Minor Update

January 2018

Chapters 5,6, & 7 Updated

BRITE Transit Development Plan

BRITE Transit is administered by the Central Shenandoah Planning District Commission

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Celebrating 45+ Years

CSPDC

Central Shenandoah Planning District Commission

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Chapter 1 – Overview of Public Transportation in the Region

INTRODUCTION

The Virginia Department of Rail and Public Transportation (DRPT) requires that any public transit (bus, rail, ferry) operator receiving state funding prepare, adopt, and submit a Transit Development Plan (TDP) at least every six years. A TDP is a short-range transit plan that outlines the services that a grantee intends to implement during the six-year planning horizon, estimates what resources will be needed, and what funding opportunities are likely to be available. DRPT provides a set of TDP requirements that form the basis of the planning effort. This TDP has been prepared for a portion of the Central Shenandoah Planning District Commission's (CSPDC) service area, including Augusta County, the Cities of Staunton and Waynesboro, and a portion of Rockingham County. The CSPDC recently became the designated grantee for federal and state transit funding to be used in the urbanized portion of the region and Virginia Regional Transit (VRT) is the current subrecipient for the rural transit funding that comes to the region.

The TDP is intended to serve as a management and policy document for the transit program in the service area, provide DRPT with an up-to-date record of the related transit capital and operating budgets, as well as provide the program with a basis for including capital and operating programs in the Six-Year Improvement Program (SYIP), the Statewide Transportation Improvement Program (STIP), and the Constrained Long Range Transportation Plan (CLRTP). This TDP is the first one developed for the joint urban-rural program. Concurrently with the TDP, a re-branding effort has also taken place, the results of which are referenced throughout the TDP and documented separately.

This first chapter of the TDP provides an overview of the transit program and provides background information and data that was used for the subsequent data collection, analysis, and eventual recommendations included in this the six-year plan.

BACKGROUND

Augusta County is located in the west central portion of Virginia in the Central Shenandoah Valley. The independent cities of Waynesboro and Staunton are contained within the county. The area is located 85 miles north of Roanoke; 90 miles west of Richmond; and 150 miles southwest of Washington, D.C. Important travel corridors in the region include I-81, I-64, US 250, U.S. 11, and US 340.

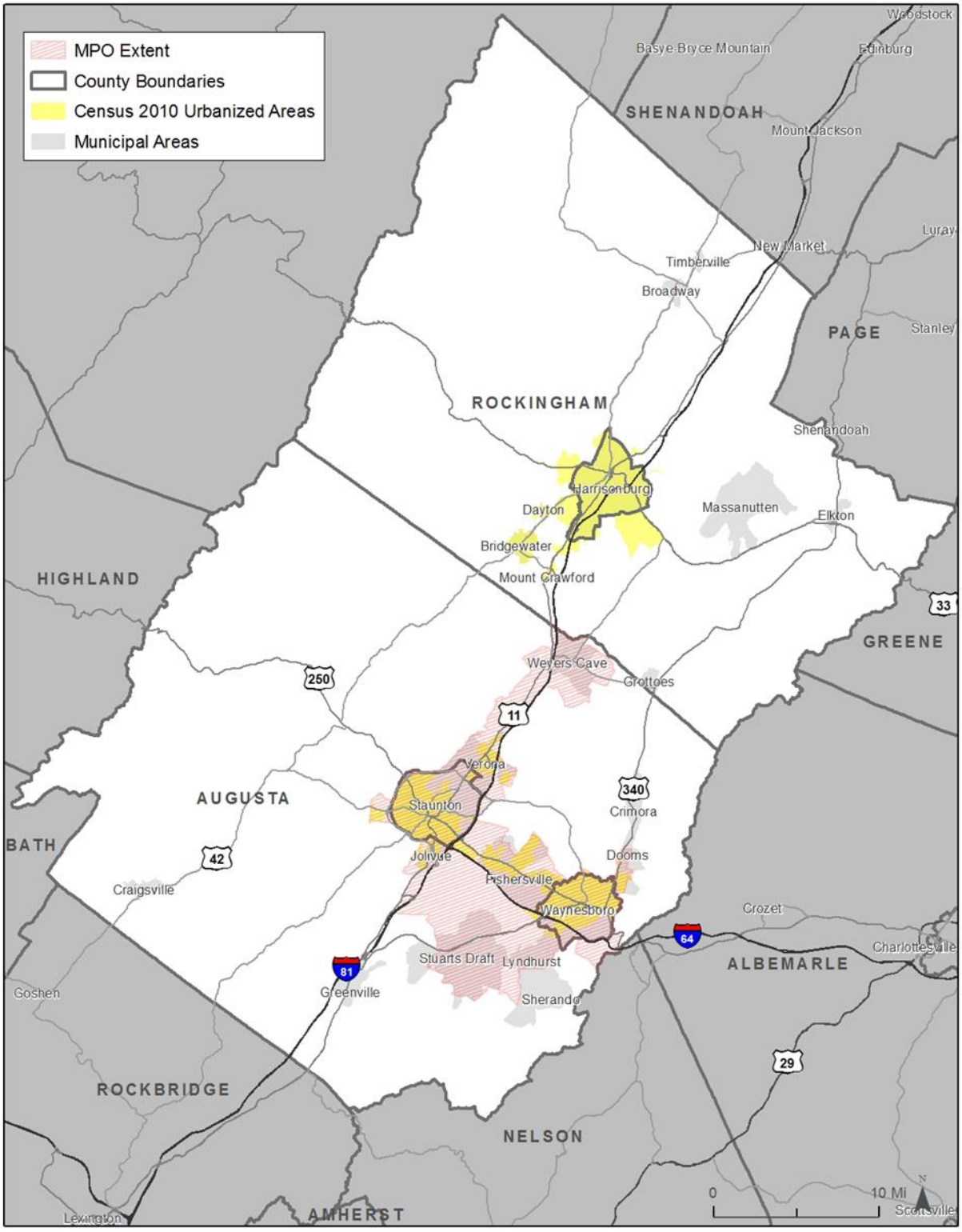
Under contract to the CSPDC, VRT currently provides fixed route public transportation in the urbanized area of Augusta County, and the cities of Waynesboro and Staunton. Demand-response service is also provided in the City of Staunton. Under the rural program, VRT also operates a route into Rockingham County to provide service to Blue Ridge Community College (BRCC) and between BRCC and Harrisonburg, as well as a rural route that operates in the Route 340 corridor between Stuarts Draft and BRCC and limited demand-response service in the Craigsville area of Augusta County.

Historically, the CSPDC has been involved in public transportation in the region in a planning and advisory capacity, fulfilling its function as a regional planning agency. Growth in the region between the 2000 Census and the 2010 Census resulted in the development of a new urbanized area, the Staunton-Augusta-Waynesboro Urbanized Area (UZA). A new MPO was formed, the Staunton-Augusta-Waynesboro MPO (SAW MPO), which is administered by the CSPDC. Figure 1-1 provides a map of the TDP study area, including the SAW MPO boundaries.

The development of this UZA changed the way in which federal transit funding is administered within the newly urbanized portions of the service area. These areas are now eligible for the Federal Transit Administration's Section 5307 urbanized area formula funding program. Federal guidance states that only public entities are eligible grant recipients for S.5307 funds. VRT, the previous rural grantee for transit funding in the region, is not a public entity. Stakeholders in the region decided that the CSPDC should be the designated entity to serve as the grantee for these funds. In FY2013 the PDC began receiving the urbanized area funds and was required to issue a Request for Proposals (RFP) for the operation of transit services in the urbanized area. VRT submitted the only proposal, which the PDC accepted. VRT was awarded an 18-month contract (January 2014- June 2015) to continue to deliver transit service in the urbanized area. An extension to continue service through FY2016 was also awarded.

The remainder of the service area remains eligible for the S.5311 rural area formula funding program, which flows through DRPT to local sub-recipients. VRT is the current sub-recipient for the rural transit funds in the region.

Figure 1-1: TDP Study Area and SAW MPO Boundaries



HISTORY

Public transportation was first introduced in the City of Staunton in 1890, with a fleet of 12 mule-drawn cars, operating on three lines. These streetcar lines were converted to electricity in 1896.[1] The service was controlled by the Staunton Light and Power Company, and was called the Shenandoah Traction Company. The service was abandoned in 1931 and replaced with a bus transportation system, which operated as the Staunton Transit Service until its 1989 discontinuation.

Staunton Transit Service Vehicle

The recent era of subsidized public transportation in the Central Shenandoah region began when Augusta Health merged the King's Daughters Hospital in Staunton and the Waynesboro Community Hospital to form a new central hospital facility in Fishersville. Augusta Health's Board recognized that while Fishersville is located between Staunton and Waynesboro, it was not an accessible location for people who did not drive. The only community transportation that was available in the region at the time (1988) was operated by human service agencies for their clients to attend programs and appointments. Community leaders began meeting regularly to plan a transportation service that could meet the needs of patients and visitors to the new hospital, while meeting other community transportation needs as well.

In 1992 Coordinated Area Transportation Services (CATS), a private non-profit agency, was formed to provide public transportation in the region. Service began with two small buses providing demand-response transportation for people who needed to access Augusta Health from Augusta County, the City of Staunton, and the City of Waynesboro. Federal and state funds through DRPT were received for the first time in 1994, and the system experimented with a fixed route in 1995. The fixed route was not successful at the time and service continued to be provided on a demand-response basis for several years. In 2002, after significant advocacy and survey efforts by the Waynesboro Disabilities Service Board, the 250 Connector fixed route was initiated, with support from the City of Waynesboro. Concurrently, operation of the services was shifted from CATS to VRT.

Meanwhile, the City of Staunton had been exploring the purchase of a trolley to provide tourist-oriented service in the downtown area. The City received grant funding from DRPT to

[1] Brown, David, editor, "Staunton, Virginia: A Pictorial History," Historic Staunton Foundation, 1985.

purchase two trolleys in 2001, with local match provided by the City's Downtown Development Association. Service began in mid-September 2001 with City employees operating the trolley while an RFP for service was being developed. In November 2001, the CATS entity, with VRT as the service provider, was awarded the contract to operate the Staunton Trolleys.

Over the years, VRT streamlined the demand-response services by increasing fixed route services, and facilitated system growth by identifying and working with additional funding partners to improve transit service in the region. VRT retained the CATS brand for some of the services, and the CATS Advisory Board continued to serve in an advisory role to VRT.

In 2012, after the official designation of the Staunton-Augusta-Waynesboro UZA, VRT's role in the urbanized portion of the region changed from sub-recipient and operator to contracted operator, with grant administration, planning and oversight provided by the CSPDC. VRT is currently the sub-recipient and operator for the services provided in the rural areas of the region.

GOVERNANCE

For services provided in the urbanized portion of the service area (about 70 percent of the services), the CSPDC is the governing body. The CSPDC has hired a Transit Coordinator to provide staff level support and oversight of the contractor and to perform planning and grant administration functions. The CSPDC Board represents and serves the localities of: the Counties of Augusta, Bath, Highland, Rockbridge, and Rockingham; the Cities of Buena Vista, Harrisonburg, Lexington, Staunton, and Waynesboro; and the Towns of Broadway, Bridgewater, Craigsville, Dayton, Elkton, Glasgow, Goshen, Grottoes, Monterey, Mount Crawford, and Timberville. A Board of representatives from each governmental subdivision oversees the activities of the Commission. Board Members are appointed by the governing body of the member jurisdictions, and representation is based on population, with a majority of the members comprised of local government elected officials. The CSPDC Board of Commissioners is the decision-making Board for the urbanized area programs. These Board members are listed in Appendix A.

VRT currently manages the rural program. It is a private non-profit agency governed by a Board of Directors. The CATS Board is advisory in nature to VRT.

ORGANIZATIONAL STRUCTURE

The organizational structure of the CSPDC is provided as Figure 1-2. Oversight of the urban transit service is provided by the CSPDC. Figure 1-3 depicts the organizational structure for VRT's Mountain Division, which includes the CSPDC service.

Figure 1-2: Organizational Chart, CSPDC

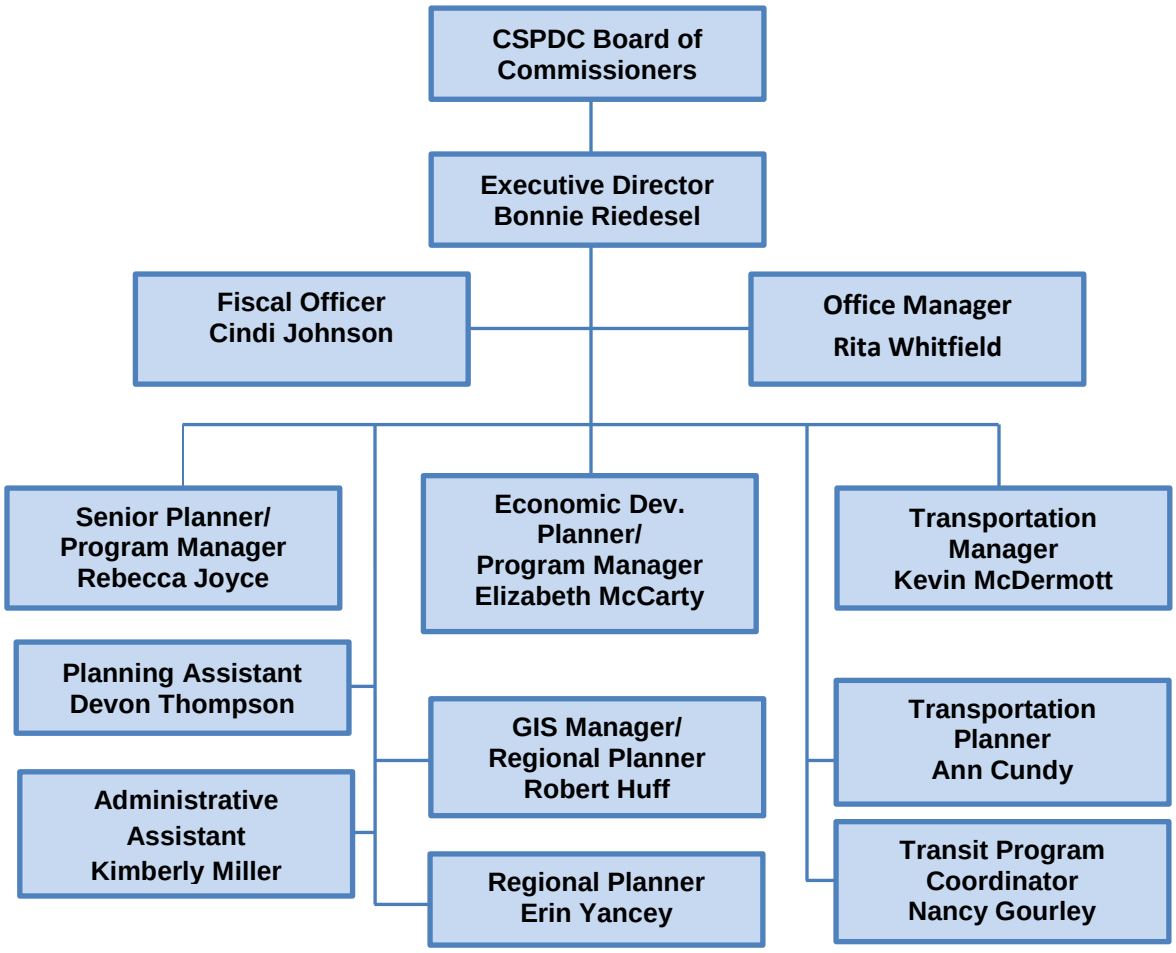
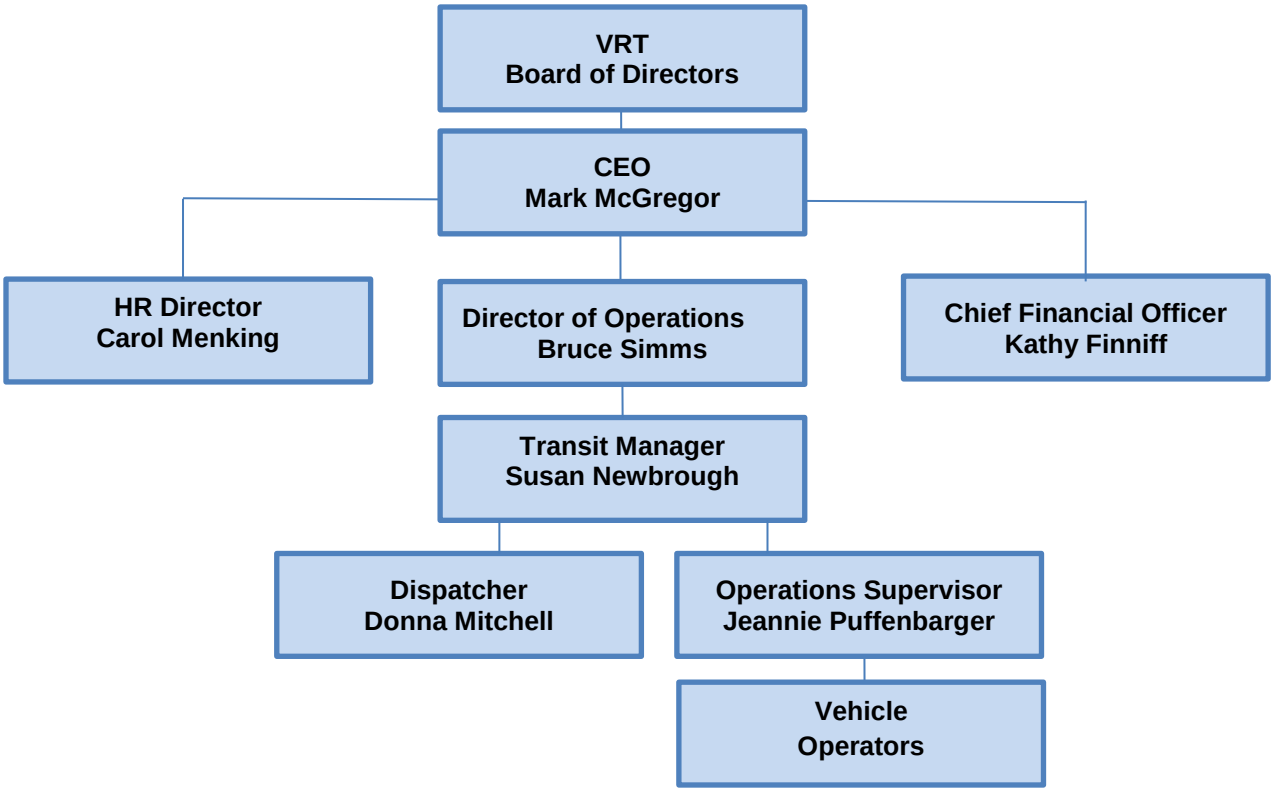


Figure 1-3: Organizational Chart, VRT Mountain Region



TRANSIT SERVICES PROVIDED AND AREAS SERVED

This section provides a brief overview of the public transit services operated in the region, including both fixed route and demand-response services. In-depth service analysis is provided in Chapter 3.

Fixed Route Services

VRT operates several fixed route services in the region. While termed "fixed route," the routes will deviate up to ¾ mile to provide service for ADA-eligible individuals. The following pages (Figures 1-4 through 1-11) provide maps and basic information relating to the existing fixed route services. Complete route profiles, including ridership and productivity information are provided in Chapter 3.

