# Frederick County Transit Development Plan

*Final Report – June 2022*


KFH GROUP

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# Frederick County 2020 Transit Development Plan
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## Appendix A: Title VI of the Civil Rights Act of 1964

# Frederick County 2020 Transit Development Plan
# Chapter 1: Existing Services

## Introduction

Frederick County, located at the crossroads of the Washington, D.C. metropolitan area and western Maryland, is full of major highways, an expanding urban core, and sparsely populated but rapidly developing rural areas. Frederick County's specific geography requires a more expansive offering of public transit services. As the primary public transportation provider in Frederick County, Transit Services of Frederick County (TransIT) offers urban fixed route services, rural to urban commuter shuttles, ADA paratransit, and rural demand response service. In addition to TransIT, work destinations in the Washington, D.C. metropolitan area are served by Maryland Department of Transportation Maryland Transit Administration (MDOT MTA) commuter bus and rail. This chapter serves as an overview of existing transportation services in Frederick County, as well as a detailed accounting of previous transportation plans and studies. The review of transit services provides a fundamental understanding of current and former transportation trends and helps guide transit alternatives later in the study.

## Public Transportation

Most of Frederick County's mobility services are provided by local and regional public transportation providers, including TransIT and the MDOT MTA. Available public transportation services include intra-county local bus, commuter bus, ADA paratransit, and demand response service provided by TransIT. MDOT MTA operates regional commuter bus and rail services. The following section provides information about the various services and programs operated by each agency.

## TransIT

TransIT, a division of the Frederick County Government, began operating in 1993 after the Frederick County and City of Frederick transportation departments merged. TransIT has grown with the rest of Frederick County since then, and now offers fixed route public transportation, demand response transportation, ADA paratransit, and taxi subsidies six days a week. As shown in Figure 1-1, TransIT operates nine Connector routes within the City of Frederick and its urbanized area. Route deviations of up to ¾ mile are publicly available on six Connector routes. Routes operate six days a week; from 6:00 a.m. – 9:35 p.m. Monday-Thursday; 6:00 a.m. – 9:35 p.m. on Friday; and 7:30 a.m. – 9:35 p.m. on Saturday.

Commuter services are also provided by TransIT during morning and evening peak hours to provide additional options for TransIT riders. TransIT also administers Frederick County's demand response (TransIT Plus) and ADA paratransit programs to ensure that public transportation is accessible and available to all who ride. The operational differences between these two programs are explained later in this chapter. Additionally, TransIT operates the Taxi Access Program to provide additional options for TransIT riders. The following sections provide a description, performance evaluation, and route profiles of each service type offered by TransIT.

The COVID-19 pandemic has presented many operating challenges for TransIT, resulting in several major changes for both TransIT staff members and riders. TransIT's updated COVID-19 plan was released on March 18, 2020 and made all services fare free, increased cleaning protocols, supplied driver personal protective equipment (PPE), limited passengers, and instituted a rear door boarding policy in an attempt to decrease the spread of COVID-19. On April 9, 2020, TransIT instituted a policy requiring all drivers and passengers to wear a mask while on board.

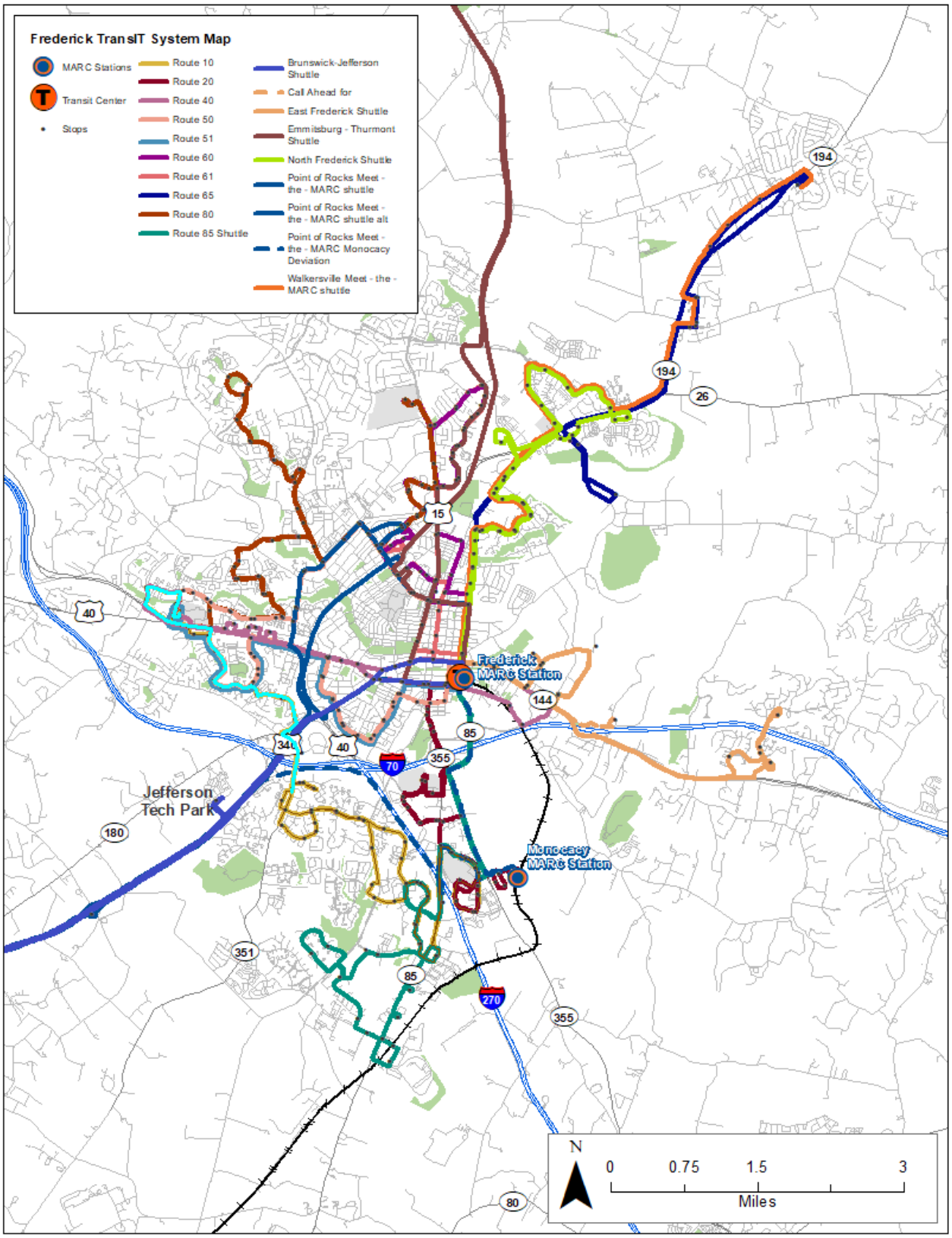
## MDOT MTA Performance Measures & System-wide Performance Evaluation

The MDOT MTA established performance standards for the Locally Operated Transit Systems (LOTS) within the state to analyze and evaluate services by their productivity, efficiency, and effectiveness. Services are rated "successful," "acceptable," and "needs review" based on their performance in different operating measures. Transit system performance measures are tabulated throughout the fiscal year and submitted to MDOT MTA annually. The MDOT MTA performance standards were developed according to previous industry research, industry experience, and peer reviews. The following operating measures form MDOT MTA performance evaluation process for the LOTS:

- Operating cost per hour
- Operating cost per mile
- Operating cost per passenger trip
- Farebox recovery
- Passenger trips per mile
- Passenger trips per hour

Table 1-1 contains the yearly performance measures for each of TransIT's service types. Overall, TransIT provided 492,461 trips between July 2019 and June 2020. TransIT's overall performance in cost per hour, cost per mile, cost per trip, trips per hour, and trips per mile were evaluated as needing review according to MDOT MTA standards. Many of these performance issues can be partially, if not wholly, attributed to the impacts of the COVID-19 pandemic on transit capacity and demand, as most transit providers in Maryland and the rest of the United States have reported lower ridership and revenue. The fourth quarter of the past fiscal year showed the immediate impact of COVID-19 on transit ridership, Table 1-2 shows the large decline in ridership that impacted service productivity at every level. Passenger trips declined by 50 percent, while cost per trip nearly doubled.

## Figure 1-1: TransIT System Map



## Table 1-1: FY2020 MDOT MTA Performance Measures for TransIT Services

| Performance Metric | Connector Fixed Route | Urbanized Shuttle | Non-Urbanized Shuttle | Taxi Access Program | SSTAP/ADA Para/5311 Demand Response | Total |
|---|---|---|---|---|---|---|
| **Total Passenger Trips** | 391,157 | 15,102 | 17,441 | 9,059 | 34,028 | 492,461 |
| **Total Service Miles** | 551,675 | 72,038 | 98,310 | 29,817 | 274,677 | 1,060,570 |
| **Total Service Hours** | 46,627 | 5,060 | 3,665 | 1,546 | 16,446 | 76,247 |
| **Total Operating Costs** | $4,051,000 | $463,997 | $492,978 | $167,876 | $1,427,494 | $6,874,105 |
| **Total Farebox Receipts** | $338,189 | $13,831 | $26,465 | $20,073 | $382,590 | $805,237 |
| **Other Local Operating Revenue** | $956,062 | $103,389 | $120,259 | $38,961 | $623,121 | $1,904,083 |
| **Cost per Hour** | $87.56 | $91.70 | $134.53 | $108.59 | $86.80 | $90.16 |
| **Cost per Mile** | $7.34 | $6.44 | $5.01 | $5.63 | $5.20 | $6.48 |
| **Cost per Trip** | $10.36 | $30.72 | $28.27 | $18.53 | $41.95 | $13.96 |
| **Farebox Recovery** | 8.3% | 3.0% | 5.4% | 12.0% | 26.8% | 11.7% |
| **Trips per Mile** | 0.7 | 0.21 | 0.18 | 0.30 | 0.12 | 0.46 |
| **Trips per Hour** | 8.45 | 2.98 | 4.76 | 5.86 | 2.07 | 6.46 |

### Table 1-2: FY2020 Performance Measures by Quarter – TransIT Overall Service

| Performance Metric | Quarter 1 (Jul-Sep) | Quarter 2 (Oct-Dec) | Quarter 3 (Jan-Mar) | Average Q1-Q3 | Quarter 4 (Apr-Jun) | Percent Change |
|---|---|---|---|---|---|---|
| **Total Passenger Trips** | 156,723 | 147,615 | 128,330 | 144,223 | 59,793 | -58.5% |
| **Total Service Miles** | 311,641 | 302,497 | 281,509 | 298,549 | 164,923 | -44.8% |
| **Total Service Hours** | 22,118 | 21,693 | 20,694 | 21,502 | 11,742 | -45.4% |
| **Total Operating Costs** | $1,840,921 | $1,833,485 | $1,742,584 | $1,805,663 | $1,457,115 | -19.3% |
| **Total Farebox Receipts** | $283,245 | $256,606 | $225,226 | $255,026 | $40,159 | -84.3% |
| **Other Local Operating Revenue** | $391,581 | $421,200 | $450,365 | $421,049 | $640,938 | 52.2% |
| **Cost per Hour** | $83.23 | $84.52 | $84.21 | $83.99 | $124.09 | 47.8% |
| **Cost per Mile** | $5.91 | $6.06 | $6.19 | $6.05 | $8.84 | 46.0% |
| **Cost per Trip** | $11.75 | $12.42 | $13.58 | $12.58 | $24.37 | 93.7% |
| **Farebox Recovery** | 15.4% | 14.0% | 12.9% | 14.1% | 2.8% | -80.5% |
| **Trips per Mile** | 0.50 | 0.49 | 0.46 | 0.48 | 0.36 | -24.8% |
| **Trips per Hour** | 7.09 | 6.80 | 6.20 | 6.70 | 5.09 | -24.0% |

## Fixed Route Connectors

TransIT operates nine Connector services Monday – Saturday between 5:30 a.m. and 9:45 p.m. that serve the City of Frederick and the County's urbanized area, going to residential areas, shopping centers, major employers, and medical facilities. Nine Connector services can deviate up to ¾ mile off their route to pick up passengers who would otherwise be unable to access the service. ADA paratransit is available for riders within ¾ mile of a Connector route to improve access to accessible transportation options.

The most recent fiscal year has presented several challenges to TransIT as the COVID-19 pandemic and social distancing practices have limited transit ridership. Table 1-3 compares each route's overall ridership from April – October in 2019 and 2020. Ridership was down significantly during this six-month period in 2020. Route 61 saw the largest decline in ridership, an over 66 percent decrease. Route 40 and Route 50 experienced the least decline, but still saw ridership decrease by nearly 30 percent. On average for each route, connector ridership decreased by over 47 percent between 2019 and 2020.

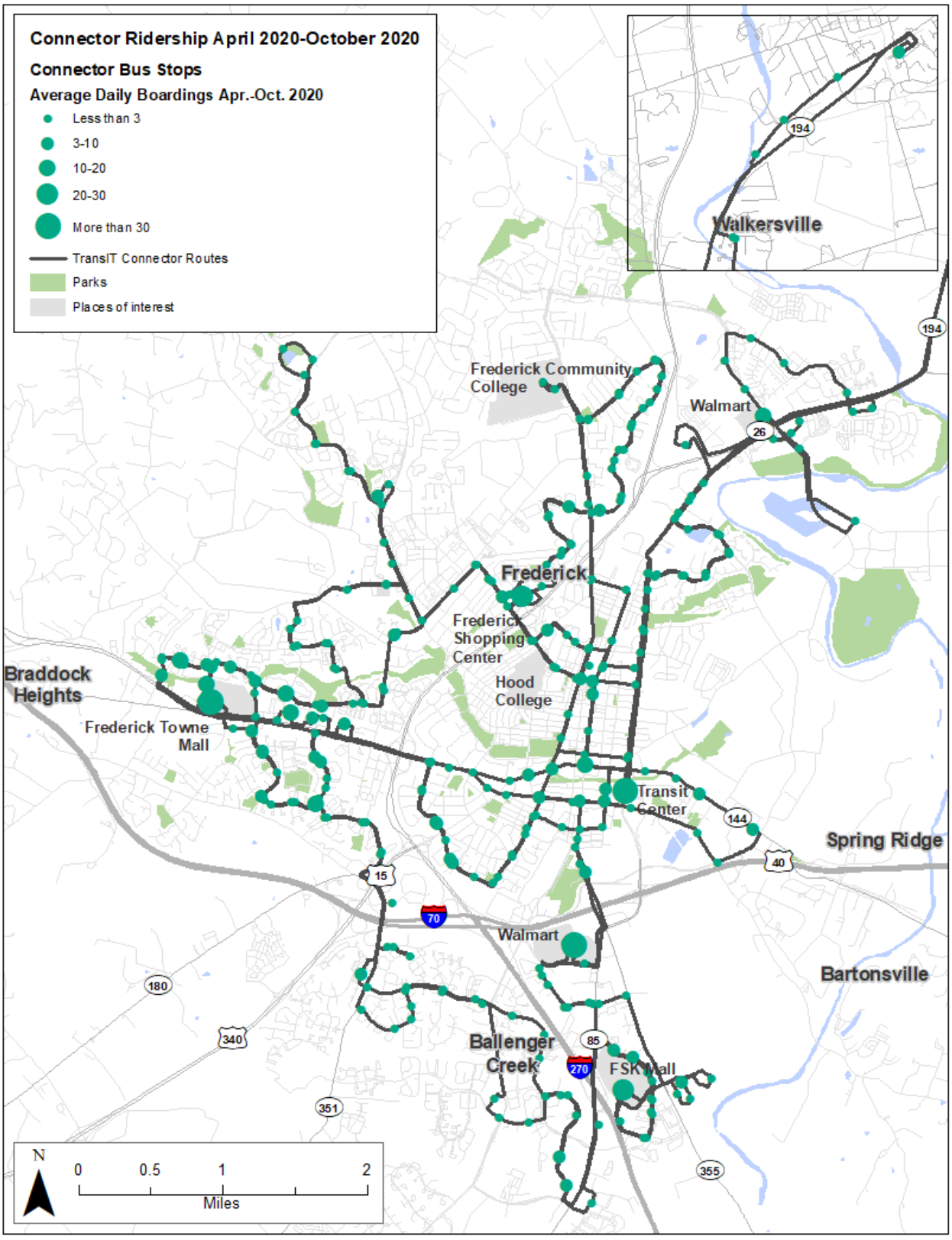
## Table 1-3: Connector Ridership Comparison: April - October 2019 and 2020

| Route | April- Oct 2019 | April - Oct 2020 | Percent Change |
|---|---|---|---|
| Route 10 | 45,014 | 20,282 | -54.9% |
| Route 20 | 47,451 | 30,695 | -35.3% |
| Route 40 | 50,535 | 35,662 | -29.4% |
| Route 50 | 36,670 | 25,955 | -29.2% |
| Route 51 | 46,603 | 16,753 | -64.1% |
| Route 60 | 29,392 | 16,053 | -45.4% |
| Route 61 | 21,377 | 7,178 | -66.4% |
| Route 65 | 27,275 | 13,230 | -51.5% |
| Route 80 | 10,691 | 5,322 | -50.2% |

Unsurprisingly, ridership has also been down at the stop level. When analyzing ridership by stop, the most boardings were seen at stops where transfers were available to other TransIT services. The Transit Center, Frederick Towne Mall, and Francis Scott Key Mall had the highest daily average boardings from April 1, 2020 – October 31, 2020. The Walmart on Buckeystown Pike also had relatively high ridership, with over 30 boardings per day. Figure 1-2 displays Connector ridership by stop in the City of Frederick's urbanized area.

The rest of this section includes route profiles for each Connector route, displaying current alignments, stop locations, and FY2020 MDOT MTA performance measures for each route.

## Figure 1-2: Average Daily Boardings by Connector Stop, April 1 – October 31, 2020



## Route 10: Mall-to-Mall Connector

TransIT Route 10, also called the Mall-to-Mall Connector, provides service between the Frederick Towne Mall and Francis Scott Key Mall (FSK), serving intermediate shopping centers and residential areas as well. The service operates Monday - Friday from 5:50 a.m. – 9:35 p.m. and on Saturday from 7:32 a.m. – 9:50 p.m. During AM and PM peak hours, route deviations to the Monocacy MARC station are available if advance notice is given. Riders have the option of scheduling a deviation of up to ¾ mile from a stop. Transfers to other Connectors are available at Frederick Towne Mall and FSK Mall. Figure 1-3 profiles Route 10.

Table 1-4 breaks down Route 10's performance metrics. Yearly reporting separates Route 10 into categories based on route alignment (10A and 10B) and whether an ADA route deviation was made on the trip. For both 10A and 10B, each performance measure did not meet the MDOT MTA acceptable performance standard. Many performance issues in FY2020 were caused by the COVID-19 pandemic.

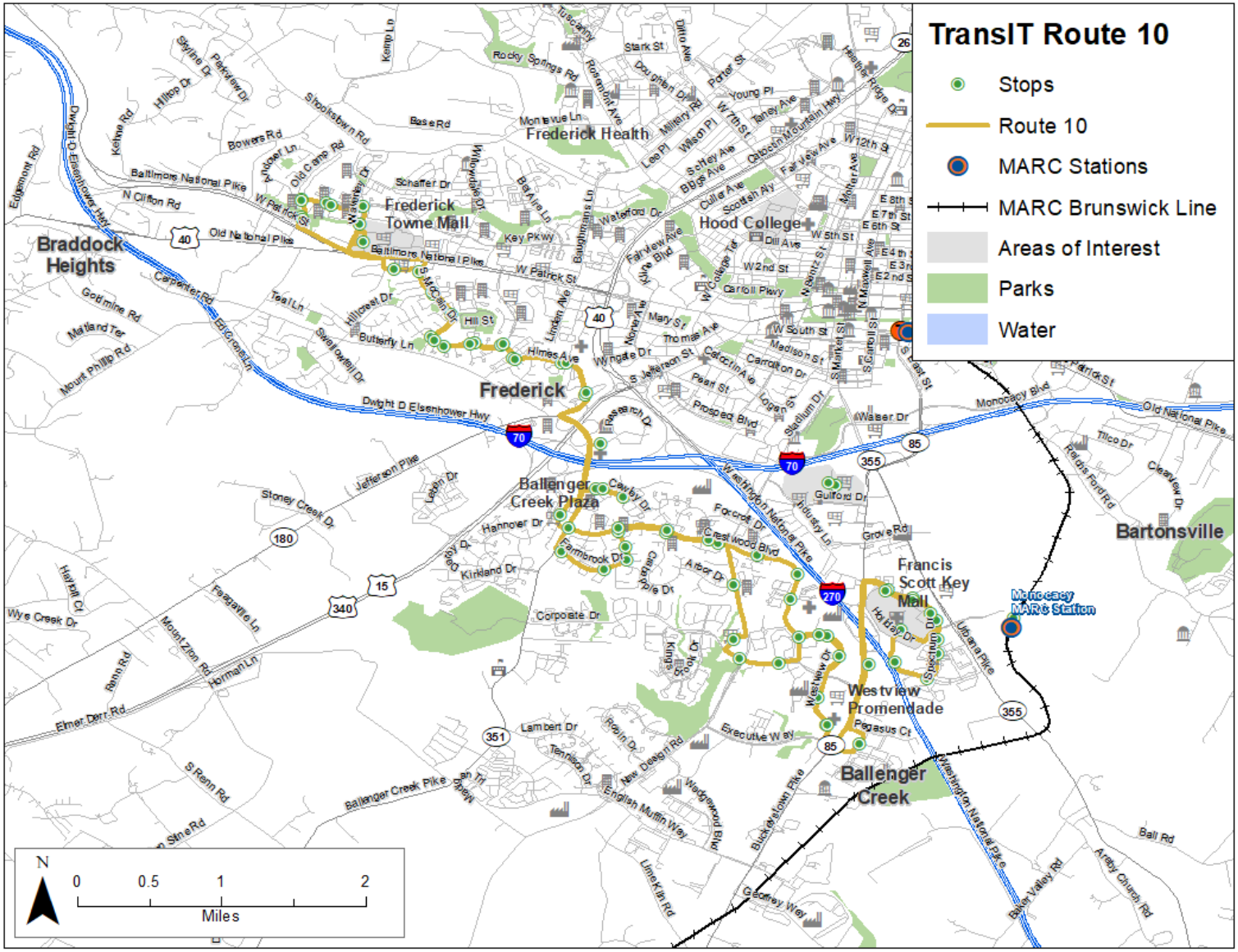
### Table 1-4: Route 10 FY2020 Performance Metrics

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10A | 30,088 | 66,030 | 4,727 | $436,775 | $25,991 | $92.40 | $6.61 | $14.52 | 6.0% | 0.5 | 6.37 |
| 10B | 26,215 | 50,495 | 3,771 | $334,402 | $24,538 | $88.68 | $6.62 | $12.76 | 7.3% | 0.5 | 6.95 |

### Table 1-5: Route 10 Highest Ridership Stops, April - October 2019 and 2020

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Francis Scott Key Mall | 4,752 | 26.3 |
| Frederick Towne Mall @ Boscov's | 3,708 | 20.5 |
| Hillcrest Drive @ Seneca Drive | 2,028 | 11.2 |
| McCain Drive @ Orchard Way SB | 1,714 | 9.5 |
| Key Parkway @ Hickory Hill Apt. | 1,630 | 9.0 |
| **2020** | | |
| Frederick Towne Mall @ Boscov's | 2,077 | 11.5 |
| Francis Scott Key Mall | 2,055 | 11.4 |
| Westview Drive across from Towne Place Suites | 982 | 5.4 |
| McCain Drive @ Orchard Way SB | 918 | 5.1 |
| Hillcrest Drive @ Seneca Drive | 861 | 4.8 |

## Figure 1-3: Route 10 Connector Profile



## Route 20: Francis Scott Key Mall Connector

TransIT Route 20, also known as the Francis Scott Key Mall Connector, connects the Ballenger Creek area to the Transit Center at the Frederick MARC Station. Route 20 operates Monday – Friday, 6:05 a.m. - 9:35 p.m. at 30-minute peak headways and 60-minute off-peak headways. Saturday service operates from 7:30 a.m. to 9:45 p.m. on 60-minute headways. Riders can call ahead to schedule pick up or drop off from the Monocacy MARC Station during peak hours. Route deviations of up to ¾ miles can be scheduled with TransIT prior to boarding. Figure 1-4 profiles Route 20.

Table 1-6 breaks down FY2020 performance data for Route 20. Route 20 performed within the MDOT MTA acceptable standard for cost per hour. All other measures were below the MDOT MTA acceptable standard.

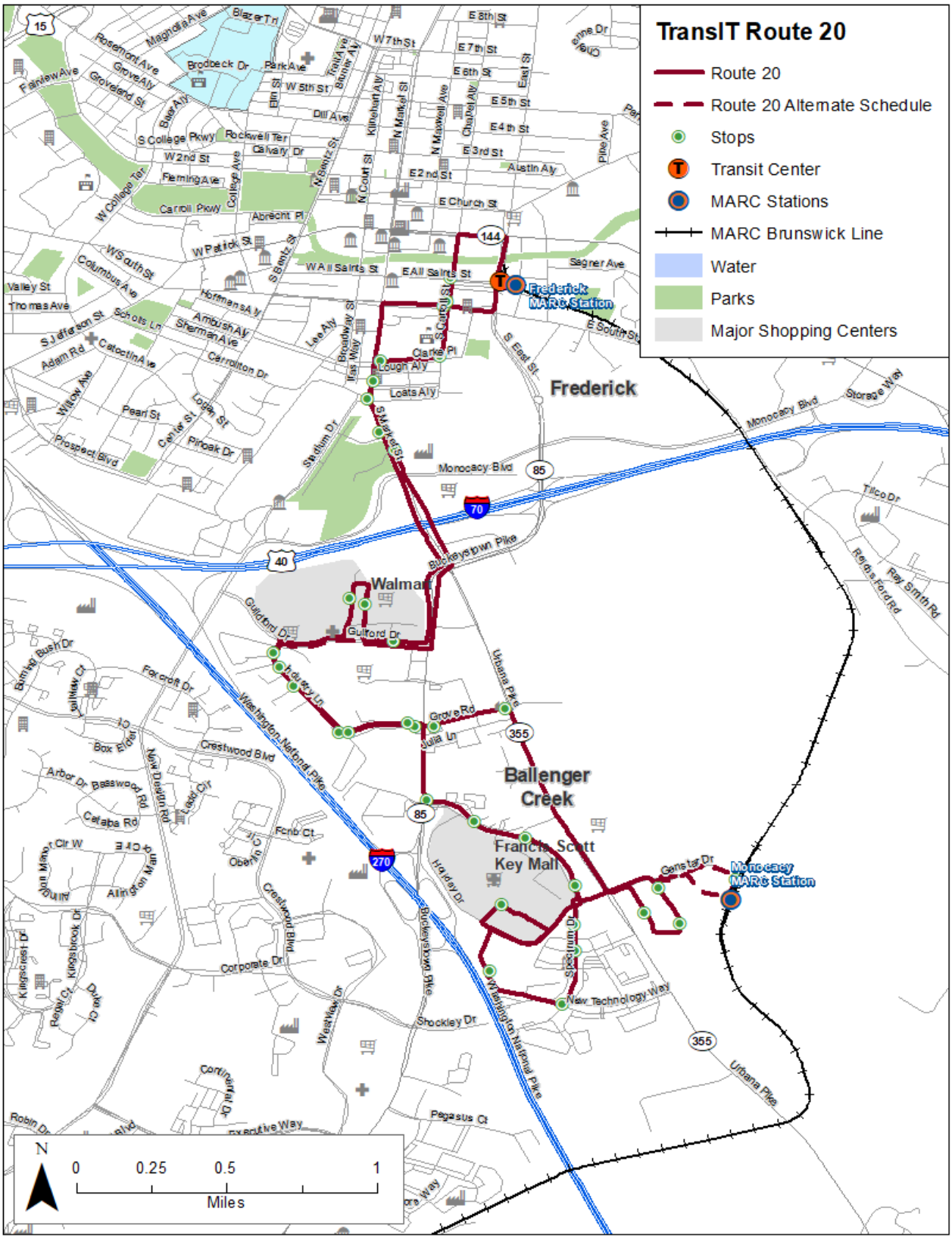
### Table 1-6: Route 20 FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 26,215 | 50,495 | 3,771 | 334,402 | 24,538 | $88.68 | $6.62 | $12.76 | 7.3% | 0.5 | 6.95 |

### Table 1-7: Route 20 Highest Ridership Stops – April - October 2019 and 2020

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Transit Center | 20,864 | 115.3 |
| Walmart (MD 85) | 8,332 | 46.0 |
| Francis Scott Key Mall | 5,905 | 32.6 |
| Kohl's | 1,598 | 8.8 |
| Riverview Plaza @ Target | 1,211 | 6.7 |
| **2020** | | |
| Transit Center | 12,625 | 69.8 |
| Walmart (MD 85) | 6,225 | 34.4 |
| Francis Scott Key Mall | 2,570 | 14.2 |
| Kohl's | 1,650 | 9.1 |
| S. Carroll Street @ E. All Saints Street | 887 | 4.9 |

## Figure 1-4: Route 20 Connector Profile



## Route 40: The Route 40 Connector

TransIT Route 40, also called the Route 40 Connector, connects the Frederick Towne Mall to the Transit Center, East Gate Plaza, and other locations along the US 40 corridor. Route 40 operates Monday – Friday, 5:40 a.m. - 9:35 p.m. and on Saturday, 7:55 a.m. - 9:35 p.m. Route 40 makes a connection with the Point of Rocks Meet-the-MARC shuttle at Frederick Towne Mall in the morning.

Table 1-8 displays Route 40 FY2020 performance measures. Despite the fourth quarter decline in productivity, Route 40 was able to stay within the MDOT MTA acceptable standard for cost per hour, cost per trip, farebox recovery, trips per mile, and trips per hour. The only performance measure that fell below the acceptable standard in FY2020 was cost per mile. Route 40 is TransIT's most productive route, and its FY2020 performance shows it is also the system's most efficient.

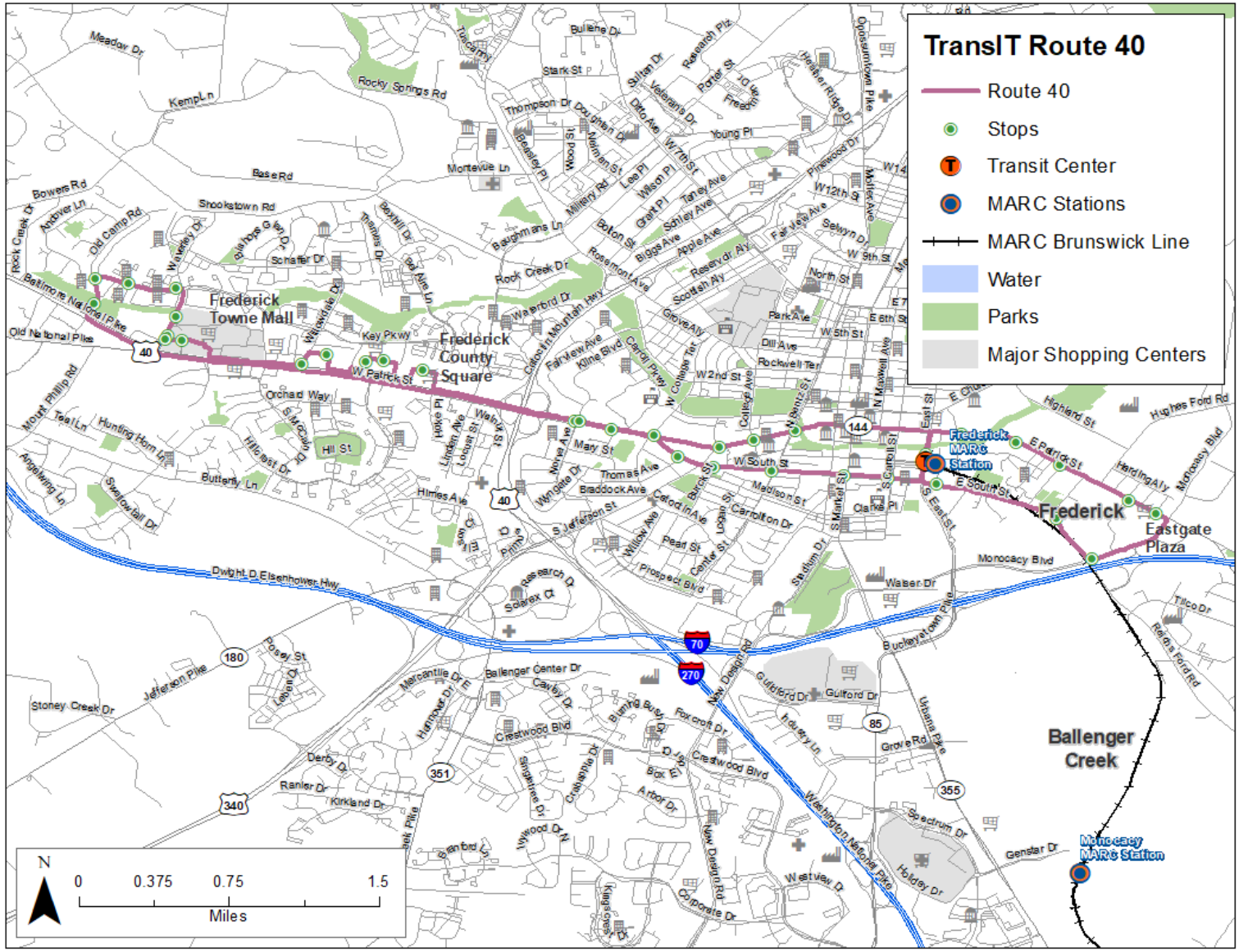
### Table 1-8: Route 40 FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 62,872 | 55,848 | 4,877 | 427,601 | 51,439 | $87.67 | $7.66 | $6.80 | 12.0% | 1.13 | 12.89 |

### Table 1-9: Route 40 Highest Ridership Stops – April - October 2019 and 2020

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Transit Center | 10,534 | 58.2 |
| Square Corner | 4,358 | 24.1 |
| Frederick Shoppers World | 4,151 | 22.9 |
| Key Parkway @ Hickory Hill | 3,859 | 21.3 |
| Frederick Towne Mall @ Boscov's | 3,444 | 19.0 |
| **2020** | | |
| Transit Center | 8,372 | 46.3 |
| Frederick Towne Mall @ Boscov's | 3,278 | 18,1 |
| Frederick Shoppers World | 3,120 | 17.2 |
| Square Corner | 1,650 | 9.1 |
| S. Carroll Street @ E. All Saints Street | 887 | 4.9 |

## Figure 1-5: Route 40 Connector Profile



## Route 50 and 51: Frederick Towne Mall Connectors

TransIT Routes 50 and 51 are clockwise and counterclockwise loop routes that provide service between Frederick Towne Mall and the Transit Center, serving Carroll Park Manor, Fort Detrick, Hood College, and Frederick Health Hospital. Route 50 travels clockwise along its route Monday – Friday, 5:40 a.m. – 9:35 p.m. and Saturday, 8:05 a.m. – 9:35 p.m. Route 51 travels counterclockwise Monday – Friday, 5:40 a.m. – 9:35 p.m. and Saturday, 7:55 a.m. – 9:35 p.m.

Table 1-10 displays each Frederick Towne Mall Connectors performance in FY2020. Both routes were in the acceptable standard for cost per hour and trips per mile, while only Route 51 was within the acceptable standard for farebox recovery. Route 50 operates more than Route 51, generating 56,367 service miles compared to Route 51's 43,949 service miles.

### Table 1-10 Route 50 and Route 51 FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | 47,298 | 56,367 | 4,775 | 422,022 | 37,940 | $88.39 | $7.49 | $8.92 | 9.0% | 0.84 | 9.91 |
| 51 | 44,211 | 43,949 | 3,847 | 326,521 | 41,291 | $84.88 | $7.43 | $7.39 | 12.6% | 1.01 | 11.49 |

### Table 1-11: Route 50 Highest Ridership Stops

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Transit Center | 8,944 | 49.4 |
| Key Parkway @ Willowdale Drive | 3,189 | 17.6 |
| Frederick Towne Mall @ Boscov's | 2,565 | 14.2 |
| Waverley Drive @ Key Parkway | 1,879 | 10.4 |
| Baughman's Lane Carroll Park Manor | 1,732 | 9.6 |
| **2020** | | |
| Transit Center | 6,630 | 36.6 |
| Frederick Towne Mall @ Boscov's | 1,949 | 10,8 |
| Key Parkway @ Willowdale Drive | 1,697 | 9.4 |
| Waverley Drive @ Key Parkway | 1,438 | 7.9 |
| Prospect Plaza Shopping Center | 1,078 | 6.0 |

## Table 1-12: Route 51 Highest Ridership Stops

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Transit Center | 10,080 | 55.7 |
| Hillcrest Dr @ Seneca Drive | 3,054 | 16.9 |
| Frederick Towne Mall @ Boscov's | 2,795 | 15.4 |
| Square Corner | 2,580 | 14.3 |
| Hillcrest Drive @ Hillcrest Shopping Center | 2,564 | 14.2 |
| **2020** | | |
| Transit Center | 4,416 | 24.4 |
| Frederick Towne Mall @ Boscov's | 1,291 | 7.1 |
| Hillcrest Drive @ Seneca Dr | 956 | 5.3 |
| Prospect Plaza Shopping Center | 923 | 5.1 |
| Hillcrest Drive @ Hillcrest Shopping Center | 872 | 4.8 |

## Figure 1-6: Route 50 and Route 51 Connector Profile

## Route 60 and 61: Frederick Community College Connectors

TransIT Routes 60 and 61, also called the Frederick Community College (FCC) Connectors, are clockwise and counterclockwise loops operating between FCC and the Transit Center. Route 60, which travels counterclockwise, operates Monday – Friday, 5:50 a.m. – 9:40 p.m. and Saturday, 7:30 a.m. – 9:30 p.m. Route 61 travels the loop clockwise Monday – Friday, 5:50 a.m. – 9:45 p.m. Route 61 does not operate on Saturday, FCC is only served by Route 60.

In FY2020, Route 60 and Route 61 had similar performance measures. Route 60 operates more than Route 61 and is slightly less efficient. Route 61 trips per mile was the only performance measure for either route that did not fall below the MDOT MTA acceptable standard in FY2020. Route 60's provision of weekend service, which is less productive than weekday service, is likely responsible for some of the performance disparities between the two routes. Table 1-13 displays each route's FY2020 performance.

### Table 1-13 Route 60 and 61 FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 60 | 35,193 | 50,303 | 4,792 | $411,709 | $29,449 | $86.06 | $8.15 | $11.43 | 7.3% | 0.71 | 7.53 |
| 61 | 25,674 | 34,053 | 3,263 | $270,761 | $24,090 | $82.98 | $7.95 | $10.55 | 8.9% | 0.75 | 7.87 |

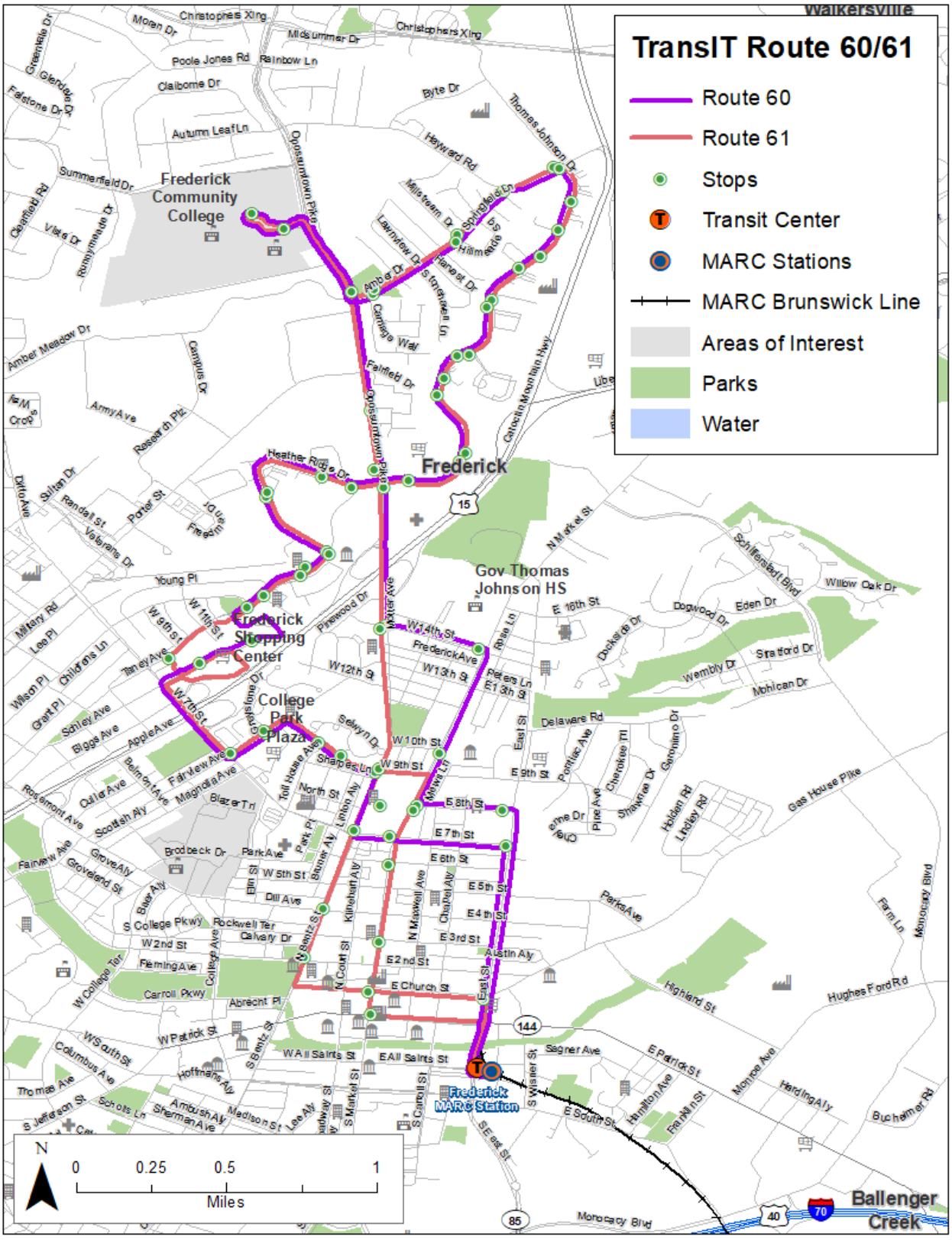
### Table 1-14: Route 60 Highest Ridership Stops

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Transit Center | 8,809 | 48.7 |
| Frederick Shopping Center | 2,729 | 15.1 |
| Frederick Community College | 2,424 | 13.4 |
| Heather Ridge Drive @ Country Hill Apartments (NB) | 1,709 | 9.4 |
| Fairview Ave @ College Park Plaza | 1,428 | 7.9 |
| **2020** | | |
| Transit Center | 4,891 | 27.0 |
| Frederick Shopping Center | 2,599 | 14.4 |
| Heather Ridge Drive @ Country Hill Apartments (NB) | 1,314 | 7.3 |
| Fairview Ave @ College Park Plaza | 884 | 4.9 |
| W. 7th Street @ N. Market Street | 596 | 3.3 |

## Table 1-15: Route 61 Highest Ridership Stops

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Transit Center | 6,786 | 37.5 |
| 8th Street @ Taney Ave | 2,504 | 13.8 |
| Frederick Community College | 2,083 | 11.5 |
| Square Corner | 1,467 | 8.1 |
| Heather Ridge Drive @ Country Hill Apartments (SB) | 876 | 4.8 |
| **2020** | | |
| Transit Center | 2,900 | 16.0 |
| Frederick Shopping Center | 1,161 | 6.4 |
| Heather Ridge Drive @ Country Hill Apartments (SB) | 324 | 1.8 |
| Motter Ave @ 14th Street | 278 | 1.5 |
| Square Corner | 220 | 1.2 |

## Figure 1-7: Route 60 and Route 61 Connector Profile



## Route 65: Walkersville Connector

TransIT Route 65, also known as the Walkersville Connector, connects North Frederick and Walkersville to the Transit Center. The Walmart on Monocacy Boulevard is also served by this route. The Walkersville Connector operates Monday – Friday, 4:23 a.m. – 9:40 p.m. and Saturday, 7:30 a.m. – 9:40 p.m. Clemson Corner, the Shops at Monocacy, and Worman's Mill are only served on weekends as they are served by the North Frederick Commuter Shuttle on weekdays. Deviations of up to ¾ mile increase access.

