) is mentioned within each of the recommendations.

Figure 30: Recommended EPTA System Map



4.2.1. Route 10

EPTA's Route 10 offers circulator-like service through downtown Martinsburg, including stops at important activity generators such as Senior Towers, Walmart at Foxcroft Towne Center, Workforce, the Berkeley Medical Center, the Caperton Transportation Center, and South Queen Street, among other destinations. Route 10 is one of EPTA's better performing services, while also operating through some of Martinsburg's more densely populated residential communities, providing direct connections to shopping, medical, and employment generators.

Route Facts

Table 8 detail the existing Route 10 facts; ridership characteristics of the Route 10 can be found in **Figure 50** of Appendix A. The Route 10 is currently the third most productive route in the system with 6.7 passengers per revenue hour and the second most effective route with 0.6 passengers per revenue mile. The on-time performance of the Route 10 is the third highest in the system as 62 percent of scheduled timepoints were reached on-time during manual ridechecks performed in November of 2019; however, the route also has the third highest rate of services showing up earlier than the scheduled time (**Figure 26**). Approximately 58 passengers board Route 10 on an average weekday, the fourth highest utilized route in the system With many of the passengers using stops at the Caperton Transportation Center and the Walmart at Foxcroft Towne Center.

Table 8: Existing Route 10 Facts

	Route 10
Passengers per Revenue Mile (System Rank)	**0.6 (*#2*)**
Passengers per Revenue Hour (System Rank)	**6.7 (*#3*)**
Percent On-Time / Late / Early (System Rank – On-Time only)	**62% / 5% / 33% (*#3*)**
Average Daily Boardings (System Rank)	**58 (*#4*)**
Highest Ridership Stops	**Caperton Transportation Center, Walmart at Foxcroft Towne Center**
Major Generators Served	**Caperton Transportation Center, Walmart at Foxcroft Towne Center, Senior Towers, Berkeley Medical Center, Shenandoah Community Health**

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - It is sometimes difficult to serve all destinations on each trip within the scheduled run time, especially on some a.m. period trips
  - On some trips multiple stops require the transit vehicle's wheelchair lift, straining the ability for that individual bus to serve passengers using wheelchairs; in some instances, coordination must be made between different EPTA routes to meet the need
  - Route 10 is one of the busier routes, could flag stops be removed and more specific stops added?
  - Operators have heard desires for additional evening and Saturday service related.

- **Public and Stakeholder Comments** (Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - Several comments requested later service into the evening hours.
  - Some comments asked for additional Saturday service throughout the system.

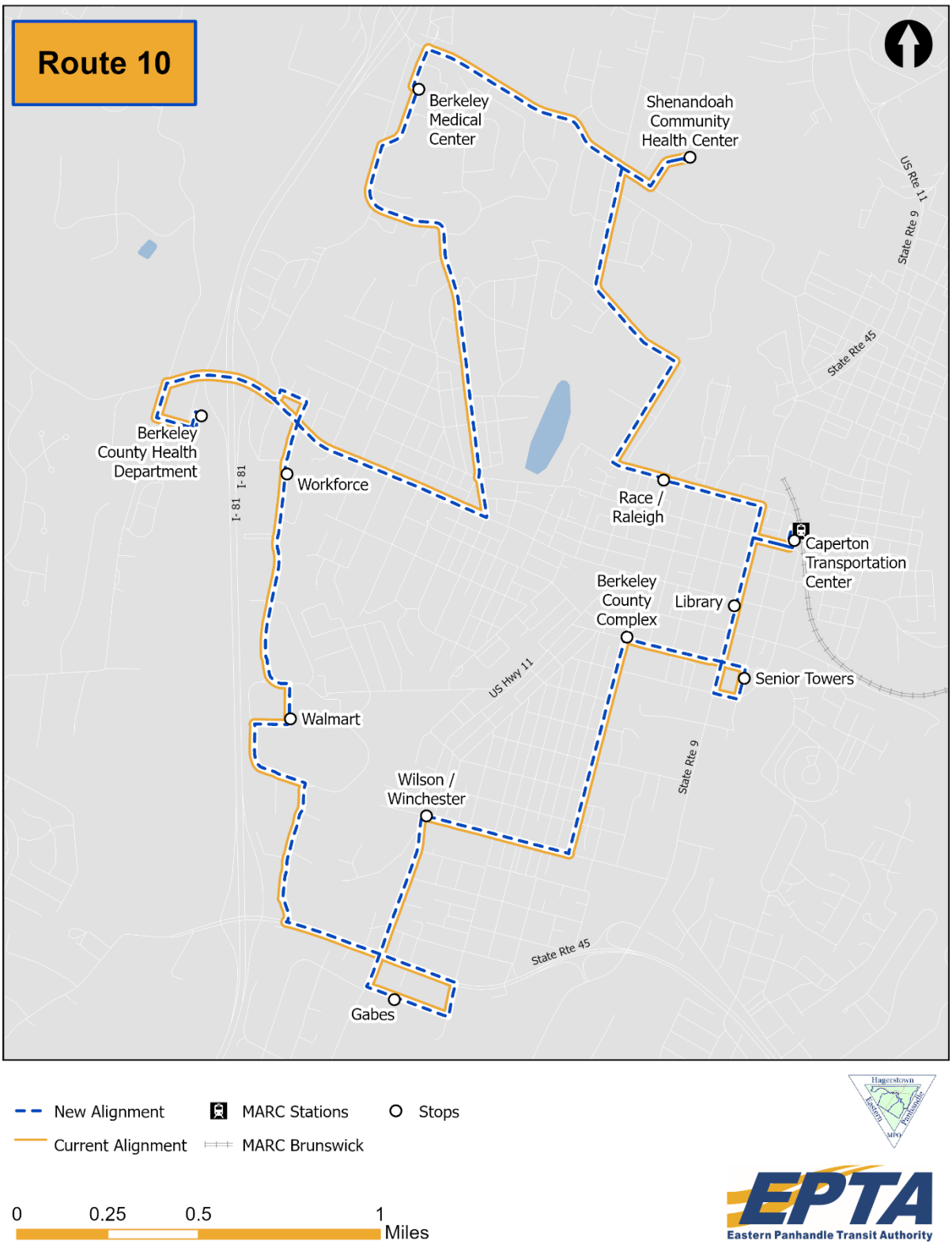
Service Recommendations

As one of the better performing routes in the system, Route 10 will keep its current routing, while also expanding its span of service later into the evening hours and providing service on Saturdays. **Table 9** summarizes the benefits of maintaining and expanding the Route 10. **Figure 31** illustrates the current and recommended alignment for the service. The recommendation to expand the service later into the evening hours has been identified as a higher priority recommendation, while providing service on Saturday on the Route 10 is a medium priority.

Table 9: Route 10 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Route 10 will continue to serve on its current alignment, providing circulator service through much of Martinsburg.	■ Maintains a popular and well used service ■ Route 10 provides decent coverage of residential areas in Martinsburg and provides connections to important destinations	■ None
Route 10 will operate two hours later into the evening, extending service to 7:30 p.m., daily.	■ Continuation of a recognizable and well used service later into the evening hours will allow existing and potential passengers additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A
Route 10 will provide Saturday Service between the hours of 9:00 a.m. and 5:00 p.m.	■ Providing Saturday service on a familiar and appreciated route will allow additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A

Figure 31: Route 10 Recommended Service Alignment



Proposed Service Levels

Service levels on Route 10 are summarized in Table 10. Route 10 is proposed to operate two hours later in the evening to replace the existing nighttime service and will also offer service on the weekends to help replace the existing weekend services provided by current Routes 35 and 40. Because of the fiscal implications of implementing the changes for the night-time and weekend periods, it is suggested that they do not happen at the same time, but rather as funding and resources become available. In terms of the potential impact to overall service performance and production, and to help increase transit utilization across the region, implementing the recommendation that extends the daily span of service on Route 10 should be a priority.

Table 10: Route 10 Summary of Proposed Service Level Changes

		Current Route 10	Recommended Route 10
From - To		Martinsburg Circulator	Martinsburg Circulator
Daily Span		7:00 a.m. – 5:24 p.m.	7:00 a.m. – 7:30 p.m.
Headway	Peak	60 min	60 min
	Off-Peak	60 min	60 min
Saturday Service		No	Yes
Saturday Span		N/A	9:00 a.m. – 5:00 p.m.
Headway	All Day	N/A	60 min
Peak Cycle Time		60 min	60 min
Peak Vehicles		1	1

Scheduled Stops

A slight adjustment will be made to the stops for the recommended Route 10 with the removal of the existing stop at Stephens Street at College Street, which will be replaced by a new stop with a shelter nearby at the Berkeley County Complex:

- Caperton Transportation Center
- Berkeley County Health Department
- Berkeley County Medical Center
- Gabes
- Shenandoah Community Health Center
- Berkeley County Complex
- Walmart at Foxcroft Towne Center
- Wilson / Winchester
- Workforce
- Sheets / Mega Apartments
- Martinsburg Library
- Race / Raleigh
- Senior Towers

Future Considerations

- Route 10's alignment will be updated to serve the new EPTA Transit Center at Race Street and Raleigh Street.
- Capital investments should be considered at or near the current stop at the Walmart at Foxcroft Towne Center.

4.2.2. Route 11

EPTA's Route 11 service provides a connection to the VA Medical Center from Downtown Martinsburg, including stops at important activity generators such as the Caperton Transportation Center, South Queen Street, Gabes, Hack Wilson Way, and the Fountainhead Apartments, among other destinations. Route 11 is one of EPTA's best performing service across several categories.

Route Facts

The Route 11 is currently the most productive route in the system (**Table 11**), with approximately 10.4 passengers per revenue hour; however, the efficiency of the service is ranked fourth, with 0.36 passengers per revenue mile. On-time performance on the Route 11 route is poor; only 46 percent of scheduled timepoints were reached on-time during manual ridechecks performed in November of 2019, with approximately 34 percent of the trips arriving early and another 20 percent of the trips arriving late (**Figure 26**). Additionally, the Route 11 has the highest instances of the route showing up before the scheduled stop time. Approximately 67 passengers use the Route 11 on an average weekday, which is the highest among all EPTA routes. The majority of passengers travel between the Caperton Transportation Center and the VA Medical Center; however, the stop at Gabes does provide important connections to other EPTA services, which can be seen in **Figure 52** in Appendix A. Additionally, the stop at Hack Wilson Way produce some fairly high daily ridership activity.

Table 11: Existing Route 11 Facts

	Route 11
Passengers per Revenue Mile (System Rank)	**0.5 (*#4*)**
Passengers per Revenue Hour (System Rank)	**10.4 (*#1*)**
Percent On-Time / Late / Early (System Rank – On-Time only)	**46% / 20% / 34% (*#7*)**
Average Daily Boardings (System Rank)	**67 (*#1*)**
Highest Ridership Stops	**Caperton Transportation Center, VA Medical Center**
Major Generators Served	**Caperton Transportation Center, VA Medical Center, Gabes, Queen Street, Hack Wilson Way**

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - No comments received or opinions expressed regarding Route 11.

- **Public and Stakeholder Comments** (Comments obtained through TDP Stakeholder meetings, on-board surveys, MetroQuest survey effort, and recent service requests)**:**
  - Several comments requested additional earlier and later hours on this route to the VA Medical Center from project and area stakeholders.

Service Recommendations

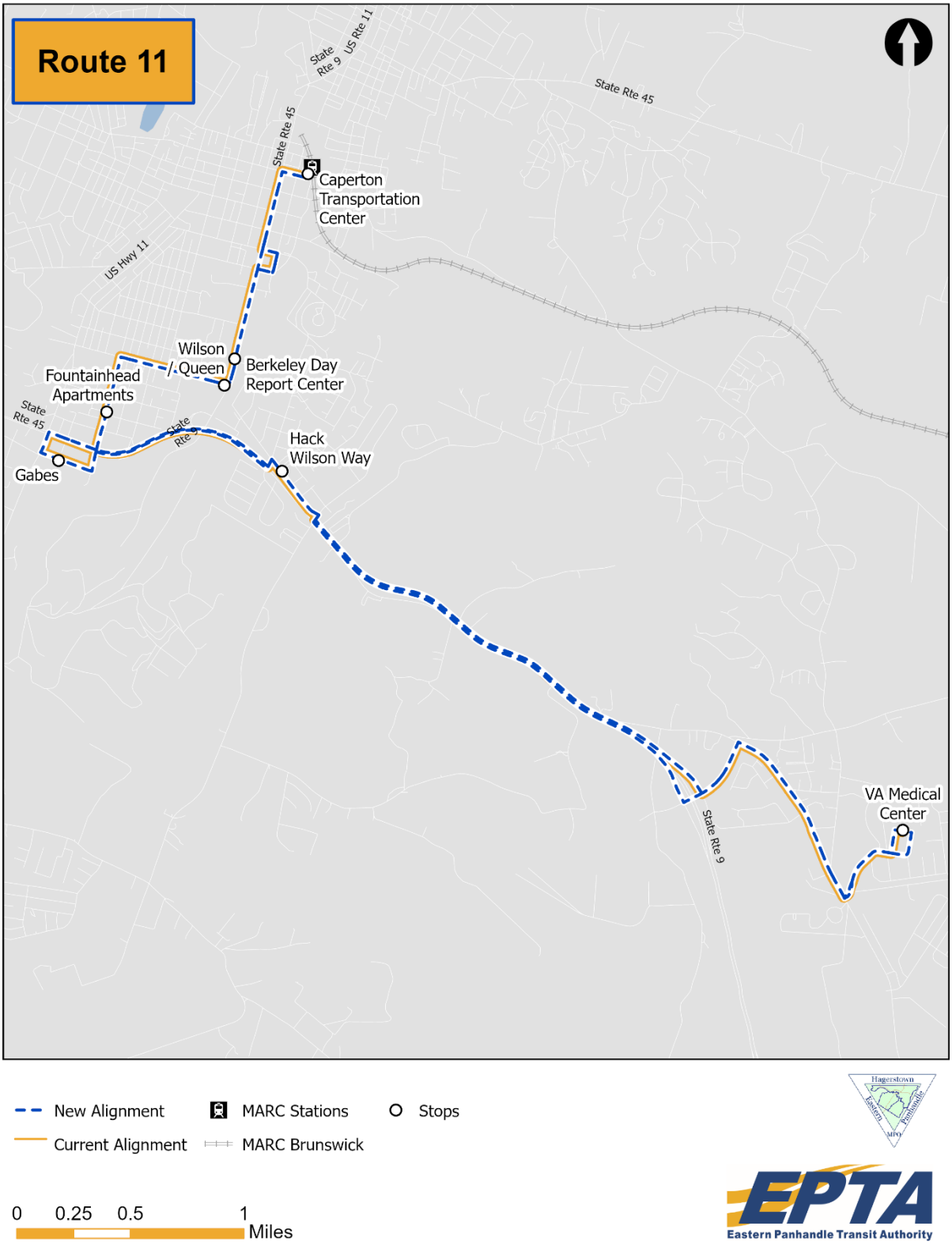
No alignment changes are recommended for Route 11. The route will continue to offer service to Gabes, the Fountainhead Apartments, and South Queen Street in Downtown Martinsburg, along with the VA Medical Center, using its existing alignment. The route will provide earlier service, beginning daily operations at 7:20 a.m., two hours earlier than the existing 9:20 a.m. start time. Additionally, the service will operate later into the evening hours as part of the effort to replace existing evening Routes 25 and 30 with more recognizable and easier to access services.

Table 12 summarizes the proposed changes, benefits, and areas with service reductions on Route 11. **Figure 32** illustrates the current and recommended alignments for Route 11.

Table 12: Route 11 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Route 11 will continue to serve on its current alignment, providing service to the VA Medical Center from Martinsburg	■ Maintains a popular and well used service ■ Route 11 provides an important connection between Martinsburg and the VA Medical Center	■ None
Route 11 will begin service two hours earlier in the morning, starting daily service at 7:30 a.m.	■ Providing an earlier start time will fulfill a number of requests for earlier access to the VA Medical Center on this route	■ N/A
Route 11 will operate two hours later into the evening, extending service to 6:30 p.m., daily.	■ Continuation of a recognizable and well used service later into the evening hours will allow existing and potential passengers additional access to destinations within Martinsburg, which should help encourage continued ridership growth	■ N/A
Route 11 will provide Saturday Service between the hours of 9:00 a.m. and 5:00 p.m.	■ Providing Saturday service on a familiar and appreciated route will allow additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A

Figure 32: Route 11 Recommended Service Alignment



Proposed Service Levels

Proposed service levels on Route 11 are summarized in **Table 13**. The route is recommended to start two hours earlier in order to provide earlier morning service to the VA Medical Center. This is a medium priority recommendation. Route 11 has also been identified as a service that should operate later into the evening hours to help replace the existing night Routes 25 and 30. Specifically, the Route 11 will operate two hours later to 6:30 p.m. This is a higher priority recommendation.

Table 13: Route 11 Summary of Proposed Service Level Changes

	Current Route 11	Recommended Route 11
From - To	Caperton – VA Medical Center	Caperton – VA Medical Center
Span	9:20 a.m. – 4:24 p.m.	7:30 a.m. – 6:30 p.m.
Headway	60	60
Weekend Service	No	No
Peak Cycle Time	60	60
Peak Vehicles	1	1

Scheduled Stops

The stops offered on recommended Route 11 will be adjusted slightly, with Senior Towers being added to the list of stops, and the Hack Wilson Way stop being divided into two stops based on the direction the route is operating:

- Caperton Transportation Center
- Berkeley Day Report Center
- Gabes
- State Circle / Hack Wilson
- Royal Crest / Hack Wilson
- Senior Towers
- Fountainhead Apartments
- VA Medical Center
- Wilson / Queen

Future Considerations

- Route 11's alignment will be updated to serve the new EPTA Transit Center at Race Street and Raleigh Street.
- Capital investments should be considered at the VA Medical Center

4.2.3. Route 12

EPTA's Route 12 service provides a connection from Downtown Martinsburg at the Caperton Transportation Center to areas in the norther area of the City, including stops at important activity generators such as Martin's North Martinsburg, the Big Lots, Save-A-Lot, Joshua Drive, Berkeley County DHHR, Shepherd University Martinsburg Center, Walgreens, and select service to Macy's, FedEx, and Quad to meet certain shift times, among other destinations.

Route Facts

The Route 12 is currently the second most productive route in the system, with approximately 7.6 passengers per revenue hour and the second most effective route in the system with 0.6 passengers per revenue mile (**Table 14**). On-time performance on the Route 12 is poor; only 50 percent of scheduled timepoints were reached on-time during manual ridechecks performed in November 2019, with approximately 31 percent of the trips arriving late and 19 percent arriving early (**Figure 26**). The passengers of the current Route 12 use a number of the existing stops for their transit needs, but the Caperton Transportation Center and the Martins attract the most daily activity, which can be seen in **Figure 54** in Appendix A

Table 14: Existing Route 12 Facts

	Route 12
Passengers per Revenue Mile (System Rank)	**0.6 (*#2*)**
Passengers per Revenue Hour (System Rank)	**7.6 (*#2*)**
Percent On-Time / Late / Early (System Rank – On-Time only)	**50% / 19% / 31% (*#6*)**
Average Daily Boardings (System Rank)	**59 (*#3*)**
Highest Ridership Stops	**Caperton Transportation Center, Martins**
Major Generators Served	**Caperton Transportation Center, Martin's North Martinsburg, Big Lots, Save-A-Lot, Joshua Drive, Berkeley County DHHR, Shepherd University Martinsburg Center, Polo Green Timberlane Leaf, and Walgreens, with some trips to Macy's, FedEx, and Quad**

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - Lee Street is hard to serve on off-route requests
  - Operators have noted that several passengers have requested that more buses come throughout the day on Route 12.

- **Public and Stakeholder Comments (**Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - Several comments requested later service into the evening hours.

Service Recommendations

In one of the biggest changes to the EPTA system, Route 12 will be realigned to operate more directly to Edwin Miller Boulevard. In a corresponding change, Route 19 will take over service currently provided by Route 12 on Rock Cliff Drive. Additionally, there are several trips that currently operate to Macy's FedEx and Quad; these trips will all be provided by recommended Route 19, which also currently provides service to these destinations.

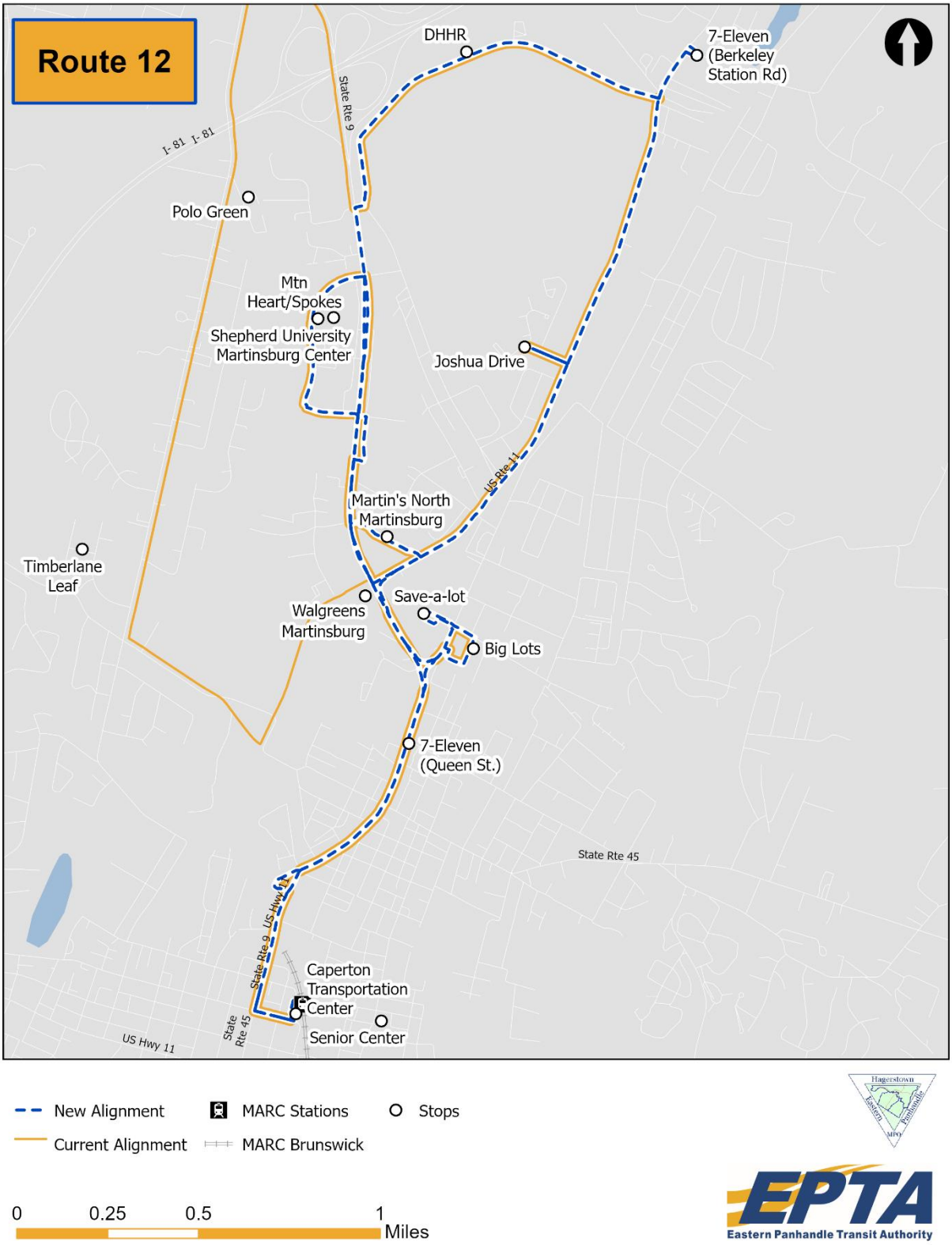
Route 12 is recommended to operate one hour later daily in the effort to replace the existing evening Routes 25 and 30; this is a higher priority recommendation. Additionally, the Route 12 is recommended to operate on Saturdays in the effort to replace the existing Saturday Routes 35 and 40, which is considered a medium priority recommendation.

Table 15 summarizes the proposed changes, benefits, and areas with service reductions on Route 12. **Figure 33** illustrates the recommended changes to Route 12.

Table 15: Route 12 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Alignment serving Macy's, FedEx, Quad, and Rock Cliff Drive transferred to Route 19.	■ Provides more efficient service in north Martinsburg while maintaining levels of service ■ Simplification of the route should help attract additional passengers	■ The areas transferred to Route 19 will not see service reductions.
Route 12 will operate one hour later into the evening, extending service to 6:45 p.m., daily.	■ Continuation of a recognizable and well used service later into the evening hours will allow existing and potential passengers additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A
Route 12 will provide Saturday Service between the hours of 9:00 a.m. and 5:00 p.m.	■ Providing Saturday service on a familiar and appreciated route will allow additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A

Figure 33: Route 12 Recommended Service Alignment



Proposed Service Levels

Proposed service levels on Route 12 are summarized in **Table 16**. Route 12 has been identified as a service that should operate later into the evening hours to help replace the existing night routes. Route 12 will operate one hour later to 6:45 p.m. Route 12 is also one of the routes recommended to operate service on Saturdays in order to replace eliminated Routes 35 and 40. Because of the fiscal implications of implementing the changes for the night-time and weekend periods, it is suggested that they do not happen at the same time, but rather as funding and resources become available. In terms of the potential impact to overall service performance and production, and to help increase transit utilization across the region, implementing the recommendation that extends the daily span of service on Route 12 should be a priority.

Table 16: Route 12 Summary of Proposed Service Level Changes

		Current Route 12	Recommended Route 12
From - To		North Martinsburg Circulator and Macy's / FedEx / Quad	North Martinsburg Circulator
Daily Span		8:00 a.m. – 5:45 p.m.	8:00 a.m. – 6:45 p.m.
Headway	Peak	60 min	60 min
	Off-Peak	60 min	60 min
Saturday Service		No	Yes
Saturday Span		N/A	9:00 a.m. – 5:00 p.m.
Headway	All Day	N/A	60 min
Peak Cycle Time		60	60
Peak Vehicles		1	1

Scheduled Stops

The recommended stops for Route 12 will include a stop at the Berkeley Senior Services on every other trip, and the removal of stops at Macy's, FedEx, and Quad, as these stops will now be served exclusively on Route 19. The stops featured on Route 12 will include:

- Caperton Transportation Center
- Senior Center
- 7-Eleven (Queen Street)
- Big Lots
- Save-A-Lot (Martinsburg)
- Martin's North Martinsburg
- Berkeley Senior Services
- Walgreens - Martinsburg
- Joshua Drive
- 7-Eleven (Berkeley Station Road)
- Berkeley County DHHR
- Shepherd University Martinsburg Center

Future Considerations

- Route 12's alignment will be updated to serve the new EPTA Transit Center at Race Street and Raleigh Street.
- Capital investments should be considered at the VA Medical Center

4.2.4. Route 14

EPTA's Route 14 service provides a connection from Downtown Martinsburg at the Caperton Transportation Center to the Walmart at Foxcroft Towne Center and beyond, including stops at important activity generators such as Winchester Avenue, Ambrose Towers, Gabes, Walmart at Foxcroft Towne Center, Target, and the Blue Ridge Community and Tech College, among other destinations.

Route Facts

The Route 14 is currently the most effective route in the system with 0.7 passengers per revenue mile and the fourth most productive route in the system, with approximately 5.8 passengers per revenue hour (**Table 17**). On-time performance on the Route 14 is among the best in the system with 75 percent of scheduled timepoints reached on-time during manual ridechecks performed in November 2019 (**Figure 26**). Route 14 has the second highest average daily boardings across the system. The passengers of the current Route 14 use a number of the existing stops for their transit needs, including Ambrose Towers, Target, and the Blue Ridge CTC; however, the stop at the Walmart at Foxcroft Towne Center attracts the most daily activity, which can be seen in **Figure 56** in Appendix A.

Table 17: Existing Route 14 Facts

	Route 14
Passengers per Revenue Mile (System Rank)	**0.7 (*#1*)**
Passengers per Revenue Hour (System Rank)	**5.8 (*#4*)**
Percent On-Time / Late / Early (System Rank – On-Time only)	**75% / 24% / 1% (*#2*)**
Average Daily Boardings (System Rank)	**63 (*#2*)**
Highest Ridership Stops	**Walmart at Foxcroft Towne Center, Ambrose Towers, Winchester Avenue**
Major Generators Served	**Caperton Transportation Center, Winchester Avenue, Ambrose Towers, Walmart at Foxcroft Towne Center, Gabes, Target, Blue Ridge CTC**

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - Gabes is used more as a Transit Center; few people are actually going to Gabes.

- **Public and Stakeholder Comments (**Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - Several comments requested later service into the evening hours.
  - Some comments asked for additional Saturday service throughout the system.

Service Recommendations

The Route 14's alignment will be adjusted slightly to no longer serve Gabes, as this destination is lightly used on this route; however, service to Gabes will be available on Route 10, Route 11, and Route 18. Service to and through the Gabes on the early morning trips (i.e., between 6:00 a.m. and 7:30 a.m.) will still be offered; however, if an alternate route can service Development Drive location for this trip the service on Route 14 would be removed. Additionally, this service recommendation is coordinated with the extension of Route 18, which will continue to operate to Gabes and then operate further to the Walmart at Foxcroft Towne Center. This recommendation provides two benefits to the system overall: first, it will create additional transfer possibilities at the Walmart stop, where connections will be possible between Routes 10, 14, and 18.

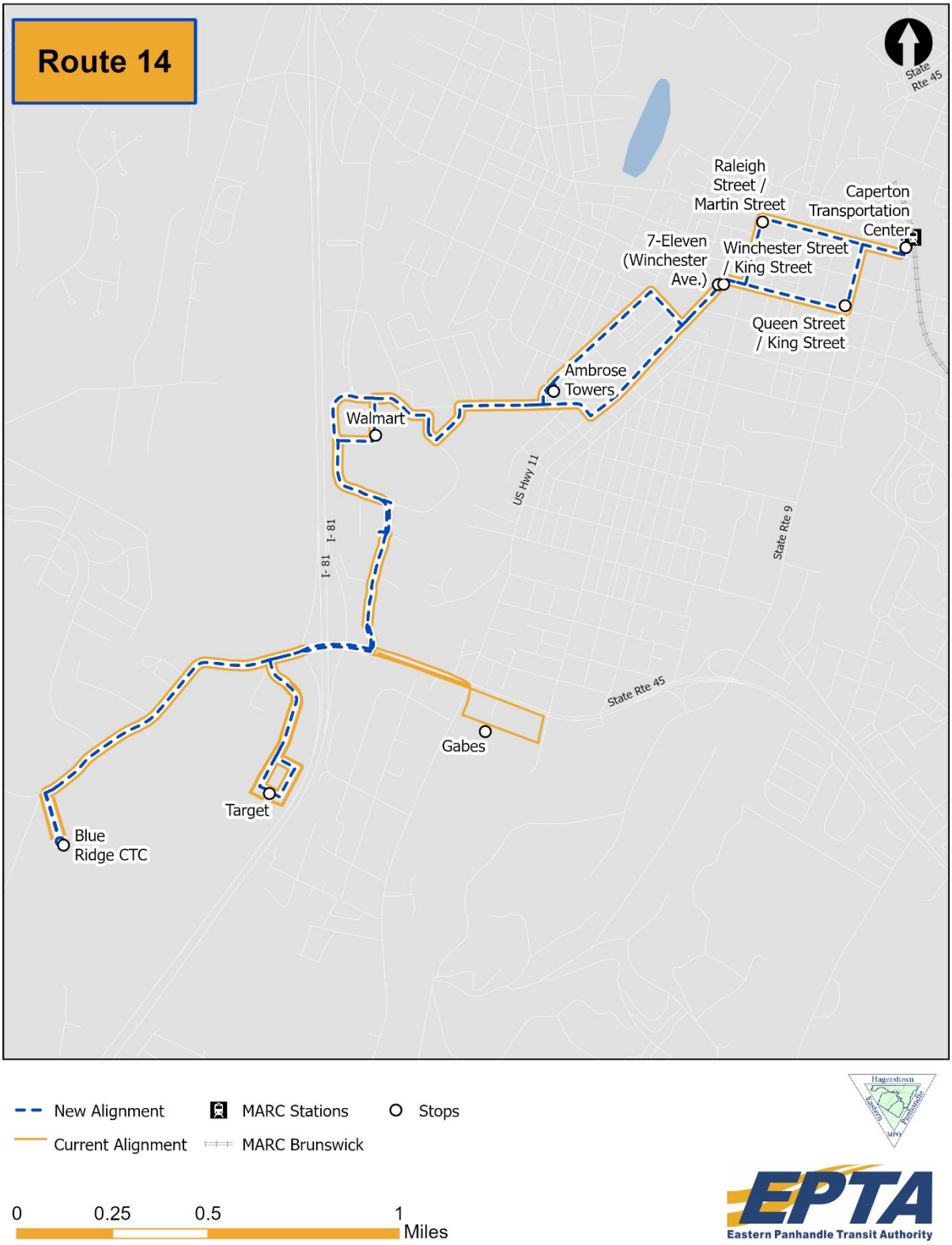
Route 14 is recommended to operate one hour later daily in the effort to replace the existing evening Routes 25 and 30; this is a higher priority recommendation. Additionally, the Route 14 is recommended to operate on Saturdays in the effort to replace the existing Saturday Routes 35 and 40, which is considered a medium priority recommendation.

Table 18 summarizes the proposed changes, benefits, and areas with service reductions on Route 14. Figure 34 illustrates the recommended changes to Route 14.

Table 18: Route 14 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
No longer serve Gabes	■ Shortens route to improve on-time performance ■ Provides an opportunity to establish a transfer point at Walmart at Foxcroft Towne Center.	■ Gabes will continue to be served by Routes 10, 11, and 18.
Route 14 will operate one hour later into the evening, extending service to 6:45 p.m., daily.	■ Continuation of a recognizable and well used service later into the evening hours will allow existing and potential passengers additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A
Route 14 will provide Saturday Service between the hours of 9:00a.m. and 5:00 p.m.	■ Providing Saturday service on a familiar and appreciated route will allow additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A

Figure 34: Route 14 Recommended Service Alignment



Proposed Service Levels

Proposed service levels on Route 14 are summarized in **Table 19.** Route 14 has been identified as a service that should operate later into the evening hours to help replace the existing night rotes. Route 14 will operate one hour later to 8:30 p.m. This higher priority recommendation will help to create an easier system to navigate throughout daily operating hours. Route 14 is also one of the routes recommended to operate service on Saturdays in order to replace eliminated Routes 35 and 40. Implementation of night and weekend service should be implemented incrementally as resources become available. Implementing the proposed expansion of weekday service hours should be a priority for Route 14, as it will help increase regional transit utilization.

Table 19: Route 14 Summary of Proposed Service Level Changes

		Current Route 14	Recommended Route 14
From - To		Caperton Transportation Center – Foxcroft Towne Center	Caperton Transportation Center – Foxcroft Towne Center
Daily Span		6:00 a.m. – 7:23 p.m.	6:00 a.m. – 8:30 p.m.
Headway	Peak	60 min	60 min
	Off-Peak	60 min	60 min
Saturday Service		No	Yes
Saturday Span		N/A	9:00 a.m. – 5:00 p.m.
Headway	All Day	N/A	60 min
Peak Cycle Time		60	60
Peak Vehicles		1	1

Scheduled Stops

Recommended scheduled stops on the Route 14 will continue to operate to all stops of the existing Route 14, with the exception of the stop at Gabes. This location will continue to have service on Routes 10, 11, and 18. The stops that will have service as part of the adjusted Route 14 include:

- Caperton Transportation Center
- 7-Eleven (Winchester Avenue)
- Ambrose Towers
- Queen Street / King Street
- Raleigh Street / Martin Street
- Target
- Winchester Street / King Street
- Gabes (early morning trips only)
- Walmart at Foxcroft Towne Center
- Development Drive-North
- Pikeside Bowling
- Sheetz / Mega Apartments

Future Considerations

- Route 14's alignment will be updated to serve the new EPTA Transit Center at Race Street and Raleigh Street.
- Capital investments should be considered at or near the current stop at the Walmart at Foxcroft Towne Center.

4.2.5. Route 16

EPTA's Route 16 service provides a connection from Downtown Martinsburg at the Caperton Transportation Center through the VA Medical Center, and to Ranson and Charles Town, including stops at important activity generators such as Queen Street, Senior Towers, Hack Wilson Way, the Apple Tree Apartments, Charles Town Courthouse, Charles Town City Hall, and the Save-A-Lot, among other destinations.

Route Facts

The Route 16 does not perform well compared to other EPTA routes; however, it is worth mentioning that this route (along with Route 20) operate the highest amount of miles per trip, which greatly impacts each of the metrics identified in **Table 20**. The route carries 0.2 passengers per revenue mil and approximately 5.7 passengers per revenue hour, both measures equating to sixth in the system. On-time performance on the Route 16 is average, with 54 percent of scheduled timepoints reached on-time during manual ridechecks performed in November 2019, and approximately 41 percent of the trips are late, while only four percent of the trips are early (**Figure 26**). Route 16 has the sixth highest average daily boardings across the system, with approximately 43 passengers per day. The passengers of the current route use a number of the existing stops for their transit needs, including the VA Medical Center, Hack Wilson Way, the Caperton Transportation Center, and the Save-A-Lot in Charles Town, which can be seen in **Figure 58** in Appendix A.

Table 20: Existing Route 16 Facts

	Route 16
Passengers per Revenue Mile (System Rank)	**0.2 (*#6*)**
Passengers per Revenue Hour (System Rank)	**5.7 (*#6*)**
Percent On-Time / Late / Early (System Rank – On-Time only)	**54% / 24% / 1% (*#5*)**
Average Daily Boardings (System Rank)	**43 (*#6*)**
Highest Ridership Stops	**VA Medical Center, Hack Wilson Way, Caperton Transportation Center, Save-A-Lot**
Major Generators Served	**Caperton Transportation Center, Senior Towers, Charlestown DMV, Apple Tree Apartments, Ranson City Hall, Charles Town Courthouse, Charles Town City Hall, Save-A-Lot**

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - Potomac Market Place should be a request only stop on Route 16 (getting few, if any, riders on most trips).
  - Route 16 has a number of regular off-route requests that impact the ability of the route to remain on-schedule.

- **Public and Stakeholder Comments (**Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - Several comments requested additional earlier and later hours on this route to the VA Medical Center from project and area stakeholders.
  - Several comments requested later service into the evening hours.
  - Some comments asked for additional Saturday service throughout the system.

Service Recommendations

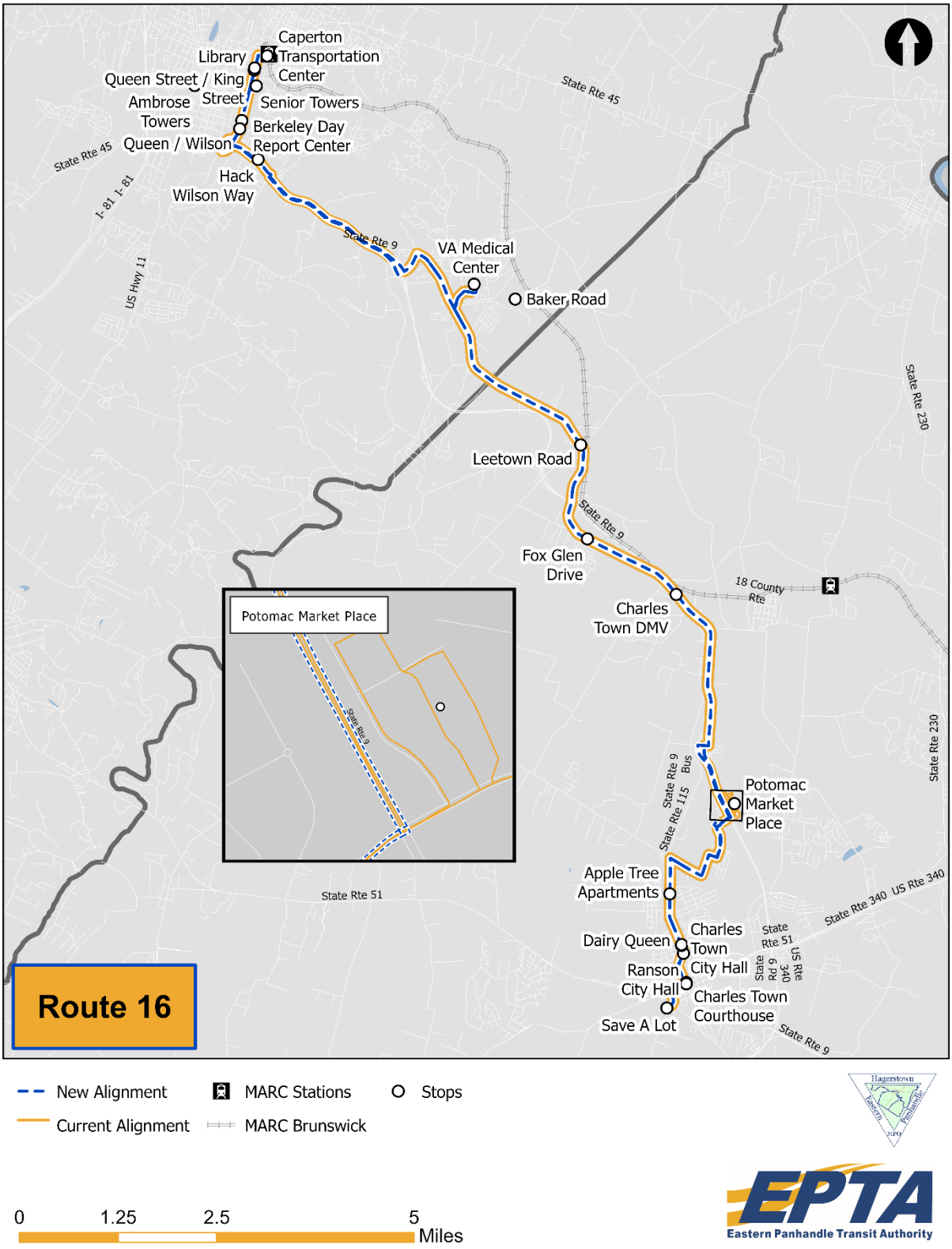
Route 16 offers vital transit connections from Ranson and Charles Town to Martinsburg, providing service to the VA Medical Center, and the Charles Town Save-A-Lot, among other important destinations. The only alignment adjustment is to have the Potomac Market Place (i.e., the location of the Weis and Ledo) become a request only stop, which will help to improve on-time performance. Route 16 is recommended to operate two hours later daily in the effort expand service hours to the VA Medical Center, Charles Town, and Ranson; this is a higher priority recommendation. Additionally, the Route 16 is recommended to operate on Saturdays in the effort to replace the existing Saturday Routes 35, which is considered a medium priority recommendation.