Figure 1-4: 250 Connector

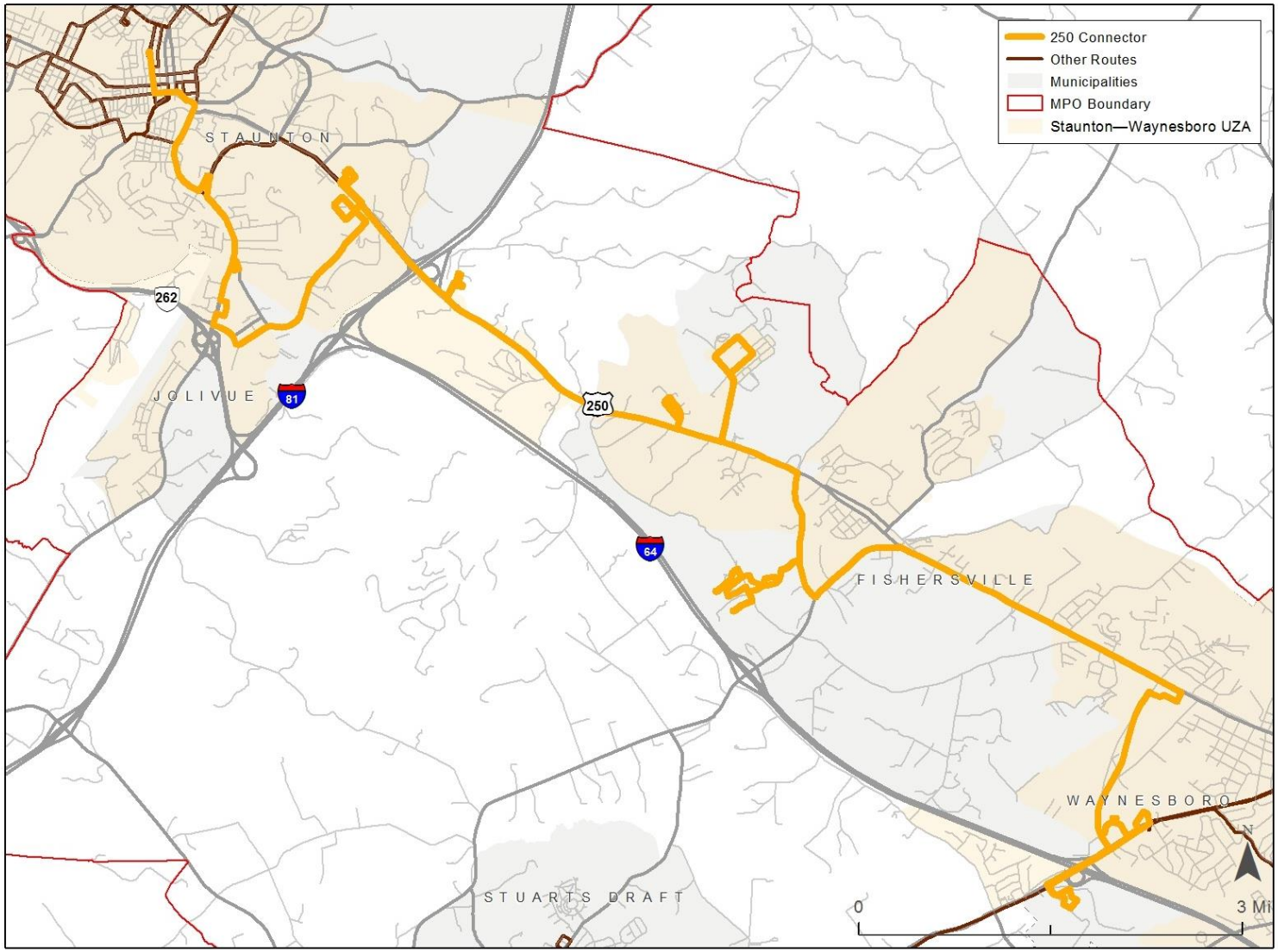


Figure 1-5: 340 Connector

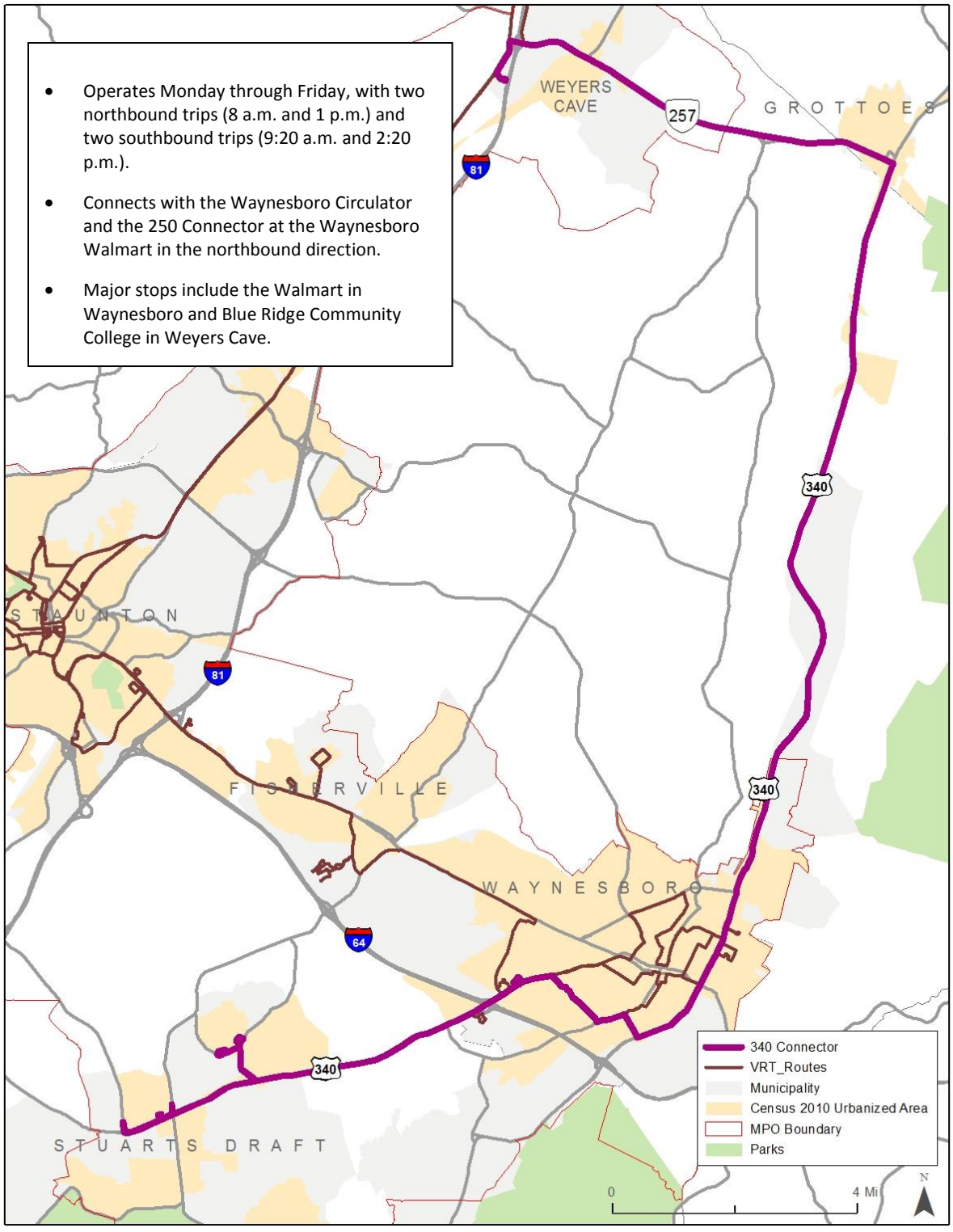


Figure 1-6: BRCC North

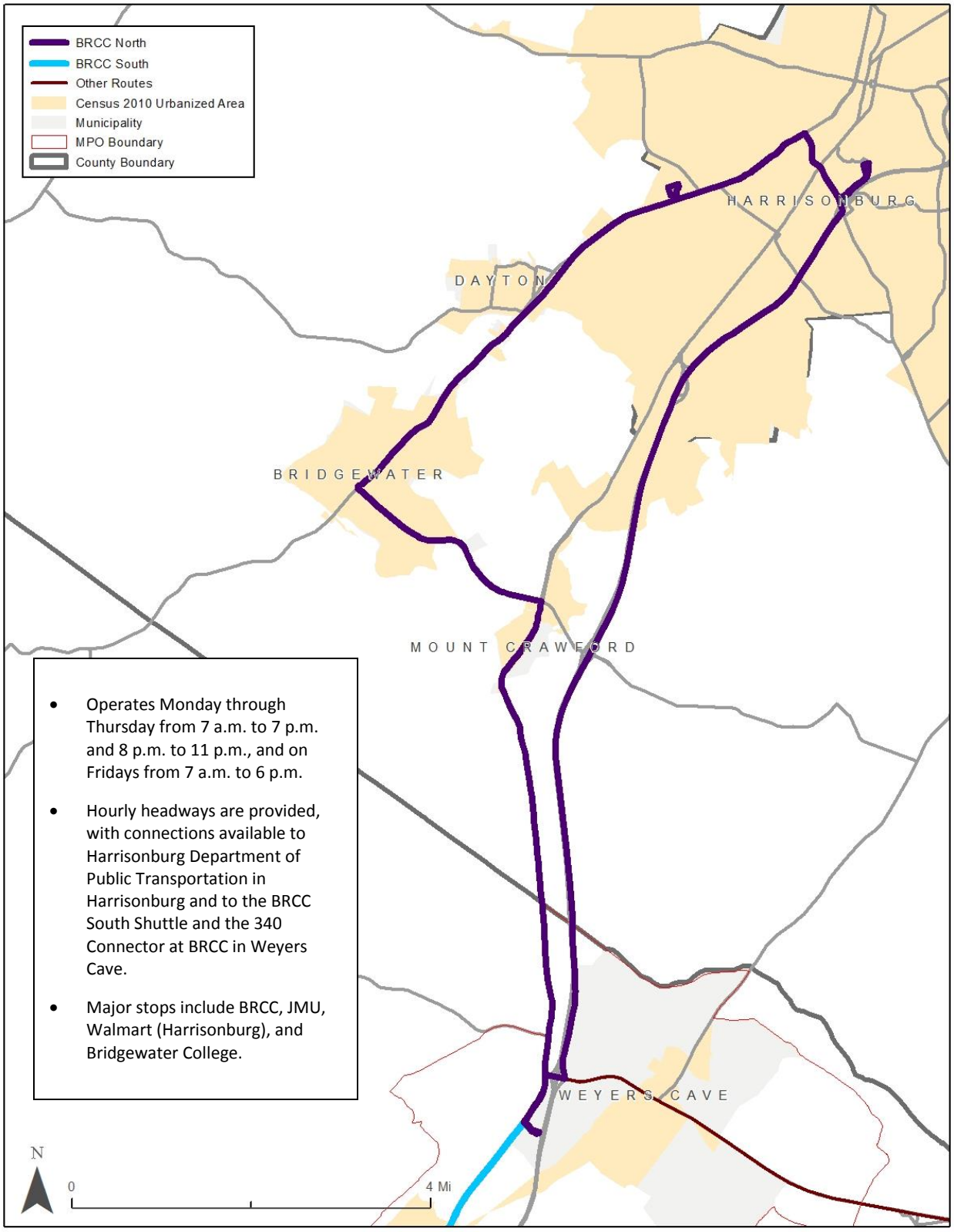


Figure 1-7: BRCC South

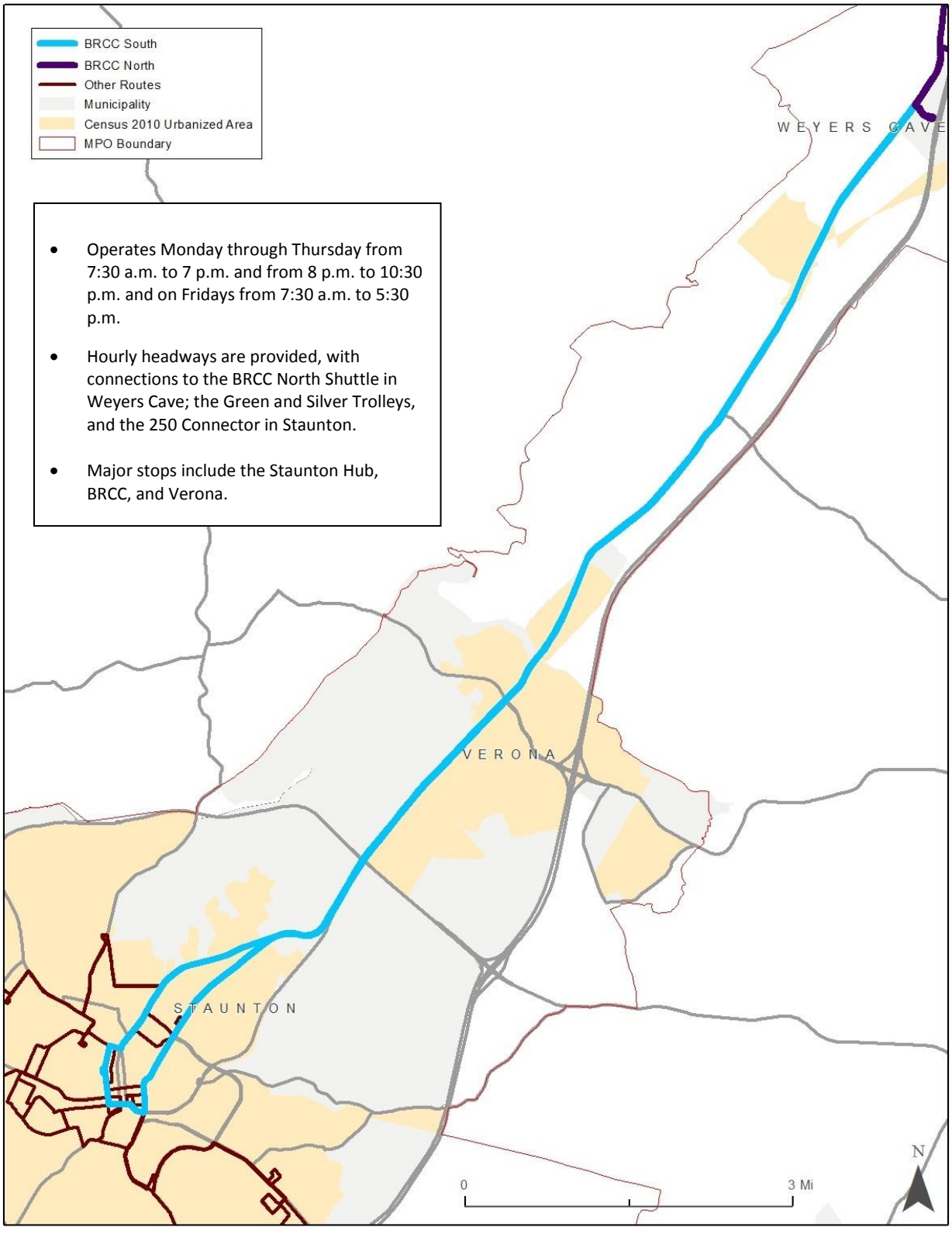


Figure 1-8: Green Trolley

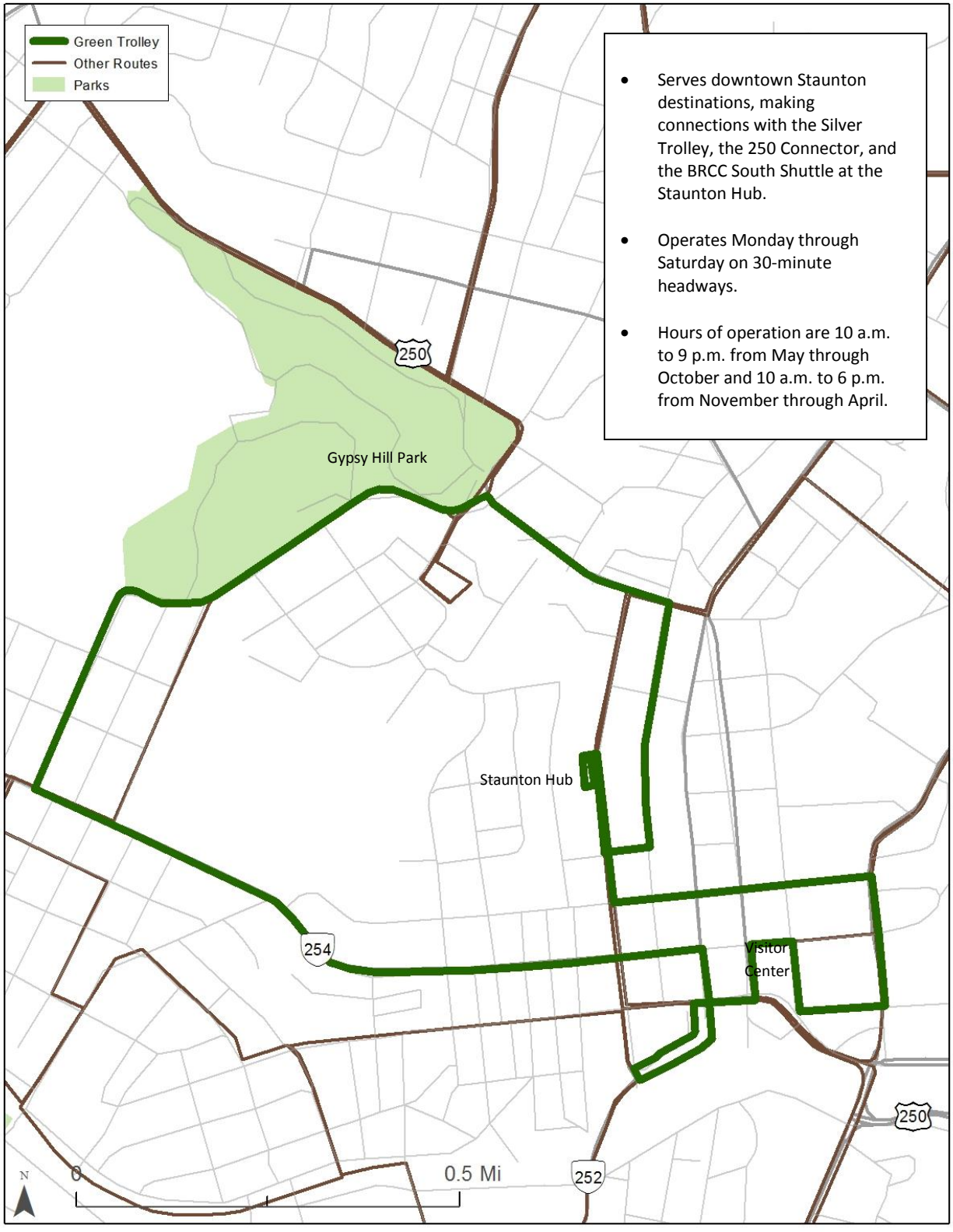


Figure 1-9: Red Trolley

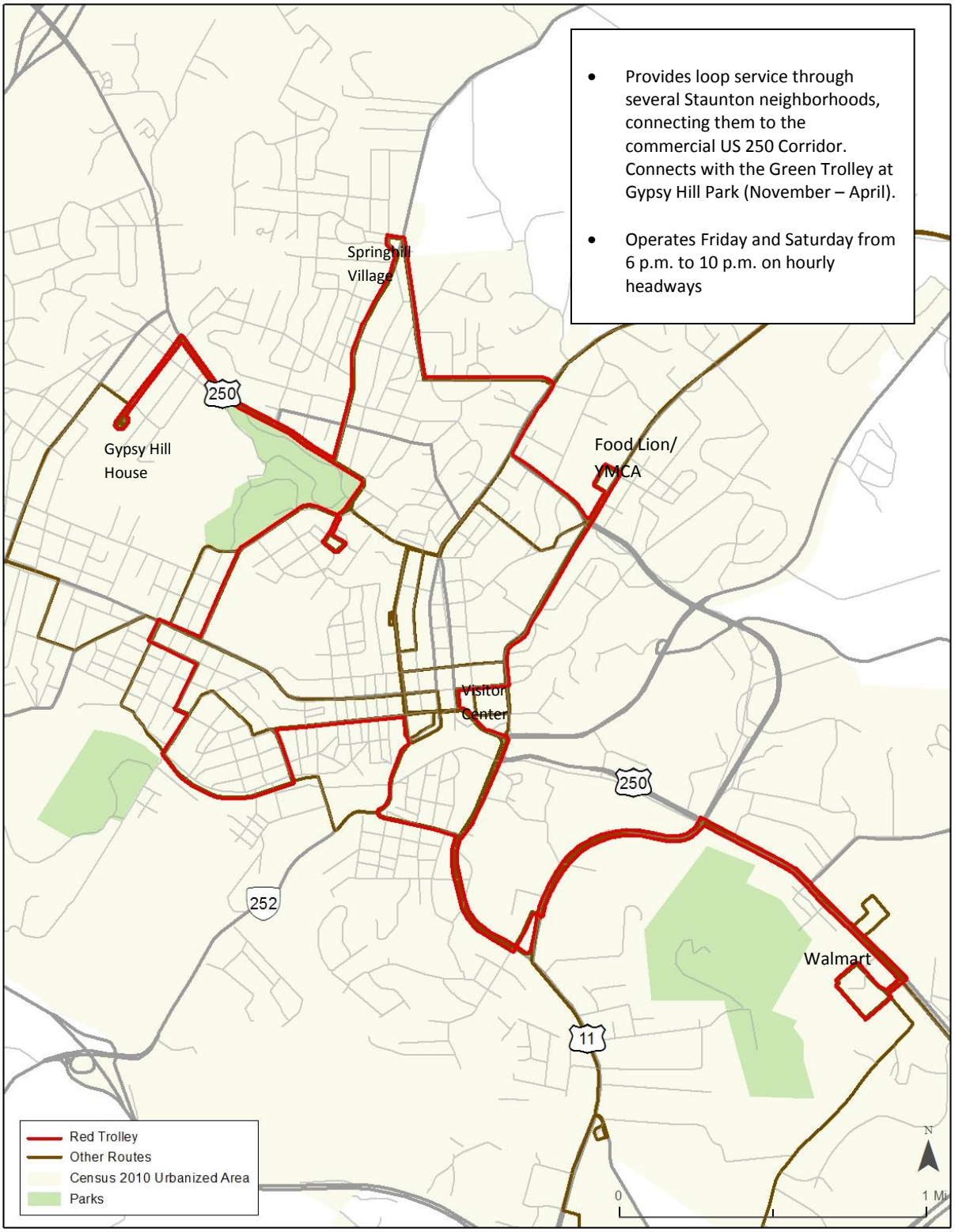
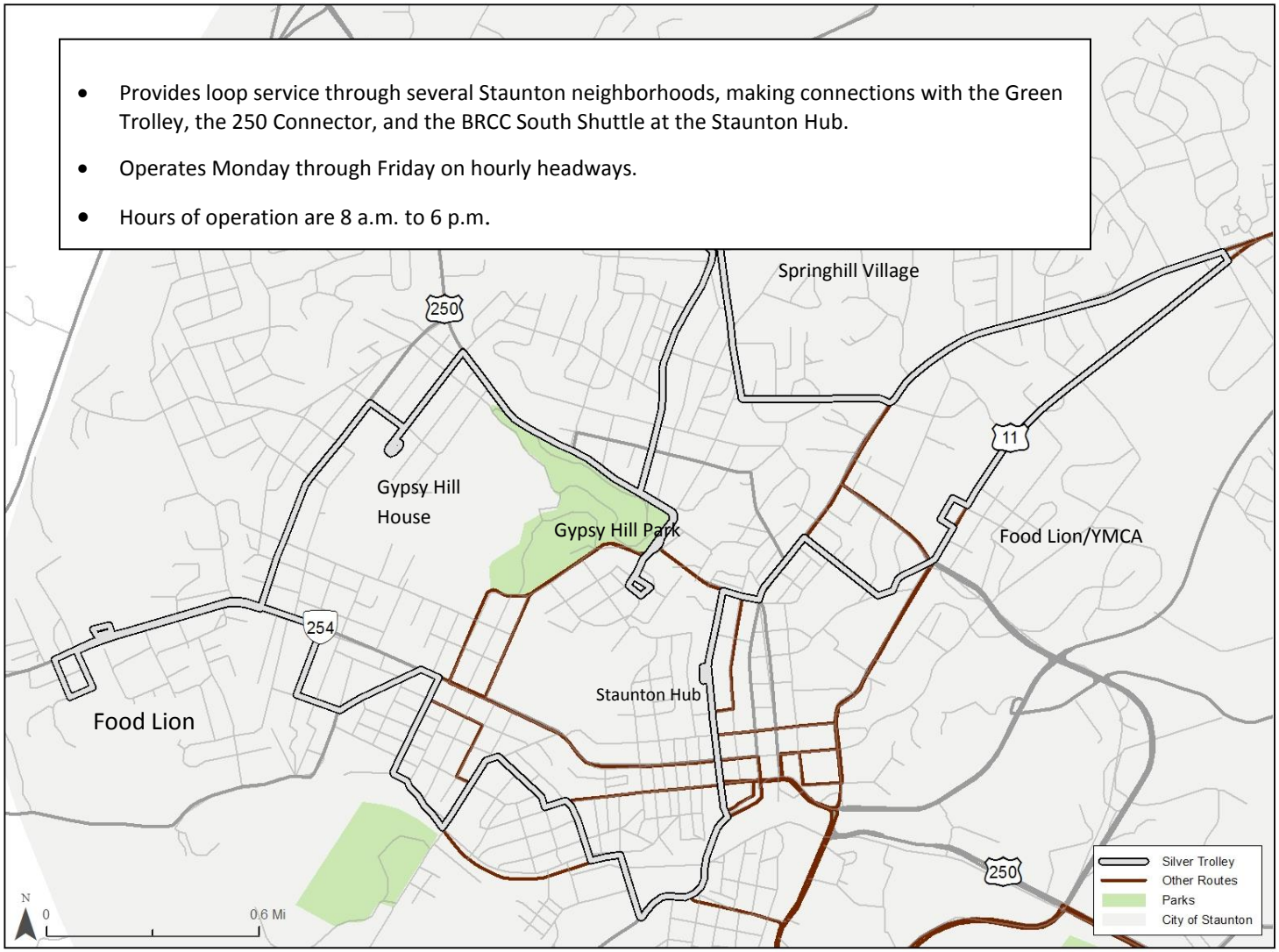
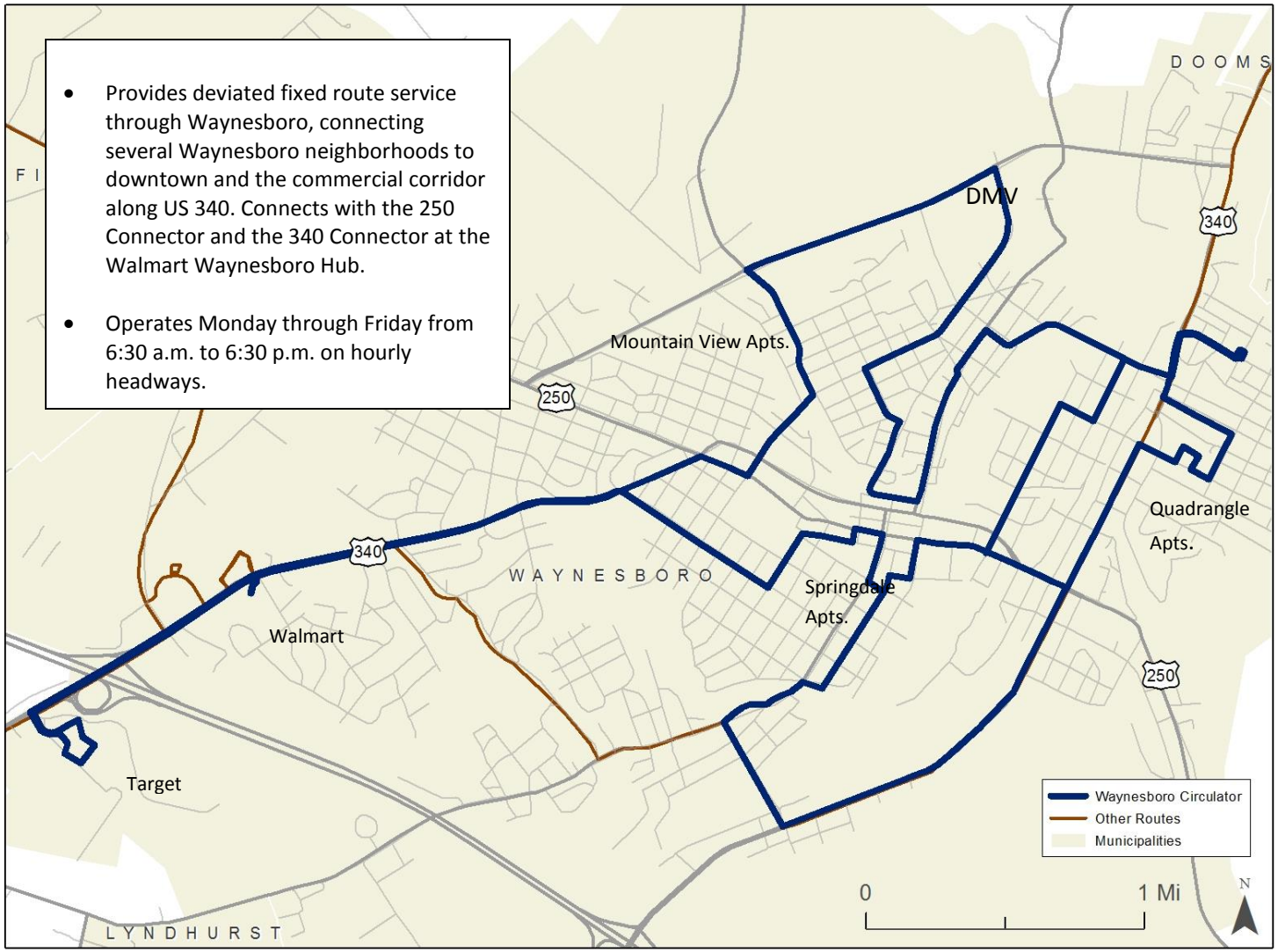


Figure 1-10: Silver Trolley



- Provides loop service through several Staunton neighborhoods, making connections with the Green Trolley, the 250 Connector, and the BRCC South Shuttle at the Staunton Hub.
- Operates Monday through Friday on hourly headways.
- Hours of operation are 8 a.m. to 6 p.m.

Figure 1-11: Waynesboro Circulator



Demand- Response Service in Staunton and Augusta County

Curb to curb, ADA compliant, demand response service is operated Monday through Friday from 6:45 a.m. to 4:30 p.m. in Staunton, and in the Craigsville area of Augusta County on Fridays from 7:45 a.m. to 10:45 a.m. and from 1:15 p.m. to 4:15 p.m.

These services are open to the public and rides must be booked at least 24 hours in advance, and no more than 2 weeks in advance. The pick-up window is 15 minutes before and 15 minutes after the scheduled ride appointment time.

ADA Service

All of the fixed route services will deviate up to ¾ mile to pick-up people with disabilities who have registered and been approved for ADA service. If the trips are within the City of Staunton, the trips may be provided by the Staunton on-demand service or through the route deviation, depending on the needs of the rider and the availability of the Staunton on-demand vehicle. On-demand service and deviations are provided on a curb-to-curb basis.

The on-demand service also serves as a feeder to the fixed routes if that is the most efficient method for the trip that meets the needs of the rider.

FARE STRUCTURE

Fares on the three trolley routes, based in Staunton, are $0.25 per one-way trip. The fare for the remainder of the fixed route services is $0.50 per one-way trip. The demand response fares are set at $2.00 per one-way trip for the general public and $1.00 for seniors and people with disabilities (paratransit service). College students ride the system fare-free, as BRCC contributes significantly toward the operation of the service. Woodrow Wilson Rehabilitation Center residents also ride fare-free, as WWRC makes an annual financial contribution to the system. In addition, Augusta Health provides operating funds each year, allowing people who board or alight at that location to ride free; and Shenandoah Valley Social Services also contributes to the system and is given tokens to be distributed among its clients of the View Program.

FLEET

There are seventeen vehicles in the fleet. Of these seventeen, eleven are designated as “urban,” meaning they provide service primarily in the urbanized portions of the service area. The remaining six are designated as rural. The ten urban vehicles include three trolleys and seven body-on-chassis vehicles. The six rural vehicles include three large vehicles (Eldorado EZ Rider II) used for BRCC, and three body-on-chassis vehicles. There are also two support vehicles.

Green Line Trolley

Seven of the ten urban vehicles are used each weekday and four of the six rural vehicles are used each weekday. While the spare ratio is on the high side, it is not excessive given the disparate vehicle needs and large geographic service area. In order to reduce deadhead, vehicles are parked in several locations, including the Fishersville facility (Waynesboro Circulator, 250 Westbound Connector, 340 Connector); the Staunton Hub (250 Eastbound Connector, BRCC South); the City of Staunton Public Works Department (trolleys); and the BRCC Campus (BRCC North). These vehicles were purchased by VRT with federal, state, and local funding assistance. The vehicle inventory is provided as Table 1-1.

Table 1-1: Vehicle Inventory

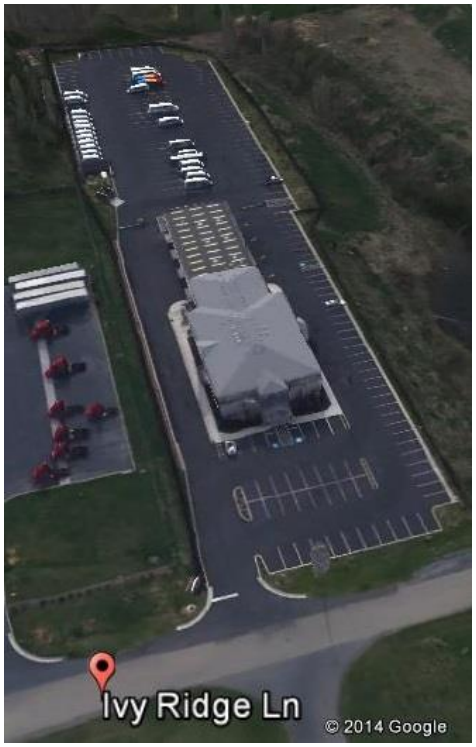
Vehicle #	Route	Year	Make	Model	Designation	Mileage 7/21/2015	Lift?	Seating Capacity	Bike Rack
Rebecca	Silver Line Trolley	2007	Freightliner	Trolley	Urban	156,548	YES	29	YES
Libby	Spare Trolley	2008	Freightliner	Trolley	Urban	188,960	YES	29	YES
266	250 B Connector	2012	Chevrolet	C4500	Urban	122,582	YES	20	YES
267	Staunton Demand	2012	Chevrolet	C4500	Urban	119,588	YES	20	YES
276	250 A Connector	2012	Chevrolet	C4500	Urban	106,140	YES	20	YES
278	Red Line Trolley	2012	Chevrolet	C4500	Urban	67,402	YES	20	YES
294	Waynesboro Circulator	2013	Champion	E-450	Urban	99,189	YES	20	YES
307	Urban Spare	2013	Champion	E-450	Urban	98,355	YES	20	YES
311	Urban Spare	2014	Chevrolet	C4500	Urban	23,746	YES	20	YES
262 (1)	Green Line Trolley	2012	Ford	Trolley	Urban	62,004	YES	28	YES
211	Spare BRCC	2010	Eldorado	EZ Rider II	Rural	262,447	YES	29	YES
212	Spare BRCC	2010	Eldorado	EZ Rider II	Rural	365,145	YES	29	YES
295	Rural Spare	2013	Champion	E-450	Rural	100,653	YES	20	YES
306	Rural Spare	2013	Champion	E-450	Rural	84,820	YES	20	YES
310	Augusta Co On Demand	2014	Chevrolet	C4500	Rural	39,024	YES	20	YES
314	BRCC	2014	Eldorado	EZ Rider II	Rural	64,230	YES	32	YES
315	BRCC	2014	Eldorado	EZ Rider II	Rural	60,657	YES	32	YES
281	Support	2012	Ford	F-150		42,030	NO	2	NO
283	Support	2012	Nissan	Murano		47,859	NO	5	NO

(1) Currently out of service with an engine problem.

EXISTING FACILITIES

VRT operates out of a relatively new operations and maintenance facility on Ivy Ridge Lane in Fishersville. The facility includes operations and administrative office space, a four-bay maintenance garage (one of which is a wash bay), training and meeting space, and significant additional office space that VRT leases out.

VRT's Fishersville Facility



Overview of Facility

The maintenance portion of the facility is also leased from VRT to Wheels Bus Parts Inc. (WBPI), a private maintenance contractor that maintains the VRT fleet as well as others. There is secure transit vehicle parking on-site, as well as staff and visitor parking.