TransIT Route 65 was less productive during FY2020 than most of the other Connector routes and had the highest cost per hour and cost per trip of any of the nine Connector routes. It also had the lowest farebox recovery of any TransIT Connector, recovering less than 7 percent of its operating cost through fare collection. Table 1-16 displays Route 65 fixed and deviated fixed route performance measures.

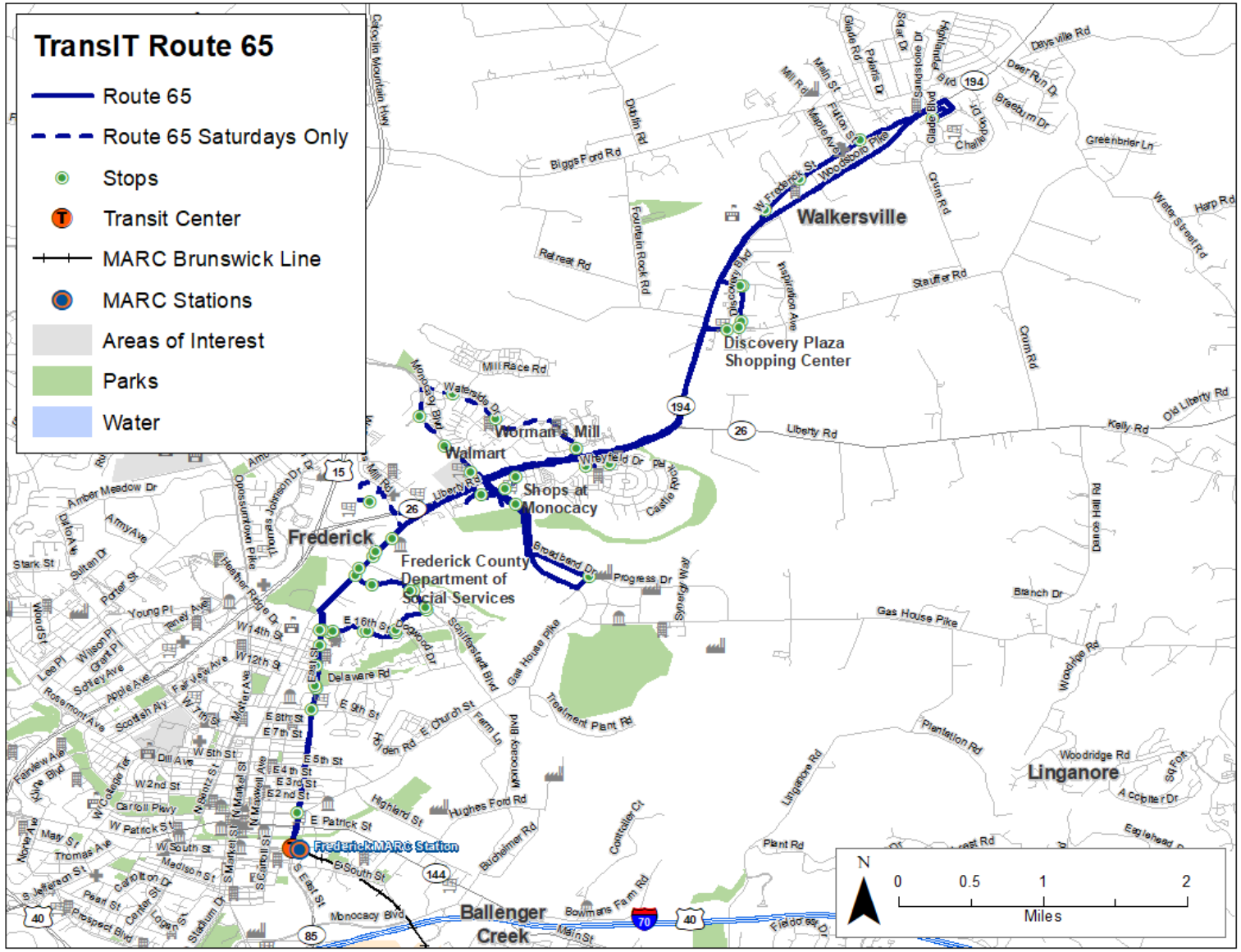
### Table 1-16: Route 65 FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 65 Fixed | 35,385 | 73,874 | 4,995 | $467,669 | $30,369 | $93.63 | $6.33 | $13.22 | 6.5% | 0.5 | 7.08 |

### Table 1-17: Route 65 Highest Ridership Stops

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Transit Center | 11,047 | 61.0 |
| Walmart (MD 26) | 4,294 | 23.7 |
| Walkers Village Shopping Center | 1,728 | 9.5 |
| Stauffer Road @ Dream Place | 1,281 | 7.1 |
| East Street @ Delaware Road | 874 | 4.8 |
| **2020** | | |
| Transit Center | 5,621 | 31.1 |
| Walmart (MD 26) | 2,506 | 13.8 |
| Walkers Village Shopping Center | 802 | 4.4 |
| Stauffer Road @ Dream Place | 504 | 2.8 |
| Frederick Street @ Main Street | 502 | 2.7 |

## Figure 1-8: TransIT Route 65 Connector Profile



## Route 80: North-West Connector

TransIT Route 80, the North-West Connector, operates between Frederick Towne Mall and Frederick Community College, serving intermediate destinations of Fort Detrick, Frederick County Health Department, and Whittier/Somerford. Route 80 operates Monday – Friday, 6:30 a.m. – 9:45 p.m. Riders have the option to call at least a day in advance to schedule a route deviation of up to ¾ mile for pick up or drop off.

Route 80 operates fewer hours than any other Connector route, and in FY2020 had lower farebox recovery and lower trips per mile than other routes. Route 80 makes many deviations, which could impact its overall productivity and efficiency according to traditional fixed route performance measures. Route 80's cost per hour was its only performance measure within the MDOT MTA acceptable standard.

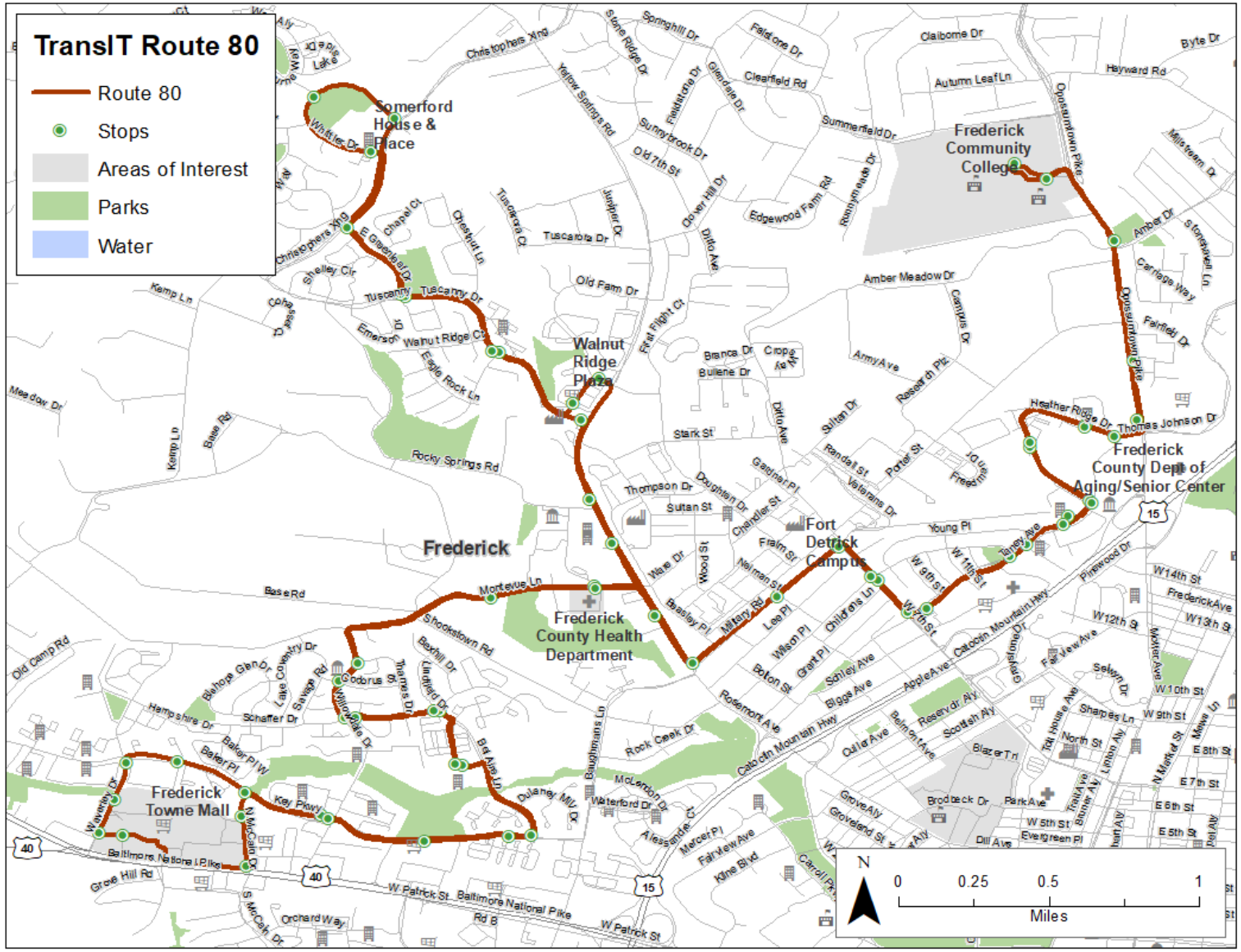
### Table 1-18: Route 80 FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 80 | 14,535 | 48,604 | 3,941 | $351,948 | $12,294 | $89.31 | $7.24 | $24.21 | 3.5% | 0.30 | 3.69 |

### Table 1-19: Route 80 Highest Ridership Stops

| Stop Location | Total Boardings | Average Daily Boardings |
|---|---|---|
| **2019** | | |
| Frederick Towne Mall @ Boscov's | 1,662 | 9.2 |
| Frederick Community College | 1,254 | 6.9 |
| Walnut Ridge Shopping Center | 987 | 5.5 |
| Waverley Drive @ Key Parkway | 727 | 4.0 |
| Key Parkway @ Westridge Plaza | 455 | 2.5 |
| **2020** | | |
| Frederick Towne Mall @ Boscov's | 827 | 4.6 |
| Walnut Ridge Shopping Center | 764 | 4.2 |
| Key Parkway @ Willowdale Drive | 200 | 1.1 |
| Military Road @ Fort Detrick | 188 | 1.0 |
| Whittier Drive @ Somerford | 183 | 1.0 |

## Figure 1-9: Route 80 Connector Profile



## Commuter Shuttle Service

TransIT's shuttle services provide commuter trips both inside and outside the City of Frederick's urbanized area. Urbanized area shuttles provide service in East Frederick, North Frederick, along Route 85, and from Walkersville to the Frederick MARC Station. Non-urbanized area shuttles connect Brunswick, Emmitsburg, Jefferson, and Thurmont to Frederick, while the Point of Rocks Meet-the-MARC (MTM) shuttles provide another option for commuters to access MARC Train service.

### East Frederick Shuttle

The East Frederick Shuttle operates Monday - Friday with morning service operating from 8:15 a.m. – 2:05 p.m. and evening service operating from 4:15 p.m. – 6:10 p.m. This shuttle provides service between the Transit Center and Spring Ridge, with deviations available to the Freedom Center and Frederick MVA. The MVA is a timed stop on outbound trips. Transfers to Connector and MARC services are available at the Transit Center. Figure 1-10 profiles the East Frederick Shuttle.

In FY2020, the East Frederick Shuttle performed under the MDOT MTA acceptable standard for traditional fixed route service. The commuter shuttles were heavily impacted by the COVID-19 pandemic as more people began working from home and others temporarily or permanently lost their jobs. Table 1-20 displays the East Frederick Shuttle FY2020 performance.

#### Table 1-20: East Frederick Shuttle FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| East Frederick Shuttle | 4,577 | 28,157 | 2,061 | 189,048 | 4,142 | $91.71 | $6.71 | $41.30 | 2.2% | 0.16 | 2.22 |

## Figure 1-10: East Frederick Shuttle Profile


5

## North Frederick Shuttle

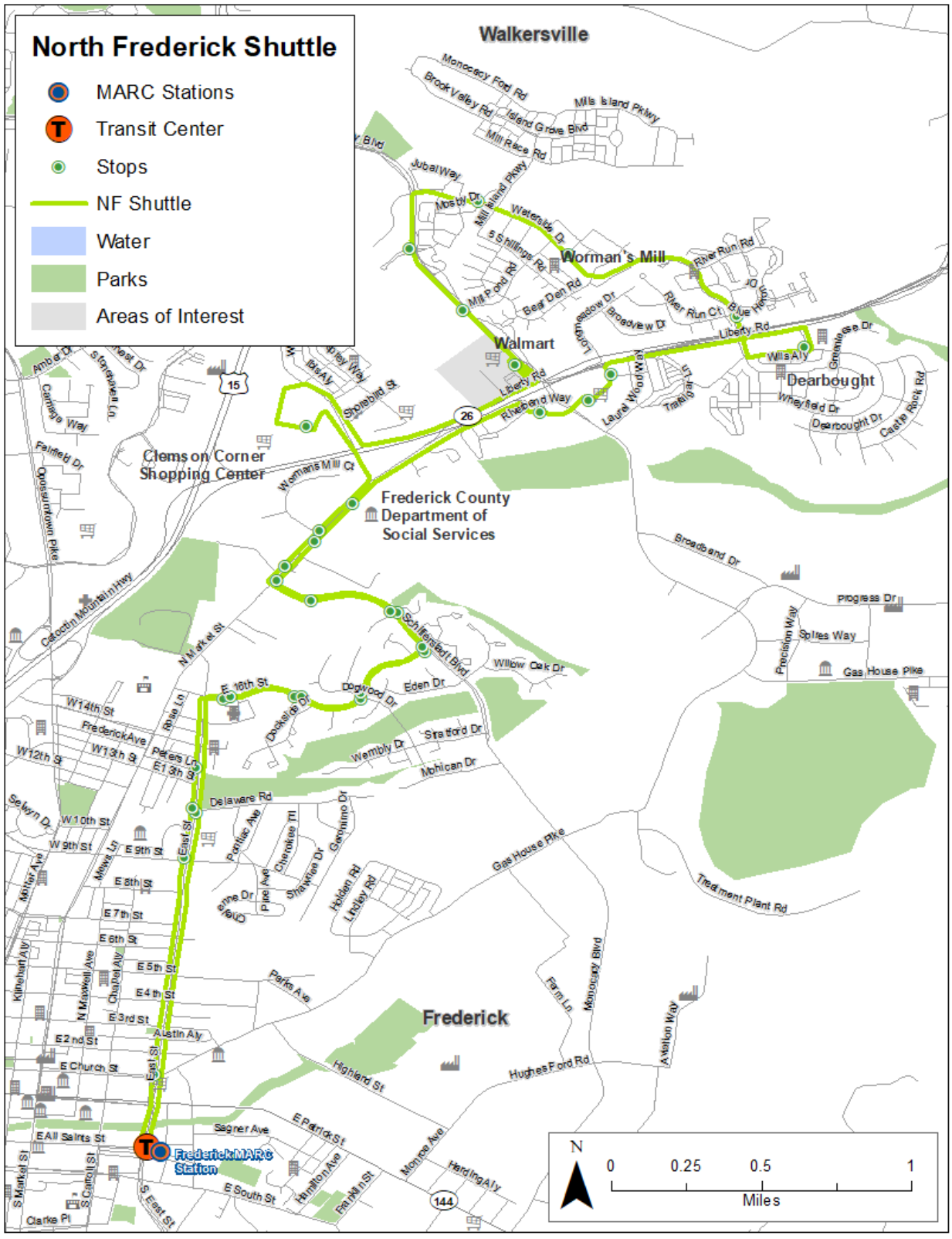
The North Frederick shuttle connects the Transit Center to major destinations in the northern part Frederick and Walkersville. The shuttle has morning and afternoon service windows, operating Monday - Friday from 8:45 a.m. – 11:22 a.m. and 12:45 p.m. – 5:35 p.m. This shuttle stops at the Department of Social Services, Clemson Corner, Dearbought, Worman's Mill, and the Walmart on Monocacy Boulevard. Connector Route 65 also serves this corridor, providing a more direct connection between Walkersville and downtown Frederick. The North Frederick shuttle operates more frequently than the other TransIT shuttles. The North Frederick Shuttle is profiled in Figure 1-11.

In FY2020, the North Frederick shuttle provided 6,583 passenger trips and traveled 18,518 miles. The COVID-19 pandemic weakened service productivity in the fourth quarter of the fiscal year, as work trips decreased due to higher unemployment and telework levels. In FY2020, the North Frederick Shuttle was below the MDOT MTA's acceptable standard in each performance measure except cost per hour. Table 1-21 displays the North Frederick Shuttles FY2020 performance data.

### Table 1-21: North Frederick Shuttle FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| North Frederick Shuttle | 6,583 | 18,518 | 1,617 | $139,189 | $6129 | $86.06 | $7.13 | $21.14 | 4.4% | 0.34 | 4.07 |

## Figure 1-11: North Frederick Shuttle Profile



## Route 85 Shuttle

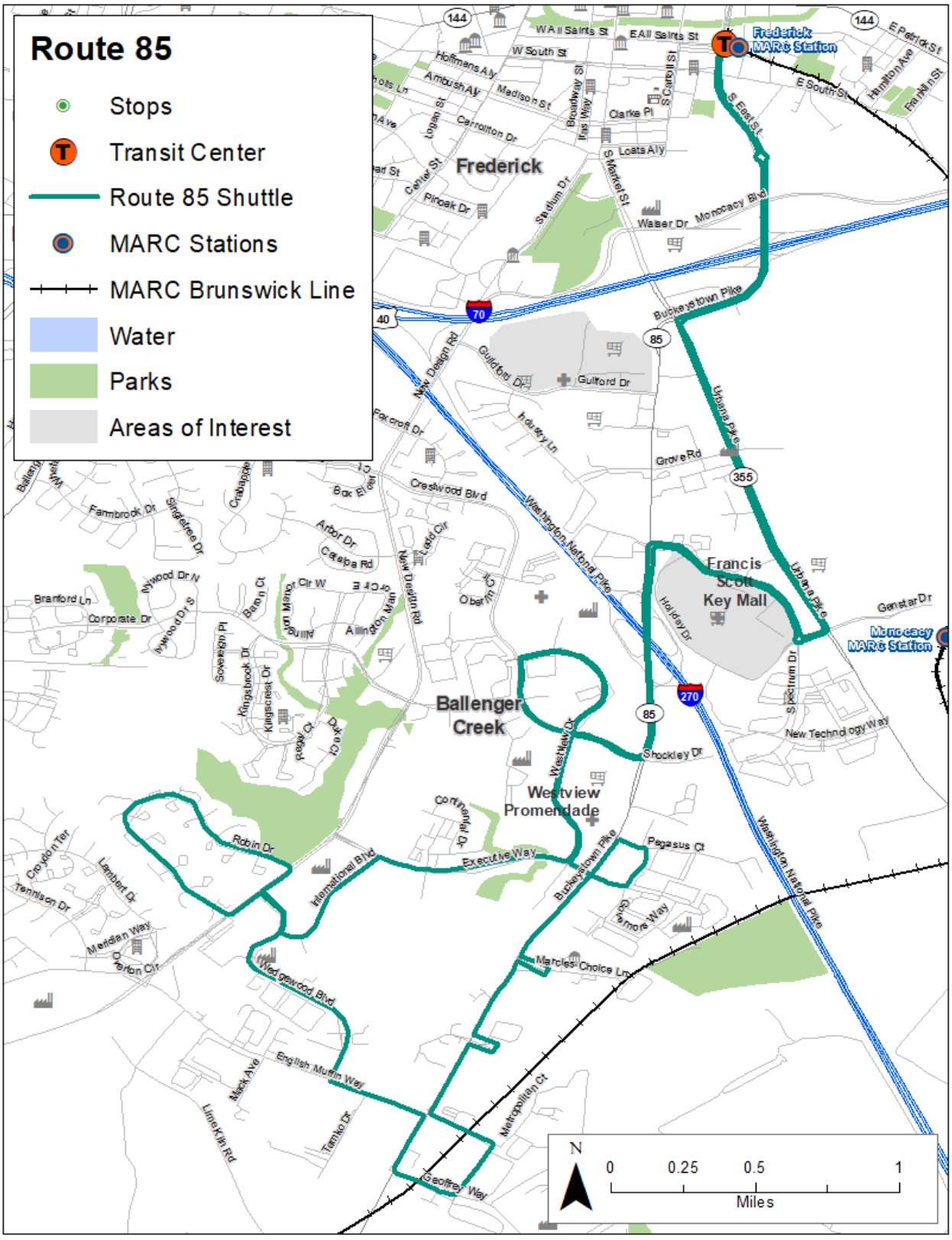
The Route 85 Shuttle connects commuters from destinations along Route 85's southern corridor, such as Francis Scott Key Mall and Westview Promenade Shopping Center, to the Transit Center. This service operates two round trips Monday - Friday during peak morning and evening hours. Morning service operates 7:15 a.m. – 9:10 a.m. and evening service operates 3:15 p.m. – 5:10 p.m. Figure 1-12 presents the Route 85 Shuttle profile.

In FY2020, the Route 85 shuttle performed under the MDOT MTA acceptable performance standards in all measures except cost per mile. Like many of the other shuttle routes, farebox recovery on the Route 85 Shuttle was less than 3 percent in FY2020. Table 1-22 displays the Route 85 Shuttle performance data in FY2020.

### Table 1-22: Route 85 Shuttle FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 85 | 2,906 | 16,764 | 964 | $95,235 | $2,558 | $98.83 | $5.68 | $32.77 | 2.7% | 0.17 | 3.02 |

## Figure 1-12: Route 85 Shuttle Profile



## Brunswick-Jefferson Shuttle

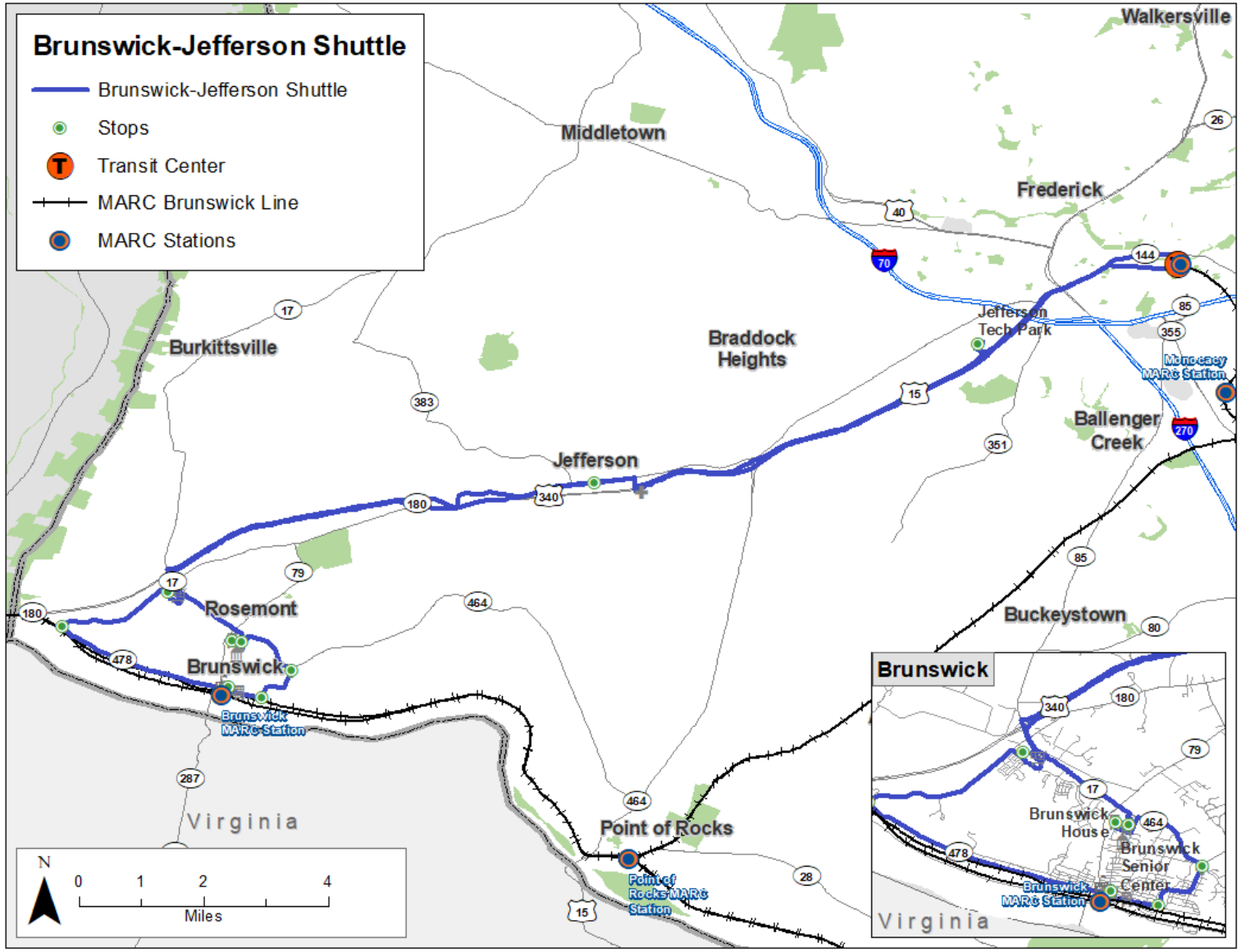
The Brunswick-Jefferson Shuttle provides weekday commuter service between downtown Frederick and the outlying municipalities of Brunswick and Jefferson. Morning peak service has two trips, the first trip arriving at Brunswick Crossing at 6:08 a.m., stopping throughout Brunswick and Jefferson, and arriving at the Transit Center at 7:05 a.m. The second trip begins at the Transit Center at 8:40 a.m., reaching Brunswick at 9:08 a.m. and arriving back at the Transit Center at 10:10 a.m. There are two evening round trips between the Transit Center and Brunswick operating 2:15 p.m. – 5:35 p.m. Deviations are available to Jefferson Tech Park on all trips. Figure 1-13 profiles the Brunswick-Jefferson shuttle.

In FY2020, the Brunswick-Jefferson Shuttle traveled 31,317 miles, provided 4,610 passenger trips, and incurred operating costs of $181,919. The only MDOT MTA performance standard within the acceptable standard was cost per mile. COVID-19 likely had an impact on the number of commuters using this service in the fourth quarter of 2020. Table 1-23 displays the Brunswick-Jefferson Shuttle's FY2020 performance data.

### Table 1-23: Brunswick-Jefferson Shuttle FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Brunswick-Jefferson Shuttle | 4,610 | 31,317 | 1,186 | $181,919 | $6,986 | $153.34 | $5.81 | $39.46 | 3.8% | 0.15 | 3.89 |

## Figure 1-13: Brunswick-Jefferson Shuttle Profile



## Emmitsburg-Thurmont Shuttle

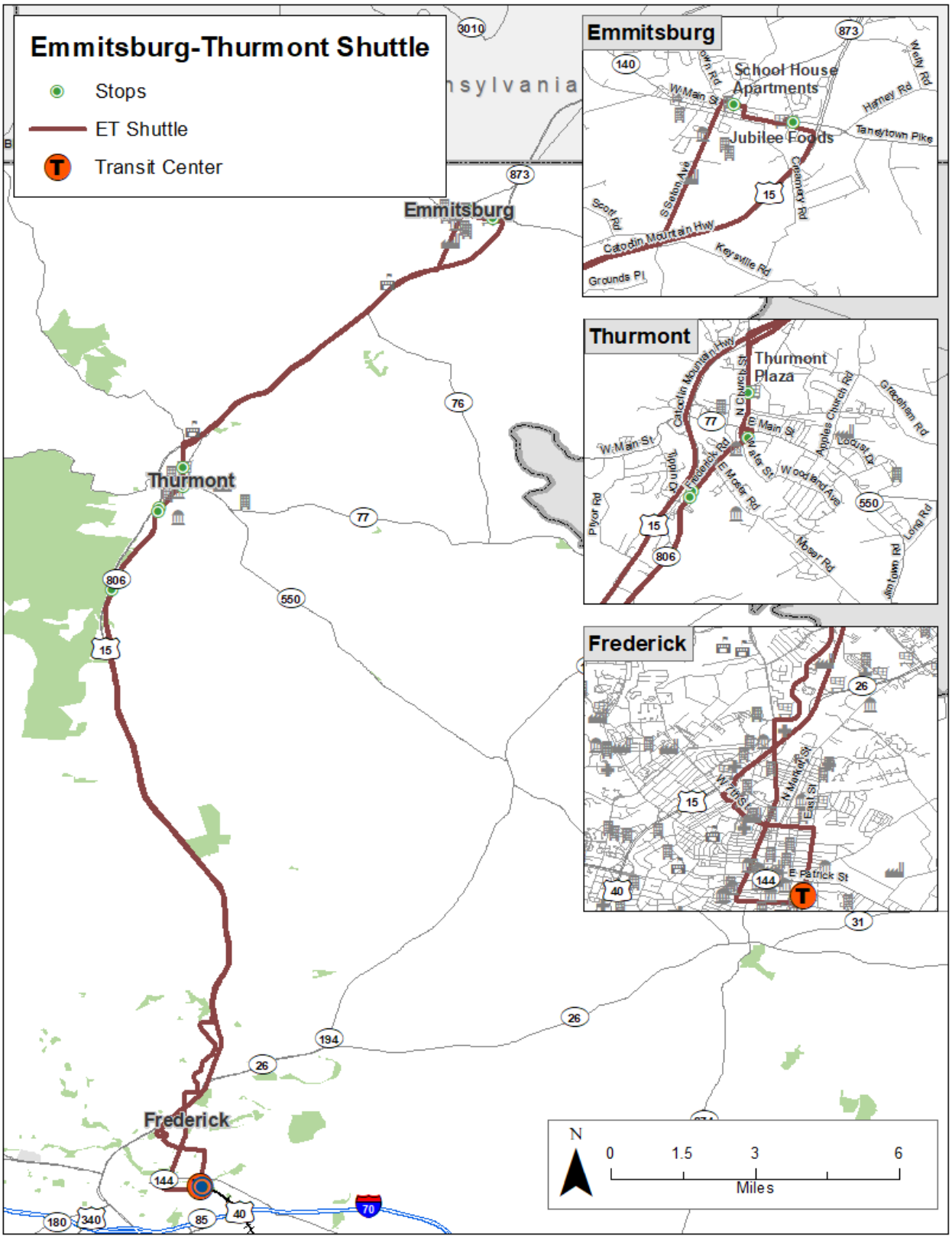
The Emmitsburg-Thurmont Shuttle connects the outlying municipalities of Emmitsburg and Thurmont to the Transit Center. The shuttle operates Monday - Friday and makes one morning round trip and one evening round trip. Buses depart the Transit Center each morning at 6:30 a.m., arriving at the Jubilee Foods in Emmitsburg at 7:11 a.m. The shuttle makes three stops in Thurmont before arriving back in Frederick at 8:00 a.m. The evening trip departs the Transit Center at 4:15 p.m., stopping in Thurmont and arriving at Jubilee Foods at 5:07 p.m. The shuttle then turns around and arrives back at the Transit Center at 5:45 p.m. Customers can call ahead to schedule a pickup in Thurmont on the southbound shuttle. Figure 1-14 profiles this route.

In FY2020, the Emmitsburg Thurmont Shuttle traveled 22,166 service miles, provided 1,991 passenger trips, and incurred an operating cost of $113,638. The only performance measure within the MDOT MTA acceptable standard was cost per mile. All other performance measures were below the acceptable standard. The COVID-19 pandemic deeply impacted this route's performance, specifically during the fourth quarter. Table 1-24 displays the shuttle's FY2020 performance data.

### Table 1-24: Emmitsburg-Thurmont Shuttle FY20 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Emmitsburg-Thurmont Shuttle | 1,991 | 22,166 | 744 | $113,638 | $3,006 | $152.74 | $5.13 | $57.08 | 2.6% | 0.09 | 2.68 |

## Figure 1-14: Emmitsburg-Thurmont Shuttle



## Meet-the-MARC Shuttles

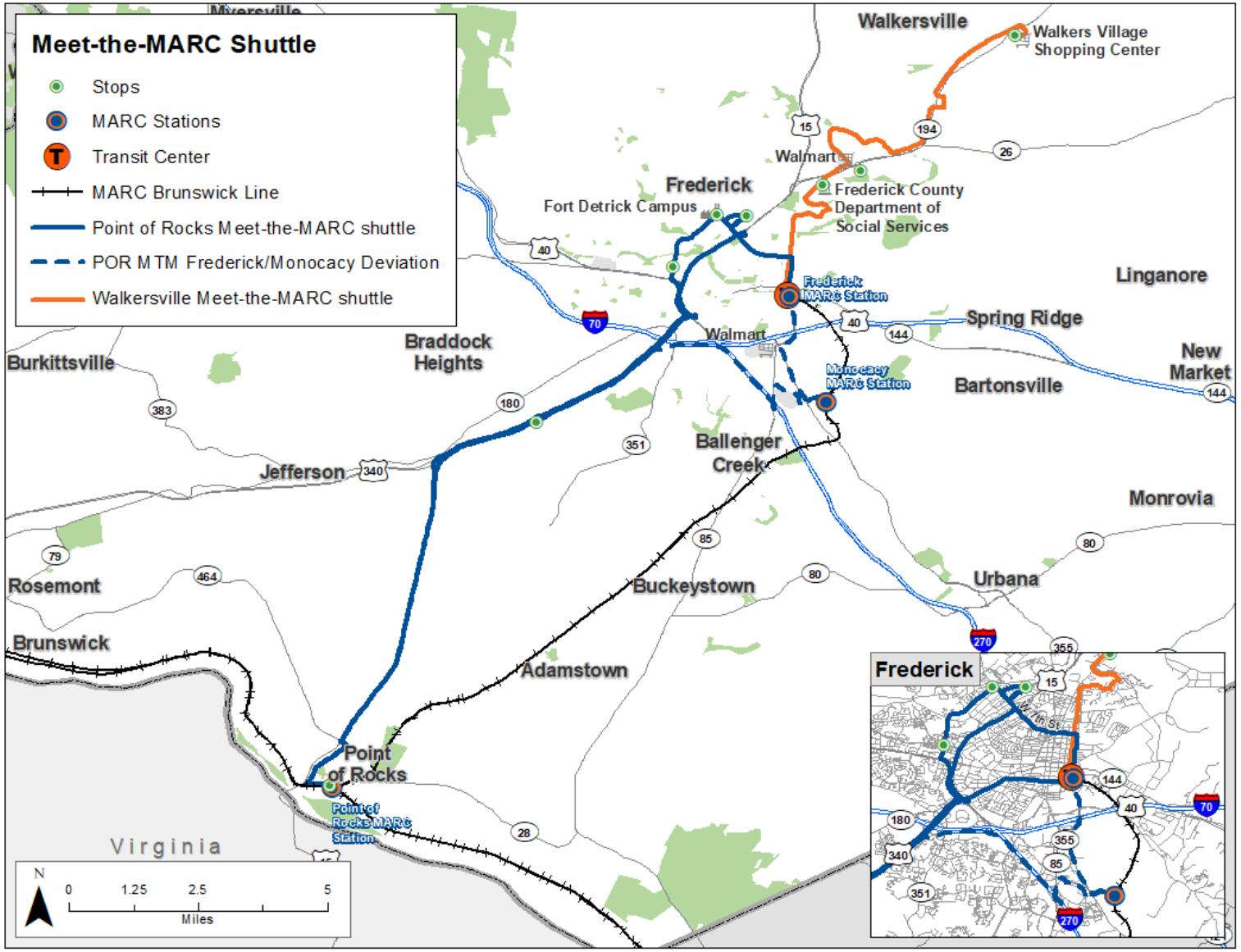
TransIT operates two shuttles, Walkersville Meet-the-MARC and Point of Rocks Meet-the-MARC, to connect Frederick County commuters to MARC commuter rail services. The Walkersville Shuttle connects Walkersville-based commuters to MARC service at the Transit Center. The Point of Rocks Shuttle provides greater trip time flexibility to commuters in Frederick by connecting to the Point of Rocks MARC Station for trips when the Brunswick Line bypasses the Frederick and Monocacy MARC stations. Route deviations are available to Mt. Zion Park & Ride and Monocacy MARC Station. The Walkersville Shuttle has three morning trips and three afternoon/evening trips, while the Point of Rocks Shuttle has three morning trips and seven afternoon trips. Exact timing of evening trips depends on when the MARC train arrives to the station. Figure 1-15 profiles both Meet-the-MARC shuttles.

In FY2020, the Walkersville Meet-the-MARC Shuttle traveled 7,599 miles, provided 1,036 passenger trips, and incurred $40,525 in operating costs. The Point of Rocks Meet-the-MARC traveled 44,827 miles, provided 1,036 passenger trips, and incurred $197,420 in operating costs. For both routes, the only performance measure within the MDOT MTA acceptable standard was cost per mile. Since these services operate in response to MARC service, the MARC service reduction caused by the COVID-19 pandemic has impacted the daily frequency of both routes.

### Table 1-25: Meet-the-MARC Shuttle FY2020 Performance Data

| Route | Passenger Trips | Service Miles | Service Hours | Operating Costs | Farebox Receipts | Cost per Hour | Cost per Mile | Cost per Trip | Farebox Recovery | Trips per Mile | Trips per Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Walkersville Shuttle | 1,036 | 7,599 | 418 | 40,525 | 1,003 | $97.05 | $5.33 | $39.12 | 2.5% | 0.14 | 2.48 |
| Point of Rocks Shuttle | 10,840 | 44,827 | 1,734 | 197,420 | 16,473 | $113.84 | $4.40 | $18.21 | 8.3% | 0.24 | 6.25 |

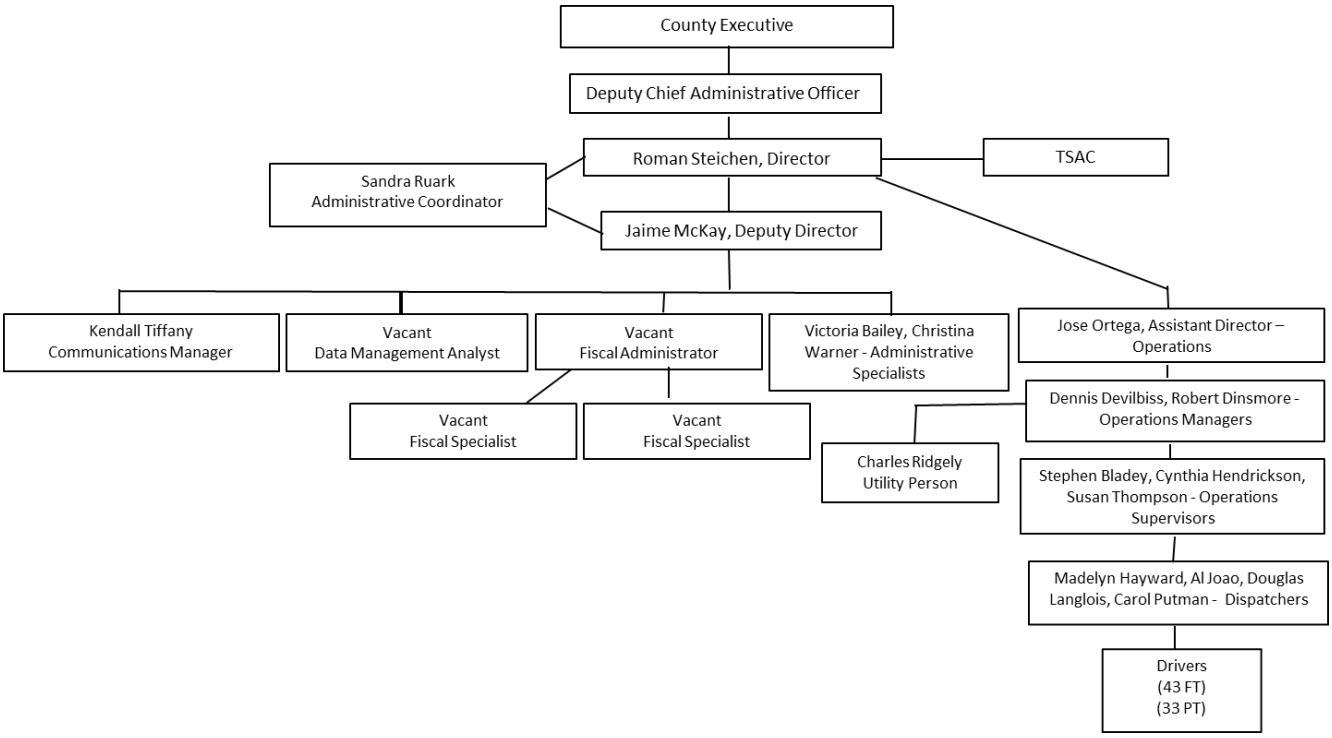
## Figure 1-15: Meet-the-MARC Shuttle Profile



## Management and Institutional Structure

TransIT is a division of Frederick County Government, and government employees perform all operation and administration. Figure 1-16 depicts TransIT's management and institutional structure as of March 2020.