Table 21 summarizes the proposed changes, benefits, and areas with service reductions on Route 16. **Figure 35** illustrates the recommended changes to Route 16.

Table 21: Route 16 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Potomac Market Place will be served as an on-call stop	■ This stop currently has little to no utilization, so not having to serve it on every trip will save operating time, helping the route improve on-time performance.	■ Potomac Market Place; however, passengers will be able to request the stop on an on-call basis
Route 16 will operate one hour later into the evening, extending service to 6:45 p.m., daily.	■ Continuation of a recognizable and well used service later into the evening hours will allow existing and potential passengers additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A
Route 16 will provide Saturday Service between the hours of 9:00 a.m. and 5:00 p.m.	■ Providing Saturday service on a familiar and appreciated route will allow additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A

Figure 35: Route 16 Recommended Service Alignment



Proposed Service Levels

Proposed service levels on Route 16 are summarized in **Table 22**. The route has been identified as a service that should operate later into the evening hours to help replace the existing night routes. Specifically, Route 16 will operate two hours later to 7:30 p.m. Route 16 is also one of the routes recommended to operate service on Saturdays in order to help replace the existing Route 35 and to expand EPTA Saturday transit service into Charles Town and Ranson.

Table 22: Route 16 Summary of Proposed Service Level Changes

		Current Route 16	Recommended Route 16
From - To		Martinsburg – VA Medical Center – Ranson / Charles Town	Martinsburg – VA Medical Center – Ranson / Charles Town
Daily Span		5:40 a.m. – 5:24 p.m.	5:40 a.m. – 7:30 p.m.
Headway	Peak	60 min	60 min
	Off-Peak	60 min	60 min
Saturday Service		No	Yes
Saturday Span		N/A	9:00 a.m. – 5:00 p.m.
Headway	All Day	N/A	60 min
Peak Cycle Time		60	60
Peak Vehicles		1	1

Scheduled Stops

The recommended scheduled stops for the Route 16 will continue to operate all of the existing stops, with the exception of the Potomac Market Place, which will become an on-call stop. The stops that will have service as part of the adjusted Route 16 will include:

- Caperton Transportation Center
- Berkeley Day Report Center
- State Circle / Hack Wilson
- Royal Crest / Hack Wilson
- VA Medical Center
- Quad / Baker Road
- Kearneysville Post Office
- Potomac Market Place (on-call only)
- Apple Tree Apartments
- Dairy Queen - Ranson
- Charles Town City Hall
- Charles Town Court House
- Ranson City Hall
- Save A Lot – Charles Town

Future Considerations

- Route 16's alignment will be updated to serve the new EPTA Transit Center at Race Street and Raleigh Street.
- Capital investments should be considered at the VA Medical Center. Locations within Ranson and Charles Town should be further explored for EPTA branded shelters and/or benches to help with recognition of the EPTA brand and the services that are available within each location.

4.2.6. Route 18

EPTA's Route 18 is the newest route amongst EPTA services, currently providing a connection from Gabes in Martinsburg to Inwood, with stops at Development Drive (including the Procter & Gamble facility), the Blue Ridge Technology Center, the 7-Eleven at Nadenbousch Lane, the Inwood Food Lion, Dollar General, and Inwood Plaza, among other destinations.

Route Facts

Compared to the rest of the daily EPTA routes, the Route 18 performs the worst across three of the measures (**Table 23**), including passengers per revenue mile (fewer than 0.1 passengers per mile), passengers per revenue hour (0.7 passengers per hour), and average daily boardings (five passengers per day). Not surprisingly, this allows the route to remain on schedule, as the Route 18 does have the best on-time performance among daily EPTA routes (**Figure 26**). The ridership characteristics of the existing route can be seen in **Figure 60** in Appendix A.

While the metrics of this route do not appear favorable, it is still a relatively new route (i.e., beginning to offer service in April 2018) that deserves a chance to grow and flourish; the route also provides coverage to an area that will not have transit if the route is removed. There are remedial actions that can be taken to ensure the proper resources are being used to provide service towards and to Inwood.

Table 23: Existing Route 18 Facts

	Route 18
Passengers per Revenue Mile (System Rank)	**>0.1 (*#8*)**
Passengers per Revenue Hour (System Rank)	**0.7 (*#8*)**
Percent On-Time / Late / Early (System Rank – On-Time only)	**82% / 0% / 18% (*#1*)**
Average Daily Boardings (System Rank)	**5 (*#8*)**
Highest Ridership Stops	**Gabes, the 7-Eleven at Nadenbousch Lane**
Major Generators Served	**Gabes, Mega Apartments, Procter & Gamble, Blue Ridge Technology Center, WV Urgent Care, Inwood Food Lion, Dollar General, Inwood Plaza**

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - Berkeley County Library should be request stop
  - Service to Jay Dee's (a seasonal water park and fun center open only during the summertime) should be request only.
  - Inwood Plaza should be request only.

- **Public and Stakeholder Comments (**Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - No comments were received or opinions expressed regarding Route 18.

Service Recommendations

In order to continue to provide service to Inwood, but in a more targeted manner, the Route 18 service will be divided into two variations: the first will continue to provide transit service to Inwood along a similar alignment as the current service but only providing trips every other hours; and the second variation that will turn back around and head northbound after serving the Blue Ridge Technology Center and the 7-Eleven at Nadenbousch Lane that will operate hourly throughout its service day.

Route 18 has two proposed alignments:

- Service within the Inwood area will no longer operate to Jay Dee's Family Fun Center; however, the route will provide service to the South Berkeley Library. The Food Lion will continue to be served in Inwood. Service to Inwood, currently offered every hour, is recommended to be offered on select trips.

- A second variation of Route 18 will offer hourly service to the Blue Ridge Technology Center and the 7-Eleven at Nadenbousch Lane, but no farther south.

All trips on Route 18 will be extended from Gabes to the Walmart at Foxcroft Towne Center, providing an opportunity for transfers to Routes 10 and 14. This recommendation will provide additional generators to the route and increase its attractiveness for passengers in and around Inwood. Should demand for service to and from Inwood increase in the future, the level of service provided to the area could be increased. Table 24 summarizes the proposed changes, benefits, and areas with service reductions on Route 18. **Figure 36** and **Figure 37** detail the two recommended variations for Route 18.

All recommendations for Route 18 should be considered as higher priority, as providing targeted service to Inwood will allow for resources to be used elsewhere in the system and extending service to the Walmart at Foxcroft Towne Center will provide additional transfer possibilities.

Table 24: Route 18 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Split into two route variations: **1. Service to Inwood, no longer serving Jay Dee's Family Fun Center** **2. Service as far south as Blue Ridge Technology Center and the 7-Eleven at Nadenbousch Lane**	■ Maintains service to major employment centers and Inwood, while allowing some resources to shift to other areas in the system with higher demand.	■ Under this recommendation, the Inwood area would see less frequent service.

Figure 36: Route 18 Recommended Service Alignment Variation 1

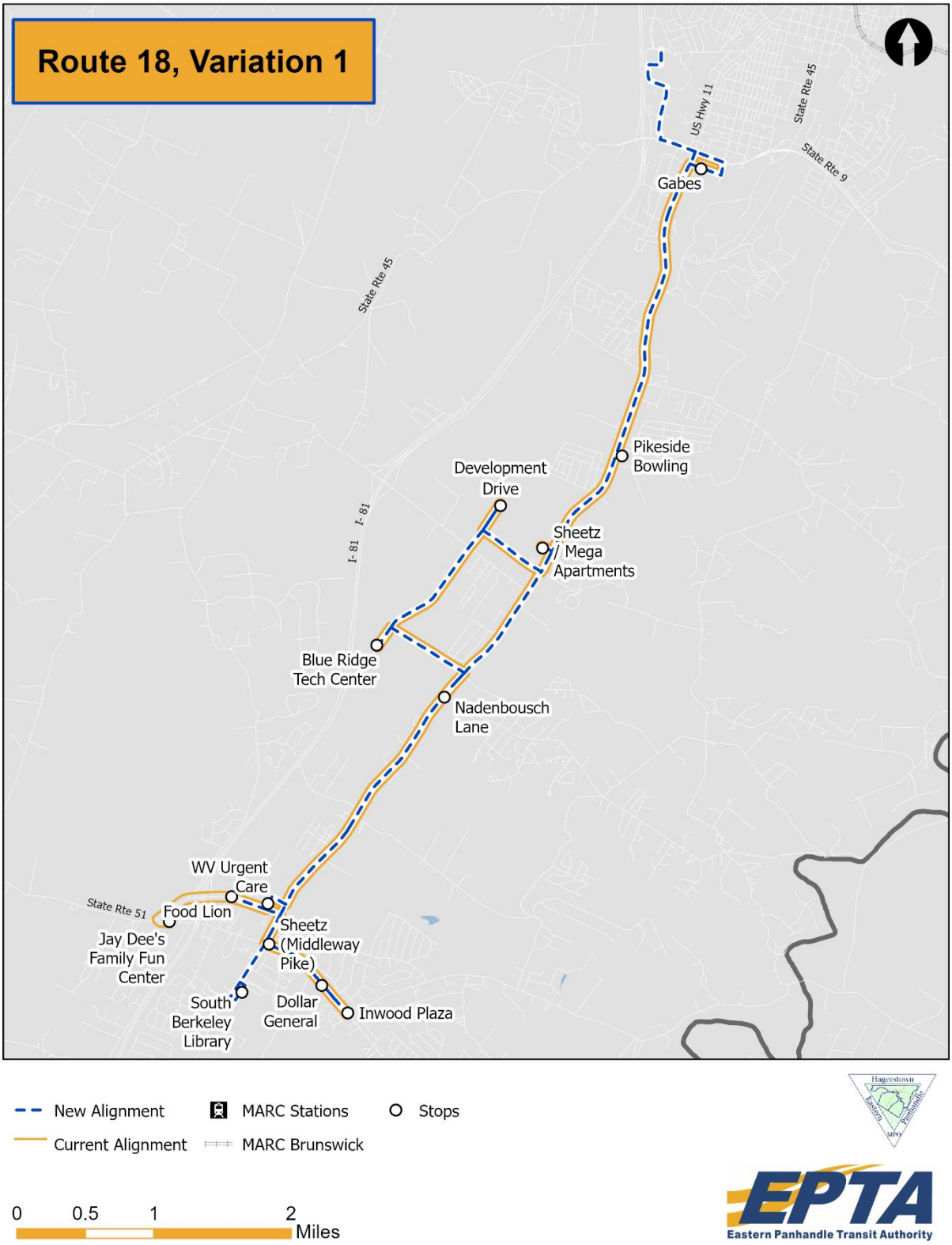
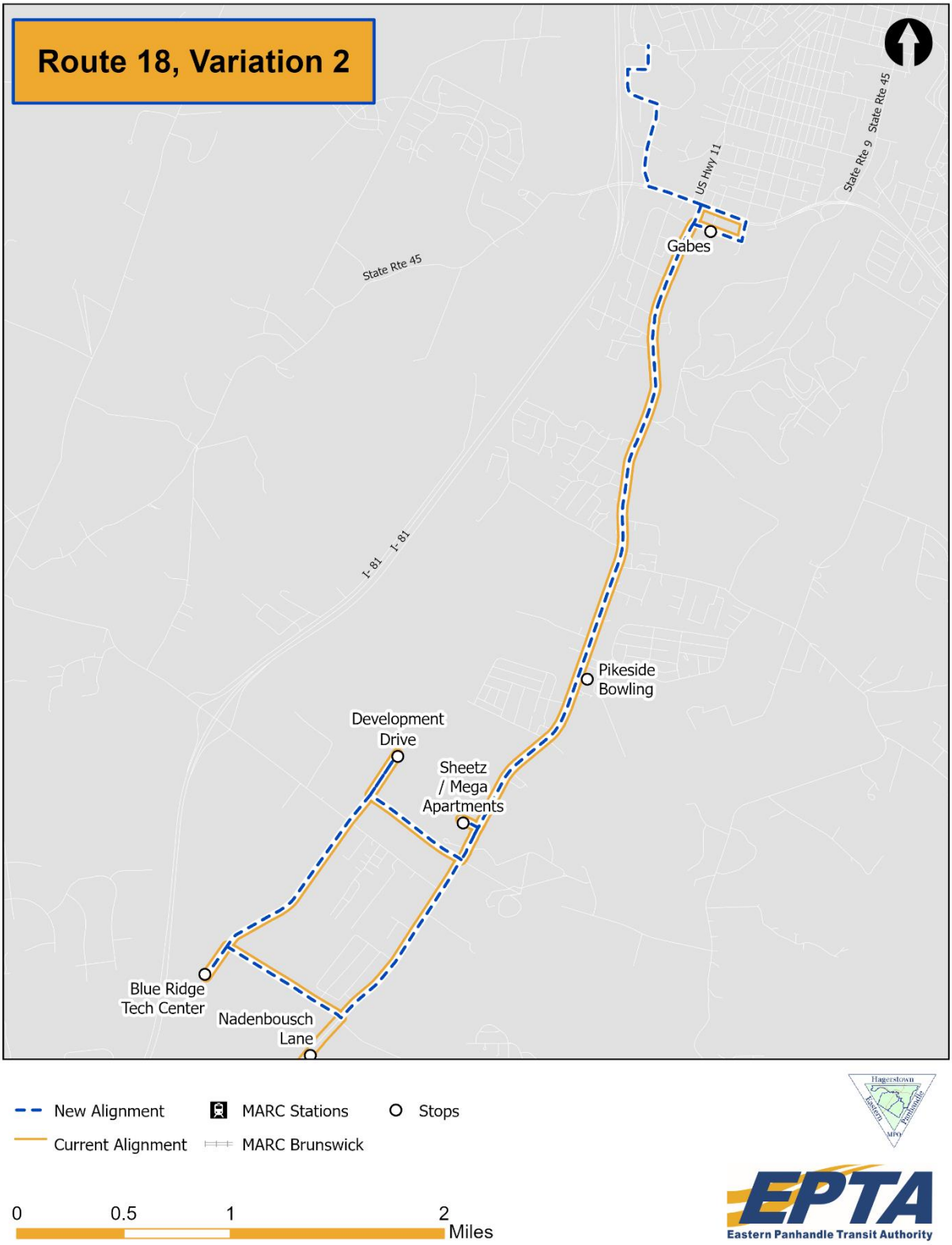


Figure 37: Route 18 Recommended Service Alignment Variation 2



Proposed Service Levels

Proposed service levels on Route 18 are summarized in **Table 25**Error! Reference source not found.. The route variation to Inwood would operate on select trips, while the variation to Blue Ridge Technology Center and the 7-Eleven at Nadenbousch Lane would operate on 60 minute headways.

Table 25: Route 18 Summary of Proposed Service Level Changes

	Current Route 18	Recommended Route 18 Variation 1	Recommended Route 18 Variation 2
From - To	Gabes – Inwood	Walmart at Foxcroft Towne Center – Inwood	Walmart at Foxcroft Towne Center – Blue Ridge Tech Center
Span	7:45 a.m. – 3:52 p.m.	7:45 a.m. – 3:52 p.m.	7:45 a.m. – 3:52 p.m.
Headway	60	Selected trips	60
Weekend Service	No	No	No
Peak Cycle Time	60	60	60
Peak Vehicles	1	1	1

Scheduled Stops

The first variation of Route 18 providing service to and from Inwood will have stops at the following location:

- Gabes
- Walmart at Foxcroft Towne Center
- Pikeside Bowling
- Sheetz / Mega Apartments
- Development Drive North
- Blue Ridge Tech Center
- 7-Eleven at Nadenbousch Lane
- WV Urgent Care
- Food Lion
- Sheetz (Middleway Pike)
- Dollar General
- Inwood Plaza
- South Berkeley Library

The second variation of Route 18 which will head north after serving the Blue Ridge Technology Center and the 7-Eleven at Nadenbousch Lane will only have stops at these locations:

- Gabes
- Walmart at Foxcroft Towne Center
- Pikeside Bowling
- Sheetz / Mega Apartments
- Development Drive North
- Blue Ridge Tech Center
- 7-Eleven at Nadenbousch Lane

Future Considerations

- Capital investments should be considered at or near the current stop at the Walmart at Foxcroft Towne Center.

4.2.7. Route 19

EPTA's Route 19 currently provides transit services between the Caperton Transportation Center, North Martinsburg, and Macy's, FedEx, and Quad, with stops at Joshua Drive, Berkeley County DHHR, Big Lots, and Shepherd University Martinsburg Center, among other destinations.

Route Facts

The Route 19 is currently the seventh most productive route in the system, with approximately 3.4 passengers per revenue hour and the fifth most effective route in the system with 0.3 passengers per revenue mile (**Table 26**). On-time performance on the Route 19 is among the middle of the routes, with about half of the service being on time or earlier as observed during manual ridechecks performed in November 2019 (**Figure 26**). The passengers of the current Route 19 use a number of the existing stops for their transit needs, but the Caperton Transportation Center, Macy's and Big Lots provide the most daily activity, which can be seen in further detail in **Figure 62** in Appendix A.

Table 26: Existing Route 19 Facts

	Route 19
Passengers per Revenue Mile (System Rank)	**0.3 (*#5*)**
Passengers per Revenue Hour (System Rank)	**3.4 (*#7*)**
Percent On-Time / Late / Early (System Rank – On-Time only)	**56% / 0% / 44% (*#4*)**
Average Daily Boardings (System Rank)	**14 (*#7*)**
Highest Ridership Stops	**Caperton Transportation Center, Macy's, Big Lots**
Major Generators Served	**Caperton Transportation Center, Big Lots, Joshua Drive, Berkeley County DHHR, Shepherd University Martinsburg Center, Macy's, FedEx, and Quad**

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - No comments were received or opinions expressed regarding Route 19.

- **Public and Stakeholder Comments** (Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - No comments were received or opinions expressed regarding Route 19.

Service Recommendations

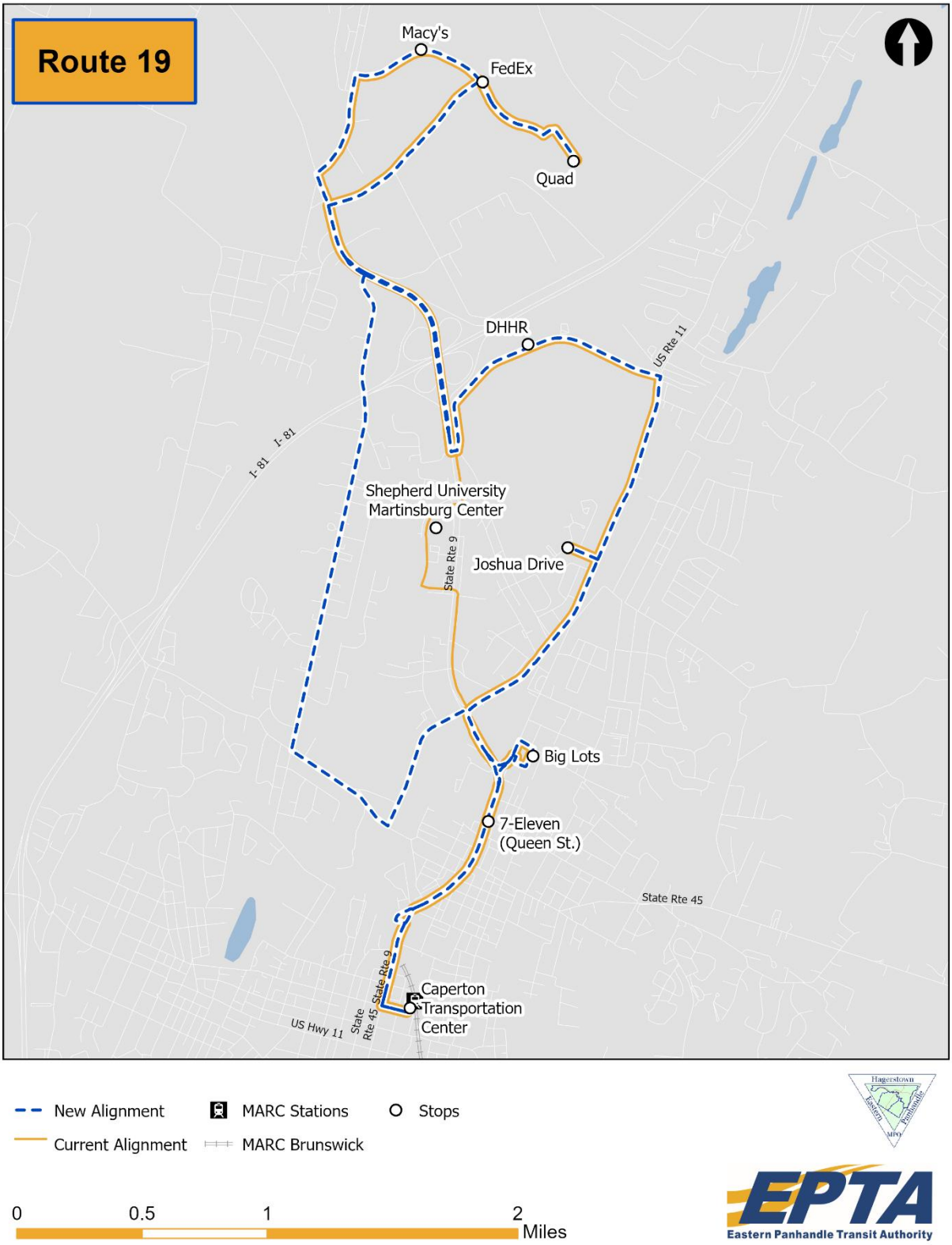
The changes to Route 19 are related to the changes recommended for Route 12. Service previously offered on Rock Cliff Drive on the Route 12 will be moved to Route 19. Service will also be removed from Edwin Miller Drive on Route 19; however, connections to this area will be possible by transferring to the Route 12.

Additionally, all trips to Macy's, FedEx, and Quad will be provided by Route 19 and coordinated with employee shift times. The route will continue to serve the Caperton Transportation Center and the Big Lots, among other destinations on the current route. **Table 27** summarizes the proposed changes, benefits, and areas with service reductions on Route 19. **Figure 38** illustrates the recommended changes to Route 19.

Table 27: Route 19 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Service to Macy's, FedEx, Quad, and Rock Cliff Drive from Route 12 now served by Route 19.	■ Shortens route to improve on-time performance ■ Provides more direct service to Macy's / FedEx / Quad area	■ All areas served by existing Route 19 will continue to have service, either as part of Route 12 or Route 19.

Figure 38: Route 19 Recommended Service Alignment



Proposed Service Levels

Proposed service levels for Route 19will remain the same and are summarized in **Table 28**.

Table 28: Route 19 Summary of Proposed Service Level Changes

	Current Route 19	Recommended Route 19
From - To	Caperton Transportation Center – Macy's / FedEx / Quad	Caperton Transportation Center – Macy's / FedEx / Quad
Span	4:50 a.m. – 6:45 p.m.	4:50 a.m. – 6:45 p.m.
Headway	60	60
Weekend Service	No	No
Peak Cycle Time	60	60
Peak Vehicles	60	60

Scheduled Stops

Route 19 will have stops at these locations

- Caperton Transportation Center
- Macy's
- FedEx
- Quad
- Polo Green
- 7-Eleven (Queen Street)
- Joshua Drive
- Berkeley County DHHR
- Big Lots

4.2.8. Route 20

EPTA's Route 20 currently provides transit services between the Caperton Transportation Center, and Charles Town and Ranson, with stops at the VA Medical Center, Charles Town City Hall, Charles Town Courthouse, Save-A-Lot, the Charles Town Walmart, and the Jefferson County DHHR in Charles Town, among other destinations.

Route Facts

The Route 20 is currently the third most productive route in the system, with approximately 6.8 passengers per revenue hour and the 7th most effective route in the system with 0.1 passengers per revenue mile (**Table 29**). On-time performance on the Route 20 is the worst in the system with only about 27 percent of the trips being on-time, as observed during manual ridechecks performed in November 2019; approximately 65 percent of the trips were late, while eight percent of the trips were early (**Figure 26**). The variability of the performance measures for this route (i.e., high utilization by low on-time performance) likely reflects the popularity of the destinations provided that contrasts with the long length of the service. The passengers of the current Route 20 use a number of the existing stops for their transit needs, but the Charles Town Walmart, the Caperton Transportation Center, the VA Medical Center, the Charles Town Courthouse, and the Save-A-Lot provide the most daily activity, which is displayed in detail in **Figure 64** in Appendix A.

Table 29: Existing Route 20 Facts

	Route 20
Passengers per Revenue Mile (System Rank)	**0.1 (*#7*)**
Passengers per Revenue Hour (System Rank)	**6.8 (*#3*)**
Percent On-Time / Late / Early (System Rank – On-Time only)	**27% / 65% / 8% (*#8*)**
Average Daily Boardings (System Rank)	**47 (*#5*)**
Highest Ridership Stops	**Charles Town Walmart, Caperton Transportation Center, VA Medical Center, Charles Town Courthouse, Save-A-Lot**
Major Generators Served	**Caperton Transportation Center, Big Lots, Joshua Drive, Berkeley County DHHR, Shepherd University Martinsburg Center, Macy's, FedEx, and Quad**

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - Requests have been heard for Saturday service specifically for Route 20.

- **Public and Stakeholder Comments** (Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - Additional service has been requested within Charles Town.
  - Additional service has been requested within Ranson.
  - Additional service to the VA Medical Center has been requested from both directions on this route, from Martinsburg in the north, and Charles Town and Ranson in the south.
  - Some comments asked for additional Saturday service throughout the system.

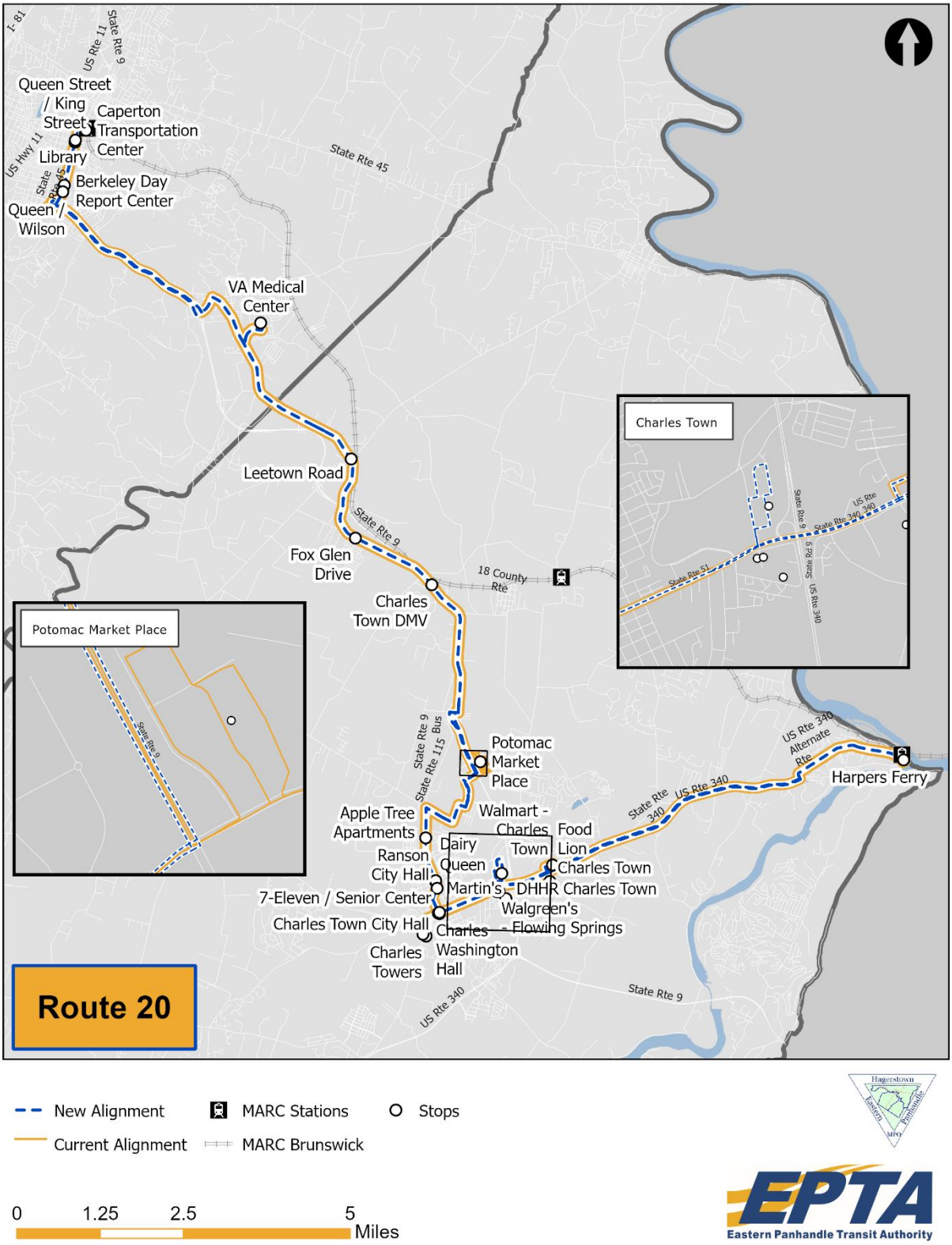
Service Recommendations

A minor alignment change in Charles Town will offer service just north of the Martin's to a new residential development. Additionally, service to the Potomac Market Place will become on-call only, similar to the recommendation for Route 16. Official stops will be added at the Appalachian Trail Conservancy and the Anvil Restaurant, two locations currently being served but without bus stop signs. Service will continue to be offered to the VA Medical Center, the Charles Town Save-A-Lot, the Charles Town Walmart, and Harpers Ferry, among many other destinations. **Table 30** summarizes the proposed changes, benefits, and areas with service reductions on Route 20. **Figure 39** illustrates the recommended changes to Route 20.

Table 30: Route 20 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Shifting alignment slightly north to serve new residential development.	■ Serves additional residential population and new development.	■ None
Potomac Market Place will be served as an on-call stop	■ This stop currently has little to no utilization, so not having to serve it on every trip will save operating time, helping the route improve on-time performance.	■ Potomac Market Place; however, passengers will be able to request the stop on an on-call basis
Route 20 will provide Saturday Service between the hours of 9:00 a.m. and 5:00 p.m.	■ Providing Saturday service on a familiar and appreciated route will allow additional access to destinations within Martinsburg, which should help encourage continued ridership growth.	■ N/A

Figure 39: Route 20 Recommended Service Alignment



Proposed Service Levels

Proposed service levels on Route 20 routes are summarized in Table 31. Route 20 is also one of the routes recommended to operate service on Saturdays in order to expand the reach of EPTA during weekend periods.

Table 31: Route 20 Summary of Proposed Service Level Changes

		Current Route 20	Recommended Route 20
From - To		Charles Town – Harpers Ferry	Charles Town – Harpers Ferry
Daily Span		6:00 a.m. – 8:40 p.m.	6:00 a.m. – 8:40 p.m.
Headway	Peak	60 min	60 min
	Off-Peak	60 min	60 min
Saturday Service		No	Yes
Saturday Span		N/A	9:00 a.m. – 5:00 p.m.
Headway	All Day	N/A	60 min
Peak Cycle Time		60	60
Peak Vehicles		1	1

Scheduled Stops

The scheduled stops for the Route 20 will continue to operate all of the existing stops, although the stop at Potomac Market Place will become on-call only. New stops will be provided at the new residential development in Charles Town north of the Martin's, and stops at the Appalachian Train Conservator and the Anvil Restaurant:

- Caperton Transportation Center
- VA Medical Center
- Kearneysville Post Office
- Charles Town DMV
- Potomac Market Place (on-call only)
- Apple Tree Apartments
- Ranson City Hall
- Dairy Queen - Ranson
- 7-Eleven / Senior Tower
- Charles Town City Hall
- Charles Town Court House
- Charles Towers
- Charles Washington Hall
- Martin's – Charles Town
- Walgreen's – Charles Town
- Jefferson County DHHR
- Food Lion – Charles Town
- Walmart – Charles Town
- Save A Lot – Charles Town
- Appalachian Trail Conservatory
- Anvil Restaurant
- Harpers Ferry

Future Considerations

- Route 20's alignment will be updated to serve the new EPTA Transit Center at Race Street and Raleigh Street.
- Capital investments should be considered at the VA Medical Center. Locations within Ranson and Charles Town should be further explored for EPTA branded shelters and/or benches to help with recognition of the EPTA brand and the services that are available within each location.

4.2.9. Route 25 and Route 30

Existing Routes 25 and 30 offer service into the evening hours to many of the transit activity generators throughout the EPTA service area. The purpose of these routes is to gain some resource efficiencies by combining several of EPTA's daily services into two routes. Route 25 operates along an alignment that combines Routes 10 and 11, while Route 25 operates along an alignment that combines an adjusted Route 12 and 19 alignment, along with Route 14. Figure 66 and Figure 68 in Appendix A detail the existing route alignments and ridership characteristics for Routes 25 and 30, respectively.

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - No comments were received or opinions expressed regarding Route 25 or Route 30.
- **Public and Stakeholder Comments** (Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - No comments were received or opinions expressed regarding Route 25 or Route 30.

Service Recommendations

Routes 25 and 30 will be eliminated, with Route 10, Route 11, Route 12, Route 14, and Route 16 operating later into the evening hours. **Table 32** summarizes route eliminations for Routes 25 and 30.

Table 32: Routes 25 and 30 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Route 25 and Route 30 will be replaced by continued operations of Route 10, Route 11, Route 12, Route 14, and Route 16	■ More service in the evening hours. ■ System will be easier to understand and more accessible to non-regular passengers	■ Areas that currently receive service on Routes 25 and 30 will be covered by expanded hours on Routes 10, 11, 12, 14, and 16.

4.2.10. Route 35 and Route 40

Existing Routes 35 and 40 offer service during Saturdays to many of the transit activity generators throughout the EPTA service area, much in the same way that Routes 25 and 30 offer service into the weekday evening hours. The purpose of these routes is to gain some resource efficiencies by combining several of EPTA's daily services into two routes. Route 35 operates along an alignment that combines Routes 10, 11, and 14, while Route 40 operates along an alignment that combines Routes 10, 12, 14 and 19. Figure 70 and Figure 72 in Appendix A detail the existing route alignments and ridership characteristics for Routes 35 and 40, respectively.

Public & Operator Input

- **Operator Comments** (Comments obtained through EPTA operator interviews):
  - Remove Commons from service (traffic creates timing issues, and very few people are heading to Commons).
  - Northside is typically busy all day.
  - While people say that they would use more service if it were available on Saturdays, sometimes ridership is as low as 10 people all day long.

- **Public and Stakeholder Comments** (Comments obtained through TDP Stakeholder meetings, on-board surveys, Metroquest survey effort, and recent service requests)**:**
  - No comments were received or opinions expressed regarding Route 35 or Route 40.

Service Recommendations

Routes 35 and 40 are recommended to be eliminated, with Route 10, Route 12, Route 14, Route 16, and Route 20 recommended to offer their weekday alignments on Saturdays. **Table 33** summarizes the proposed changes.

Table 33: Routes 35 and 40 Proposed Changes, Benefits & Service Reductions

Proposed Change	Benefit	Areas with Service Reduction
Instead of Route 35 and Route 40 operating on Saturday, Route 10, Route 12, Route 14, Route 16, and Route 20 will operate on the weekends.	■ Areas that currently receive service on Routes 25 and 30 will be covered by expanded hours on Routes 10, 11, 12, 14, and 16.	■ Areas that currently receive service on Routes 35 and 40 will be covered by Saturday service on Routes 10, 12, 14, 16, and 20.

4.2.11. Shepherd Circulator

The Shepherd Circulator currently operates on the Shepherd University campus between the H-Lot and the Student Center. Select trips begin and end at the Caperton Transportation Center, allowing for travel between Martinsburg and the University.

Route Facts

Because of the nature of the Shepherd Circulator and its lack of connections with the rest of the EPTA system, the service was not ranked and compared with the other EPTA routes. The Shepherd Circulator caries nearly 400 students on an average weekday. The majority of passengers are students at Shepherd University, who ride between the east and west sides of the campus. **Table 34** summarizes the operating characteristics of the Shepherd Circulator. **Figure 73** in Appendix A details the existing alignment of this service, but it is worth nothing that the majority of the trips function purely within the Shepherd University Campus, while only certain trips extend to Martinsburg.

Table 34: Existing Shepherd Circulator Facts

	Shepherd Circulator Line
Daily Ridership	**392**
Highest Ridership Stops	**Student Center, Moler Hall, Frank Arts Center**
Major Generators Served	**Shepherd University**

Service Recommendations

There are no alignment changes recommended for the Shepherd Circulator.

Proposed Service Levels

Service levels are not proposed to change on the Shepherd Circulator.

4.3. Recommendations for New EPTA Services

4.3.1. Route 21: VA Medical Center to Shepherdstown

A new service is being proposed that will operate between the VA Medical Center and Shepherdstown (**Figure 40**). The route presents an opportunity to provide additional service to and through Shepherdstown, with stops likely at the new (as of yet, unbuilt) Library, the Shepherdstown Food Lion, Shepherd University and several destinations within the Shepherdstown area. By originating the service at the VA Medical Center, potential passengers will be able to connect to the other EPTA routes that operate to this destination, including Routes 11, 16, and 20, providing the opportunity to travel further to either Martinsburg or Charles Town and Ransom. The service should become a viable option for both residents of Shepherdstown and students, faculty and staff at Shepherd University. **Table 35** details the benefits of the proposed route.

Table 35: Recommended Route 21 Service Benefits

Recommendation	Benefit
Create new route between the VA Medical Center and Shepherdstown	■ Offers increased regional connections ■ Provides new service between Shepherd University, Shepherdstown and the VA Medical Center.

Table 36 outlines the potential service levels for the route, which suggests hourly service between the VA Medical Center and Shepherdstown between the hours of 8:00 a.m. and 4:00 p.m. daily in order to help expand the EPTA service area in the region and provide additional connections between Jefferson and Berkeley Counties.