The facility was completed in 2011, at a total cost of about $5 million. The grant funding was included in the FY2009 VRT/CATS capital budget, and included $500,000 for land acquisition; $400,000 for engineering and design; $100,000 for third party construction management; and $4 million for construction.[2] A mix of federal, state and local funds was used to finance the facility, including 80% federal funds, 15% state funds and 5% local funds. As a federally-funded facility, DRPT/VRT were required to get concurrence from FTA concerning the incidental use of the facility (i.e., other tenants) and the facility is to remain in use to support public

Lewis Street Hub

[2] VDOT SYIP, 2009.

transportation in the region. The facility is currently assessed at $3,296,100 and Augusta County historically returns the annual property tax payment to the transit program, which was $18,458 in FY14, and counted as local revenue.[3]

Another transit-supportive facility in the service area includes the city–provided Staunton Hub on Lewis Street, which features two shelters and a parking area. The 250 Connector, the trolleys, and the BRCC South meet for connections at the Staunton Hub. There are also eight passenger shelters in use throughout the system.

Transit Security Program

Elements of the transit security program include the use of cameras on the vehicles, as well as the use of two-way radios that allow the drivers to be in contact with the dispatcher at all times. The radios also have GPS capability. In addition, the system utilizes secure fareboxes that are pulled each day. As previously discussed, the transit vehicle parking at the facility is fenced and is locked when staff is not present.

Intelligent Transportation Systems (ITS) Program

ITS programs in public transportation programs encompass a broad range of communication-based information and electronics technologies that serve to improve safety, efficiency, and service, through the use of real-time information. The GPS capability of VRT's relatively new radio system is just starting to be used. The vehicle tracking function is being tested, but is not yet being used in real time. For demand- response and route-deviation scheduling, VRT is using the SHAH reservation and scheduling system. The system is used to schedule the trips and for data collection, but it is not used for routing.

Public Outreach

The primary mechanism used for public outreach has been the wide distribution of a system brochure. The brochure, developed in 2013, includes maps, timetables, and system information, and is available at government buildings, libraries, the visitor center in Staunton, Augusta Health, and several other locations. In addition, staff participate in several community events each year and work with DRPT to promote transit during Try Transit Week. VRT currently has a website, a Facebook account, and a Twitter feed that provides transit information.

[3] Augusta County tax records, online; CSPDC/VRT Budget, FY2014.

OTHER AREA TRANSPORTATION PROVIDERS/SERVICES

- **Amtrak** – Amtrak's Cardinal route runs between New York and Chicago three days per week, with a stop in downtown Staunton. Passengers can depart westbound on Sundays, Wednesdays, and Fridays at 3 p.m. and eastbound on Wednesdays, Fridays, and Sundays at 1:40 p.m. The Cardinal also stops in Charlottesville, with transfers to the Northeast Corridor.

- **Human Service Agencies** – A variety of non-profit agencies provide transportation in the region:

  - The Arc of Augusta serves individuals with disabilities, providing transportation with one vehicle for clients that participate in its programs.

  - Heart Havens, Inc. serves individuals with disabilities. Transportation (one vehicle) is available for clients for community outings, medical appointments, and shopping.

  - Valley Program for Aging Services (VPAS) provides transportation to the region's senior centers as well as other trips for seniors and individuals with disabilities. The agency has approximately 18 vehicles and makes over 65,000 trips per year. Transportation is available within Waynesboro and Staunton city limits for grocery shopping, banking, etc., and throughout the region for non-emergency medical appointments. The agency relies on volunteer drivers for many of its demand response trips, organized under its TED Program – Transportation for the Elderly and Disabled.

  - Vector Industries employs and trains individuals with disabilities. Located in Waynesboro, it provides transportation for employees to reach job sites.

  - Woodrow Wilson Rehabilitation Center is a funding partner for the 250 Connector and also has five vehicles that are used to bring students enrolled in the program to job sites that cannot be feasibly accessed through the current Central Shenandoah transit network.

  - Valley Community Services Board serves clients with mental health, intellectual disability, and substance abuse issues. The agency operates 25 vehicles, providing about 7,000 passenger trips per year in Augusta and Highland Counties and the Cities of Staunton and Waynesboro.

- **Intercity Bus** – The closest intercity bus service in the region occurs in Charlottesville. Greyhound operates two daily round trips between Charlottesville and Baltimore and three daily round trips between Richmond and Nashville via Charlottesville. Due to service cuts in the past decade, Greyhound no longer serves Harrisonburg, Staunton, or Waynesboro. Other intercity providers include Megabus, which operates on I-81 between Washington, DC and Knoxville and includes a stop in Christiansburg, and the NYCShuttle, which operates between Charlottesville and New York City.

- **Private Providers** – Several taxi companies operate near Waynesboro and Staunton. These include City Cab, Al's Radio Cabs, and Blue Ridge Taxi. However, due to price, these providers are rarely feasible sources of daily transportation for area residents.

Chapter 2 - Goals, Objectives, and Standards

TASKS AND ISSUES FOR THE TRANSIT DEVELOPMENT PLAN

An important first step in the development of the TDP was to learn from committee members and CSPDC staff what community transportation issues were the most important to explore within the TDP, as well as what goals these stakeholders had for the study. A discussion of goals and issues was held during the TDP kick-off meeting on October 23, 2014. Committee members and staff articulated both issues and study goals in a number of different topic areas. These are summarized by topic area below and are not prioritized.