### Figure 1-16: TransIT Management Structure




As a division of the County Government, TransIT receives oversight by the County Executive. Day-to-day operations are overseen by the TransIT Director, who is aided by the TransIT Coordinator and Deputy Director, a position that is currently vacant. Sub-departments of TransIT include community relations, planning, fiscal, administration, and operations. Most TransIT employees work in operations, including 47 full time drivers and 37 part time drivers.

## Existing Facilities, Fleets, and Technologies

TransIT's administrative office and maintenance facility is located on Rocky Springs Road northwest of downtown Frederick. It includes offices, a vehicle maintenance area, and parking for service vehicles, staff, and visitors. TransIT vehicles are stored inside and outside the facility. Constructed in 1998, the county completed a parking expansion projected in 2011. This project was suggested in the 2007 TDP.

TransIT's administrative facility expanded in 2022 as recommended in the 2015 TDP.

**Figure 1-17: Transit Center**


The Transit Center is located at the Frederick MARC Station on East Street. The majority of TransIT's fixed route and commuter services stop at the Transit Center. The Transit Center passenger amenities include three bus shelters and a bus loading area. The Transit Center also includes an indoor waiting area, schedule/brochure racks, and restrooms. The building is only open during rail and intercity bus operating hours, not the full span of TransIT's services. Reaching an agreement to allow TransIT riders to utilize these facilities during the evening may improve the rider experience for TransIT users. Additional transfer locations are found at Frederick Community College, Francis Scott Key Mall, and Frederick Towne Mall. Eleven of TransIT's approximately 380+ stops have shelters, all of which are within the urbanized area. Installing additional bus stop amenities may help increase rider comfort and serve as a marketing tool for TransIT. ADA considerations must be made when improving any bus stops.

Since the last TDP, TransIT now offers customers the ability to track vehicles and pay for bus fare using mobile phone applications. Vehicle tracking and real-time arrival data is available with the RouteShout 2.0 application, which can be used to track a bus and find up-to-date arrival and departure times at TransIT stops in the area. Token Transit is TransIT's mobile ticketing app and allows customers to pay for TransIT services electronically. Riders who are eligible for reduced fares have the option of registering in the app, allowing them to purchase reduced fares electronically. Customers also have the option of sending pre-purchase tickets to other riders electronically. Fare-capping has also been implemented, ensuring more equity for riders.

Fifty-seven vehicles are used to operate all TransIT services. Twenty-three vehicles are used primarily for urban fixed route service, eight vehicles are used for shuttle service, eighteen are used for TransIT Plus demand response service, and three vehicles are utility vehicles that are mostly used for public transportation. Table 1-26 provides details about the vehicles that are part of TransIT's fleet.

## Table 1-26: TransIT Vehicle Fleet

| Bus Type | Year | VIN | Vehicle No. | Max. Seats | Max. Wheelchair | Fuel | Model | Primary Assignment | Vehicle Equipment | Bike Rack | Cost | % Fed | Fund Source | Replace Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Fixed Route Services** | | | | | | | | | | | | | | |
| GILLIG | 2010 | 15GGE2713A1091800 | 37981 | 26 | 2 | D | Low Floor | Urban Service | Kneeler | Y | $319,365 | 80% | Grant | **FY22** |
| GILLIG | 2010 | 15GGE2715A1091801 | 37982 | 26 | 2 | D | Low Floor | Urban Service | Kneeler | Y | $319,365 | 80% | Grant | **FY22** |
| GILLIG | 2010 | 15GGE2717A1091802 | 37983 | 26 | 2 | D | Low Floor | Urban Service | Kneeler | Y | $319,365 | 80% | Grant | **FY23** |
| GILLIG | 2010 | 15GGE2719A1091803 | 37984 | 26 | 2 | D | Low Floor | Urban Service | Kneeler | Y | $319,365 | 80% | Grant | **FY23** |
| GILLIG | 2010 | 15GGE2710A1091804 | 37985 | 26 | 2 | D | Low Floor | Urban Service | Kneeler | Y | $319,365 | 80% | Grant | **FY23** |
| GILLIG | 2010 | 15GGE2712A1091805 | 37986 | 26 | 2 | D | Low Floor | Urban Service | Kneeler | Y | $319,365 | 80% | Grant | **FY23** |
| GILLIG | 2011 | 15GGB3013B1180891 | 38157 | 32 | 2 | H | Low Floor | Urban Service | Kneeler | Y | $539,263 | 100% | Grant | **FY24** |
| GILLIG | 2011 | 15GGB3015B1180892 | 38158 | 32 | 2 | H | Low Floor | Urban Service | Kneeler | Y | $539,263 | 100% | Grant | **FY24** |
| GILLIG | 2016 | 15GGB2217X1070795 | 38779 | 31 | 2 | E | Refurb | Urban Service | Kneeler | Y | $563,983 | 80% | Grant | **FY28** |
| GILLIG | 2016 | 15GGB2218X1070790 | 38780 | 31 | 2 | E | Refurb | Urban Service | Kneeler | Y | $563,983 | 80% | Grant | **FY28** |
| GILLIG | 2016 | 15GGB2212X1070798 | 38781 | 31 | 2 | E | Refurb | Urban Service | Kneeler | Y | $563,983 | 80% | Grant | **FY28** |
| GILLIG | 2016 | 15GGB2213X1070793 | 38782 | 31 | 2 | E | Refurb | Urban Service | Kneeler | Y | $563,983 | 80% | Grant | **FY29** |
| GILLIG | 2016 | 15GGB221XX1070791 | 38783 | 31 | 2 | E | Refurb | Urban Service | Kneeler | Y | $563,983 | 80% | Grant | **FY29** |
| EL DORADO NATIONAL | 2018 | 1N9MNAC69JC084134 | 38956 | 26 | 2 | D | EZ Rider II | Urban Service | Kneeler | Y | $392,766 | 80% | Grant | **FY31** |
| EL DORADO NATIONAL | 2018 | 1N9MNAC60JC084135 | 38957 | 26 | 2 | D | EZ Rider II | Urban Service | Kneeler | Y | $392,766 | 80% | Grant | **FY31** |
| EL DORADO NATIONAL | 2018 | 1N9MNAC62JC084136 | 38958 | 26 | 2 | D | EZ Rider II | Urban Service | Kneeler | Y | $392,766 | 80% | Grant | **FY31** |

| Bus Type | Year | VIN | Vehicle No. | Max. Seats | Max. Wheelchair | Fuel | Model | Primary Assignment | Vehicle Equipment | Bike Rack | Cost | % Fed | Fund Source | Replace Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EL DORADO NATIONAL | 2018 | 1N9MNAC64JC084137 | 39122 | 26 | 2 | D | EZ Rider II | Urban Service | Kneeler | Bike Rack | $392,766 | 80% | Grant | **FY32** |
| EL DORADO NATIONAL | 2018 | 1N9MNAC66JC084138 | 39123 | 26 | 2 | D | EZ Rider II | Urban Service | Kneeler | Bike Rack | $392,766 | 80% | Grant | **FY32** |
| EL DORADO NATIONAL | 2018 | 1N9MNAC68JC084139 | 39124 | 26 | 2 | D | EZ Rider II | Urban Service | Kneeler | Bike Rack | $392,766 | 80% | Grant | **FY32** |
| BYD | 2019 | 4B9KDLA44K2038005 | 39367 | 22 | 2 | E | K7M Low Floor | Urban Service | Kneeler | Bike Rack | $554,409 | 80% | Grant | **FY33** |
| BYD | 2020 | 4B9KDLA42L2038019 | 39364 | 22 | 2 | E | | Urban Service | Kneeler | Bike Rack | $542,410 | 80% | Grant | **FY34** |
| BYD | 2020 | 4B9KDLA49L2038020 | 39365 | 22 | 2 | E | | Urban Service | Kneeler | Bike Rack | $542,410 | 80% | Grant | **FY34** |
| BYD | 2020 | 4B9KDLA40L2038021 | 39366 | 22 | 2 | E | | Urban Service | Kneeler | Bike Rack | $542,410 | 80% | Grant | **FY34** |
| **Shuttle Services** | | | | | | | | | | | | | | |
| Small Bus | 2016 | 1FDFE4FS1GDC56660 | 38798 | 16 | 4 | G | Ford E-450 Phoenix | Shuttle | 2 | Y | $ 73,946 | 80% | Grant | **FY25** |
| Small Bus | 2016 | 1FDFE4FSOGDC51255 | 38799 | 16 | 4 | G | Ford E-450 Phoenix | Shuttle | Lift | Y | $ 73,946 | 80% | Grant | **FY25** |
| Small Bus | 2017 | 1FDFE4FS7HDC19081 | 38880 | 16 | 3 | G | Ford E-450 Phoenix | Shuttle | Lift | Y | $ 73,946 | 100% | Grant | **FY26** |
| Small Bus | 2017 | 1GB6GUBG9H1119604 | 38881 | 16 | 3 | G | Chevy Starcraft | Shuttle | Lift | Y | | | County | |
| Medium Duty Bus | 2018 | 4UZADRFCXJCW3748 | 38959 | 26 | 2 | D | Champion Defender | Shuttle | Lift | Y | $130,821 | 80% | Grant | **FY27** |
| Minibus | 2018 | 1FDFE4FS9JDC17287 | 39118 | 16 | 2 | G | Ford E-450 Phoenix | Shuttle | Lift | Y | $ 68,366 | 80% | Grant | **FY27** |
| Small Bus | 2019 | 1FDFE4FS1KDC03238 | 39280 | 14 | 2 | G | Ford E-450 Phoenix | Shuttle | Lift | Y | $ 71,087 | 80% | Grant | **FY28** |
| Small Bus | 2019 | 1FDFE4FS3KDC03239 | 39281 | 14 | 2 | G | Ford E-450 Phoenix | Shuttle | Lift | Y | $ 71,087 | 80% | Grant | **FY28** |
| **Paratransit Services** | | | | | | | | | | | | | | |
| Small Bus | 2014 | 1FDFE4FS8EDB19776 | 38624 | 12 | 4 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $ 63,829 | 90% | Grant | **FY22** |
| Small Bus | 2014 | 1FDFE4FSXEDB19777 | 38625 | 12 | 4 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $ 63,829 | 90% | Grant | **FY22** |

| Bus Type | Year | VIN | Vehicle No. | Max. Seats | Max. Wheelchair | Fuel | Model | Primary Assignment | Vehicle Equipment | Bike Rack | Cost | % Fed | Fund Source | Replace Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Small Bus | 2014 | 1FDFE4FS1EDB 19778 | 38633 | 12 | 4 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $ 63,829 | NA | County | |
| Small Bus | 2015 | 1GB6G5BL0F11 84082 | 38704 | 12 | 2 | D | Chevy Pegasus Diesel | TransIT Plus | Lift | NA | $ 75,465 | 80/10/ 10% | Grant | **FY23** |
| Minibus | 2015 | 1GB6G5BG0F12 81432 | 38784 | 12 | 2 | G | Chevy Starcraft | TransIT Plus | Lift | Y | $ 71,183 | | County | |
| Minibus | 2015 | 1GB6G5BG3F12 80355 | 38785 | 12 | 2 | G | Chevy Starcraft | TransIT Plus | Lift | Y | $71,036 | | **County** | |
| Minibus | 2017 | 1FDFE4FS1HDC 24826 | 38878 | 12 | 4 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $70,581 | 100% | Grant | **FY26** |
| Minibus | 2017 | 1FDFE4FS3HDC 24827 | 38879 | 12 | 4 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $70,581 | 1 | Grant | **FY26** |
| Minibus | 2017 | 1GB6GUBG2H1 119962 | 38882 | 16 | 3 | G | Chevy Starcraft | TransIT Plus | Lift | Y | | | County | |
| Minibus | 2017 | 1GB6GUBG8H1 120534 | 38883 | 16 | 3 | G | Chevy Starcraft | TransIT Plus | Lift | Y | | | County | |
| Minibus | 2018 | 1FDFE4FS0JDC1 7288 | 39119 | 16 | 2 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $ 68,366 | 80% | Grant | **FY27** |
| Minibus | 2018 | 1FDFE4FS2JDC1 7289 | 39120 | 16 | 2 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $ 68,366 | 80% | Grant | **FY27** |
| Minibus | 2018 | 1FDFE4FS9JDC1 7290 | 39121 | 16 | 2 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $ 68,366 | 80% | Grant | **FY27** |
| Minivan | 2019 | 2C4RDGBG6KR 573654 | 39267 | 5 | 0 | G | Grand Caravan | TransIT Plus | No lift | N | $ 22,811 | NA | County | |
| Small Bus | 2019 | 1FDFE4FSXKDC 03240 | 39282 | 14 | 2 | G | Ford E-450 Phoenix | TransIT Plus | Lift | Y | $ 78,018 | 80% | Grant | **FY28** |
| Minivan | 2019 | 2C4RDGBG9KR 778062 | 39416 | 5 | 0 | G | Grand Caravan | TransIT Plus | No lift | N | $ 27,591 | 0% | County | **FY26** |
| Minivan | 2019 | 2C4RDGBG0KR 779780 | 39418 | 5 | 0 | G | Grand Caravan | TransIT Plus | No lift | N | $ 27,591 | 0% | County | **FY26** |
| Minivan | 2019 | 2C4RDGBG8KR 777761 | 39422 | 5 | 0 | G | Grand Caravan | TransIT Plus | No lift | N | $ 27,591 | NA | County | |
| **Utility Vehicles** | | | | | | | | | | | | | | |
| Jeep | 2007 | 1J4GL48K67W6 95833 | 37414 | 5 | 0 | G | Liberty | Utility | No lift | N | | | County | |
| Minivan | 2019 | 2C4RDGBG7KR 778061 | 39415 | 5 | 0 | G | Grand Caravan | Utility | No lift | N | $ 27,591 | 0 | County | **FY26** |
| Minivan | 2019 | 2C4RDGBG0KR 778063 | 39417 | 5 | 0 | G | Grand Caravan | Utility | No lift | N | $ 27,591 | 0 | County | **FY26** |

## Review of Funding Sources

MDOT MTA's Office of Local Transit Support (OLTS) administers federal and state funding for the Maryland LOTS. Frederick County applied for MDOT MTA administered funds through the Annual Transportation Plan (ATP) application for funding through the following programs:

- FTA Section 5303/5304 – Federal technical assistance fund.
- FTA Section 5311 – Federal and state funds allocated for public transportation operating in rural areas. Capital and operating funds are available through this program.
- FTA Section 5307 – Federal and state funds allocated for public transportation operating in urbanized areas. Capital and some operating funds are available through this program.
- Americans with Disabilities Act (ADA) – State funds to help subsidize ADA complementary paratransit.
- Statewide Special Transportation Assistance Program (SSTAP) - State funds for transportation of older adults and people with disabilities.

TransIT's FY2020 grant application requested $5,542,671 in operating funds for the fiscal year. $3,485,753 (62.9%) of the FY2020 operating budget consisted of either state or federal funding sources. An additional $7,280,997 was requested for capital maintenance and improvements. Table 1-27 details TransIT's FY2020 operating and capital budget, while Table 1-28 shows the actual FY2020 operating costs. The lack of fare revenue due to lower ridership and fare free service during Quarter 4 was made available by these different places and people and things.

### Table 1-27: FY2020 TransIT Operating and Capital Budget

| Source | Section 5307 | Section 5311 Operating | Section 5311 Capital | ADA | SSTAP |
|---|---|---|---|---|---|
| Federal | $1,478,227 | $230,094 | $5,824,798 | - | - |
| State | $492,742 | $76,698 | $728,100 | $1,048,832 | $159,159 |
| Local | $1,248,416 | $155,146 | $728,100 | $116,537 | $536,819 |

### Table 1-28: FY2020 TransIT Operating Actuals

| Source | Total Cost | Federal/State | Local | Fares |
|---|---|---|---|---|
| Section 5307 Fixed Route | $2,415,868 | $1,650,136 | $562,303 | $203,429 |
| Section 5311 Fixed Route | $492,978 | $346,254 | $120,259 | $26,465 |
| ADA | $2,369,890 | $1,637,770 | $559,439 | $172,681 |
| SSTAP/Demand Response | $1,427,494 | $421,783 | $623,121 | $382,590 |
| Taxi Access Program | $167,876 | $108,842 | $38,961 | $20,073 |

## Fare Structure

Prior to the fare free policy instituted during the COVID-19 pandemic, the base fare for a one-way TransIT trip was $1.50. Deviations of up to ¾ mile from the route cost an additional $2.00. Customers could buy unlimited day passes for $4, 10-trip booklets for $13, 20-trip booklets for $25, and monthly passes for $50. One-day passes are only offered through the Token Transit mobile ticketing application.

Children under 12 and students with valid school ID could purchase 10 trip tickets and monthly passes for reduced rates, while children under 3 feet tall rode free. The Summer Freedom Pass is offered for $15 and provides unlimited TransIT trips for students between June 1 and August 31.

Reduced fares are offered for people with disabilities and people ages 60 and older with valid ID; ID must be presented when boarding. For these groups, the base fare is reduced to $0.75, 10 trip tickets are $7.00, 21 trip tickets are $13.00, and a monthly pass is $30.00

### Table 1-29: TransIT Fare Structure

| Fare Type | Rate |
|---|---|
| **General Public** | |
| One-way base fare | $1.50 |
| One-day pass (mobile app only) | $4.00 |
| 10-trip ticket | $13.00 |
| 20-trip ticket | $25.00 |
| Monthly Pass | $50.00 |
| **Youth/Students with ID** | |
| One-way base fare | $1.50 |
| 10-trip ticket | $10.00 |
| Monthly Pass | $30.00 |
| Summer Freedom Pass | $15.00 |
| **Reduced Fare: People with Disabilities and People over Age 60** | |
| One-way base fare | $0.75 |
| 10-trip ticket | $7.00 |
| 21-trip ticket | $13.00 |
| Monthly Pass | $30.00 |

## Pedestrian/Bicycle Access

TransIT operates in well-connected areas with sufficient infrastructure, making service more accessible to pedestrians and cyclists. In addition, all TransIT fixed-route vehicles have bike racks on the front of the vehicle.

# Other Area Transportation Providers

## MDOT MTA Commuter Bus

MDOT MTA operates three commuter routes that stop in Frederick County: Route 204, Route 505, and Route 515. Route 204 operates between the Monocacy MARC Station and travels south toward College Park making an additional stop at the Urbana Park and Ride.

Route 204 stops at the FDA building in White Oak, National Archives, University of Maryland, and College Park Metro Station. There are five southbound trips on 25-minute headways that depart Monocacy between 5:18 a.m. and 6:58 a.m. There are five northbound trips on 25-minute headways departing from the College Park Metro Station between 2:47 p.m. and 4:57 p.m.

Route 505 operates between the Hagerstown MVA and Shady Grove Metro Station, stopping at Myersville Park and Ride. There are seven southbound trips stopping at Myersville Park and Ride every 25 minutes between 4:21 a.m. and 7:16 a.m. Ten northbound trips depart from Shady Grove Metro Station; one trip departs at 1:30 p.m., while the other nine trips depart Shady Grove Metro every 25 minutes between 3:40 p.m. and 7:10 p.m.

Route 515 operates between the North Frederick Park & Ride and Shady Grove Metro Station, making additional stops in Frederick County at the Frederick MARC Station, Monocacy MARC Station, and Urbana Park and Ride. Route 515 makes thirteen southbound trips, seven beginning at the North Frederick Park & Ride and six beginning at the Frederick MARC Station. The southbound trips begin service at the North Frederick Park & Ride at 3:55 a.m. The final southbound pick up in Frederick County is at 7:47 a.m. in Urbana. There are fifteen northbound trips in the afternoon, with the first departure from Shady Grove Metro at 1:25 p.m. and the final stop at the Frederick MARC Station at 7:57 p.m.

## MARC Commuter Rail

MARC Commuter Rail's Brunswick Line provides service between Harpers Ferry, WV and Washington, D.C., making four stops in Frederick County. MARC service is available at the Brunswick MARC Station, Point of Rocks MARC Station, Frederick Station, and Monocacy Station. Due to the COVID-19 pandemic, MARC trains are currently operating on a reduced "R" schedule. Under this schedule, Brunswick and Point of Rocks are served by three eastbound morning trips and three westbound morning trips. downtown Frederick is served by one eastbound morning trip, though commuters have the option to take TransIT's Point of Rocks Meet-the-MARC shuttle for an additional trip. downtown Frederick is served by one westbound afternoon trip, and the Meet-the-MARC shuttle provides a ride back to Frederick from Point of Rocks. Monocacy is served by one eastbound morning trip and one westbound afternoon trip.

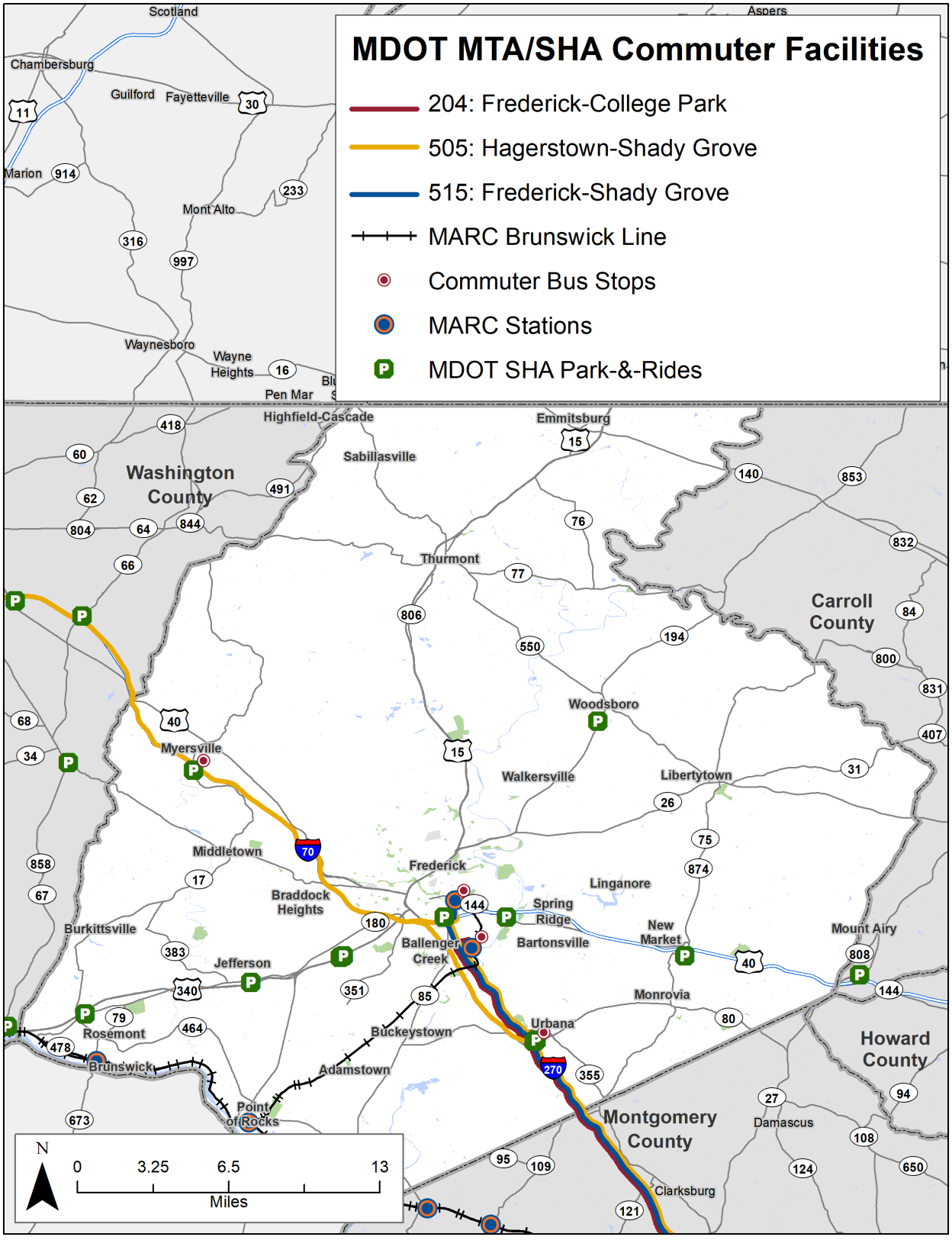
## Park & Ride Lots

There are fourteen park and ride lots in Frederick County, providing approximately 1,680 parking spaces for carpools, vanpools, and commuter bus riders. The North Frederick Park and Ride is the county's newest, and largest, commuter lot. Its strategic location between downtown Frederick and Walkersville suburb makes it a primary candidate for increased transit service. Currently, the MDOT MTA 505 commuter route serves the lot. The most heavily utilized park and ride lots are the Urbana South (91% utilization), New Design Road (97%), and US 340 @ Mt Zion Road West (95%) and East (98%). Frederick County's park and ride lots are presented in Table 1-30; and the commuter services and facilities in Frederick County are shown in Figure 1-18.

### Table 1-30: Frederick County Commuter Lots

| Frederick County Park & Ride Lots | | | |
|---|---|---|---|
| **Name** | **Spaces** | **Average Daily Occupancy** | **Transit Connections** |
| Myersville | 170 | 39% | MDOT MTA 505 |
| Boonsboro | 64 | 23% | N/A |
| Rosemont | 44 | 82% | N/A |
| US 340 @ Lander Road | 80 | 50% | Brunswick Shuttle |
| US 340 @ Mt. Zion (West) | 42 | 95% | Meet-the-MARC |
| US 340 @ Mt. Zion (East) | 47 | 98% | Meet-the-MARC |
| New Design Road | 112 | 97% | N/A |
| North Frederick | 390 | N/A | N/A |
| I-70 @ MD 144 | 125 | 16% | MDOT MTA 505 |
| Urbana South Lot | 228 | 91% | MDOT MTA 204, MDOT MTA 505 |
| Urbana North Lot | 280 | 35% | MDOT MTA 204, MDOT MTA 505 |
| New Market | 54 | 72% | N/A |
| Woodsboro | 20 | N/A | N/A |

## Figure 1-18: Commuter Services and Facilities in Frederick County



# Private and Non-Profit Transportation Providers

## Taxi Services

Taxi service is available in Frederick County and is most widely available in the City of Frederick. The taxi companies include:

- Frederick City Cab
- Gordon's Transportation
- Henry's Airport Service
- Taxi Fiesta
- Agniman Transportation
- Bowie Taxi
- Independent Taxi
- Jose Taxi Service

The TransIT Taxi Access Program is available to eligible riders and offsets cost prohibitive taxi fares for county residents.

## Non-Profit Organizations

Frederick County residents may also be eligible to receive transportation from one of the area's private non-profit human service agencies. Most of these organizations offer transportation to clients who participate in day programs or need transportation to employment opportunities. Non-profit human service transportation providers serving the region are listed below. Agencies that receive FTA Section 5310 funding are highlighted in **orange.**

- Carroll County Veteran's Transportation Shuttle
- **Daybreak Adult Day Services**
- Frederick Community Action Agency
- Community Living
- Partners in Care (PIC)
- Family Partnership
- Goodwill Industries of the Monocacy Valley
- Human Development Council, Frederick
- Scott Key Center
- Senior Service Division, Frederick County
- **Star Community, Inc**
- The Arc of Frederick County
- **Unified Community Connections, Inc.**
- **Way Station**

# Ride-Hailing (Uber/Lyft)

Uber and Lyft are available in Frederick, with most drivers concentrated in the county's most densely populated areas. Uber and Lyft services are available anytime, anywhere, but availability and wait times can vary greatly based on the number of drivers on the road at a given time.

# Intercity Bus

## Greyhound

Pre pandemic, Greyhound's Washington-Cleveland-Detroit-Chicago route offered three eastbound trips and two westbound trips stopping in Frederick. One trip ends in Cleveland, another in Chicago, and another in Detroit. In February 2022 this was down to one eastbound stop in Frederick.

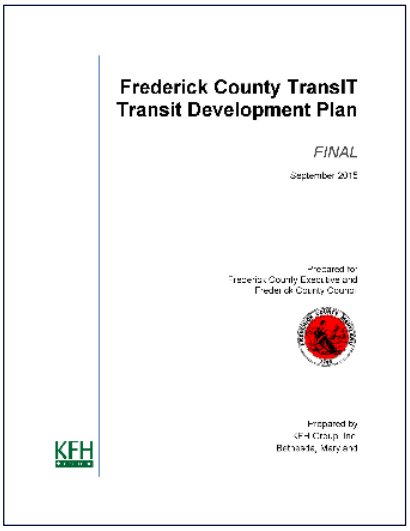
## BayRunner

The BayRunner Shuttle operates intercity bus service that connects Frederick to BWI International Airport and the Baltimore Greyhound Bus terminal. The BayRunner shuttle also stops at the Frederick Airport.

Currently Bay Runner offers five departures from Frederick to Baltimore (Greyhound and BWI) daily (except two do not operate on Saturdays); and three westbound from Baltimore, of which one is daily and two are daily except Saturday. West of Frederick there are the two 5311(f) routes which operate daily (only one operates on Saturday) that terminate in Grantsville. The Bay Runner services are also Amtrak Thruway service, which are interlined with Greyhound as well and appear in the Greyhound ticketing system.

# Previous Plans and Studies

## 2016 Frederick County TransIT Transit Development Plan




The previous Frederick County TDP, finalized in 2016, has guided public transportation planning in Frederick for the past five years, providing alternatives to help improve TransIT's efficiency and effectiveness. Chapter 5 of this plan categorizes each alternative as either short-term, medium-term, or long-term, and provides cost projections for each improvement. Short-term improvements included:

- Systemwide route adjustments to Routes 10, 20, 60, 61, and 65
- Strengthen TransIT's role in city and county planning
- Improved deviation policies and procedures
- Extended transit center access and hours of operation
- Coordination with the proposed Golden Mile Circulator
- East County Shuttle expansion
- Expanded hours/capacity on TransIT-Plus
- Route 85 Shuttle redesign and expansion

The previous TDP also outlines the following mid-term improvements:

- Additional MDOT MTA commuter bus service and connections
- Further route network redesign, including revised alignments and new headways for all routes
- Increased peak service days to include three holidays
- Urbana and Middletown shuttle routes

The following long-term improvements were included in the TDP:

- 30-minute headways on all Connector routes
- Implement peak hour service with 15-minute headways
- Implement Sunday service
- Extend evening hours
- Expanded service area

Some of the alternatives outlined in the plan have not yet been implemented and may form a part of this TDP's Transit Plan in the final stages of this planning process.

## 2015 Town of Emmitsburg Comprehensive Plan

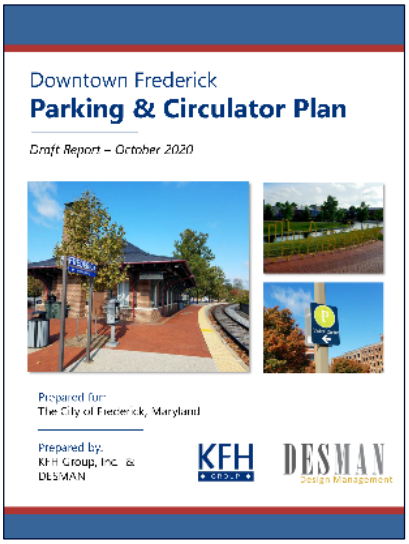
The Town of Emmitsburg updated its Comprehensive Plan in 2015 and includes a chapter outlining the transportation planning goals for Emmitsburg over a ten-year planning horizon. At the end of this chapter, six future transportation goals are proposed, two that involve transit and mobility. These goals included:

- Plan for safe bicycle mobility within Emmitsburg and plan with other entities to create bicycle connections throughout Frederick County and neighboring jurisdictions.
- Study potential bike routes along existing streets within the town to determine the feasibility of creating a bike-friendly system.

Expanding the bicycle network would expand mobility in Emmitsburg, potentially providing greater access to TransIT service.

## 2021 City of Frederick Downtown Parking and Circulator Study

The City of Frederick recently completed a Parking and Circulator Study to plan for maintaining appropriate parking capacity as some of the downtown garages begin to age. This plan took a two-pronged approach to solving parking capacity, examining the feasibility of constructing and/or renovating parking garages downtown and exploring possible circulator alignments to alleviate future capacity issues.




The circulator component of the study included several different options for a parking circulator, describing both potential alignments and operations. Route alignments were separated into two broader service concepts, a short, high-frequency parking shuttle and a longer circulator throughout the city. The different alignment options for each concept are briefly described below:

- East-West Parking Shuttle concept:
  - East Street - Patrick Street - Bentz Street - All Saints Street: a short route allowing for high frequency service
  - East Street - Patrick Street - Baker Park - Church Street - East Street: shuttle travels from a remote lot at the Brickworks site and connects to all 5 downtown parking garages

- City of Frederick Circulator option:
  - 2 different loops serving Hood College and Frederick Health from the proposed remote parking site at South Street and East Street
  - 3 downtown loops along N Market Street and East Street, one turning at 5th Street, another at 7th Street, and the longest one extending all the way up N Market Street to where it intersects East Street.

## 2013 Golden Mile Small Area Plan

The Golden Mile Small Area Plan was completed in 2013 after the Golden Mile area was identified for additional transit planning in the City of Frederick's 2010 Comprehensive Plan. The Golden Mile of Frederick is located on the commercial corridor of Route 40 in the western portion of the city. This area has mostly been developed in the strip mall style, but the Golden Mile Small Area Plan outlines ways to improve walkability, accessibility, sustainability, and mobility in the area. Several of the projects recommended at the end of the plan involve an expansion of transit services, as well as the introduction of new transit modes to the region. Goal 3 of the plan is to "improve and expand circulation on the corridor by providing more efficient and comfortable connections between destinations for vehicles, pedestrians, bicyclists, and users of public transportation." Some policy actions that involved transit were considered to help achieve this goal, including:

- Establishing Bus Rapid Transit (BRT) or light rail service to connect the Golden Mile to downtown Frederick and other regional transit nodes.
- Working with TransIT to increase destinations and frequency of bus stops along the corridor.
- Improve bus stops to provide more signage, benches, and shelters.
- Incorporate transit in all future redevelopment proposals.

## 2017 East Street Corridor Small Area Plan

The East Street Corridor Small Area Plan was completed after East Frederick was identified for a more focused planning effort. Since East Frederick is a rather large area, it was split into several smaller sub-areas, and the East Street corridor was prioritized. This plan was drafted with Frederick's Complete Streets policy and Transit Friendly Design Standards in mind, and each of the plan's final recommendations stress the importance of development that enhances alternative mobility, including walking, biking, and riding transit. The implementation plan organizes projects by planning goals and policies. The third goal of the plan was to "transform East Street to a complete street for all users to influence business draw" and includes several transit-based implementation activities, including:

- Route development projects within the East Street Corridor to TransIT of Frederick County for review.

- Work with TransIT to identify areas where bus ridership is heaviest to determine where shelters should be located.

## MDOT MTA Traffic Relief Plan

Increased traffic congestion has been an unfortunate by-product of the I-270 corridor's recent population boom. The Office of Public Private Partnerships manages the I-495 & I-270 P3 Program, theproject aims to create managed lanes along both I-270 and I-495, funded by a public-private

partnership. The Hogan Administration has promised that ten percent of the funds generated by the managed lanes will be used for transit, potentially increasing rail frequency and commuter bus service along the I-270 corridor. Currently, the project is in the pre-National Environmental Policy Act (NEPA) stage for the portion of I-270 between I-370 in Gaithersburg and Frederick. This project is still in development, but increased road capacity in Frederick County will likely lead to more commercial and residential development and more transportation options.

## 2010 Walkersville Transit Plan

The community of Walkersville is currently served by TransIT's Route 65 and the North Frederick Shuttle, and it completed its most recent Comprehensive Plan in 2010. Walkersville is currently updating their Comprehensive Plan for 2020 but has not published a final version. While most of the transportation related goals involve improving road infrastructure, Walkersville considers the TransIT services it receives an important link for transit dependent residents and workers.

## 2019 Livable Frederick Master Plan

The Livable Frederick Master Plan, adopted in September 2019, is a large scale, long-term plan for Frederick County's growth and development until 2040. The plan takes a holistic approach to improving Frederick County for residents, workers, and visitors, and encompasses planning for Frederick County's community, health, economy, and environment. Public transit is emphasized throughout the plan as a manner of improving the transportation infrastructure, public health, workforce development, and environmental stewardship. The plan focuses specifically on creating a more multimodal community, where projects to improve conditions for pedestrians, cyclists, and transit users are undertaken to decrease the county's dependency on automobiles. Multimodal development in mixed use areas could relieve congestion, spur economic development, and provide housing to satiate increased demand. The plan extensively outlines how implementing more transit along major multimodal corridors and developing a hub and spoke system between Frederick and outlying areas of the county can allow Frederick to grow. The plan identified the following "growth areas" where increased transit service should be explored:

- Adamstown
- Ballenger Creek
- Brunswick
- Buckeystown
- Eastalco region along the site of the former Alcoa plant
- Emmitsburg
- Frederick
- I-270 corridor
- Libertytown
- Middletown
- Mount Airy
- Myersville
- New Market
- Point of Rocks
- Thurmont
- Urbana
- Walkersville
- Woodsboro

## 2018 Frederick County Bikeways & Trails Plan

Frederick County's Bikeways & Trails Plan (https://www.frederickcountymd.gov/DocumentCenter/View/322377/Bikeways-and-Trail-Plans-2018_FINAL-PLAN_compressed) provided analysis of different trail and bikeway options to provide safer pathways for county pedestrians and cyclists. The pathways analyzed in this plan were those that connected Frederick County's "Main Street" communities (Brunswick, Frederick, Middletown, Thurmont). Each of the eight trail segments were prioritized based on multiple factors, including access to public transit. The trail segment that received the highest overall priority score was the New Design Road Sidepath connecting Frederick to Brunswick, which received a score of 72 out of 100. However, this trail only received one out of a possible three points for transit access. The following two segments received the highest transit access score of any route (2 points):

- MD 180/17 Bikeway: Frederick to Brunswick
- MD 17 Bikeway: Brunswick to Middletown

These trails received the two lowest overall priority scores despite having more access to transit. This is likely due to the lower population density in Brunswick and Middletown.

## 2020 Frederick County Bus Stop Assessment

In May 2020, funded by an MDOT MTA Statewide Transit Innovation Grant (STIG), Frederick County assessed each of its 380+ bus stops for ADA compliance and amenities to determine where improvements were most needed. All bus stops were evaluated for the presence of ten bus stop attributes, listed below:

- Accessible landing
- Drainage hazard
- Lighting
- Marked crosswalk
- Opposing useable ramp
- Sidewalk connecting
- Sidewalk damage
- Sidewalk existing
- Sidewalk width
- Usable ramp

Additional reference data was provided for each stop to prioritize stops for repairs or improvements. This data included boardings, nearby trip generators, jurisdiction, and the presence of a shelter. These factors were used to create a prioritization score for each stop. Stops that had high average daily boardings and/or were near several trip generators received higher prioritization scores. The five highest scoring bus stops are below:

1. Frederick Shopping Center North
2. Church Street @ East Street
3. Broadway Street @ South Street
4. Center Street @ Scholl's Lane
5. South Market Street @ Stadium Drive

# Frederick County 2020 Transit Development Plan
# Chapter 2: Demographic and Needs Assessment

## Introduction

An important step of the TDP process is assessing a study area's current and future transit needs. A thorough needs assessment warrants a full demographic analysis to document recent population trends, updated population projections, transit dependent populations and Title VI considerations to help guide public transit decision-making over the five-year planning horizon. An assessment of current land use assessment will be performed. This land use assessment will identify trip generators, new land uses, commuting patterns, and journey to work patterns to determine existing transportation trends and further identify where there are gaps in transit service. The outcomes of a survey completed by TransIT in late 2019 and early 2020 is also included in the needs assessment. The results of the following needs assessment will be considered later in the TDP process to create alternatives.

## Demographic Analysis

### Population Trends

Since 1990, Frederick County has experienced immense growth as major employment centers and residential areas have expanded along the I-270 corridor. Between 1990 and 2018, Frederick County grew by over 65 percent, increasing in population from 150,208 in 1990 to 248,472 in 2018. The Frederick MARC Station and location at the I-270 and I-70 interchange has made it an attractive location for employers and commuters alike, triggering growth in both the city center and its suburbs of Ballenger Creek. As Frederick has grown as an employment center, so too have the populations of Frederick County's outlying towns, including Middletown, Thurmont, and Walkersville. Places that have seen their population more than double since 1990 are Ballenger Creek (258% growth), Middletown (148% growth), and Mount Airy (152% growth). It should be noted that since it has an inter-jurisdictional census boundary, not all Mount Airy residents live in Frederick County. Table 2-1 displays the change in population throughout Frederick County since 1990.