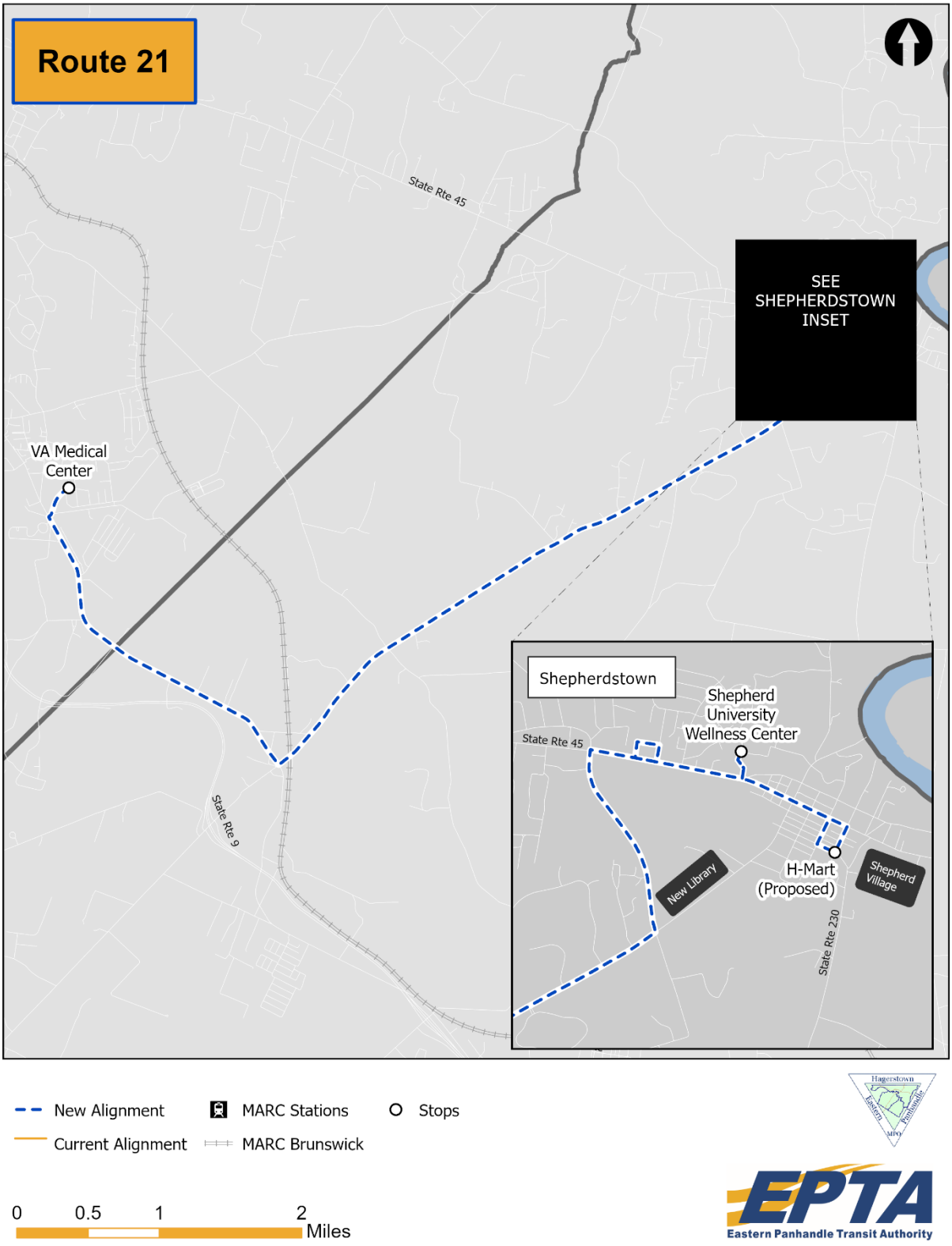
Table 36: Recommended Route 21 Summary of Proposed Service Levels

	Recommended Route 21
From - To	**VA Medical Center – Shepherdstown**
Span	**8:00 a.m. – 4:00 p.m.**
Headway	**60**
Weekend Service	**No**
Peak Cycle Time	**60**
Peak Vehicles	**1**

The stops for proposed Route 21 should be further investigated as implementation of the new service becomes more imminent; however, some consideration should be had to the following locations when finalizing the route's stops:

- VA Medical Center
- Shepherdstown Library
- Shepherdstown Food Lion
- Shepherd University
- Martinsburg Pike / German Street
- Princess Street / H-Mart
- Washington Street

Figure 40: Proposed VA Medical Center to Shepherdstown Route



4.3.2. Route 22: Martinsburg to Spring Mills

The proposed Route 22 would connect Martinsburg with the quickly developing Spring Mills area (**Figure 41**), which is experiencing growth in terms of both residential communities and commercial opportunities. Throughout recent years, a number of requests for service to the Walmart have been received by EPTA staff and through comments on passenger surveys. The new route would begin daily service at the Martin's in Martinsburg, and then operate northbound via Williamsport Pike to Spring Mills; once in Spring Mills, the route could also offer service via Hammonds Mill Road to the North Berkeley Public Library. **Table 37** details the benefits of the proposed route.

Table 37: Recommended Route 22 Service Benefits

Recommendation	Benefit
Create new route between Martinsburg and Spring Mills	• Provides new service to developing area (Spring Mills) and another major transit generator (Spring Mills Walmart) • Fulfills multiple requests for additional service coverage in the EPTA area

Initially, the service should be provided hourly on weekdays between 8:00 a.m. and 6:00 p.m., with the potential for earlier and later service if demand grows. **Table 38** lists the proposed levels of service for Route 22.

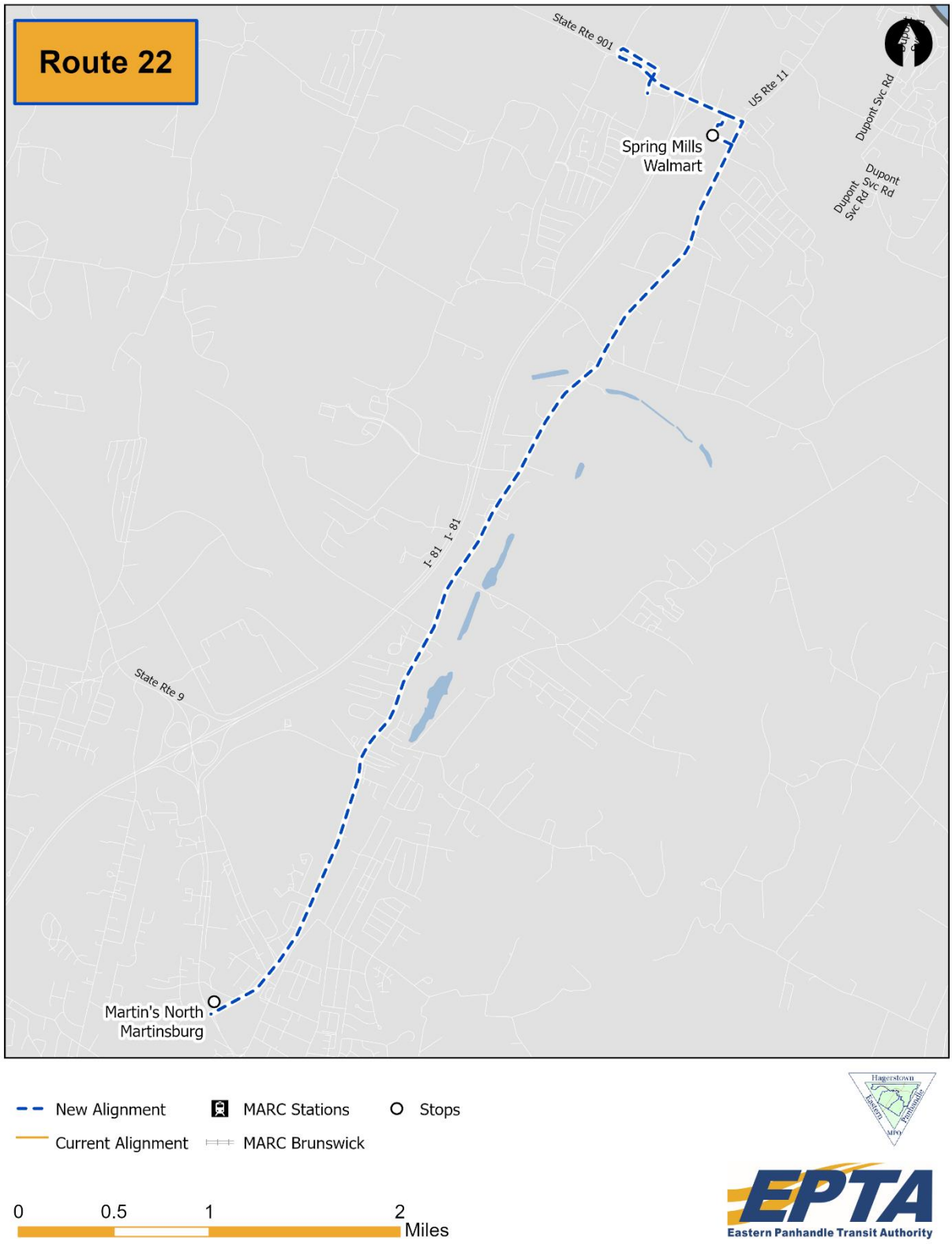
Table 38: Recommended Route 22 Summary of Proposed Service Levels

		Recommended Route 22
From - To		**Martin's – Spring Mills Walmart**
Span		**8:00 a.m. – 6:00 p.m.**
Headway	**Peak**	**60**
	Off-Peak	**60**
Peak Cycle Time		**60**
Peak Vehicles		**1**

The stops for proposed Route 22 should be further refined as implementation of the new service becomes imminent; however, some consideration should be had to the following locations when finalizing the route's stops:

- Martin's North Martinsburg
- Joshua Drive
- Mid Atlantic Parkway
- Spring Mills Walmart Supercenter
- North Berkeley Public Library

Figure 41: Proposed Martinsburg to Spring Mills Route



4.4. Systemwide Operational Recommendations

4.4.1. Evening Service

Currently, evening service is provided across Martinsburg via a consolidation of EPTA's daily weekday routes into two evening services, Route 25 and Route 30. These routes both operate as circulator services, providing connections to Martinsburg's major activity centers, including the Berkeley Medical Center, the Caperton Transportation Center, Senior Towers, Gabes, Walmart at Foxcroft Towne Center and the VA Medical Center on Route 25, and Save-A-Lot, Martins, Big Lots, the Caperton Transportation Center, Ambrose Towers, Walmart, Gabes, and Target on Route 30. While the consolidation of services does offer operational and cost efficiencies, the practice also creates confusion amongst transit users about what services to use when, which is especially impactful for infrequent riders or new passengers. Simplifying service structure over the course of a day is one of the most impactful ways to increase access to the system by creating a situation where transit is easier to understand and use.

When reviewing average daily EPTA ridership by hour (previously presented in **Figure 16**), ridership has a steep decline between the hours of 3:00 p.m. and 4:00 p.m. hours, and then even further between 4:00 p.m. and 5:00 p.m., which coincides with the cross-over the evening Route 25 and Route 30. This indicates that passengers know that they have to complete their use of EPTA services at a certain point in the day, otherwise getting home becomes slightly more difficult and trips take longer as the consolidated evening routes have longer alignments.

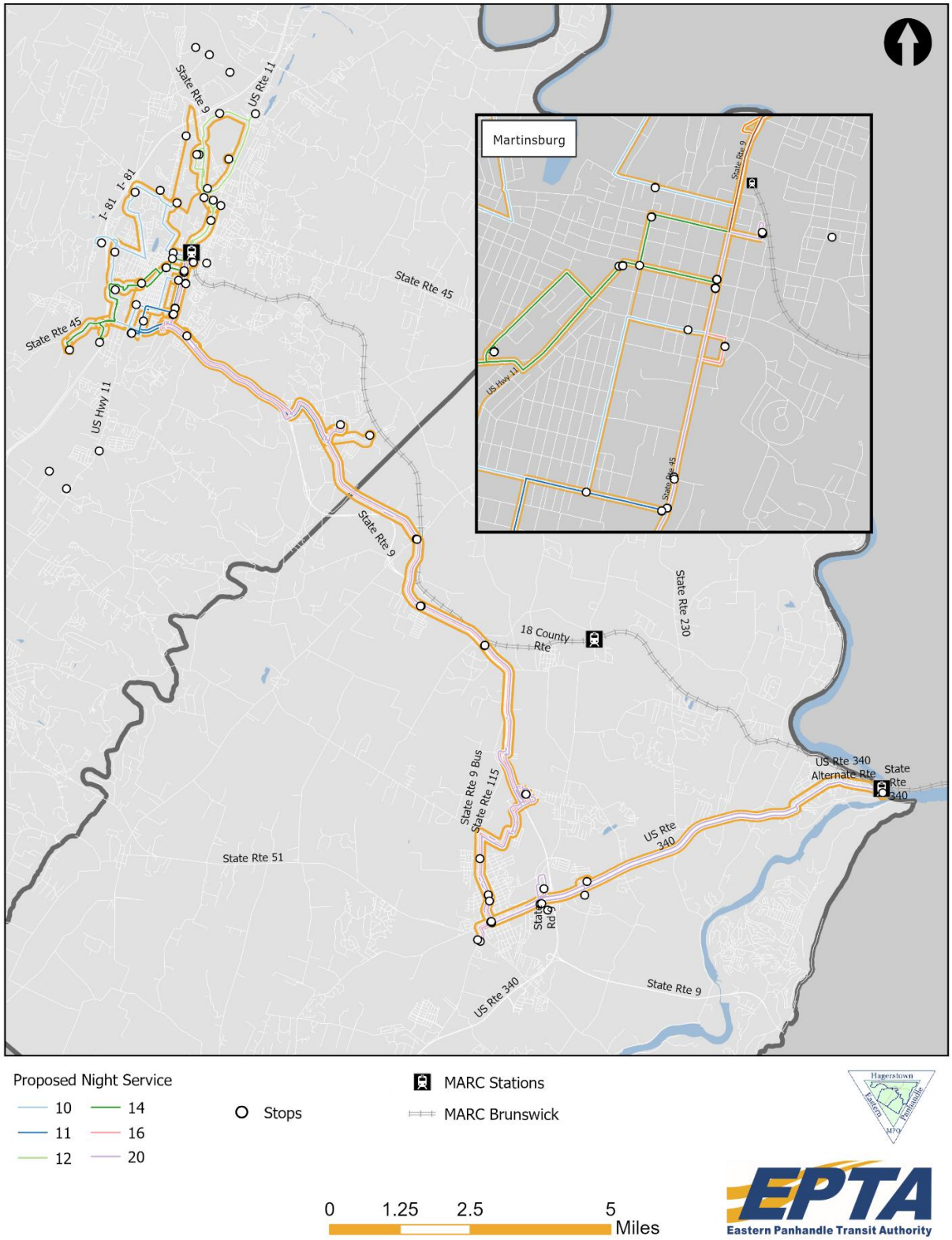
By offering extended hours on existing services, usage should remain higher through the later afternoon and into the evening, hours, with a more gradual ridership decline as additional hours on each service provides additional options for transit user. This will help to increase the attractiveness of the service for everyday users and occasional riders alike. In order to provide a similar layer of coverage as Route 25 and Route 30, it is recommended that the following services continue to operate past their existing evening end times:

- **Route 10** should be extended 2 hours past its current daily end time of 5:24 p.m. to 7:30 p.m.
- **Route 11** should be extended 2 hours past its current daily end time of 4:24 p.m. to 6:30 p.m.
- **Route 12** should be extended 1 hour past its current daily end time of 5:45 p.m. to 6:45 p.m.
- **Route 14** should be extended 1 hour past its current daily end time of 7:23 p.m. to 8:30 p.m.
- **Route 16** should be extended 2 hours past its current daily end time of 5:24 p.m. to 7:30 p.m.

Figure 42 illustrates the recommended EPTA evening service offerings, which would replace Route 25 and Route 30. Additional information will be provided regarding the service changes to the individual routes recommended to operate further into the evening hours in their descriptions on the following pages. It is worth mentioning that one of the most requested service improvements from passengers and stakeholders alike was later evening service, which this recommendation will help propagate.

Because of the potential positive impacts to overall system utilization, this recommendation has been designated a higher priority service change. While the financial implications of this recommendation are important to recognize – more buses will be operating into the evening hours, requiring additional bus operator hours – other service change recommendations presented in this TDP should free up necessary resources for the agency to implement keeping Route 10, Route 11, Route 12, Route 14, and Route 16 in daily service longer. The overall financial impact of this recommendation will be presented in the Costs, Priority, and Implementation chapter of this report.

Figure 42: Recommended EPTA Routes to Operate into Evening Hours



4.4.2. Saturday Service

Current Saturday service is also provided to EPTA transit riders via consolidated Route 35 and Route 40. Similar to how evening service is offered, these routes provide coverage to the most important transit generators in the area on a more limited basis. The availability of transit on Saturdays and the rather circuitous alignments offered on Route 35 and Route 40 help to explain the decline in average daily ridership between weekdays, when there are approximately 20.1 passengers per hour using EPTA services, and Saturday periods, when there is an average of 9.0 passengers per hour. This represents a 55.2 percent decline in ridership between the two service day types; typically, transit ridership is expected to drop between one-third to one-half between weekdays and Saturdays, so there is definitely room for improvement regarding service utilization on Saturdays.

The recommendation for Saturday service within the EPTA service area is to operate the same route alignments offered during weekdays on Saturday, for the following routes:

- **Route 10** will provide Saturday coverage of the south Martinsburg area
- **Route 11** will provide Saturday coverage of the south Martinsburg area and the VA Medical Center
- **Route 12** will provide Saturday coverage of the north Martinsburg area
- **Route 14** will serve the Target and Walmart at Foxcroft Towne Center, and provide additional coverage in Downtown Martinsburg
- **Route 16** and **Route 20** will provide weekend service between Martinsburg, through the VA Medical Center, and to Ranson and Charles Town.

Each route would operate between 9:00 a.m. and 5:00 p.m. **Figure 43** details what Saturday service will look like once the recommendation is implemented, replacing existing Saturday Routes 35 and 40. Additional service information regarding each route's Saturday service logistics are described in the following pages. As with the request for additional evening service, this recommendation helps to fulfil a request from the public and stakeholders asking for additional weekend service.

The results of this recommendation should also see a positive change to service utilization on Saturdays by offering recognizable services that offer similar levels of service and trip times. The recommendation has been classified as a medium priority change; while the potential impacts of the change are enticing, the additional operator need and funding requirements to implement this recommendation may take time to secure.

4.4.3. EPTA New Transit Center

Most routes currently serving the Caperton Transportation Center will also serve EPTA's new Transit Center at Race Street and Raleigh Street in Martinsburg. Because of roadway directions and turning permissions within Martinsburg, some of the routes will need to operate past the Caperton Train Station in order to access Race Street and Raleigh Street. Routes 12 and 19 will no longer serve the train station, but service to this destination could be requested on these routes. The transition to the new Transit Center is considered the highest priority recommendation, as service should be shifted to this new facility as its development finishes. **Figure 44** shows the routes aligned to the new Transit Center. **Appendix D: Adjusted EPTA Routes to New Transit Center** provides individual route alignments for each of the recommended EPTA routes.

Figure 43: Recommended EPTA Routes to Operate during Saturdays

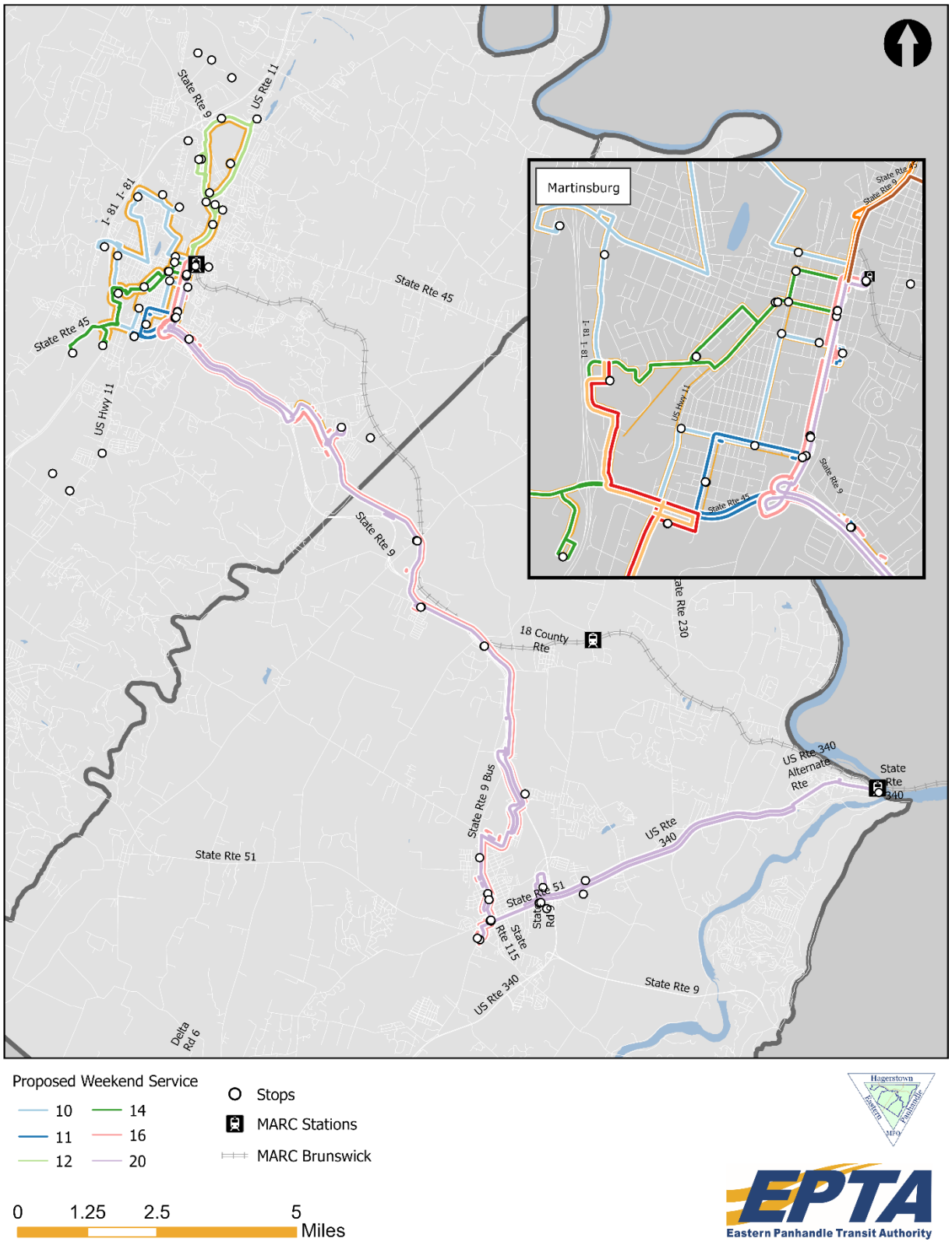
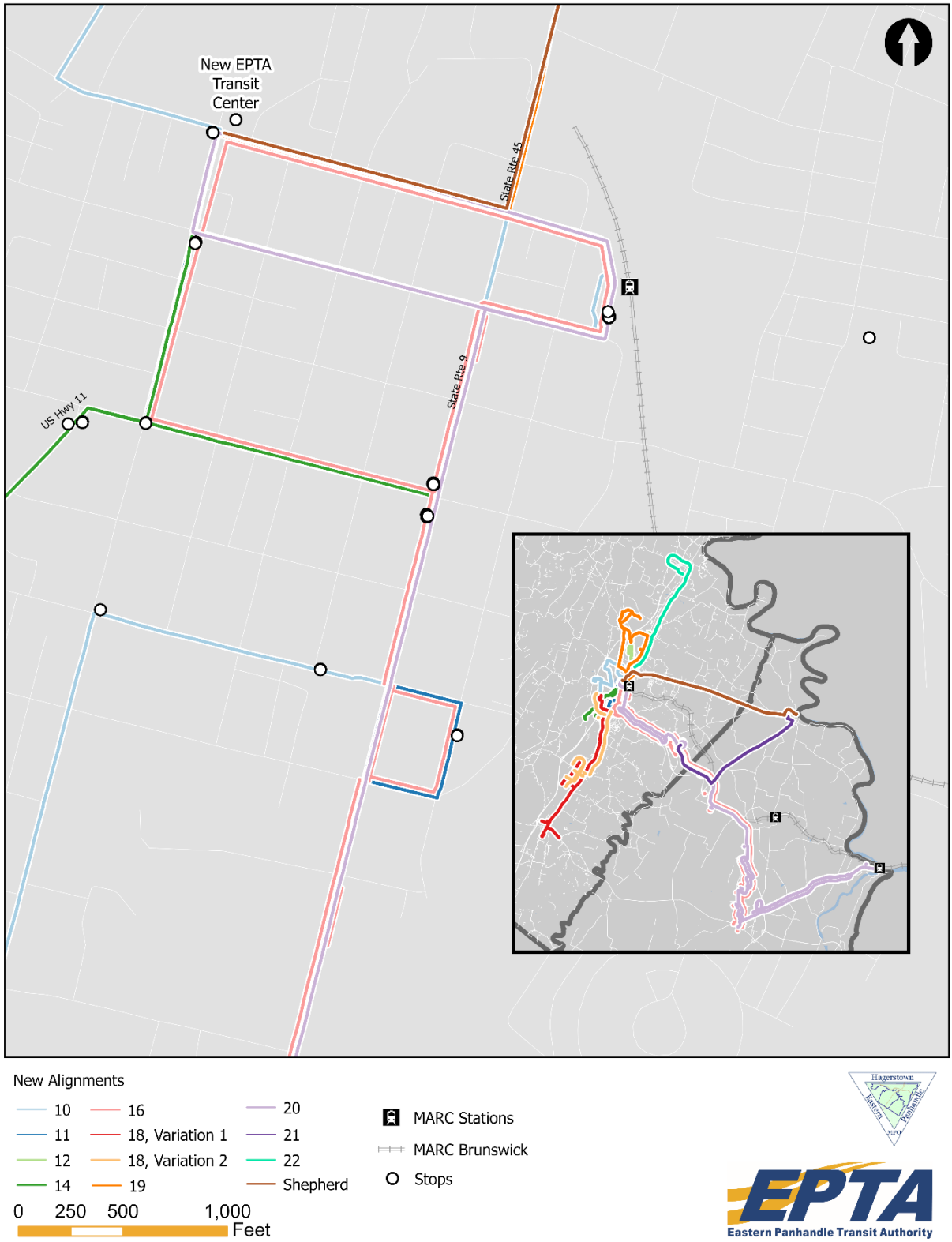


Figure 44: Recommended EPTA System, Routed to New EPTA Transit Center



4.5. Virtual Outreach

Initially, an in-person outreach effort was intended to take place so that residents and employees who live and work in and around the EPTA service area could respond to the recommendations presented in this plan. However, a world-wide pandemic, COVID-19, has greatly inhibited the ability to conduct such an outreach effort. With that in mind, a presentation (**Figure 45**) was developed that was recorded with a voice over and placed online so that interested parties could see what recommendations were being offered and then respond with their thoughts and ideas.[4] Each EPTA route recommendation was detailed using a map of the proposed service and descriptions and justifications for any and all recommended changes. The full presentation can be seen in **Appendix E: Service Recommendations Outreach Presentation**.

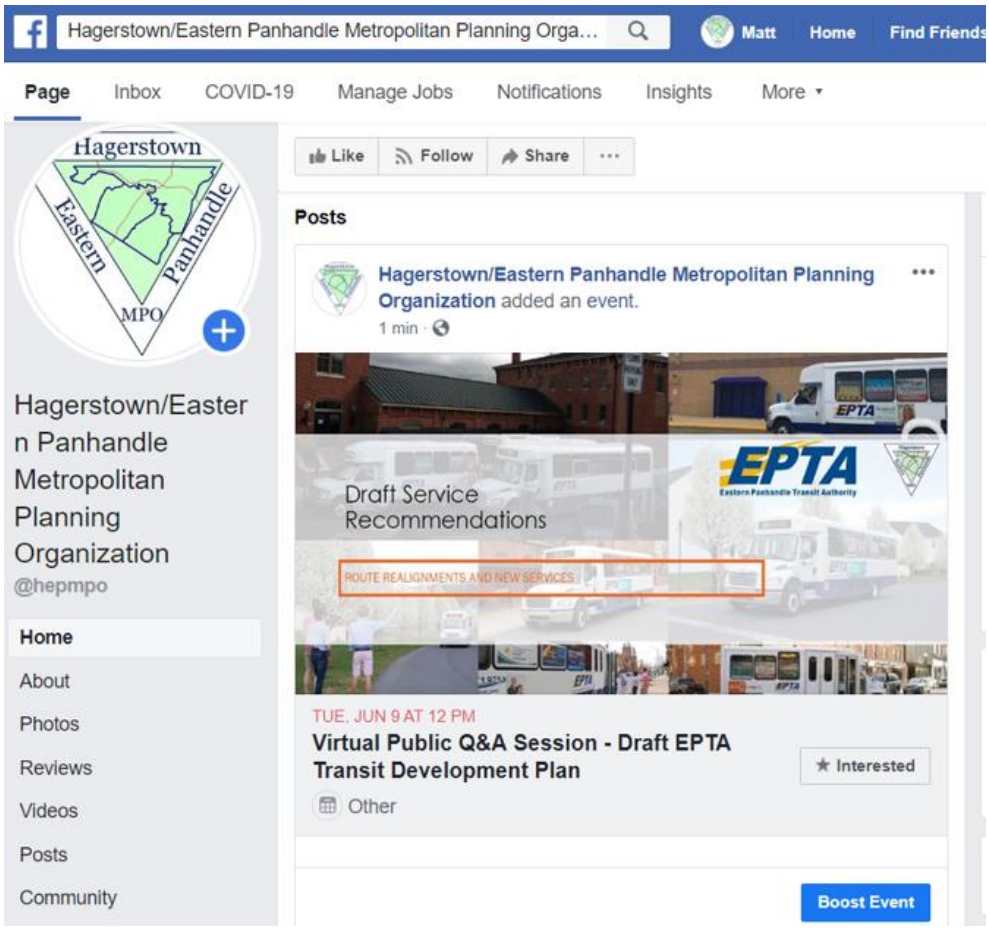
Figure 45: Online EPTA TDP Outreach Presentation

[4] https://www.facebook.com/hepmpo/videos/236664987661634/

The presentation was publicized through EPTA's and HEPMPO's websites and their social media platforms, and mentioned through several regional news outlets, including The Journal from Martinsburg, WV and the Herald-Mail from Hagerstown, MD. The presentation was placed online for 30 days, providing enough time for folks to view and respond to the recommendations. Approximately 15 comments were received providing both positive and critical feedback for the TDP recommendations.

In the third week of the presentation being available, a live question and answers session was held to further promote the TDP and the service recommendations from it, and to answer any questions that had been received or new questions that attendees may have.[5] This session was similarly publicized by EPTA and HEPMPO through their website and social media platforms (**Figure 46**). The event, which lasted one hour, had 15 attendees, most of whom stayed through the entire presentation. Several additional comments were received that provided additional input towards the TDP recommendations.

Figure 46: EPTA TDP Virtual Q&A Session Publicized on HEPMPO's Facebook page



[5] https://www.facebook.com/hepmpo/videos/741425273295003/

4.6. Ridership Projections

Ridership projections were developed for the new route alignments recommended through this Transit Development Plan. The projections were developed based on the type of change recommended for each route, which included span of service extensions, route alignment adjustments, and route extensions (**Figure 47**). Base ridership was first projected using the estimated revenue hours per route. Each route's current passengers per revenue hour was multiplied by the route's projected number of revenue hours and an elasticity was applied according to *Transit Cooperative Research Program (TCRP) Report 95: Traveler Response to Transportation System Changes Chapter 9*[6]. Overall, ridership is expected to grow approximately 17 percent should each of the recommendations become an implemented reality.

Figure 47: Equation for Ridership Estimation

Table 39 summarizes current ridership and ridership projections for the recommended system, by route. The services are all expected to grow, ranging from a modest 2 percent growth for Route 20, were a slight alignment change should attract additional passengers, to Route 11 which should expect a significant growth in ridership due to the route starting two hours earlier in the morning and extending two hours later into the evening. In fact, much of the increase for Routes 10, 11, 12, 14, and 16 are directly tied to the recommendation for offering service later into the evening hours. The adjustments recommended for Routes 12 and 19 intended to create more direct routes should yield positive results for ridership growth on these routes. Route 18's extension to the Walmart at Foxcroft Towne Center will provide additional destinations on a one-seat ride from southern Berkeley County.

It is worth mentioning that the ridership estimations for Saturday service, which is recommended to be offered between 9:00 a.m. and 5:00 p.m., have been calculated separately and estimated to around approximately 8,400 riders per year (estimated across the Saturdays plus Holidays where EPTA operates a Saturday schedule) While the estimations seem a bit lofty, especially considering existing Saturday service accounts for approximately 5,900 passengers per year, the familiarity of the weekday routes and the directness of the service should be quite attractive to existing and potential passengers once they realize the change has been implemented. A fairly significant marketing campaign should be considered when rolling out both the evening span of service extension for Routes 10, 11, 12, 14, and 16, and for the implementation of Saturday service on Routes 10, 11, 12, 14, 16, and 20. A targeted marketing campaign will help yield earlier ridership growth, and should initially be focused on existing high ridership locations, such as the Walmart at Foxcroft Towne Center, the VA Medical Center, Caperton Transportation Center, Martin's in north Martinsburg, and other locations around Martinsburg, Charles Town, Ranson, and Inwood.

[6] TRB, 2004. Transit Cooperative Research Program Report 95: Traveler Response to Transportation System Changes, Chapter 9: Transit Scheduling and Frequency. Available at: http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_95c9.pdf. Accessed on 5/20/2020

Table 39: Ridership Projections by Route in Core System*

	Current (FY20)	Projected	
Route	Base Annual Passengers	Projected Annual Passengers	Percent Change in Ridership
10	14,700	17,700	17%
11	17,200	22,700	24%
12	10,400	13,000	20%
14	16,000	18,000	11%
16	10,900	12,300	11%
18	1,400	1,500	9%
19	8,100	9,000	10%
20	12,000	12,300	2%
21	-	1,400	-
22	-	3,300	-
10 Sat	-	1,900	-
11 Sat	-	2,200	-
12 Sat	-	1,400	-
14 Sat	-	2,100	-
16 Sat	-	1,400	-
20 Sat	-	1,600	-
Total	~102,400	~123,100	17%

**Shepherd University Circulator not included in ridership projection.*

4.7. Economic Benefits

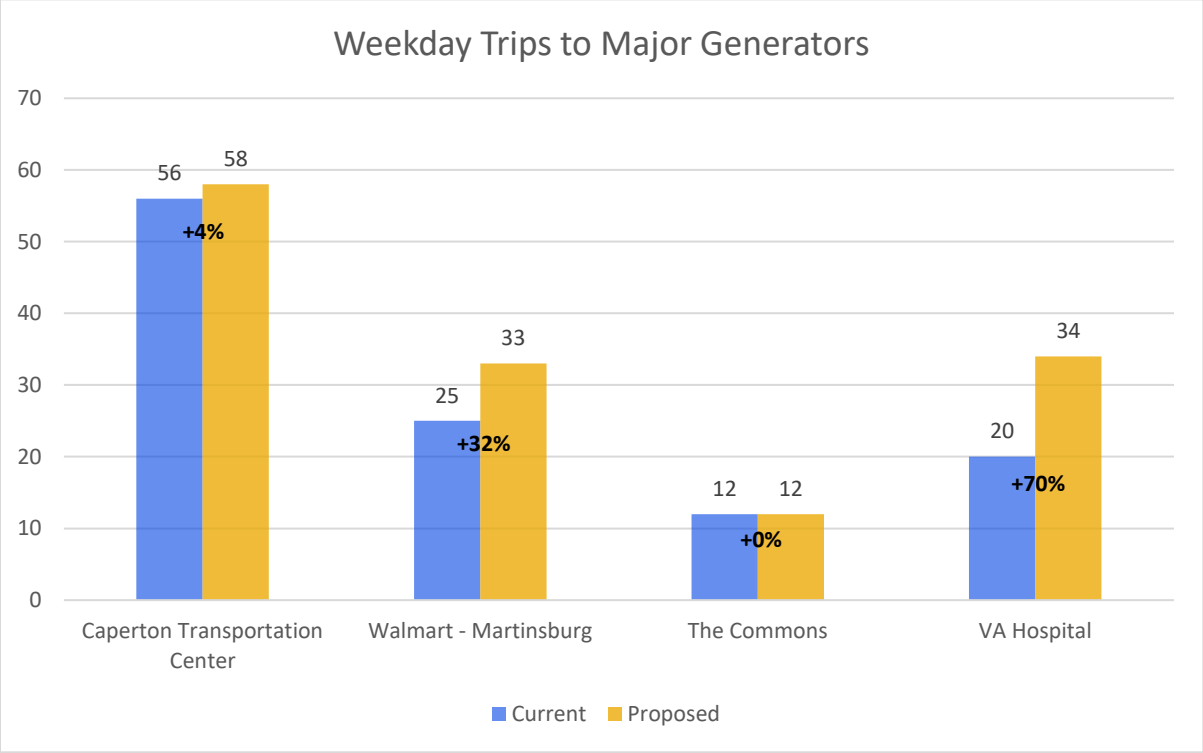
The recommended system would have an overall positive economic benefit on Berkeley and Jefferson counties, particularly by increasing access to employment and major generators like Clorox, Macy's, and FedEx in Martinsburg, and Walmart in Spring Mills. Currently, there are 42,325 jobs within ¾-mile of EPTA's system (¾-mile is considered as EPTA routes will deviate that distance for on-call pick-ups). Under the proposed system, there would be 44,287 jobs within ¾-mile, which represents a 4.4 percent increase in terms of access to job from EPTA Routes. **Table 40** summarizes the increase in employment within ¾-mile of the proposed system.

Table 40: Projected Employment Within ¾-Mile of Proposed System

	Current Core System	Proposed Core System	Percent Change
Employment Within ¾-Mile	42,325	44,287	+4.4%

In addition to increasing access to employment, the recommended system will provide additional service later into the evening hours and on Saturdays between Jefferson County and Berkeley, improving access system-wide through the efforts to simplify the EPTA evening and Saturday services provided. This not only extends the availability of EPTA services to provide connections to jobs, but also increases access to shopping and other commercial activities within the region (**Figure 48**).

Figure 48: Weekday Trips to Major Generators



5. Capital Recommendations

5.1. Bus Stop Signs

EPTA is currently undergoing a project to develop, fund, and install a bus stop sign across the system. This effort, in conjunction with the Hagerstown Eastern Panhandle Metropolitan Planning Organization (HEPMPO), will see bus stop signs placed strategically along the recommended bus routes in an effort to increase awareness about EPTA and the system of bus routes it provides, along with providing a sense of place for both existing and potential transit users throughout Jefferson and Berkeley Counties. There are currently 90 bus stop signs across Berkeley and Jefferson Counties that are budgeted to be ordered in the near-term period. Bus stop signage was designed with consideration of state and federal laws, regulations, and industry best practices described in the *Bus Stop Design Guide.*[7]

5.2. Shelter and Benches

Bus stop shelter and benches are conveniences added to major transit stops and high use destinations in order to provide comfort while waiting for the bus to arrive. Shelters provide an escape from the elements, especially during the winter and summer months, while benches afford an opportunity to sit and wait, as opposed to standing. Often, when either shelters or benches are installed at a stop, trash cans are also provided so that litter can be appropriately mitigated.

EPTA currently has shelters at the Berkeley County Complex, Joshua Gardens, Martinsburg Library, Shepherd University Martinsburg Center, the Walmart at Foxcroft Towne Center in Berkeley County, Ranson City Hall, and the Apple Tree Apartments in Jefferson County. Eight additional stops are planned to have shelters ordered in the near term. An additional 26 stops are being considered for future shelters, seven of which are in Jefferson County and 19 in Berkeley County. EPTA is also considering implementing bike racks at 28 stops based on future funding, of which 22 are planned for Berkeley County and the remaining six planned for Jefferson County.

Capital investments for EPTA should be considered a lower priority only to be accomplished when funding for such improvements becomes available. Bus stop amenities such as shelters, and benches should be implemented with priority in Martinsburg, Charles Town and Ranson, due to the high rate of transit utilization in these areas and potential for marketing EPTA services. In these locations especially, the provision of information such as route maps and schedules will help increase general familiarity with the system. in Martinsburg, amenity investments should be prioritized around the VA Medical Center and the Walmart at Foxcroft Towne Center; two key transfer points and high activity stops in the area. In Charles Town, amenity investments should similarly be targeted at key transfer points or high activity stops like the Save-A-Lot or the newly-served Charles Town Walmart.

When Route 21 is implemented between the VA Medical Center and Shepherdstown, shelter locations should be explored at the new Shepherdstown Library (once the development, design, and construction is complete near the intersection of Kearneysville Pike and Potomac Farms Drive), near the Food Lion on Martinsburg Pike, for locations on Shepherds University's campus, along German Street, and near the US Post Office at Washington Street and King Street. Similarly, once Route 22 is implemented between Martinsburg and Spring Mills, considerations for shelters or other amenities should be explored for the Spring Mills Walmart Supercenter and the North Berkeley Library.

[7] MDOT MTA, 2019. Bus Stop Design Guide. Available at: https://www.mta.maryland.gov/bus-stop-design-guide Accessed on 6/17/2020

5.3. Transit Vehicles

It is not expected for any of the recommendations to the existing EPTA services to require additional vehicles through the course of the plan. However, if either of the new recommended services – Route 21 offering service between the VA Medical Center and Shepherdstown or Route 22 providing service between Martinsburg and Spring Mills – get implemented, a new transit vehicle will need to be purchased for each service. The consideration for the purchase of these new transit vehicles must be had in tandem when securing the additional operating funding needed to support the services themselves.

6. Costs, Priority, and Implementation

The recommended system would require additional funding beyond what EPTA currently receives from its funding sources. Current funding sources include the local municipalities, federal grants, commuter rail services, Shepherd University, the National Park Service (NPS), fareboxes, and advertising. More information on potential funding sources can be found in the Potential Funding Sources chapter.

6.1. Operating Statistics & Costs

Cost estimates for the recommended system changes were developed using a three variable cost model that takes into account revenue miles, revenue hours, and annual vehicle days. This cost model was developed by assigning specific line item costs to miles, hours, or vehicles. **Table 41** summarizes the annual operating cost and operating characteristics of the recommended system in 2020 dollars. In other words, if all the recommendations were implemented immediately, the presented data represents the expected cost.

Table 41: Recommended System Operating Statistics (2020 Dollars)

Route	Annual Revenue Miles	Annual Revenue Miles	Annual Vehicle Days	Annual Operating Cost
10	3,524	37,354	313	$334,800
11	3,210	38,470	313	$310,600
12	2,759	24,421	313	$262,100
14	4,034	26,866	313	$383,200
16	3,421	91,438	313	$325,000
18	2,040	25,556	255	$193,800
19	1,020	13,148	255	$96,900
20	4,204	91,775	313	$399,400
21	2,295	20,540	255	$218,000
22	2,550	17,595	255	$242,250

Shepherd University Circulator not included in projected operating statistics.

6.2. Priority of Service Recommendations

The recommendations listed above have each been given a priority designation either based on the impact they will have throughout the EPTA service area or the improvements to service efficiency and effectiveness, or resource allocation, that the specific recommendation produces. It is worth noting that this is not the actual implementation schedule for the service changes to EPTA's routes, but rather a listing of which changes are the most likely to produce positive impacts to service, as well as changes that are required based on upcoming logistic changes, such as the opening of EPTA's new Transit Center.