Intercity Bus/Commuter Bus

- Explore the need for intercity bus service and commuter bus service in the region, connecting Harrisonburg, Staunton, Waynesboro, and Charlottesville. The purpose of this type of service would be to connect to Amtrak and Greyhound, as well as to provide access to employment, educational, and medical destinations.
- Such a service would ideally serve park and ride lots as well as downtown destinations.
- It was noted that Megabus recently declined to provide service to James Madison University (JMU).
- DRPT may have available funds for intercity bus service from the S.5311 (f) program. An Intercity Bus Plan was completed for DRTP in 2013 and the findings with regard to this corridor may be referenced.

Community Awareness and Connectivity

- The community is not necessarily aware that the urban and rural services connect. It is not readily obvious that the various transit services in the region are provided by a single operator and are one system.

- When conducting the re-branding task, committee members would like to see an umbrella brand that is unified, with specific services maintaining their current brand (BRCC shuttle, in particular).

Regional Growth

- There is a need to look at system growth, given the recent MPO/urbanized area designation.

- Stuarts Draft is a high growth area.

Organizational Issues

- With the urbanized area designation, a result of the 2010 Census, significant parts of the transit service area became eligible for S. 5307 urbanized area funding. Grantees under this program must be public bodies, so the PDC took on this role. VRT's role became that of contractor for the urbanized area services. The current contract runs through June 2015, with an extension option. VRT continues to be the designated sub-recipient of rural funds, but this may change. Both the urban and rural programs are likely to be administered by the PDC in the future, which will require contractual changes.

- With the change in transit oversight, the TDP will need to discuss the best way to handle ownership of both fixed facilities and vehicles. The TDP will explore the cost/benefit issues of ownership versus leasing, as well an examination of which roles are appropriate for the public agency (the grantee) and the contractor (operator of service). There will also need to be a review of how the change in grantee status affects the Fishersville transit facility.

- A full exploration of organizational options with regard to the development of a new transit organization is not desired at this time, but perhaps in a future TDP.

Financial Issues

- The TDP should include an examination of cost allocation for the participating funding agencies. Historically the funding agreements from the partners have not been tied to a particular level of service. The PDC would like to see the development of a cost allocation model that it can use when approaching potential funding partners. There may need to be a provision to "grandfather in" existing partners.

    - For example, all college students with ID ride free, but only some colleges are funding partners (from student fees). The Augusta Health stop is free for everyone.

Specific Service Gaps and Issues

- The following specific service gaps were noted by committee members and staff:
  - Service for 8 a.m. BRCC classes, Monday -Thursday BRCC evening classes, and Saturday classes for students coming from Waynesboro and Stuarts Draft.
  - Access to Augusta Health and associated services in the vicinity.
  - The 250 Connector needs more Saturday service, Sunday service, and an elimination of the current mid-day break and evening break.
  - The 250 Connector needs to be restructured because the schedule is too tight. It cannot keep to the hour.
  - There is a need for additional connectivity to and from Harrisonburg.
  - Only a portion of Augusta County (Craigsville area) is served with demand-response service on Fridays only.
  - There is no countywide demand response in Rockingham County.

- The route design within Staunton and Waynesboro needs to be reviewed. The current loop routes can be inconvenient and inefficient. Bi-directional routing should be examined.

- The transit program should attract choice riders, in addition to transit-dependent riders.

- Vehicle tracking technology is desired.

- Trolleys may not be the best vehicles for daily fixed route service.

- Many of the bus stops are not signed. There are flag stops permitted throughout the service area, which raises safety concerns.

These issues and goals were explored to the extent feasible during the TDP process.

TRANSIT PROGRAM MISSION

A mission statement is "a written declaration of an organization's core purpose and focus that normally remains unchanged over time."[1] It is a sentence or two that describes what the agency does and who the agency serves, defining why it exists. The mission statement for the CSPDC is:

> *"To help communities and agencies within the Central Shenandoah Valley work together by providing high quality planning, technical assistance, and facilitation services that address local, regional and state needs in an innovative, timely and cooperative manner."* [2]

The current transit program in the region does not have an adopted mission statement, which is understandable as it is a collection of services provided under the umbrella of VRT Mountain Division. As the program is re-branded and moves forward, it will be helpful to have a mission statement to focus the program. KFH Group drafted several different mission statements, each with a slightly different style, as a starting point for discussion with the TDP Committee. The mission statement chosen by the TDP Committee is:

> *"To deliver quality, accessible public transportation services that link people, jobs, and communities in the Central Shenandoah Valley."*

TRANSIT PROGRAM GOALS AND OBJECTIVES

It is important that a transit program has specific goals and objectives, and service standards to guide and measure if the system is accomplishing its mission. The current transit program does not have formally established written goals or objectives to focus its efforts. Goals and objectives for the transit program have been developed as part of this TDP process. The development of these goals and objectives is described below.

During the first TDP Advisory Committee meeting, committee members were asked to indicate some important topic areas that should be included within these goals. The following topic areas were discussed:

- Creating a cohesive, comprehensive system that reflects the diversity of the community
- Providing mobility for people who cannot afford personal transportation, while remaining affordable
- Working with area human service agency providers

[1] Business Dictionary.com
[2] CSPDC website.

- Finding a balance between serving transit dependent and choice riders
- Reaching out to new markets without reducing service for existing riders
- Supporting the economic development goals of the localities
- Supporting urban re-development through intercity/commuter service (i.e. connecting lower cost housing in Waynesboro with jobs in Charlottesville)

The first two topic areas listed above were included as part of a mission statement. From the remaining topic areas, the following goals and associated objectives were drafted for the transit program.

Goal 1: Provide coordinated, cost- efficient and effective public transportation services that support the mobility and economic development goals of the communities served.

Objectives:

- Evaluate and monitor system-wide performance to ensure appropriate allocation of resources
- Consider changing or eliminating service that does not meet established performance standards
- Consider the establishment of new services to meet regional mobility and economic development goals

Goal 2: Maintain the current ridership base while seeking opportunities to increase ridership and serve new markets.

Objectives:

- Sustain and improve current public transit services to serve both transit-dependent and discretionary riders
- Identify opportunities to better serve existing markets, such as providing service on additional days or extending hours of service
- Identify opportunities to serve new markets by fully exploring the demand for service to Harrisonburg and Charlottesville

Goal 3: Maintain strong relationships with area human service transportation providers and neighboring transit programs to maximize mobility options in the region.

Objectives:

- Meet regularly with area human service agencies and other providers in the region to continue to improve mobility options for agency clients and the public, while reducing duplication where it may exist
- Coordinate service and transfer opportunities with other transit providers in the region, where feasible
- Develop a standard rate to use when providing human service agency transportation

Goal 4: Establish, strengthen, and market a brand identity for the transit program.

Objectives:

- Choose a brand identity for the transit program that represents the diversity of current services and markets under the Central Shenandoah umbrella
- Build and strengthen the chosen brand identity through marketing and advertising efforts
    - Create a system website
    - Maintain accurate and up-to-date transit information on the CSPDC and VRT websites, as well as the websites of the local financial partners
    - Distribute system brochures throughout the communities served.

Goal 5: Responsibly leverage federal and state funds with local funds and fare revenue to ensure the financial viability of the system.

Objectives:

- Develop and monitor a multi-year financial plan
- Research available federal and state funding programs to ensure the region is maximizing its federal and state transit funding opportunities

- Review the fare structure annually to determine if fares are both affordable for riders and economical for the operations of the system
- Explore additional partnership opportunities with local businesses, employers, educational institutions, and other community stakeholders to maximize financial support for transit
- Identify and explore strategies to secure new revenue sources, such as advertising, fundraising, and/or other grant opportunities

Goal 6: Provide a safe and secure transit system.

Objectives:

- Ensure that safety sensitive staff members are adequately trained and monitored
- Provide refresher training for drivers
- Monitor the incident and accident data on a monthly basis
- Ensure that security equipment is properly maintained

SERVICE AND PERFORMANCE STANDARDS

Service standards are benchmarks by which service performance is evaluated. Service standards are typically developed in several categories, such as service coverage, passenger convenience, safety, fiscal condition, productivity, and passenger comfort. The most effective service standards are straightforward and relatively easy to calculate and understand.

Service standards are also used as a measure of compliance with Title VI of the Civil Rights Act of 1964, to ensure that services are provided equitably to all persons in the service area, regardless of race, color, or national origin.

CSPDCs Title VI Plan details the system-wide service standards meant to ensure this equity, including standards on vehicle load, vehicle headways, on-time performance, and service availability.

The following standards are included in the agency's Title VI Plan:

- Maximum vehicle load: 1.3 (ratio of passengers to total seats) for all vehicle types. For example, if there were thirty seats on the bus, the maximum vehicle load would be 39 passengers (39 divided by 30= 1.3)
- Vehicle headways: every sixty minutes, weekdays and weekends (if applicable)
- On-time performance: ninety percent or greater (a vehicle leaving a scheduled time point no more than 1 minute early or five minutes late is considered on-time)
- Service availability within the urbanized area: eighty percent of all residents in the service area are within a ½-mile walk of bus service

These standards have been incorporated into a more comprehensive set of service standards that are presented in Table 2-1.

PROCESS FOR UPDATING GOALS, OBJECTIVES, AND STANDARDS

These goals, objectives, and service standards were developed for the system as a component of the TDP process. Prior to this effort, the only standards in place were those recently developed for the CSPDC's Title VI Plan. Given that these goals, objectives, and service standards are new to the program, they should be examined on an annual basis to ensure that they are appropriate and in keeping with what the system is experiencing. If additional goals are envisioned, or if specific goals, objectives, or standards are no longer appropriate, represent under-achievement, or cannot reasonably be attained, the CSPDC can update the measures to reflect current circumstances.

It is recommended that the annual review of goals, objectives, and service standards take place as part of the grant preparation cycle. Any changes for these measurement tools can be included in the annual TDP update.

Table 2-1: Service and Performance Standards

Category	Standard
Availability within the Urbanized Area	***Service Coverage:*** 80 percent of all residents in the service area are within a ½ mile walk of bus service. ***Frequency:*** Every 60 minutes, weekdays and weekends (if applicable). ***Span:*** Weekdays- 8:00 a.m. to 6:00 p.m.
Patron Convenience	***Maximum Vehicle Load:*** 1.3 (ratio of passengers to total seats) for all vehicles. ***Bus Stop Spacing***: 5 to 7 stops per mile in core; 4 to 5 per mile in fringe, as needed based on land uses
Dependability	***On-time Performance****:* 90 percent or greater (a vehicle leaving a scheduled time point no more than 1 minute early or 5 minutes late is considered on-time).
Productivity (Pass./rev. hour)	Review and modify, if possible, services that exhibit less than 60% of average Review and modify, if warranted, routes between 60% and 80% of average Fixed-route average is currently **12.09** trips per revenue hour Demand-response is currently **1.8** trips per revenue hour
Cost Effectiveness (Cost per trip)	Review and modify, if possible, services that exhibit less than 60% of average Review and modify, if warranted, routes between 60% and 80% of average Fixed route average is currently $ **4.83** per trip Demand response is currently $ **32.70** per trip
Passenger Comfort	***Waiting Shelters*****:** Available where there are 25 or more boardings per day. ***Vehicles:*** Working heat and air conditioning
Safety (1) • Safety Incidents per 100,000 miles	**0.30** or fewer "reportable incidents" per 100,000 miles, as defined by the National Transit Database. A reportable incident is one in which one or more of the following conditions apply: • A fatality • Injuries requiring medical attention away from the scene for one or more persons • Property damage equal to or exceeding $25,000(2)
Public Information	Timetable, maps, and website current and accurate

(1) For NTD reporting years FY11,12, 13, there were 5 incidents over 1,325,310 miles; a rate of .38 per 100,000 miles.

(2) National Transit Database, Rural Reporting Manual.

Chapter 3 - Service and System Evaluation and Transit Needs Analysis

SYSTEM EVALUATION

Trend Data

System wide

Over the past five years (FY2010- FY2014), transit ridership in the service area grew significantly between FY2010 and its peak in FY2013 (76.5%, from 210,990 annual passenger trips to 375,977 annual passenger trips). Ridership dropped in FY2014 (22.5%), primarily due to the institution of a fare on the Staunton Trolleys, which resulted in a 47 percent loss in trolley ridership. Ridership on the three trolley routes together totaled 141,937 in FY13 and 74,655 in FY14. While this is a significant loss in ridership, the FY14 trolley ridership is likely more reflective of actual transit demand in the City of Staunton, as the institution of a fare eliminated riders who were using the system for reasons other than mobility. Other routes also saw decreases in ridership between 2013 and 2014, but most of those also operated fewer revenue hours and miles. It is likely that the harsh winter of 2013-2014 impacted transit ridership in the region, both by reducing the service hours and by reducing demand for travel. Table 3-1 provides the system wide operating and performance data for FY2010 through FY2014.

In terms of transit productivity, the data from FY13 showed the highest level of overall system wide productivity, with an average (mean) of 13.1 passenger trips per revenue hour and an overall average (mean) cost per trip of $4.19. It should be noted that while the performance data from FY14 were not as favorable as the performance data from FY13, the overall trends are positive, with the system providing 36.7 percent more passenger trips in FY14 than in FY10, operating with fewer revenue hours. The average passenger trips per revenue hour in FY2010 were 8.05, compared with 11.15 in FY14. The mean productivity on the fixed route services was 12.09 passenger trips per revenue hour and the mean productivity on the demand response services was 1.8 passenger trips per revenue hour in FY14. The mean cost per trip in FY14 for the fixed routes was $4.83 and the mean cost per trip for the demand-response services was $32.70.

The trend data also indicate that operating expenses have been relatively well controlled over the five year period, with total operating costs rising 17.2 percent over the period, which equates to an average increase of 3.4 percent per year.

Table 3-1: Transit Program Trend Data

Total System Data by Year					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	212,990	289,958	362,275	375,977	291,217
Revenue Hours	26,467	30,001	28,616	28,672	26,126
Revenue Miles	406,230	454,166	431,560	439,590	374,516
Trips/Hour	8.05	9.66	12.66	13.11	11.15
Trips/Mile	0.52	0.64	0.84	0.86	0.78
MPH	15.35	15.14	15.08	15.33	14.34
Operating Costs	$ 1,301,647	$ 1,459,549	$ 1,516,648	$ 1,576,960	$ 1,525,807
Cost/Trip	$ 6.11	$ 5.03	$ 4.19	$ 4.19	$ 5.24
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 58.40

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Route Level Data

The transit program in the region has evolved as a collection of different services, each with different characteristics. There are generally four types of routes operating in the region: connector routes, targeted shuttle routes, circulators, and demand-response services. The historical performance data for these routes are presented and analyzed below.

Connector Routes

Two of the transit routes in the region are characterized as connectors, meaning that they connect towns/cities to one another. These two routes are the 250 Connector and the 340 Connector. The 250 Connector is the spine of the regional transit system, connecting Staunton and Waynesboro via US Route 250. In 2014, the route carried the most number of passengers, exhibited the highest productivity, and the lowest cost per trip among all of the routes in the regional transit network. Table 3-2 provides the historical trend data for the route.

The second connector route, the 340 Connector, has been in operation since FY2012 and operates on a limited schedule. The route was originally implemented as a way to manage the need for on-demand services, which had previously been provided through the Augusta On-Demand service. The 340 Connector service replaced the Augusta On-Demand service for areas within the 340 corridor. The 340 Connector is currently the lowest performing fixed route within the system, providing an average of 2.42 trips per revenue hour at a cost of $23.53 per trip. Table 3-3 provides the historical trend data for the route.

Table 3-2: Route 250 Connector Trend Data

250 Connector					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	39,836	71,961	102,519	111,647	106,700
Revenue Hours	3,855	7,641	7,081	7,051	6,580
Revenue Miles	70,073	126,077	102,675	93,458	87,185
Trips/Hour	10.33	9.42	14.48	15.83	16.22
Trips/Mile	0.57	0.57	1.00	1.19	1.22
MPH	18.18	16.5	14.5	13.3	13.25
Operating Costs	$ 189,589	$ 371,735	$ 375,293	$ 387,805	$ 388,812
Cost/Trip	$ 4.76	$ 5.17	$ 3.66	$ 3.47	$ 3.64
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 59.09

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Table 3-3: Route 340 Connector Trend Data

340 Connector			
Operating Data	**2012**	**2013**	**2014**
Passenger Trips	2,315	3,946	3,534
Revenue Hours	1,398	1,530	1,459
Revenue Miles	34,950	38,449	36,475
Trips/Hour	1.66	2.58	2.42
Trips/Mile	0.07	0.10	0.10
MPH	25	25.13	25
Operating Costs	$ 74,094	$ 84,150	$ 83,163
Cost/Trip	$ 32.01	$ 21.33	$ 23.53
Cost/Hour	$ 53	$ 55.00	$ 57.00

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Targeted Shuttle Routes

There are currently two targeted shuttle routes operating in the region, both of which serve the needs of Blue Ridge Community College students, faculty, and staff. These routes are the BRCC North and BRCC South.

The ridership trend data indicates that the BRCC North exhibited ridership growth from FY2010 through FY2012, and then experienced a slight decline in FY2013, and a more significant decline in FY2014. Ridership in FY2014 was 16.2 percent higher than it was in FY2010, but 20.9 percent lower than the peak in FY2012. The growth of the route might be limited by its use of I-81, which provides a fast journey north, but makes bi-directional travel from points along SR42 and US11 inconvenient. FY2014 productivity on the route (8.93 trips/hour) is lower than the fixed route mean of 12.09 and the cost per trip ($6.39) is higher than the fixed route mean of $4.83.

Table 3-4: BRCC North Trend Data

BRCC North					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	27,141	35,219	38,171	36,919	31,548
Revenue Hours	3,899	3,816	3,862	3,494	3,534
Revenue Miles	83,425	80,136	81,102	65,558	66,263
Trips/Hour	6.96	9.23	9.88	10.57	8.93
Trips/Mile	0.33	0.44	0.47	0.56	0.48
MPH	21.40	21	21	18.76	18.75
Operating Costs	$ 191,753	$ 185,648	$ 204,686	$ 192,170	$ 201,438
Cost/Trip	$ 7.07	$ 5.27	$ 5.36	$ 5.21	$ 6.39
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 57.00

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

The BRCC South provided more passenger trips than the BRCC North in FY2014, while operating fewer service hours. Trend data for the route showed similar growth and contraction trends to the BRCC North, though the ridership peak for the five year period was in FY2013, rather than FY2012. Overall ridership on this route grew by 43 percent between from FY2010 to FY2014, with the highest productivity shown in FY14 (11.8 passenger trips per revenue hour). The cost per trip is very close to the mean for fixed route services in the region at $4.82 per trip. Table 3-5 provides the five-year trend data for the BRCC South.

Table 3-5: BRCC South Trend Data

BRCC South					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	27,075	33,730	41,394	43,659	38,802
Revenue Hours	3,641	3,554	3,606	3,760	3,284
Revenue Miles	70,778	68,237	68,514	70,731	61,739
Trips/Hour	7.44	9.49	11.48	11.61	11.82
Trips/Mile	0.38	0.49	0.60	0.62	0.63
MPH	19.44	19.2	19	18.81	18.8
Operating Costs	$ 179,064	$ 172,902	$ 191,118	$ 206,800	$ 187,188
Cost/Trip	$ 6.61	$ 5.13	$ 4.62	$ 4.74	$ 4.82
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 57.00

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Circulators

There are currently four routes within the transit network that could be considered circulator routes. The current routes are the three Staunton Trolley routes and the Waynesboro Circulator.

Staunton Trolleys

Of the three trolley routes, the Green Trolley has historically recorded the highest ridership and operated the most number of annual revenue service hours. The Green Trolley route operates as a true circulator, providing thirty minute frequency on a relatively short route through the downtown area of Staunton. Trend data for the Green Trolley route shows that ridership increased significantly between FY2010 and FY2013 (64%). Ridership dropped 55 percent between FY2013 and FY2014, most likely due to the implementation of a $0.25 fare. There were 573 fewer service hours provided in FY2014. Productivity on the Green Trolley in FY2014 was 11.84 trips per hour (slightly below the fixed route mean) and the cost per trip was $4.99 (just above the fixed route mean). Table 3-6 provides the trend data for the route.

Staunton's Silver Trolley Route exhibited the highest productivity among the three trolley routes in FY2014, providing 13.81 passenger trips per revenue hour. As with the Green Trolley, ridership dropped significantly between FY2013 and FY2014 (39%), most likely due to the implementation of the fare. The cost per trip on the Silver Trolley was below the fixed route mean in FY2014, at $4.28 per passenger trip. Table 3-7 provides these data.