## Table 2-1: Historical Population Trends

| Frederick County Population Growth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Place | 1990 | | 2000 | | 2010 | | 2018 | | 1990-2018 |
| | Total | % Growth | Total | % Growth | Total | % Growth | Total | % Growth | % Growth |
| Frederick County | 150,208 | - | 195,277 | 30.0% | 233,385 | 19.5% | 248,472 | 6.5% | 65.4% |
| City of Frederick | 40,148 | - | 52,767 | 31.4% | 65,239 | 23.6% | 70,166 | 7.6% | 74.8% |
| Emmitsburg | 1,688 | - | 2,290 | 35.7% | 2,814 | 22.9% | 3,058 | 8.7% | 81.2% |
| Thurmont | 3,398 | - | 5,588 | 64.4% | 6,170 | 10.4% | 6,563 | 6.4% | 93.1% |
| Ballenger Creek | 5,546 | - | 13,518 | 143.7% | 18,274 | 35.2% | 19,889 | 8.8% | 258.6% |
| Braddock Heights | 4,778 | - | 4,627 | -3.2% | 2,608 | -43.6% | 3,258 | 24.9% | -31.8% |
| Mount Airy | 3,730 | - | 6,425 | 72.3% | 9,288 | 44.6% | 9,395 | 1.2% | 151.9% |
| Middletown | 1,834 | - | 2,668 | 45.5% | 4,136 | 55.0% | 4,553 | 10.1% | 148.3% |
| Brunswick | 5,117 | - | 4,894 | -4.4% | 5,870 | 19.9% | 6,193 | 5.5% | 21.0% |
| Walkersville | 4,145 | - | 5,192 | 25.3% | 5,800 | 11.7% | 6,095 | 5.1% | 47.0% |
| Urbana | - | - | 8,553 | - | 9,175 | 7.3% | 11,788 | 28.5% | 37.8% |

The Maryland Department of Planning's 2015 population projections predict population growth in each of Maryland's 23 counties until 2040. These projections show that while Frederick County will continue to grow, it will be at a slower rate than between 1990 and 2018. While the overall population growth rate is slowing, the projected growth rate for the over 65 population is expected to increase. Projections currently show a 51 percent increase in people over the age of 65 between 2020 and 2030, with this population group expected to make up over 21 percent of the county population in 2030. As this population with historically higher transit dependency grows, steps should be made to address the increased demand for transit services, especially demand response and paratransit. Table 2-2 displays the Maryland Department of Planning's population projections from 2020-2040.

## Table 2-2: Population Projections in Frederick County

| Frederick County Population Projections 2020-2040 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2020 | | | 2030 | | | 2040 | | |
| | Total | % of Pop. | % Growth | Total | % of Pop. | % Growth | Total | % of Pop. | % Growth |
| Total Pop. | 265,650 | - | - | 304,050 | - | 14.5% | 334,100 | - | 9.9% |
| Pop. Under Age 65 | 223,310 | 84.1% | - | 239,940 | 78.9% | 7.4% | 255,380 | 76.4% | 6.4% |
| Pop. over Age 65 | 42,340 | 15.9% | - | 64,110 | 21.1% | 51.4% | 74,720 | 22.4% | 16.5% |

## Population Density

Population density is one of the most useful indicators of whether an area can support transit services. High density areas generally have higher populations of transit dependent individuals, more pedestrian infrastructure for better access, and frequent trip generators. Areas with over 2,000 people per square mile are better suited to supporting fixed-route service, though lower density areas with high percentages of transit dependent populations could support a fixed route service. In Frederick County, the highest density block groups are found in the City of Frederick and its suburbs of Ballenger Creek and Walkersville. Other areas with high population densities are Brunswick, Emmitsburg, Middletown, and Thurmont. Figure 2-1 displays the population density by block group in Frederick County.

# Transit Dependent Populations

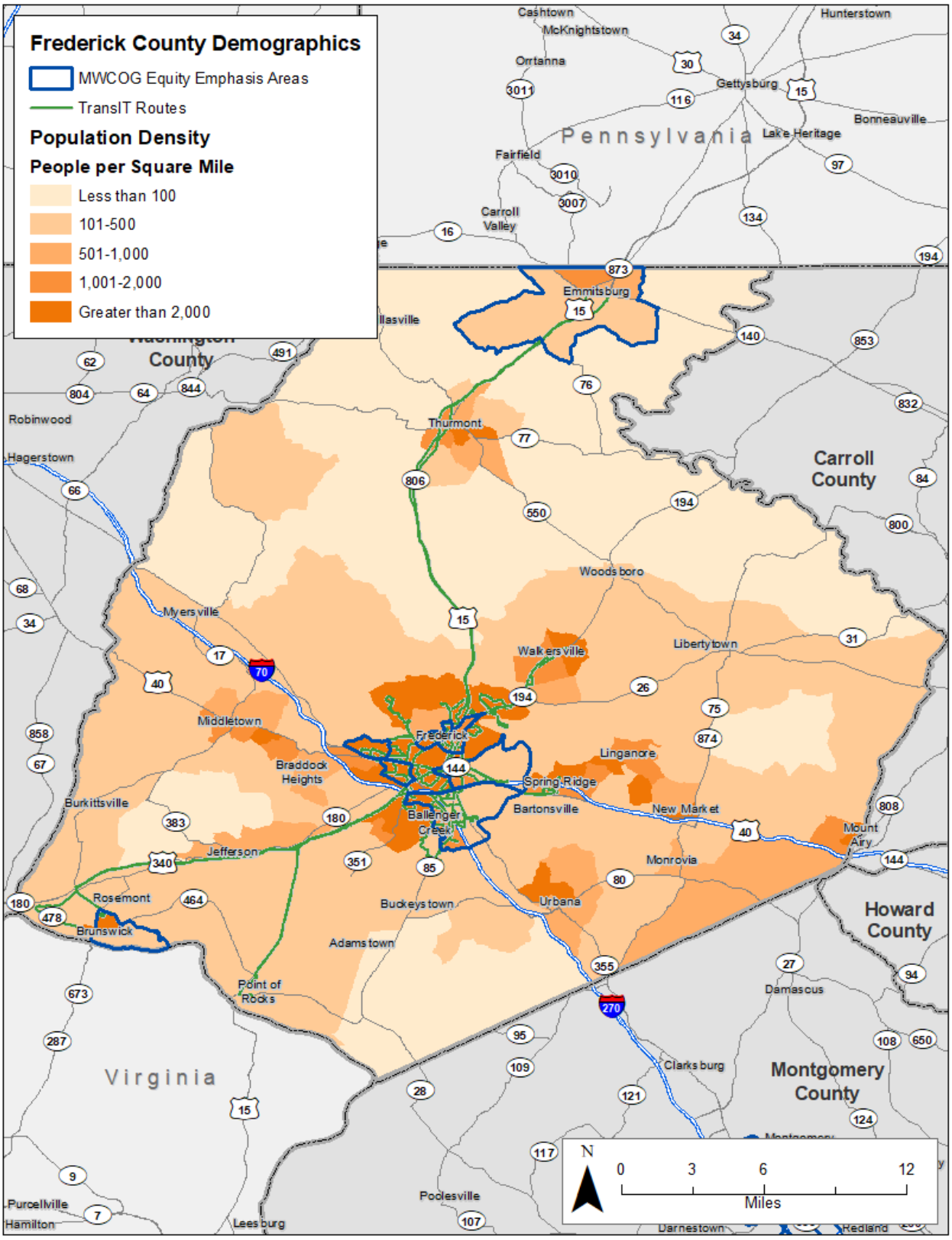
Transit dependent populations are the demographic groups that are more likely to rely on public transit for their daily mobility. For this analysis, transit dependent populations are defined as:

- Individuals living below the federal poverty line
- Households without access to a private vehicle
- People with disabilities
- Older adults (ages 65 and older)
- Younger individuals (between ages 10 and 17)

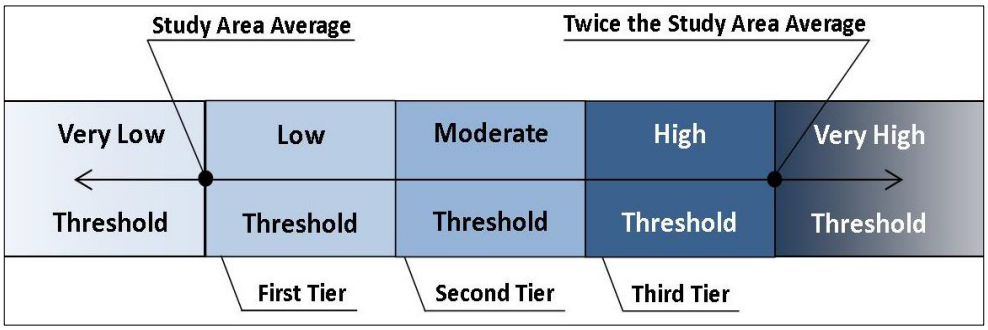
Using the U.S Census Bureau American Community Survey 2014-2018 5-year Estimates (ACS) for each of Frederick County's Census Block Groups, the percentage of each transit dependent population was calculated and assigned a score relative to the average percent in the study area's block groups. The amount of transit dependent populations in each group were combined and synthesized into two measures of transit dependence, the transit dependence index (TDI) and the transit dependence index percentage (TDIP). The Transit Dependent Index combines scores for each of the transit dependent populations and multiplies them by a population density factor. This measure shows the amount of transit dependent individuals in an area. As illustrated in Figure 2-2, the relative classification system utilizes averages in ranking populations. For example, areas with less than the average transit dependent population fall into the "very low" classification, while areas that are more than twice the average will be classified as "very high."

The TDIP is similar to the TDI but does not use the population density multiplier. Instead, the TDIP evaluates the total amount of transit dependent individuals in each block group, calculates the percentage of dependent individuals, and gives a score based on how that percentage relates to the study area average. The TDIP is useful in showing the block groups with a high degree of transit dependence, rather than a high number of transit dependent populations.

## Figure 2-1: Population Density by Census Block Group



### Figure 2-2: Transit Dependent Populations Classification System




Areas with a high TDI are concentrated within Frederick County's towns and cities. Within the City of Frederick, the most transit dependent populations are found in the downtown core as well as along US 40 to the west and US 15 to the east. Brunswick, Thurmont, Walkersville, and Spring Ridge are other areas with high or very high transit needs. Figure 2-3 maps TDI by Census Block Group.

Areas with a very high TDIP score are found in Adamstown, Bartonsville and north Frederick. Other block groups with high percentages of transit dependent individuals are in Emmitsburg, Frederick, and Thurmont. Figure 2-4 maps TDIP by Census Block Group.

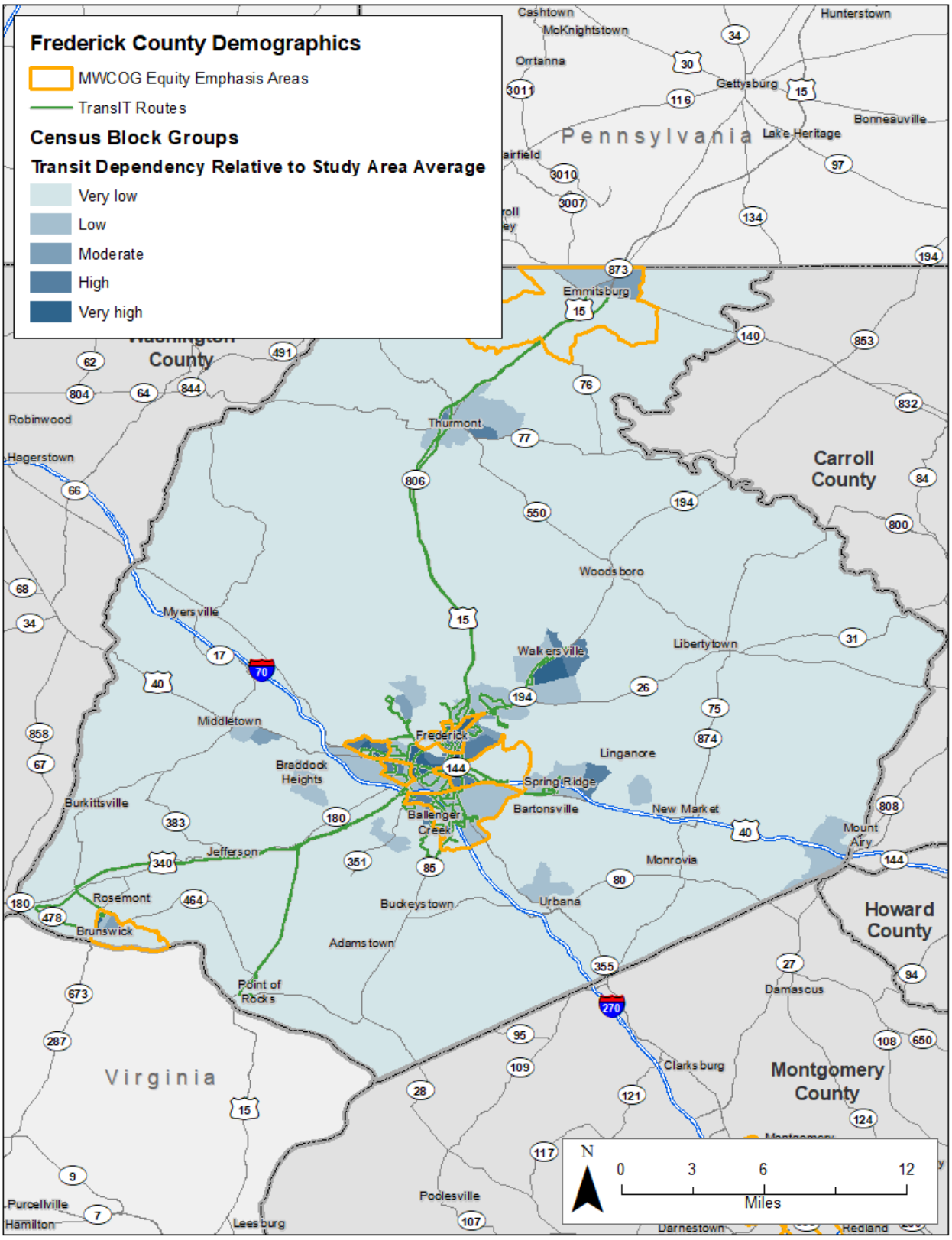
## No Vehicle Households

People living in a household without access to a private vehicle are more likely to rely on transit for their mobility. For this population group, transit provides the mobility needed to live. High or very high percentages of autoless households can be found in block groups throughout Frederick County, including Adamstown, Bartonsville, Emmitsburg, Frederick, Middletown, Sabillasville, and Walkersville. Figure 2-5 displays percentages of No Vehicle Households by Census Block Group.

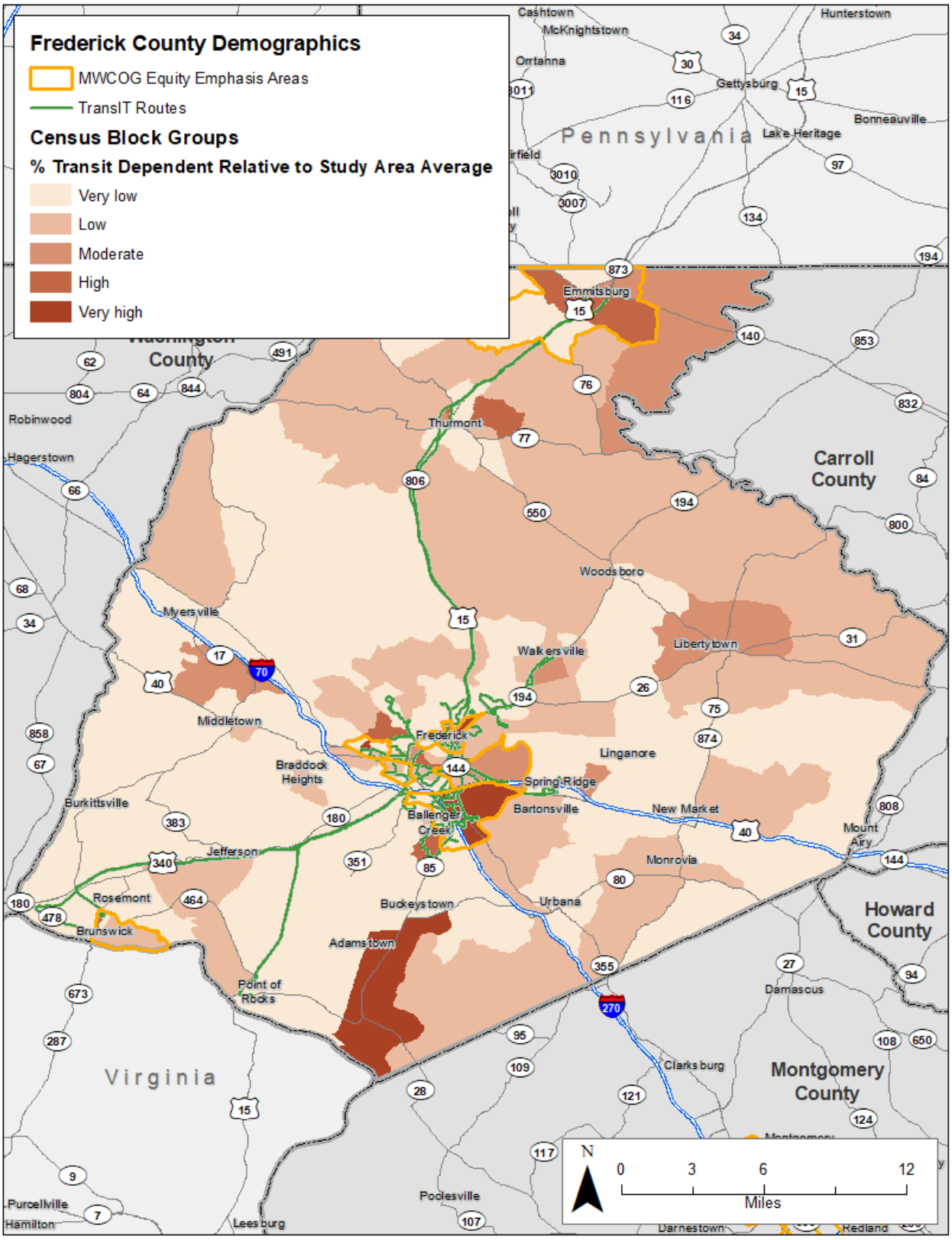
## Older Adults (Ages 65+)

People over the age of 65 often decrease their driving and use more public transportation, especially as their age continues to increase. For most rural transit systems, older adults are the base ridership, and in Frederick County they make up the bulk of riders in its rural areas. There are very high percentages of older adults in Adamstown, Ballenger Creek, Frederick, and Thurmont. High percentages are found in Braddock Heights, Emmitsburg, Myersville, Spring Ridge, and Woodsboro. Figure 2-6 displays percentages of older adults by Census Block Group

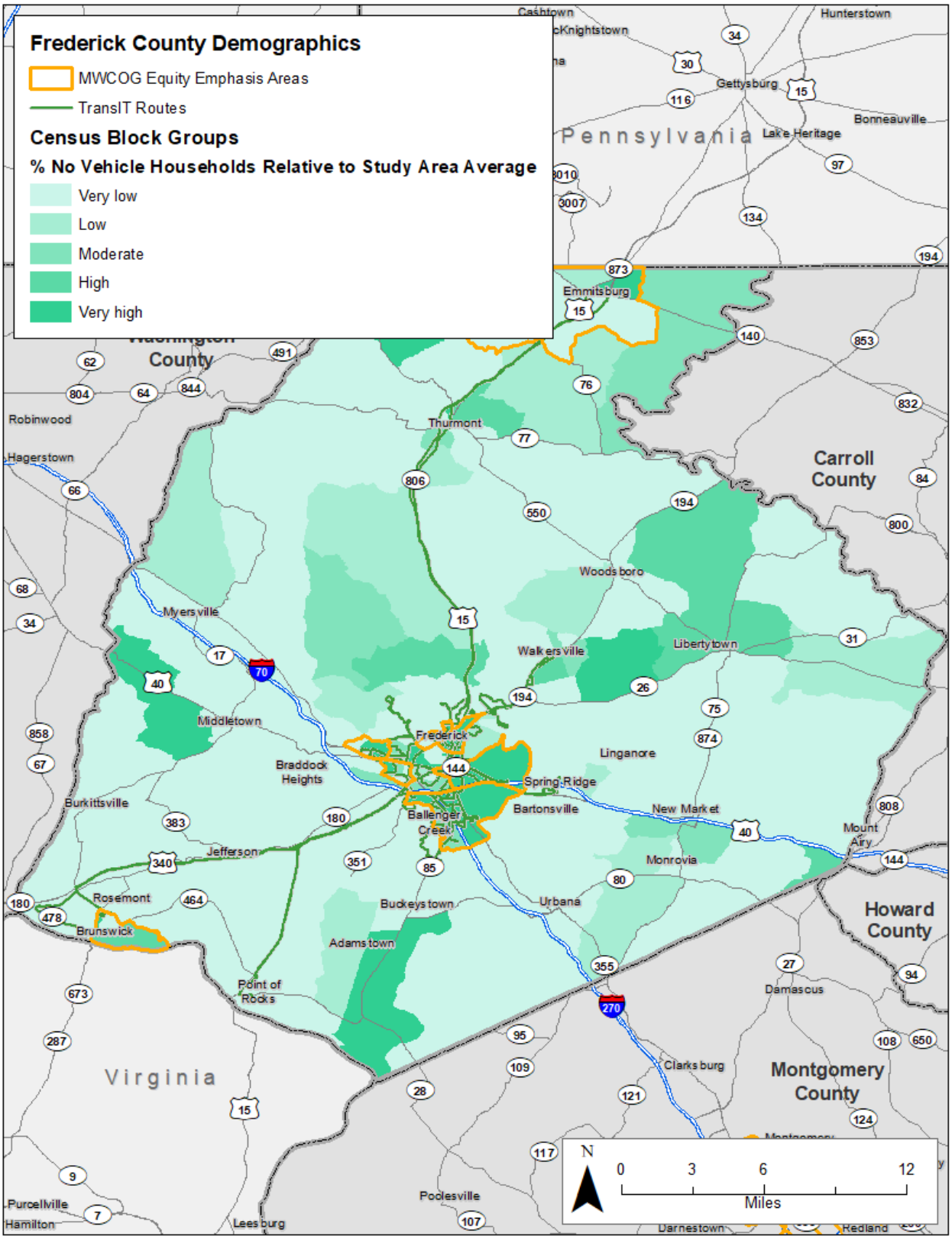
## Figure 2-3: Transit Dependency Index by Census Block Group



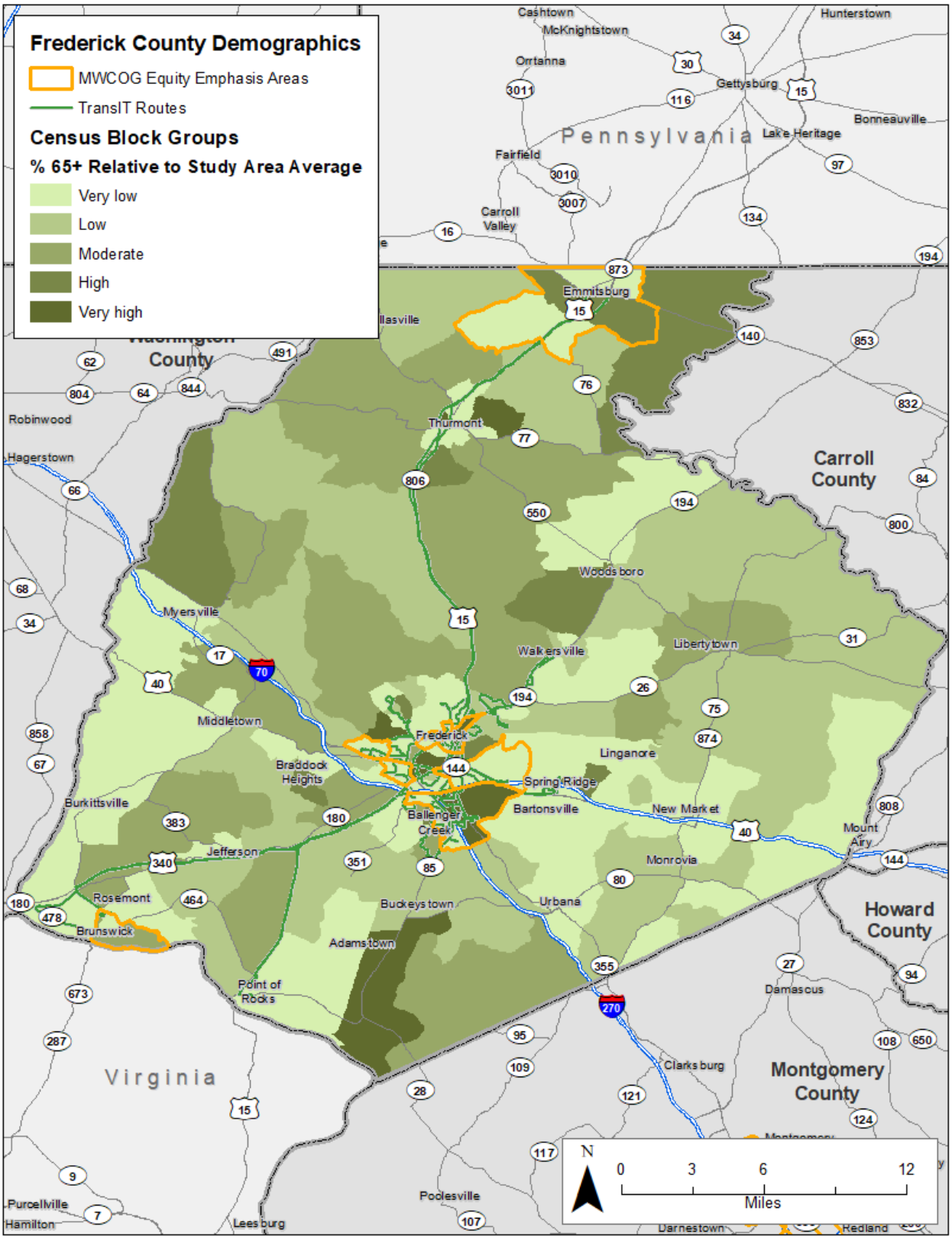
## Figure 2-4: Transit Dependency Index Percentage by Census Block Group



## Figure 2-5: No Vehicles Households by Census Block Group



## Figure 2-6: Older Adults (Ages 65+) by Census Block Groups



### People with Disabilities

People with disabilities may be unable to operate or maintain a personal vehicle, resulting in a higher dependence on transit for mobility. Providing accessible transportation to this population is imperative to the success of a public transit program and its compliance with the Americans with Disabilities Act of 1990 (ADA). High or very high percentages of people with disabilities are found in Adamstown, Ballenger Creek, Bartonsville, Brunswick, Frederick, Thurmont, and Walkersville. Figure 2-7 displays percentages of people with disabilities by Census Block Group.

### Younger Individuals

People between the ages of 10 and 17 either do not or drive or have limited vehicle access, which can cause an increased reliance on public transit for mobility. Areas in Frederick County with high or very high youth populations are in Ballenger Creek, Bartonsville, Frederick, Jefferson, Middletown, and Urbana. Figure 2-8 displays the percentage of younger individuals by Census Block Group.

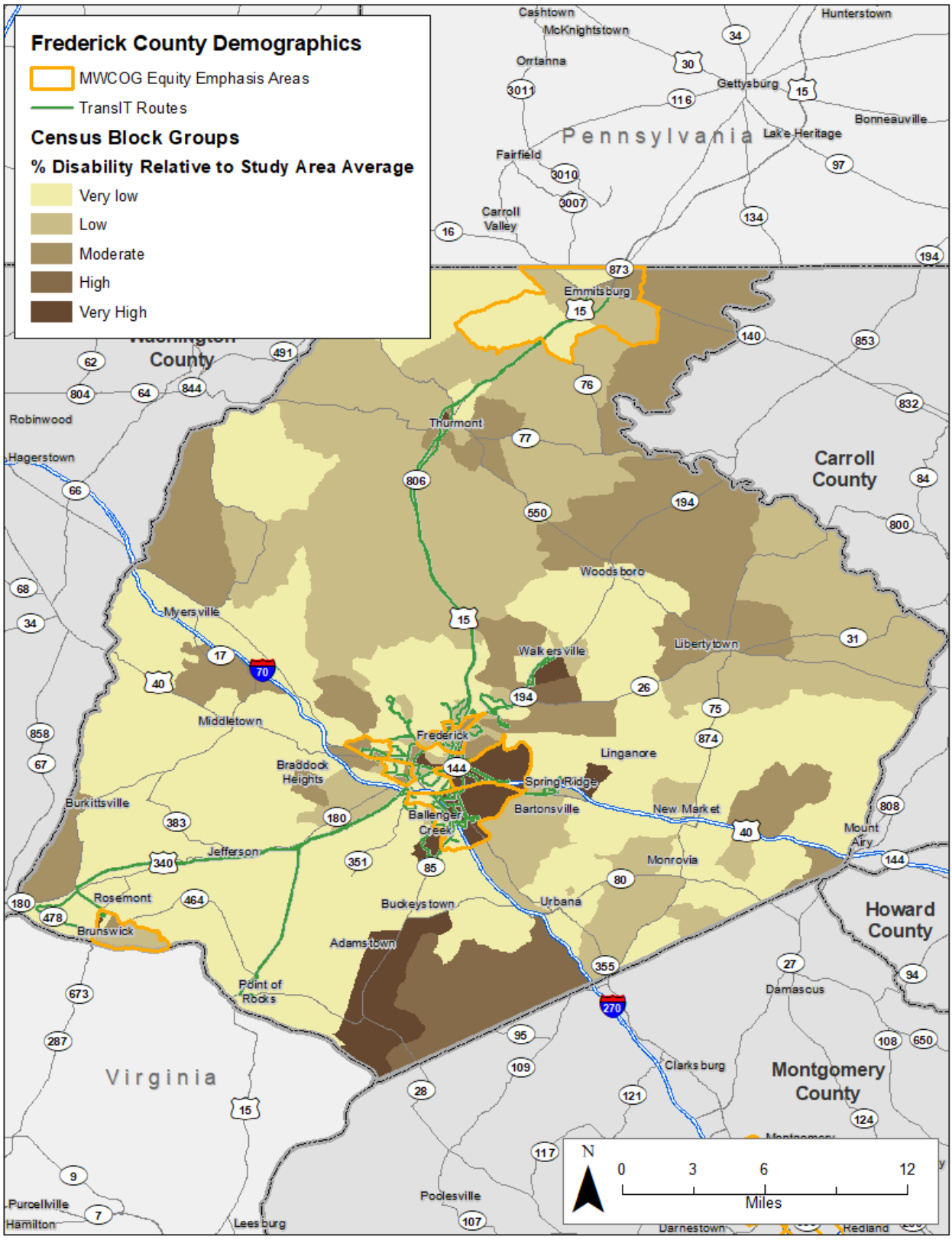
## Title VI Demographic Analysis

Through the Civil Rights Act of 1964, Title VI prohibits discrimination on the basis of race, color or national origin in programs and activities receiving federal subsidies. This includes agencies providing federally funded public transportation. The following section examines the minority below poverty level and limited English proficiency (LEP) populations in Frederick County.

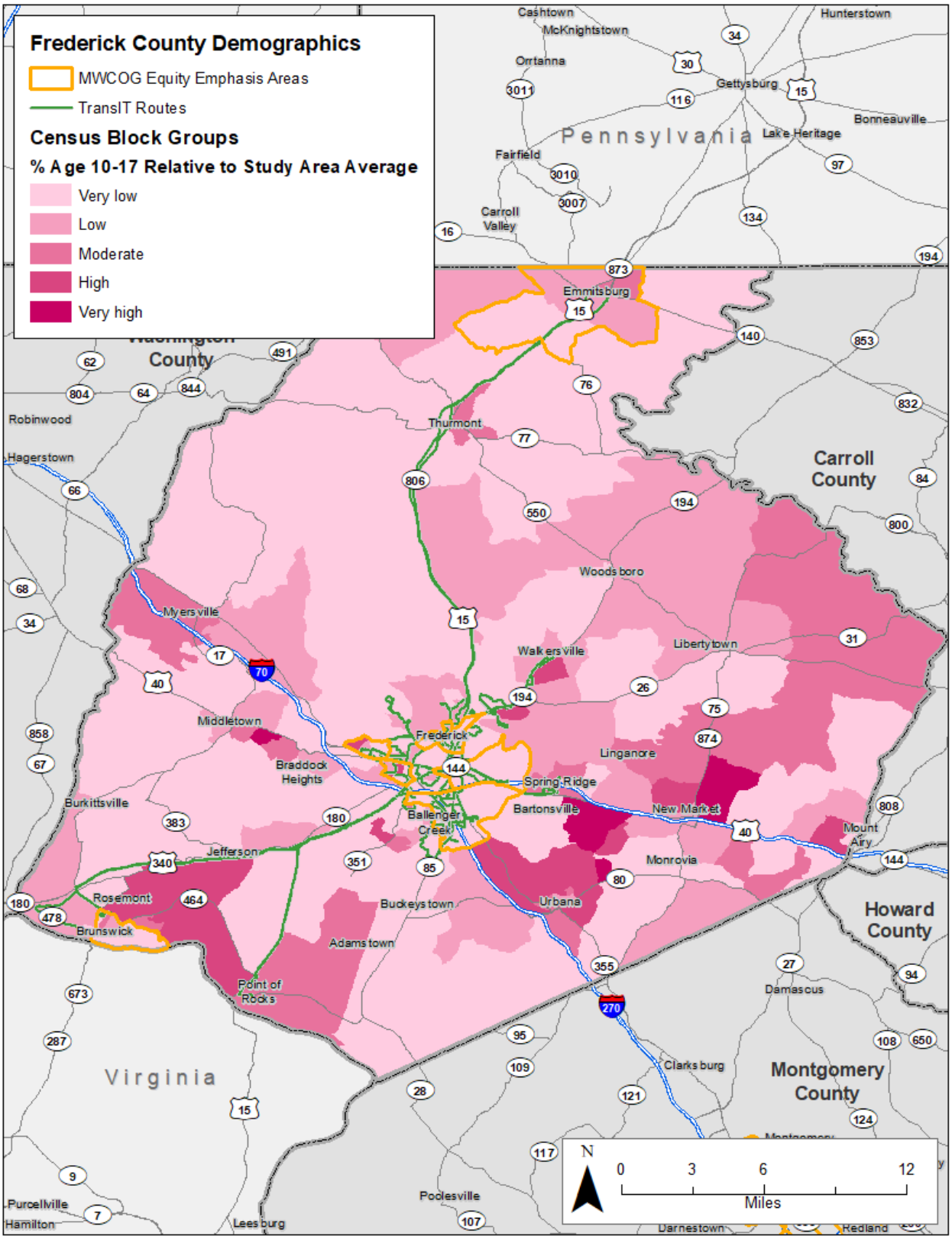
### Below Poverty Populations

Individuals living below the federal poverty level are protected by Title VI of the Civil Rights Act, and any service change or improvement should be made so that there is disproportionate burden on this population group. In Frederick County, above average percentages of below poverty individuals can be found in Ballenger Creek, Bartonsville, Brunswick, Burkittsville, Emmitsburg, Frederick, Middletown, Monrovia, Myersville, New Market, Rosemont, Walkersville, and Woodsboro, as well some other rural block groups throughout the county. Below poverty populations are also included in the TDP and TDIP measure. Figure 2-9 displays below poverty populations by Census Block Group.

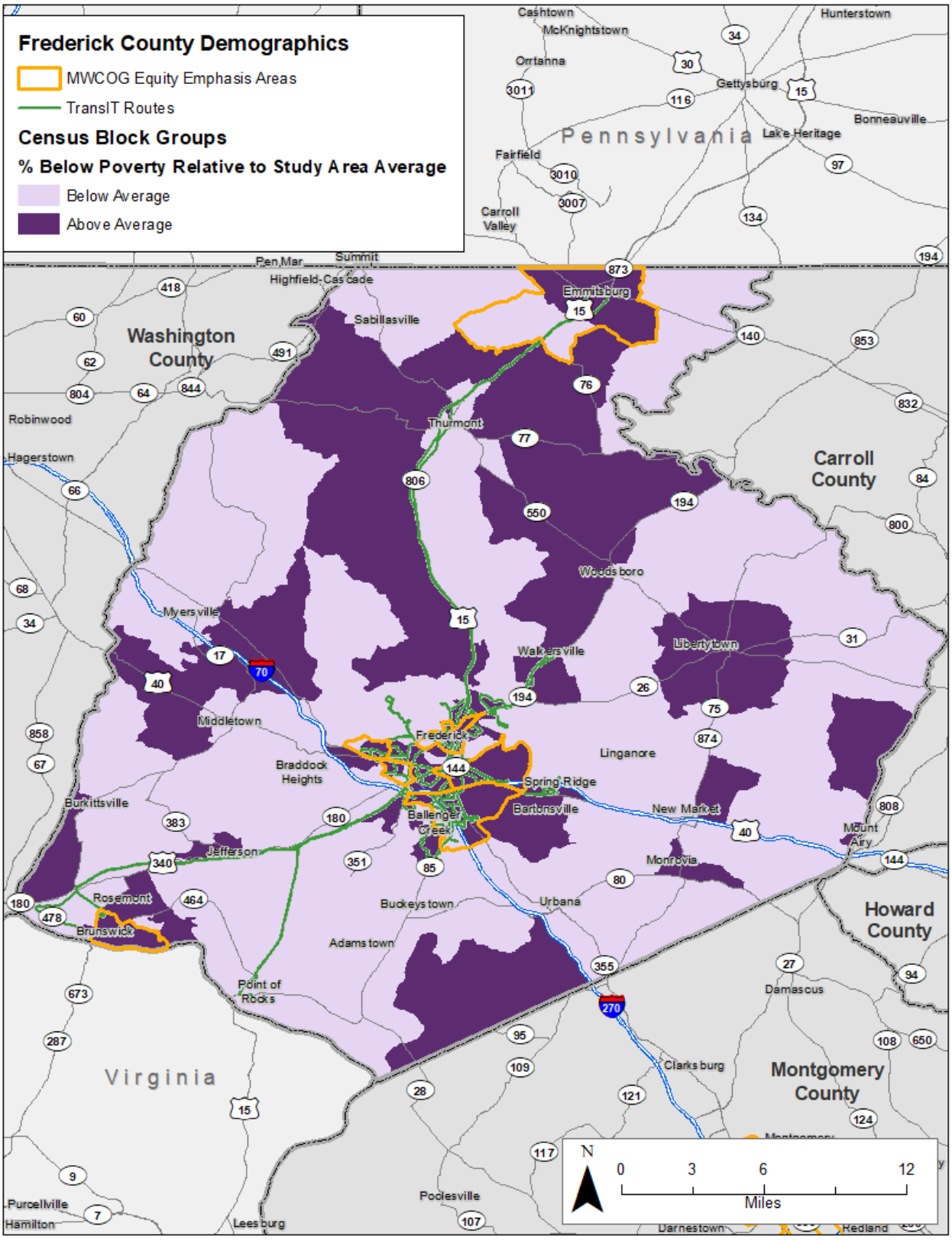
## Figure 2-7: People with Disabilities (Ages 18+) by Census Block Group



## Figure 2-8: Younger Individuals (Ages 10-17) by Census Block Group



## Figure 2-9: Below Poverty Individuals by Census Block Group



### Minority Populations

Minority populations are protected from discrimination under the Civil Rights Act of 1964, and therefore service changes should be analyzed for their impact on these communities. In Frederick County, above average percentages of minority populations are found in Ballenger Creek, Bartonsville, Braddock Heights, Burkittsville, Emmitsburg, Frederick, Monrovia, Rosemont, Urbana, and Walkersville. Figure 2-10 maps minority populations by Census block group in Frederick County.

### Limited English Proficiency Population

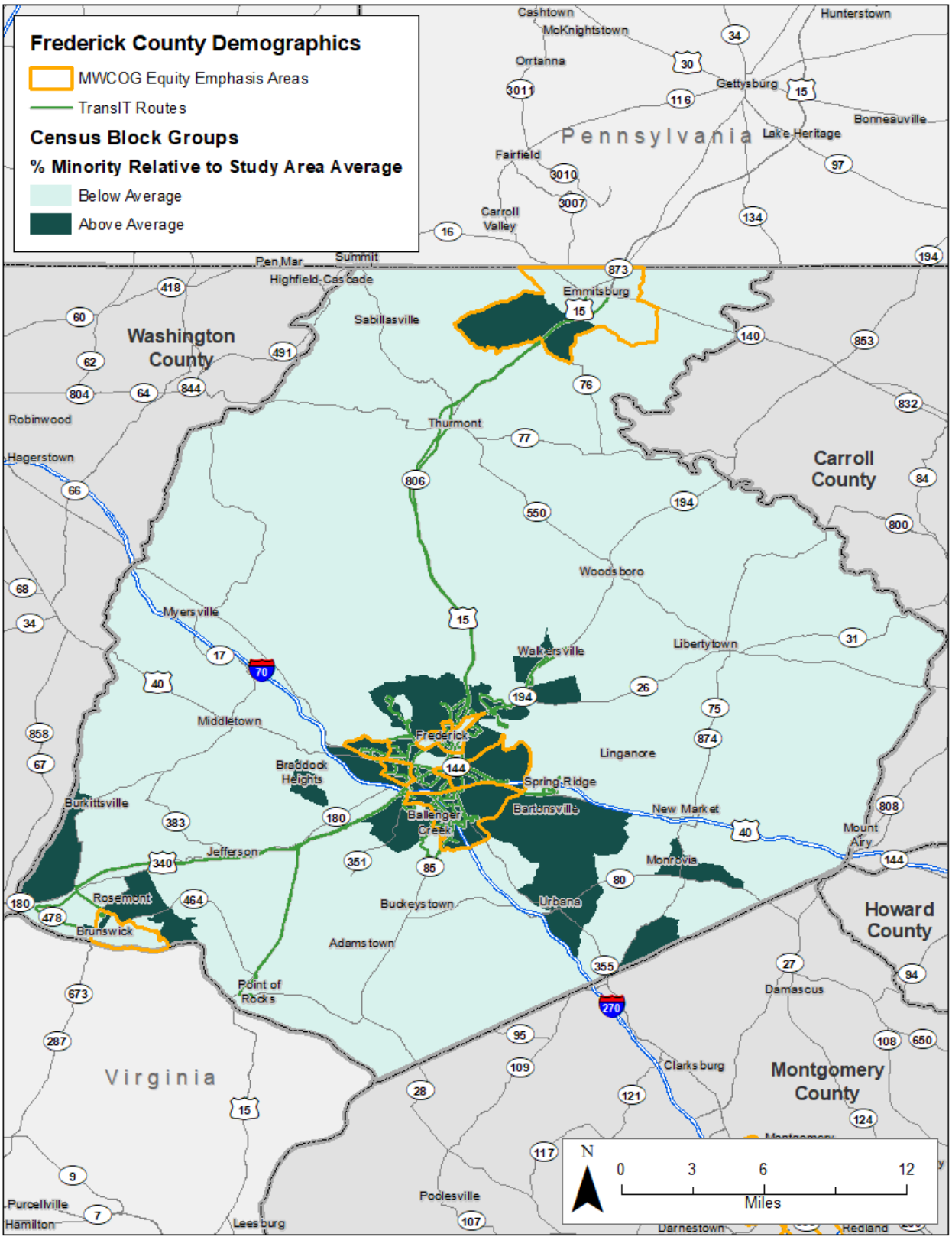
Title VI ensures that individuals of all national origins are entitled to the same level of service as everyone else, and as such any individual who is LEP can request translated materials to better access transportation services. Limited English proficiency (LEP) populations are defined by the FTA as any person who identifies how they speak English as less than "very well". The FTA Safe Harbor Provision of Title VI stipulates that materials must be translated for any language that has a limited English population that represents over 1,000 individuals or over one percent of the service area population, whichever number is lower. In Frederick County, the Spanish speaking LEP population represents 2.8 percent of the county's total population and over half of the study area's LEP population. It is the only language group that meets the Safe Harbor threshold for translated materials. Table 2-3 breaks down LEP populations by language spoken at home.