As **Table 42** suggests, the highest priority service recommendation is the realignment of EPTA routes to serve the new Transit Center at Race Street and Raleigh Street, which should happen soon after the facility becomes available for use. The higher priority service changes include extending Route 10, Route 11, Route 12, Route 14, and Route 16 later into the evening hours to replace service currently provided on evening Route 25 and Route 30, which are proposed to be eliminated; Route 16 and Route 20 will provide on-call service only to the Potomac Market Place; all trips on Route 18 will be extended to the Walmart at Foxcroft Towne Center, which will allow for

Route 14 to no longer have to serve Gabes; and Route 18's service will be adjusted so that all trips will serve the Blue Ridge Technology Center and the 7-Eleven at Nadenbousch Lane, but only select trips will continue to Inwood.

The medium priority items include providing Saturday service on Route 10, Route 11, Route 12, Route 14, Route 16, and Route 20, which will allow for the elimination of Saturday only Routes 35 and 40. The other medium priority recommendations are offering service on Route 11 two hours earlier, daily; removing Route 12 service from Rock Cliff Drive, while providing similar service on Rock Cliff Drive via realigned Route 19; service to Macy's, FedEx, and Quad will be offered exclusively via Route 19; and Route 20 will be slightly realigned in Charles Town to serve a new residential development.

The two lower priority service recommenations include both new routes that have been proposed through this TDP effort, including Route 21 that will operate between the VA Medical Center and Shepherdstown, and Route 22 that will provide service between Martinsburg and Spring Mills.

Table 42: Priority of Service Recommendations

Priority Level	Service Recommendation	Associated Service Recommendation
Highest	Realign EPTA services, as necessary, to operate to new EPTA Transit Center at Race Street and Raleigh Street	N/A
Higher	Operate Route 10 two hours later into the evening to help replace Routes 25 and 30	Eliminate Route 25 and Route 30
	Operate Route 11 two hours later into the evening to help replace Routes 25 and 30	
	Operate Route 12 one hour later into the evening to help replace Routes 25 and 30	
	Operate Route 14 one hour later into the evening to help replace Routes 25 and 30	
	Operate Route 16 two hours later into the evening to help replace Routes 25 and 30	
	Route 16 and Route 20 will serve Potomac Market Place on-call only	N/A
	Extend all trips on Route 18 to Walmart at Foxcroft Towne Center	Route 14 to no longer serves Gabes
	Route 18 will provide hourly service to the Blue Ridge Technology Center & 7-Eleven	Route 18 will provide service to Inwood on select trips beyond the Blue Ridge Technology Center & 7-Eleven
Medium	Provide Saturday service on Route 10	Eliminate Route 35 and Route 40
	Provide Saturday service on Route 11	
	Provide Saturday service on Route 12	
	Provide Saturday service on Route 14	
	Provide Saturday service on Route 16	
	Provide Saturday service on Route 20	
	Route 11 will offer daily service two hours earlier in the morning	N/A
	Route 12 will no longer serve Rock Cliff Drive; service will be realigned to Edwin Miller Boulevard to operate towards downtown	Route 19 will be realigned to provide service to Rock Cliff Drive
	Route 12 will no longer provide service to Macy's / FedEx / Quad	All service to Macy's / FedEx / Quad will be provided via Route 19
	Route 20 will be realigned to serve a new development in Charles Town	N/A
Lower	New Route 21 to provide service between the VA Medical Center and Shepherdstown	N/A
	New Route 22 to provide service between the Martinsburg and Spring Mills	N/A

As with most recommendations, the availability of reallocated resources and/or new funding sources often dictate when service changes can realistically be made. In addition to considering the priority of the service recommendation, EPTA will need to determine if enough funding is available to implement a higher priority recommendation; if enough funding is not available, then the agency should consider a lower level priority item that would fit within any new funding restrictions.

6.3. Priority of Capital Investments

Additional capital would also be necessary to implement the recommended system, including the recommended route changes and bus stop improvements. These improvements could also be spread out over a three- to five-year period. **Table 43** summarizes the proposed capital improvement needs. EPTA's current shelter program will help to implement many of these suggestions and will properly direct funding where needed.

Table 43: Priority of Capital Investments

Priority Level	Capital Recommendation	Associated Service Recommendation
Lower	Explore further capital investments near the current stop at the Walmart at Foxcroft Towne Center (or other location in the vicinity)	N/A
	Provide a shelter, benches and trash can at the VA Medical Center stop	N/A
	Explore branded shelters and benches in Charles Town and Ranson	N/A
	Explore branded shelters and benches in Shepherdstown	Implement new Route 21 between VA Medical Center and Shepherdstown
	Explore branded shelters and benches in Spring Mills	Implement new Route 22 between Martinsburg and Spring Mills

6.4. Implementation Schedule

The recommendations detailed in this section would be implemented in annual phases. **Table 44** summarizes the recommended annual implementation and operating costs by route. Assuming an inflation rate of two percent per year (the consumer price index growth for the area[8]), this would result in an operating cost of approximately $2.11 million in year one, $2.20 million in year two, $2.4 million in year three, $2.71 million in year four, and $3.01 million in year five.

6.4.1. Year One

As the nation continues to deal with the COVID-19 pandemic and finding potential solutions that will postively impact transit, the system will operate as it currently exists today. Future years will see the implementation of more substantive changes to route spans, alignments, and days of operation.

6.4.2. Year Two

Two routes which currently operate exclusively in the evening periods, Routes 25 and 30, would be eliminated and replaced by expanded operating hours on Routes 10, 11, 12, 14, and 16. In addition to expanded spans of service, Route 14 will no longer serve Gabes due to low ridership and Route 18 will begin operating two patterns, with one

[8] https://www.bls.gov/regions/mid-atlantic/data/consumerpriceindexhistorical_northeast_table.htm

pattern serving destinations in the Inwood area on select trips, and the other pattern short turning at the Blue Ridge Tech Center every hour.

6.4.3. Year Three

Weekend-only routes 35 and 40 will be discontinued and replaced with Saturday service on the following existing weekday routes: 10, 12, 14, 16, and 20. These routes would operate using their primary weekday alignments from 9:00 a.m. to 5:00 p.m. Additionally, Routes 12 and 19 will be realigned to be more efficient for their intended purposes, and Route 11 will begin operating two hours earlier at 7:20 a.m.

6.4.4. Year Four

New Route 22 from Martin's North Martinsburg to the Spring Mills Walmart Supercenter and the North Berkeley Library is recommended to be implemented.

6.4.5. Year Five

New Route 21 from the Martinsburg VA Hospital to Shepherdstown is recommended to be implemented.

Table 44: Recommended Implementation & Annual Operating Costs

Route	Year 1	Year 2	Year 3	Year 4	Year 5
10	$247,100	$302,400	$355,300	$362,400	$369,600
11	$173,000	$226,800	$329,600	$342,200	$336,800
12	$197,700	$226,800	$278,100	$283,700	$289,400
14	$321,200	$352,900	$406,700	$414,800	$423,100
16	$282,100	$338,100	$344,900	$351,800	$358,800
18	$197,700	$201,600	$205,600	$209,700	$214,000
19	$98,800	$100,800	$102,800	$104,900	$107,000
20	$362,400	$369,600	$423,800	$432,300	$440,900
21	--	--	--	--	$240,700
22	--	--	--	$262,200	$267,500
25	$72,100	--	--	--	--
30	$78,200	--	--	--	--
35	$42,100	$43,000	--	--	--
40	$41,200	$42,000	--	--	--
Total	**$2,114,000**	**$2,204,000**	**$2,446,900**	**$2,764,100**	**$3,047,900**

6.5. Demand-Response Costs

Currently, EPTA uses its regular operating budget to provide demand-response service to eligible passengers within its service area. Since EPTA operates a fixed-route deviated service that allows for up to a ¾-mile deviation off its fixed routes, it is not required to operate a separate demand-response service. EPTA redirects any qualified rider to schedule transportation through the state of WV's NEMT Provider, meaning those who do not quality are able to receive demand responsive service from EPTA at cost.

7. Potential Funding Sources

7.1. Overview

There are a number of funding programs and grants available through both the U.S. Department of Transportation (U.S. DOT) and from other federal agencies that can be used for transportation and transportation-related expenditures. Programs originating outside of U.S. DOT, for the most part, require partnerships with local government, social service agencies or public health agencies at the local and state level as a stand-alone transit agency is not eligible as a grant recipient. These programs *can* fund transportation services at some level (i.e. vehicle purchases, fare reimbursement, etc.) according to program guidelines but specifics of each program need to be evaluated individually.

EPTA could partner with external agencies to write capital and operating assistance for transit that would serve targeted populations into eligible grants. For example, household incomes below the federal poverty level of $24,000 for a family of four would qualify for grants and programs targeted to low-income populations particularly those under the Department of Health and Human Services and under the Department of Housing and Urban Development. Similarly, EPTA could propose extending specific service, such as a route extension to a technical training school, in a Department of Labor Grant through the local workforce development agency or applying for a Federal Lands Access Grant through FHWA to support capital costs associated with a new route to Harpers Ferry.

This chapter provides an overview of all federal programs and grants that include eligibility for transportation. Each program includes a project link that can provide more information about what agency is eligible as grant recipient and what activities are eligible for funding.

In addition to these public funding options, EPTA should partner with large employers in its service area to provide service to their facilities in exchange for contract revenue much like that received from the Maryland Transit Administration (MTA) and Shepherd University. Routes 18 and 19, both of which are meant to provide service to specific major employers, would be prime candidates for this type of contract service.

7.2. Coronavirus Aid, Relief, and Economic Security (CARES) Act

Under the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020, the Federal Transit Administration (FTA) is allocating $25 billion to recipients of urbanized area and rural area formula funds, with $22.7 billion to large and small urban areas and $2.2 billion to rural areas. Funding will be provided at a 100-percent federal share, with no local match required, and will be available to support capital, operating, and other expenses generally eligible under those programs to prevent, prepare for, and respond to COVID-19.

Operating expenses incurred beginning on January 20, 2020 for all rural and urban recipients are also eligible, including operating expenses to maintain transit services as well as paying for administrative leave for transit personnel due to reduced operations during an emergency.

A summary of apportionments and allocations is available here:

https://www.transit.dot.gov/cares-act-apportionments

7.3. U.S. Department of Transportation

The following section provides an update on programs under the FAST Act that could potentially benefit EPTA. A complete summary of FAST Act changes is available here:

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/2015_FAST_Act_Presentation.pdf

7.3.1. Federal Transit Administration

Urbanized Area Formula Grants (5307)

Under the FAST Act, Urbanized Area Formula Grants (5307) now includes the job access and reverse commute program, which is also available under the Rural Area Formula program (5311). The program provides funding for services to low-income individuals to access jobs. The 5307 Program provides operating assistance with a 50 percent local match for job access and reverse commute activities. There is expanded eligibility for operating expenses for systems with 100 or fewer buses. Systems operating 75 or fewer buses in fixed-route service during peak service hours may use up to 75 percent of their attributable share of funding for operating expenses.

Enhanced Mobility of Seniors and Individuals with Disabilities Program (5310)

Activities that were previously eligible under the New Freedom program are now eligible under the Enhanced Mobility of Seniors and Individuals with Disabilities program. Projects selected for funding must be included in a locally developed, coordinated public transit-human service transportation plan. At least 55 percent of program funds must be spent on the types of capital projects that include public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation in insufficient, inappropriate, or unavailable. The remaining 45 percent may be used for: public transportation projects that exceed the requirements of the ADA; public transportation projects that improve access to fixed-route service and decrease reliance by individuals with disabilities on complementary paratransit; or, alternatives to public transportation that assist seniors and individuals with disabilities. Using these funds for operating expenses requires a 50 percent local match while using these funds for capital expenses (including acquisition of public transportation services) requires a 20 percent local match.

Bus and Bus Facilities Discretionary Grant (5339)

The Grants for Buses and Bus Facilities Program (5339) makes federal resources available to states and direct recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. Funding is provided through formula allocations and competitive grants. The federal share of eligible capital costs is 80 percent of the net capital project cost, unless the grant recipient requests a lower percentage. Eligible applicants include designated recipients that allocate funds to fixed route bus operators, states or local governmental entities that operate fixed route bus service, and Indian tribes. EPTA would qualify as an eligible recipient under these guidelines and could apply for funding through this program to use on capital costs for new buses and the construction of bus facilities.

7.3.2. Federal Highway Administration (FHWA)

The Federal Lands Access Program and the Federal Lands Transportation Program are two programs housed under the Federal Highway Administration, which replace the Transit in the Parks (5320) program that existed under SAFETEA-LU.

Federal Lands Access Program

Under the FAST Act, $232M was available in FY2020 to provide funds for transportation projects on Federal Lands.

Eligible activities: transportation planning, research, engineering, preventative maintenance, rehabilitation, restoration, construction, and reconstruction of Federal lands access transportation facilities. Also includes operation and maintenance of transit facilities.

More information is available here: https://www.fhwa.dot.gov/fastact/factsheets/fedlandsaccessfs.cfm

Federal Lands Transportation Program (FLTP)

Under the FAST Act, $375M was available in FY2020 to improve access within national forests, parks, and national recreation areas on transportation facilities in the national Federal Lands transportation inventory and owned and maintained by the Federal government.

Eligible activities: transportation planning, research, engineering, preventative maintenance, rehabilitation, restoration, construction, and reconstruction of Federal lands access transportation facilities. Also includes operation and maintenance of transit facilities.

More information is available here: https://highways.dot.gov/sites/fhwa.dot.gov/files/docs/federal-lands/programs/federal-lands-transportation-program/8191/fast-fltp-fact-sheet.pdf

7.4. U.S Department of Agriculture

The U.S. Department of Agriculture provides grants and funding opportunities for food access in low-income communities. The Hunger-Free Communities program provides a one-time opportunity for funds aimed at helping communities increase food access by promoting coordination and partnerships between public, private, and non-profit partners.

https://www.fns.usda.gov/get-involved/hunger-free-communities-best-practices

7.5. Department of Health and Human Services

The Department of Health and Human Services provides a number of programs to state welfare agencies, several of which include provisions for transportation to access services. All of these programs would require collaboration and partnerships with local and state social service agencies.

7.5.1. Administration for Children and Families

Social Services Block Grant

Title XX Program provides formula funds to state welfare agencies for the provision of social services, often including transportation, that help individuals reduce welfare dependency, achieve economic self-sufficiency, or forestall unnecessary use of institutional care. Grants are received and distributed at the state level. The following activities are eligible: mobility management services, purchase of transit vouchers, and capital cost for vehicle purchases.

http://www.acf.hhs.gov/programs/ocs/programs/ssbg

Community Services Block Grant

This program is awarded as formula-based grants to states, which pass them on to local community action programs. The Job Opportunities for Low-income Individuals (JOLI) program, awards discretionary grants to local non-profits who are creating employment and business opportunities for welfare recipients and other low-income individuals. Transportation services are commonly provided in both the block grant and JOLI programs. The following activities are eligible: mobility management services, purchase of transit vouchers, and capital cost for vehicle purchases.

http://www.acf.hhs.gov/programs/ocs/programs/csbg

7.5.2. Administration on Aging

Supportive Services and Senior Centers

Programs funds are awarded to state units on aging for the purpose of providing supportive services to older persons, including the operation of multipurpose senior centers. States award funds to area agencies on aging, most whom use a portion of their funding allocations to help meet the transportation needs of older persons. The following activities are eligible: mobility management services, purchase of transit vouchers, and capital cost for vehicle purchases.

https://acl.gov/programs/community-inclusion-integration-and-access/senior-centers-and-supportive-services-older

7.6. Centers for Disease Control and Prevention

7.6.1. State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease and Stroke (1422)

This program works with state and large city health departments to prevent obesity, diabetes, heart disease, and stroke and reduce health disparities through community and health system interventions. Communities implement environmental changes to make healthy living easier, such as improving means for safe active transportation for pedestrians, bicyclists and transit users.

https://www.cdc.gov/nccdphp/dch/programs/index.htm

7.7. Department of Housing and Urban Development

7.7.1. Office of Community Planning and Development

Community Development Block Grant (CDBG)

The CDBG program supports a wide variety of community and economic development activities. Some communities have used CDBG funds to assist in the construction of transportation facilities or for operating expenses and vehicle acquisition for community transportation services.

https://www.hud.gov/program_offices/comm_planning/communitydevelopment

Supportive Housing and Related Programs for the Homeless

The Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act of 2009 helps local governments and private nonprofits provide housing and supportive services to homeless persons. Many of these housing providers fund transportation as part of services offered.

https://www.hudexchange.info/homelessness-assistance

7.7.2. Office of Housing

Supportive Housing for the Elderly

Also known as Section 202, this program helps expand the supply of affordable housing with supportive services for the elderly. It provides very low-income elderly with options that allow them to live independently but in an environment that provides support activities such as cleaning, cooking, transportation, etc.

http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/progdesc/eld202

Supportive Housing for Persons with Disabilities

Also known as Section 811, this program provides funding to develop and subsidize rental housing with the availability of supportive services, including transportation, for very low-income adults with disabilities.

http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/progdesc/disab811

7.8. Department of Labor

Depending on the eligibility requirements of the grant, programs under the Department of Labor may be used to fund service that supports technical training schools and programs.

7.8.1. Employment and Training Administration

Workforce Investment and Opportunity Act Programs

The Workforce Investment and Opportunity Act (WIOA) authorizes funding to state, tribal and local workforce development agencies for a verity of employment and training services for youths, adults, dislocated workers, migrant and seasonal farmworkers and their families, and Native Americans. These funds may be used to help provide transportation to training programs for program participants.

https://www.doleta.gov/programs/

7.9. Office of Job Corps

Job Corps is an alternative education and training program that helps young people from low-income households earn a high school diploma or GED and find and keep a good job. Transit fares/vouchers are an eligible expense under this program.

https://www.jobcorps.gov/

7.9.1. Veterans' Employment and Training Service

Veterans Workforce Investment Program and Homeless Veterans Reintegration Project

The Labor Department's Veterans' Employment and Training Service addresses the specific needs of veterans, including veterans with disabilities, as they transition from military service to non-military employment. Working through state and local workforce agencies, veterans' groups, and One-Stop Career Centers, a variety of job search, training, transitional assistance and necessary supportive services, occasionally including transportation, are provided to veterans, with particular emphasis paid to addressing the needs of veterans with disabilities and homeless veterans.

http://www.dol.gov/vets/programs/vwip/main.htm

7.10. Department of Veteran's Affairs

7.10.1. Veterans' Health Administration

Veterans Medical Care Benefits

Veterans are eligible for a wide range of hospital-based and outpatient medical services. The department of Veterans Affairs will reimburse eligible transportation to covered medical care.

http://www.va.gov/healthbenefits/

Homeless Providers Grant and Per Diem Program

This is a program of annual discretionary grants to community agencies that provide services to homeless veterans. The purpose is to promote the development and provision of supportive housing and/or supportive services with the goal of helping veterans achieve residential stability, increase their occupational skills and income, and obtain greater self-determination. This grant can be used for capital costs associated with transportation but not to purchase transit fares or vouchers.

http://www.va.gov/homeless/gpd.asp

7.11. Additional Funding Information

Additional information on transportation funding across federal agencies is available through United We Ride (https://cms7.fta.dot.gov/sites/fta.dot.gov/files/docs/resources/176/united-we-ride.pdf), a federal interagency initiative aimed at coordinating access to employment, health care, education, community services, and food for older adults, people with disabilities, veterans, and individuals with lower incomes.

Appendix A: Ridership per Route Details

Route 10

Walmart at Foxcroft Towne Center and Caperton Transportation Center are the most highly utilized stops on Route 10 (**Figure 50**). Most passengers board in downtown Martinsburg and alight at Gabes, Walmart at Foxcroft Towne Center, and Wilson/Winchester. Ridership per hour is displayed in **Figure 49**.

Figure 49: Daily Ridership by Hour, Route 10

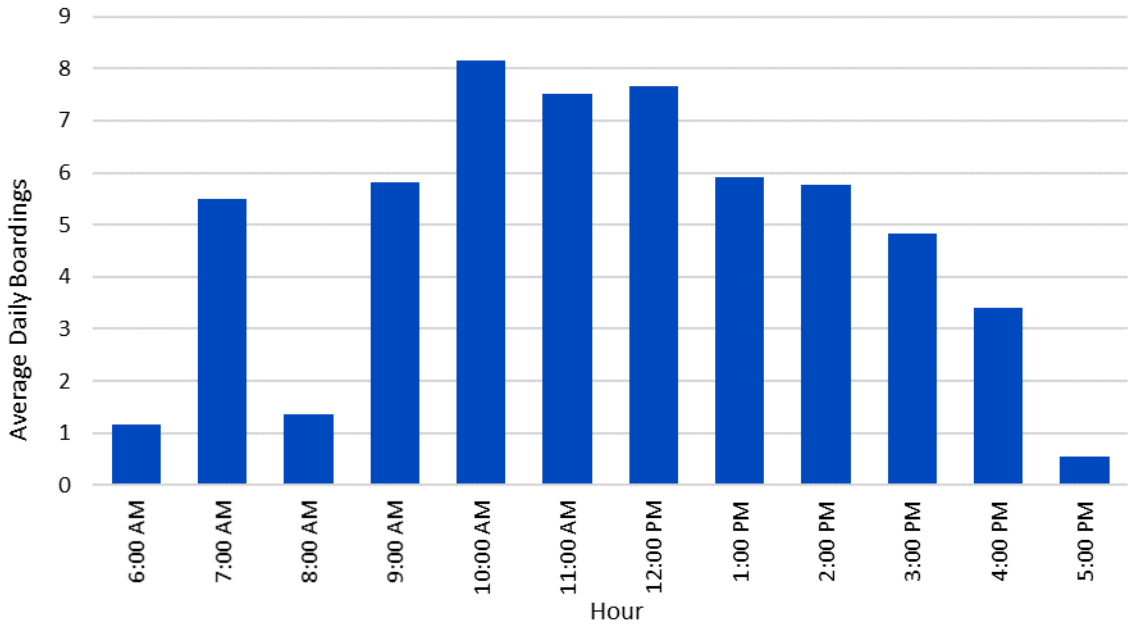
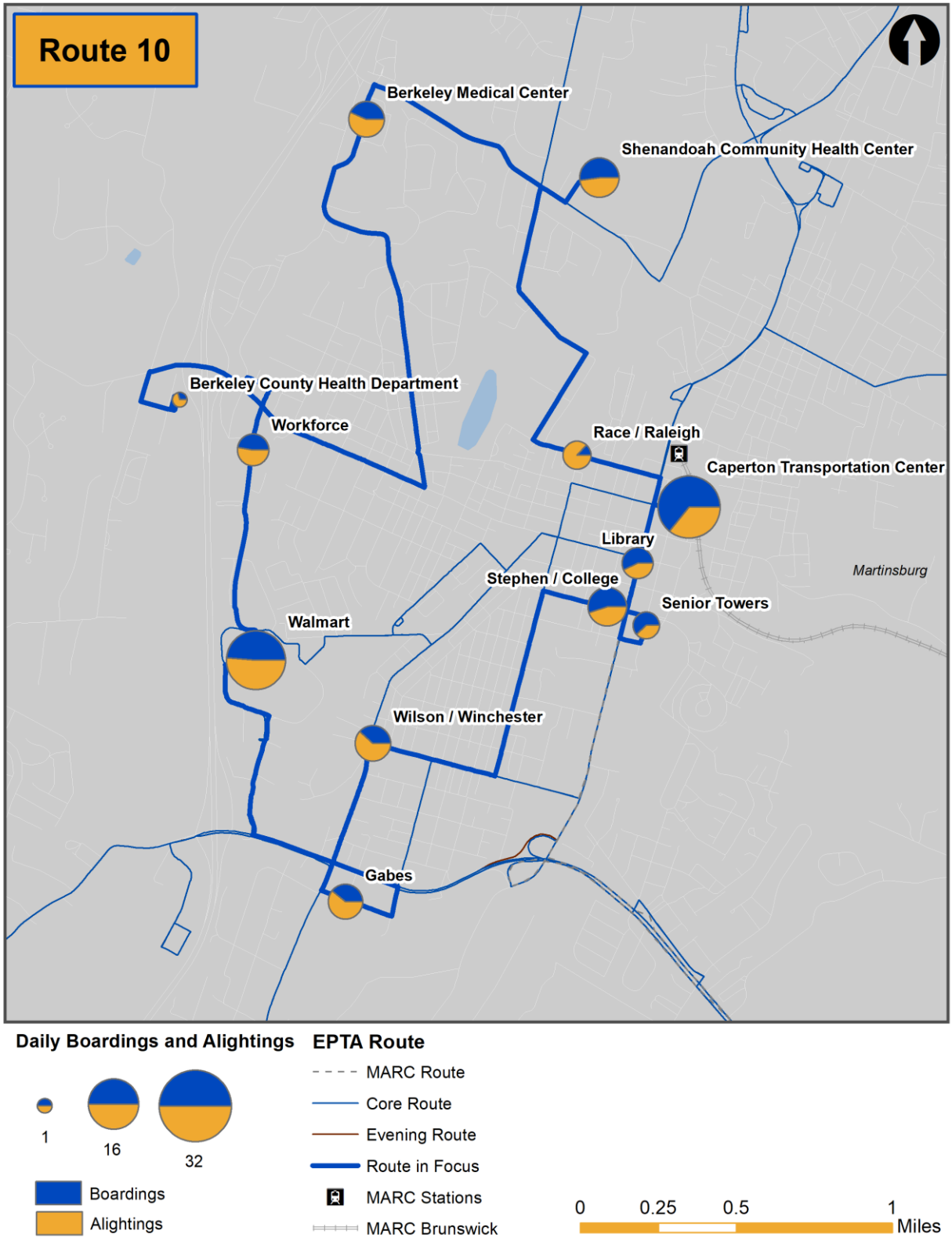


Figure 50: Daily Ridership by Stop, Route 10



Route 11

Caperton Transportation Center and the VA Medical Center are the most highly utilized stops in Route 11 (**Figure 52**). Most passengers board at the VA and Gabes and alight at Caperton and Hack Wilson Way. Ridership per hour is displayed in **Figure 51**.

Figure 51: Daily Ridership by Hour, Route 11

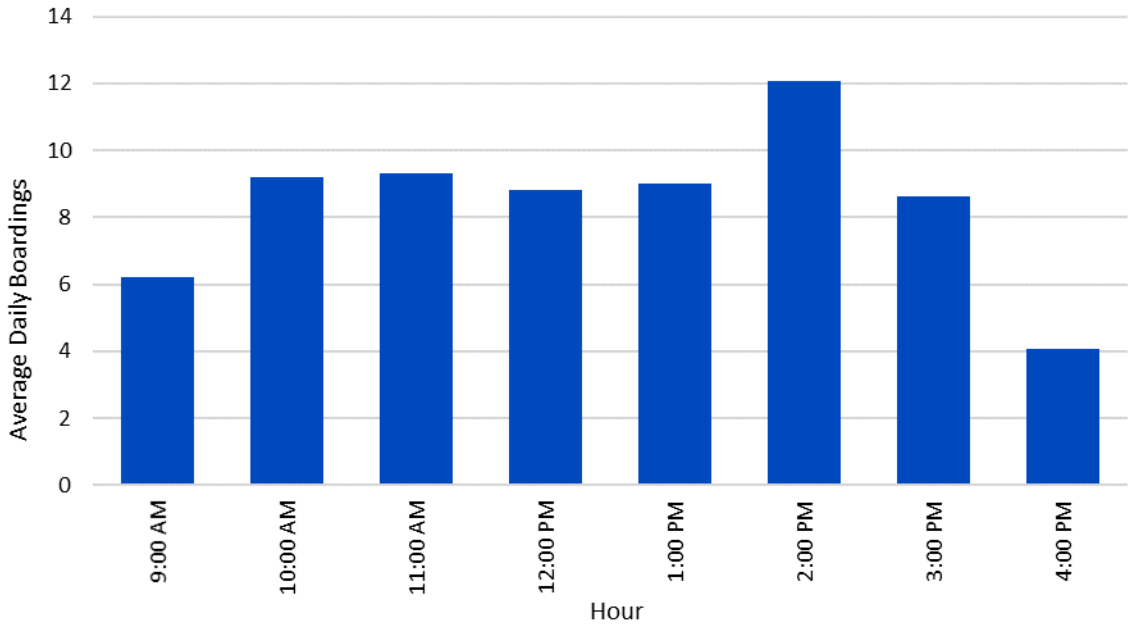
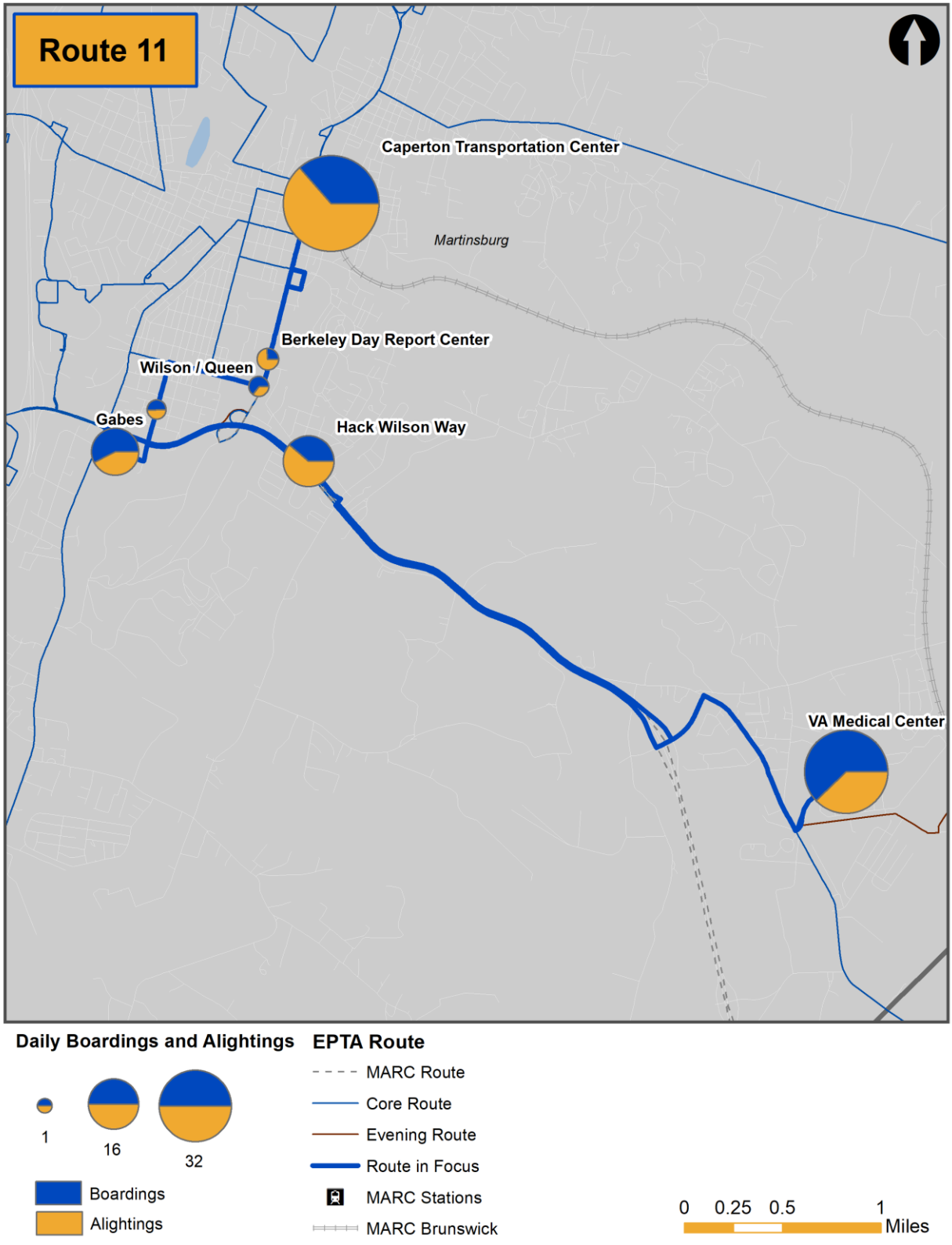


Figure 52: Daily Ridership by Stop, Route 11



Route 12

Caperton Transportation Center is the highest activity stop on Route 12 (**Figure 54**). Passengers board at the train station, Timberleaf Lane, and Big Lots. Passengers alight at Save-A-Lot in Martinsburg and at the DHHR. Ridership per hour is displayed in **Figure 53**.

Figure 53: Daily Ridership by Hour, Route 12

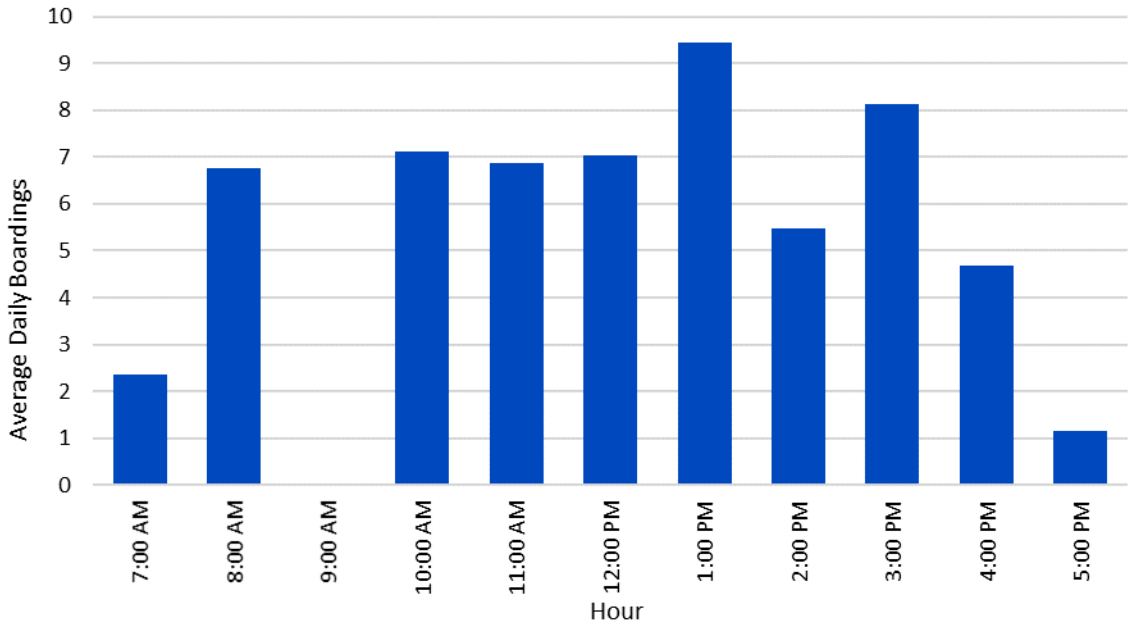
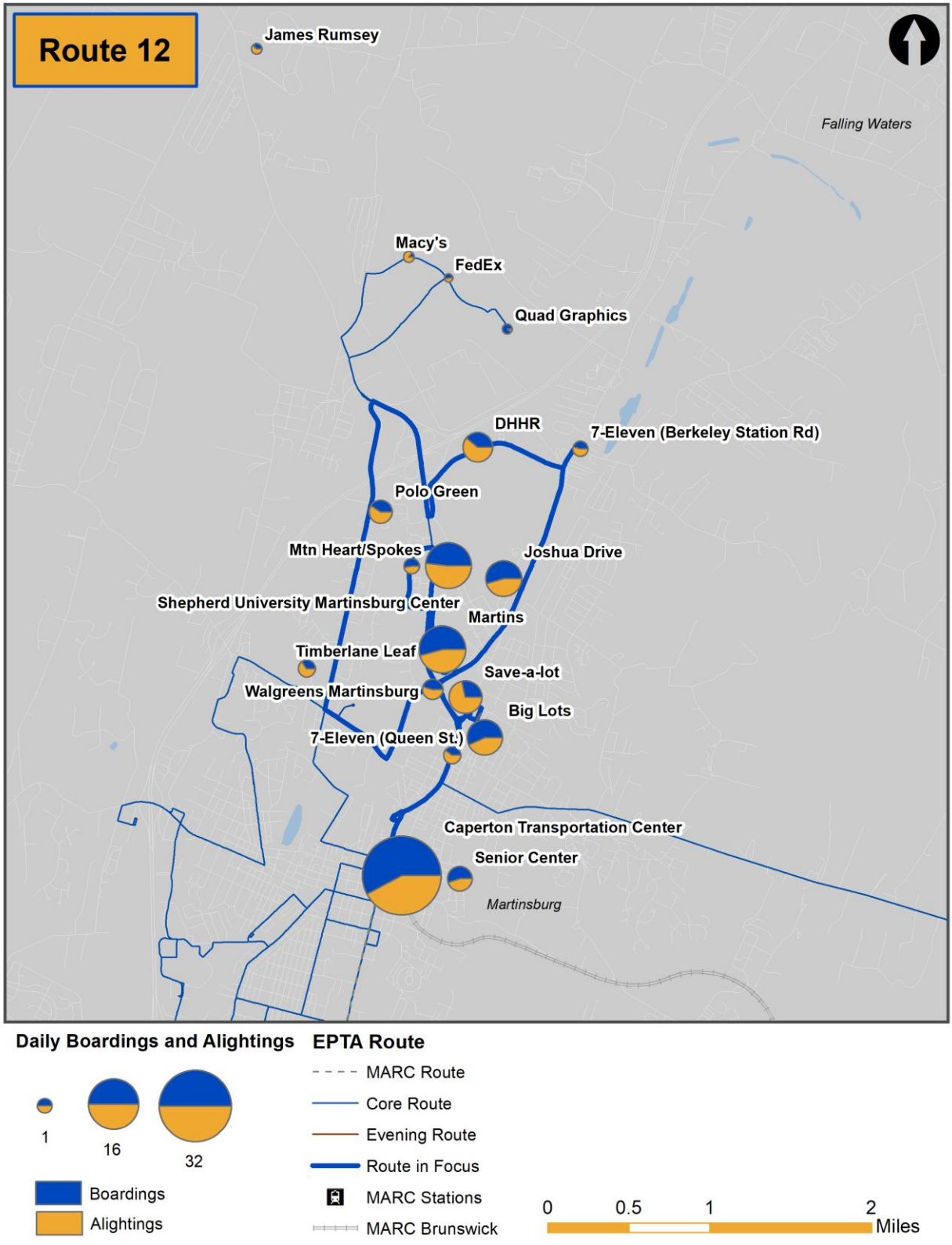


Figure 54: Daily Ridership by Stop, Route 12



Route 14

The Walmart at Foxcroft Towne Center, Ambrose Towers, and Caperton Transportation Center are the most highly utilized stops on Route 14 (**Figure 56**). The main destination on this route is the Walmart at Foxcroft Towne Center. Ridership per hour is displayed in **Figure 55**.