Table 3-6: Staunton Green Trolley Trend Data

Staunton Green					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	49,002	65,749	79,539	80,538	35,936
Revenue Hours	3,800	3,966	3,143	3,608	3,035
Revenue Miles	22,104	23,003	18,229	21,258	17,907
Trips/Hour	12.90	16.58	25.31	22.32	11.84
Trips/Mile	2.22	2.86	4.36	3.79	2.01
MPH	5.82	5.8	5.8	5.89	5.9
Operating Costs	$ 186,884	$ 192,946	$ 166,579	$ 198,440	$ 179,338
Cost/Trip	$ 3.81	$ 2.93	$ 2.09	$ 2.46	$ 4.99
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 59.09

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Table 3-7: Staunton Silver Trolley Trend Data

Staunton Silver					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	38,881	47,905	59,725	55,937	34,070
Revenue Hours	2,699	2,720	2,720	2,677	2,467
Revenue Miles	31,406	31,552	31,552	22,315	20,476
Trips/Hour	14.41	17.61	21.96	20.90	13.81
Trips/Mile	1.24	1.52	1.89	2.51	1.66
MPH	11.64	11.6	11.6	8.34	8.3
Operating Costs	$ 132,737	$ 132,328	$ 144,160	$ 147,235	$ 145,775
Cost/Trip	$ 3.41	$ 2.76	$ 2.41	$ 2.63	$ 4.28
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 59.09

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

The Red Trolley Route, operating only on Friday and Saturday evenings, operated just 412 revenue service hours in FY2014, down from 936 revenue service hours in FY2013. This reduction in hours resulted in a significant increase in productivity (from 5.8 trips per hour to 11.3 trips per hour). The cost per trip in FY14 was $5.24, a significant improvement from the FY13 cost per trip of $9.01. The trend data for the Red Trolley route is provided in Table 3-8.

Table 3-8: Staunton Red Trolley Trend Data

Staunton Red					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	4,598	4,985	5,559	5,462	4,649
Revenue Hours	927	909	945	936	412
Revenue Miles	11,680	11,453	11,907	24,729	6,180
Trips/Hour	4.96	5.48	5.88	5.84	11.28
Trips/Mile	0.39	0.44	0.47	0.22	0.75
MPH	12.60	12.6	12.6	26.42	15
Operating Costs	$ 45,590	$ 44,223	$ 50,085	$ 51,480	$ 24,345
Cost/Trip	$ 9.92	$ 8.87	$ 9.01	$ 9.43	$ 5.24
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 59.09

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Waynesboro Circulator

The trend data for the Waynesboro Circulator is similar to that of the other fixed routes, in that ridership grew steadily from 2010 through 2013, with less ridership activity shown for FY14. Overall, ridership increased by over 56 percent from FY2010 to FY2014, even with the lower Fy2014 ridership numbers. Productivity on the route is lower than the fixed route mean (10.7 trips/hour versus 12.09 trips/hour), and the cost per trip is higher at $5.52 per passenger trip. Table 3-9 provides the trend data for the Waynesboro Circulator.

Table 3-9: Waynesboro Circulator Trend Data

Waynesboro					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	20,243	24,576	28,482	33,722	31,668
Revenue Hours	2,570	3,060	3,165	3,060	2,958
Revenue Miles	37,639	44,676	46,209	48,084	46,441
Trips/Hour	7.88	8.03	9.00	11.02	10.71
Trips/Mile	0.54	0.55	0.62	0.70	0.68
MPH	14.65	14.6	14.6	15.71	15.7
Operating Costs	$ 126,393	$ 148,869	$ 167,745	$ 168,300	$ 174,788
Cost/Trip	$ 6.24	$ 6.06	$ 5.89	$ 4.99	$ 5.52
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 59.09

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Demand Response

The two demand response services in the region are the Staunton On-Demand and the Augusta County – Craigsville area service. The Staunton On-Demand service has become increasingly effective over time, reducing revenue hours while maintaining ridership. The operating costs and the cost per trip were lower in FY2014 than in FY2010. The number of trips per revenue hour has also generally increased each year to the current level of 2.0 passenger trips per revenue hour. Discussions with VRT operating staff indicated that they have made an effort to divert as many trips as possible onto the fixed routes that operate in Staunton to manage demand. The trend data for the Staunton On-Demand service is shown in Table 3-10.

The Augusta County service shows very different trend data, with significantly fewer passenger trips provided each year, as well as fewer service hours operated. Productivity on the service is very low, at 0.49 passenger trips per revenue hour. While the overall operating costs have been reduced significantly (along with the service hours) over the five year period, the ridership has dropped more dramatically, such that the cost per trip is very high at $116.50 per passenger trip. Table 3-11 shows these data.

Americans with Disabilities Act (ADA) Services

Within the City of Staunton, ADA complementary paratransit is provided for people with disabilities through the Staunton On-Demand service. This service is provided as a "complement" to the Staunton Trolley routes. For the remainder of the transit network, the fixed route vehicles are fully accessible to people with disabilities and will deviate up to ¾-mile from the routes to serve riders with disabilities who cannot access the fixed route bus stops.

Table 3-10: Staunton On-Demand Trend Data

Staunton on Demand					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	4,315	4,321	4,068	3,920	4,151
Revenue Hours	3,084	2,486	2,244	2,231	2,072
Revenue Miles	36,366	29,335	26,704	26,783	24,864
Trips/Hour	1.40	1.74	1.81	1.76	2.00
Trips/Mile	0.12	0.15	0.15	0.15	0.17
MPH	11.79	11.8	11.9	12.00	12
Operating Costs	$ 151,671	$ 120,944	$ 118,932	$ 122,705	$ 122,434
Cost/Trip	$ 35.15	$ 27.99	$ 29.24	$ 31.30	$ 29.50
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 59.09

Notes*: Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Table 3-11: Augusta County On-Demand Trend Data

Augusta D/R					
Operating Data	**2010**	**2011**	**2012**	**2013**	**2014**
Passenger Trips	1,899	1,512	503	227	159
Revenue Hours	1,992	1,849	452	325	325
Revenue Miles	42,759	39,698	9,718	28,225	6,988
Trips/Hour	0.95	0.82	1.11	0.70	0.49
Trips/Mile	0.04	0.04	0.05	0.01	0.02
MPH	21.47	21.47	21.5	86.85	21.5
Operating Costs	$ 97,967	$ 89,954	$ 23,956	$ 17,875	$ 18,525
Cost/Trip	$ 51.59	$ 59.49	$ 47.63	$ 78.74	$ 116.5
Cost/Hour	$ 49.18	$ 48.65	$ 53.00	$ 55.00	$ 57.00

Notes: *Source: VRT and CSPDC*
The fiscal year for VRT is October 1 - September 30.
The cost data were estimated based on VRT and CSPDC operating expenses per hour.
The mileage data were estimated based on actuals for years 2010 and 2013.

Ridership – Boarding/Alighting Counts

Supplementing the trend data, the following section draws on the boarding/alighting counts conducted by the VRT drivers in October 2014. The counts included a stop-by-stop analysis of activity, and the findings described below approximate overall system performance on a given day.

The boarding/alighting counts highlighted that the 250 Connector is the busiest route, carrying about 35 percent of the system's weekly riders (over 700 combined boardings and alightings per day). These data are consistent with the trend data, which also showed the 250 Connector to be the busiest route. The count data for the 250 Connector showed higher daily ridership than what was experienced in FY2014, by about 5.7 percent

As shown in Table 3-12, the BRCC South and BRCC North were the next busiest routes in the network. This is generally consistent with the historic data, though the Staunton Trolleys experienced higher daily ridership than the BRCC routes prior to the fare increase.

The count data for the Staunton Trolley routes were consistent with the trend data for the Green and Silver Trolleys, though the Red Trolley showed significantly higher ridership during the counts than was experienced in FY14. This may be an anomaly, as the route operates just two days a week, with likely quite variable ridership throughout the year. The count data for the Waynesboro Circulator was relatively consistent with the trend data.

While the 340 Connector had the lowest activity, with an average of nineteen boardings per day, this represents a significant ridership increase over the FY14 average of thirteen boardings per day.

Table 3- 12: Boardings by Route

Route	Est. Weekly Boardings	Days of Operation	Est. Daily Boardings
250 Connector	2,172	Mon – Sat	726
BRCC South	811	Mon – Fri	162
BRCC North	796	Mon – Fri	159
Green Trolley	792	Mon – Sat	132
Silver Trolley	653	Mon – Fri	130
Waynesboro Circulator	568	Mon – Fri	113
Red Trolley	85	Fri / Sat	43
340 Connector	96	Mon – Fri	19
System Total	**5,973**	**Mon – Sat**	**996**

Table 3-13 summarizes the highest ridership stops. The system transfer points were some of the busiest stops: the Lewis Street Hub, BRCC, the Waynesboro Wal-Mart, and JMU. Other high volume stops included Wal-Mart, Rite Aid and the Visitor Center in Staunton; WWRC and Augusta Heath in Fishersville; and the Route 42 Wal-Mart. In contrast, about a quarter of observed stops had 1 or fewer average daily boardings. These locations were scattered throughout the system, but most noticeably in Stuarts Draft and eastern Waynesboro.

Table 3- 13: Greatest Daily Activity by Stop

Stop	Routes	Est. Daily Boardings
Lewis Street Hub	250, BRCC South, Green Trolley, Red Trolley	204
BRCC	340, BRCC South, BRCC North	109
Wal-Mart Waynesboro	Waynesboro Circulator, 250, 340	96
Wal-Mart Staunton	250, Red Trolley	61
WWRC	250	51
JMU Harrisonburg	BRCC North	40
Rite Aid	Red Trolley, Green Trolley	38
Wal-Mart Rt. 42	BRCC North	34
Visitor Center	Red Trolley, Green Trolley	25
Augusta Health Atrium	250	21

Route Profiles

The data collected via the boarding/alighting counts was combined with trend data and land use data to construct a route profile for each route in the system. These profiles are depicted on maps that show the stop activity, the trip generators, and the FY14 operating data for the route. Figures 3-1 to 3-8 present these profiles.

Figure 3-1: Route Profile: 250 Connector

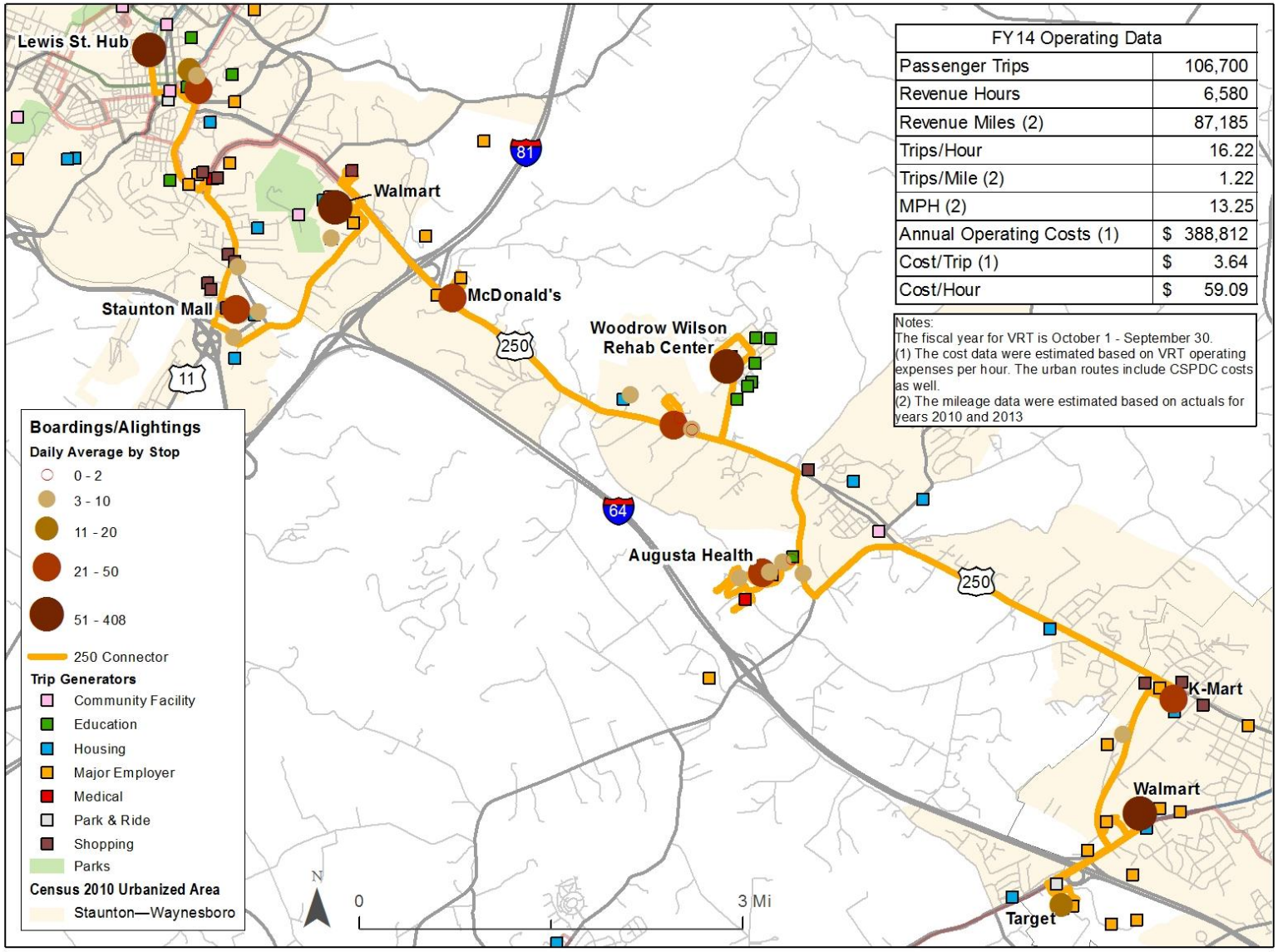
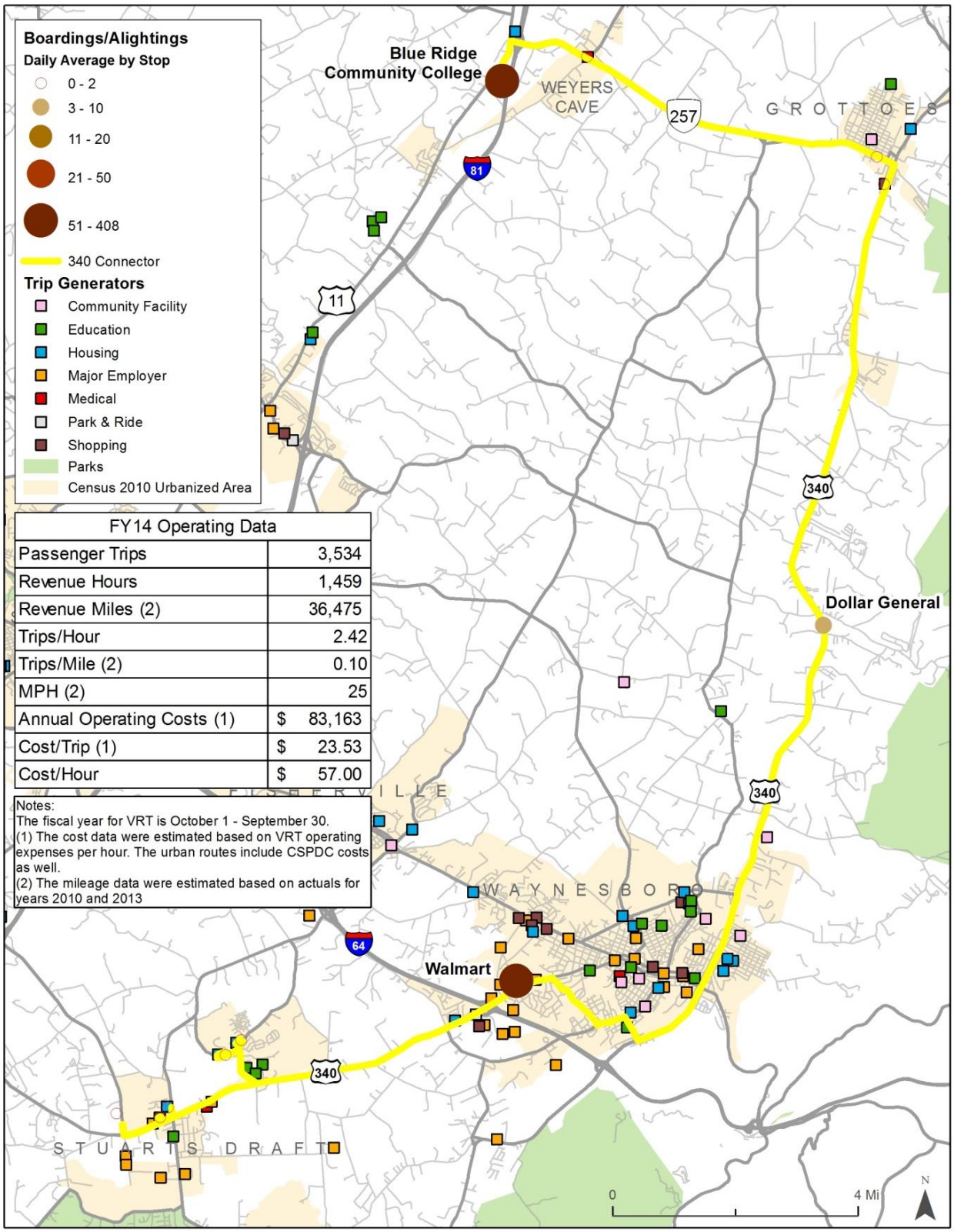


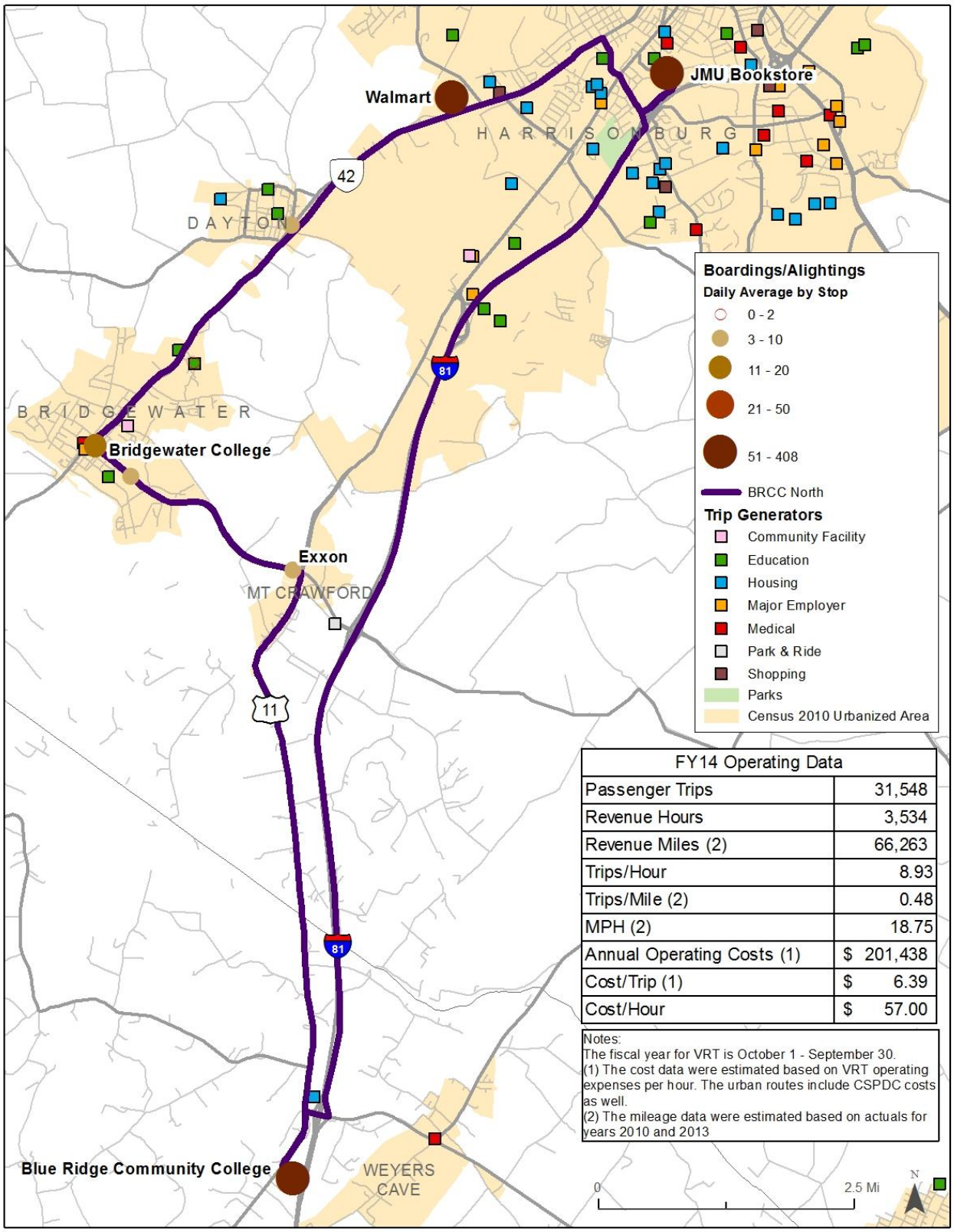
Figure 3-2: Route Profile: 340 Connector