# Land Use Assessment

## Major Trip Generators

The identification of major trip generators forms the foundation of this assessment. Major trip generators include education facilities, major employers, shopping destinations, high-density housing, medical facilities, and shopping destinations. Figure 2-11 maps Frederick County's trip generators. While most of the county's trip generators are already served by TransIT, unserved clusters can be found in Middletown, Urbana, and Woodsboro. Trip generators are mostly clustered in the City of Frederick and Ballenger Creek. Brunswick, Emmitsburg, Point of Rocks, and Thurmont are outlying areas with trip generators served by TransIT.

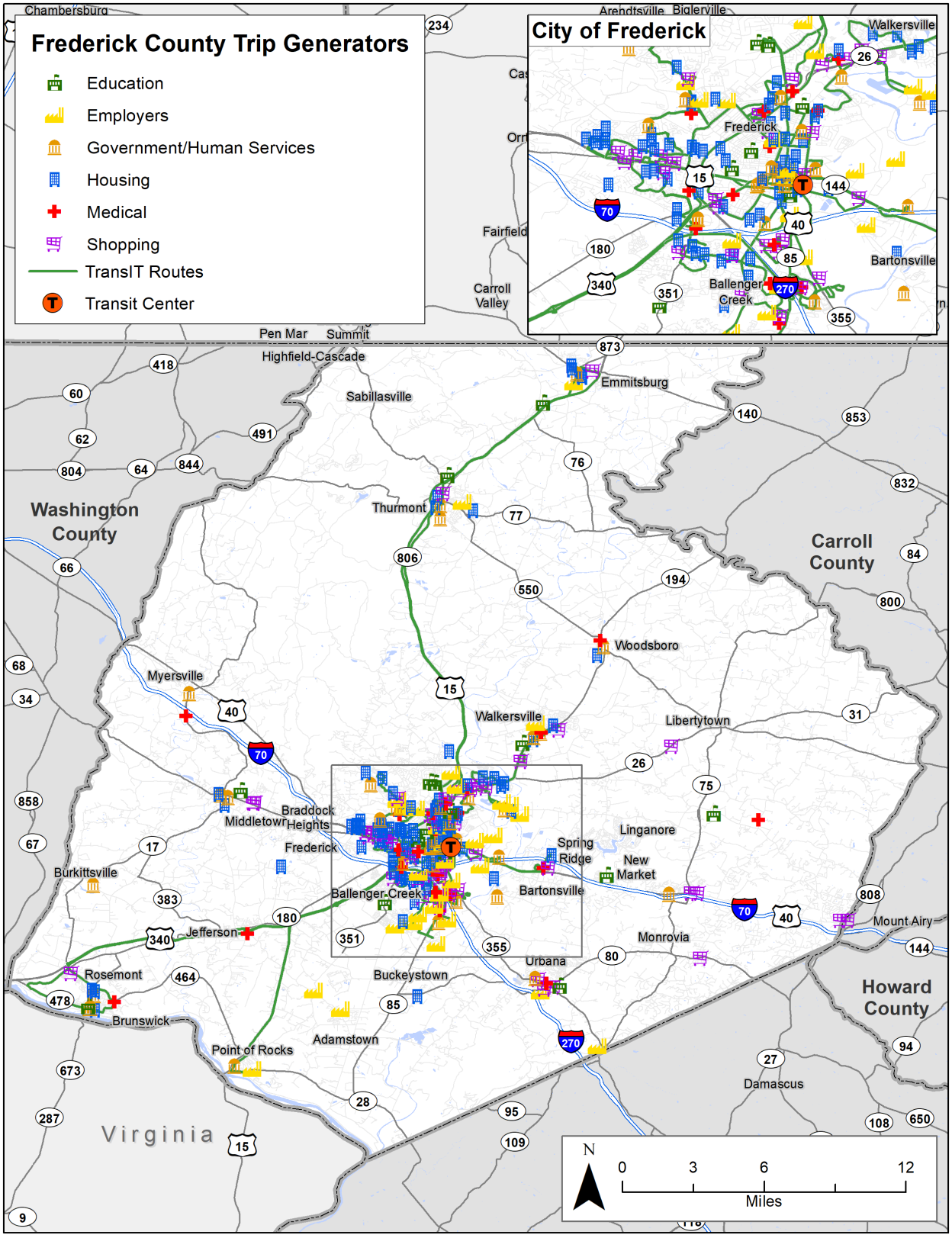
## Figure 2-10: Minority Population by Census Block Group



## Table 2-3: Population by Language Spoken at Home and English Proficiency

| Population by Language Spoken at Home and English Proficiency | | | |
|---|---|---|---|
| **Category** | **Total** | **% of Total Population** | **% of LEP Population** |
| Population 5 years and over | 233,844 | - | - |
| Speak only English at Home | 201,756 | 86.3% | - |
| Speak language other than English at home | 32,088 | 13.7% | - |
| Speak English "very well" | 20,524 | 8.8% | - |
| Speak English less than "very well" | 11,564 | 4.9% | - |
| Spanish | 6,454 | 2.8% | 55.8% |
| French, Haitian, or Cajun | 523 | 0.2% | 4.5% |
| German or other West Germanic languages | 66 | 0.0% | 0.6% |
| Russian, Polish, or other Slavic languages | 423 | 0.2% | 3.7% |
| Other Indo-European languages | 1,010 | 0.4% | 8.7% |
| Korean | 400 | 0.2% | 3.5% |
| Chinese | 695 | 0.3% | 6.0% |
| Vietnamese | 358 | 0.2% | 3.1% |
| Tagalog (incl. Filipino) | 204 | 0.1% | 1.8% |
| Other Asian and Pacific Island languages | 1,108 | 0.5% | 9.6% |
| Arabic | 97 | 0.0% | 0.8% |
| Other and unspecified languages | 226 | 0.1% | 2.0% |

## Figure 2-11: Frederick County Trip Generators



# Journey to Work

A combination of TransIT, MDOT MTA Commuter Bus, MARC rail, and WMATA Metrorail are used by 2.7 percent of Frederick County commuters to get to work. In Maryland, 8.6 percent of workers use public transportation to get to work. 87.9 percent of workers drove alone to work in Frederick County, nearly fifteen percentage points higher than Maryland (73.9%). Frederick County's lower population density in certain parts of the county likely contributes to higher levels of driving alone. Frederick County also has a higher percentage of people working from home (6.3%) than the rest of Maryland (4.7%). With the COVID-19 pandemic expanding the amount of people working from home, this number is likely to increase. Since so many Frederick County commuters travel to work along the notoriously congested I-270 corridor, many who switched to work from home will likely remain that way, at least on a part time basis. Table 2-4 compares journey to work modes in Frederick County and the state of Maryland.

### Table 2-4: Means of Transportation to Work

| Means of Transportation to Work | | | | |
|---|---|---|---|---|
| | Frederick County | | Maryland | |
| | Total | Percent | Total | Percent |
| Workers over age 16 | 129,931 | - | 3,021,967 | |
| Drove alone | 114,185 | 87.9% | 2,233,034 | 73.9% |
| Carpooled | 11,720 | 9.0% | 273,373 | 9.0% |
| Public Transportation | 3,503 | 2.7% | 258,397 | 8.6% |
| Bus or trolley bus | 1,242 | 1.0% | 122,601 | 4.1% |
| Streetcar or trolley car | 45 | 0.0% | 1,602 | 0.1% |
| Subway | 744 | 0.6% | 111,886 | 3.7% |
| Railroad | 1,456 | 1.1% | 21,385 | 0.7% |
| Walk | 2,534 | 2.0% | 70,350 | 2.3% |
| Taxicab, motorcycle, other | 1,228 | 0.9 % | 34,189 | 1.1% |
| Worked at home | 8,130 | 6.3% | 142,425 | 4.7% |

# Commuting Patterns

The US Census Bureau's 2017 Longitudinal Employer-Household Dynamics (LEHD) dataset was analyzed to determine where Frederick County workers live and where Frederick County residents work. As the largest job center and residential area in the county, the city of Frederick is the most popular work destination and place of residence for county workers. Outside of Frederick and neighboring Ballenger Creek, the most popular commuting destinations are areas along I-270 (Rockville, Gaithersburg, Germantown, North Bethesda) and Baltimore. Popular in-county places of residence for people working in Frederick County include the city of Frederick, Ballenger Creek, Thurmont, Linganore, Brunswick, Urbana, and Spring Ridge. Outside Frederick County, there are significant commuter populations in Hagerstown, Germantown, and Baltimore. Table 2-5 shows both the top ten work destinations and places of residence for workers in Frederick County. Figure 2-12 maps the top 25 work destinations and places of residence for the Frederick County workforce.

**Table 2-5: Top 10 Work Destinations and Places of Residence for Frederick County Workforce**

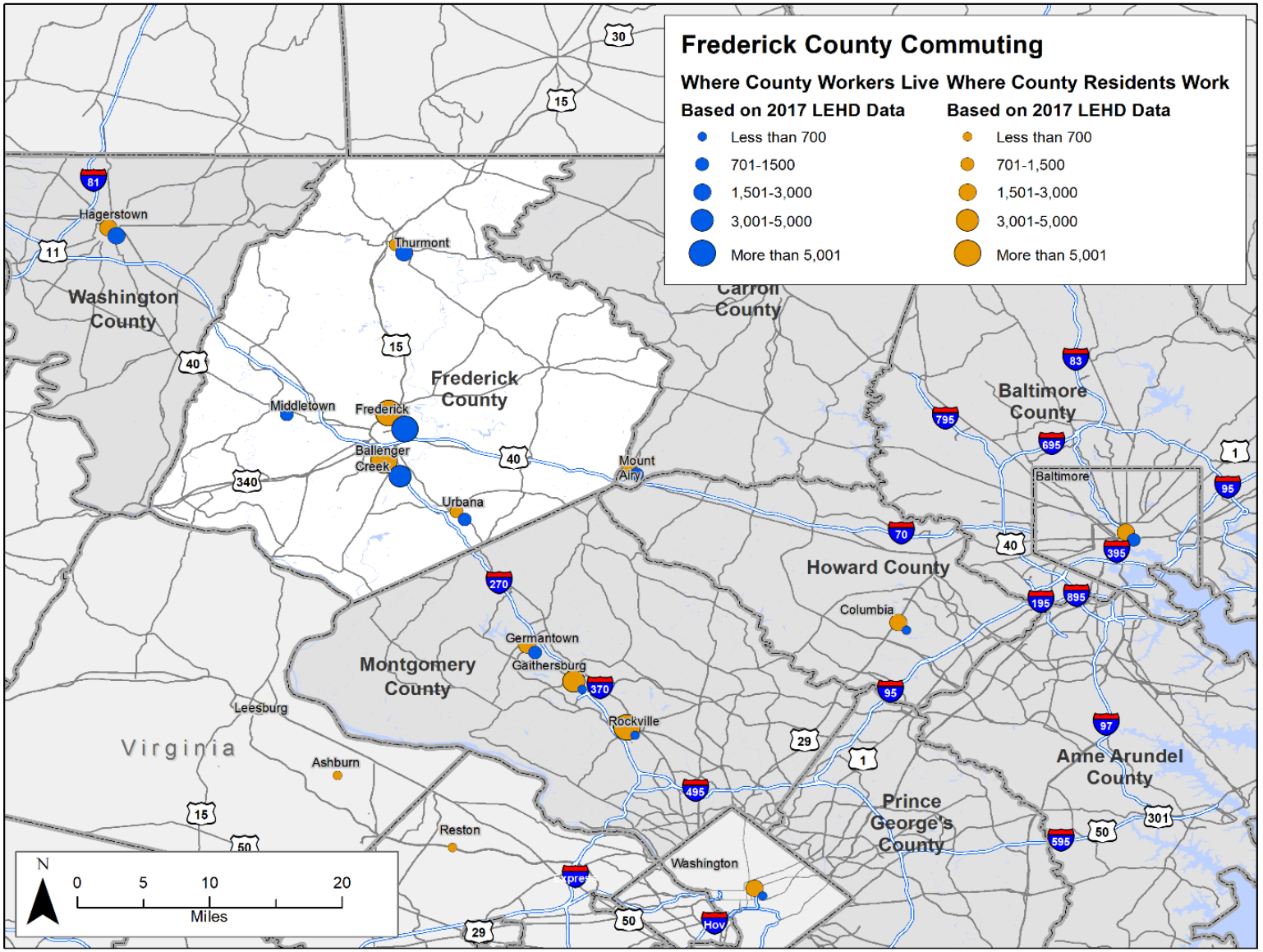
| Top 10 Work Destinations | | |
|---|---|---|
| Place | Commuters from Frederick County | Percent of Workforce |
| Frederick | 25,802 | 21.1% |
| Ballenger Creek | 8,102 | 6.6% |
| Rockville | 6,425 | 5.3% |
| Gaithersburg | 3,996 | 3.3% |
| Baltimore | 2,829 | 2.3% |
| Germantown | 2,816 | 2.3% |
| Washington | 2,418 | 2.0% |
| Columbia | 2,262 | 1.8% |
| North Bethesda | 2,166 | 1.8% |
| Hagerstown | 1,627 | 1.3% |
| **Top 10 Places of Residence** | | |
| Place | Commuters to Frederick County | Percent of Workforce |
| Frederick | 14,696 | 14.7% |
| Ballenger Creek | 3,640 | 3.7% |
| Hagerstown | 2,116 | 2.1% |
| Thurmont | 1,804 | 1.8% |
| Linganore | 1,679 | 1.5% |
| Germantown | 1,416 | 1.4% |
| Baltimore | 1,398 | 1.4% |
| Brunswick | 1,252 | 1.3% |
| Urbana | 1,127 | 1.1% |
| Spring Ridge | 1081 | 1.1% |

# Public & Stakeholder Input

## 2020 TransIT Customer Satisfaction Survey

Frederick County administered its 2020 Customer Satisfaction Survey in January 2020, receiving 31 responses from frequent and occasional TransIT fixed route riders. The following section analyzes these responses to provide insight about who rides TransIT, their travel habits, and their assessment of TransIT services.

## Figure 2-12: Top 25 Work Destinations and Places of Residence for Frederick County Workforce



## Travel Characteristics

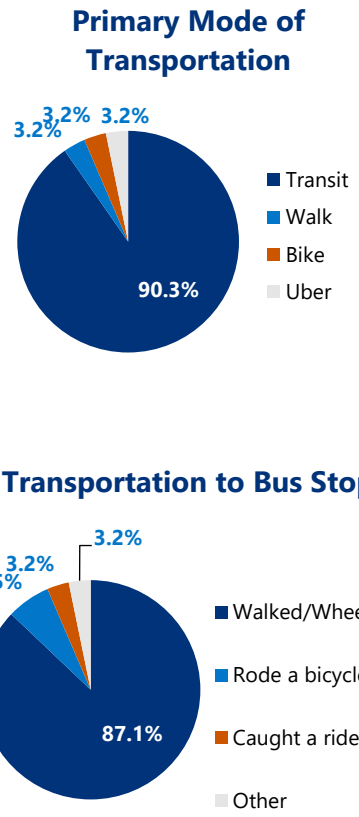
Riders were asked their primary mode of transportation. Over 90 percent of respondents relied on TransIT as their primary transportation mode. A small number of respondents indicated they walked or biked, and one respondent chose other, specifying they used Uber.

When asked how they got to the bus stop for their trip, over 83 percent of respondents indicated they walked to the bus stop. An additional rider used their electric wheelchair to access TransIT service. Two respondents rode a bicycle, and another respondent caught a ride from an acquaintance to access the bus stop. The primary transportation modes are summarized in Figure 2-13.

Riders were then asked why they use TransIT. A majority (61.3%) of riders stated they did not have access to a vehicle, and an additional 32.3% of respondents stated they were unable to drive. Other responses included lower cost compared to driving (16.1%), sustainability/environmental friendliness (12.9%), and convenience (6.5%). Figure 2-14 displays respondents' reasons for using TransIT.

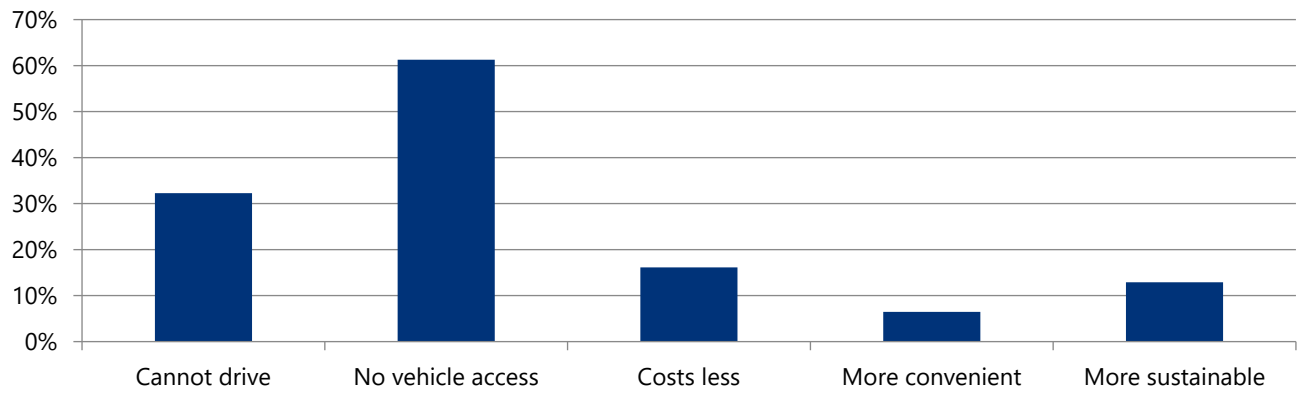
Primary trip purposes varied by respondent. The majority (54.8%) of respondents used TransIT to get to work, while nearly half (48.4%) indicated they often used it for personal business. Other common trip purposes included medical appointments (35.5%), pleasure (38.7%), and school (12.9%). Only one responded that they frequently used TransIT to connect with MDOT MTA MARC or Commuter Bus services. Over 16 percent of respondents selected other, riders specified trips to the gym, programs, and appointments as their trip purposes. Figure 2-15 displays common trip purposes for survey respondents

**Figure 2-13: Rider Mobility Summary**

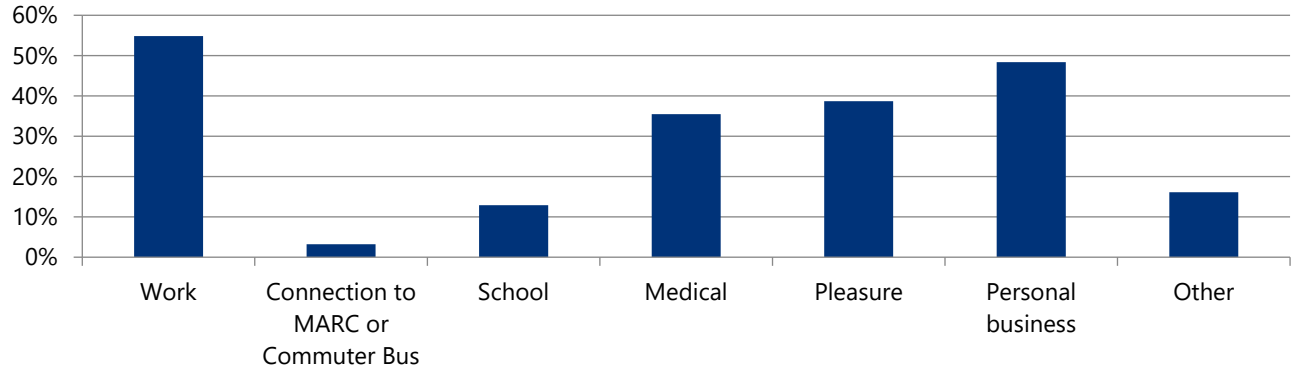



Most survey respondents used TransIT frequently, and 61.3 percent of respondents were daily TransIT riders. An additional 32.3 percent of respondents used TransIT several times a week. Only one respondent indicated they used the service rarely, and another respondent indicated it was their first time on TransIT. When then asked how long they have been a TransIT customer, 71 percent of respondents indicated they had been using TransIT for more than 3 years. Only three respondents said they had been using the service for less than one year. Responses to this question are displayed in Figure 2-16.

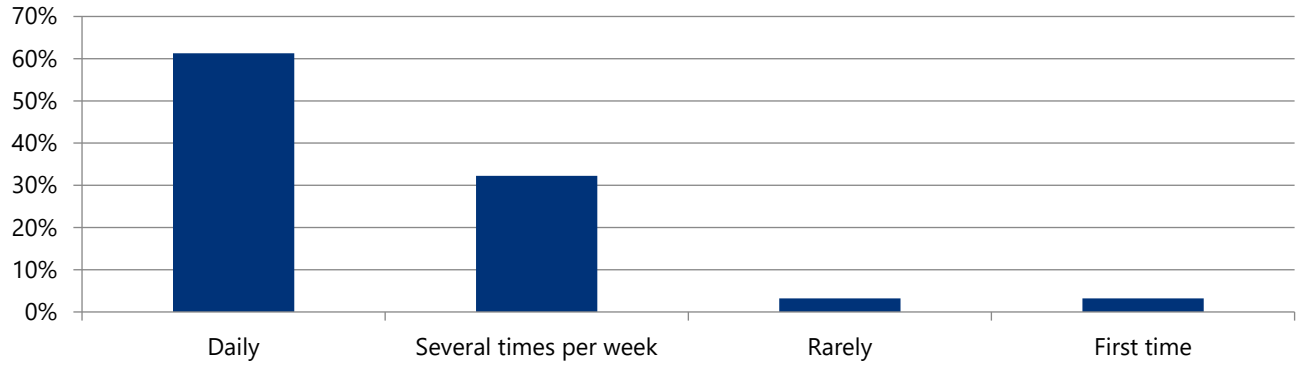
## Figure 2-14: Reasons for Using TransIT




## Figure 2-15: Trip Purpose



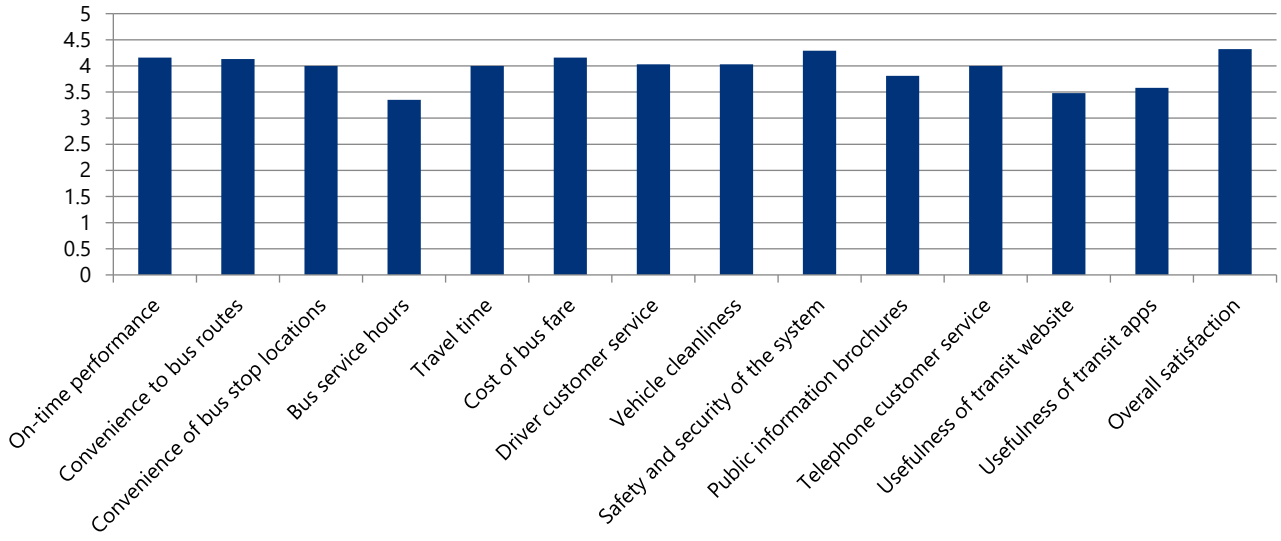

## Figure 2-16: Frequency of Use



## Customer Satisfaction

Customers were asked to rate their satisfaction with different aspects of TransIT service. Overall, most respondents (93.6%) were either "very satisfied" or "satisfied" with TransIT's overall service. The individual service aspects with the highest level of satisfaction were TransIT's safety and security (96.8%) and cost of bus fare (93.6%), Customers were least satisfied with TransIT's technological offerings, as respondents indicated they were less satisfied with the usefulness of TransIT's mobile app (48.4%) and website (38.7%). The lower satisfaction levels may be due to limited customer awareness of these technologies. The operational characteristic with the lowest satisfaction was the bus service hours (54.8%). Figure 2-17 displays the weighted average (between 0-5) of each TransIT service aspects.

### Figure 2-17: Overall Customer Satisfaction, Weighted Average




Customers were asked to describe what they liked best about TransIT. Riders were happy with the convenience of TransIT as well as the friendly drivers and easy transfers. Some customers were simply happy for the existence of the service and the mobility it provides.

***Riders most liked the convenience of service and friendly drivers***

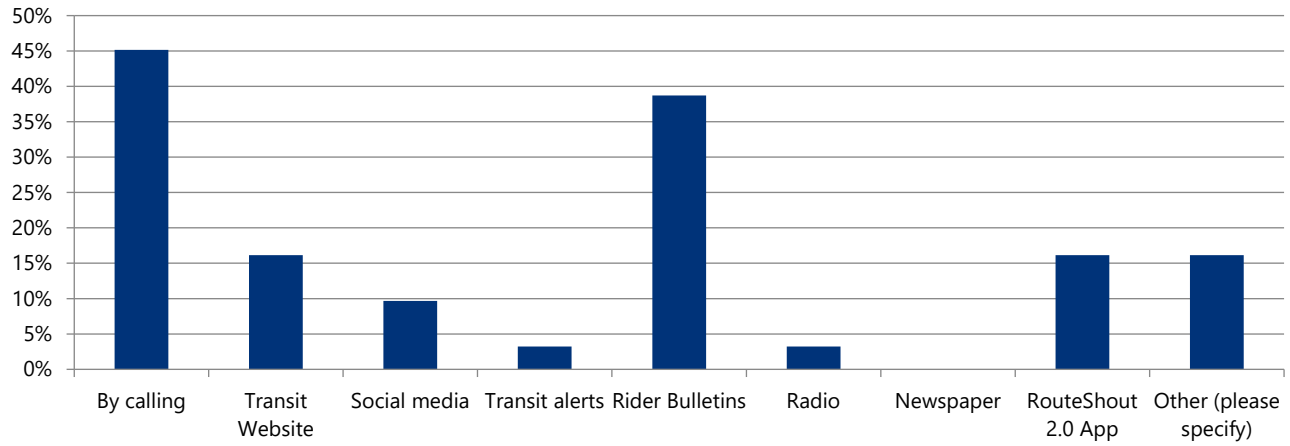
Customers, though mostly positive about TransIT services, said that TransIT's limited availability, especially on Sundays was their least liked aspect of TransIT services. Respondents wanted more peak trips, later hours, and Sunday service. Other riders wanted more transit infrastructure, specifically more bus shelters at stops. When asked what improvements they would like to see, most respondents replied that they wanted Sunday service, higher frequency during peak hours, and later evening service.

***Riders most desired Sunday service, additional shelters, and later hours***

## Availability of Information and Use of Technology

The TransIT service asked several questions about the channels through which customers received information about TransIT service. A higher percentage of respondents received service information by calling TransIT (45.2%) or using rider bulletins (38.7%). Sixteen percent of respondents received TransIT information from the website or the RouteShout 2.0 App. Figure 2-18 displays how respondents received TransIT service information.

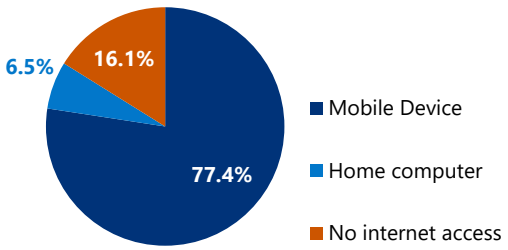
### Figure 2-18: How TransIT Riders Get Their Information




Respondents found TransIT riders helpful, with over 83 percent of respondents indicated that the bulletins were useful. Of the respondents who indicated they did not use the bulletins, most said they struggle to read the bulletins while the bus is in motion.

Riders were more likely to use the internet to access route and schedule information through the internet, specifically by using their smart phone or tablet. Over 77 percent of respondents used a mobile device to access schedule information, while only 6.5 percent of respondents used their home computer. An additional 16.1 percent of respondents indicated they do not have internet access. Asked what type of information they would like more of, riders indicated they would like additional information about special events (32.3%) and service changes (32.3%) through the existing information channels. Figure 2-19 displays how survey respondents accessed TransIT schedule information.

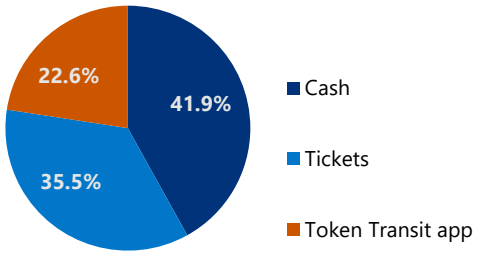
### Figure 2-19: Method of Accessing Information




Typical fare payment method varied by customer. More customers typically paid using cash (42.0%) rather than using tickets (35.5%), and an additional 22.6 percent of respondents normally pay using the

Token Transit App. When asked whether they had ever used Token Transit, 35.5 percent of respondents indicated that they had. Of those who do not use the app, many indicated that they do not have a smartphone, while others stated they did not wish to use the app, had bad cell service, or did not have the app downloaded. As TransIT works to introduce Token Transit to riders, additional information about how to use this application would be helpful. Figure 2-20 displays how respondents paid for TransIT services.

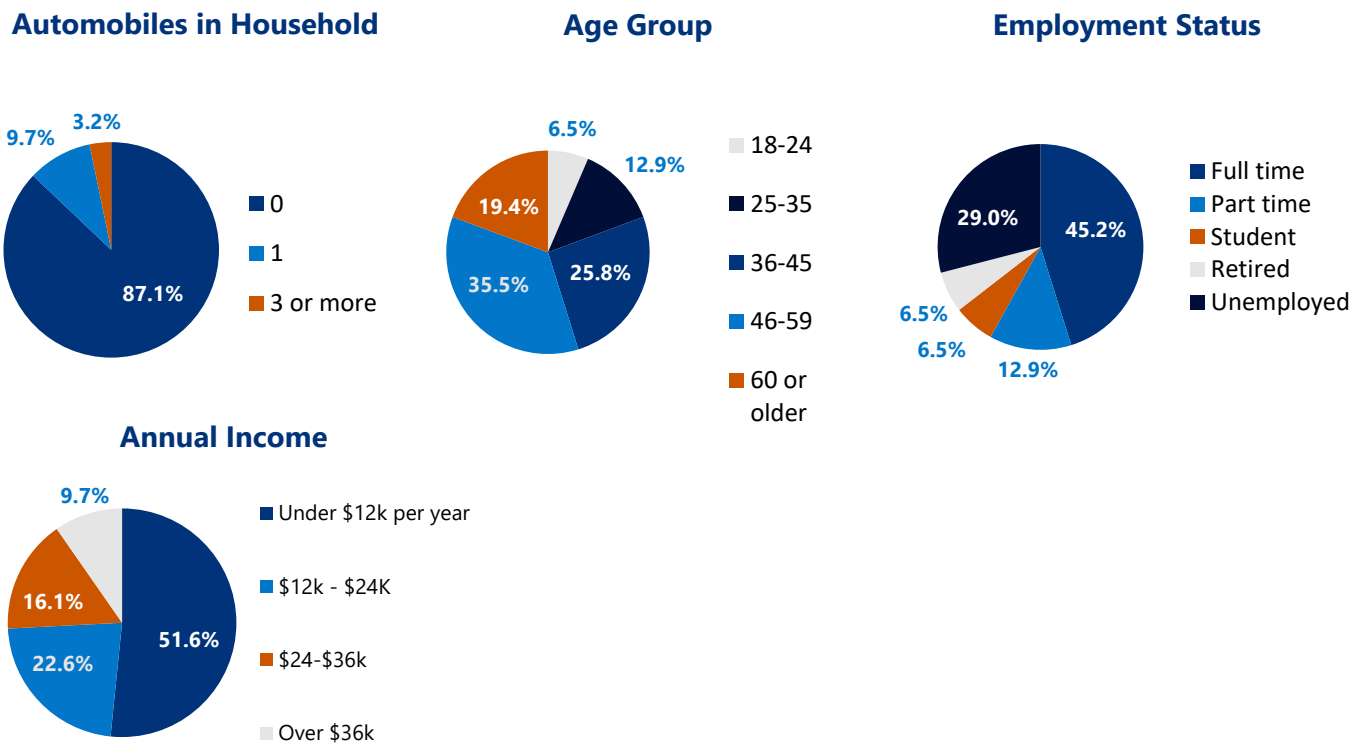
**Figure 2-20: Typical Fare Payment**




## Rider Profile

To develop a profile of the typical TransIT rider, several questions were asked at the end of the survey to determine each respondent's access to vehicles, age group, employment status, and other demographic indicators. A majority (87.1%) of respondents did not have an automobile in their household. The largest share (35.5%) of respondents were between the age of 46 and 59, while an additional 19.4 percent were over 60 years old. A majority (58.0%) of respondents had either full-time or part-time employment, and 29 percent of respondents were unemployed. A majority (51.6%) of riders made under $12,000 per year. The full breakdown of these questions is available in Figure 2-21.

**Figure 2-21: Rider Profile Summary**



# Frederick County 2020 Transit Development Plan
# Chapter 3: County Survey and Outreach Effort

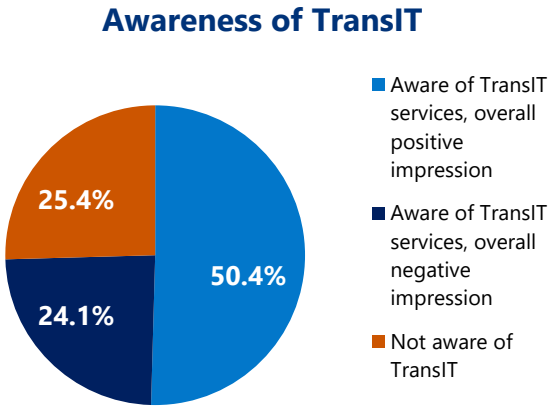
## Community Survey

The community survey was created by KFH Group and distributed by TransIT to evaluate the general public's familiarity with TransIT services, use of all available public transportation in Frederick County, and desired improvements to transit services. Some demographic questions were asked to create a profile of the typical community survey respondent. The outreach effort was performed via on-line surveys, as in-person meetings were not held due to the pandemic.

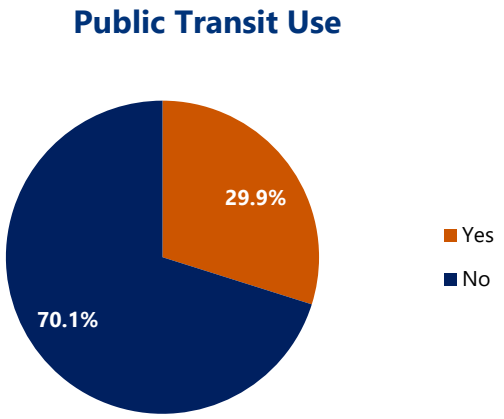
## Travel Characteristics

Respondents were asked their primary mode of transportation. Nearly three quarters (73.5%) of respondents used their car as their primary mode of transportation, while over twelve percent of respondents used public transportation. Smaller percentages of respondents indicated they walked, biked, used Uber/Lyft, or had a family member/friend drive them.

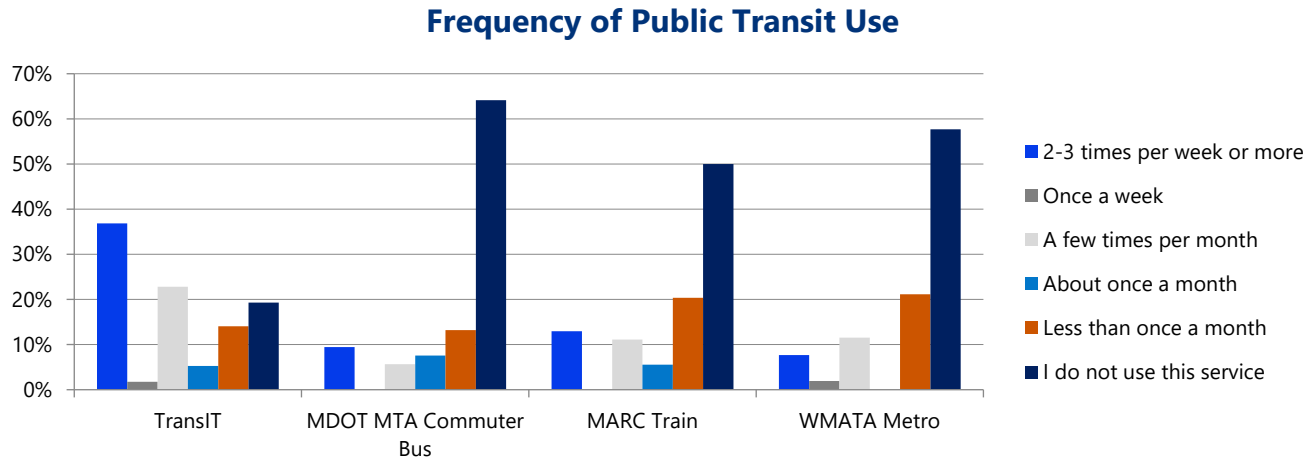
Respondents were then asked if they were aware of TransIT's services, to which over 50% of respondents were aware of TransIT services and had a positive impression of its services. Nearly a quarter of respondents were aware of TransIT and had a negative impression, while another quarter of riders were not aware of TransIT services.

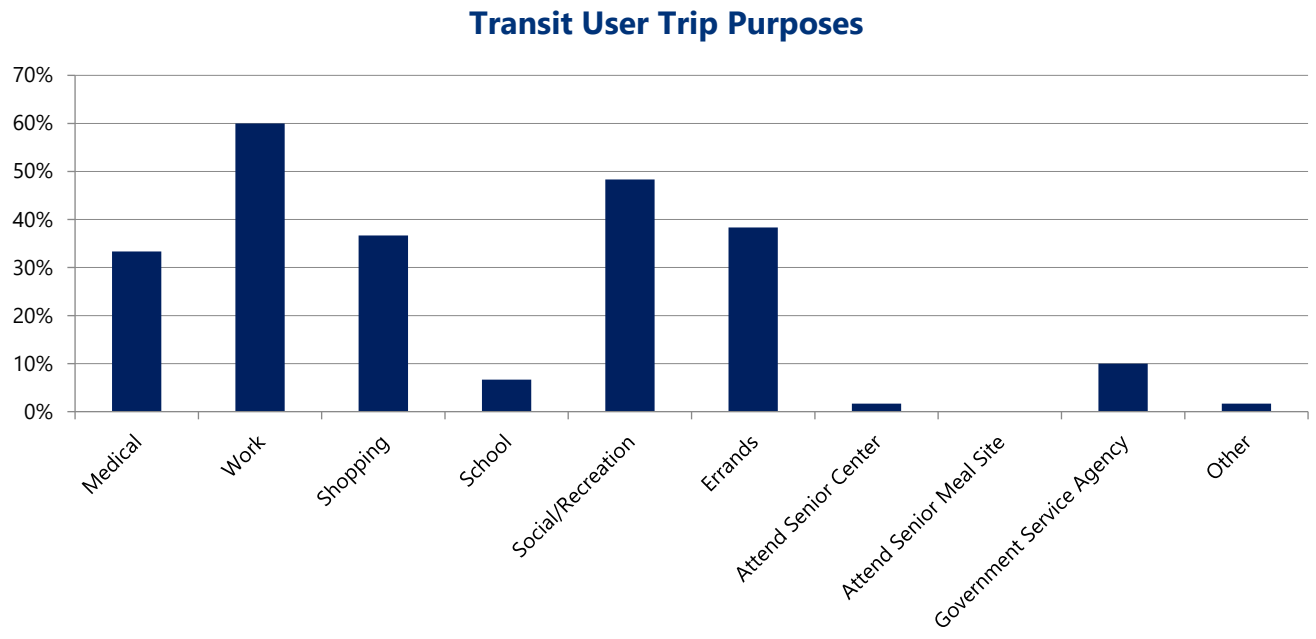


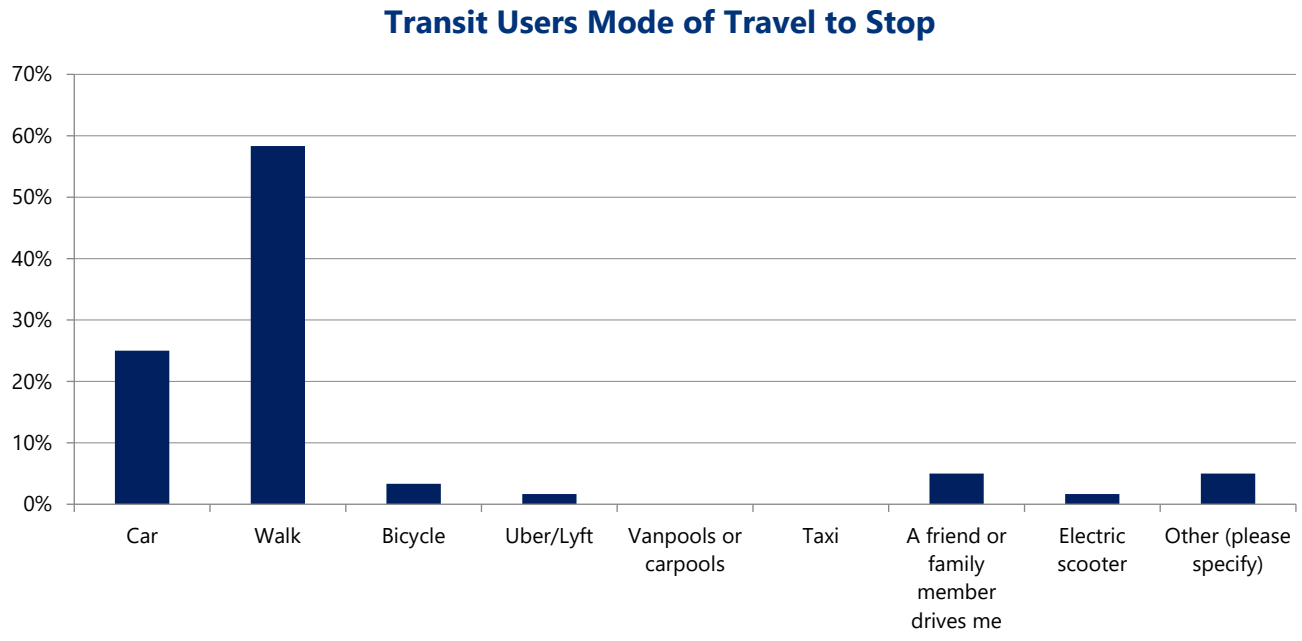
Asked whether they used any of the public transportation services operating in Frederick County, nearly 30 percent of respondents said they did use some of the available public transportation options in the city. Those who indicated they used public transportation were then asked which services they used and how often they used them. TransIT was the most commonly and frequently used service among respondents who rode TransIT. Over 36 percent of all transit users indicated they used TransIT 2-3 times per week or more, and nearly 80 percent of transit users ride TransIT at least once a month. Smaller percentages of TransIT users indicated they used MDOT MTA Commuter Bus (35.8%), MARC Train (50.0%), and WMATA Metrorail (42.3%) services.