Figure 55: Daily Ridership by Hour, Route 14

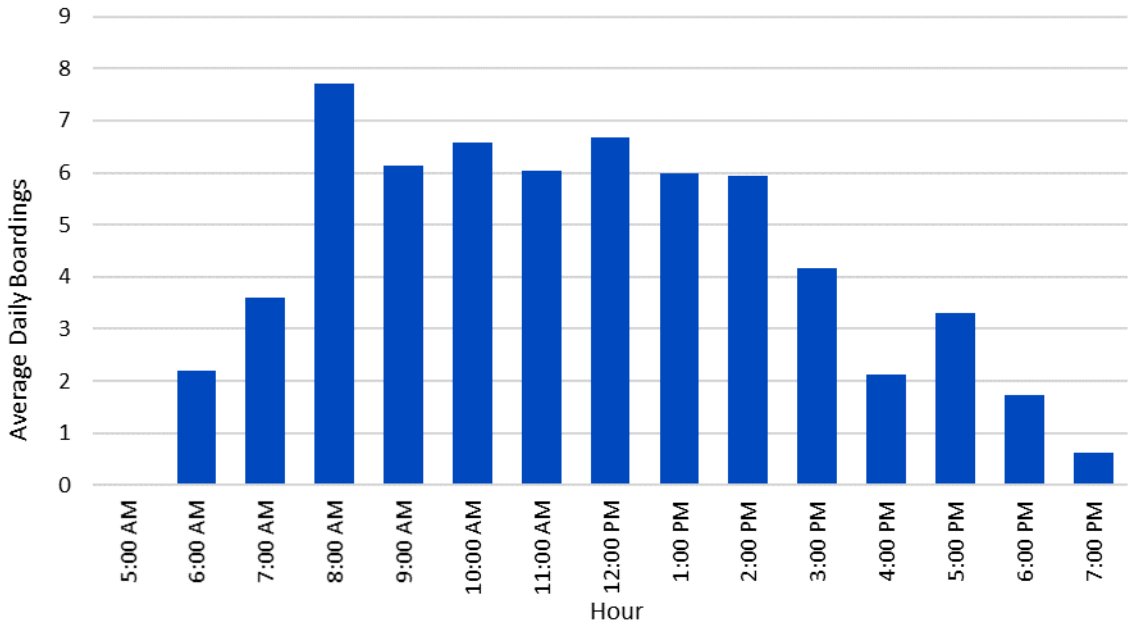
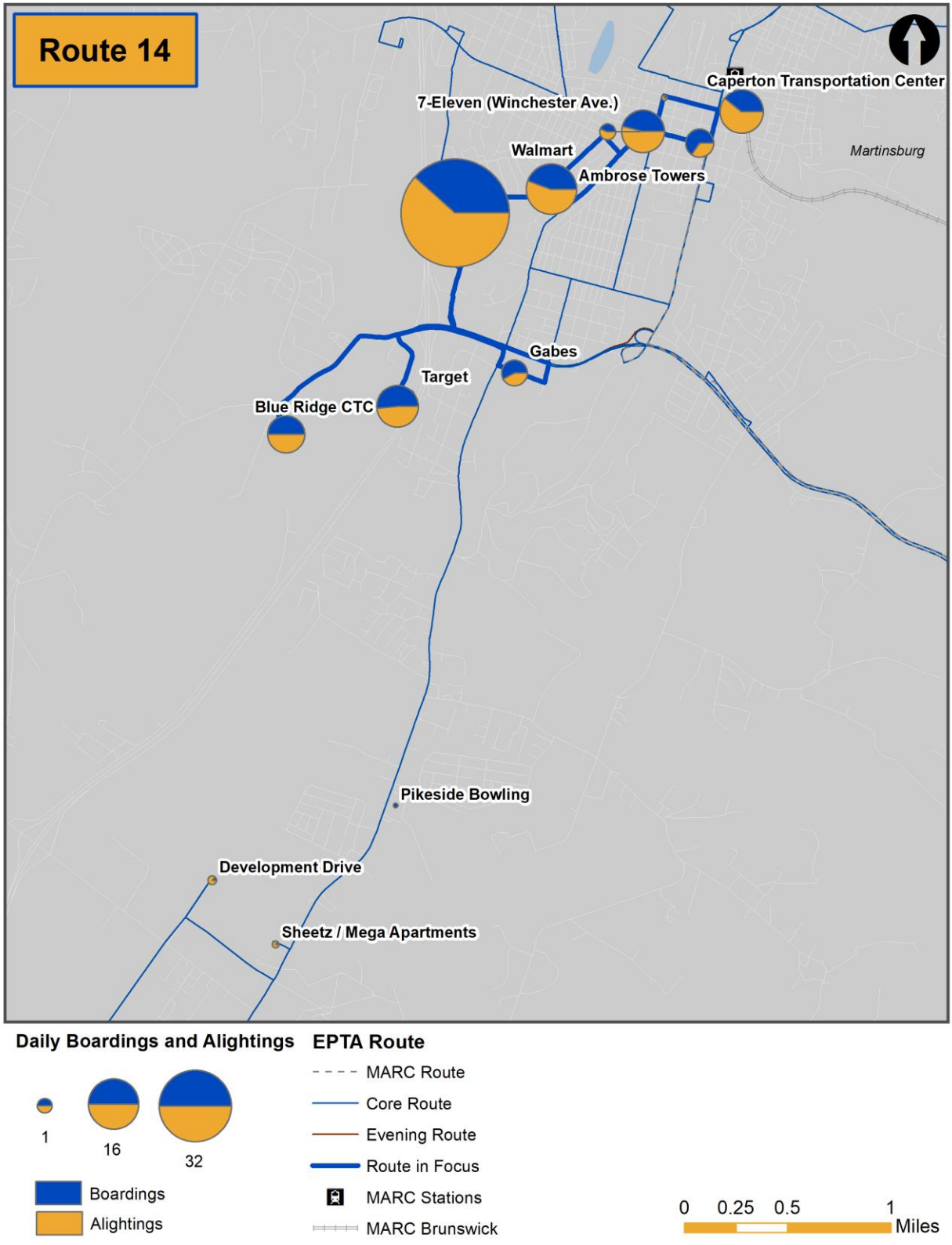


Figure 56: Daily Ridership by Stop, Route 14



Route 16

The VA Medical Center is the main attraction for Route 16 (**Figure 58**), where riders transfer from other routes to get between Martinsburg and Charles Town. Riders typically board in downtown Martinsburg and alight at Hack Wilson Way and the VA. Ridership per hour is displayed in **Figure 57**.

Figure 57: Daily Ridership by Hour, Route 16

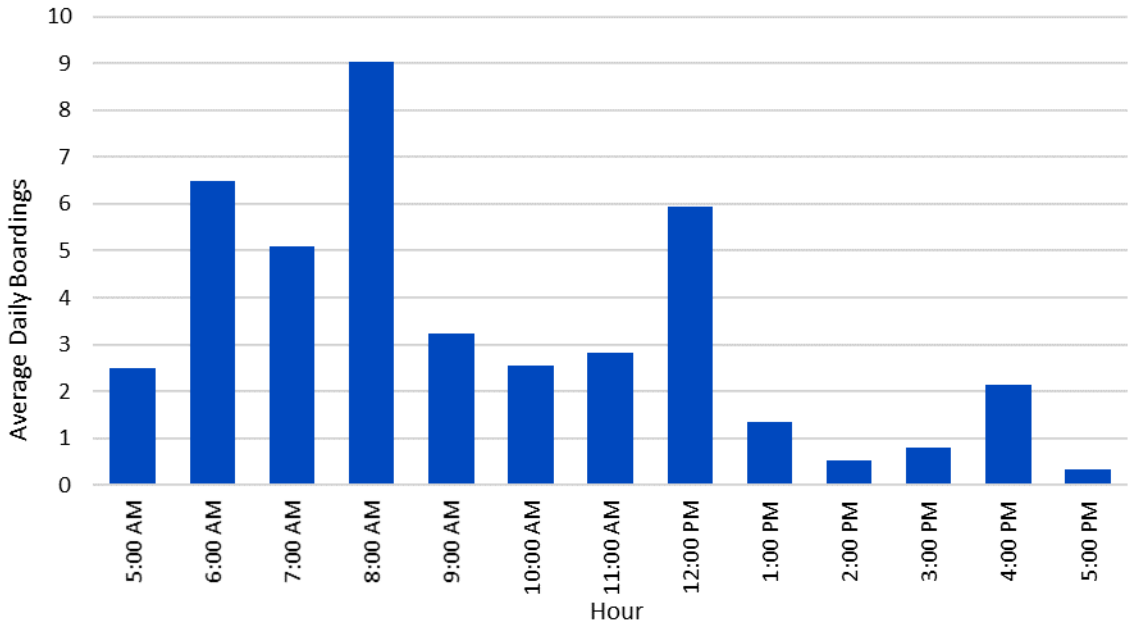
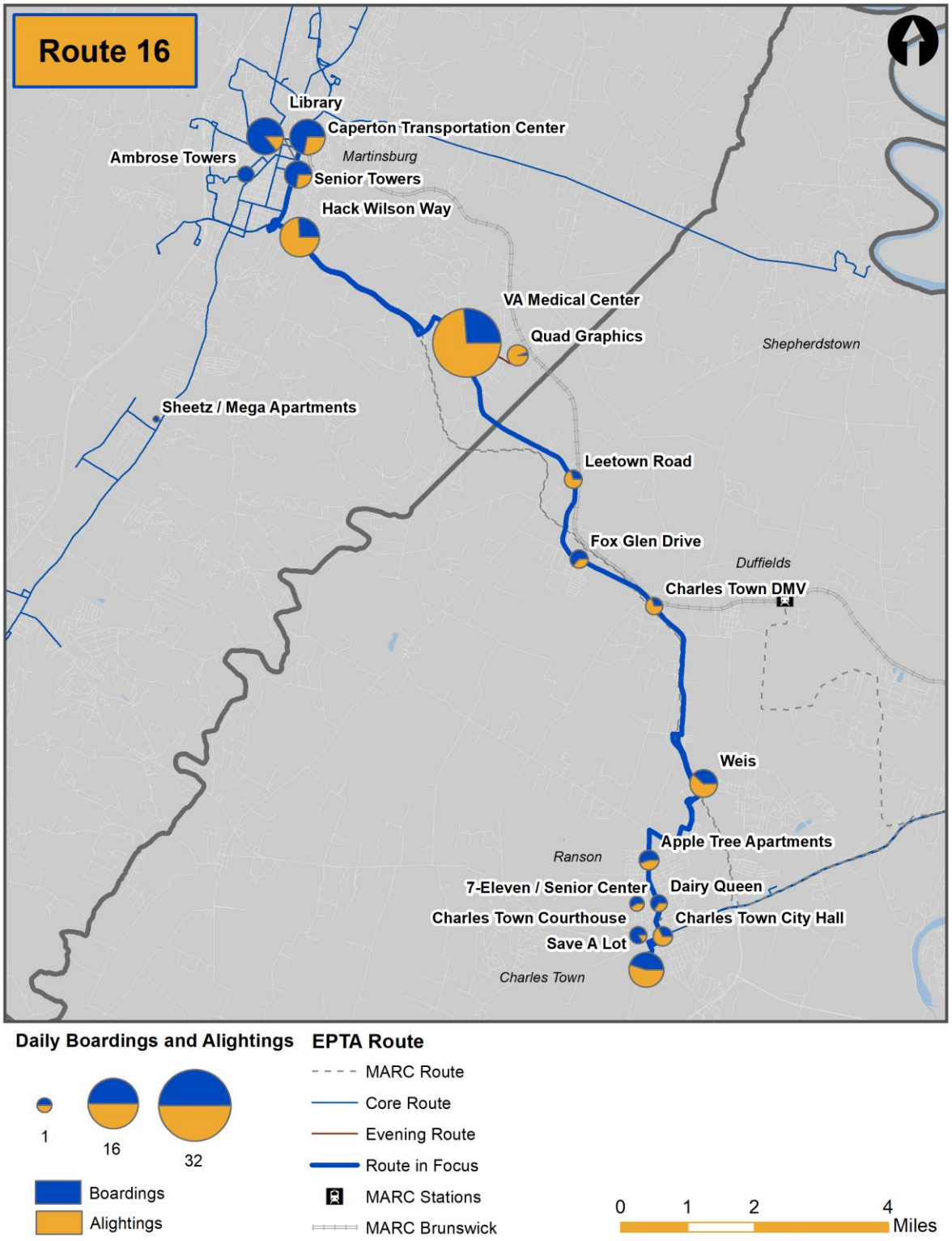


Figure 58: Daily Ridership by Stop, Route 16



Route 18

Route 18 has a concentration of ridership at Gabes, as seen in **Figure 60**. Ridership per hour is displayed in **Figure 59**.

Figure 59: Daily Ridership by Hour, Route 18

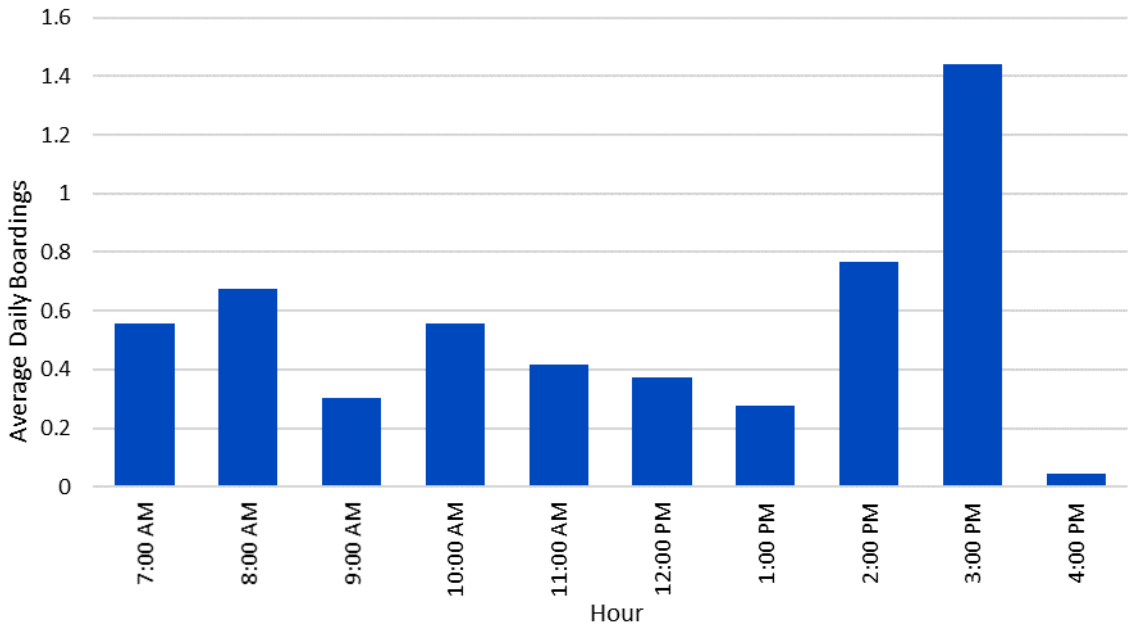
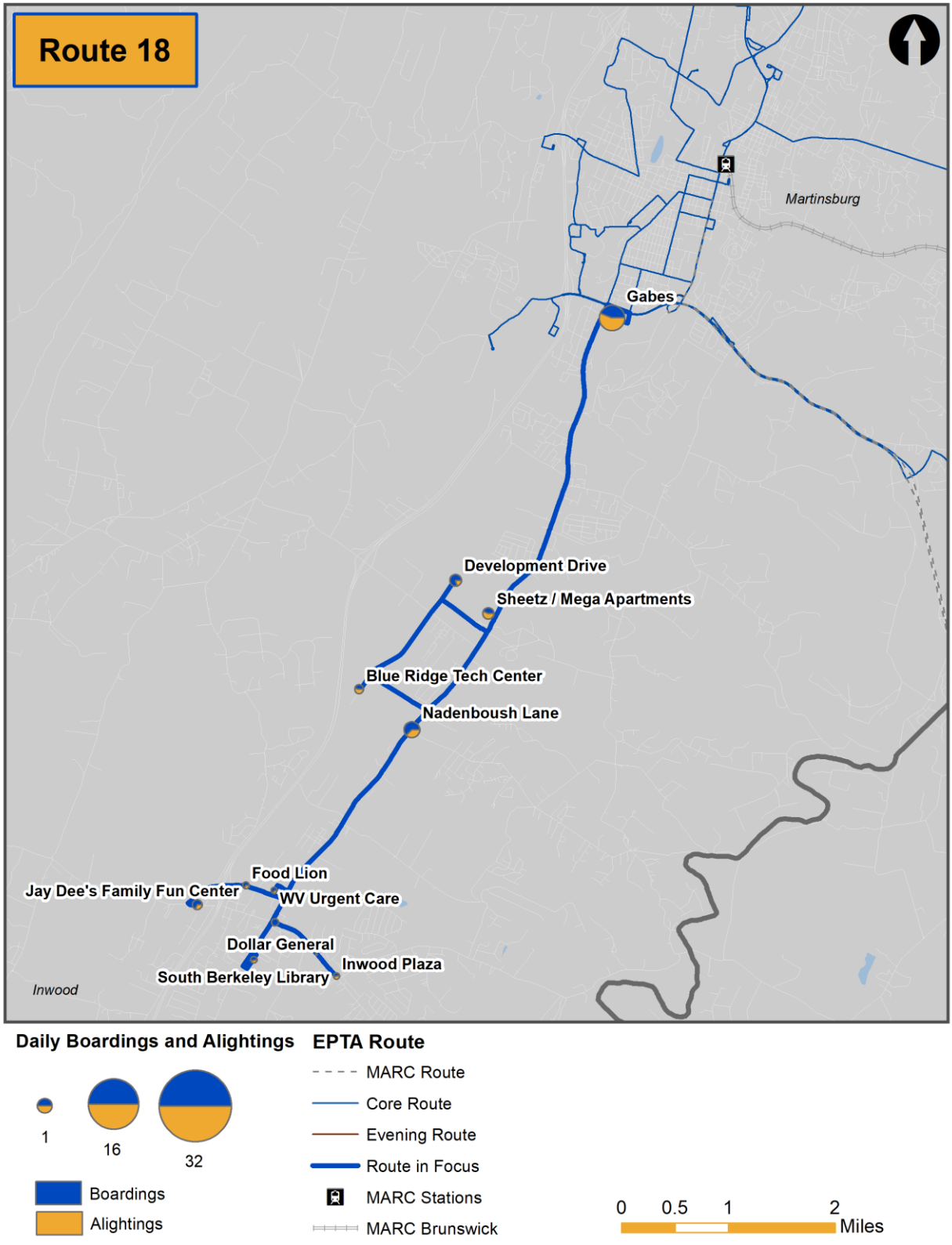


Figure 60: Daily Ridership by Stop, Route 18



Route 19

Passengers board at the Caperton Transportation Center and alight at points north, most notably at Macy's (**Figure 62).** Ridership per hour is displayed in **Figure 61**.

Figure 61: Daily Ridership by Hour, Route 19

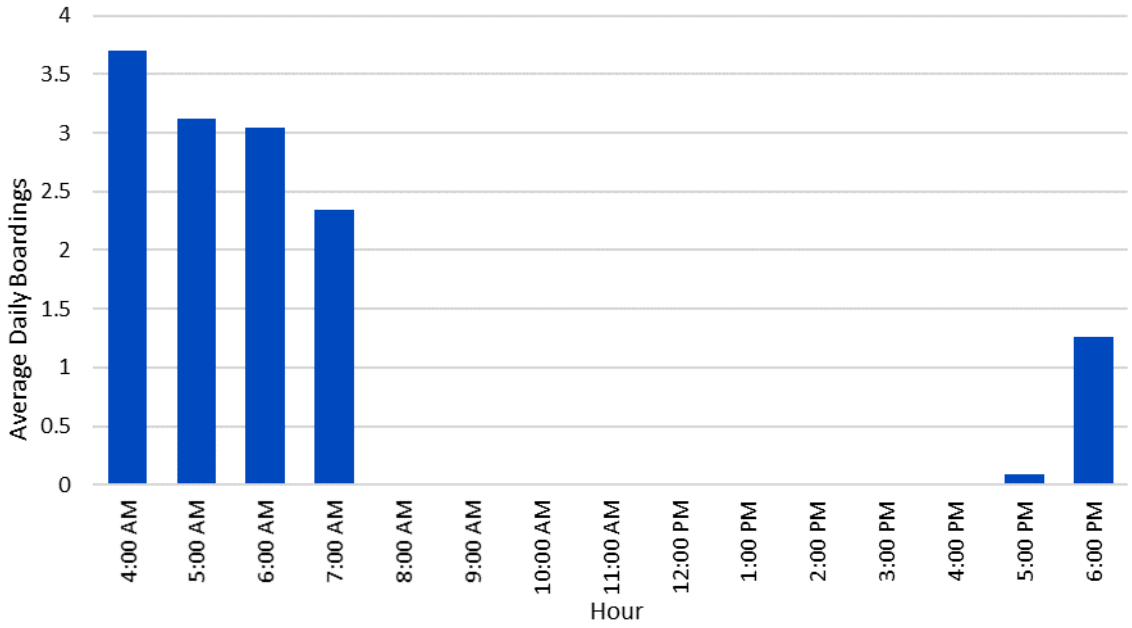


Figure 62: Daily Ridership by Stop, Route 19

Route 20

Major stops on Route 20 include the Walmart in Charles Town, Harper's Ferry, and Caperton Transportation Center (**Figure 64**). Boardings concentrate in downtown Charles Town, with alightings at the Charles Town Walmart. Ridership by hour is displayed in **Figure 63**.

Figure 63: Daily Ridership by Hour, Route 20

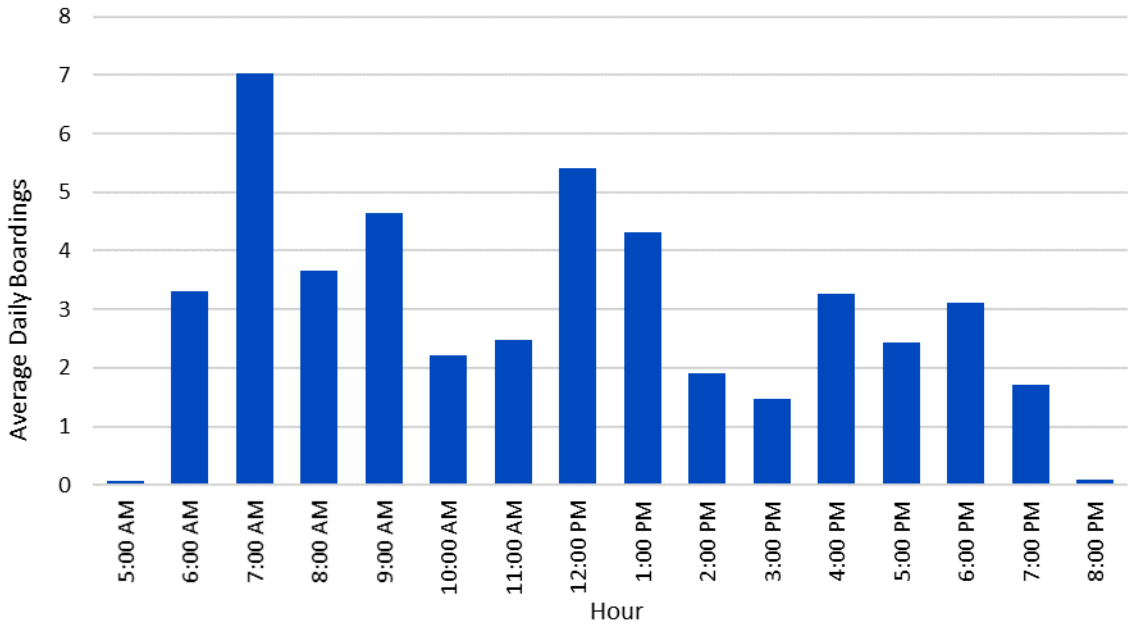
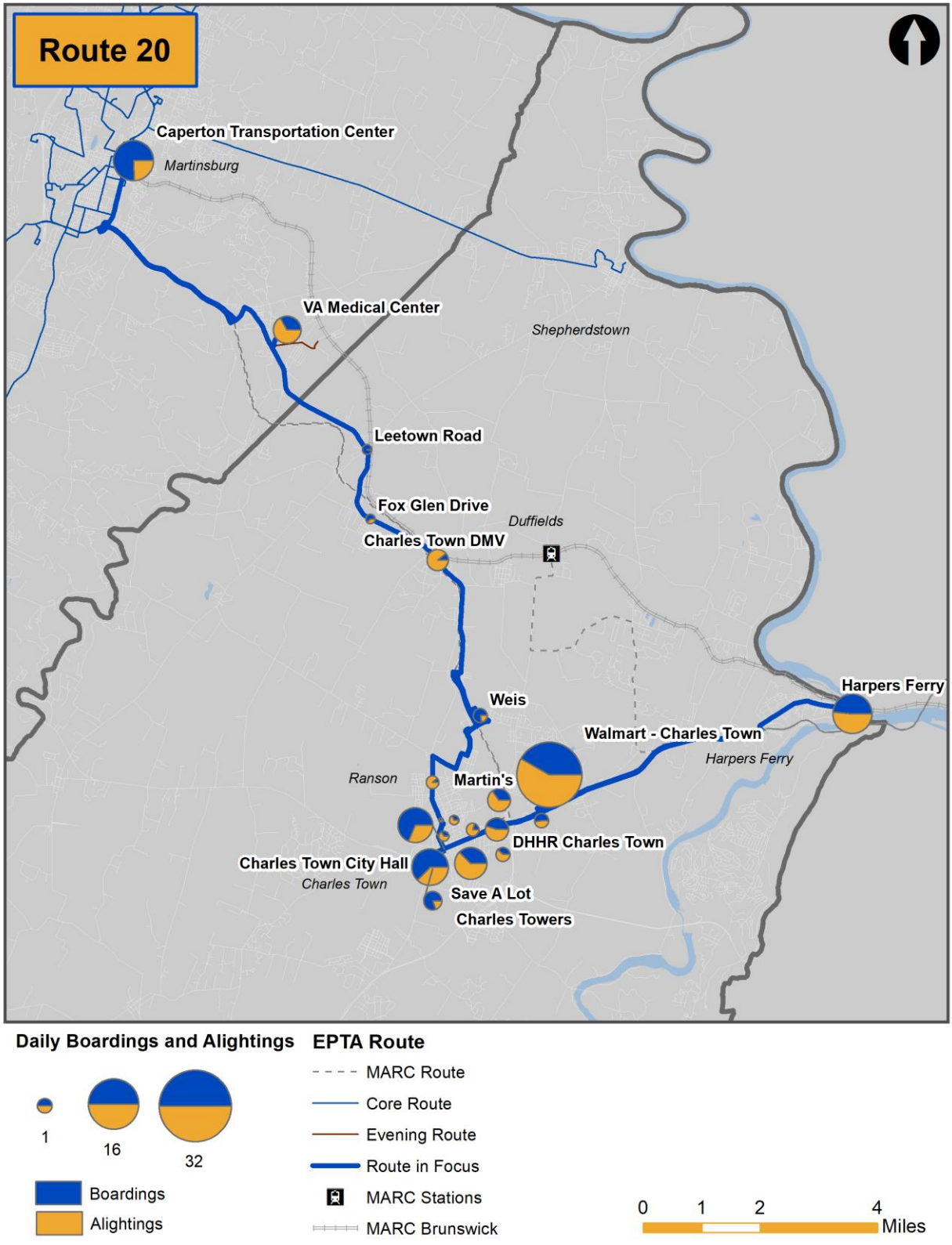


Figure 64: Daily Ridership by Stop, Route 20



Route 25

The Caperton Transportation Center is the highest ridership stop for Route 25 (**Figure 66**). Ridership per hour is displayed in **Figure 65**.

Figure 65: Daily Ridership by Hour, Route 25

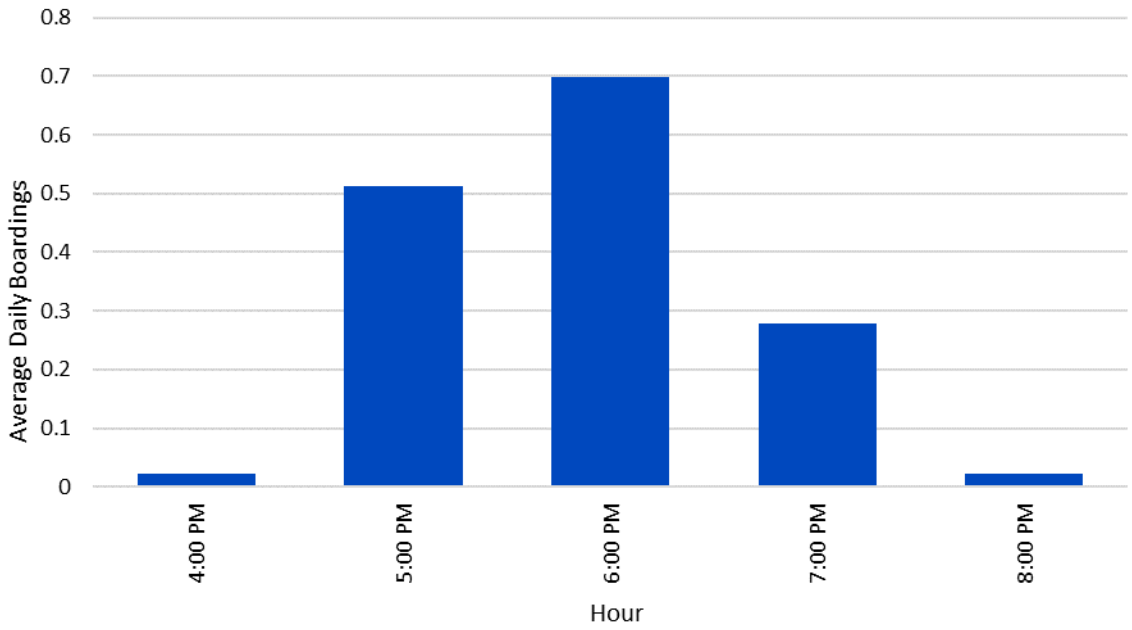
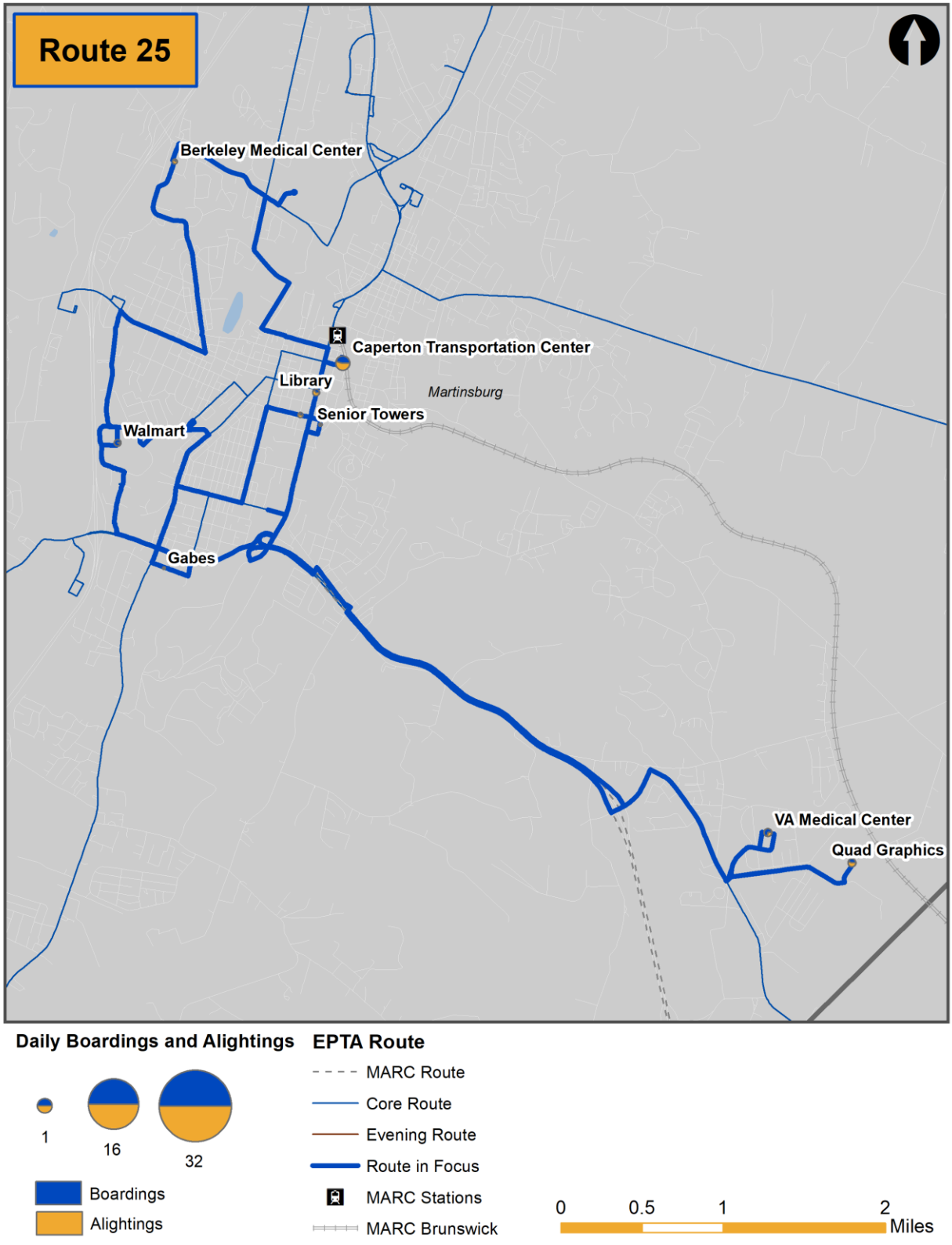


Figure 66: Daily Ridership by Stop, Route 25



Route 30

On Route 30, passengers typically board at the Caperton Transportation Center and alight at other stops, as shown in **Figure 68**. Ridership by hour is displayed in **Figure 67**.

Figure 67: Daily Ridership by Hour, Route 30

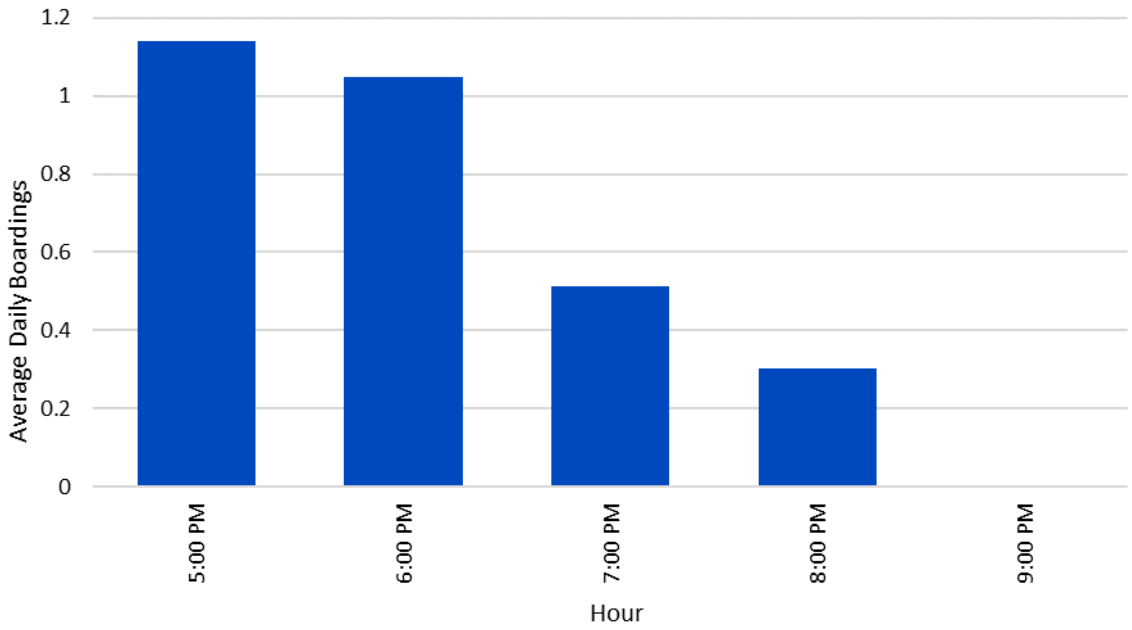
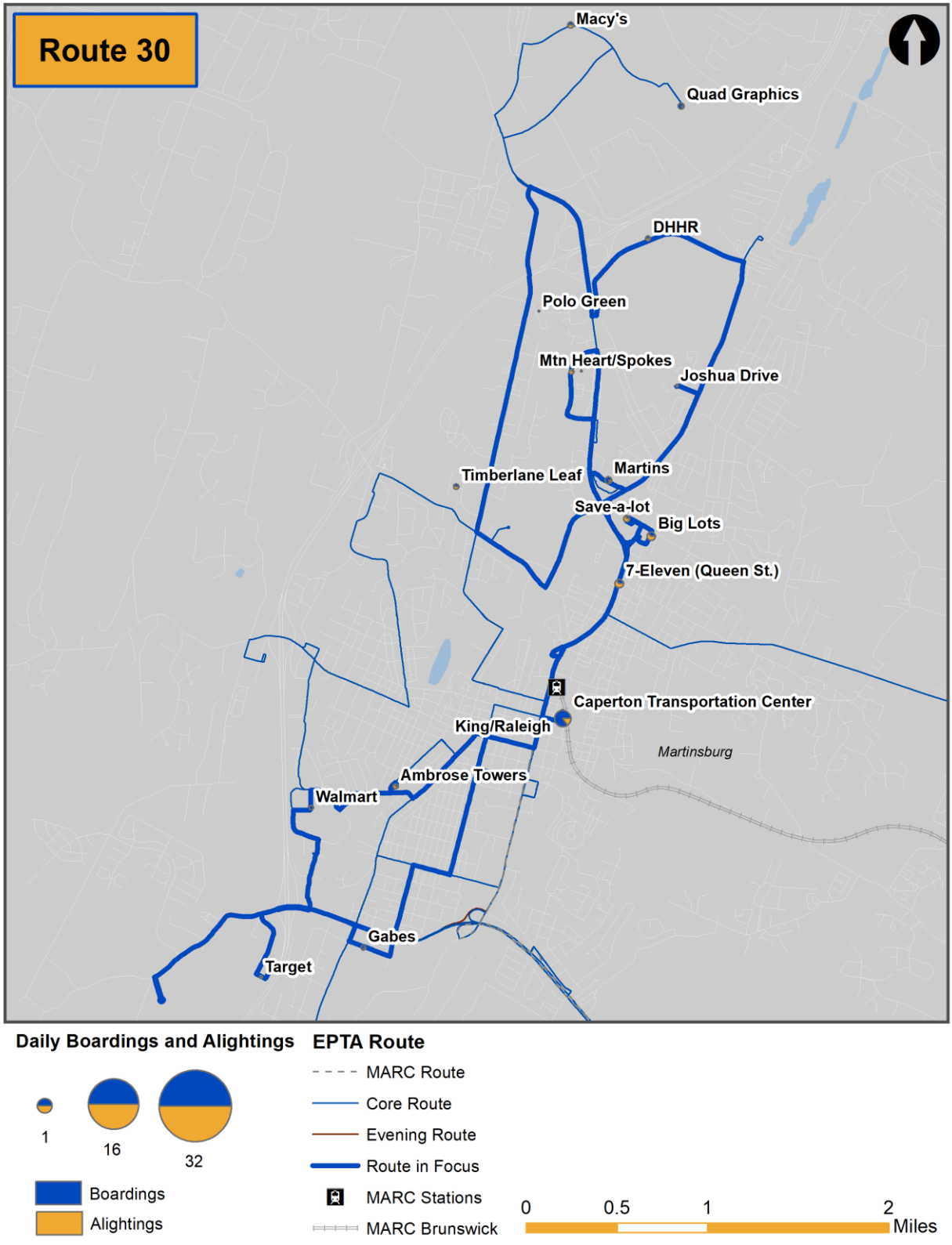


Figure 68: Daily Ridership by Stop, Route 30



Route 35

On Route 35 (**Figure 70**), Walmart at Foxcroft Towne Center, Caperton Transportation Center, and the VA Medical Center have the most boarding and alighting activity. Ridership by hour is displayed in **Figure 69**.

Figure 69: Daily Ridership by Hour, Route 35

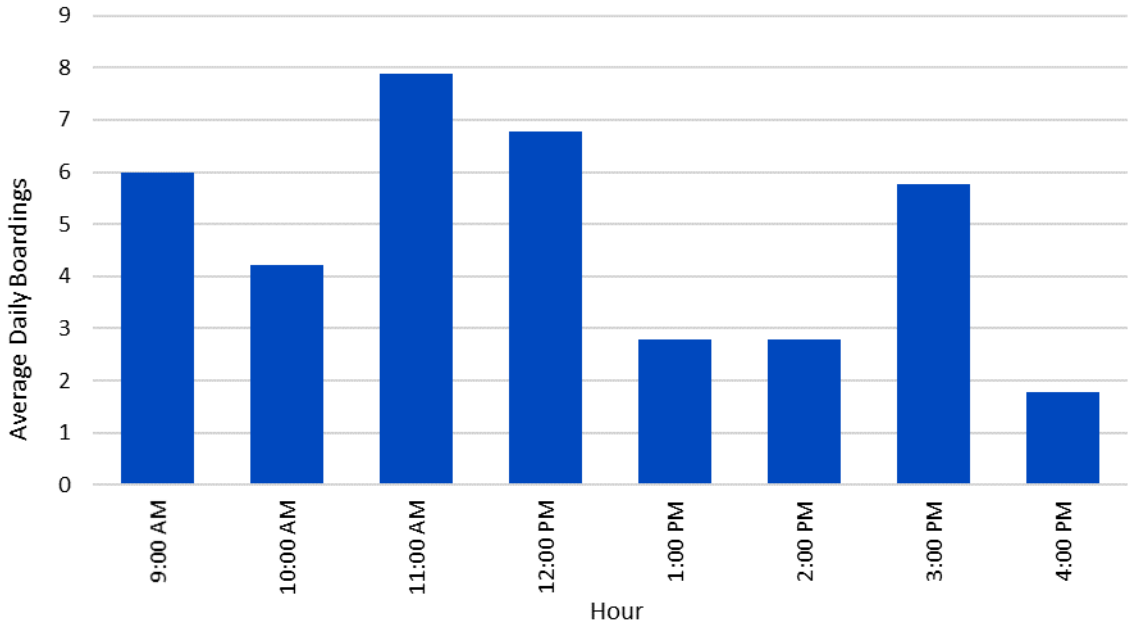
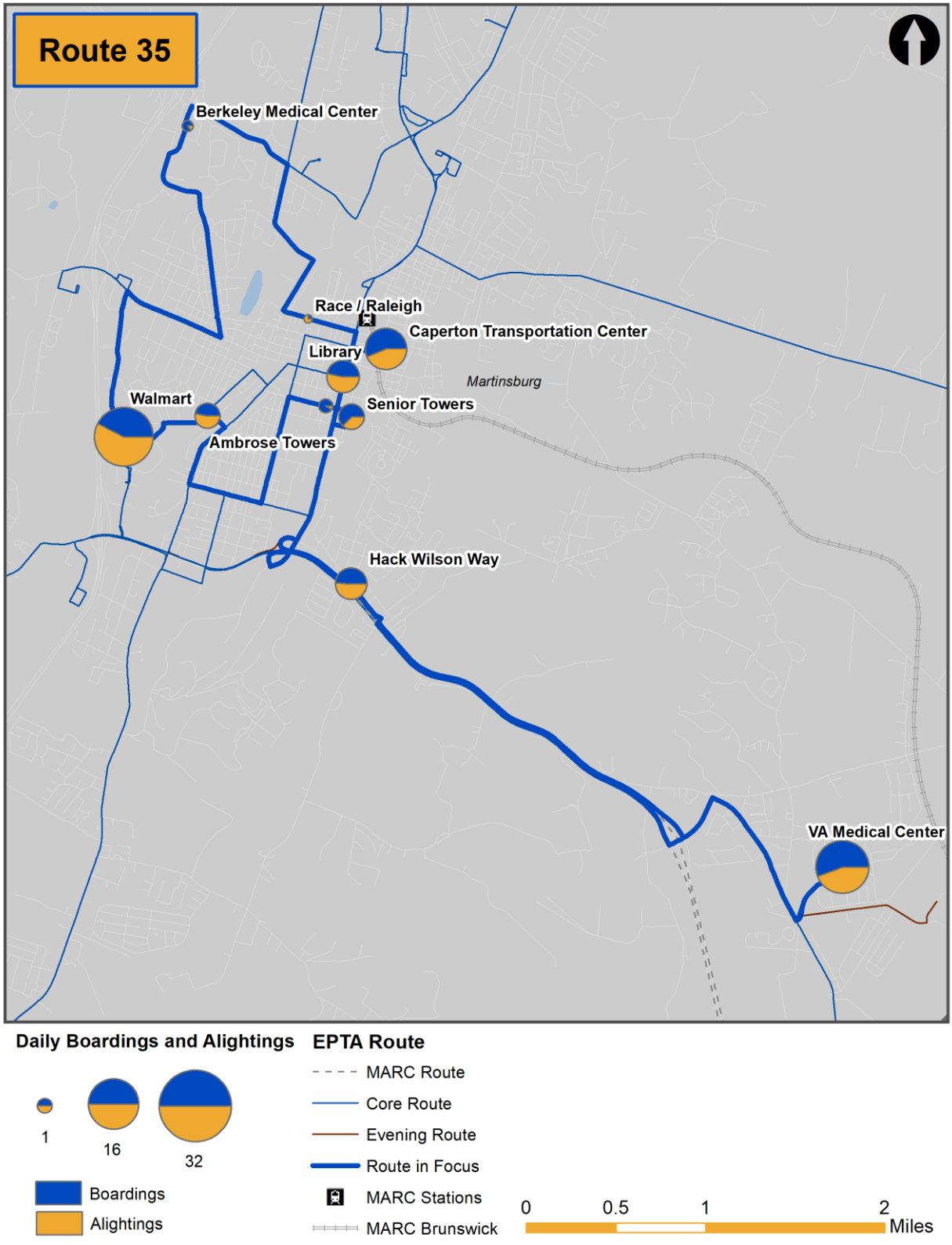


Figure 70: Daily Ridership by Stop, Route 35



Route 40

Figure 72 shows ridership on Route 40; Caperton Transportation Center has the highest activity, followed by Walmart at Foxcroft Towne Center, Joshua Drive, and Shepherd University Martinsburg Center. Daily ridership by hour is displayed in **Figure 71**.