FY14 Operating Data	
Passenger Trips	3,534
Revenue Hours	1,459
Revenue Miles (2)	36,475
Trips/Hour	2.42
Trips/Mile (2)	0.10
MPH (2)	25
Annual Operating Costs (1)	$ 83,163
Cost/Trip (1)	$ 23.53
Cost/Hour	$ 57.00

Notes:
The fiscal year for VRT is October 1 - September 30.
(1) The cost data were estimated based on VRT operating expenses per hour. The urban routes include CSPDC costs as well.
(2) The mileage data were estimated based on actuals for years 2010 and 2013

Figure 3-3: Route Profile: BRCC North



FY14 Operating Data	
Passenger Trips	31,548
Revenue Hours	3,534
Revenue Miles (2)	66,263
Trips/Hour	8.93
Trips/Mile (2)	0.48
MPH (2)	18.75
Annual Operating Costs (1)	$ 201,438
Cost/Trip (1)	$ 6.39
Cost/Hour	$ 57.00

Notes:
The fiscal year for VRT is October 1 - September 30.
(1) The cost data were estimated based on VRT operating expenses per hour. The urban routes include CSPDC costs as well.
(2) The mileage data were estimated based on actuals for years 2010 and 2013

Figure 3-4: Route Profile: BRCC South

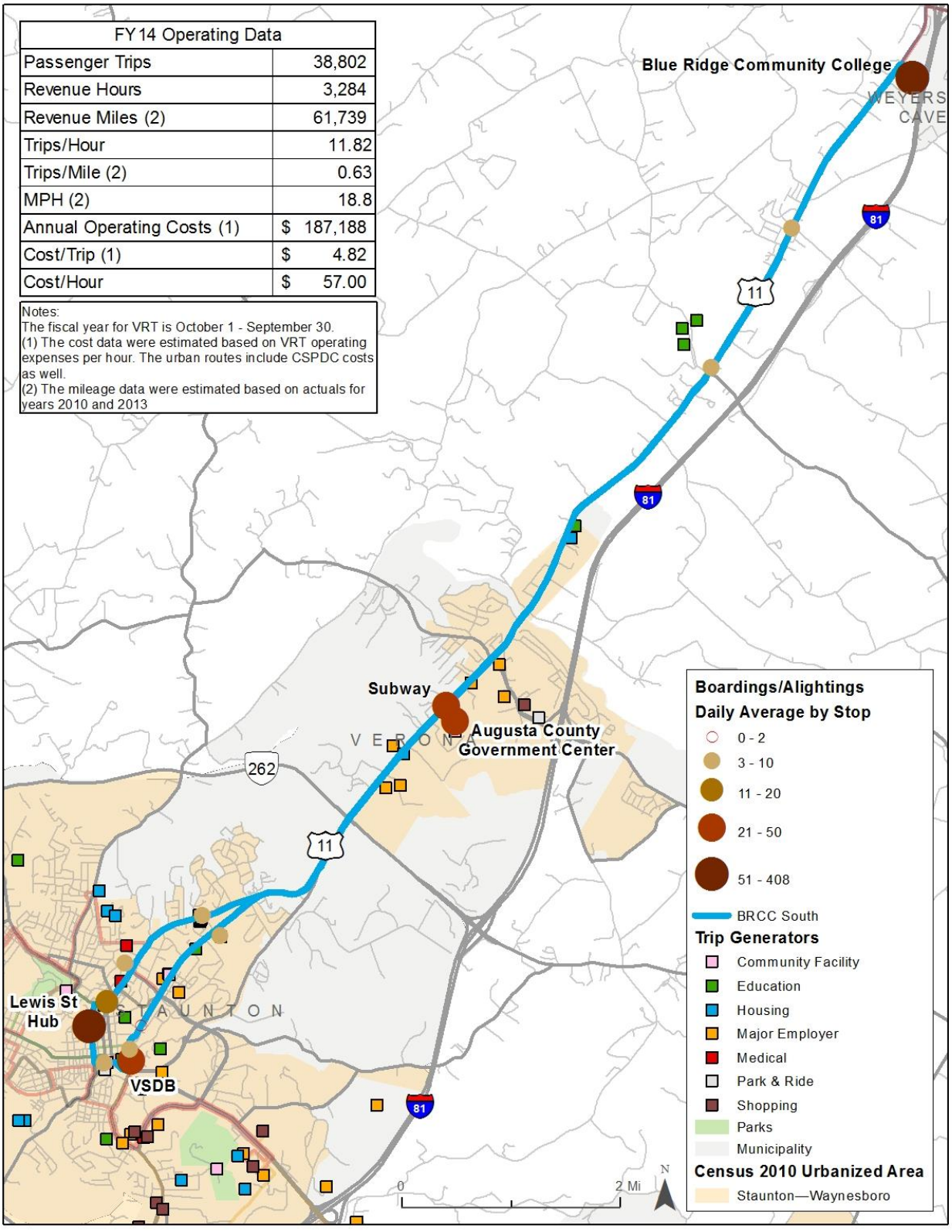


Figure 3-5: Route Profile: Green Trolley

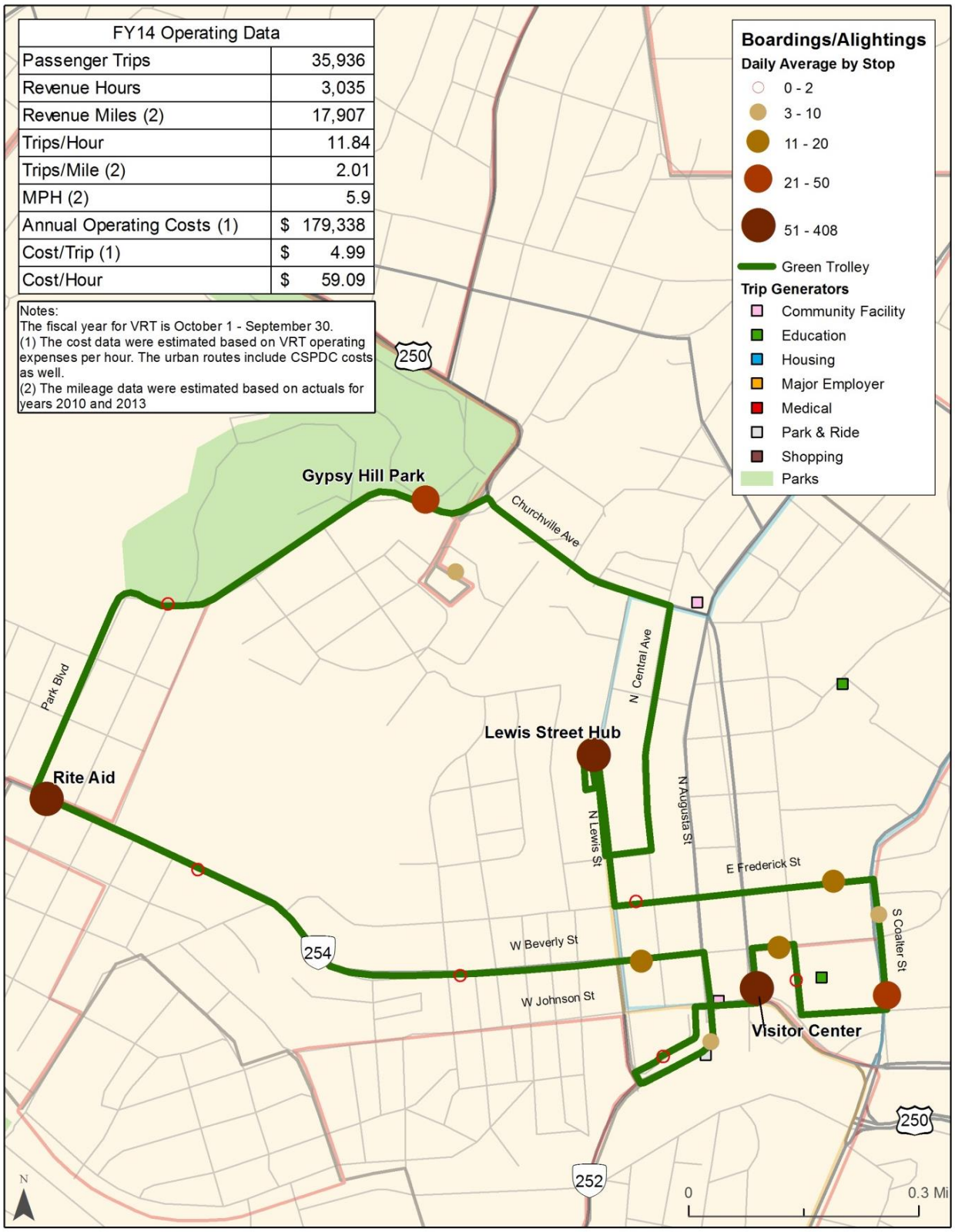


Figure 3-6: Route Profile: Red Trolley

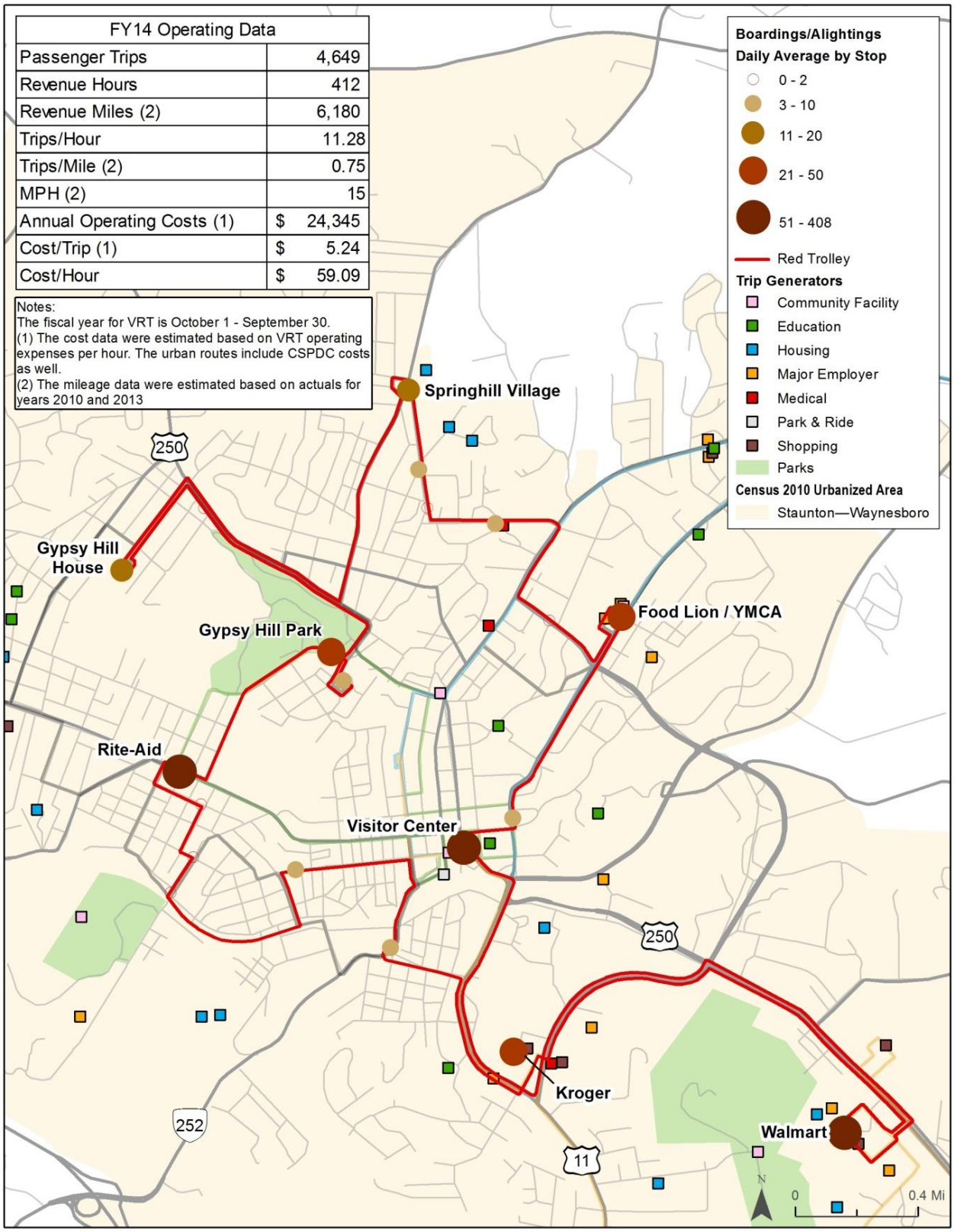


Figure 3- 7: Route Profile: Silver Trolley

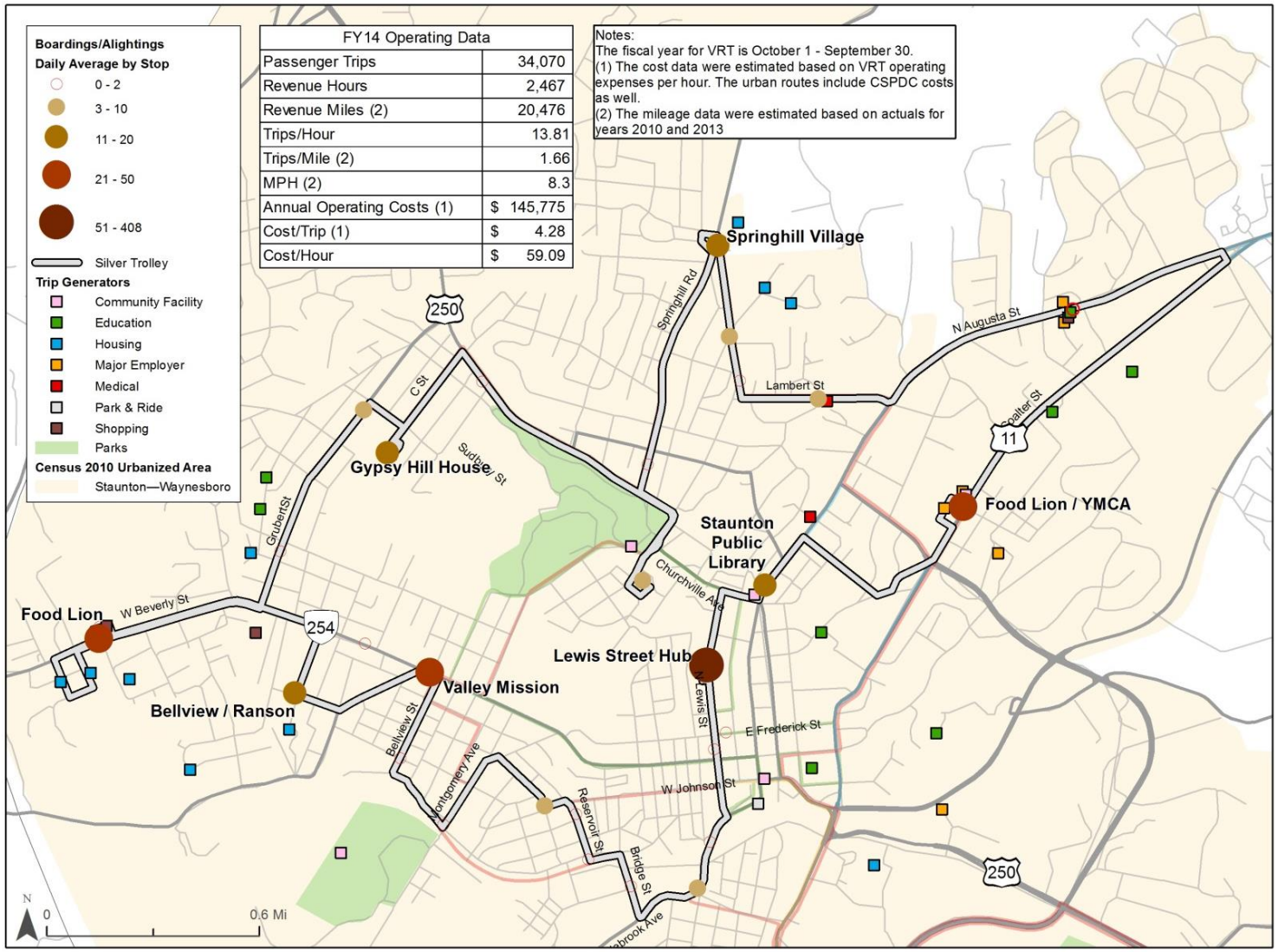
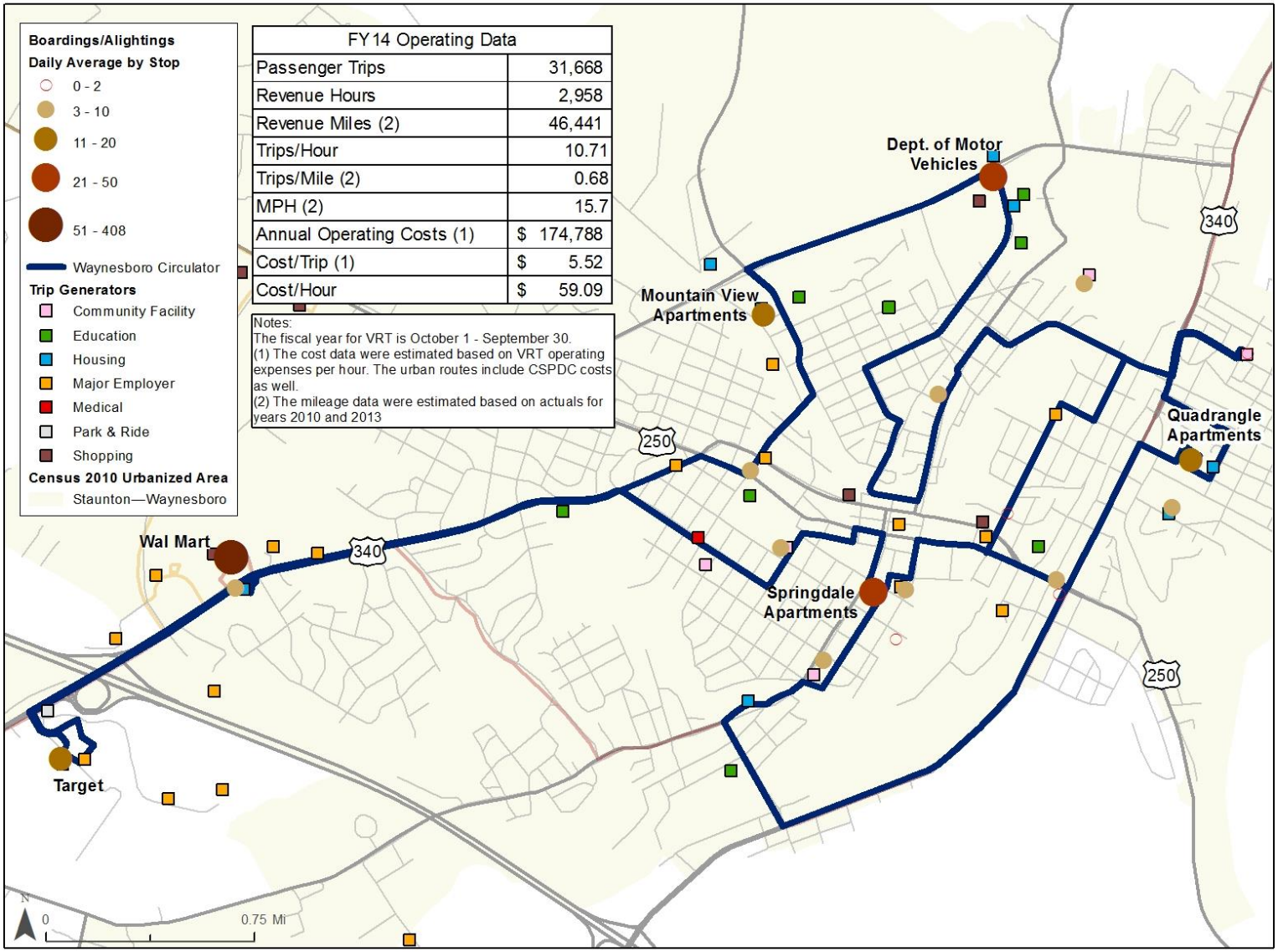


Figure 3-8: Route Profile: Waynesboro Circulator



PEER ANALYSIS

While it is most relevant for a transit agency to examine its own performance over time, it is valuable to know the operating statistics for transit programs that could be considered "peers," either by virtue of location, service area characteristics, or size, to see if local transit data is "in the ballpark" of typical peer operating data. It was somewhat difficult to find "peers" for the transit program operated by VRT in this region, given that it is a collection of different types of services, each with somewhat different performance characteristics.