Asked their common trip purposes, respondents were most likely to use public transportation to get to work, with 60.0% of all transit users indicating that this was a common trip purpose. Other common trip purposes included social/recreation (48.3%), errands (38.3%), shopping (36.7%), and medical (33.3%). Smaller percentages of transit users used public transportation to access government service agencies (10.0%), and attend senior center events (1.7%).

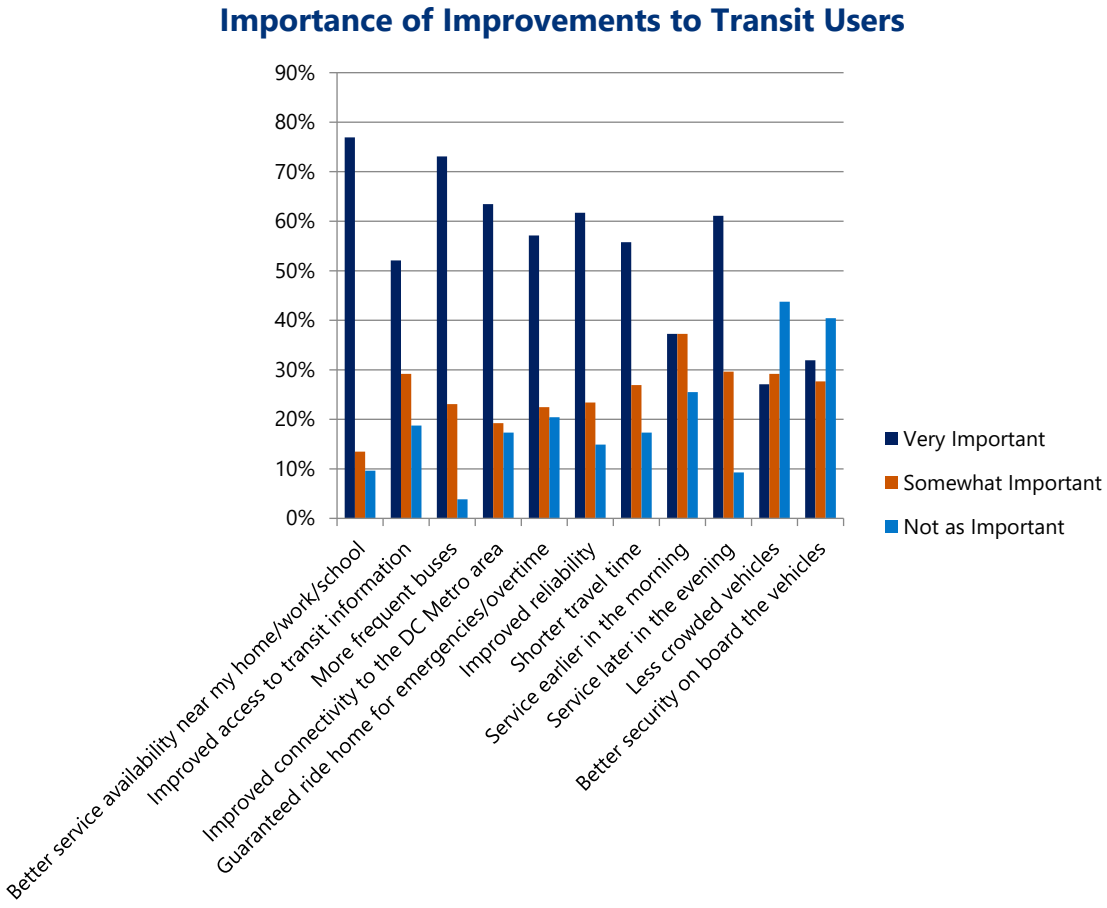




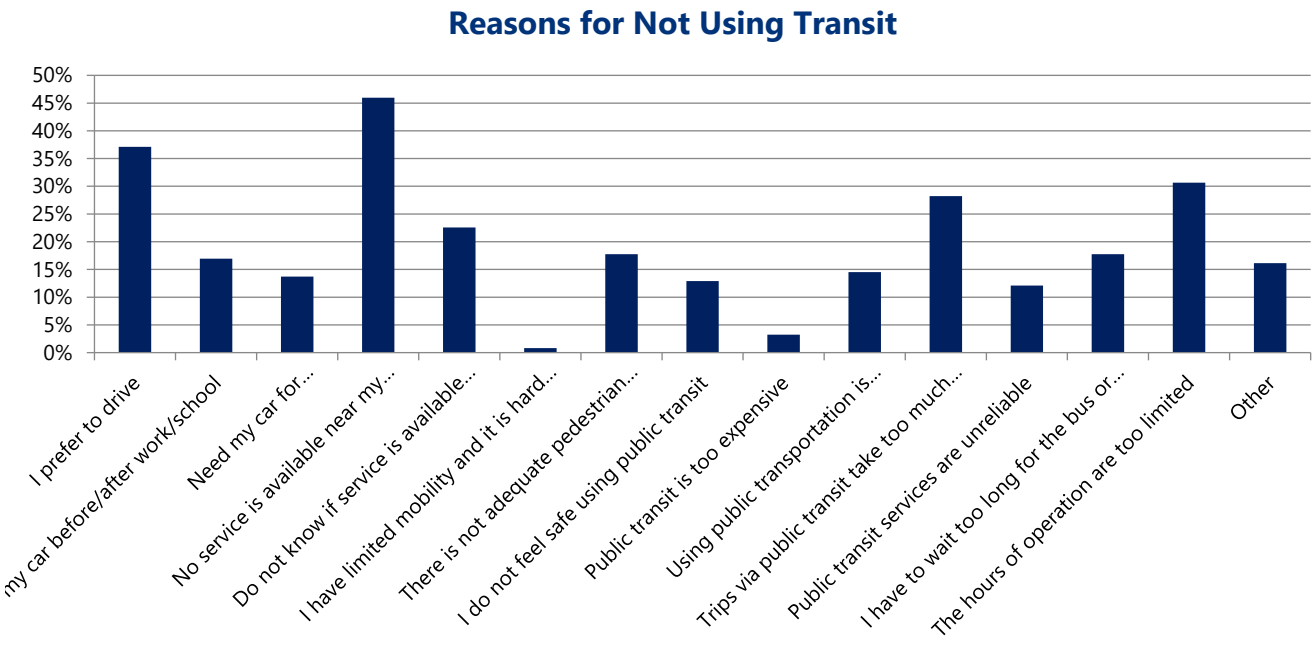




Asked to identify desired service improvements, current public transportation users were asked to rank several broad service improvements by level of importance. Over three quarters of respondents thought more service availability near their home, workplace, or school was very important. More frequent buses (73.1%), improved connections to the DC Metro area (63.5%), improved reliability (61.7%), and service later in the evening (61.1%) were frequently rated as very important by transit users. Asked to specify any areas that needed additional transit, public transportation users frequently mentioned Ballenger Creek, Ijamsville, and Thurmont. Some respondents also wanted more direct service to their desired locations to limit transfers, including service that ran more direct on Route 85 and a bus running on

Christophers Crossing from northwest Frederick. Some riders wanted additional service to the county's outlying areas, especially on the weekends.

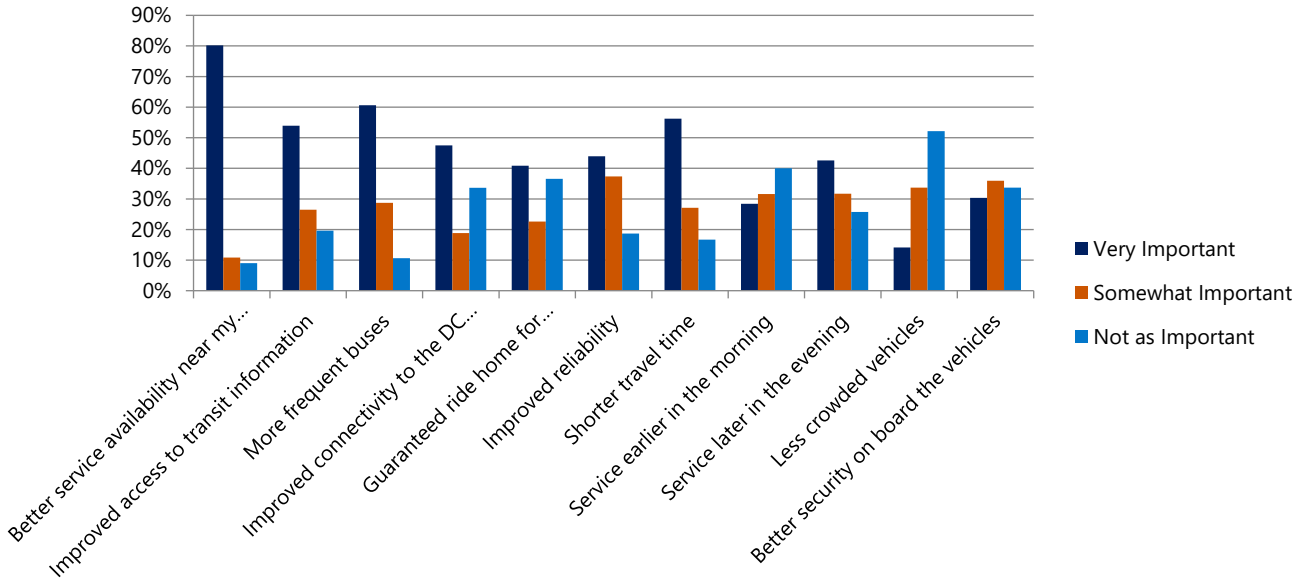



Approximately 124 respondents indicated that they do not use public transportation in Frederick County. Asked why they did not use public transportation, the most common reasons were no service available near their home/work/school (46.0%), preferring to drive (37.1%), limted hours of operation (30.7%), and trips via public transit taking too long (28.2%). If more public transit service was available, non-transit users indicated they would most likely use public transportation for errands (51.3%), social/recreation (50.4%) shopping (49.6%), work (48.7%), and medical (37.4%) trips.

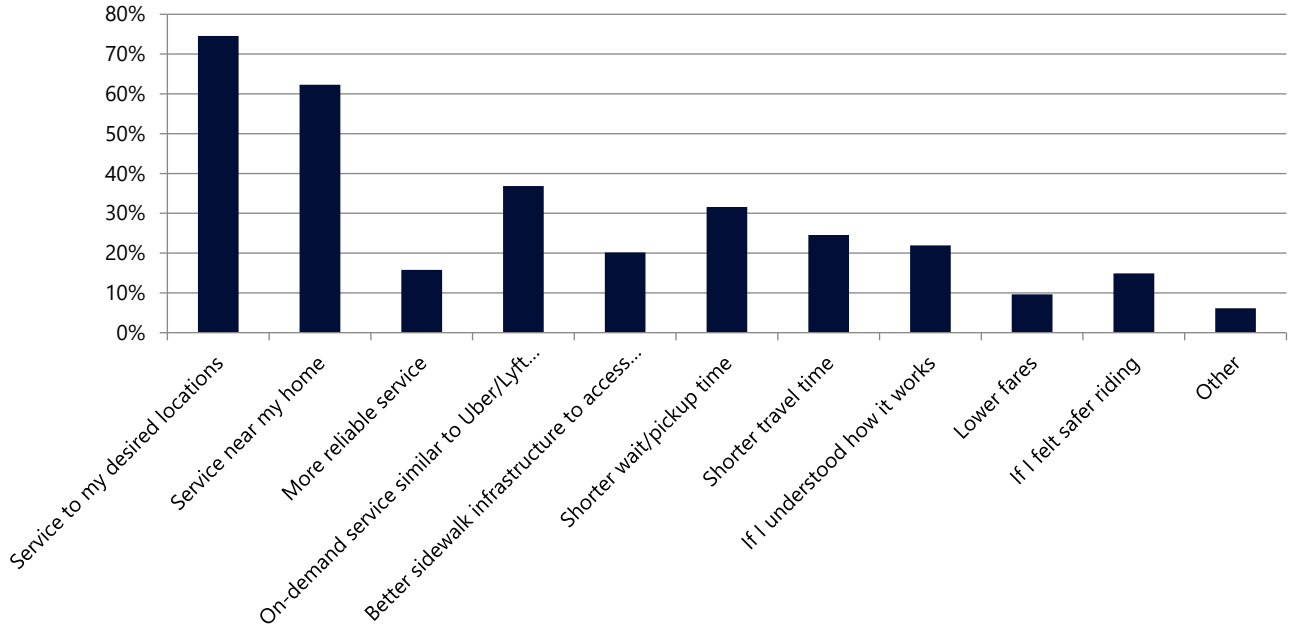



Asked what transit service improvements would make them ride transit with more frequency, a majority of non-transit riders indicated that better service availability to home/work/school (80.1%), more frequent buses (60.6%), shorter travel times (56.3%), and improved access to transit information (53.9%) were very important service improvements. Asked to list specific areas that required more service, 46 respondents provided specifics about which locations required additional service. Many respondents wanted additional service to locations in Montgomery County, especially connections to WMATA Metrorail. Other frequently mentioned locations included enhanced service in Ijamsville, Mt. Airy, New Market, Thurmont, and Urbana.

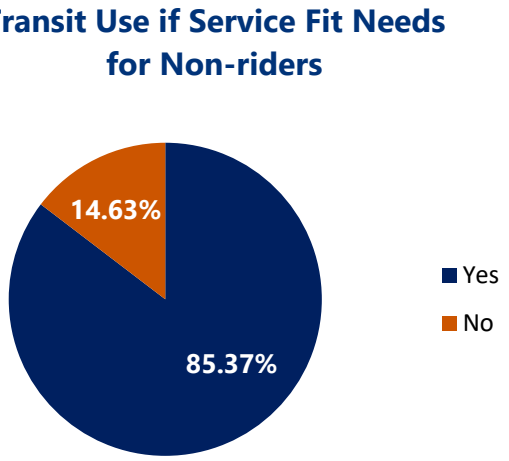
## Importance of Improvements for Non-riders




## Potential Trip Reasons for Non-Riders



Over 85 percent of non-transit riders indicated that they would use public transportation if there was a service that met their travel needs. Asked what their primary trip purposes would be on a service that fit their needs, errands (51.3%), social/recreation (50.4%), shopping (49.6%), and work (48.7%) trips were most frequently mentioned. Over 37 percent of non-transit users would use the service for medical trips.

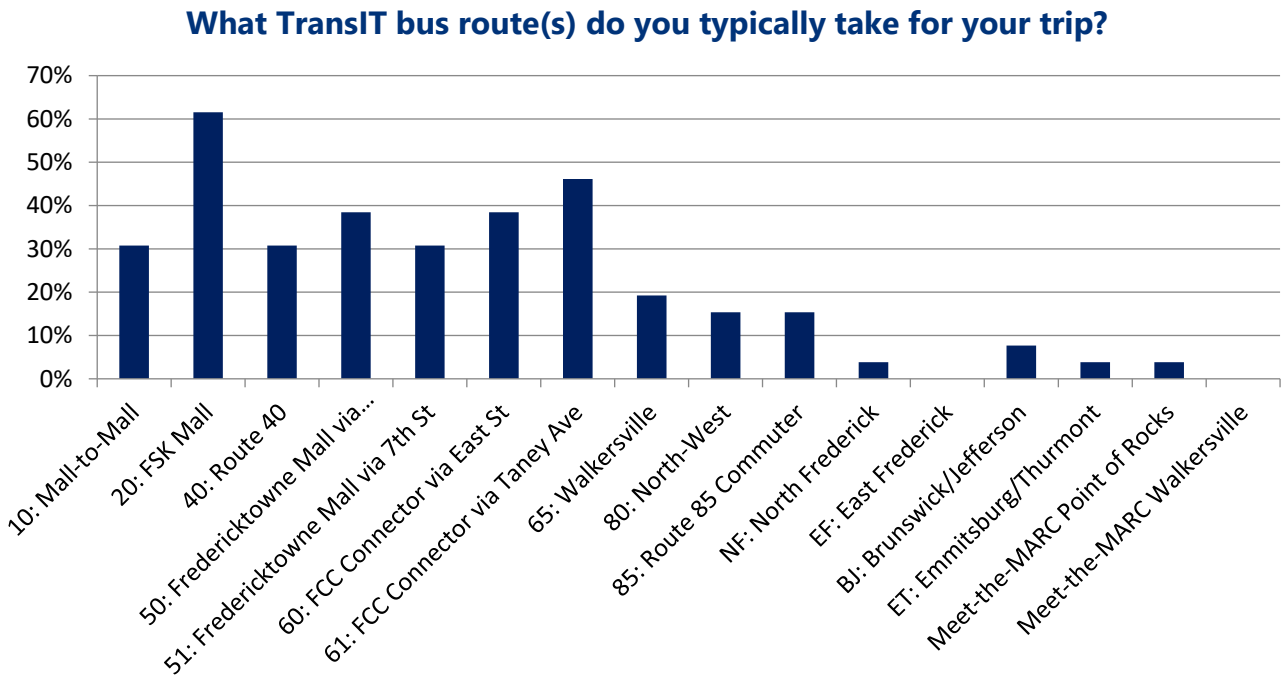



## Community Profile

After providing their thoughts on public transit in Frederick County, survey respondents were asked some demographic questions to create a profile of the typical survey respondent. Community survey respondents typically had a valid driver's license (84.8%) and access to a private automobile (79.7%). A majority of respondents were employed full-time (63.1%), while over eighteen percent indicated they were retired. Based on income, the highest percentage of respondents had an annual household income of over $100,000 (29.9%), and over 67 percent of respondents had an annual household income of over $41,000. Over 78.2% of respondents identified as white/Caucasian, and an additional 10.9% preferred not to answer.

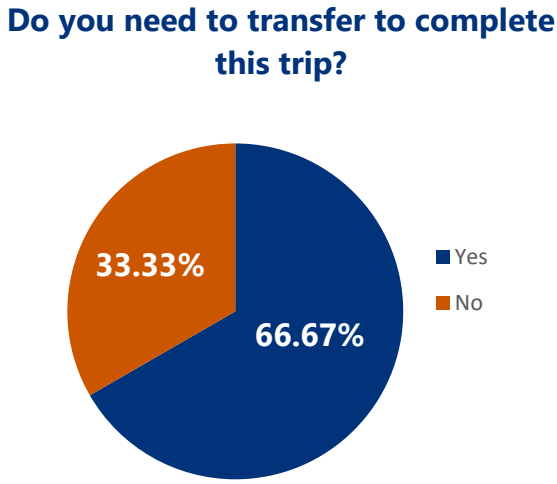
# Rider Survey

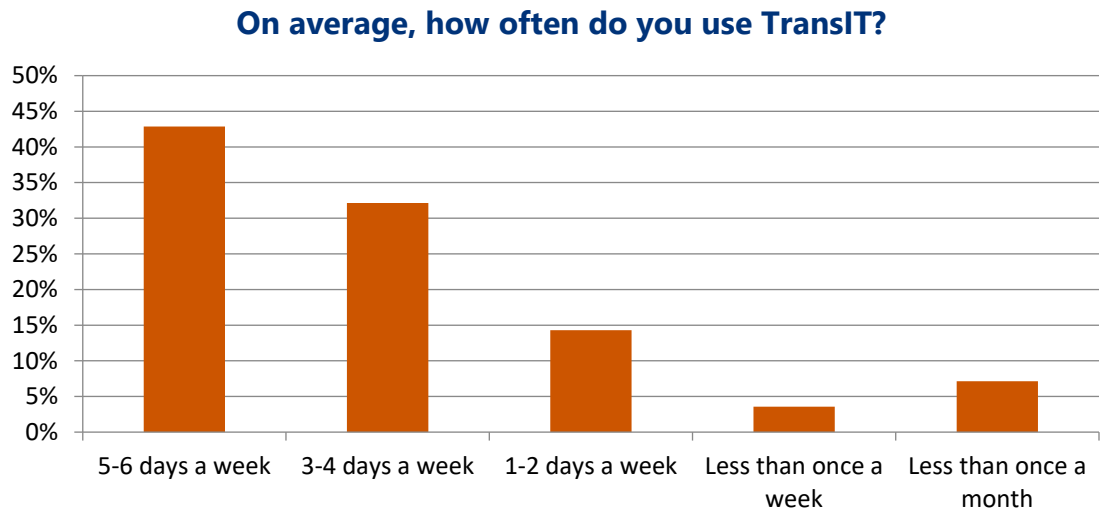
The rider survey was administered online due to existing COVID-19 social distancing measures. This survey, which under normal circumstances would have been administered on TransIT vehicles, received only 29 responses. Despite the lower number of responses, this feedback still provides valuable insight into the experiences of TransIT riders and what improvements could be most impactful on the perception and satisfaction of the service.



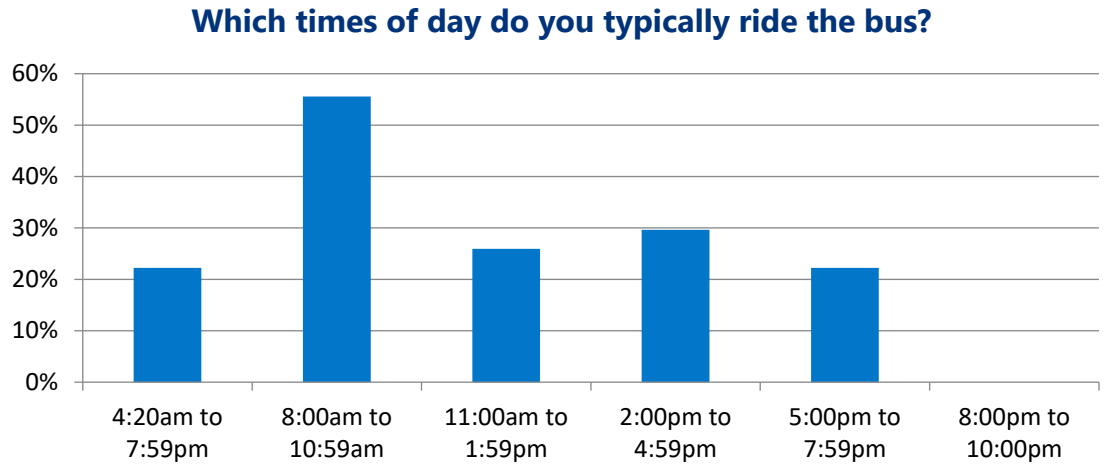

Riders were asked which TransIT buses they typically used for their trips, and a large amount of riders indicated that they regularly rode more than one TransIT route. The most indicated routes were route 20, route 61, and Route 50. Some respondents indicated they regularly used one of TransIT's 4 commuter shuttles.

When asked whether they need to transfer to complete their typical trip, about two thirds (66.7%) of respondents required a transfer to complete their typical trip. A slight majority (59.3%) of respondents said that they had no desired destinations or areas not already served by TransIT.

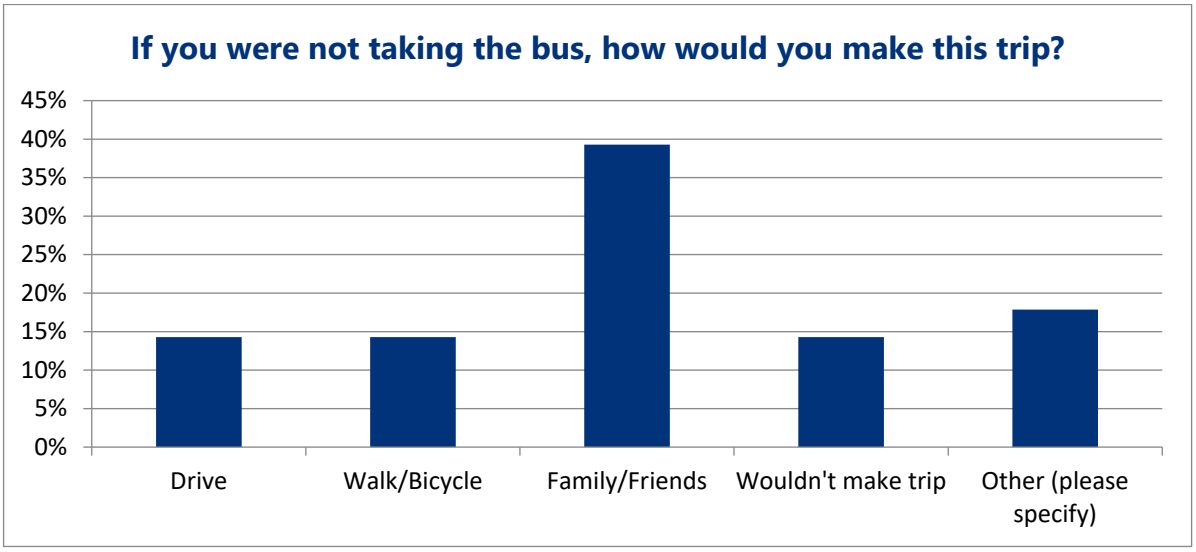




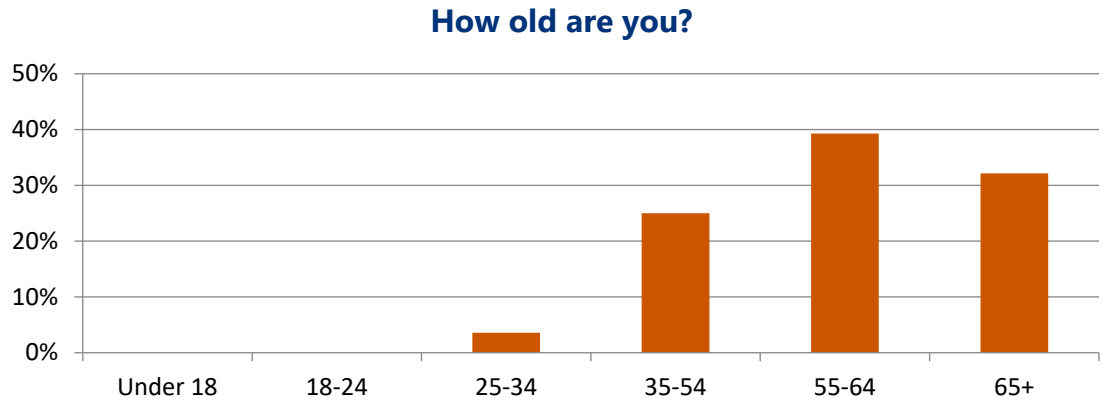

Asked how often they take TransIT, almost all respondents (89.3%) used TransIT at least one day a week, and over 42 percent indicated they used the service 5-6 days a week.




Asked what time of day they typically ride TransIT, the majority of riders used the bus between 8:00 a.m. -10:59 a.m., while no respondents indicated they normally used the service between 8:00 p.m. -10:00 p.m.




If not using TransIT, respondents indicated they would use family or friends (39.3%), drive themselves (14.3%), walk/bicycle (14.3%) to make their trip. Over 14 percent of respondents said they would not make their trip without TransIT.




The majority of riders were over the age of 55 (71.3%) and had an internet enabled mobile phone (89.3%), while only half of respondents (50.0%) had a valid driver's license.

# Frederick County 2020 Transit Development Plan
# Chapter 4: Alternatives

## Introduction

This chapter presents potential service alternatives for Frederick TransIT to consider for implementation during the five-year period covered by this Transit Development Plan (TDP). These alternatives were developed after a comprehensive review of existing TransIT services, demographic analysis, and public outreach. The next step in the TDP process is using the information obtained from this process to propose potential service alternatives throughout the service area based on gaps in current services and ways to improve ridership. Feedback on the alternatives from TransIT staff, stakeholders, and the Maryland Department of Transportation Maryland Transit Administration (MDOT MTA) will be used to refine the alternatives for inclusion in a final five-year plan.

The alternatives discussed in this chapter include a summary of each proposal as well as the potential advantages, disadvantages, and estimates of costs and ridership. They focus on:

- Fixed Route Options – Connector and Shuttle
  - Route modifications
  - More frequent service
  - Sunday service
  - Later evening hours
  - Fare free service
- Demand Response – Microtransit
- Infrastructure

The proposed improvements concentrate on:

- Reducing the need for customers to transfer and allowing more “one-seat” rides.
- Shortening travel time for customers through service modifications.
- Decreasing headways (the time between buses heading in the same direction).
- Exploring new service areas
- Serving riders utilizing new service methods and technology

## Fixed Route Modifications

This section discusses the potential service alternatives for targeted Frederick TransIT Connector and Shuttle routes. These alternatives are designed to serve as a starting point and can be modified based on the needs of the City of Frederick and Frederick County. In addition, due to both the Coronavirus

(COVID-19) and indeterminate economic times, the directive was to create a route network that achieved greater efficiencies while initially keeping costs neutral. The cost information is expressed as the fully allocated costs, which means we have considered all of the program's costs on a per unit basis when contemplating the operating budget. Thus, we used the year-end FY2019 operating cost per hour of $78.03 for Connector routes and $84.34 for the urbanized Shuttles derived from the MTA 2a form. This overstates the incremental cost of minor service expansion, as there are likely to be some administrative expenses that would not be increased with the addition of a few service hours. A proposed route map is shown for each modified route. The potential impacts of the route modifications are provided in Table 4-1.

## #10 Mall-to-Mall Connector

- Minor route adjustments – proposed route map is shown in Figure 4-1:
  - Eliminate route section along Crestwood Blvd. between Corporate Drive and New Design Road
  - Eliminate Farmbrook Drive
  - Serve apartments in Kingsbrook

## #20 FSK Mall Connector

- No proposed route adjustments.

## #40 Route 40 Connector

- No proposed route adjustments[1]

## #50/51 Frederick Towne Mall Connectors

- Separate routes into a north route (north of Patrick St.) and a south route (south of Patrick St.) – proposed route map is shown in Figure 4-2:
  - Actual alignment of routes would primarily stay the same
  - Route 51 would have a slight modification to also serve Creekside apartments along Bel Aire Lane.

[1] Future infrastructure improvements on Route 40 may allow for increase in route frequency.

## #60/61 Frederick Community College Connectors

- Establish a single route – proposed route map is shown in Figure 4-3:
- Two routing terminus options based on scheduling were analyzed
    - Frederick Community College
    - Walmart (Monocacy Blvd.)
        - It was determined that the way Walmart is currently configured the bus cannot exit to go west on Monocacy Boulevard.
        - This would require two vehicles and therefore was not explored further.
- Frederick Community College option would free up one Connector bus to support another route (see below *Extra Connector Bus Options*)

## #65 Walkersville Connector

- Minor route adjustments– proposed route map is shown in Figure 4-4:
    - Eliminate Monocacy Boulevard leg
    - Serve Worman's Mill
    - Serve Clemson Corner
    - If practicable, serve Market Place (PetSmart/One Life Fitness/HomeGoods plaza)
- These routing modifications were determined to be adverse and not explored further
- When the extension of Mill Pond opens additional routing options will become available

## #80 North-West Connector

- Realign to serve areas currently without service.
- A few different alternatives are provided (Figure 4-5) to ensure appropriate headways are achieved as well as addressing the preferred geographic coverage.
- Key locations targeted – Tuscanney Drive, Walnut Ridge and Christophers Crossing.

## Extra Connector Bus Option

### North Frederick Shuttle becomes the North Frederick Connector

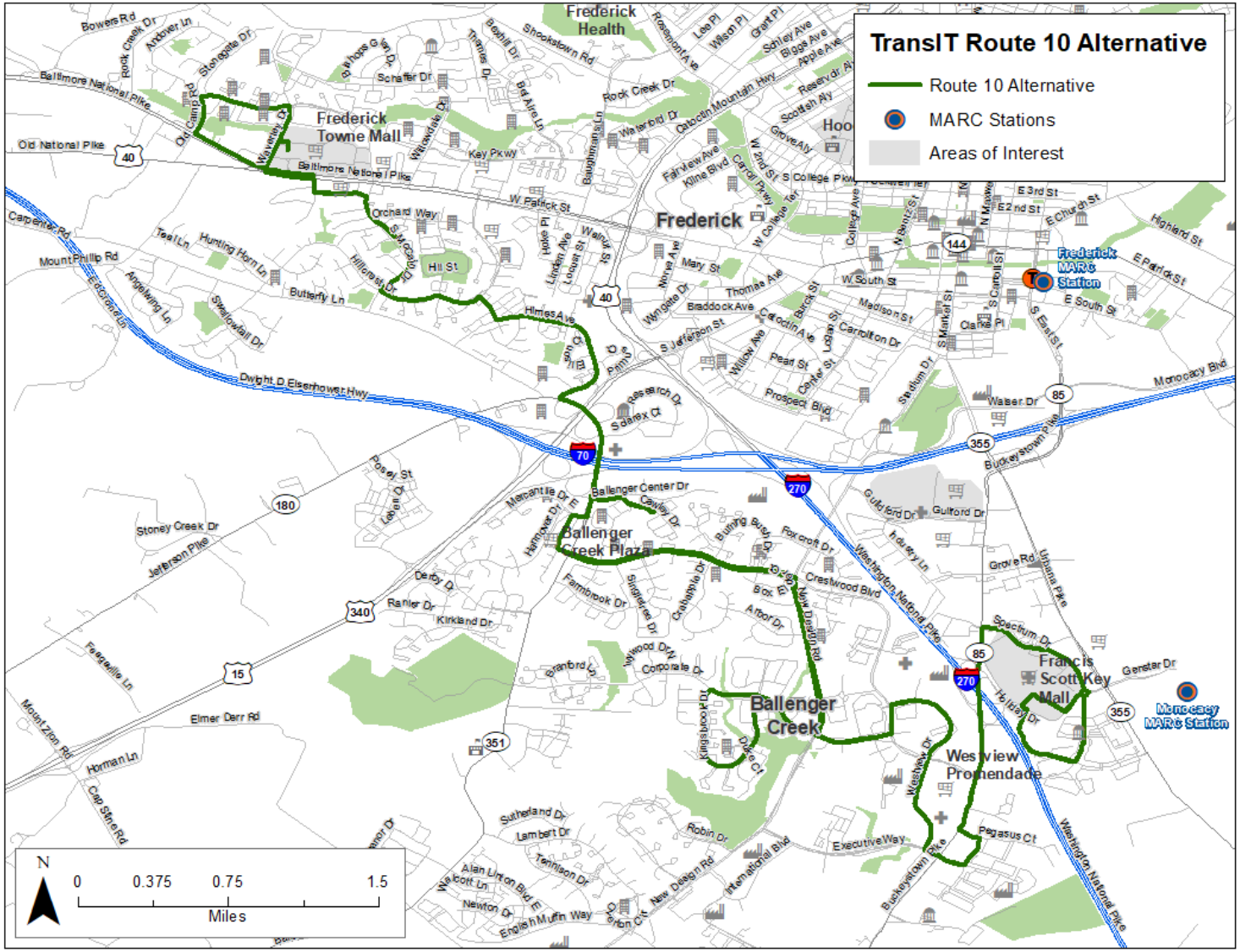
- Use the "extra" Connector bus that was freed from the #60/61 modifications– proposed route map is shown in Figure 4-6:
    - True to its name this new design would be solely a connection for north Frederick.
    - This "new" route would serve Frederick Community College, North Frederick Park and Ride Lot, Walmart and Walkersville.

- This would potentially free up #65 Walkersville Connector to serve Schifferstadt and Broadband.
- Additionally, the potential to incorporate a more express route to Walkersville providing an option for transfers at Walmart.

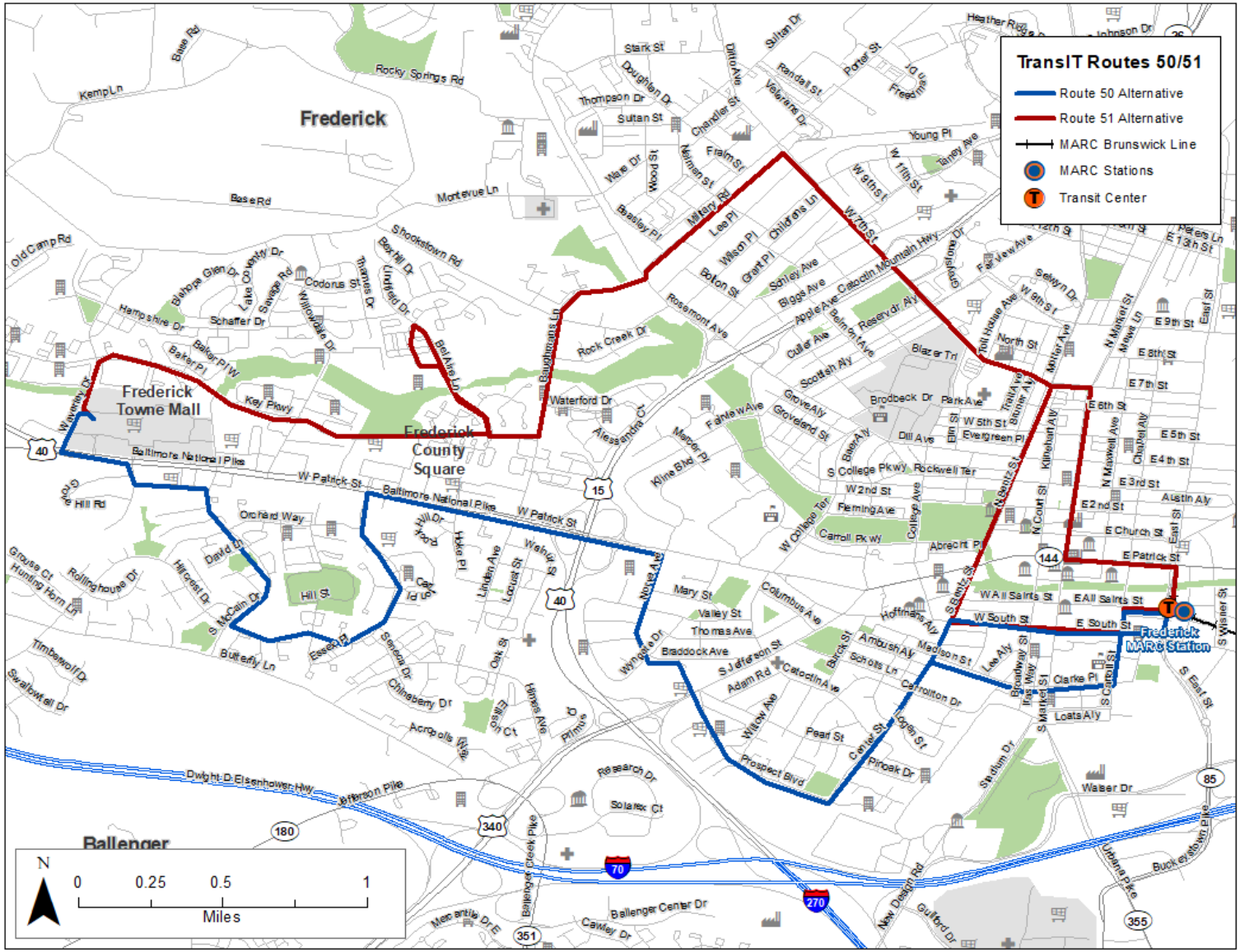
## Route 85 Commuter Shuttle

- Minor route adjustments– proposed route map is shown in Figure 4-7:
  - Increased Ballenger Creek service coverage.