Figure 71: Daily Ridership by Hour, Route 40

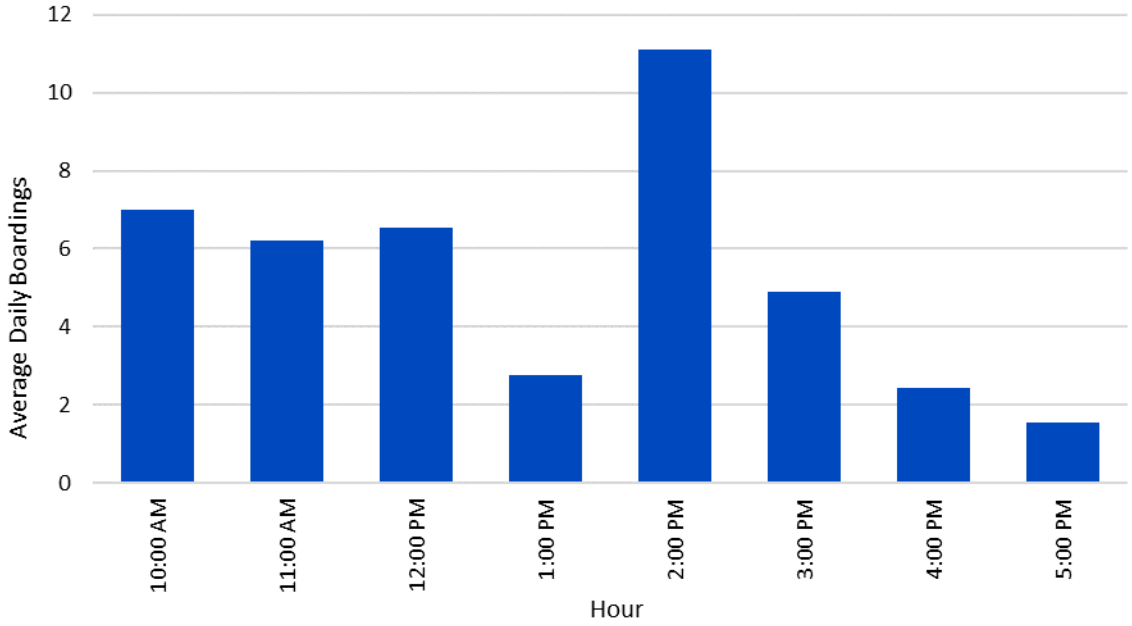
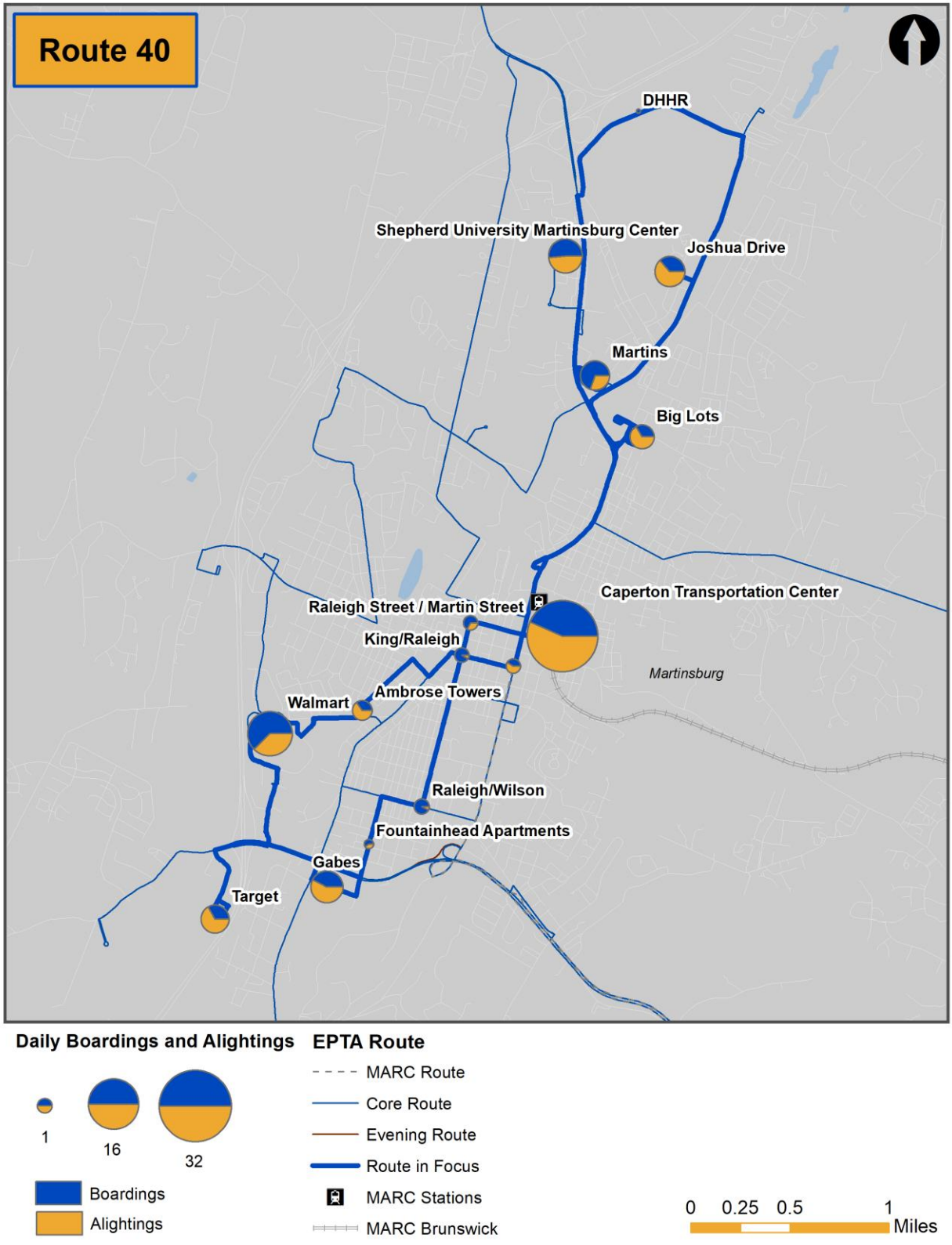
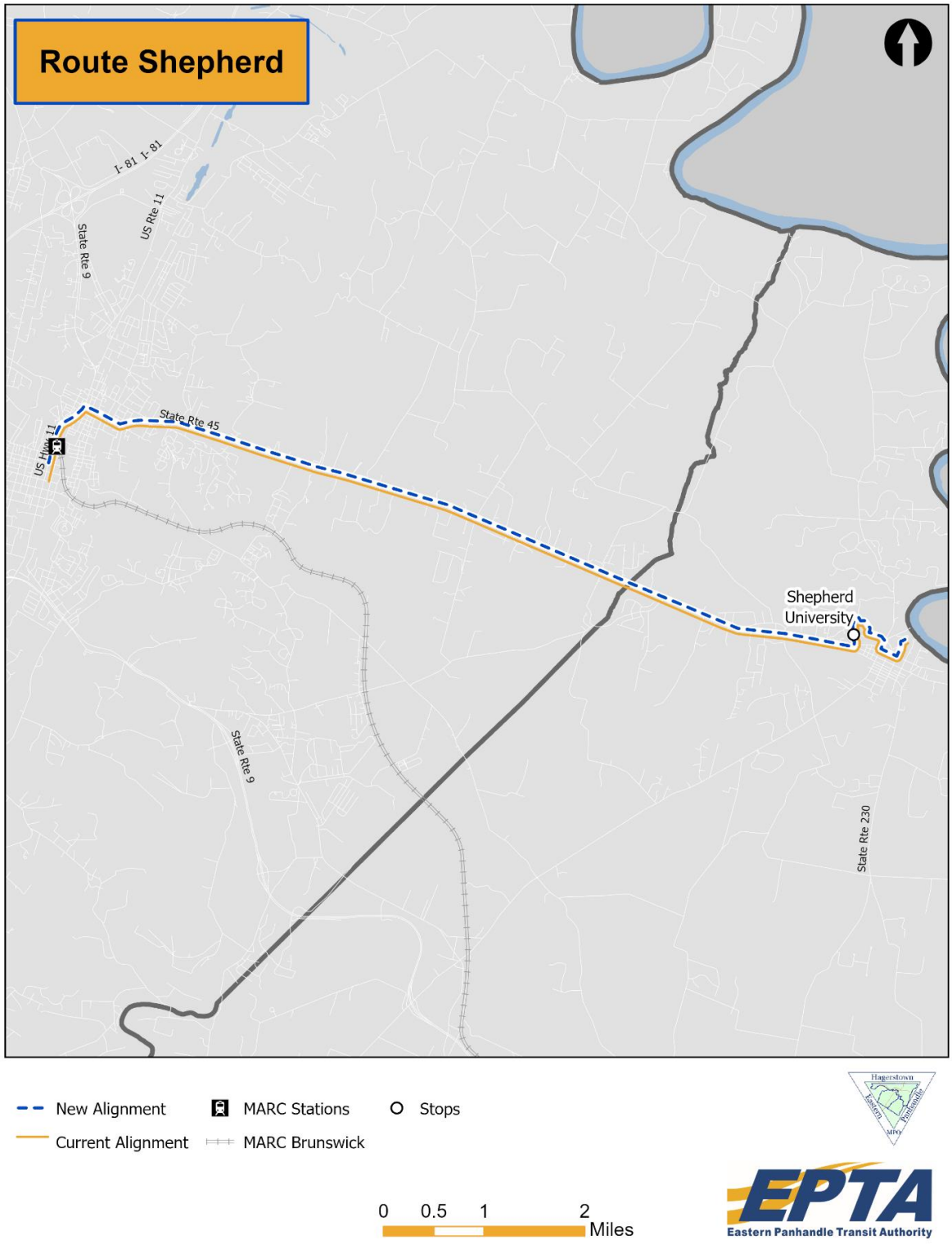


Figure 72: Daily Ridership by Stop, Route 40



Shepherd University Circulator Route

Figure 73: Existing Shepherd Circulator Characteristics



Appendix B: EPTA 2019 Passenger Survey Results

A public survey was available in November 2019 to solicit riders for input on their demographics, ridership tendencies, and satisfaction with the system. **Figure 74** is the survey form that was available online and onboard EPTA buses. The survey received a total of 25 responses with the results compiles in this appendix.

Figure 74: 2019 Passenger Survey Form

EPTA – Rider Survey – 2019

Take this survey on your smartphone by scanning this barcode:
Or take it online at www.eptawv.com

Dear Customers: We'd like to learn more about you and your travel needs to help EPTA plan its future services. Please read each question and mark the most appropriate answer. Thank you!

The following questions are required to be asked by the federal government:

1. **What is your total family income in a year?** ☐ Less than $10,000 ☐$10,000-$24,999 ☐$25,000-$39,999 ☐$40,000-$54,999 ☐ $55,000-$69,999 ☐$70,000 and above
2. **What is your race/ethnicity?** ☐White ☐Black or African American ☐Asian ☐Native American or Alaska Native ☐Two or more races ☐Hispanic or Latino ☐Other: _____
3. **How well do you speak English?** ☐Speak English well ☐Limited English proficiency ☐Do not speak English at all
4. **What is the primary language spoken in your home?** ☐English ☐Spanish ☐Mandarin ☐Korean ☐Other: _____
5. **Please list the route you were on when you received this survey:** Route Name/Direction _____
6. **Please list the stop you got on at:** _____
7. **How did you get to this bus?** ☐Walked _____ block(s) ☐Bike ☐Drove car ☐Another bus (Route ____) ☐Dropped off in car ☐ Train ☐Other
8. **Please list the stop you will get off at:** _____
9. **Please list your final destination(s).** Name, address or intersection: _____ _____City/Town or Zip Code: _____
10. **After leaving this bus, how will you complete your trip to your final destination?** ☐Walk _____ block(s) ☐Bike ☐Drive car ☐Train ☐Will be picked up in car ☐Another bus (Route _____) ☐Other _____
11. **How did you pay your fare on this bus?** ☐ Cash ☐Ticket ☐Mobile Ticket ☐Punch card ☐Monthly Pass ☐ Monthly Student Pass
12. **How much did you pay to board this bus?** $_____
13. **Are you eligible for the half-fare discount?** ☐Yes ☐No
14. **How long have you been riding EPTA service?** ☐Less than a year ☐1-2 years ☐3-4 years ☐5 or more years
15. **How many one-way bus trips do you make each week?** _____ trips
16. **What is the purpose of this trip today?** ☐School ☐Work ☐Shopping ☐Personal Business ☐Medical/Dental ☐Social/Recreation ☐Other _____
17. **Compared to a year ago, EPTA service is:** ☐Getting better ☐Getting worse ☐Staying about the same
18. **Which sources of information about EPTA service do you most often use? Select top 3:** ☐Bus schedule ☐ Website ☐Drivers ☐Radio/TV ☐Calling office ☐Newspapers ☐Word-of-mouth ☐Notices on buses ☐Phone book ☐Other_____
19. **Compared to last year, are you riding:** ☐More ☐Less ☐About the same ☐ I am a new rider
20. **Could you have made this trip if this service were not available?** ☐No ☐Yes ☐Yes, but with inconvenience
21. **How do you rate EPTA service for each of the following (5 being the highest):**

	5	4	3	2	1
Buses running on time	☐	☐	☐	☐	☐
Vehicle cleanliness	☐	☐	☐	☐	☐
Value received for fare charged	☐	☐	☐	☐	☐
Drive courtesy	☐	☐	☐	☐	☐
System safety	☐	☐	☐	☐	☐
Places served	☐	☐	☐	☐	☐
How often buses run	☐	☐	☐	☐	☐
Hours of operation	☐	☐	☐	☐	☐
Overall satisfaction	☐	☐	☐	☐	☐

22. **Do you have a valid driver's license?** ☐Yes ☐No

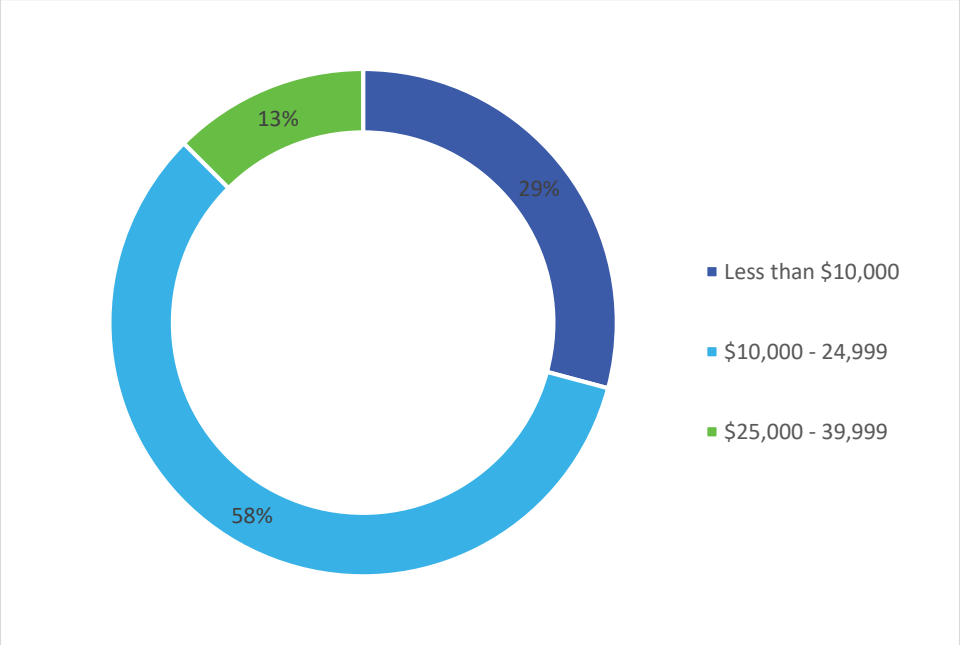
Por assistancia en español, llame a 304-263-0876

More questions on back →

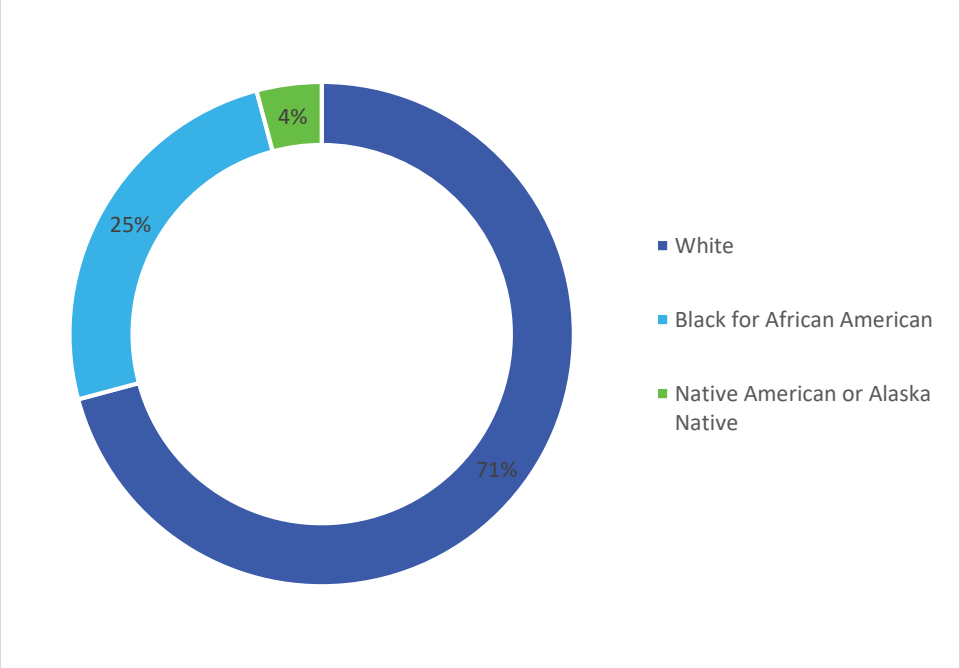
23. **How many autos are there in your household?** ☐0 ☐1 ☐2 ☐ 3 or more
24. **Your sex/age:** ☐Male ☐Female _____ years
25. **What is your occupation?** ☐Student ☐Manger/Professional ☐Technical/Skilled ☐ Clerical ☐Service ☐Homemaker ☐Retired ☐Unemployed ☐Other _____
26. **Where do you work?** ☐Martinsburg ☐Elsewhere in Berkeley Co. ☐Jefferson Co. ☐DC Area ☐Hagerstown Area ☐Elsewhere in West Virginia ☐Elsewhere in Virginia ☐Other _____
27. **What is the single most important improvement that you would suggest for EPTA service?**

After completing this card, return it to the survey worker or your bus driver. You can also take it with you and return it to your driver on your next trip on EPTA. Thank you for your help.

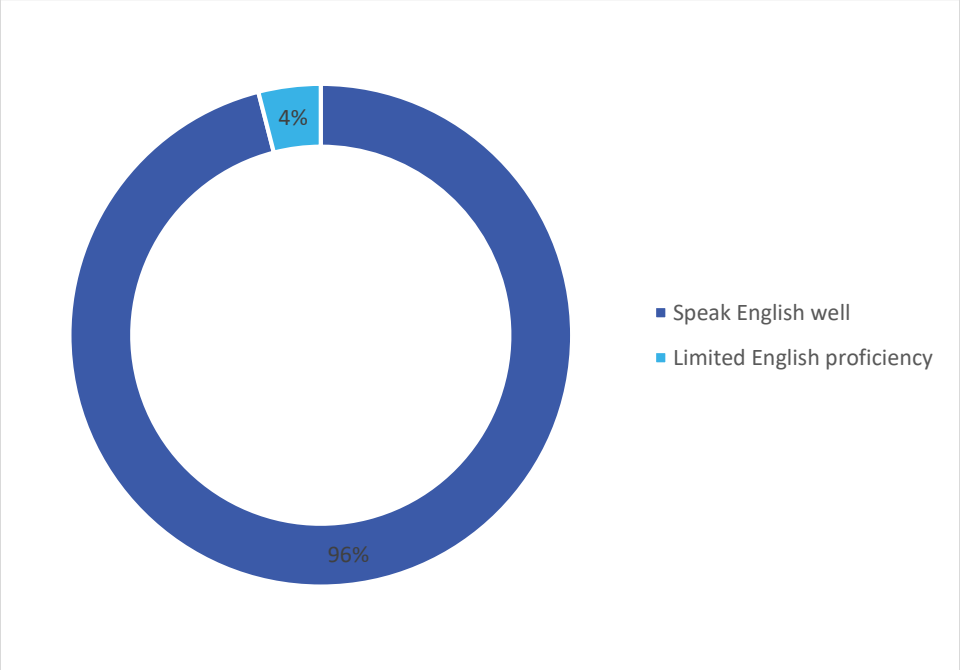
Question 1: What is your total family income in a year?



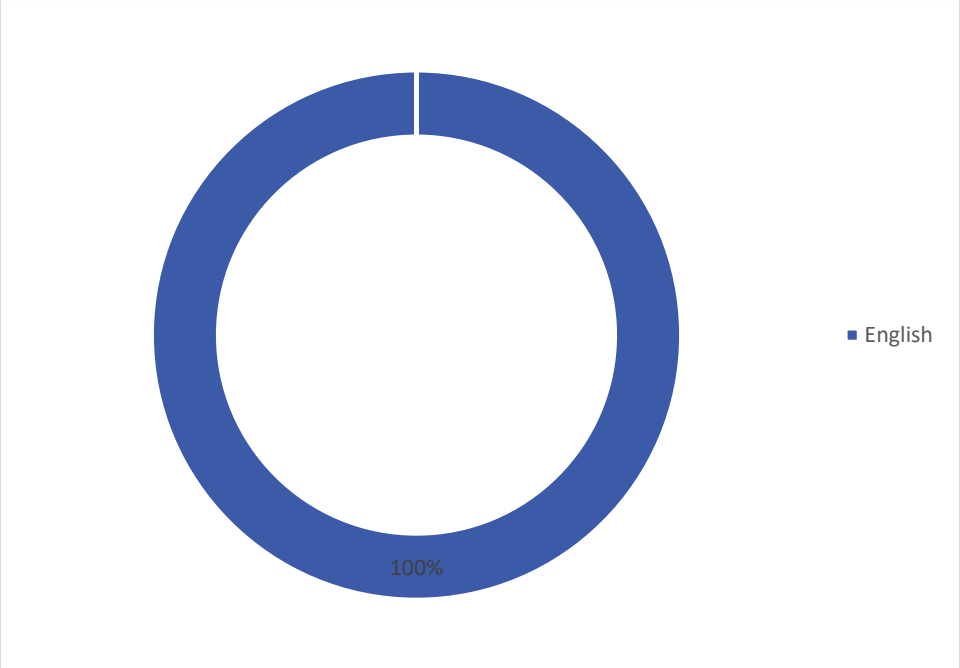
Question 2: What is your Race/Ethnicity?



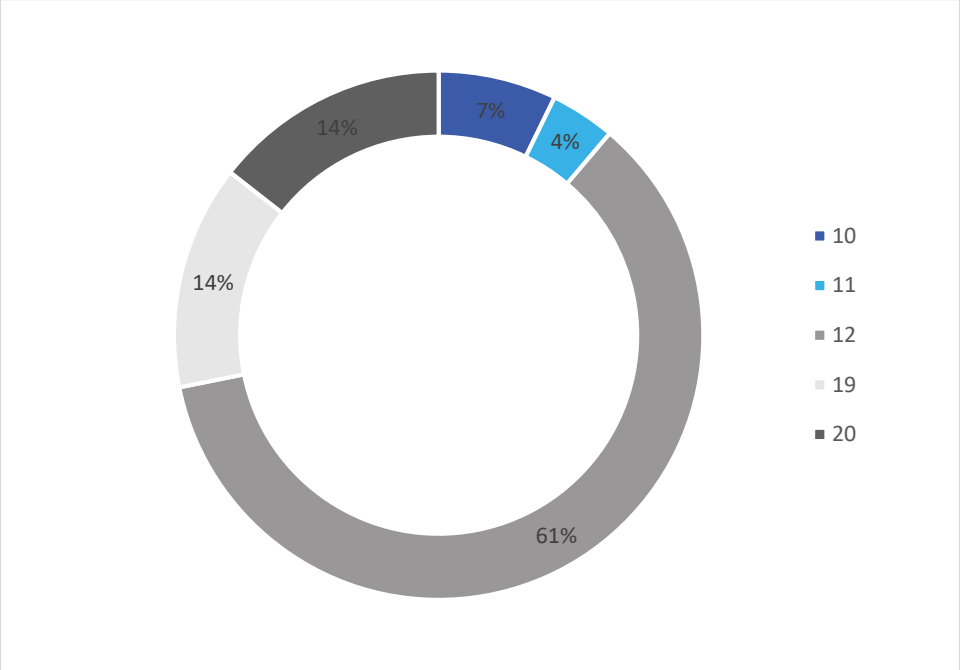
Question 3: How well do you speak English?



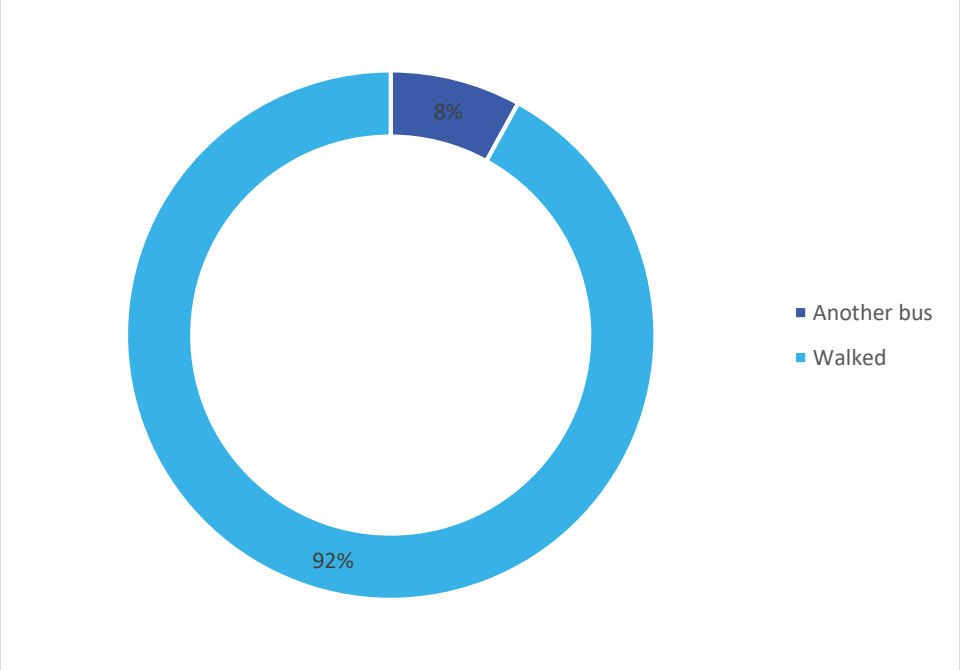
Question 4: What is the primary language spoken in your home?



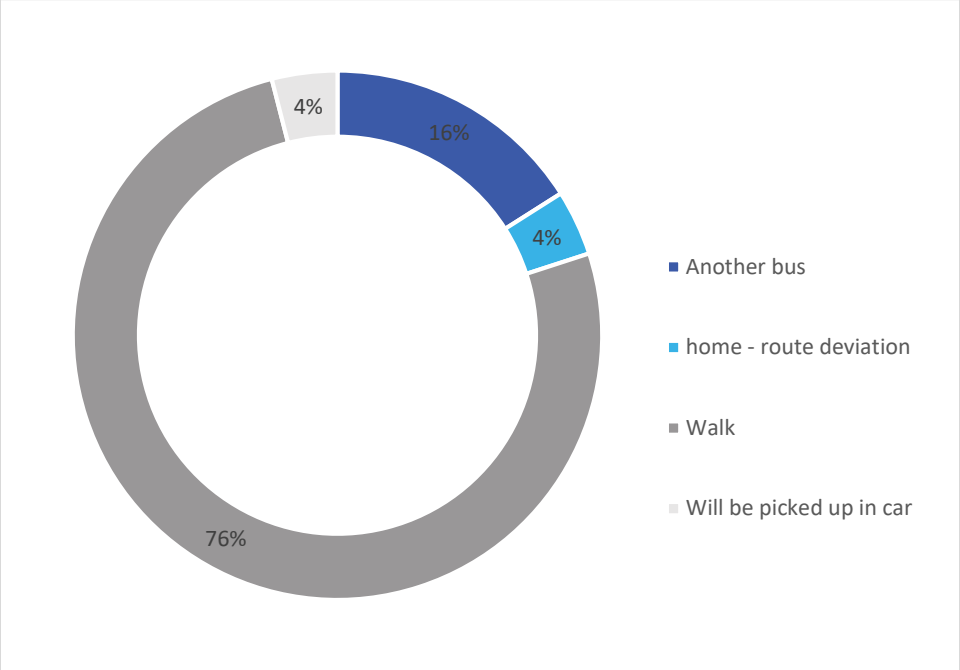
Question 5: What route were you on for this survey?



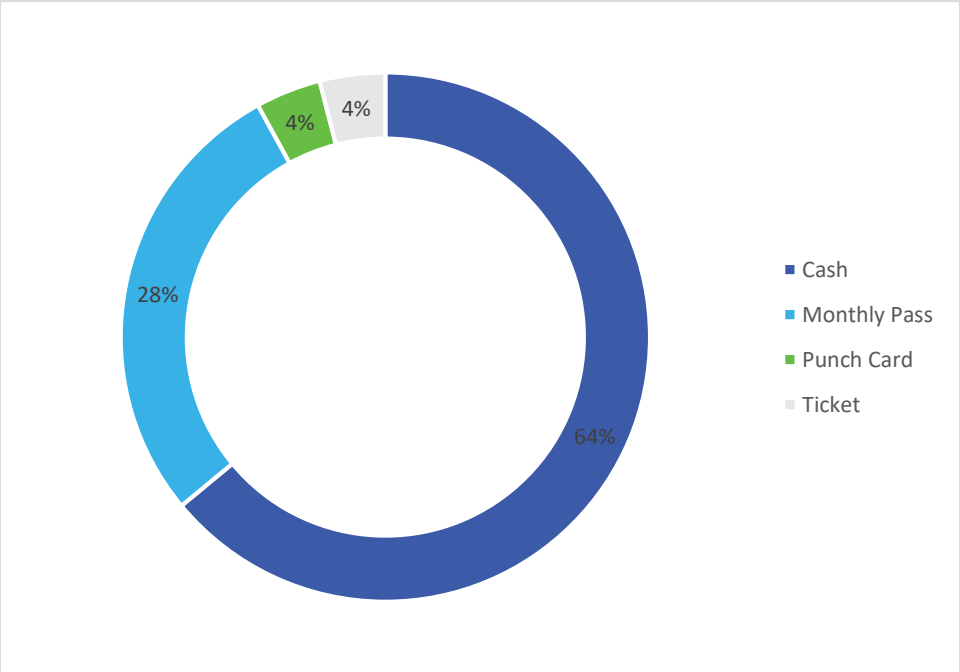
Question 6: How did you get to this bus?



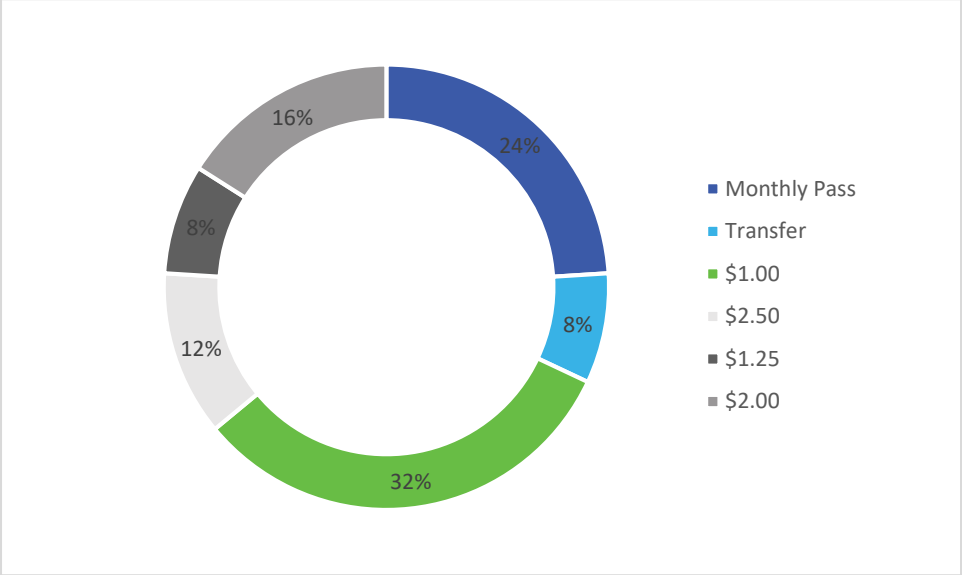
Question 7: After leaving this bus, how will you complete your trip to your destination?



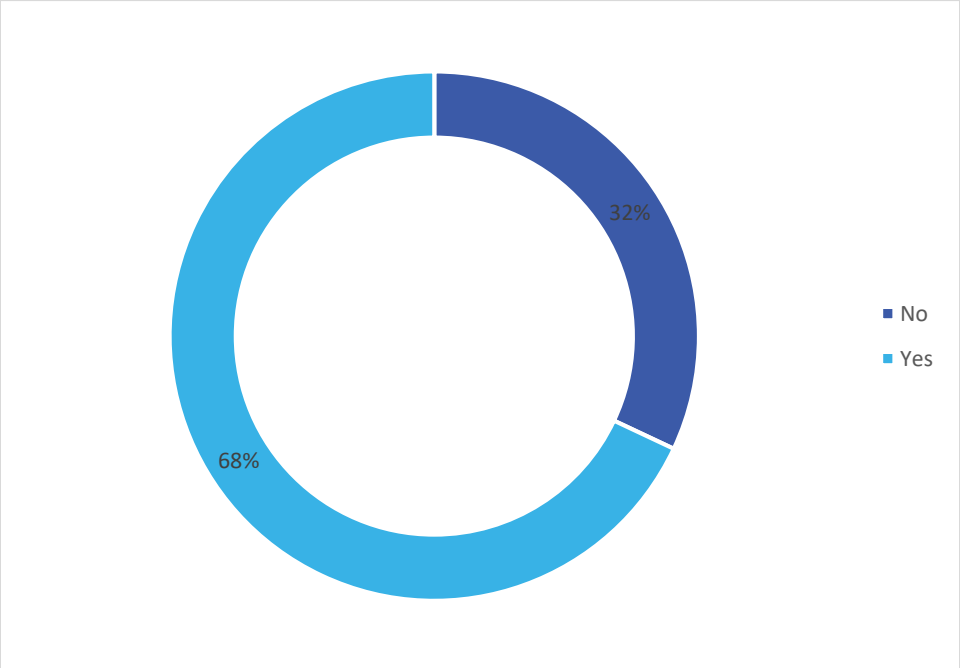
Question 8: How did you pay your fare on this bus?



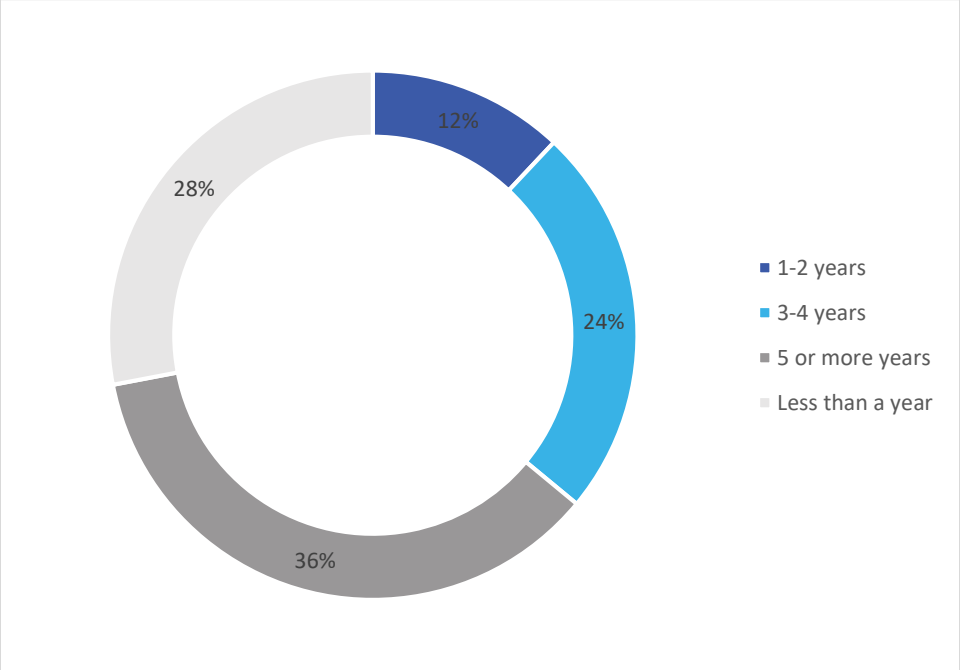
Question 9: How much did you pay to board this bus?



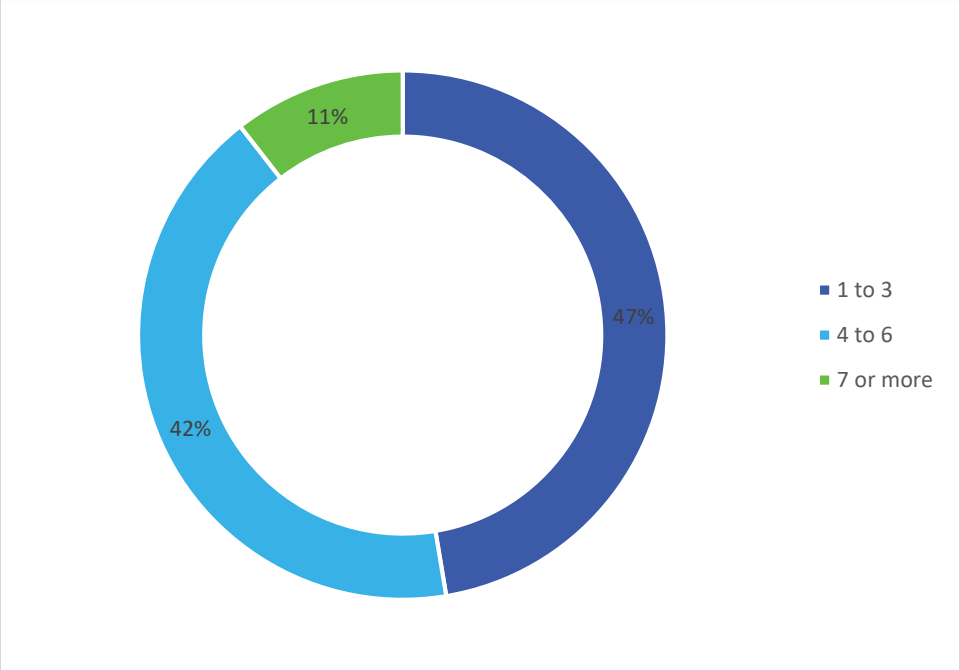
Question 10: Are you eligible for the half-fare discount?