The services operated in this region are a mix of both rural and urban services, as well as a mix of those directly operated, and those operated using a contractual arrangement. There are a number of different types of services included within the system, including two college shuttle routes, tourist circulator services, urban connector services, small city circulator services, and rural connector services. For these reasons, the peer review for this TDP is not as relevant as it may be for other systems that can more closely relate to one another, such as small city transit programs serving a single city in the same state.

Given these constraints, several systems were chosen as peers, based on some similarities such as the number of annual revenue hours provided, the number of vehicles, the type of service area, and the annual budget.

The following programs were used as peers:

- Allegany County Transit, serving Cumberland, Maryland
- Bluefield Area Transit, serving Bluefield and Princeton, West Virginia
- Central West Virginia Transit Authority, serving Clarksburg, West Virginia
- Danville Transit, Danville, Virginia
- Radford Transit, Radford, Virginia
- Virginia Regional Transit, Culpeper

The peer data compiled show the following:

- The CSPDC/VRT program is more productive (11.15 trips/hour), than all but one of the peers. This is interesting, as some of the peers operate in much more compact service areas. The mean productivity of the peer group was 8.32 passenger trips per revenue hour.

- The operating cost per revenue hour is higher than the mean, but the cost per trip is lower than the mean due to the relatively high ridership.

- The fleet size of sixteen is close to the mean of the peer group (15).

- The CSPDC/VRT program serves a larger area in terms of population than the mean of the peer group.

The complete peer data are presented in Table 3-14.

Table 3-14: Selected Peer Comparison

System	UZA (Yes or No)	Number of Vehicles	Approximate Service Area Population	Annual Passenger Trips	Total Operating Expenses	Vehicle Revenue Hours	Vehicle Revenue Miles
Allegany County Transit (MD)	Yes	12	68,780	210,601	$ 1,947,512	29,082	376,307
Bluefield Transit (WV)	No	20	16,879	200,024	$ 1,130,368	26,377	343,832
Central West VA Transit Authority (Clarksburg, WV)	No	23	16,360	270,277	$2,234,425	39,796	548,080
Danville Transit	No	9	48,411	295,243	$ 1,528,185	31,412	506,459
Radford Transit	Yes	14	16,400	339,178	$ 1,292,663	30,095	294,210
VRT Culpeper	No	14	46,562	130,275	$ 1,678,397	25,910	651,375
VRT Staunton (FY14 data) (1)(2)	**Yes**	**16**	**72,617**	**291,217**	**$ 1,525,807**	**26,126**	**374,516**
Mean	**-**	**15**	**40,858**	**248,116**	**1,619,622**	**29,828**	**442,111**

Table 3-14: Selected Peer Comparison (continued)

System	Trips Per Hour	Trips Per Mile	Cost Per Trip	Cost Per Hour	Cost Per Mile
Allegany County Transit (MD)	7.24	0.56	$ 9.25	$ 66.97	$ 5.18
Bluefield Transit (WV)	7.58	0.58	$ 5.65	$ 42.85	$ 3.29
Central West VA Transit Authority (Clarksburg, WV)	6.79	0.49	$ 8.27	$ 56.15	$ 4.08
Danville Transit	9.40	0.58	$ 5.18	$ 48.65	$ 3.02
Radford Transit	11.27	1.15	$ 3.81	$ 42.95	$ 4.39
VRT Culpeper	5.03	0.20	$ 12.88	$ 64.78	$ 2.58
VRT Staunton (FY14 data) (2)	11.15	0.78	$ 5.24	$ 58.40	$ 4.07
Mean	**8.32**	**0.56**	**$ 6.53**	**$ 54.30**	**$ 3.66**

Sources*: 2013 National Transit Database and VRT data (FY14)*

(1) Service area population excludes Harrisonburg

(2) FY14 data were used for Staunton to reflect significant change in trolley ridership

FINANCIAL ANALYSIS

Operating Budget

The FY15 operating budget for transit in the region is just over $1.8 million. Of this budget, about 67 percent is comprised of expenses incurred for transit service in the urbanized area and 33 percent is comprised of expenses for transit services provided in the rural area. The largest expense item on the urban side is the contract for service, with CSPDC contracting with VRT to provide transit services in the urbanized portion of the service area. The urbanized routes include the 250 Connector; the Staunton Trolleys; Staunton on-demand; and the Waynesboro Circulator. For the rural program, managed and operated by VRT, the single largest expense is salaries and wages. The rural routes include the 340 Connector, Augusta On-Demand; and the BRCC North and South Routes.

The largest single source of funding assistance for transit in the region comes from the federal S.5307 urbanized area program, which covers up to fifty percent of the operating costs for transit service provided in the urbanized area (and up to eighty percent for preventive maintenance). CSPDC currently uses FTA's Capital Cost of Contracting provisions to maximize the use of the S.5307 funds. Local partner funding is also a significant source of funding in the region, providing almost $500,000 in funding assistance for the current year. FTA S.5311 funding and DRPT funding are also significant sources of funds for the program. Line item operating expenses, revenues, and funding sources for FY15 are provided in Table 3-15.

The individual line items expenses for the rural program were estimated, using the total program expense and applying the FY13 line item percentages. This was necessary as VRT has several programs combined together in their cost center making it difficult to extract the Staunton program specifically.

Capital Budget

Federal grant programs fund up to eighty percent of transit capital projects in the region. CSPDC is accessing the federal S.5307 grant program, while VRT accesses the federal S.5311 program. The majority of the CSPDC's funding for capital purposes is used to support vehicle operations, through FTA's Capital Cost of Contracting, which allows the agency to categorize 50 percent of the contract with VRT as capital, which provides an eighty percent federal match. The FY15 capital budget for VRT included spare parts ($25,000) and shop equipment ($7,500).

Table 3-15: FY15 Operating Budget for Transit in the Region

Expenses	Urban CSPDC	Rural VRT (1)	Combined Operating
Salaries and Wages	$ 67,411	$ 262,410	$ 329,821
Fringe Benefits		$ 89,877	$ 89,877
Education & Training		$ 2,556	$ 2,556
Cleaning Supplies		$302	$ 302
Tires and Tubes		$ 7,556	$ 7,556
Motor Fuels & Lubricants		$ 76,909	$ 76,909
Parts		$ 21,461	$ 21,461
Office Supplies & Materials		$ 10,496	$ 10,496
Uniforms		$ 2,419	$ 2,419
Travel	$ 2,286	$ 4,511	$ 6,797
Communication Services		$ 9,472	$ 9,472
Utilities		$ 12,315	$ 12,315
Contracted Repairs & Maintenance		$ 21,453	$ 21,453
Advertising & Promotion Media		$ 5,010	$ 5,010
Data Processing--Programming		$ 1,324	$ 1,324
Drug Testing		$ 1,225	$ 1,225
Service & Maintenance Contracts		$ 9,530	$ 9,530
Insurance & Bonding		$ 24,991	$ 24,991
Indirect Cost	$ 34,663		$34,663
Purchased Transportation Services	$ 1,086,670		$ 1,086,670
Printing	$ 12,286	$ 5,870	$18,156
Professional Services		$ 3,900	$ 3,900
Other Fixed Charges		$ 14,968	$ 14,968
Other	$ 6,280	$ 2,586	$ 8,866
Total Operating Expenses	**$ 1,209,595**	**$ 591,143**	**$ 1,800,738**
(1) Line item detail for VRT estimated based on FY13 line item budget			
Revenues			
Passenger Revenue	$ 43,259	$ 15,000	$ 58,259
Net Deficit	**$ 1,166,336**	**$ 576,143**	**$ 1,742,479**
Funding Assistance			
Federal S.5307 Operating	$ 599,890	$ -	$ 599,890
S. 5311 Operating	$ -	$ 295,571	$ 295,571
State Funding	$ 230,044	$ 106,406	$ 336,450
State Capital in Support of Capital Cost of Contracting	$ 54,400		$ 54,400
Partner Financial Contributions	$ 282,002	$ 189,166	$ 471,168
Total Funding Assistance	**$ 1,166,336**	**$ 591,143**	**$ 1,757,479**

VEHICLE OWNERSHIP

As a relatively new S.5307 grantee, the CSPDC has not historically owned vehicles. Currently, the vehicles operated in the region are owned by CSPDC's contractor, VRT, with DRPT maintaining a financial interest in the vehicles through their useful life. These vehicles were purchased through DRPT, with funding assistance from the federal S.5311 (80%) program, DRPT (up to 16%), and the remaining local matching funds provided by VRT and/or the local funding partners.

In order to help the CSPDC decide which direction to pursue in the future, an analysis of the advantages, disadvantages, and financial implications for vehicle ownership is highlighted in Chapter 4.

RECENT COMPLIANCE RESULTS

Historically, the transit program in the region has been funded through the federal S.5311 program which flows through DRPT, with the local transit agency considered a sub-recipient of federal funds. As such, DRPT was responsible for ensuring compliance with the federal regulations and guidance that are requirements of federal funding assistance. Population growth in the region was reflected in the 2010 Census, which resulted in a Census classification of "urban" for Staunton, Waynesboro, and much of the corridor in between. The newly designated "urbanized" area is now eligible for funding under FTA's S.5307 program. Under this funding program, the local transit entity is directly responsible to the FTA for compliance with federal guidance. As previously discussed, the CSPDC is the urbanized area grantee of FTA S.5307 funds. The CSPDC will now be subject to triennial reviews of program compliance, the results of which will be reported in future TDPs.

The CSPDC's Title VI Plan was adopted by the CSPDC Board on February 3, 2014, and has been approved by FTA. The Title VI Plan provides specific information on how to file a nondiscrimination complaint and provides an overview of Environmental Justice and Limited English Proficiency (LEP) concepts, definitions of Title VI and associated nondiscrimination acts, and how Title VI, Environmental Justice and LEP are incorporated into CSPDC programs. Environmental Justice guidelines and outreach strategies for minority, low-income, and LEP populations are also described. A copy of the plan is provided as Appendix B.

RIDERSHIP SURVEYS

An important task within the TDP process was the acquisition of more information about current public transportation trip patterns, rider characteristics, rider satisfaction with the service, and suggestions for service improvements. In order to collect these data, an on-board rider survey was conducted. The surveys were administered during the second half of January

2015. Survey participants were bus riders who completed a two-page survey that was distributed by VRT drivers during their trips. The participants were instructed to only complete one survey. Surveys were completed on both the fixed routes and the demand response services. A copy of the fixed route survey is provided as Appendix C. The results of the survey are described below, with Appendix C offering the complete results. Appendix D provides these results for the demand-response survey.

Fixed Route Survey

Three hundred and thirty ridership surveys were completed on the fixed route vehicles. Given the daily ridership of about 1,000 trips, which represents an estimated 500 people (assuming 2 trips per person), the results are representative of the fixed route customer base, with a 95 percent confidence interval (+/- 5%). Of these surveys, 107 of them (32.5%) were completed by riders on the 250 Connector. Another 74 (22.5%) were completed by riders on the BRCC South, followed by 67 (20.4%) from Waynesboro Circulator riders. These data are shown in Table 3-16.

Table 3-16: Survey Response by Route

Q1: What route are you currently riding?		
	#	%
250 Connector	107	33%
BRCC South	74	23%
Waynesboro Circulator	67	20%
BRCC North	64	20%
Green Trolley	33	10%
Silver Trolley	24	7%
340 Connector	10	3%
Red Trolley	7	2%

Note: Some Respondents checked more than one route

While the majority of the riders walked less than five minutes to the bus stop (56%), it should be noted that 10 percent of the respondents reported that they walked twenty minutes or more to reach a stop. Forty-four percent of the riders reported that they made a transfer to complete their trip, with the most transfer activity reported in association with the Route 250 Connector. This makes sense, as this route is the spine of the fixed route system, connecting with local routes in Staunton and Waynesboro.

When asked to indicate the name of the transit program, 38 percent reported CATS or some close variation, followed by VRT (22%), and the name of the specific route (21%).

The most commonly reported trip purpose was work (35.3%), followed by school (27.1%) and errands (23.4%). The riders are frequent users of the system, with 83.6 percent reporting that

they use the system at least two times per week or more. If the service were not available, riders reported that they would get a ride with family/friends (26%), walk (24%), or would not make the trip (24%). There are some choice riders of the service, as 17 percent indicated that they would drive themselves if the bus were not available.

The satisfaction scores were positive in all categories, with only two categories receiving over 10 percent dissatisfaction scores. These categories were days of service (17% negative) and hours of service (14.6% negative). The cost of the service and the driver courtesy received the highest ratings. The full satisfaction results are presented in Table 3-17.

Table 3-17: Rider Satisfaction for Various Service Characteristics

Q13: Please rate your satisfaction with the following areas:				
	Very Satisfied	Satisfied	Unsatisifed	Very Unsatisfied
Phone customer service	142 (43.2%)	120 (36.5%)	19 (5.7%)	5 (1.5%)
On-time service	163 (49.5%)	132 (40.1%)	10 (3.0%)	3 (0.9%)
Days of service	140 (42.6%)	109 (33.2%)	**50 (15.2%)**	**6 (1.8%)**
Hours of service	138 (41.9%)	118 (35.9%)	**44 (13.4%)**	**4 (1.2%)**
Cost of service	229 (69.6%)	84 (25.5%)	1 (0.3%)	0.00
Cleanliness of vehicles	186 (56.5%)	111 (33.7%)	10 (3.0%)	1 (0.3%)
Driver courtesy	220 (66.9%)	84 (25.5%)	4 (1.2%)	0.00
Information availability	182 (55.3%)	107 (32.5%)	15 (4.6%)	1 (0.3%)
Bus stop safety	190 (57.8%)	107 (32.5%)	8 (2.4%)	1 (0.3%)
Vehicle safety	206 (62.6%)	102 (31.0%)	6 (1.8%)	1 (0.3%)

When asked about service improvements, the most commonly reported request was for additional weekend service (60.2%), followed by later evening service (41%), increased frequency (36.2%), and bus stop improvements (24.6%). Other improvements that scored ten percent or more include: service earlier in the day (22.5%), shorter travel time (18.5%), and real-time schedule information (13.7%). While the majority of the respondents indicated that there are places that they want to go but cannot get to, there were 22 requests for service to Charlottesville (6.6%). These results are shown in Table 3-18

Table 3-18: Requested Service Improvements

	#	%
Additional weekend service	198	60%
Later evening service	135	41%
Increased frequency	119	36%
Stop improvements	81	25%
Service earlier	74	23%
Shorter travel time	61	19%
Real time schedule information	47	14%

…at stops	24	7%
…on phone	30	9%
…on computer	14	4%
Service to more places	45	14%
Additional bicycle capacity	11	3%
Additional park and ride opportunities	11	3%
Other	13	4%

The general comment section echoed the survey responses with many positive comments and requests for additional weekend service. These results indicate that riders are generally pleased with the service, but would like more of it, along with additional passenger amenities.

The results of the demographic questions showed that the riders are primarily transit dependent, with 59 percent indicating that they do not have a driver's license, and 69 percent indicating that they do not have access to a vehicle. Fifty percent are employed, either full-time (25.5%) or part-time (23.7%). There is significant student ridership on the system, with 23.1 %reporting that they are full-time (15.8%) or part-time (7.3%) students. Household income levels among riders are generally low, with 81 percent reporting annual incomes of $29,999 or less.

Demand Response Survey

A small sample of demand response riders were also surveyed during January 2015. With this small sample size, the results are more anecdotal in nature, rather than statistically valid. Eleven surveys were completed on the demand-response services. The primary survey participants were senior citizens traveling from Garber Manor and other Staunton addresses to medical, recreational, and shopping destinations. This group of riders primarily identified the service as CATS (6 of 11). The demand response riders also reported that they rode frequently (9), riding at least once per week. The majority also use the fixed routes, primarily the 250 Connector (7) and the Green (5) and Silver (4) Trolleys.

The improvements requested by the demand response riders were similar to those requested by the fixed route riders, including additional weekend service, more frequent service, service later in the evening, and service to more places. Specific locations included Staunton to Harrisonburg; Waynesboro Circulator to Roses; Stuarts Draft to Charlottesville; and Mountain View Lane, Fishersville.

Satisfaction scores among this sample were also high, with three negatives reported: days of service, hours of service, and bus stop safety. As with the fixed route respondents, this sample group was very satisfied with the cost of service. Other highly ranked characteristics included the cleanliness of the vehicles, driver courtesy and vehicle safety. The general comment section included requests for more buses and drivers and a request to sell multi-trip passes.

PUBLIC SURVEYS

In order to gather feedback from community members who may not know about or use transit service in the region, a Community Survey was also developed. The community survey was uploaded into Survey Monkey for electronic administration, with paper back-up copies located at key public buildings throughout the service area. CSPDC staff sent out press releases concerning the study and the survey (including the survey link) to the CSPDC media contact list and the TDP study committee. One of the local television stations followed up with CSPDC staff and produced a news story about the study and the survey. The segment can be viewed through the following link:

http://www.nbc29.com/story/27854251/cspdc-surveying-shenandoah-valley-bus-riders

The survey link was open from mid-January through mid-February 2015. A copy of the survey is provided in Appendix E. There were 114 surveys completed during the survey period. Of the 114 surveys, 45 percent were received from Staunton area zip codes, 26 percent were received from Waynesboro area zip codes, and the remaining 29 percent were received from 13 other zip codes in the region. Survey respondents were also asked if they were affiliated with any of the area colleges and universities. The results indicated that over 87 percent of the respondents were not affiliated with area colleges and universities. This question was asked so that the study team would be aware of any potential survey bias with regard to requested services. The survey results are summarized below, with the full results provided in Appendix D.

Mode Choice

Of the 114 respondents, 97 (85.1%) indicated that they drive themselves to get where they need to go for work, school, shopping, etc. There were 6 respondents (5.3%) that indicated that they use public transit or that they get a ride from family or friends. The survey asked the respondents to indicate which public transit services they use and how frequently they ride. Of the relatively few respondents that indicated transit use, the most commonly chosen responses were: the Staunton Trolley (one time per week or less- 11 responses; two to four times per week – 3 responses); and the 250 Connector (one time per week or less – 7 responses; two to four times per week – 4 responses; and five times per week or more – 1 response).

The survey also asked respondents who indicated that they use public transportation to indicate why. The most commonly listed reason was “the bus is less expensive than driving”, with 11 responses; “for environmental reasons”, eight responses; followed by not having access to a vehicle or not being able to drive due to age or disability (5 responses each).

Question 7 of the survey was targeted to people who do not use public transportation. The question asked the survey respondents to indicate what transit service improvements would be needed for them to choose to ride public transportation. The most commonly listed response was “better service availability near my home/work/school,” (42 responses); followed by “I would not ride, I prefer to drive,” (30 responses); “improved access to transit information,” (28

responses); "more frequent buses," (26 responses);"longer hours of service" (25 responses); and "guaranteed ride home for emergencies/overtime" (19 responses).

Public Transit Awareness

Just fewer than 63 percent of the survey respondents indicated that they are aware of the public transportation services that are provided in the region. The survey also asked the respondents to indicate the name of the transit system that serves the region. The responses to this question confirm that there is some confusion with regard to the name of the service, with only 78 of the 114 respondents (68%) answering the question, and 15% of these indicating that they do not know. Of the 78 survey respondents who answered the question, 49 percent indicated CATS, followed by VRT (15%). The full list of responses is provided in Table 3-22.