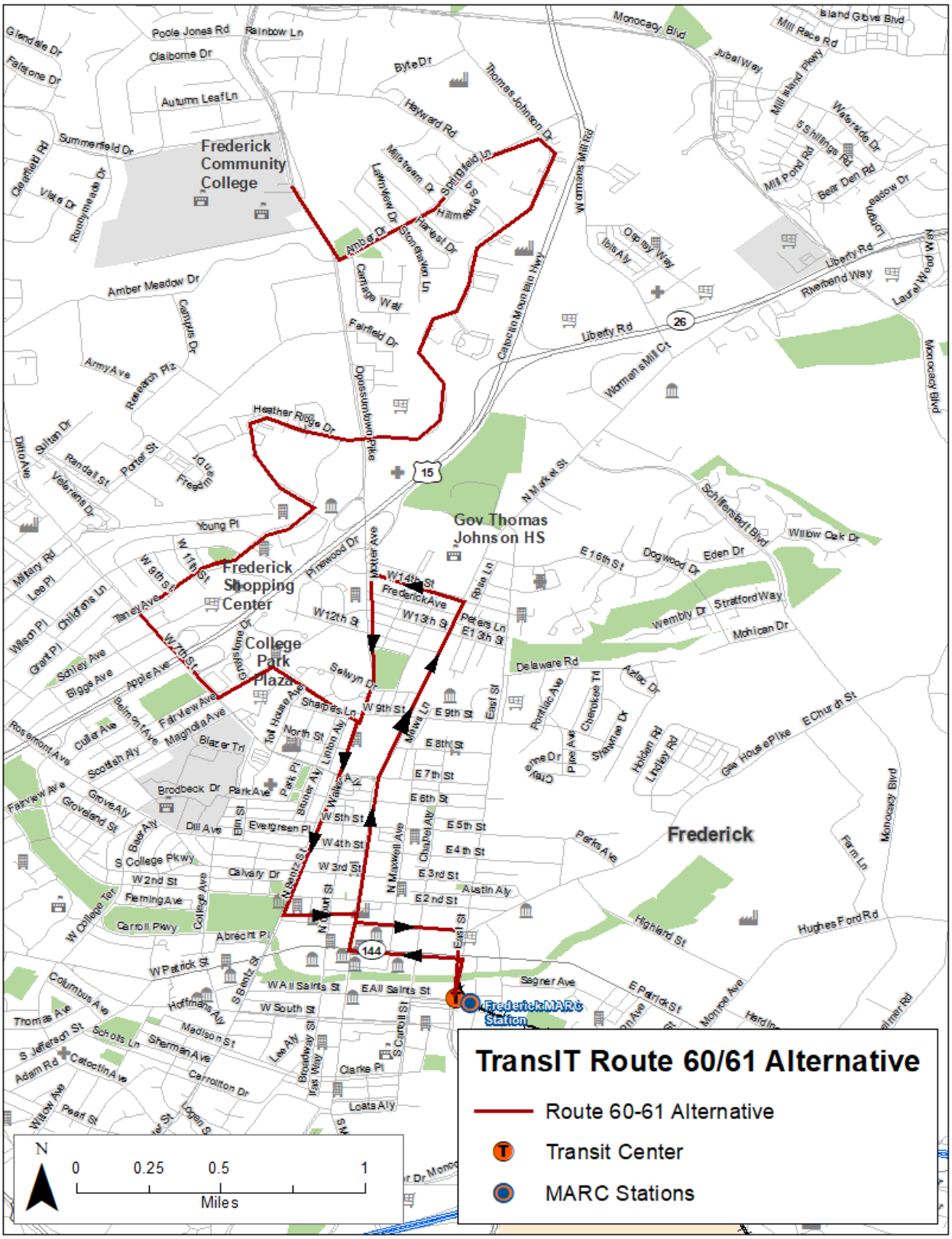
## Figure 4-1: Route 10 Alternative



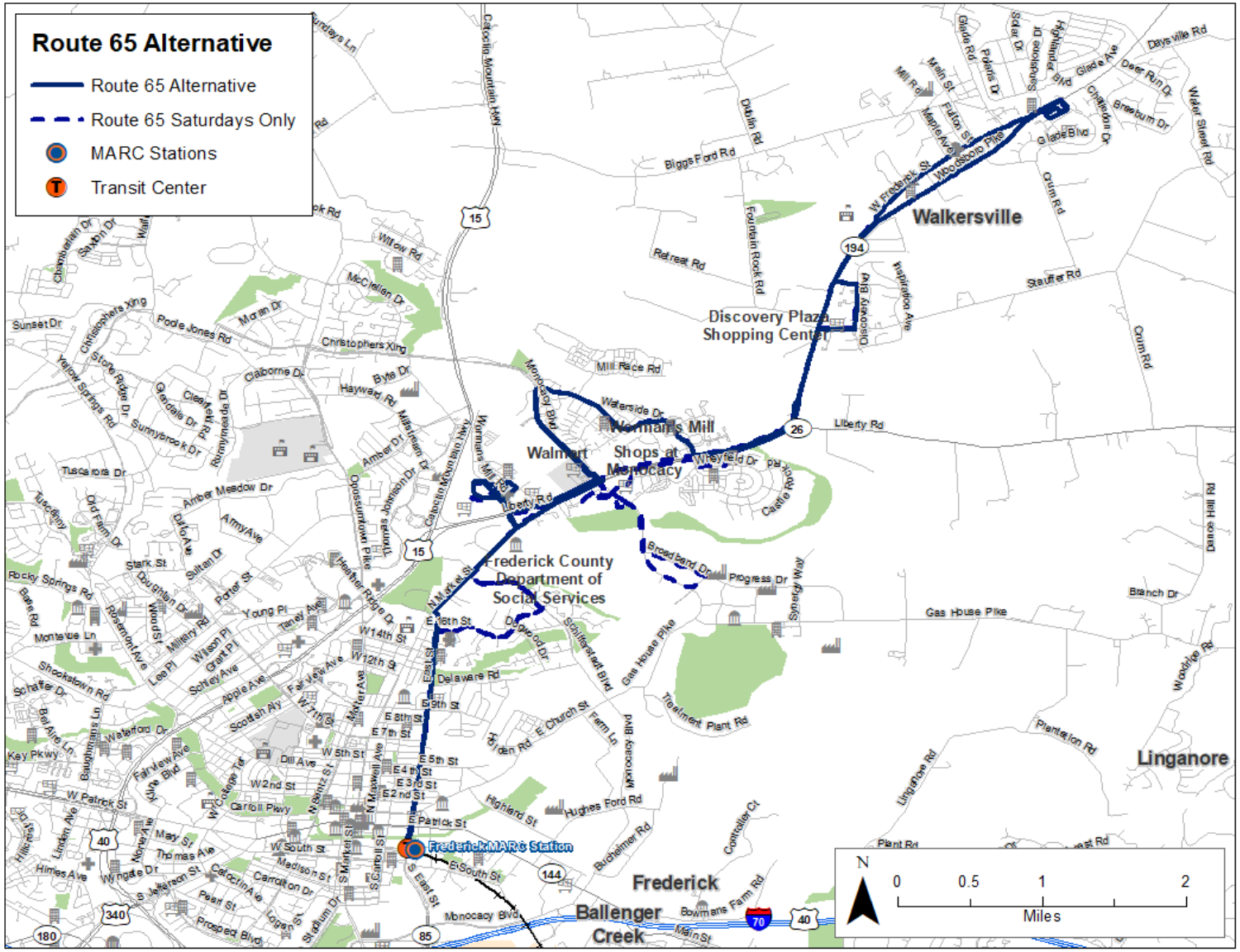
## Figure 4-2: Route 50/51 Alternative



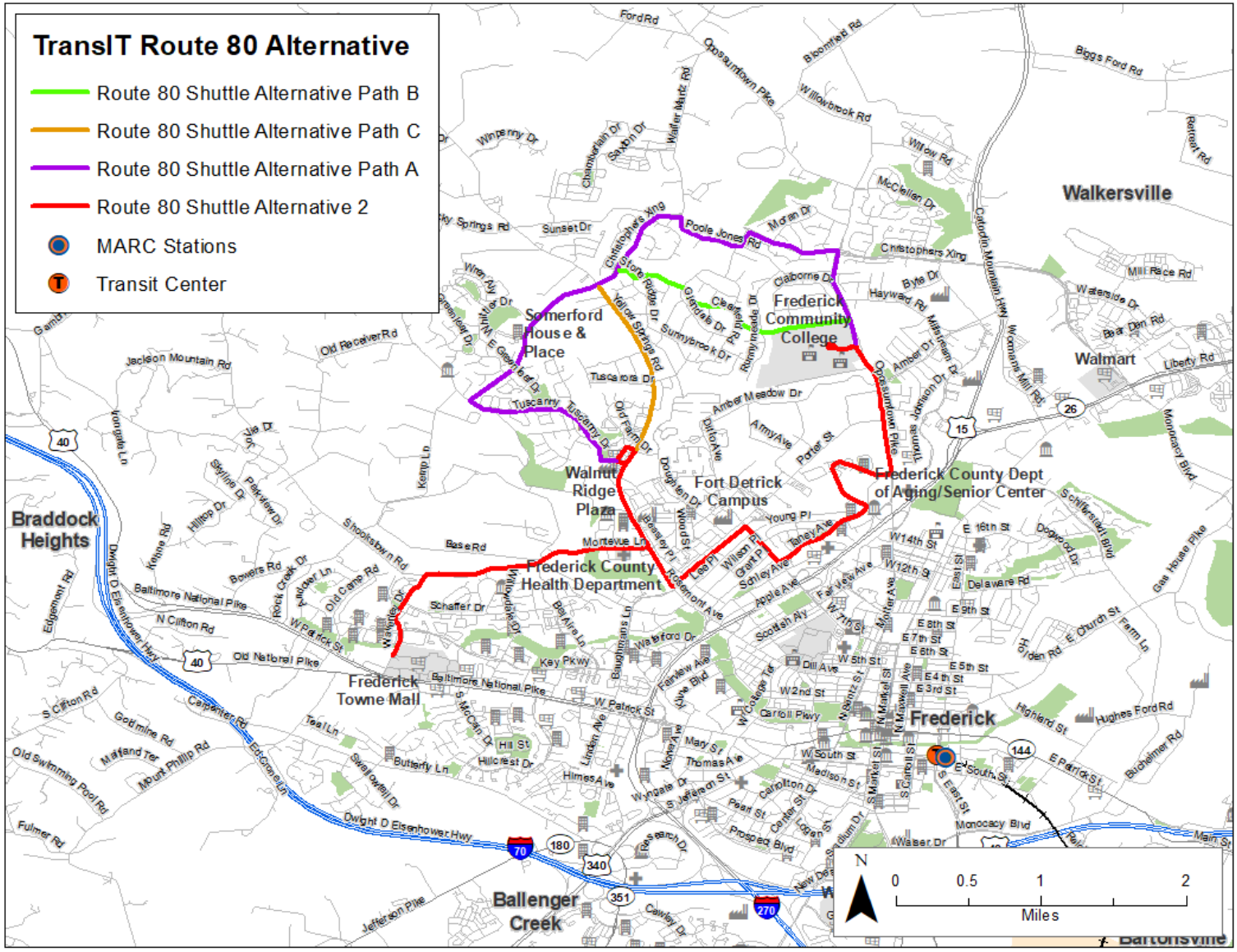
## Figure 4-3: Route 60/61 Alternative



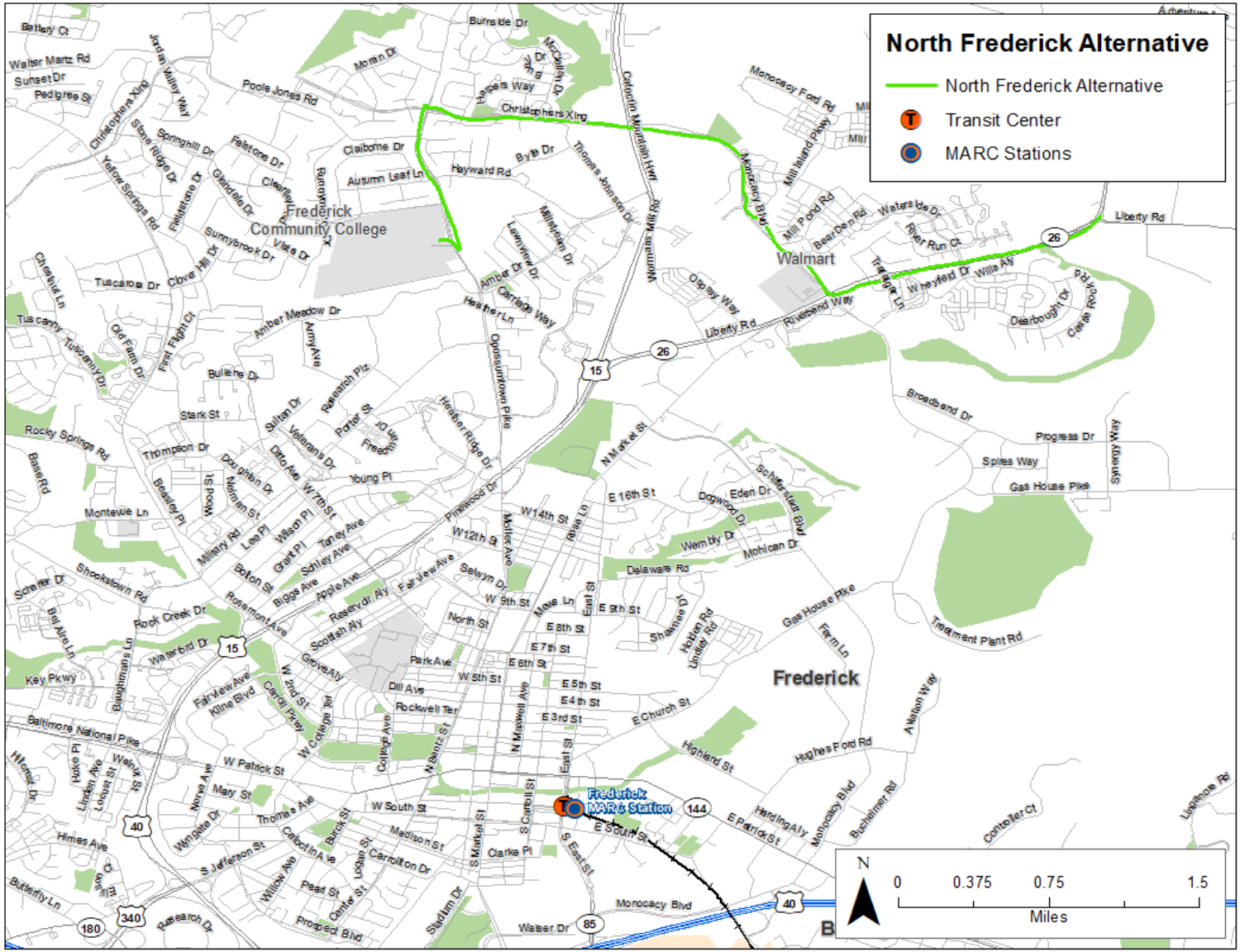
## Figure 4-4: Route 65 Alternative



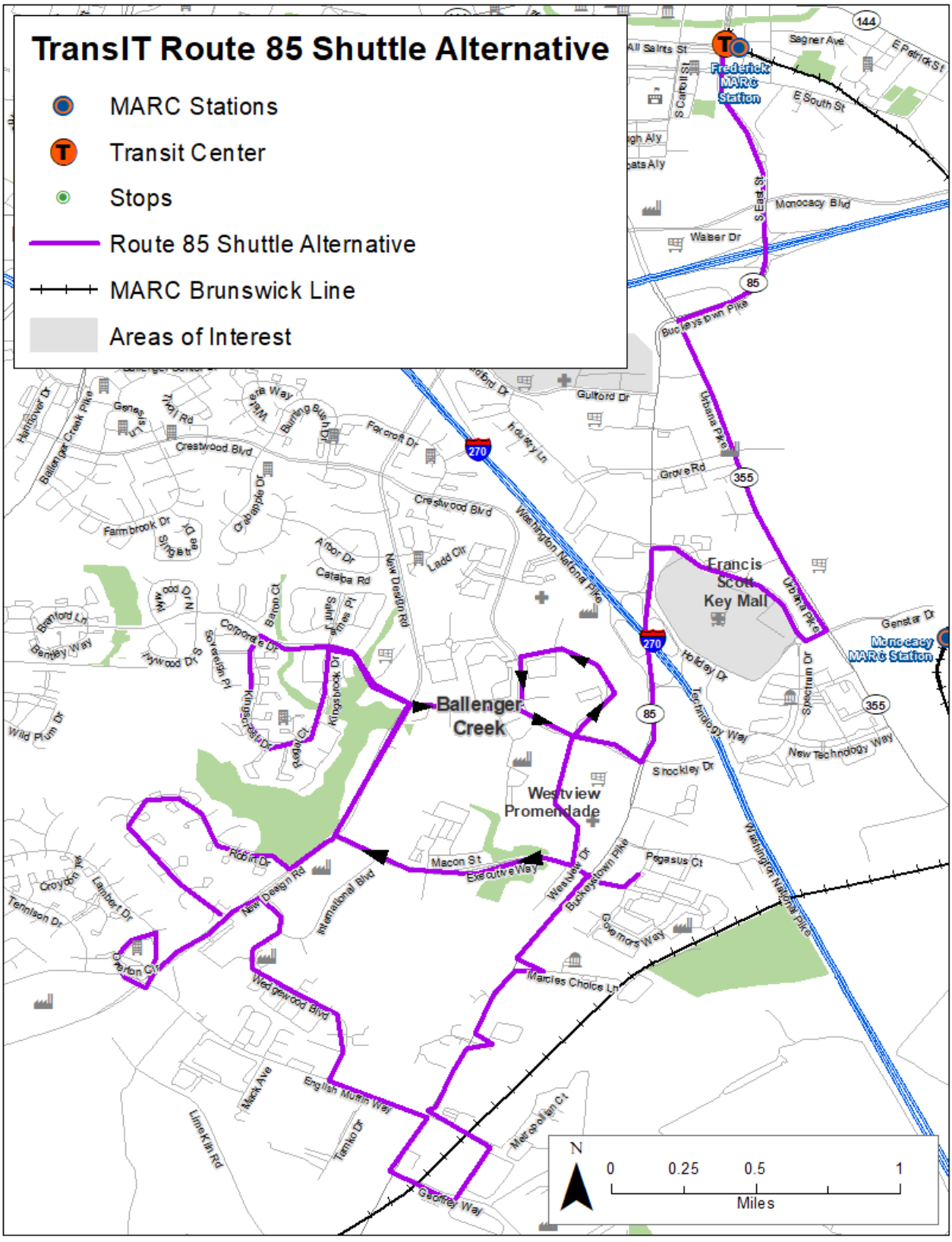
## Figure 4-5: #80 North-West Connector Alternatives



## Figure 4-6: North Frederick Connector Alternative



## Figure 4-7: Route 85 Shuttle Alternative



## Table 4-1: Potential Impacts of Fixed Route Modifications

| Advantages | Disadvantages |
|---|---|
| • Eliminates fixed route service segments with low performance.<br>• Uses data from on off counts to maximize service to and from key origins and destinations.<br>• Increases the level of service to several key origins and destinations.<br>• Establishes the north Frederick Walmart (Monocacy Blvd.) as another transfer stop.<br>• Alleviates transfer issues (50/51 and 60/61).<br>• Streamlines routes, making TransIT more convenient, appealing, and understandable for riders. | • Any route and schedule adjustments would require TransIT to update its print and web materials.<br>• Though service continues for the majority of stops, there are a few that will no longer receive direct service.<br>• Route adjustments would require an education campaign to alert riders and reduce confusion during implementation. |
| **Cost Estimates** | **Ridership Impacts** |
| • The route adjustments are designed to be cost-neutral.<br>• Schedule re-design and printing would incur minimal costs. | • The adjustments will streamline the routes and make them more bi-directional.<br>• Modest increase in ridership due to:<br>  ○ On-time performance<br>  ○ Greater service to key destinations<br>  ○ More direct routing |

# Increased Connector Route Frequency

This alternative would supplement the core Connector services (currently Connector Routes 10, 20, 40, 50/51, and 60/61) by reducing headways for these routes to 30 minutes all day. Since the routes currently operate on hour headways, multiple scenarios are available for implementation – one initial route, two phased groupings (first Route 40 and Route 50/51 since these routes have the highest ridership per hour and then Routes 10, 20 and 60/61) or all at once if funding is available. This will require adding seven additional all-day vehicles to the morning and evening service routes. All routes would continue to operate in their same "new" pattern, though by adding vehicles to Route 10 and Route 20 there is an opportunity to merge those routes together keeping the time transfer at the Transit Center and introducing a one seat ride for passengers along this route corridor. The potential impacts of this proposal are outline in Table 4-2.

### Table 4-2: Potential Impacts of Increased Connector Route Frequency

| Advantages | Disadvantages |
|---|---|
| • The ability to start the service in the morning a half hour earlier and end in the evening a half hour later, thus extending the service span for each weekday (if that is the most optimal time to add the additional service).<br>• Provides higher service along key corridors.<br>• Potentially alleviates transfers between Route 10 and Route 20.<br>• Increased convenience for customers.<br>• Increased ridership. | • Any route and schedule adjustments would require TransIT to update its print and web materials.<br>• Increasing frequencies may reduce productivity and add to annual operating costs (as service would double but ridership likely would not). |
| **Cost Estimates** | **Ridership Impacts** |
| • Will require up to 7 vehicles, each estimated to be about $400,000.<br>• If the route operates a 17-hour span of service, Monday through Friday, the annual operating expenses are estimated to be about $66,350 for each vehicle required (only Route 10 would require two vehicles). | • Combined Connector routes provide 8.45 passenger trips per hour. It is likely that overall ridership increases, but productivity drops because trips are spreading over more hours. Thus, 5.915 "new" passenger trips per hour (70% of the current trips/hr.) are achieved, the annual ridership increase would be around 25,000 trips. |

## Sunday Service

Frederick TransIT currently provides service Monday through Saturday only. Sunday service will be particularly helpful for transit-dependent passengers, and also provides an option for residents with cars to run errands, shop, and conduct social activities. Sunday service targets transit riders' four out of the top five trip purposes – work, shopping, social/recreation, and errands, as identified in the Community Survey results.

This alternative proposes that TransIT initiate Sunday service on the same routes currently providing Saturday service. Depending upon funding availability, Sunday service could be implemented on a six-hour service span (for example from 10:30 a.m. to 5:30 p.m.). Assuming the Saturday service routes are mirrored, eight vehicles would be required to ensure that an hourly headway is adhered to on all routes (except for Route 10 which does not keep to hourly headways). The potential impacts of this proposal are outline in Table 4-3.

### Table 4-3: Potential Impacts of Sunday Service

| Advantages | Disadvantages |
|---|---|
| • Addresses a need articulated in the rider and community surveys.<br>• Offers mobility options for employment, essential shopping, and religious trips.<br>• Would not require additional capital to run the service. | • Would require TransIT to update its print and web materials.<br>• Additional service would increase annual operating expenses. |
| **Cost Estimates** | **Ridership Impacts** |
| • If the Sunday routes each operates a six-hour span of service (plus an hour for deadheads), the annual operating expenses are estimated to be about $218,500. | • Current Saturday service achieves about 7.35 trips/hour. If we predict Sunday service will be 75% as successful – 5.5 trips per hour is used totaling 132,000 trips per year. |

# Expand Saturday Service

As noted in Chapter 1: Existing Services, Connector routes operate six days a week, Monday through Saturday. However, not all Connector routes operate on Saturdays. Additionally, the service span and frequency are less than the weekday service.

This alternative proposes that TransIT expand Saturday service so that it mirrors the weekday schedules/service. Assuming the weekday service routes are mirrored, approximately 77 vehicle hours would be required. The potential impacts of this proposal are outline in Table 4-4.

### Table 4-4: Potential Impacts of Expanded Saturday Service

| Advantages | Disadvantages |
|---|---|
| • Improves access and makes TransIT easier and more convenient to use.<br>• Addresses a need articulated in the rider and community surveys.<br>• Offers mobility options for employment, essential shopping, and religious trips.<br>• Would not require additional capital to run the service. | • Would require TransIT to update its print and web materials.<br>• Additional service would increase annual operating expenses. |
| **Cost Estimates** | **Ridership Impacts** |
| • If the Saturday routes each operate the same schedule as the weekday service, the additional annual operating expenses are estimated to be about $300,415. | • Current Saturday service achieves about 7.35 trips/hour. If we predict additional Saturday service will be 75% as successful – 5.5 trips per hour is used totaling 21,175 additional Saturday trips per year. |

# Later Evening Hours

TransIT provides service on its Connector routes Monday through Thursday until approximately 9:35 p.m. and Friday 9:45 p.m. This span can be problematic for many who work outside of traditional shifts; specifically work was the number one transit user trip purpose and service later in the evening ranked high in terms of importance of improvements for transit users.

This alternative would extend evening hours Monday through Friday on the Connector routes, on the same route network. Depending upon implementation (whether this alternative is carried out after reducing headways on each Connector route), frequency would be either every hour or half hour. Adding one hour would accommodate late night trips, resulting in about 2,500 additional hours for service until 9:35 p.m. – 9:45 p.m. (hourly headway scenario) or 5,000 additional hours for service until 9:35 p.m. – 9:45 p.m. (30-minute headway scenario). The potential impacts of this proposal are presented in Table 4-5.

### Table 4-5: Potential Impacts of Later Evening Hours

| Advantages | Disadvantages |
|---|---|
| • Addresses a need for later evening hours rider and community surveys.<br>• More attractive to workers.<br>• Increases social opportunities.<br>• Does not require additional capital. | • Increase annual operating expenses.<br>• Still might not be enough to capture untraditional working hour employees. |
| **Cost Estimates** | **Ridership Impacts** |
| • One additional hour of service will total around $195,000 annually under the current hourly frequency.<br>• One additional hour of service will total around $390,000 annually if service is running the proposed 30-minute headways on all Connector routes. | • Ridership per hour will be slightly lower since it is on the peripheral. If we predict service will be 75% as successful – 6.35 trips per hour is used totaling 15,875 trips per year (hour headways) and 31,750 trips per year (30-minute headways). |

## Fixed-Route Fare Free Service

Prior to the COVID-19 pandemic, TransIT's base fare for a one-way TransIT trip was $1.50. Deviations of up to ¾ mile from the route cost an additional $2.00. TransIT also offered a variety of general public bus pass options. Additionally, they have a Senior & Disabled Persons Reduced Fare and a Youth/Students with ID option. Currently, all TransIT services are free due to the COVID-19 pandemic.

This alternative recommends continuing this fare free policy permanently. New policies would need to be employed such as origin-to-destination policies (addressing all day ridership). The potential impacts of this proposal are presented in Table 4-6.

### Table 4-6: Potential Impacts of Fixed-Route Fare Free Service

| Advantages | Disadvantages |
|---|---|
| • Service is more efficient, faster and convenient.<br>• Advances equity.<br>• Helps stimulate local economy.<br>• Does not require additional capital. | • Loss revenue would need to be captured elsewhere.<br>• Potential for increased passenger disturbances. |
| **Cost Estimates** | **Ridership Impacts** |
| • The route adjustments are designed to be cost-neutral.<br>• Schedule re-design and printing where fares are listed would incur minimal costs. | • Short-term would result in steady ridership due to the existence of fare free service. Modest increase in ridership from pre-pandemic levels is envisioned. |

# Demand Response Service

Stakeholders and staff have identified the need for additional demand response service to meet the needs for a variety of customers, including SSTAP and ADA paratransit riders. Over the past several years ADA paratransit demand and SSTAP ridership has been growing. Two possible ways that additional service could be provided are considered below.

# Implement Microtransit Service

As on-demand ride-hailing apps like Uber have become a common mobility option over the past decade, demand has risen for public transit services that utilize mobile technology to provide on-demand transportation services. In the past few years, microtransit services have emerged across the country. As a county with a large commuter population and several smaller suburban communities, microtransit could be a viable option as both a peak hour commuter service to commuter rail or a more local service for errands. A microtransit pilot service could be implemented in Frederick County to either replace lower performing fixed route service or to better serve more isolated areas of the county. To better understand where microtransit service might be appropriate, a demographic analysis was performed. This analysis is described on the following page.

## Microtransit Propensity Index (MPI)

The MPI was created to help transit providers make decisions on where to establish microtransit zones based on demographic, geographic, and infrastructural factors that may impact an area's propensity for service. An MPI score was calculated for each Census Block Group in Frederick County and was calculated based on several variables.

Population density (PD), household density (HHD), percent below poverty (PBP), percent no vehicle households (PNV), and intersection density (ID) were deemed positive indicators of microtransit propensity. Areas within 1.5 miles of a high-frequency transit center/hub (TC) received a multiplier to indicate a first mile-last mile connection could be made with high frequency transit. Extensive sidewalk coverage/density (SWD) and the existence of fixed route services (EFR) are considered potential impediments to successful microtransit and were impacted accordingly.

Internet and smartphone access were not included in the analysis since broadband connectivity and smartphone use are widespread throughout the county.

The MPI was calculated using the following formula:

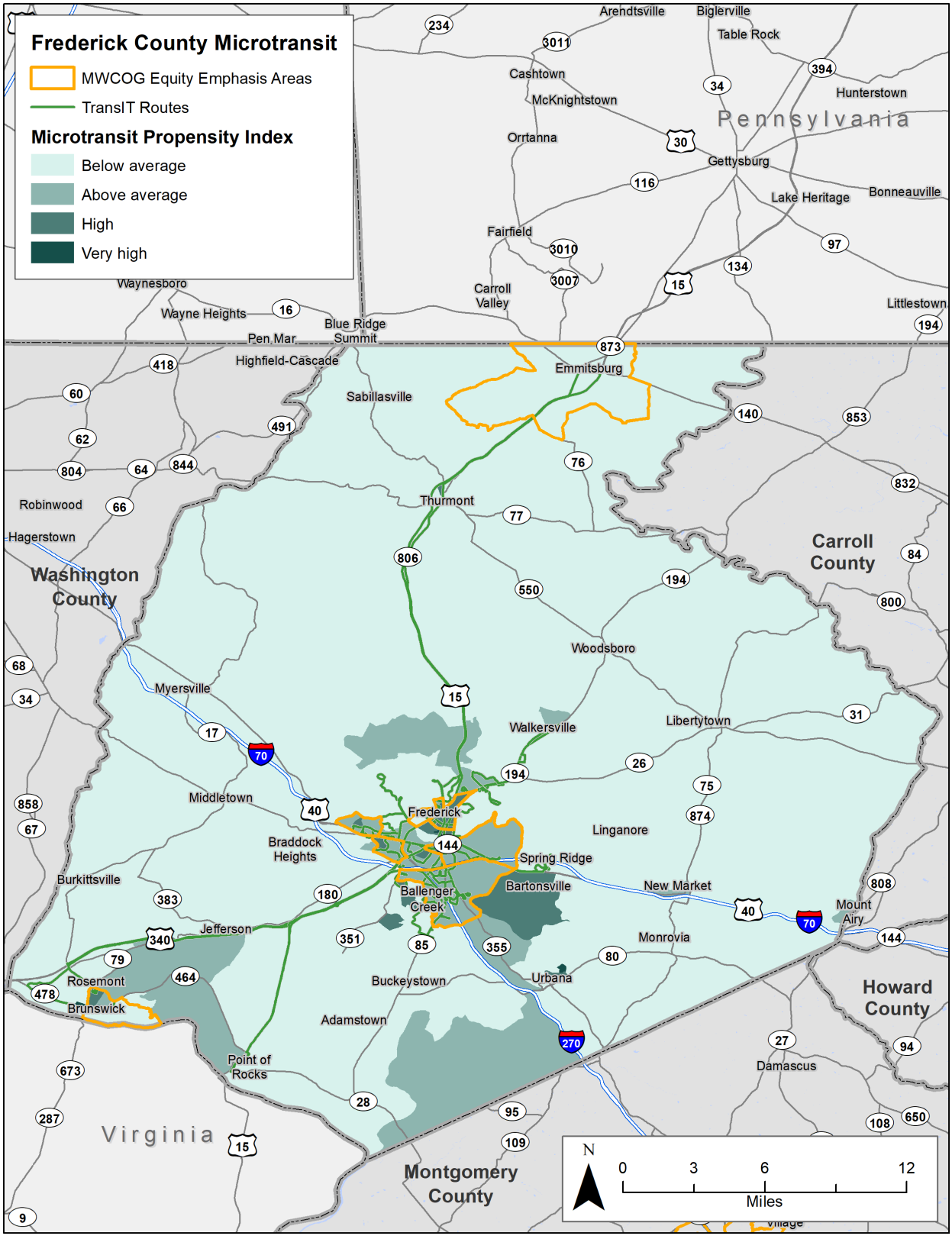
$$\frac{(((PD + HHD + PBP + PNV) - SWD)(ID + TC))}{(EFR)}$$

The MPI – as well as population density, household density, percent below poverty, percent no vehicle households, sidewalk density, and intersection density – was scored based on a block group's relation to the study area's mean and standard deviation of each metric.

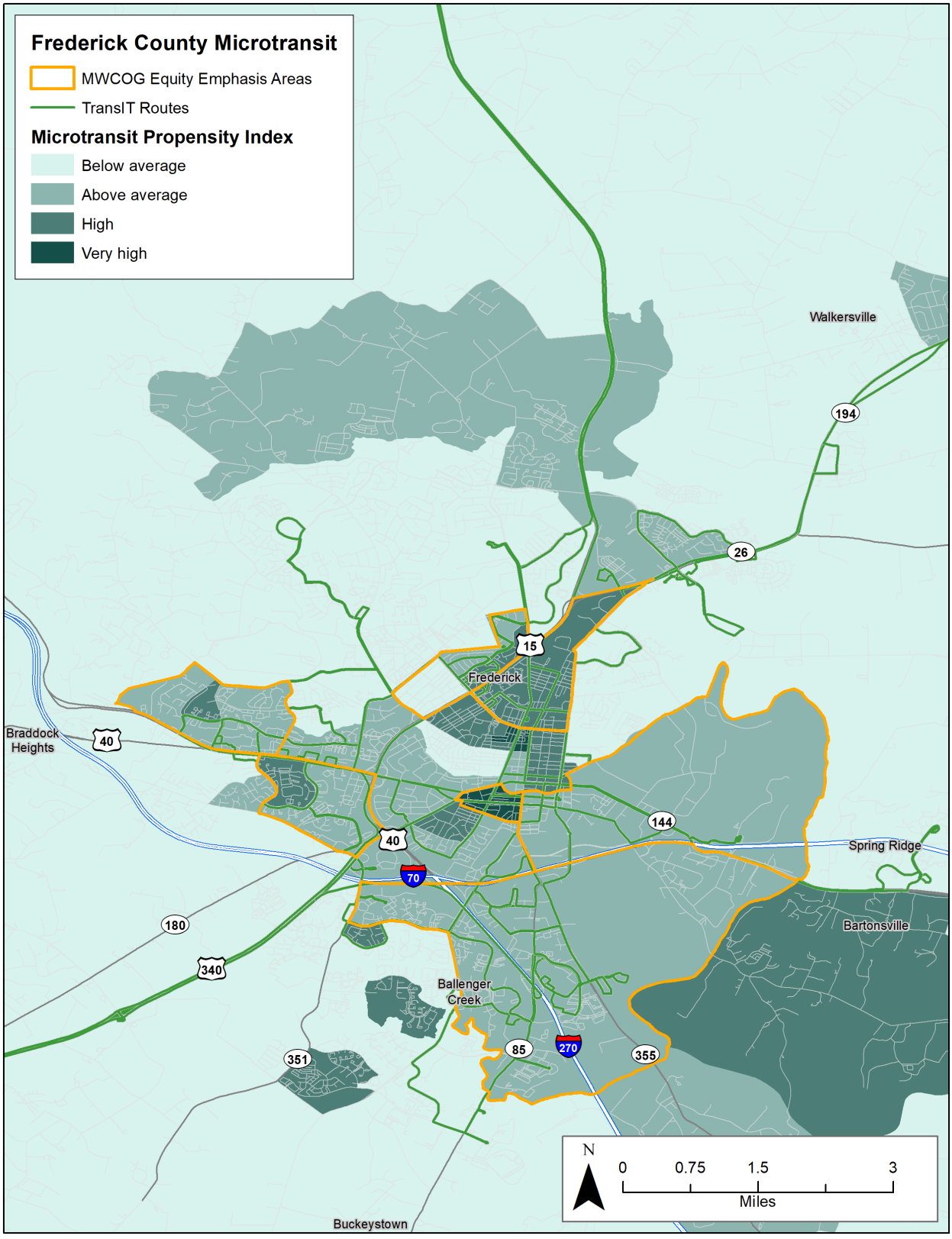
Figures 4-8 and Figure 4-9 map the microtransit propensity by block group in Frederick County and the City of Frederick. The highest propensity areas in Frederick County were:

- City of Frederick
- Bartonsville
- Ballenger Creek
- Brunswick
- Urbana

## Figure 4-8: Frederick County Microtransit Propensity Index



## Figure 4-11: City of Frederick Microtransit Propensity Index



## Microtransit Pilot Service

Options for operating public transit services have become very diverse, spanning from conventional fixed route service through semi-flexible service on-demand microtransit. Frederick TransIT's exploration into this service option should be based on the identified parameters from above. A logical first approach is converting existing shuttle service into pilot microtransit routes. Each of the current shuttle routes display characteristics of succeeding, however, the two that boast the greatest potential for success are the East Frederick Shuttle and the 85 Shuttle. Table 4-7 highlights the potential impacts for microtransit.

### Table 4-7: Potential Impacts of Microtransit

| Advantages | Disadvantages |
|---|---|
| • On-demand, e-hailing service for the general public.<br>• Increases service levels (on-demand) for ADA paratransit ambulatory customers.<br>• All vehicles are ADA (wheelchair) accessible.<br>• Alleviates demand from traditional services.<br>• Replaces low productivity routes.<br>• Reduces operating cost and improve system productivity.<br>• No increase in technology procurement cost. | • Train drivers on federal ADA paratransit requirements.<br>• Customers may be unable to pay cash while boarding the vehicle.<br>• If demand outpaces supply, has the potential to increase the agency cost. |
| **Cost Estimates** | **Ridership Impacts** |
| • Operational costs would be cost neutral – transitioning existing Shuttle service into Pilot Microtransit route.<br>• Modest savings through the provision of fewer paratransit trips. | • Likely will reduce ADA ridership and increase fixed route ridership. |

## ADA Ride Free on Fixed Route

Another way to handle the growing demand for ADA paratransit is to attempt to reduce the demand by incentivizing the use of the fixed routes for people who are ADA eligible but can under certain conditions use the fixed routes. The concept is to allow ADA-eligible riders to ride the fixed routes for free. This would save the passenger $2.00 per trip ($4.00 per round trip).

This concept is currently in use by a number of transit programs around the country including Hampton Roads Transit (Virginia); New Orleans; Great Falls, Montana (small urban); and Gainesville, Florida. The Transit Cooperative Research Program (TCRP) conducted a study of this practice, and the results are outlined in *TCRP Report 163: Strategy Guide to Enable and Promote the Use of Fixed-Route Transit by People with Disabilities*.[2]

The following conclusions were offered within TCRP Report 163:

- There is a significant financial incentive for transit agencies to adopt fare-free fixed route service for ADA paratransit customers. Transit agencies reported that the savings realized from providing fewer paratransit trips were greater than the revenue lost by providing free fixed route trips.

- The costs to implement this type of fare incentive were negligible.

- For transit agencies that use in-person interviews and functional assessments to determine paratransit eligibility, fare free fixed routes for paratransit eligible riders did not increase the number of ADA applications received by the agencies. However, for agencies that rely on paper applications, fare free service significantly increased the number of applications received.

Seven agencies were discussed within the research and each one has made some tweaks to the program specific to their experiences. The potential impacts that could be expected if TransIT were to implement fare free fixed routes for ADA riders are outlined in Table 4-8.

[2] Transit Cooperative Research Program, Report 163, *Strategy Guide to Enable and Promote the Use of Fixed-Route Transit by People with Disabilities,* Russ Thatcher, et al, 2013.

**Table 4-8: Potential Impacts of Fare Free Fixed Route for ADA Riders**

| Advantages | Disadvantages |
|---|---|
| • Will likely save money through trip diversions.<br>• Offers financial savings to riders with disabilities.<br>• May reduce paratransit demand.<br>• May increase fixed route ridership. | • Will require that TransIT transition to in-person interviews for qualifying ADA riders. The TCRP research indicated that for agencies that do not require in-person interviews, the number of ADA applications significantly increased when fare-free fixed routes for ADA riders were introduced. |
| **Cost Estimates** | **Ridership Impacts** |
| • Modest savings through the provision of fewer paratransit trips.<br>• May increase the cost of eligibility if TransIT transitions to in-person interviews for ADA riders. | • Likely will reduce ADA ridership and increase fixed route ridership. |

# Infrastructure Improvements

This section of the alternatives describes the infrastructure projects that should be considered for implementation during the five-year TDP planning horizon.

## Transit Hubs

Key to TransIT's success is a downtown Transit Center that provides a seamless transition for passengers needing to transfer. Two other key destinations have emerged as the system has matured warranting an upgraded passenger hub – Frederick Towne Mall and the north Frederick Walmart (Monocacy Blvd.) which is becoming the newest transfer point based on the proposed alternatives. The proposed hubs would replace inadequate existing infrastructure. The process would include engaging both Frederick Towne Mall and Walmart on potential site plans, with a detailed design. The small-scale hub should include at a minimum a covered passenger waiting area and a bus pull-in for vehicles. Table 4-9 presents the potential impacts of these improvements.

### Table 4-9: Potential Impacts of New Transit Hubs

| Advantages | Disadvantages |
|---|---|
| • Improves the functionality of the current stop by providing infrastructure that is designed for transit use.<br>• Provides an indoor waiting area and restroom.<br>• Presents a more professional image for TransIT.<br>• Allows for system growth. | • It is expensive and time-consuming to plan and construct a transfer hub. |
| **Cost Estimates** | **Ridership Impacts** |
| • The cost to plan and build a transit hub is variable and will include planning/design and construction.<br>• The cost is likely to be between $100,000 and $200,000 per hub. | • Ridership may improve somewhat with a new transfer hub, but any increase would be marginal. |

## Summary of Service Alternatives

A summary of the alternatives is provided in Table 4-10. While this list may appear to be overly ambitious given the current funding environment, it provides a starting point for local stakeholders to decide which projects may be feasible for the five-year planning period, and which may be more visionary. Additional concepts will also be researched, if desired by local stakeholders.