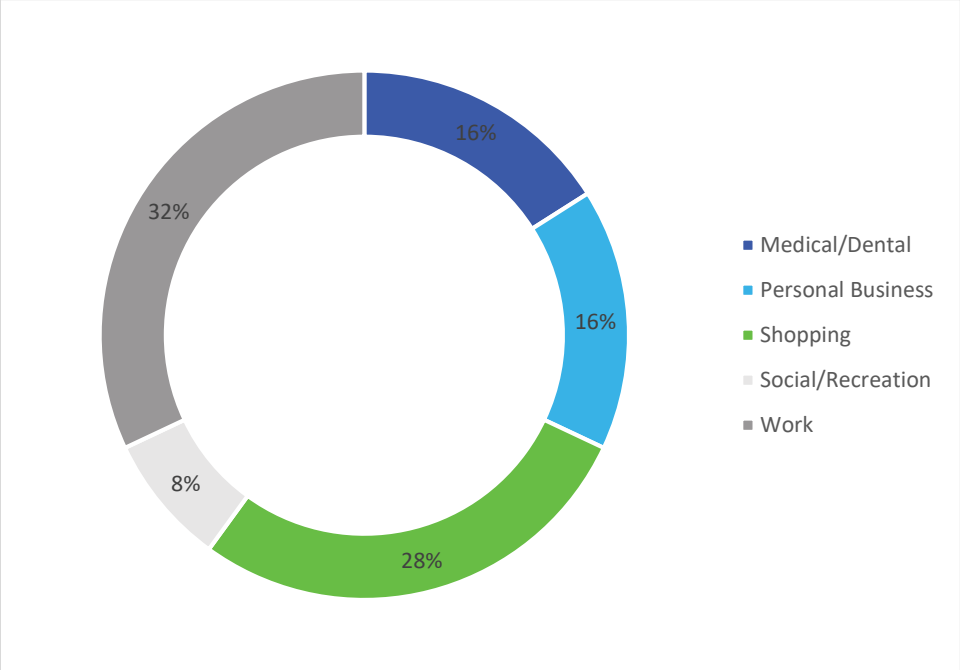
Question 11: How long have you been riding EPTA service?



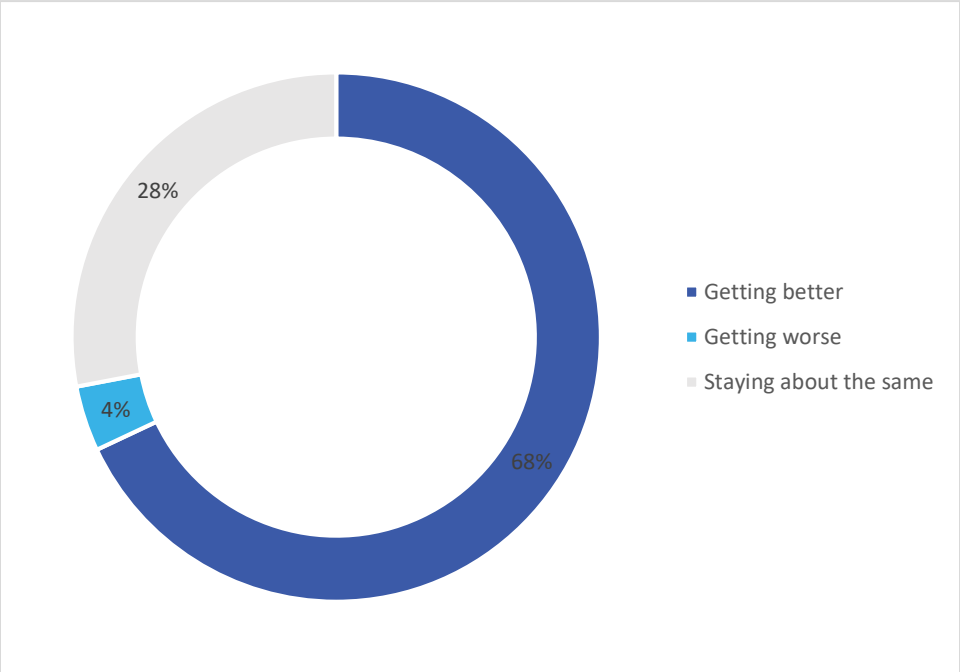
Question 12: How many one-way trips do you make each week?



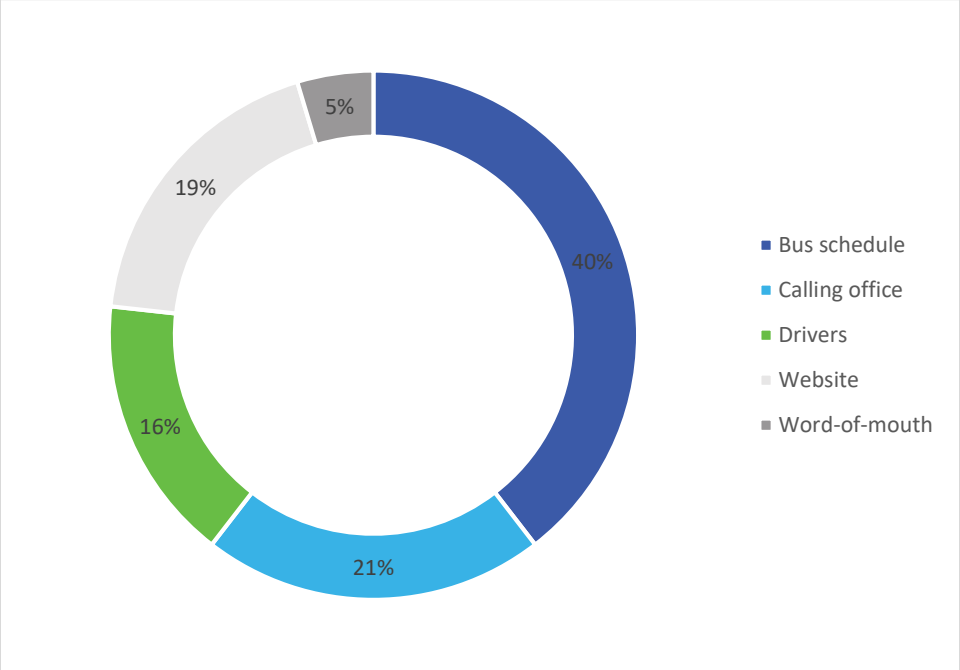
Question 13: What is the purpose of this trip today?



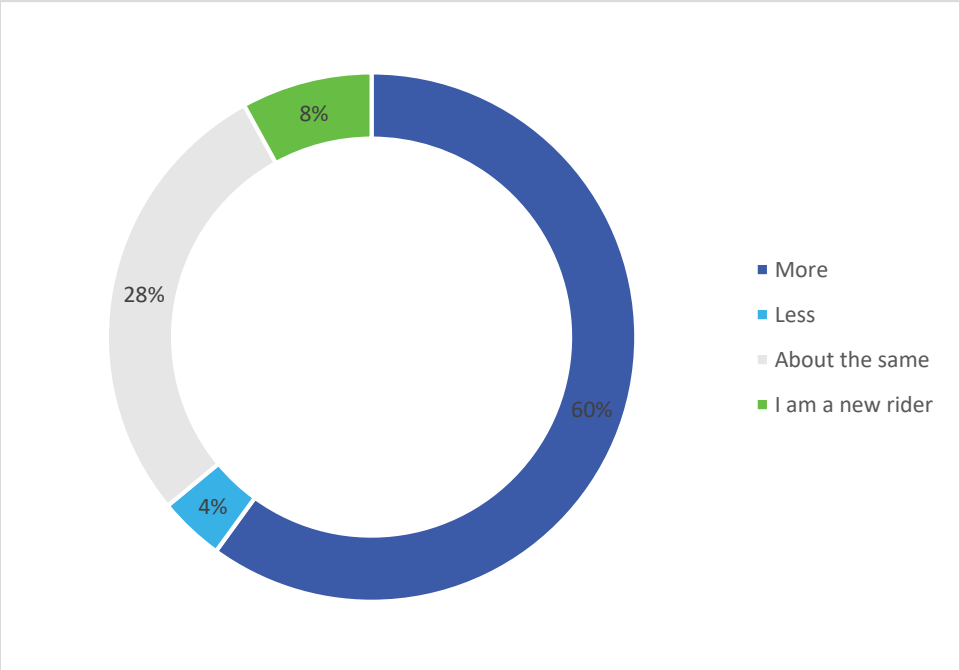
Question 14: Compared to a year ago, EPTA service is...



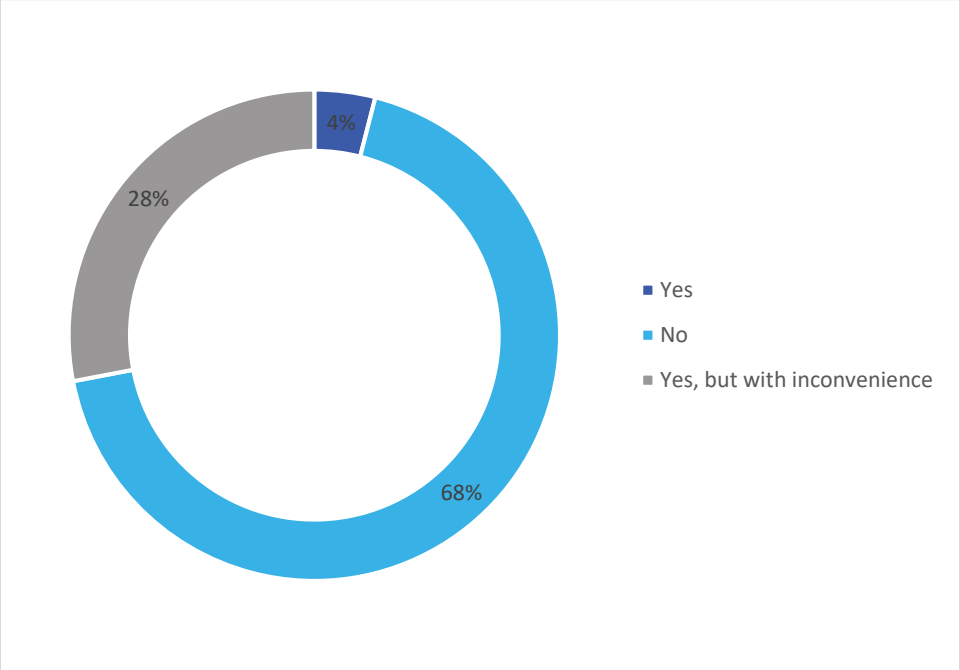
Question 15: Which sources of information about EPTA service do you most often use?



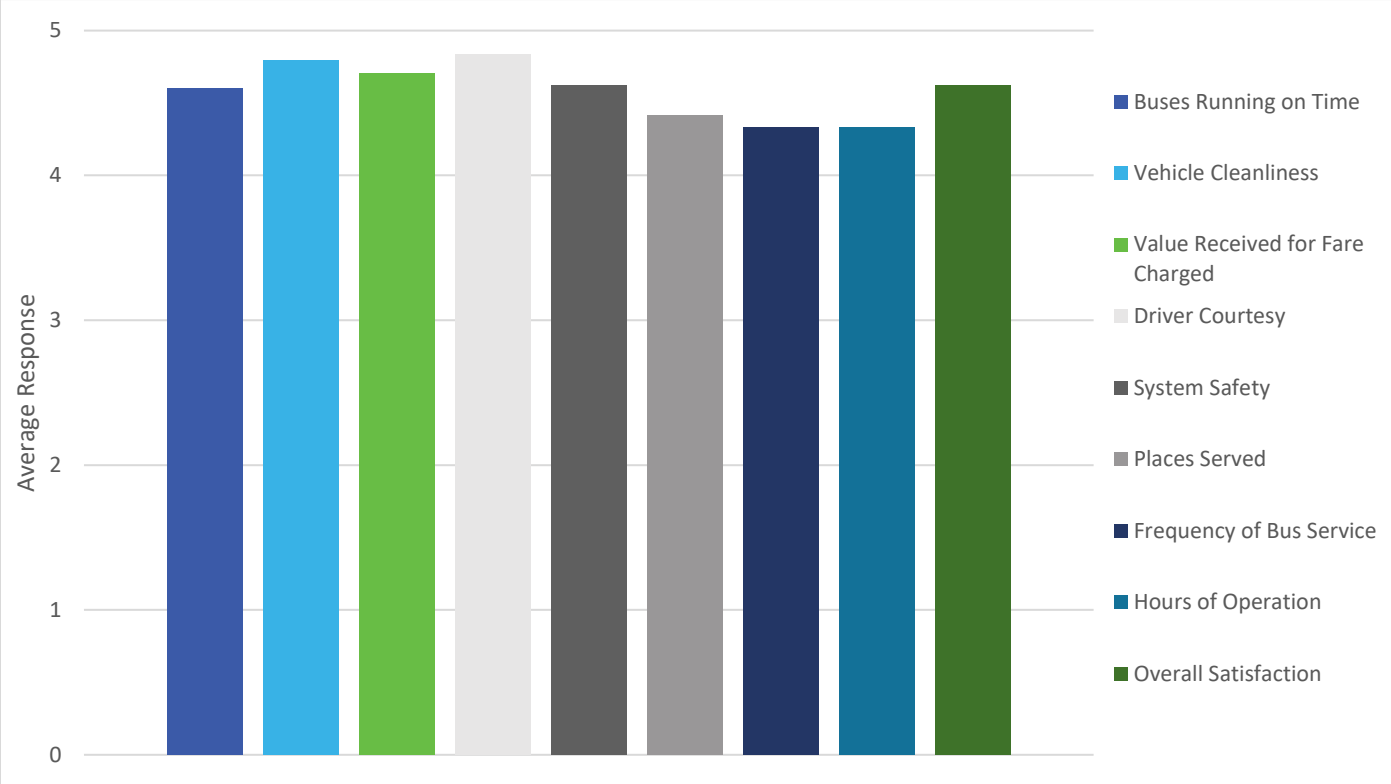
Question 16: Compared to last year, are you riding...



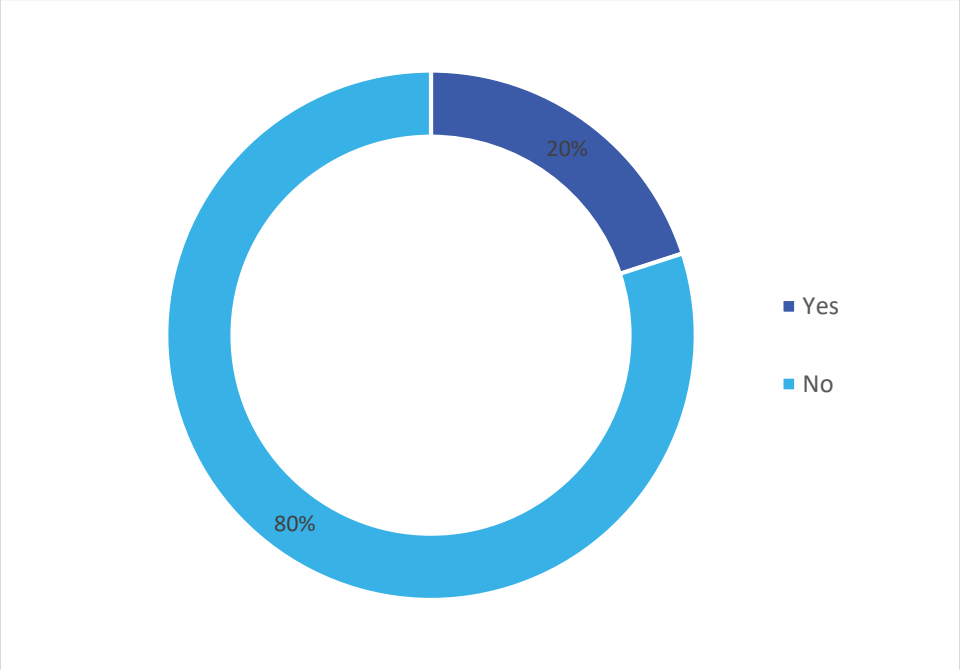
Question 17: Could you make this trip if this service was not available?



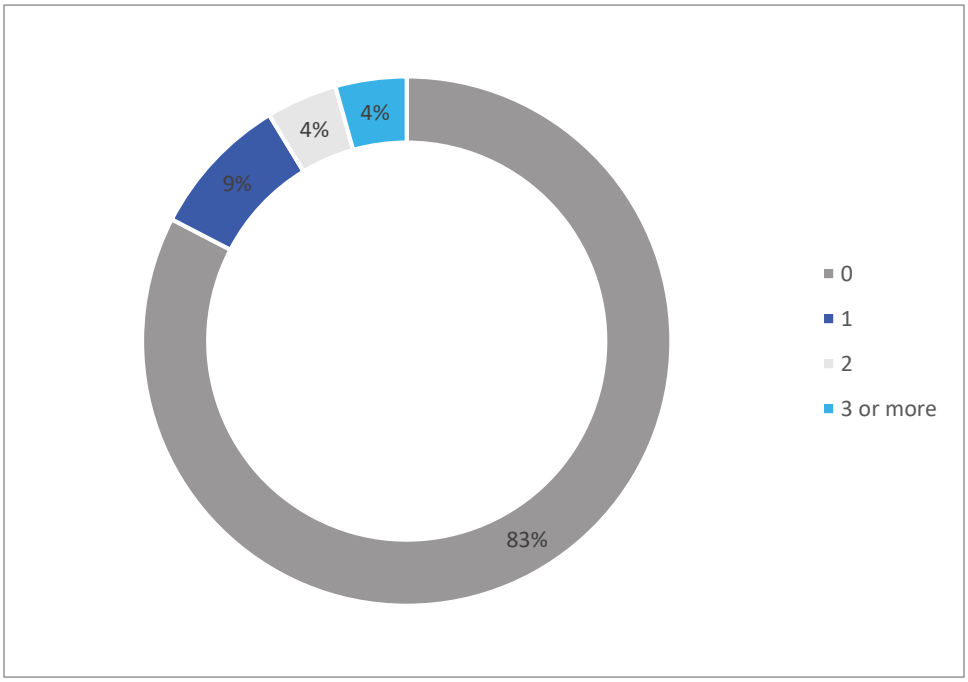
Question 18: How would you rate EPTA service? (Average of all responses)



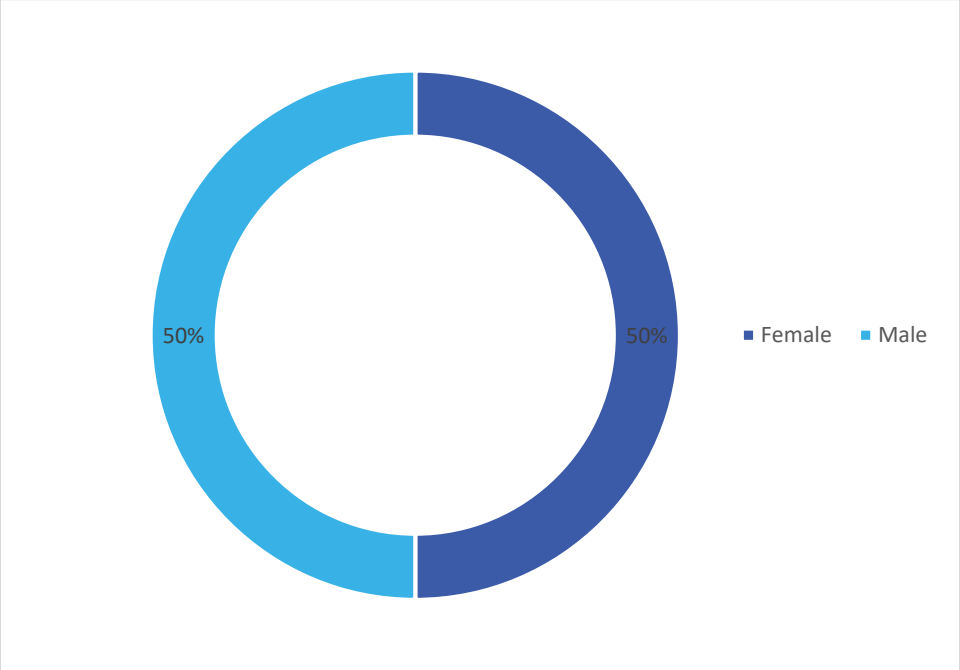
Question 19: Do you have a valid driver's license?



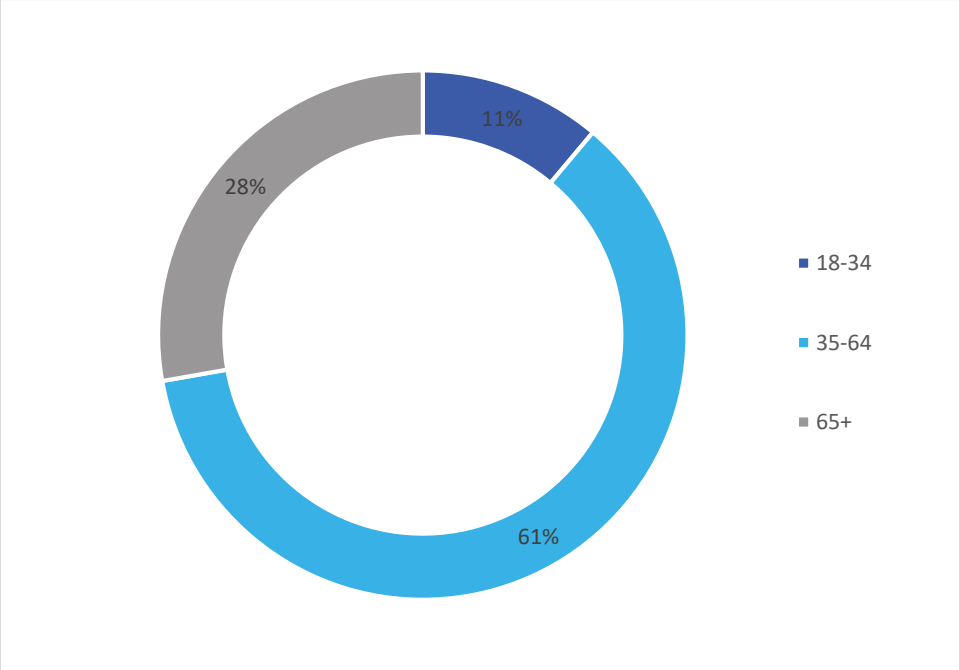
Question 20: How many autos are there in your household?



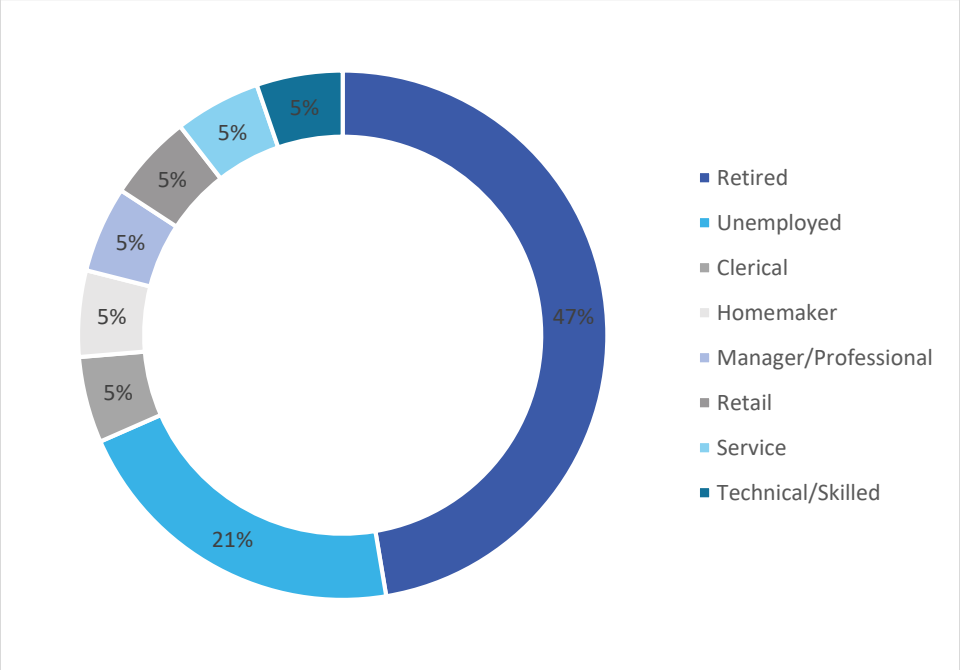
Question 21: What is your sex?



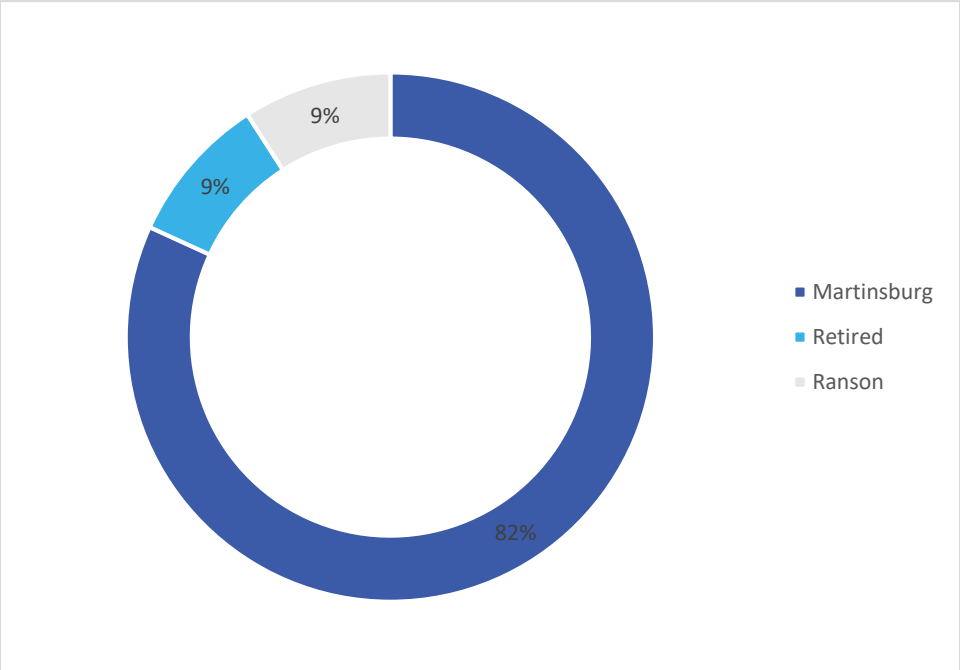
Question 22: What is your age?



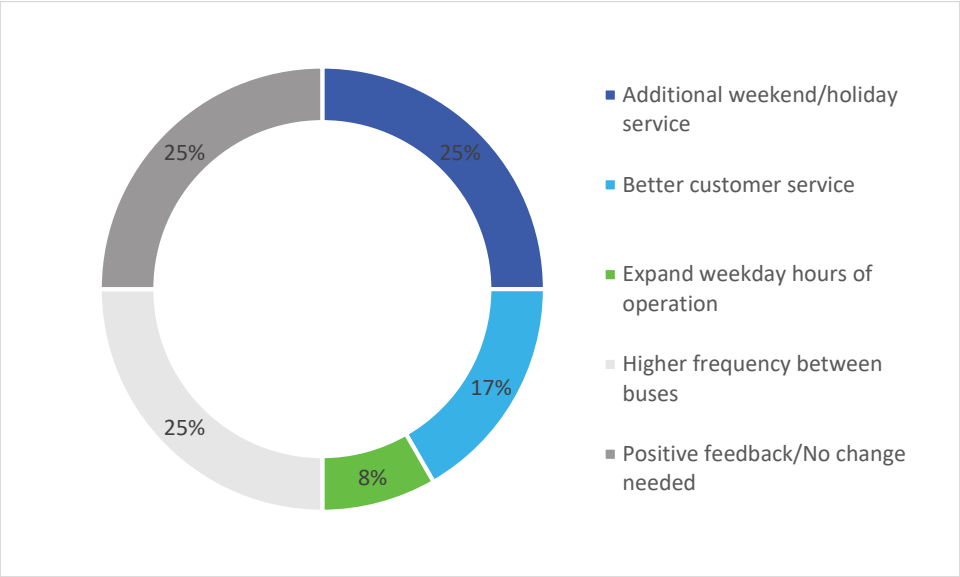
Question 23: What is your occupation?



Question 24: Where do you work?



Question 25: What would you improve about EPTA service?



Appendix C: Shepherd University Survey Results

In September 2019, Shepherd University students were surveyed to provide input on the Shepherd Circulator operated by EPTA. The route provides weekday shuttle service between Caperton Train Station and Shepherd University, offering a few morning, afternoon, and evening trips between the two destinations and circulates campus frequently throughout the day; additionally, it only operates during the fall and spring semesters. Students were surveyed on the frequency at which they use the service, typical trip purposes, and how well the route serves their transportation needs between and around campus; the survey additionally solicited opinions on some proposed changes to service. The survey had approximately 280 responses and sampled both residential and commuter students (45 and 55 percent of all respondents, respectively) with representation from students of all undergraduate class standings.

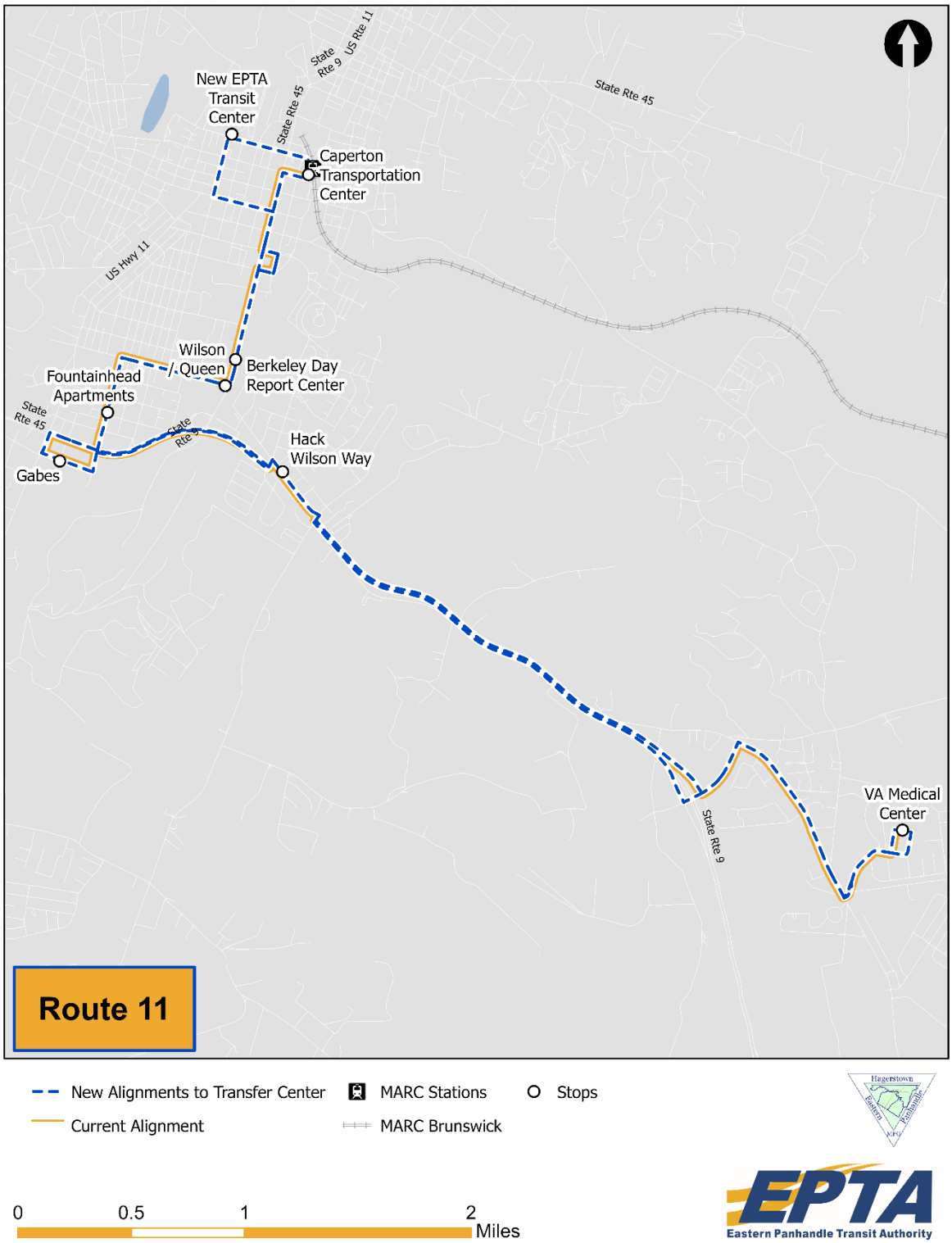
Findings from the survey concluded that a plurality of students (28 percent) never ride the EPTA shuttle, but nearly half of respondents (45 percent) ride at least once per day. Overall, students indicated general satisfaction with the shuttle, as only 15 percent of respondents expressed moderate or strong dissatisfaction. When asked what reasons they do not use EPTA to get around campus, the most common response was that students wait too long for a bus. Other top responses to this question were too long travel times, not in service when needed, and that the shuttle makes students late for class. In terms of coverage, 70 percent of students moderately or strongly agreed that the shuttle service has enough routes and stops to get them to the locations they need.

The survey additionally allowed for some open-ended responses binned in the categories of “Missed Bus” for students to comment on missed buses for various reasons, “Don’t Use” if they aren’t a shuttle user, and “Use” for active riders. Students indicated that they frequently miss the bus due to mismatches in class times and scheduled departure times, and that buses often leave before their scheduled times. Among students that do not use the shuttle, the most common reasons for not using the shuttle were that they drive to campus or that their classes are largely concentrated on one end of campus and they don’t need a shuttle for transportation between buildings. Students that did use the shuttle used the open-ended response section to provide feedback and suggestions for service improvements. The most common response among users was for the desire to have bus schedules synchronized more effectively with class schedules.