## Table 4-10: Summary of Service and Infrastructure Proposals

| Proposed Improvements | Annual Operating Costs | Capital Costs |
|---|---|---|
| **Operating** | | |
| Fixed Route Modifications | neutral | $0 |
| Increased Connector Route Frequency | $66,350 - $464,450 | $400,000 - $2,800,000 |
| Sunday Service | $218,500 | $0 |
| Expanded Saturday Service | $300,415 | $0 |
| Later Evening Hours | $195,000 - $390,000 | $0 |
| Fixed-Route Fare Free Service | neutral | $0 |
| Microtransit Pilot | neutral | $0 |
| ADA Ride Free on Fixed Routes | neutral | $0 |
| **Subtotal Operating** | **$479,850 - $1,072,950** | **$400,000 - $2,800,000** |
| **Capital/Infrastructure** | | |
| Transit Hubs: (1) | | |
| Frederick Towne Mall | $0 | $100,00 - $200,000 |
| North Frederick Walmart | $0 | $100,00 - $200,000 |
| Route Map/Schedule Improvements (2) | | |
| **Subtotal Infrastructure** | **$44,400** | **$200,000 - $400,000** |

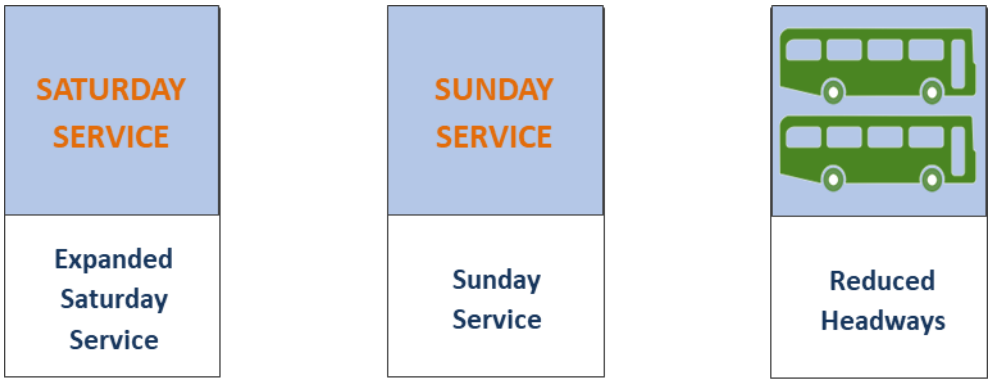
(1) Does not factor in potential design and engineering work

(2) Periodic expense

# Frederick County 2020 Transit Development Plan
# Chapter 5: Transit Plan

## Introduction

This five-year plan is the product of an intensive TDP process. The recommended projects were derived through detailed evaluation of existing services (Chapter 1), a comprehensive needs analysis including demographic data (Chapter 2), public input – survey and outreach effort (Chapter 3), and an alternatives analysis (Chapter 4). Transit Services of Frederick County staff, City of Frederick and Frederick County representatives, MDOT MTA representatives, and TSAC provided guidance throughout the planning process.




As documented in the report, key demand was for the following:

The costs shown in this chapter are based on projected hourly operating costs and estimates of capital costs. Depending on the timing and implementation choices, costs may differ due to inflation or variable market costs. Guidance from the Maryland Transit Administration (MDOT MTA) indicates that in the near-term there is not likely to be funding available for extensive service expansion; as such, this plan calls for a mix of primarily cost-neutral and palatable costing improvements in the short-term and expansionary projects in later years. TransIT can begin with these improvements, achieved primarily by shifting resources within the network. All proposed services are conceptual and will require operational planning and community outreach before implementation.

The five-year plan is organized into the following sections:

- **Service Plan** – Brief narratives on the proposed improvements; broken into short, mid, and long-term implementation timeframes.
- **Title VI Analysis** – Review of changes in services to ensure they do not have a disproportionately high negative impact on below poverty or minority populations.
- **Conceptual Financial Plan for Operating** – Estimated operating costs for the five years of the TDP, based on existing operating costs and estimated expenses for proposed service improvements.
- **Conceptual Financial Plan for Capital** – Estimated capital costs for the five years of the TDP, based on information from TransIT's most recent Annual Transportation Plan and estimated capital needs to implement the proposed operating plan.

# Service Plan

The proposed projects for the service plan are summarized below in an implementation timeline. Each of the improvements proposed in the service plan has been derived from the review of alternatives in the preceding chapter. Brief descriptions of the proposed improvements are provided in this section, and additional details can be found in Chapters 4.

In general, the short-term projects correspond to Years 1 and 2, mid-term projects to Years 3 and 4, and the long-term projects to Year 5 and beyond. Actual implementation will vary based on the availability of funding and other changing conditions.

## Short-Term Improvements (Years 1-2)

### Fixed Route Modifications

The fixed route adjustments are intended to make TransIT Connector trips more convenient, direct, and dependable. The adjustments make the routes more consistently bi-directional, increasing their understandability for riders.

The modified route network continues to utilize the basic framework of transit service within the core urbanized area of the county. Each of the Connector routes would serve at least one of the main hubs – Transit Center, Frederick Towne Mall, Frederick Community College, and the Walmart on Monocacy Boulevard. The goal is for each of the Connector routes to maintain or achieve 60-minute headways. This would not only create uniform schedules but would also enable timed transfers at each of the key hubs.

The service network was designed utilizing the same number of vehicles as is currently used. This was accomplished by altering certain routes. The components of the proposed network are summarized in Table 5-1. Changes should occur on each route but vary depending upon route specific needs, including:

- Minor stop adjustments
- Adjusting how many vehicles the route requires
- New route patterns
- New route designations

### Table 5-1: Proposed Network Redesign

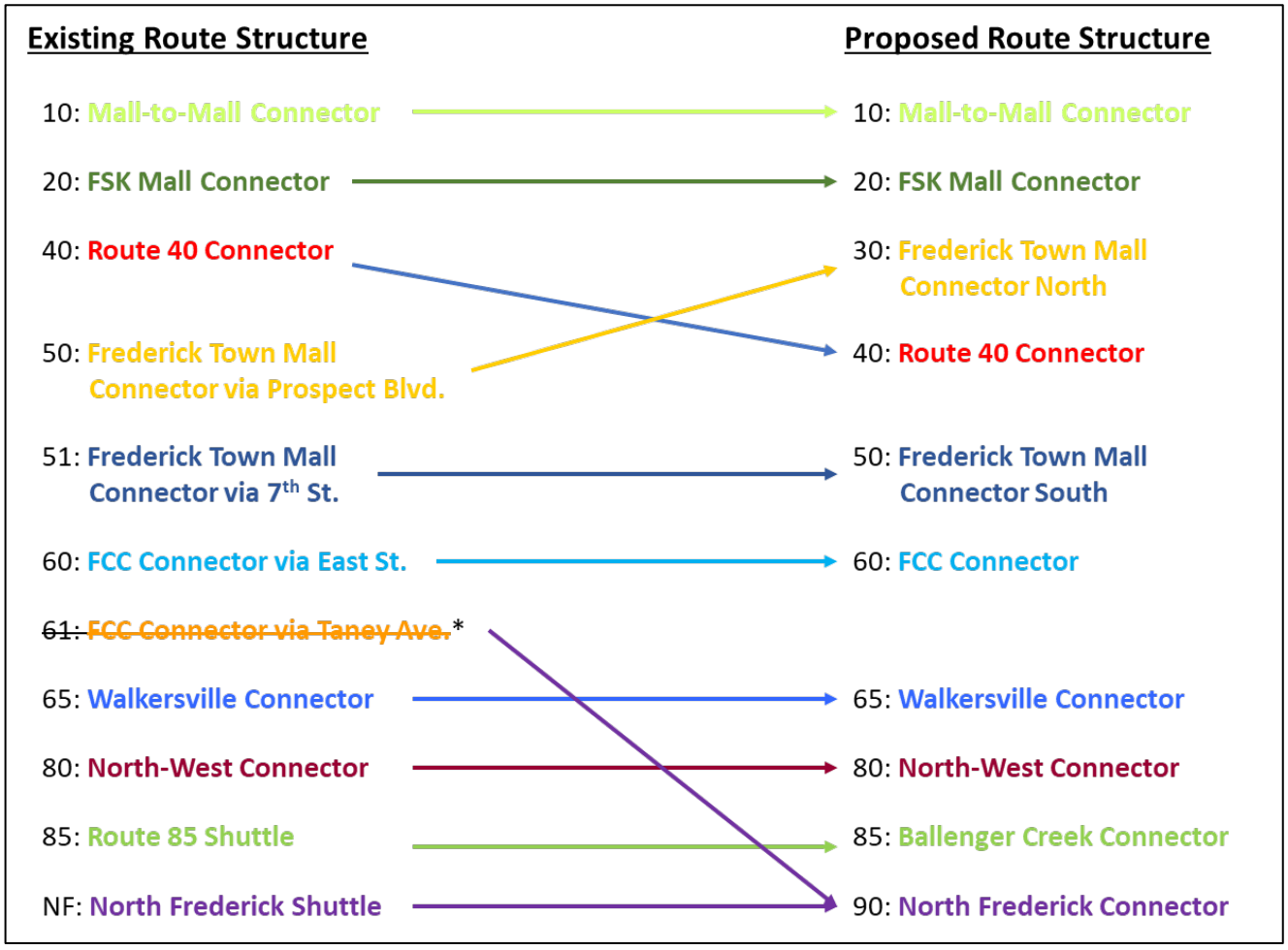
| Route | Description |
|---|---|
| #10 Mall-to-Mall Connector | Minor route adjustments |
| #20 FSK Mall Connector | No proposed route adjustments |
| #40 Route 40 Connector | No proposed route adjustments |
| #50/51 Frederick Towne Mall Connectors | Separate routes into a north route (north of Patrick St.) and a south route (south of Patrick St.) – includes minor route adjustment to the north route |
| #60/61 Frederick Community College Connectors | Establish a single route |
| #65 Walkersville Connector | No proposed route adjustments |
| #80 North-West Connector | Realign to serve areas currently without service |
| North Frederick Connector (formerly North Frederick Shuttle) | North Frederick Shuttle becomes North Frederick Connector – route would serve Frederick Community College, North Frederick Park and Ride Lot, Walmart and Walkersville |
| Route 85 Shuttle | Minor route adjustments |

As a supplement to the proposed Connector network redesign, proposed modifications to the existing route designations have also been identified. Existing and proposed Connector route names are shown in Figure 5-1.

## Improvement Highlights

- Increases the level of service to several key origins and destinations.
- Establishes the Walmart on Monocacy Boulevard as another transfer stop.
- Alleviates transfer issues (Route 50/51 and Route 60/61).
- Streamlines routes, making TransIT more convenient, appealing, and understandable for riders.
- Uses data from on off counts to maximize service to and from key origins and destinations.

**Figure 5-1: Proposed Route Designations**




*One FCC Connector Route with the vehicle reallocated to the "new" North Frederick Connector

# Mid-Term Improvements (Years 3-4)

## Fixed-Route Fare Free Service

Fixed-route fare free service was introduced during the COVID-19 pandemic. Due to the success of this strategy and the key lessons learned, TransIT should implement this as a permanent policy. This is only feasible if local funds are available to absorb the loss in farebox revenue.

### Improvement Highlights

- Service would be more efficient, faster and convenient
- Advances equity to all riders
- Helps stimulate local economy by encouraging more trips and freeing personal funds to be expended locally
- Would not require additional capital to run the service

## Sunday Service

Sunday service offers additional mobility for employment, essential shopping, and increased quality of life. TransIT should initiate Sunday service on the same routes currently providing Saturday service, addressing four out of the top five trip purposes identified in the Community Survey. If the Saturday service hours are adhered to, approximately 1,200 Sunday service hours would cost about $218,500 annually in operating expenses (with an approximate net deficit of $198,800, assuming a 9 percent farebox recovery ratio). No additional capital would be required.

### Improvement Highlights

- Offers mobility options for employment, essential shopping, and religious trips
- Addresses a need articulated in the rider and community surveys
- Would not require additional capital to run the service

## Expanded Saturday Service

TransIT Connector routes currently operate six days a week, however, not all Connector routes operate on Saturdays and those that do provide more limited hours. Riders who utilize and often depend upon transit would benefit from this added mobility opportunity. TransIT should expand Saturday service so that it mirrors the weekday schedules/service. The upgraded service would require approximately 3,850 Saturday service hours and would cost about $300,400 annually in operating expenses (with an approximate net deficit of $273,400 assuming a 9% farebox recovery ratio). No additional capital would be required.

### Improvement Highlights

- Improves access and makes TransIT easier and more convenient to use
- Enhances mobility options
- Addresses a need articulated in the rider and community surveys
- Would not require additional capital to run the service

## Microtransit Pilot Service

The potential for microtransit services was well received by Transit Services of Frederick County and TSAC. While the implementation process detailed in Chapter 4 can serve as a foundation for this effort, microtransit services will need to be tailored to specific communities based on additional stakeholder input and available funding.

Several communities in Frederick County were identified as prime candidates for microtransit services. In particular, converting existing shuttle service into pilot microtransit routes. These service areas possess many of the attributes that are synonymous with successful microtransit services and are proposed as the barometer when determining which community receives on-demand transportation option.

Based on current conditions and demographics the two routes that boast the greatest potential for success are the East Frederick Shuttle and the 85 Shuttle. For conceptual budgeting purposes, microtransit services are proposed to operate the same days and hours the shuttle route follows currently, utilizing the same vehicle.

### Improvement Highlights

- Provides a first mile/last mile mobility option that connects residential and commercial areas.
- The opportunity to implement locally operated services that are more flexible to operate than more traditional fixed route service.
- Pilot microtransit service would serve as the litmus test for similar services in other communities in Frederick County, providing the opportunity to consider lessons learned and to make necessary adjustments and modifications.

## ADA Ride Free on Fixed Route

To handle the growing demand for ADA paratransit TransIT should implement an ADA Ride Free program for the fixed routes for people who are ADA eligible but can under certain conditions use the fixed routes. This would save the passenger $2.00 per trip ($4.00 per round trip), and the cost to implement this type of fare incentive is negligible. TransIT would counter the lost revenue by providing fewer paratransit trips which are traditionally more expensive.

### Improvement Highlights

- Offers financial savings to riders with disabilities.
- May reduce paratransit demand.
- Potential to increase fixed route ridership.

# Long-Term Improvements (Year 5 and Beyond)

## Increased Connector Route Frequency

The recommendation to increase frequency targets both "choice" riders and patrons who have no other means of travel. TransIT should reduce headways on current service (30-minute headways across the board), Monday through Friday. This change will increase operating and capital equipment costs, but it will also increase convenience for customers and increase ridership. The operating cost to implement 30-minute service on the Connector routes during the day Monday through Friday is estimated to be about $422,650 annually in operating expenses ($464,450 annually – $66,350 for each vehicle added to provide the enhanced service, assuming a 9% farebox recovery ratio). Seven additional vehicles would cost about $2,800,000 (approximately $400,000 per vehicle).

### Improvement Highlights

- Provides higher service along key corridors.
- The ability to start the service in the morning a half hour earlier and end in the evening a half hour later, thus extending the service span for each.
- Potentially alleviates transfers between Route 10 and Route 20.
- Increased convenience for customers.

## Ballenger Creek Connector

Currently the Route 85 shuttle operates as an AM and PM peak hour commuter service in the southern part of the Frederick urbanized area. Even with the limited service hours, this shuttle route is one of the highest performing commuter routes. Therefore, it is recommended that this service is developed into the Ballenger Creek Connector Route.

The Ballenger Creek Connector would mirror the other Connector routes operating Monday through Saturday, approximately 17 service hours per day. Based on this, roughly 5,100 service hours would cost about $398,000 annually in operating expenses (with an approximate net deficit of $362,000, assuming a 9% farebox recovery ratio). One additional vehicle would be required to operate this service and would cost about $400,000.

### Improvement Highlights

- Provides mid-day and evening transit service in the corridor.
- Supports a high growth area.
- Increased convenience for customers.

## Later Evening Hours

Rider and commuter surveys both indicated that later evening hours were a priority improvement. TransIT should extend its evening hours (Monday through Saturday) on all Connector routes from each route's current ending time. Adding an hour would accommodate late night trips, resulting in about 2,500 additional hours for service and would cost about $195,000 annually in operating expenses (with an approximate net deficit of $177,450, assuming a 9% farebox recovery ratio). No additional capital would be required.

### Improvement Highlights

- Attractive to workers.
- Increases social opportunities.
- Does not require additional capital.

# Title VI Analysis

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin. Public transportation agencies have the ability and responsibility to enhance the social and economic quality of life for people in their communities. As such, public transportation agencies must ensure that changes in services do not have a disproportionately high negative impact on below poverty or minority populations.

TransIT is not required by the FTA to evaluate its service and fare changes under Title VI due to thresholds regarding UZA population (200,000 or more) and number of vehicles operated in peak service. However, TransIT should still consider the impacts of proposed changes based on the distribution of Frederick County's minority and below poverty populations. Chapter 2 includes maps that show this distribution. In addition, Appendix A outlines the key service changes in light of Title VI. It includes maps that depict the distribution of below poverty and minority populations along with proposed changes.

Overall, minority and below poverty individuals stand to benefit from the proposed service changes included in this TDP, as do all Frederick County residents. The proposed routes have nearly the same geographic coverage as existing routes, and the operating changes are intended to increase service quality and availability. However, TransIT should continue its monitoring and evaluation efforts once these service changes are implemented to ensure that below poverty and minority populations do not experience adverse and disproportionate impacts.

# Conceptual Financial Plan for Operating

Frederick County develops an annual grant application for MDOT MTA that includes operating and capital grant programs. This grant application has to be approved by the county each year. Maryland's transit program combines available federal and state funds to provide local assistance, and the allocation to the various localities is not strictly formula driven. Therefore, any estimate for the amount of grant funding available to Frederick County is somewhat speculative. However, the TDP serves an important role in MDOT MTA's annual process for reviewing grant applications; typically, the projects proposed in a county's annual grant application must have been identified in the TDP in order to receive funding.

Table 5-2 presents the conceptual financial plan for transit operations covering the TDP's five-year period. The estimated total budget for each year assumes that all service improvements occur in the proposed implementation phase, and at the level of service planned. As noted previously the actual implementation will be based on several factors, primarily detailed service planning and funding availability.

Several assumptions used in developing the operating cost estimates:

- The projected cost per revenue hour and the operating costs to maintain the current level of service assume a 3% annual inflation rate.
- For the initial year the expenses are based on Frederick County's FY2022 budget submitted to MDOT MTA through the ATP.
- Operating cost per hour of $87.25 for Connector routes and $91.70 for the urbanized Shuttles.
- Regarding the potential funding to support the proposed services, there are a variety of unknown factors and issues. At this time MDOT MTA does not anticipate increases in current federal and state programs that support current TransIT services. Therefore, any service expansions or improvements will most likely require additional local support.
- Frederick County should continue to work with MDOT MTA annually through the ATP process to explore opportunities through current federal and state funding programs, as well as any new ones that become available over the next five years. For instance, the Federal Transit Administration (FTA) has recently developed new funding programs that support innovative mobility projects such as microtransit services. During the next five years it is anticipated that the federal legislation that funds transportation will be reauthorized, potentially creating additional funding opportunities.

## Table 5-2: Conceptual Financial Plan for Operating

| | Year | | | | | Long-Term |
|---|---|---|---|---|---|---|
| **Projects** | **1** | **2** | **3** | **4** | **5** | |
| FY 2022 Operating Budget with Inflationary Increase[1] | $ 8,323,477 | $ 8,573,181 | $ 8,830,377 | $ 9,095,288 | $ 9,368,147 | |
| Fixed Route Modifications[2] | | $ - | $ - | $ - | $ - | |
| Fixed-Route Fare Free Service | | | $ - | $ - | $ - | |
| Sunday Service | | | $ 259,178 | $ 266,953 | $ 274,962 | |
| Expanded Saturday Service | - | - | - | $ 367,061 | $ 378,072 | - |
| Microtransit Pilot Service[2] | | | | $ - | $ - | |
| ADA Ride Free on Fixed Route | - | - | - | $ - | $ - | |
| Increased Connector Route Frequency | | | | | $ 589,204 | |
| Ballenger Creek Connector | - | - | - | - | - | $ 515,848 |
| Later Evening Hours | | | | | | $ 252,867 |
| **Total New Operating Expenses** | $ - | $ - | $ 259,178 | $ 634,014 | $ 1,242,238 | $ 768,715 |
| **Subtotal Proposed Transit Operating Expenses** | **$ 8,323,477** | **$ 8,573,181** | **$ 9,089,555** | **$ 9,729,302** | **$ 10,610,385** | |
| **Anticipated Funding Sources for Operating** | **1** | **2** | **3** | **4** | **5** | |
| **Federal** | | | | | | |
| CARES Funds[2] | $ 926,275 | | | | | |
| CRRSAA Funds[2] | $ 94,885 | | | | | |
| **Subtotal Federal** | **$ 1,021,160** | **$ -** | **$ -** | **$ -** | **$ -** | |
| **Traditional Federal/State** | | | | | | |
| Section 5307 | $ 1,702,189 | $ 1,753,254 | $ 1,805,852 | $ 1,860,028 | $ 1,915,828 | |
| SSTAP | $ 286,339 | $ 294,929 | $ 303,777 | $ 312,890 | $ 322,277 | |
| Section 5307 | $ 1,123,706 | $ 1,157,417 | $ 1,192,140 | $ 1,227,904 | $ 1,264,741 | |
| SSTAP | $ 159,159 | $ 163,934 | $ 168,852 | $ 173,917 | $ 179,135 | |
| **Subtotal State** | **$ 3,271,393** | **$ 1,616,280** | **$ 1,664,769** | **$ 1,714,712** | **$ 1,766,153** | |
| **Local** | | | | | | |
| Passenger Fares[3] | $ 727,322 | $ 720,147 | $ 763,523 | $ 817,261 | $ 891,272 | |
| Section 5307PM Contract Revenue | $ 700,000 | $ 721,000 | $ 742,630 | $ 764,909 | $ 787,856 | |
| Section 5311PM Contract Revenue | $ 70,000 | $ 72,100 | $ 74,263 | $ 76,491 | $ 128,279 | |
| MARC Contract Revenue | $ 30,569 | $ 31,486 | $ 32,431 | $ 33,404 | $ 34,406 | |
| General Funds | $ 2,503,034 | $ 5,412,168 | $ 5,811,940 | $ 6,322,525 | $ 7,002,419 | |
| **Subtotal Local** | **$ 4,030,925** | **$ 6,956,901** | **$ 7,424,786** | **$ 8,014,590** | **$ 8,844,232** | |
| **Total Projected/Proposed Operating Revenues** | **$ 8,323,477** | **$ 8,573,181** | **$ 9,089,555** | **$ 9,729,302** | **$ 10,610,385** | |

[1]Operating Budget includes fixed routes, SSTAP, ADA, and PM-Capital Expense; 3% annual inflation factored each year

[2]COVID Federal Funding not employed beyond year 1

[3]Farebox recovery ratio based on FY 2022 Actuals for year 1 and year 2 and beyond based on of 8.4% of that FY budget. Years 3, 4, and 5 would need to be added to the General Funds if TransIT's Fixed-Route Fare Free policy is implemented in year 3.

# Conceptual Financial Plan for Capital

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

## Useful Life Standards

Useful life standards are developed by MDOT MTA based on the vehicle manufacturer's designated life cycle and the results of independent FTA testing. If vehicles are allowed to exceed their useful life they may become much more susceptible to break-down which may result in increased operating costs and a decrease in service reliability. MDOT MTA vehicle useful life policy, shown in Table 5-3, is also provided in the Locally Operated Transit System Program Manual.

### Table 5-3: MDOT MTA's Vehicle Useful Life Policy

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

Source: MDOT MTA, Locally Operated Transit System (LOTS) Program Manual, April 2017, Rev. 3 01.2019

## Vehicle Plan – Baseline Estimate

Table 5-4 provides the existing TransIT vehicle inventory, along with an estimated replacement year for each vehicle taking into account projected replacement years from Frederick County's FY2022 ATP.

## Table 5-4: TransIT Vehicle Inventory

| Vehicle Number | Model Year | Vehicle Type | Mileage listed in FY22 ATP | Useful Life Criteria (Miles) | Useful Life Criteria (Years) | Earliest Possible Replacement Year | Planned Replacement Year |
|---|---|---|---|---|---|---|---|
| ***Revenue Vehicles*** | | | | | | | |
| 37981 | 2010 | Bus_Heavy_Duty_Med | 379,069 | 350,000 | 10 | 2019 | Won't be replaced |
| 37982 | 2010 | Bus_Heavy_Duty_Med | 363,475 | 350,000 | 10 | 2019 | Won't be replaced |
| 37983 | 2010 | Bus_Heavy_Duty_Med | 367,784 | 350,000 | 10 | 2019 | FY23 |
| 37984 | 2010 | Bus_Heavy_Duty_Med | 354,889 | 350,000 | 10 | 2019 | FY23 |
| 37985 | 2010 | Bus_Heavy_Duty_Med | 351,518 | 350,000 | 10 | 2019 | FY23 |
| 37986 | 2010 | Bus_Heavy_Duty_Med | 346,251 | 350,000 | 10 | 2019 | FY24 |
| 38157 | 2011 | Bus_Heavy_Duty_Lrg | 284,145 | 500,000 | 12 | 2023 | FY24 |
| 38158 | 2011 | Bus_Heavy_Duty_Lrg | 277,241 | 500,000 | 12 | 2023 | FY24 |
| 38624 | 2014 | Bus_Light_Duty | 159,411 | 200,000 | 6 | 2020 | Won't be replaced |
| 38625 | 2014 | Bus_Light_Duty | 152,310 | 200,000 | 6 | 2020 | Retired |
| 38633 | 2014 | Bus_Light_Duty | 134,064 | 200,000 | 6 | 2020 | FY23 |
| 38704 | 2015 | Bus_Light_Duty | 136,884 | 200,000 | 6 | 2021 | FY28 |
| 38779 | 2016 | Bus_Heavy_Duty_Lrg | 38,891 | 500,000 | 12 | 2027 | FY28 |
| 38780 | 2016 | Bus_Heavy_Duty_Lrg | 46,267 | 500,000 | 12 | 2027 | FY28 |
| 38781 | 2016 | Bus_Heavy_Duty_Lrg | 41,556 | 500,000 | 12 | 2027 | FY29 |
| 38782 | 2016 | Bus_Heavy_Duty_Lrg | 43,686 | 500,000 | 12 | 2027 | FY29 |
| 38783 | 2016 | Bus_Heavy_Duty_Lrg | 43,667 | 500,000 | 12 | 2027 | FY24 |
| 38784 | 2015 | Bus_Light_Duty | 130,218 | 200,000 | 6 | 2021 | FY25 |
| 38785 | 2015 | Bus_Light_Duty | 146,929 | 200,000 | 6 | 2021 | FY25 |
| 38798 | 2016 | Bus_Light_Duty | 142,424 | 200,000 | 6 | 2026 | FY25 |
| 38799 | 2016 | Bus_Light_Duty | 106,053 | 200,000 | 6 | 2022 | FY25 |
| 38878 | 2017 | Bus_Light_Duty | 103,762 | 200,000 | 6 | 2022 | FY31 |
| 38879 | 2017 | Bus_Light_Duty | 115,959 | 200,000 | 6 | 2022 | FY31 |
| 38880 | 2017 | Bus_Light_Duty | 103,001 | 200,000 | 6 | 2022 | FY31 |
| 38881 | 2017 | Bus_Light_Duty | 96,698 | 200,000 | 6 | 2022 | FY26 |
| 38882 | 2017 | Bus_Light_Duty | 96,483 | 200,000 | 6 | 2022 | FY27 |
| 38883 | 2017 | Bus_Light_Duty | 93,810 | 200,000 | 6 | 2022 | FY27 |
| 38956 | 2018 | Bus_Heavy_Duty_Lrg | 75,036 | 500,000 | 12 | 2030 | FY27 |
| 38957 | 2018 | Bus_Heavy_Duty_Lrg | 76,615 | 500,000 | 12 | 2030 | FY27 |
| 38958 | 2018 | Bus_Heavy_Duty_Lrg | 71,031 | 500,000 | 12 | 2030 | FY32 |
| 38959 | 2018 | Bus_Heavy_Duty_Med | 14,741 | 350,000 | 10 | 2028 | FY32 |
| 39118 | 2018 | Bus_Light_Duty | 75,803 | 200,000 | 6 | 2023 | FY32 |
| 39119 | 2018 | Bus_Light_Duty | 89,210 | 200,000 | 6 | 2023 | FY28 |
| 39120 | 2018 | Bus_Light_Duty | 79,892 | 200,000 | 6 | 2023 | FY29 |
| 39121 | 2018 | Bus_Light_Duty | 54,903 | 200,000 | 6 | 2023 | FY29 |
| 39122 | 2018 | Bus_Heavy_Duty_Lrg | 77,719 | 500,000 | 12 | 2030 | FY34 |
| 39123 | 2018 | Bus_Heavy_Duty_Lrg | 64,035 | 500,000 | 12 | 2030 | FY34 |
| 39124 | 2018 | Bus_Heavy_Duty_Lrg | 52,003 | 500,000 | 12 | 2030 | FY34 |
| 39267 | 2019 | Accessible_Van | 30,122 | 150,000 | 4 | 2022 | FY33 |
| 39280 | 2019 | Bus_Light_Duty | 29,286 | 200,000 | 6 | 2024 | FY26 |
| 39281 | 2019 | Bus_Light_Duty | 23,817 | 200,000 | 6 | 2024 | FY26 |
| 39282 | 2019 | Bus_Light_Duty | 32,262 | 200,000 | 6 | 2024 | Won't be replaced |
| 39364 | 2020 | Bus_Heavy_Duty_Med | 263 | 350,000 | 10 | 2030 | Won't be replaced |
| 39365 | 2020 | Bus_Heavy_Duty_Med | 294 | 350,000 | 10 | 2030 | FY23 |

| Vehicle Number | Model Year | Vehicle Type | Mileage listed in FY22 ATP | Useful Life Criteria (Miles) | Useful Life Criteria (Years) | Earliest Possible Replacement Year | Planned Replacement Year |
|---|---|---|---|---|---|---|---|
| 39366 | 2020 | Bus_Heavy_Duty_Med | 318 | 350,000 | 10 | 2030 | FY23 |
| 39367 | 2019 | Bus_Heavy_Duty_Med | 1,625 | 350,000 | 10 | 2029 | FY23 |
| 39416 | 2019 | Accessible_Van | 6,831 | 150,000 | 4 | 2023 | FY24 |
| 39418 | 2019 | Accessible_Van | 7,804 | 150,000 | 4 | 2023 | FY24 |
| 39422 | 2019 | Accessible_Van | 1,837 | 150,000 | 4 | 2023 | FY24 |
| ***Support and Non-Revenue Vehicles*** | | | | | | | |
| 37414 | 2007 | Non_Rev._Vehicle | 89,654 | 130,000 | 10 | 2029 | Won't be replaced |
| 38415 | 2019 | Support_Van | 6,093 | 200,000 | 6 | 2025 | FY26 |
| 38417 | 2019 | Support_Van | 3,953 | 200,000 | 6 | 2025 | FY26 |

## Financial Plan for Capital

Table 5-5 provides a financial plan for vehicle replacement and expansion. The following assumptions were considered in developing the capital plan:

- The plan is initially based on the vehicle replacement schedule identified in the previous table. Then the capital plan includes seven additional vehicles in year five to accommodate for the potential increased Connector route frequency implementation.

- The financial plan for capital does not include vehicles for the implementation of the proposed microtransit services, as it is assumed this service would utilize existing capital.

### Table 5-5: Conceptual Financial Plan for Capital

| | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |
|---|---|---|---|---|---|
| **Number of Vehicles** | | | | | |
| Replacement | 4 | 4 | 4 | 5 | 4 |
| Expansion | - | - | - | - | 7 |
| Total | 4 | 4 | 4 | 5 | 11 |
| **Vehicle Type** | | | | | |
| Small Cutaway | 1 | 1 | 4 | - | 4 |
| 30' Heavy Duty | 3 | 1 | - | 1 | 7 |
| 35' Heavy Duty | - | 2 | - | - | - |
| Minivan | - | - | - | 4 | - |
| **Total** | **4** | **4** | **4** | **5** | **11** |
| **Vehicle Costs** | | | | | |
| Replacement | $1,380,000 | $1,380,000 | $300,000 | $712,000 | $3,345,000 |
| Expansion | -- | -- | -- | -- | $525,000 |
| **Total Projected Costs** | **$1,380,000** | **$1,380,000** | **$300,000** | **$712,000** | **$3,870,000** |
| **Anticipated Funding Sources** | | | | | |
| Federal | $1,104,000 | $1,104,000 | $240,000 | $569,600 | $3,096,000 |
| State | $138,000 | $138,000 | $30,000 | $71,200 | $387,000 |
| Local | $138,000 | $138,000 | $30,000 | $71,200 | $387,000 |
| **Total Projected Funding** | **$1,380,000** | **$1,380,000** | **$300,000** | **$712,000** | **$3,870,000** |

[1]Based on FY 2022 ATP.

## Other Capital Expenses and Funding Sources

The financial plan for equipment and other capital is provided in Table 5-6. These expenses are associated with passenger amenity and information improvements, as well as tools and communication upgrades. The other identified capital needs were included to upgrade the expansion vehicles with the necessary communication equipment.

### Table 5-6: Financial Plan for Other Capital Equipment

| Projects | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |
|---|---|---|---|---|---|
| **Facilities and Maintenance** | | | | | |
| Section 5307 PM | $700,000 | $700,000 | $700,000 | $700,000 | $700,000 |
| Section 5311 PM | $70,000 | $70,000 | $70,000 | $70,000 | $70,000 |
| **Technology** | | | | | |
| AVL/APC Hardware for Expansion Vehicles | - | $14,360 | $20,104 | $20,104 | $20,104 |
| **Total Projected Non-Vehicle Capital Expenses** | **$770,000** | **$784,360** | **$790,104** | **$790,104** | **$790,104** |
| **Anticipated Funding Sources** | **FY 2023** | **FY 2024** | **FY 2025** | **FY 2026** | **FY 2027** |
| Federal/State | $693,000 | $705,924 | $711,094 | $711,094 | $711,094 |
| Local | $77,000 | $78,436 | $79,010 | $79,010 | $79,010 |
| **Total Projected Non-Vehicle Capital Funds** | **$770,000** | **$784,360** | **$790,104** | **$790,104** | **$790,104** |

[1]Based on FY 2022 ATP.

## Benefits of the Transit Plan

This TDP presents recommendations for transit improvements in Frederick County that:

- Improve service through progressive route modifications to make transit attractive and usable.
- Meet identified transportation needs including access to jobs, schools, and medical services.
- Provide transit infrastructure improvements to support continued growth in transit services.

This plan aims to improve services within the confines of the County's relatively flat transit operating budget. While the service improvements were developed to address issues identified during the review of needs, they are dependent on the future availability of new or additional funding. Despite uncertain funding, it is important to remember that public transportation can contribute to the local and regional economy by providing a way for residents to get to work and school, access necessary medical services, and support local businesses and economic development. In particular, the proposed service expansions would increase access to employment opportunities by expanding transportation options and providing connections to the existing public transit network.

# Appendix A
# Title VI of the Civil Rights Act of 1964

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# Title VI of the Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin. The FTA provides guidance to help public transportation agencies verify that service and fare changes are not discriminatory in nature. Frederick Transit can take the following steps when evaluating service changes:

- Describe proposed changes and the rationale behind them.
- Describe the impacts of service changes on below poverty and/or minority communities. In particular, establish why the proposed service would not have a disproportionately high and adverse effect on below poverty and/or minority populations.
- Describe transit alternatives available to riders impacted by proposed changes and identify measures that would be taken to avoid, minimize, or mitigate any adverse effects. Also describe any enhancements or offsetting that would be implemented in conjunction with the service.
- Describe how the agency intends to reach out and involve minority and below poverty populations to make sure their viewpoints are considered.
- Determine whether it is necessary to disseminate information that is accessible to Limited English Proficient (LEP) persons. If so, describe the steps that will be taken to provide information in languages other than English.

The first four bullets are addressed for each relevant service change. The last two bullets are addressed below.

## Minority and Below Poverty Involvement

To satisfy the requirements of Title VI, TransIT will continue to reach out to minority and below poverty populations to make sure their viewpoints are considered. TransIT uses press releases, advertising, public notices, websites, rider bulletins, and other means to communicate with the general public, minorities, and below poverty populations. TransIT advertises public meetings in the local newspaper, onboard vehicles, and issues press releases on service changes and proposals.

TransIT staff members also regularly attend community events to publicize available transit options and involve minorities and below poverty individuals. TransIT staff visit schools, senior/assisted-living complexes, and human service agencies to engage segments of the population that tend not to provide input.

# Limited English Proficiency

TransIT must determine whether it is necessary to disseminate information accessible to persons with LEP. According to the 2011-2015 American Community Survey, the service area includes a total of 9,786, or 4.31%, persons with Limited English Proficiency (those persons who indicated that they spoke English "not well," and "not at all".

Among other strategies, TransIT accommodates LEP individuals by providing translation and interpretation service through:

- Voiance: TransIT utilizes the services of Voiance. Translation services are provided on the spot for any language via phone conference.
- Maryland Relay: TransIT takes phone calls from hearing-impaired citizens via Maryland Relay.
- TransIT materials such as public notices, Rider Bulletins, Ride Guide, surveys and more are translated into Spanish for publication in the newspaper, on board and on the website.
- Interpreters are offered at public meetings, to date no requests have been received.
- TransIT's mobile ticket app, Token Transit, has the option for the customer to select Spanish as the app language.
- TransIT's website has a Google language translation button that permits translation to numerous languages.

# Proposed Service Changes

This Title VI analysis only considers some of the proposed service changes in depth: the system-wide route adjustment. For the other proposed changes, minority and below poverty individuals will likely share proportionately (if not more so) in the benefits. No measures to avoid, minimize, or mitigate adverse effects, or enhancements or offsetting, would need to be implemented to ensure non-discrimination.

Implementing Sunday service, adding an additional service hours, and reducing headways on Connector routes are changes that increase the level of service of the entire system. These service changes do not come at the expense of reductions in service in other areas. For those improvements that do pertain to particular routes (i.e., peak headways and weekend service on only select routes), the routes were chosen due to current activity in order to benefit the greatest number of riders.

Maps of Frederick County's minority and below poverty populations are shown in Chapter 2. In Census block groups where the population in question is greater than the average for all block groups, TransIT

should demonstrate that any proposed service and fare changes avoid discrimination. The relevant service changes are listed below, including information to help verify that the changes are not discriminatory in nature.

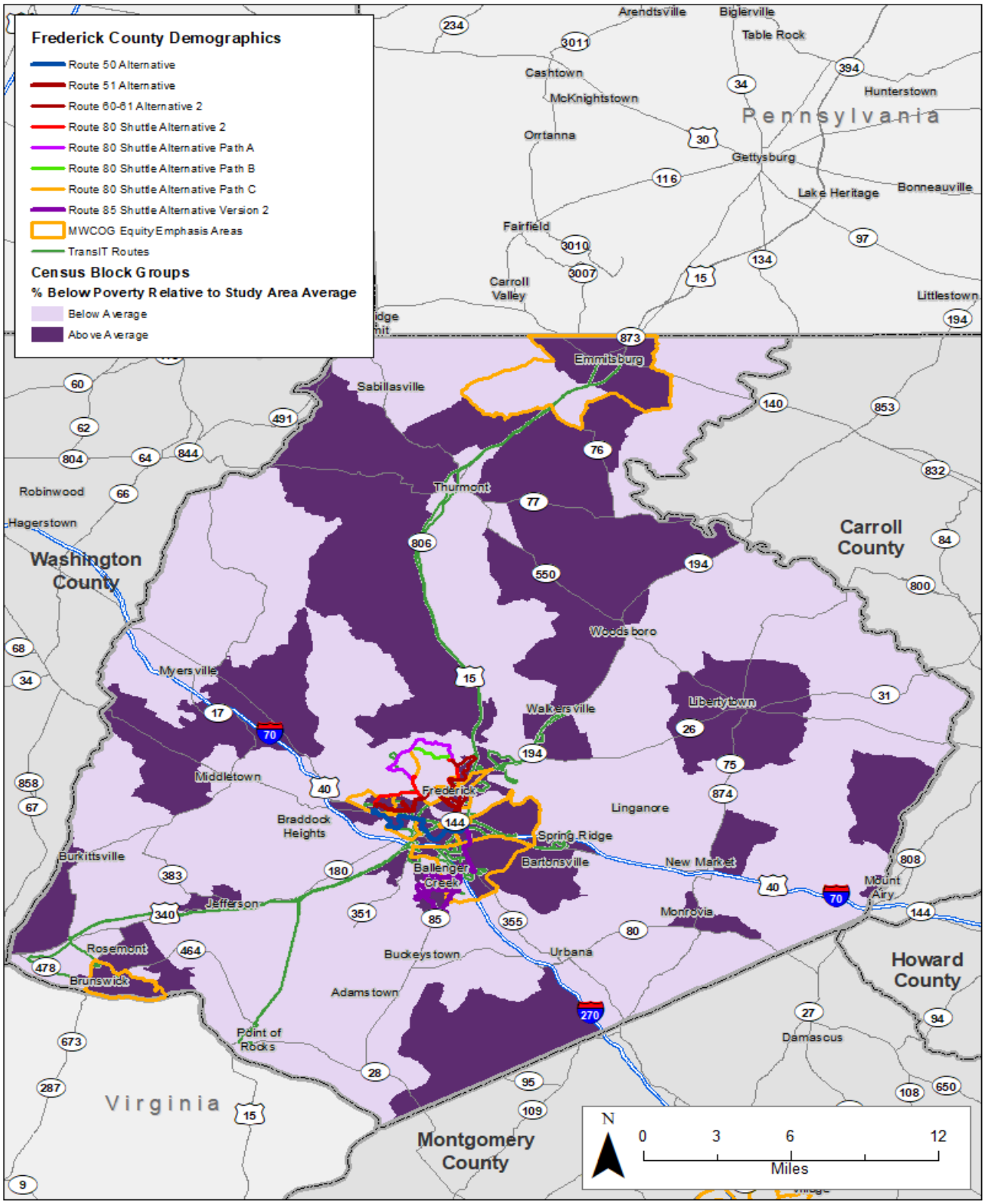
## Systemwide Route Adjustments

- The redesign of routes results in more bi-directional routes and better connectivity. Route frequencies either remain the same or increase. As shown in Figure A-1 and Figure A-2, the redesign has nearly the same geographic coverage as current service.

- The redesign is unlikely to have a disproportionately high and adverse effect on below poverty or minority populations. Service is only eliminated on a few short segments in the network.

- Due to the minor nature of the coverage changes, no measures to avoid, minimize, or mitigate adverse effects, or enhancements or offsetting, would need to be implemented to ensure non-discrimination.

## Figure A-1: Title VI Analysis – System-Wide Route Adjustments – Poverty Populations



## Figure A-2: Title VI Analysis – System-Wide Route Adjustments – Minority Populations