Appendix D: Adjusted EPTA Routes to New Transit Center

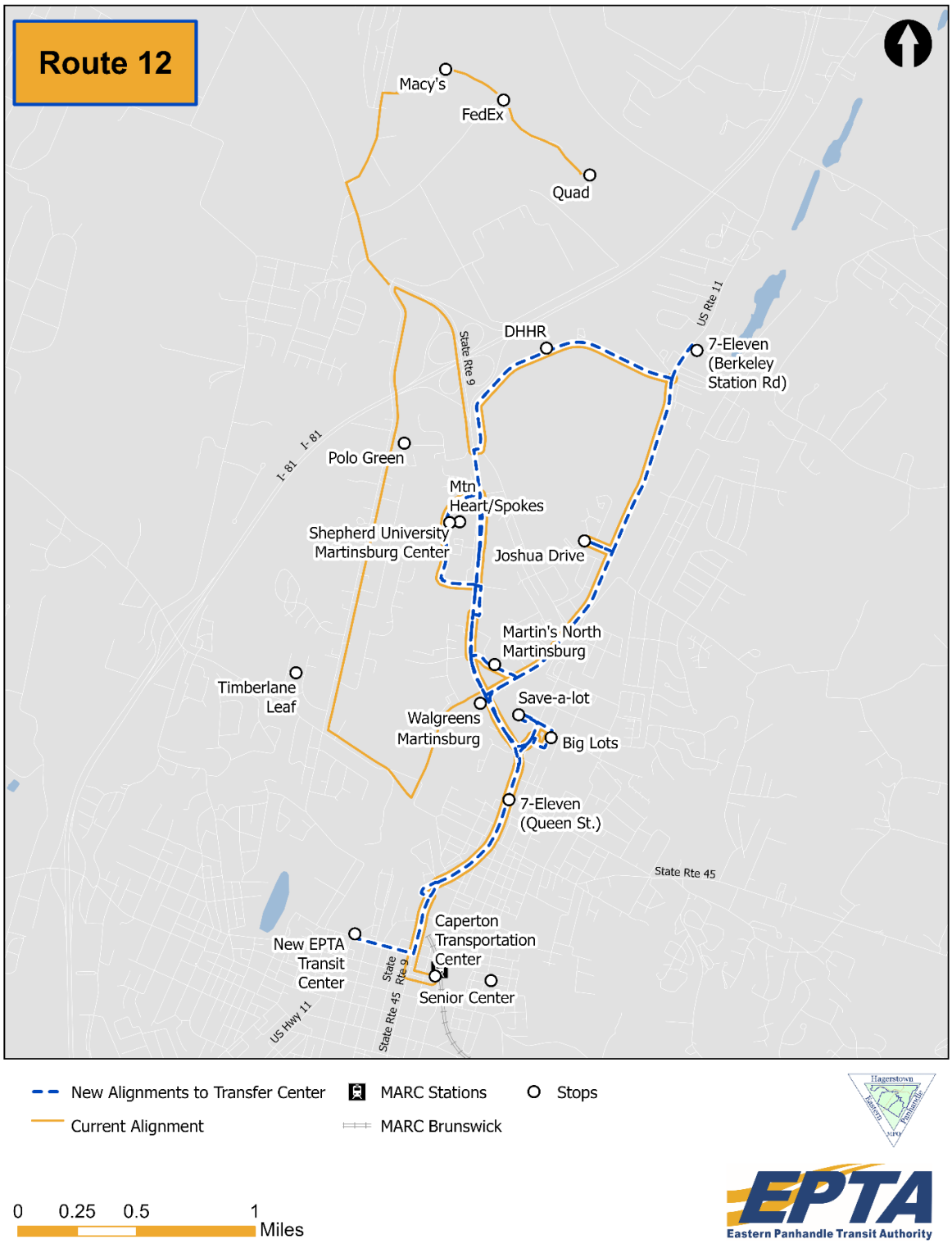
Route 11

Figure 75: Route 11, Rerouted to New EPTA Transit Center



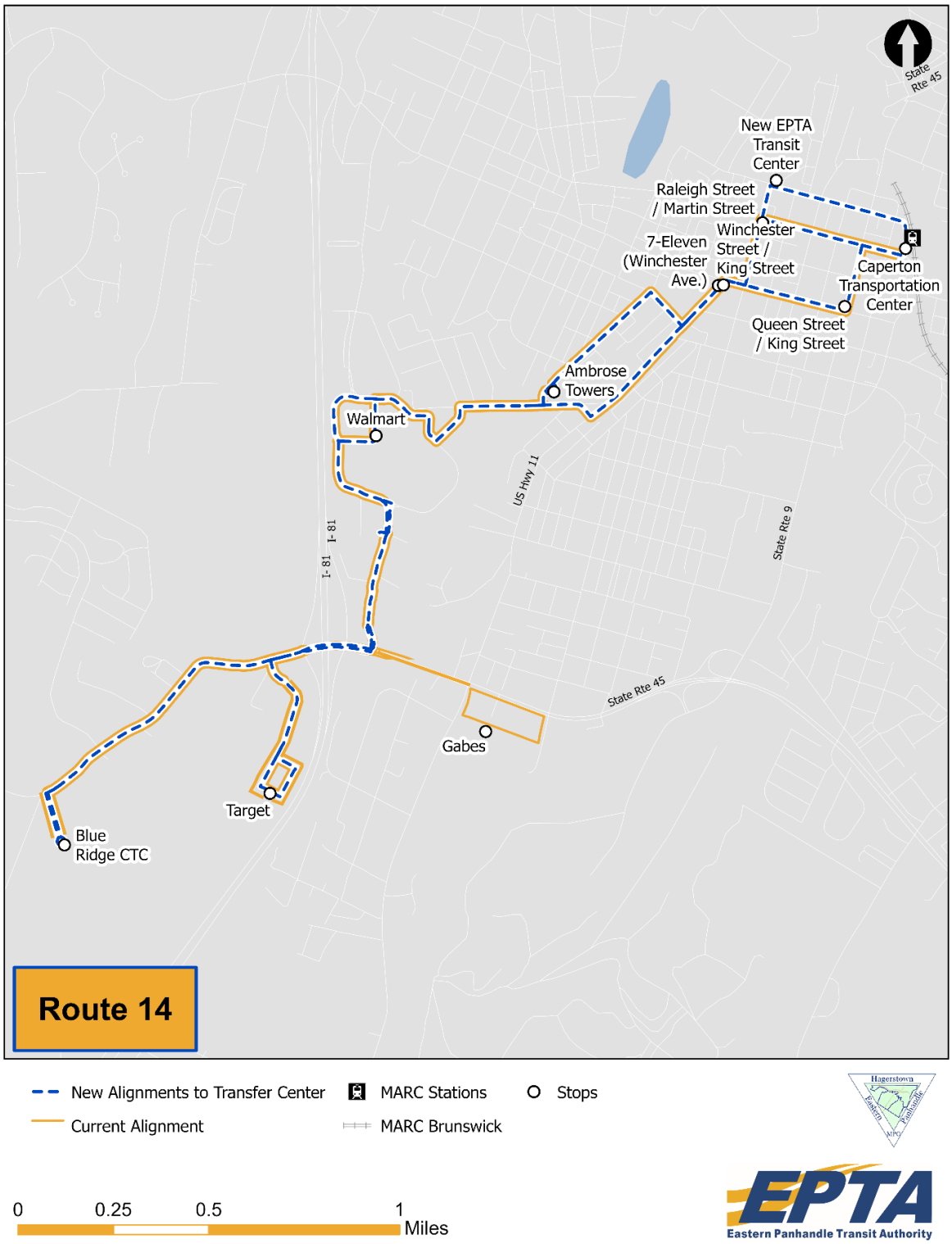
Route 12

Figure 76: Route 12, Rerouted to New EPTA Transit Center



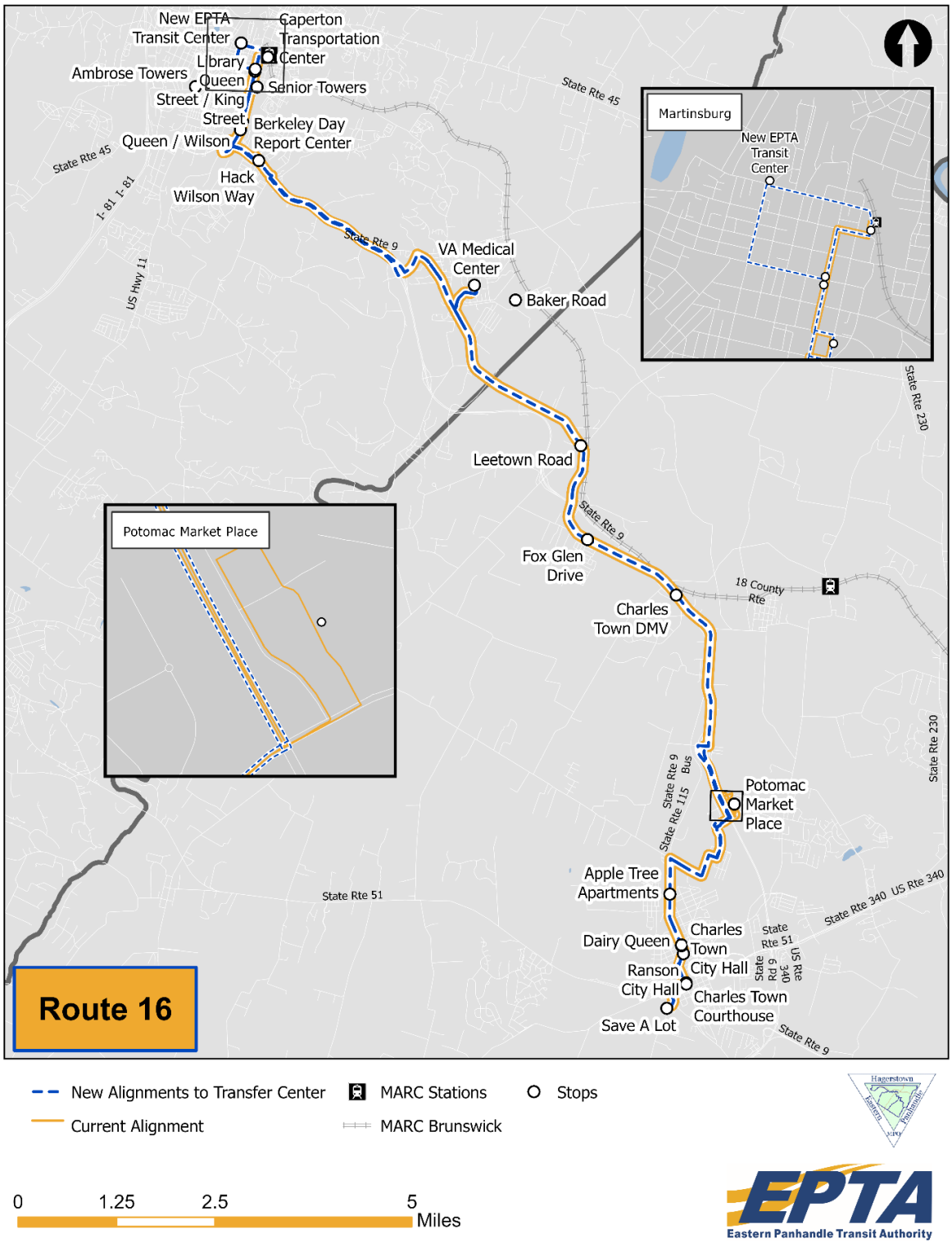
Route 14

Figure 77: Route 14, Rerouted to New EPTA Transit Center



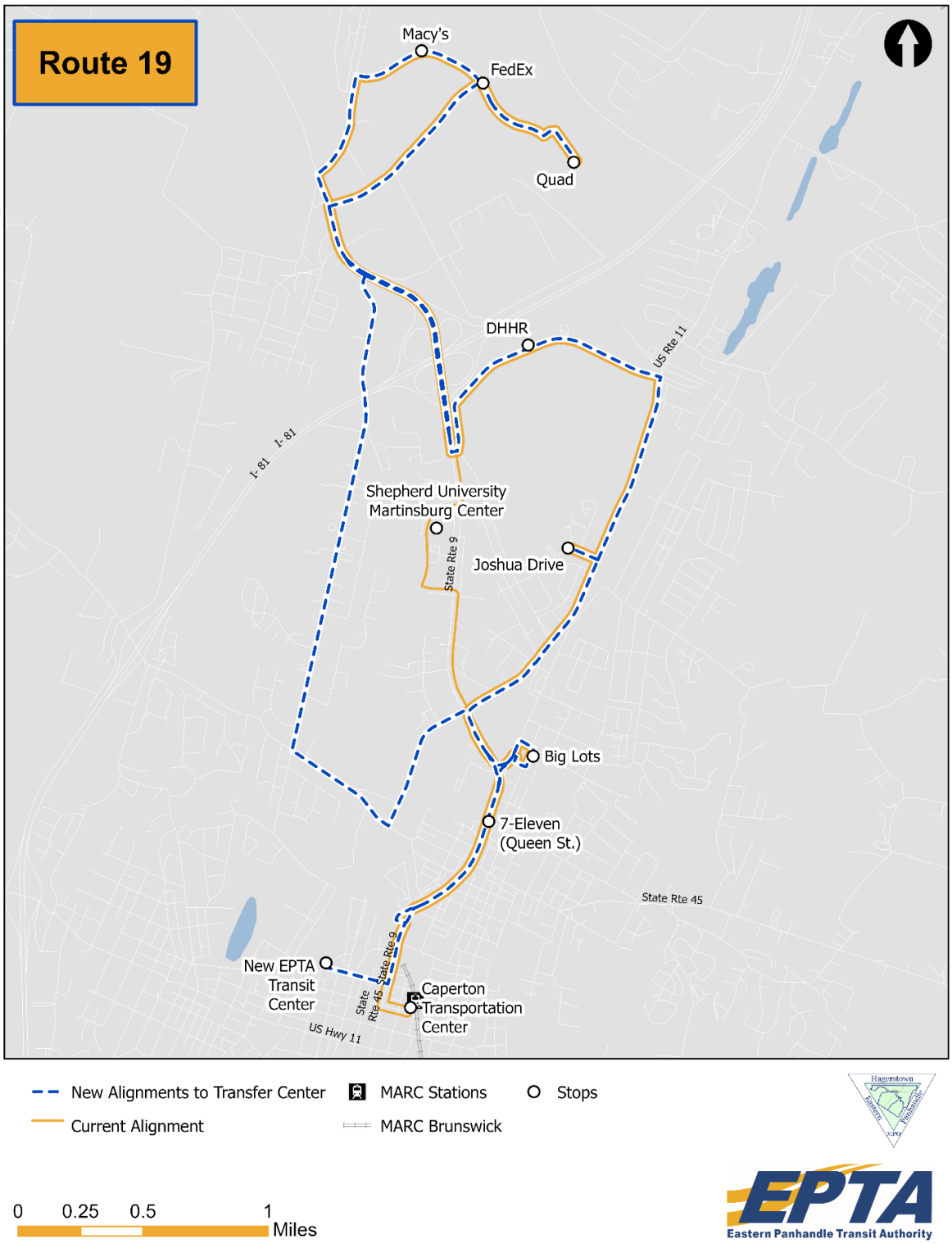
Route 16

Figure 78: Route 16, Rerouted to New EPTA Transit Center



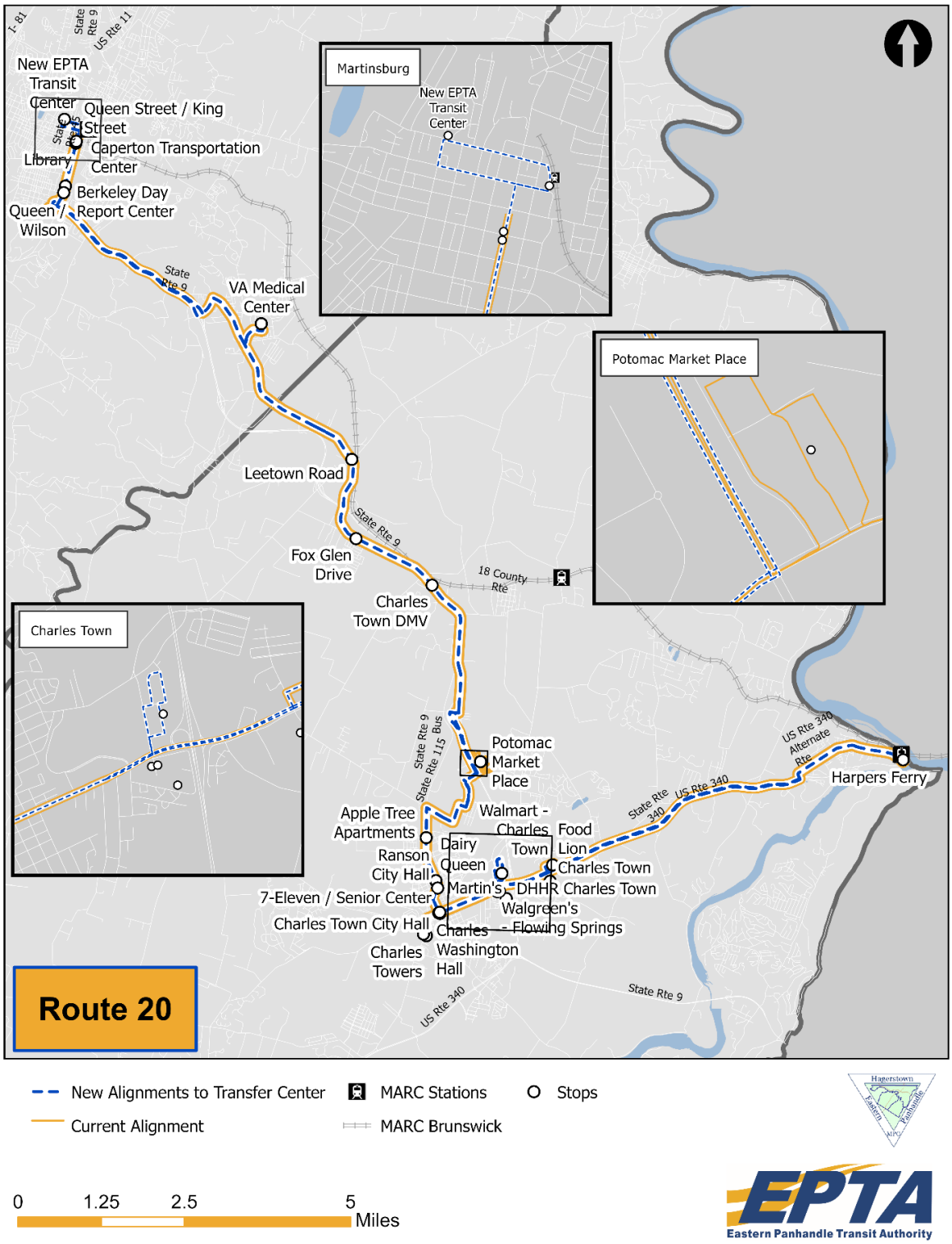
Route 19

Figure 79: Route 19, Rerouted to New EPTA Transit Center



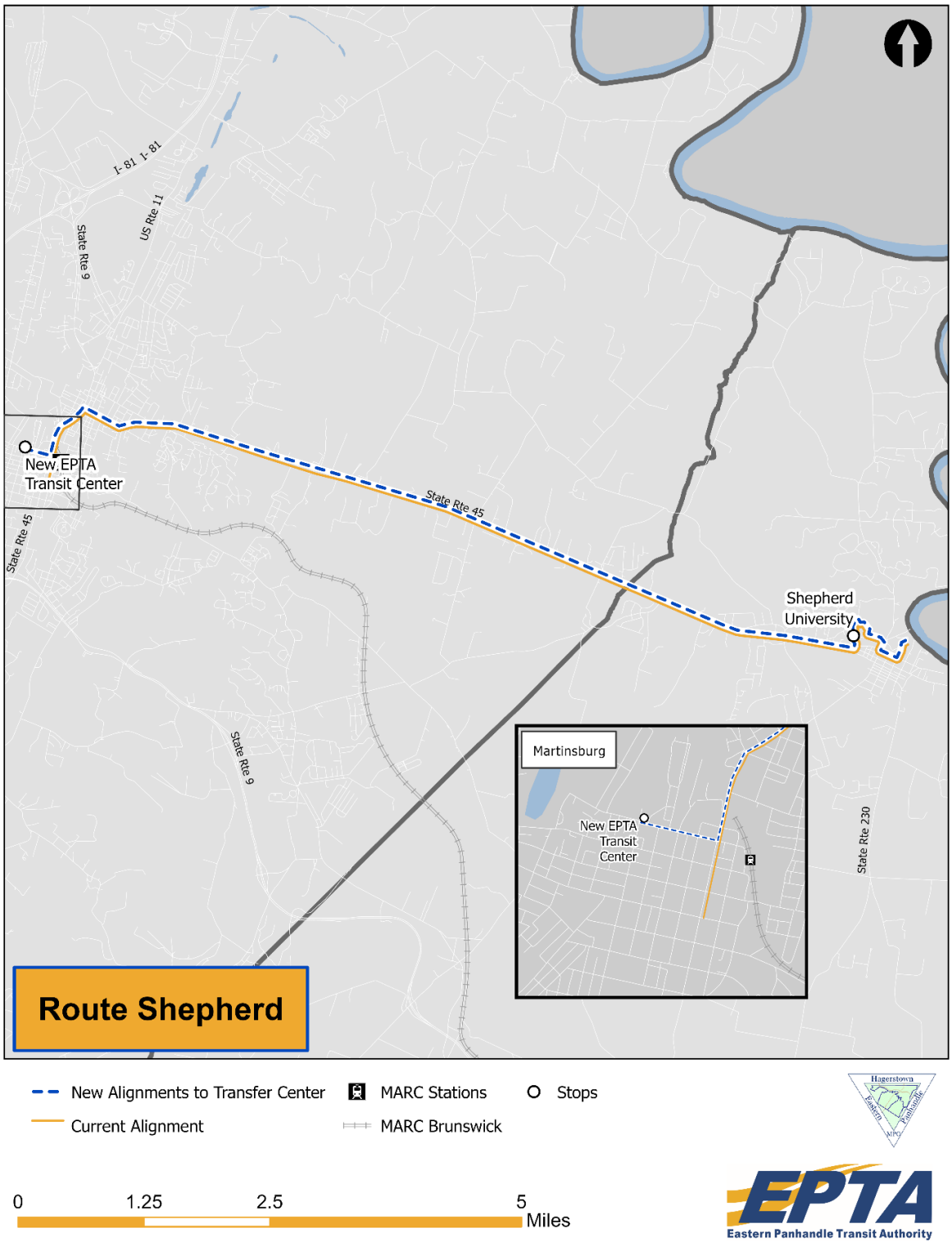
Route 20

Figure 80: Route 20, Rerouted to New EPTA Transit Center



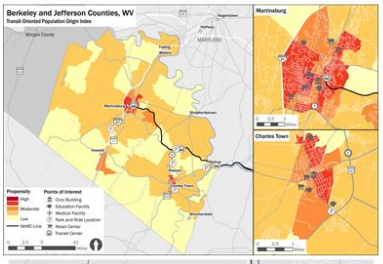
Shepherd University Circulator Route

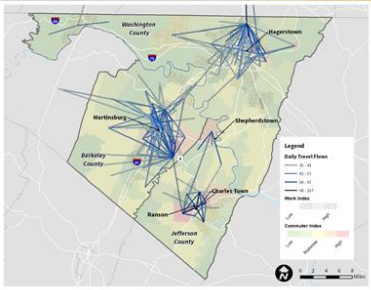
Figure 81: Shepherd Circulator, Rerouted to New EPTA Transit Center



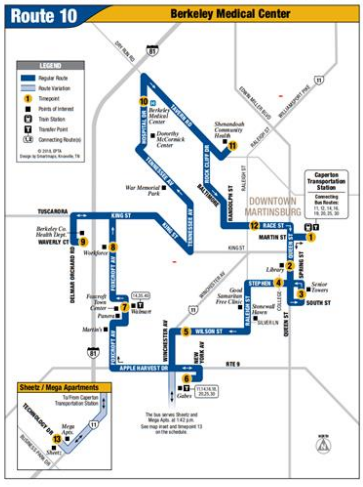
Appendix E: Service Recommendations Outreach Presentation

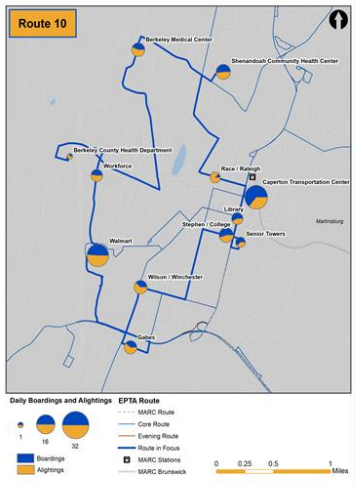
EPTA Service Area Market Research



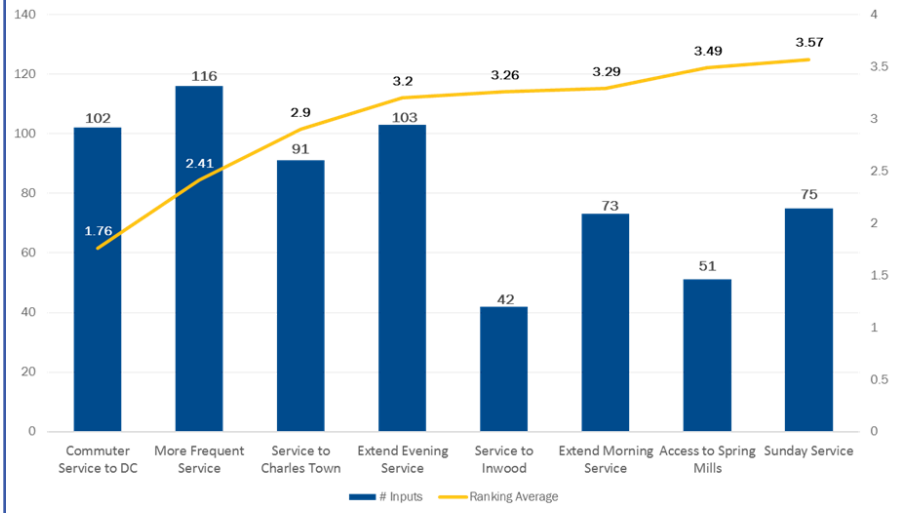


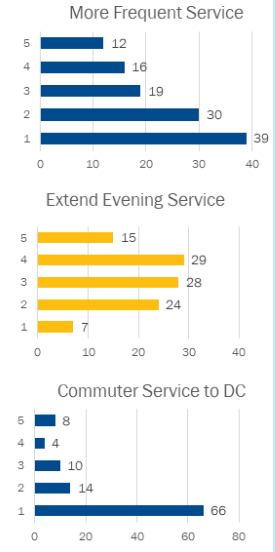
EPTA Existing Service Assessments



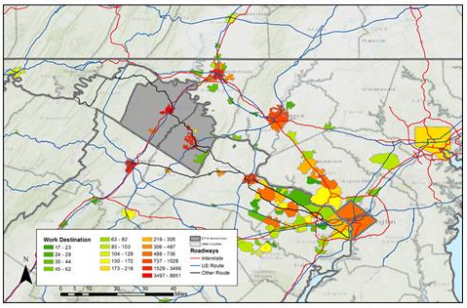


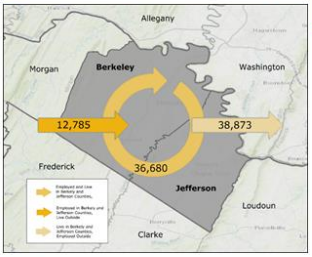
EPTA Survey and Opinions Research Regarding Transit Priorities

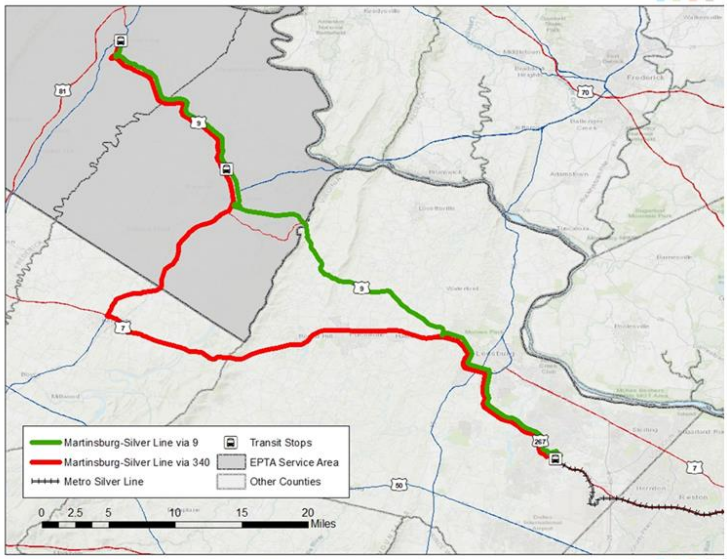




The Assessment and Development of a Commuter Service to the DC Region







The Development of Goals and Objectives to Lead the Service Planning Efforts

Goals and objectives were created to guide the service planning efforts based on:

- Guidance from EPTA
- Guidance from HEPMPO
- Stakeholder input
- Survey feedback
- Gaps identified in the existing conditions report

The five resulting goals of the service planning effort include:

1. Expanding and Improving Systemwide Service Efficiency
2. Expanding the Availability of Weekend and Evening Service
3. Exploring Locations for New Transit Infrastructure
4. Incorporating EPTA's New Transfer Center and Administrative Facility into Future Plans
5. Improving EPTA's Brand and Technology

Evening Only Routes 25 and 30

Evening only Routes 25 and 30 will be eliminated and replaced with extended hours on existing EPTA Routes: HIGHER PRIORITY

- → Route 10 extended 2 hours to 7:24 pm
- → Route 11 extended 2 hours to 6:24 pm
- → Route 12 extended 1 hour to 6:45 pm
- → Route 14 extended 1 hour to 8:23 pm
- → Route 16 extended 2 hours to 7:24 pm

Weekend Only Routes 35 and 40

Weekend only Routes 35 and 40 will be eliminated and replaced with Saturday hours on existing EPTA Routes: MEDIUM PRIORITY

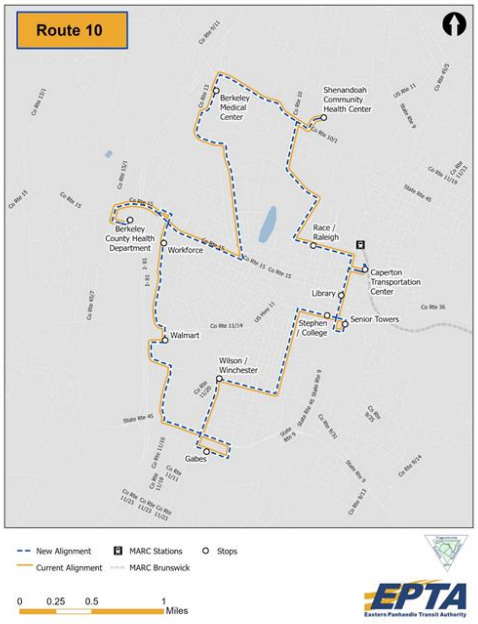
- → Route 10 will provide Saturday coverage of the Martinsburg area
- → Route 14 will serve as a shopping route to Target and Walmart, as well as providing additional coverage in Downtown Martinsburg
- → Routes 16 and 20 will provide weekend service between Martinsburg and Charles Town and Ranson

Eliminating the routes that provide week night and Saturday service for EPTA and replacing them with the regular daily EPTA routes is an effort to simplify the system for potential new customers and to remove confusion among existing passengers as to which service to use during different days of the week and times of the day.

Route 10

- → No alignment changes are recommended for Route 10
- → Route 10 is one of the routes identified to operate later into the evening to help replace the existing evening routes: HIGHER PRIORITY
- → Route 10 is one of the routes that will operate during weekends to replace the existing weekend only routes: MEDIUM PRIORITY
- → A smaller transfer hub could be explored near the Walmart property: LOWER PRIORITY

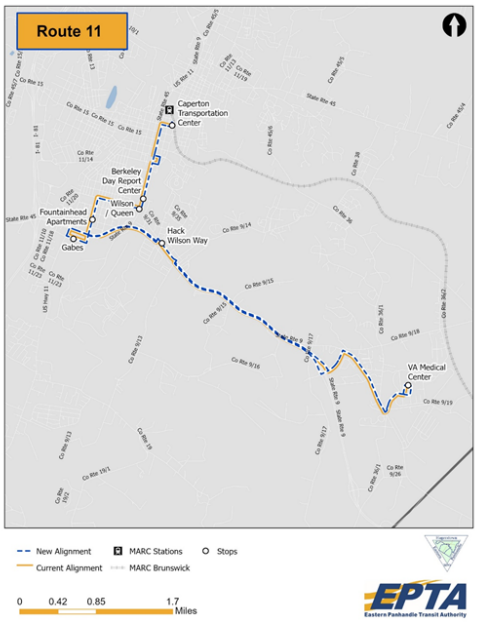
Caperton Station to Berkeley Medical Center		
	Current	Recommended
Span	7:00 AM – 5:24 PM	7:00 AM – 7:24 PM
Headway	60 min	60 min
Weekend Service?	No	Yes



Route 11

- → No alignment changes are recommended for Route 11
- → This route is recommended to start two hours earlier in order to provide additional service to the VA Medical Center: MEDIUM PRIORITY
- → Route 11 is one of the route identified to operate later into the evening to help replace the existing evening routes (Routes 25 and 30): HIGHER PRIORITY
- → Shelters could be installed at the VA Medical Center: LOWER PRIORITY

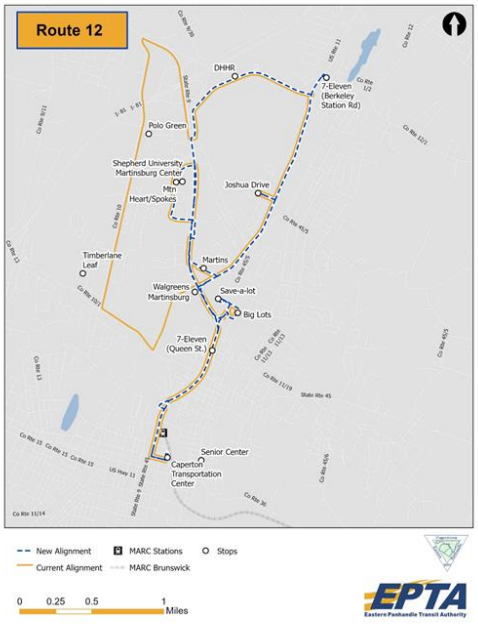
Caperton Station to VA Medical Center		
	Current	Recommended
Span	9:20 AM – 4:24 PM	7:20 AM – 6:24 PM
Headway	60 min	60 min
Weekend Service?	No	No



Route 12

- → Route 12's routing will be changed in order to provide more direct connections to area destinations along Edwin Miller Boulevard: MEDIUM PRIORITY
- → Some Route 12 trips currently operate to Macy's, FedEx, and Quad Graphics; all trips to these destinations will be moved to Route 19: MEDIUM PRIORITY
- → Route 12 is one of the route identified to operate later into the evening to help replace the existing evening routes: HIGHER PRIORITY

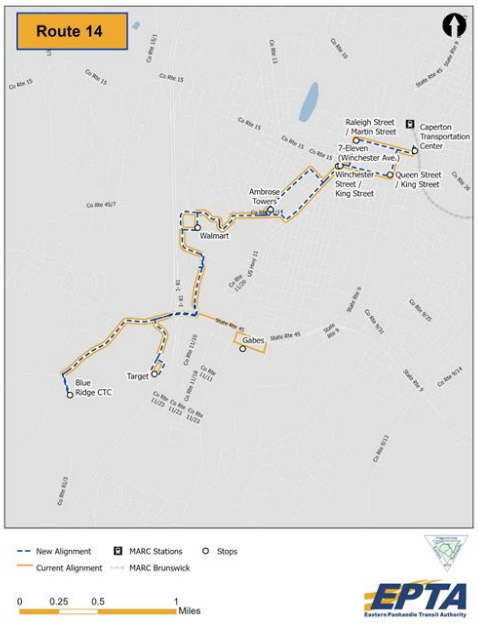
Caperton Station to DHHS		
	Current	Recommended
Span	8:00 AM – 5:45 PM	8:00 AM – 6:45 PM
Headway	60 min	60 min
Weekend Service?	No	No



Route 14

- → The Route 14's alignment will be adjusted slightly to no longer serve Gabes: **HIGHER PRIORITY**
- → Route 14 is one of the route identified to operate later into the evening to help replace the existing evening routes: **HIGHER PRIORITY**
- → Route 14 has been identified as one of the routes that will operate during weekends to replace the existing weekend only routes: **MEDIUM PRIORITY**
- → A smaller transfer hub could be explored near the Walmart property: **LOWER PRIORITY**

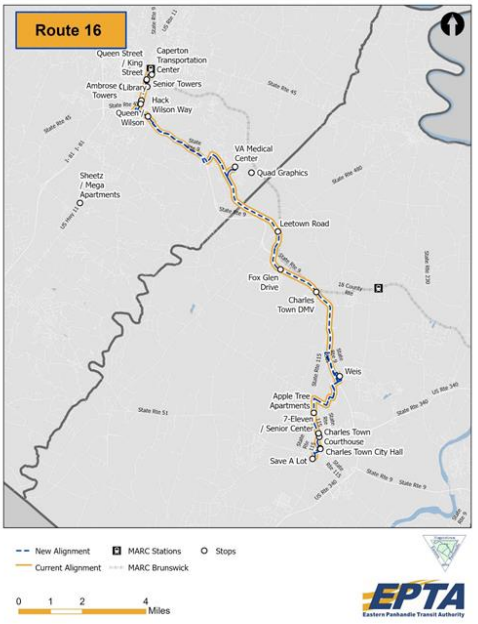
Caperton Station to Commons		
	Current	Recommended
Span	6:00 AM – 7:23 PM	6:00 AM – 8:23 PM
Headway	60	60
Weekend Service?	No	Yes



Route 16

- → No alignment changes are recommended for Route 16
- → Route 16 is one of the routes identified to operate later into the evening to help replace the existing evening routes: **HIGHER PRIORITY**
- → Route 16 is one of the routes that will operate during weekends to replace the existing weekend only routes: **MEDIUM PRIORITY**
- → Shelters could be installed at the VA Medical Center; Shelter/benches could be explored in Charles Town and Ranson: **LOWER PRIORITY**

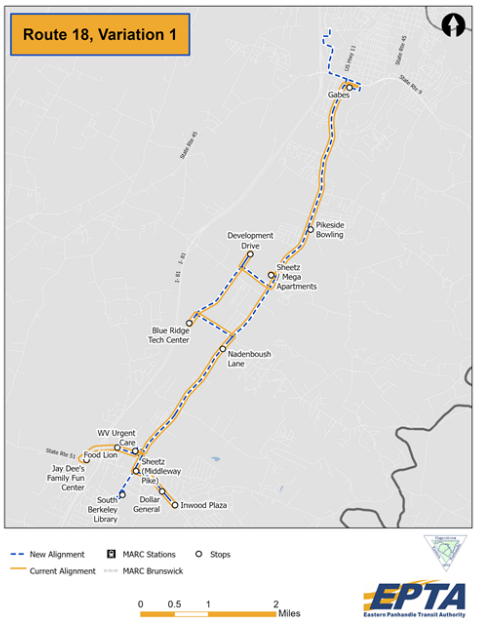
VA Medical Center to Ranson/Charles Town		
	Current	Recommended
Span	5:40 AM – 5:24 PM	5:40 AM – 7:24 PM
Headway	60 min	60 min
Weekend Service?	No	Yes



Route 18 – Variation 1

- → Route 18's current routing through the Inwood area will be adjusted and operated on select trips: **HIGHER PRIORITY**
- → A second Route 18 variation will operate as far south as the Blue Ridge Tech Center; this service will operate hourly: **HIGHER PRIORITY**
- → All Route 18 trips will be extended north from Gabes to the Walmart: **HIGHER PRIORITY**
- → A smaller transfer hub could be explored near the Walmart property: **LOWER PRIORITY**

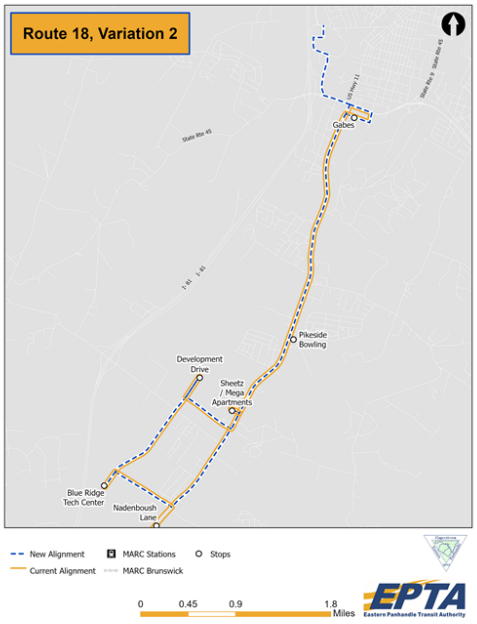
Walmart to Inwood Plaza		
	Current	Recommended
Span	7:45 AM – 3:52 PM	7:45 AM – 3:52 PM
Headway	60 min	Select Trips
Weekend Service?	No	No



Route 18 – Variation 2

- → This variation of the Route 18 will operate to the Blue Ridge Tech Center and no farther south, while offering hourly service: **HIGHER PRIORITY**
- → All Route 18 trips will be extended north from Gabes to the Walmart: **HIGHER PRIORITY**
- → A smaller transfer hub could be explored near the Walmart property: **LOWER PRIORITY**

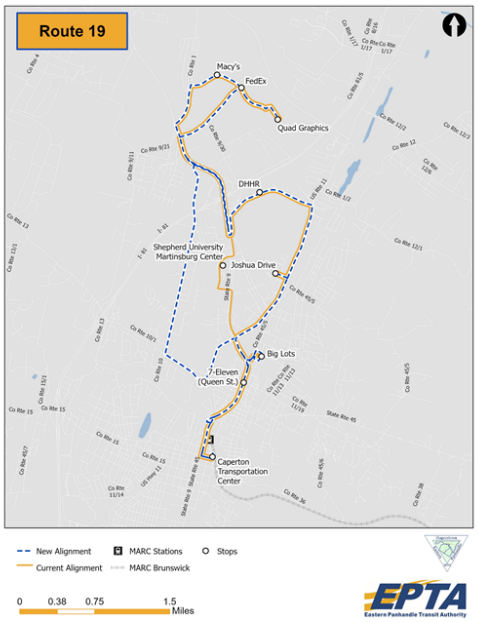
Walmart to Blue Ridge Tech Center		
	Current	Recommended
Span	N/A	7:45 AM – 3:52 PM
Headway	N/A	60 min
Weekend Service?	No	No



Route 19

- → Route 19's alignment will be changed in order to provide service to Rock Cliff Drive, previously offered as part of Route 12: MEDIUM PRIORITY
- → Service will no longer be operated on Edwin Miller Drive on Route 19 MEDIUM PRIORITY
- → All trips to Macy's, FedEx, and Quad Graphics will now only be a part of Route 19. These trips will be coordinated with employee schedules: MEDIUM PRIORITY

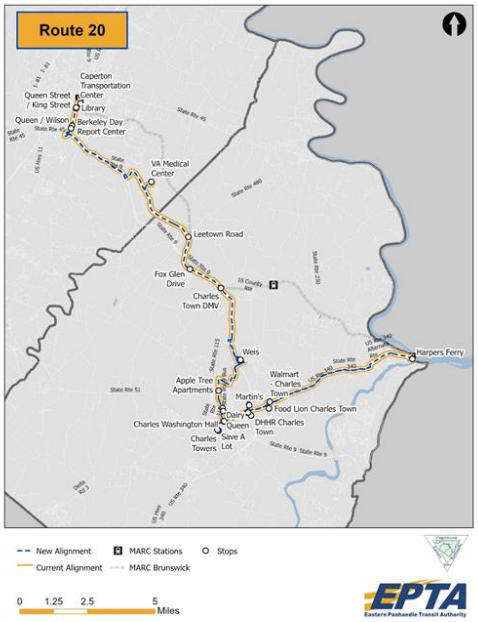
Caperton Station to Caperton Industrial Park		
	Current	Recommended
Span	4:50 AM - 6:45 PM	4:50 AM - 6:45 PM
Headway	60 min	60 min*
Weekend Service?	No	No



Route 20

- → A minor alignment change is recommended in Charles Town for Route 20: MEDIUM PRIORITY
- → Route 20 is one of the routes that will operate during weekends to replace the existing weekend only routes: MEDIUM PRIORITY
- → Shelters could be installed at the VA Medical Center; Shelter/benches could be explored in Charles Town and Ranson: LOWER PRIORITY

Charles Town to Harpers Ferry		
	Current	Recommended
Span	6:00 AM – 8:40 PM	6:00 AM – 8:40 PM
Headway	60 min	60 min
Weekend Service?	No	Yes

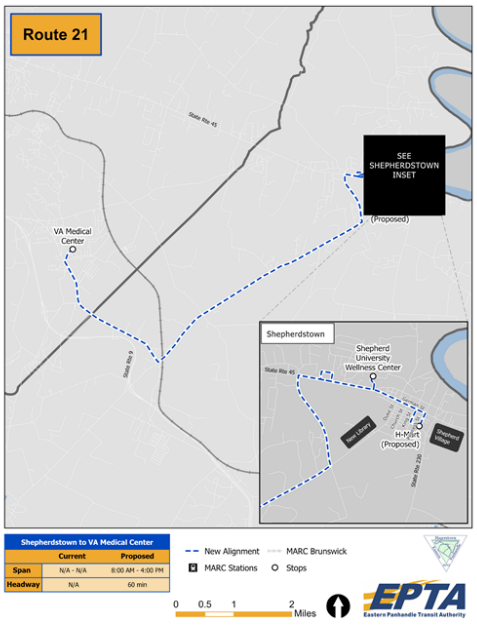


NEW Route 21

- → New Route 21 will offer service between the VA Medical Center and Shepherdstown: LOWER PRIORITY
- → The route could operate between the hours of 8:00 AM and 4:00 PM, offering hourly service on weekdays.
- → Shelters could be installed at the VA Medical Center; Shelter/benches could be explored in Shepherdstown: LOWER PRIORITY

**Recommend shelters or benches at University, Shepherd Village.*

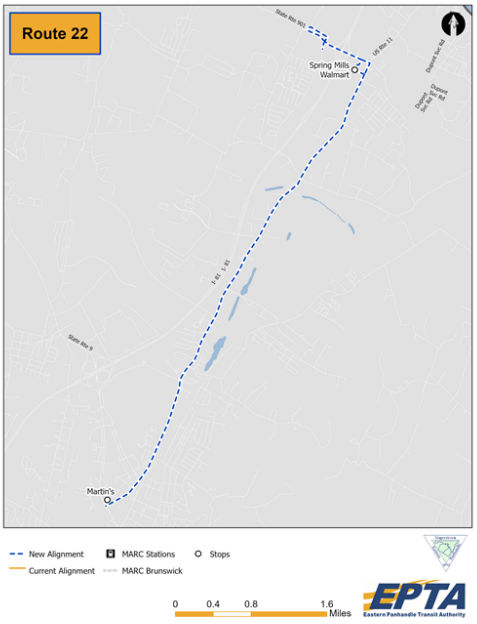
Shepherdstown to VA Medical Center		
	Current	Recommended
Span	N/A	8:00 AM – 4:00 PM
Headway	N/A	60 min
Weekend Service?	N/A	No



NEW Route 22

- → New Route 22 is recommended to offer service from the North Berkeley Library and Walmart in Spring Mills to Martin's in North Martinsburg: MEDIUM PRIORITY
- → Route 22 would run from 8:00AM-6:00PM and offer hourly service on weekdays.
- → Shelters could be installed at the North Berkeley Library or at the Spring Mills Walmart:

Caperton Train Station to Spring Mills		
	Current	Recommended
Span	N/A	8:00 AM – 6:00 PM
Headway	N/A	60 min
Weekend Service?	No	No



Realignment to EPTA's New Transfer Center

- → A new EPTA Transfer Center is being developed at Race Street and Raleigh Street in Martinsburg
- → Many of the recommended EPTA routes will need to be slightly re-routed to access this new center: **HIGHEST PRIORITY**
- → Many EPTA routes will continue to serve the Caperton Train Station, either directly or as requested

THANK YOU!

Please provide feedback by:

→Mail:
446 Novak Drive
Martinsburg, WV 25405

→Direct Message to EPTA's Facebook:
https://www.facebook.com/eptransit/

→Calling:
304-263-0876 extension 8453

→Email:
info@eptawv.com

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EPTA Transit Development Plan, 2020

Eastern Panhandle Transit Authority

Hagerstown Eastern Panhandle MPO