Table 3- 19: Brand Awareness

Name	Response Percent	Response Count
CATS	49%	38
Virginia Regional Transit/VRT/VRTA	15%	12
I do not know	15%	12
CATS, VRT	4%	3
250 Connector	1%	1
Blue Ridge Shuttle Bus	1%	1
BRCC BUS AND TROLLEYS	1%	1
Connector	1%	1
Harrisonburg Department of Transportation	1%	1
Mountain Bus Service	1%	1
Not sure, we know the names of the individual bus routes	1%	1
Shenandoah valley transit	1%	1
Silver Line	1%	1
Staunton Transit System	1%	1
Waynesboro	1%	1
Waynesboro Circulator	1%	1
Circulator	1%	1
	Answered question	**78**
	Skipped question	**36**

Public Transit Need

Seventy-one percent of the survey respondents who answered the question indicated that there is a need for additional or improved public transportation in the region. The most frequently listed improvements were for more geographic coverage, later hours of service, improved information about the services provided, and more frequency. Specifically requested improvements were as follows:

- Service from Rockingham County to Fishersville
- More buses between Staunton and Harrisonburg
- Direct service connecting Harrisonburg downtown to Waynesboro downtown, UVA, Charlottesville, and the Charlottesville Airport.
- Central Virginia rail
- Improving cycling infrastructure, including trails connecting major areas and wider roads
- Service to Stuart's Draft
- Service from Eastside Highway in Augusta County to the senior center in Waynesboro

Public Transit Information

When asked how they would prefer to receive information about public transportation, the most commonly listed response was "website" (51 responses); followed by "email" (34 responses); "social media" (28 responses); "newspaper" (27 responses); and "brochure" (25 responses). The vast majority of the survey respondents reported that they had Internet access (94%), with Facebook listed as the most popular social media application (91%) among the respondents that use social media (77).

Demographics

Ninety-one percent of the survey respondents reported that they were Caucasian/white, with 99 percent reporting that English is the primary language spoken at home. There were more female survey participants (68.6%) than male. The majority of the survey participants reported that they have a valid driver's license (94%) and access to a vehicle (93%). Survey respondents were primarily between the ages of 26 and 55 (63.7%). Those aged 56-64 were represented (19.6%), as well as those ages 65+ (14.7%). Very few younger people were represented in the survey sample.

Seventy four percent of the survey respondents reported that they are employed full time. The most commonly reported annual income level was $75,000 or higher (33.3%), followed by $60,000- 74,999 (20%).

STAKEHOLDER OPINION

Apart from drawing on survey data, KFH Group conducted stakeholder interviews by phone and email to gain information on transportation needs in the region. The following section describes these efforts, detailing a variety of service types, clients, and perspectives. In addition, KFH Group met with the VRT manager, supervisor and dispatcher, soliciting their input concerning transit needs and issues in the region.

Public Transportation Stakeholders in the Region

An important task within the TDP process was soliciting perspectives from regional stakeholders. Stakeholders included contributing partners, human service agencies, educational institutions, and economic development representatives. The contacted stakeholders are listed below, followed by several themes that emerged from the conversations.

- Augusta County Economic Development
- Augusta Health (represented on Study Committee)
- Blue Ridge Community College (represented on Study Committee)
- CATS Board
- Community Foundation of the Blue Ridge
- Mary Baldwin College
- Shenandoah Valley Social Services
- Staunton Downtown Development Agency
- The City of Staunton (represented on Study Committee)
- Valley CSB
- Western State Hospital
- Woodrow Wilson Rehabilitation Center (represented on Study Committee)

Client/Constituent Use of Public Transportation

- Visitors use the trolley for touring and seeing downtown and locals use it to get around the city.

- Many of our clients are unable to ride the public transportation service because of physical disabilities. Our clients that do ride CATS have to walk up a hill from the bus stop because our agency is no longer a stop on the CATS route. Our clients are aware of the system and many find it overwhelming to understand the maps.

Unmet Transit Needs in the Region

- Need better amenities/infrastructure. One would never know that some places are bus stops. Need signs/shelters as demand for service grows. Also awareness/marketing because people don't necessarily need the service so they don't know it exists. Students and one-car households know because they are transit dependent, but more choice riders may use the service if they knew about it.

- Citizens are interested in more (daily) Amtrak service and transportation to Charlottesville. Those who are relocating from metropolitan areas to the region are accustomed to more option. This is a small percentage of the total population but still growing.

- The lack of routes available as well as pickup stops are a great concern in Augusta County, Staunton and Waynesboro.

- It would be helpful to have public transportation available to Western State Hospital for both staff and patients. The patients make regular trips to the mall and Walmart. There are also staff who walk to work.

- There is no transportation provided to Rockingham or Augusta Senior centers. It would be wonderful if there was some sort of transit for seniors to get to the senior centers, to grocery stores, doctor's offices, etc. (from the Weyers Cave area).

- For Mary Baldwin students, the main issue is getting back and forth between Staunton and wherever their families are, so the school is interested in increased Amtrak/Greyhound frequencies and access.

- People who use the trolleys ask for later hours, different destinations and updated routes.

- Rural western Augusta County; Bath County

- More runs and more stops

- There is a great need for connecting Waynesboro into the BRCC system better than we do now. A ride from Waynesboro along the 250 connector and then onto the BRCC shuttle takes far too long to make it practical.

- There is an unmet need in Stuarts Draft, Craigsville, Lyndhurst and Greenville (a suggested stop at Mint Spring Apartments) areas.

Potential Financial Support for Unmet Transportation Needs

- There are definitely unmet needs in the region. Financially, one stakeholder agency is struggling due to lack of state funding and charity care. Funding would be difficult for them at this time.

- Financial support would most likely depend on citizen requests/public demands, as well as business feedback. The demand for transit is different in the county than in the cities because businesses are more spread out.

Strengths of Current System

- Provides needed service in the core, i.e., most populated areas of the service area

- The availability of service, i.e., students like having the freedom to get around independently. The bus gives them real-world experience.
- The drivers are good.
- Trolleys are nicely appointed and comfortable for riding
- Staff are well trained and friendly
- Shuttles to and from Harrisonburg and Staunton serve a great need**.**
- The cost to use the service is affordable, there is ample space on the buses, buses are kept clean and drivers are helpful and friendly.

Weaknesses of Current System

- Availability of services and complicated maps and routes
- The routes should connect to different groups such as high school and MBC students.
- Sometimes there are capacity issues at WWRC, i.e., too many students want to ride at the same time. Sometimes wheelchair capacity is an issue.
- The mid-day break in the schedule
- People do not know about it
- Does not provide much service to the very rural areas
- The service is not accessible to reach outlying areas of Augusta County; night and weekend hours are a need.
- Buses can run behind schedule, service is not provided on weekends, and service is not offered late enough during the weekdays to serve those who are working evening hours.

Potential Public Transportation Improvements and Associated Concerns

- More pickup and drop off areas and distribution of information that could be easily understood by clients that suffer from mental illness
- There is room for more development of the trolley system, particularly with public education.
- Close the mid-day break

- More service on Saturday
- Sunday service
- The local service needs to be maximized prior to branching out to commuter service. There are areas of Fishersville that could use additional service (Food Lion, housing areas).
- The routes should be examined.
- Given current level of funding and no additional funding available, one stakeholder thinks the system is as strong as it can be. Measurable improvements would require significantly more resources.
- Expand service to the outer parts of Augusta County, additional runs to the bus hub to link to other routes, and extension of hours and weekend service.

Vision for Public Transportation in the Region

- A system like the one that operates in Harrisonburg, VA
- North-South corridor service between Lexington and Harrisonburg
- East-West corridor service between Staunton and Charlottesville
- That services run to major industrial plants/employers (for example in Stuarts Draft – Target, Hershey, McKee) and that the routes to these employers are planned to operate around shift change times.

VRT Observations

The study team interviewed the local VRT operations team to gather additional information about unmet needs and transit issues in the region. VRT staff offered the following:

There are unmet transit needs in Stuarts Draft

- To/from major employers
- To/from the Stuarts Draft Retirement Community (Mountain Vista Drive)
- Augusta Health is building a new facility in Stuarts Draft
- There were riders in the Stuarts Draft area when on-demand service was previously provided there.

- Currently residents in Stuarts Draft have to transfer to get to Augusta Health, using the 340 Connector, which runs infrequently.

There are unmet transit needs in Verona, off of U.S. 11.
Waynesboro Issues

- The Waynesboro Circulator has difficulty keeping to the schedule if there are more than 2 deviations. A demand-response service may be needed in Waynesboro so that the Circulator can work more effectively.
- The Waynesboro Circulator has a confusing alternating schedule.
- The 340 Connector should go through downtown Waynesboro, rather than Lyndhurst, and operate more frequently.

Staunton Issues

- The Staunton On-Demand service is at maximum capacity and riders are sometimes turned away.
- There is demand for service from Emeritus Assisted Living in Staunton (Hillsmere Lane).
- The Silver Trolley route perhaps should be operated with a small bus, rather than a trolley. The route is longer with many turns.
- There is duplication between the Green and Silver routes.
- There is demand for the Silver route to serve Wal-Mart. Should the Red and Silver perhaps be combined in some fashion?

Perception

- There are three services operating in the region: BRCC, CATS and Trolleys.

Vision

- Transit service to Stuarts Draft for employment purposes
- The implementation of demand-response service in Waynesboro
  Service to Charlottesville oriented to students

Other

- There is a need for longer hours and Sunday service.
- The map/schedule layout should be simplified as it is confusing for riders.
- There have been requests for discounted passes (multi-ride).

- The BRCC North route uses I-81 in the northbound direction. This eliminates the opportunity for northbound travel through this corridor.
- There is significant vehicular and pedestrian traffic on the JMU campus which can be time-consuming to navigate.
- For some of the routes it is difficult to stay on schedule if there are any deviations. Perhaps a "floater" deviation bus could be used.

DEMOGRAPHICS AND LAND USE

The following section provides an assessment of transit needs based on demographic analysis, land use patterns, and major transit origins and destinations. Specifically, it describes a general population profile for the region and identifies underserved population groups. The chapter then develops a land use profile based on the region's major trip generators and commuting patterns.

Population Characteristics and Trends

As of 2010, the United States Census Bureau reported that Augusta County had a population of 43,750, Rockingham County had a population of 76,314, Staunton had a population of 23,746, and Waynesboro had a population of 21,006 (see Table 3-23). Of the jurisdictions, all grew over time except Staunton, which remained steady between 2000 and 2010. The population of the entire CSPDC region also increased over the past decade (by 11 percent).

Projections developed by the Weldon Cooper Center for Public Service estimate that Augusta and Rockingham Counties will both grow by about 28 percent over the next 30 years (see Table 3-24). This is on par with the CSPDC overall. Staunton and Waynesboro will grow by about 11 percent and 17 percent, respectively. Currently, the area's sixty-five and older population ranges from 16 to 20 percent of all residents. This will rise to between 19 and 25 percent by 2040.

Table 3-20: Population Characteristics

	1990 Population	2000 Population	2010 Population	1990-2000 % Change	2000-2010 % Change	1990-2010 % Change
CSPDC	225,025	258,763	286,781	15%	11%	27%
Augusta Co.	54,677	65,615	73,750	20%	12%	35%
Rockingham Co.	57,482	67,714	76,314	18%	13%	33%
Staunton	24,461	23,853	23,746	-2%	0%	-3%
Waynesboro	18,549	19,520	21,006	5%	8%	13%

Source: *United States Census Bureau, American FactFinder; Weldon Cooper Center for Public Service.*

Table 3-21: Age Divisions and Population Forecasts

	2010		2020		2030		2040	
	Population	%	Forecast	%	Forecast	%	Forecast	%
Augusta Co.	73,750	-	80,655	-	87,580	-	94,713	-
0-19 yrs	17,586	24%	17,842	22%	18,792	21%	20,465	22%
20-64 yrs	44,325	60%	46,156	57%	46,907	54%	50,469	53%
65+ yrs	11,839	16%	16,657	21%	21,881	25%	23,779	25%
Rockingham Co.	76,314	-	83,431	-	90,341	-	97,249	-
0-19 yrs	20,338	27%	21,212	25%	22,265	25%	24,478	25%
20-64 yrs	44,012	58%	46,278	55%	47,606	53%	51,053	52%
65+ yrs	11,964	16%	15,940	19%	20,469	23%	21,719	22%
Staunton	23,746	-	24,605	-	25,574	-	26,440	-
0-19 yrs	5,345	23%	5,428	22%	5,418	21%	5,714	22%
20-64 yrs	13,711	58%	13,441	55%	13,538	53%	14,180	54%
65+ yrs	4,690	20%	5,735	23%	6,617	26%	6,546	25%
Waynesboro	21,006	-	22,375	-	23,575	-	24,613	-
0-19 yrs	5,398	26%	5,840	26%	6,017	26%	6,311	26%
20-64 yrs	12,041	57%	12,450	56%	12,821	54%	13,592	55%
65+ yrs	3,567	17%	4,085	18%	4,738	20%	4,710	19%

Sources: *United States Census Bureau, American FactFinder, Virginia Employment Commission, Weldon Cooper Center for Public Service (www.vawc.virginia.gov/gsipub/index.asp?docid=359).*

An abundance of colleges and universities are located in and near the CSPDC, all of which influence the region's growth and demographics. These include:

- Blue Ridge Community College (Weyers Cave)
- Bridgewater College (Bridgewater)
- Eastern Mennonite University (Harrisonburg)
- James Madison University (Harrisonburg)
- Mary Baldwin College (Staunton)
- Murphy-Deming College of Health Sciences (Fishersville)
- Old Dominion University (Charlottesville)
- Southern Virginia University (Buena Vista)
- University of Virginia (Charlottesville)
- Virginia Military Institute (Lexington)
- Washington and Lee University (Lexington)

Blue Ridge Community College (BRCC) in Weyers Cave is especially relevant, given the BRCC shuttles. According to the National Center for Education Statistics, BRCC had a 2013 total enrollment of 4,437. The college does not have any on-campus housing and about 36 percent of its students attend full time. Mary Baldwin College in Staunton had a 2013 enrollment of 1,441 undergraduate students and 270 graduate students. Enrollment is projected to increase by about 30 percent (about 500 students) by 2020.[1]

Population Density

Population density is often an effective indicator of the types of public transit services that are most feasible within a study area. While exceptions exist, an area with a density of 2,000 persons per square mile will generally be able to sustain frequent, daily fixed-route transit service. Conversely, an area with a population density below this threshold but above 1,000 persons per square mile may be better suited for demand-response or deviated fixed-route services.

Figure 3-9 portrays population density by Census block group. The block groups with a density greater than 1,000 persons per square mile are located in Harrisonburg, Bridgewater, Waynesboro, Stuarts Draft, and Staunton (the single high density block group near Craigsville is an anomaly due to the presence of the Augusta Correctional Center). Overall, Waynesboro's average population density is 2,407 and Staunton's is 2,616. Augusta and Rockingham County are much more rural, with average population densities of only 307 and 285 persons per square mile.

Transit-Dependent Populations

Public transportation needs are defined in part by identifying the relative size and location of those segments within the general population that are most likely to be dependent on transit services. These include individuals who may not have access to a personal vehicle or are unable to drive themselves due to age or income status. Determining the location of transit dependent populations allows for an evaluation of current transit services and the extent to which they meet community needs.
The Transit Dependence Index (TDI) is an aggregate measure that displays relative concentrations of transit dependent populations. Five factors make up the TDI calculation, as shown in the following formula:

TDI = PD * (AVNV + AVE + AVY + AVBP)
PD: population per square mile
AVNV: amount of vulnerability based on autoless households
AVE: amount of vulnerability based on elderly populations
AVY: amount of vulnerability based on youth populations
AVBP: amount of vulnerability based on below-poverty populations

[1] State Council of Higher Education. http://research.schev.edu/enrollment/projections/details.asp.

In addition to population density (PD), the factors above represent specific socioeconomic characteristics of area residents. For each factor, individual block groups are classified according to the prevalence of the vulnerable population relative to the area average.[2] The factors are then plugged into the TDI equation to determine the relative transit dependence of each block group (very low, low, moderate, high, or very high).

Figure 3- 10 displays overall TDI rankings. The block groups with a classification of very high are primarily located in Staunton and Waynesboro, as well as Bridgewater and just to the southeast of Harrisonburg. Additional block groups in Staunton, Waynesboro, and Stuarts Draft have classifications of high.

The Transit Dependence Index Percentage (TDIP) provides a complementary analysis to the TDI measure. It is nearly identical to the TDI measure with the exception of the population density factor. The TDIP for each block group in the study area is calculated with the following formula:

TDIP = DVNV + DVE + DVY + DVBP
DVNV: degree of vulnerability based on autoless households
DVE: degree of vulnerability based on elderly populations
DVY: degree of vulnerability based on youth populations
DVBP: degree of vulnerability based on below-poverty populations

By removing the population per square mile factor, the TDIP measures degree rather than amount of vulnerability. The TDIP represents the percentage of the population within the block group with the above socioeconomic characteristics and it follows the TDI's five-tiered categorization of very low to very high. However, it differs in that it does not highlight the block groups that are likely to have higher concentrations of vulnerable populations only because of their population density. As shown in Figure 3-11, Staunton and Waynesboro have block groups with a high TDIP, as do Elkton and Grottoes in Rockingham County.

[2] Block groups within the City of Harrisonburg are not included in the analysis and therefore do not impact the area average.

Figure 3-9: Population Density by Census Block Group in the Region

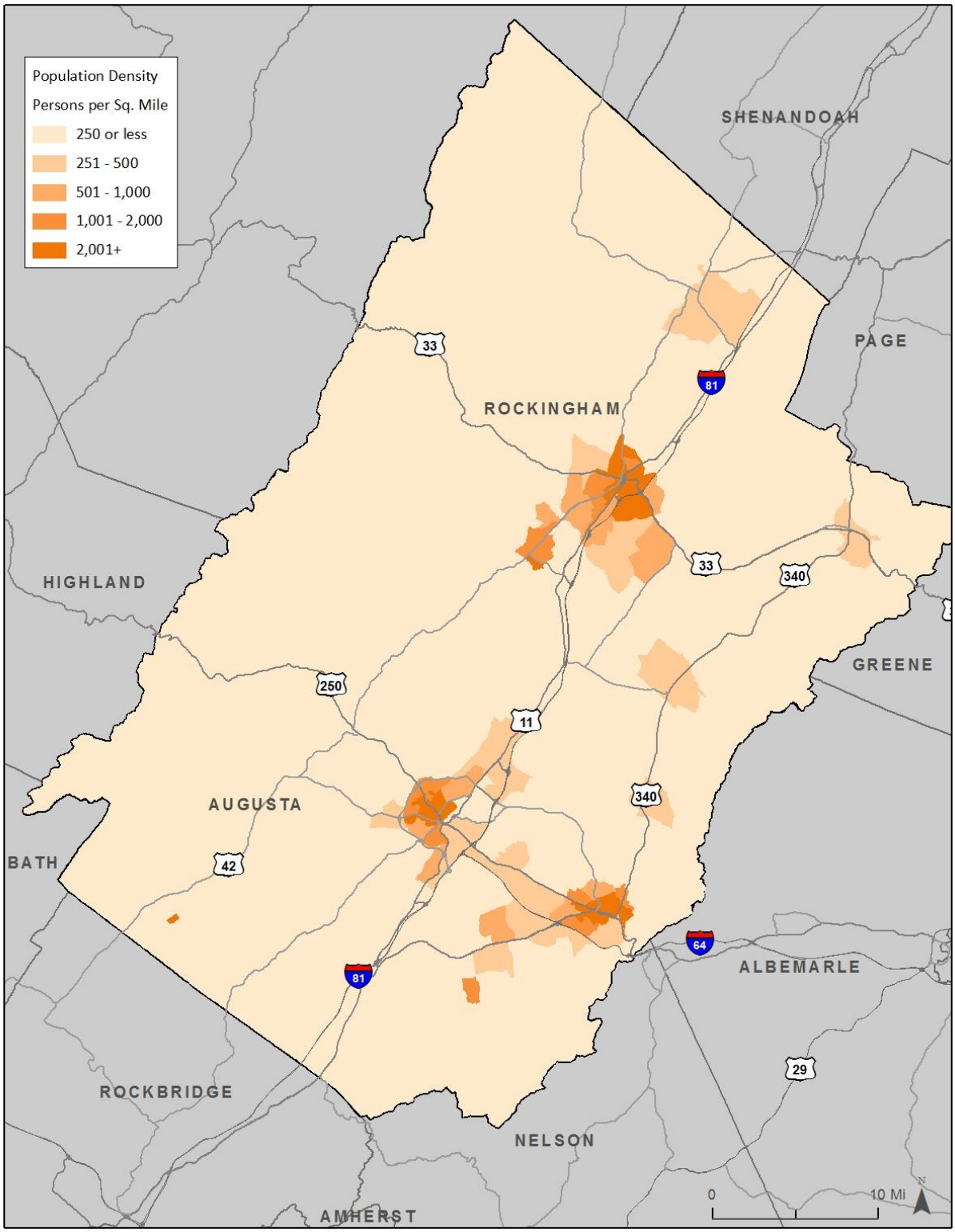
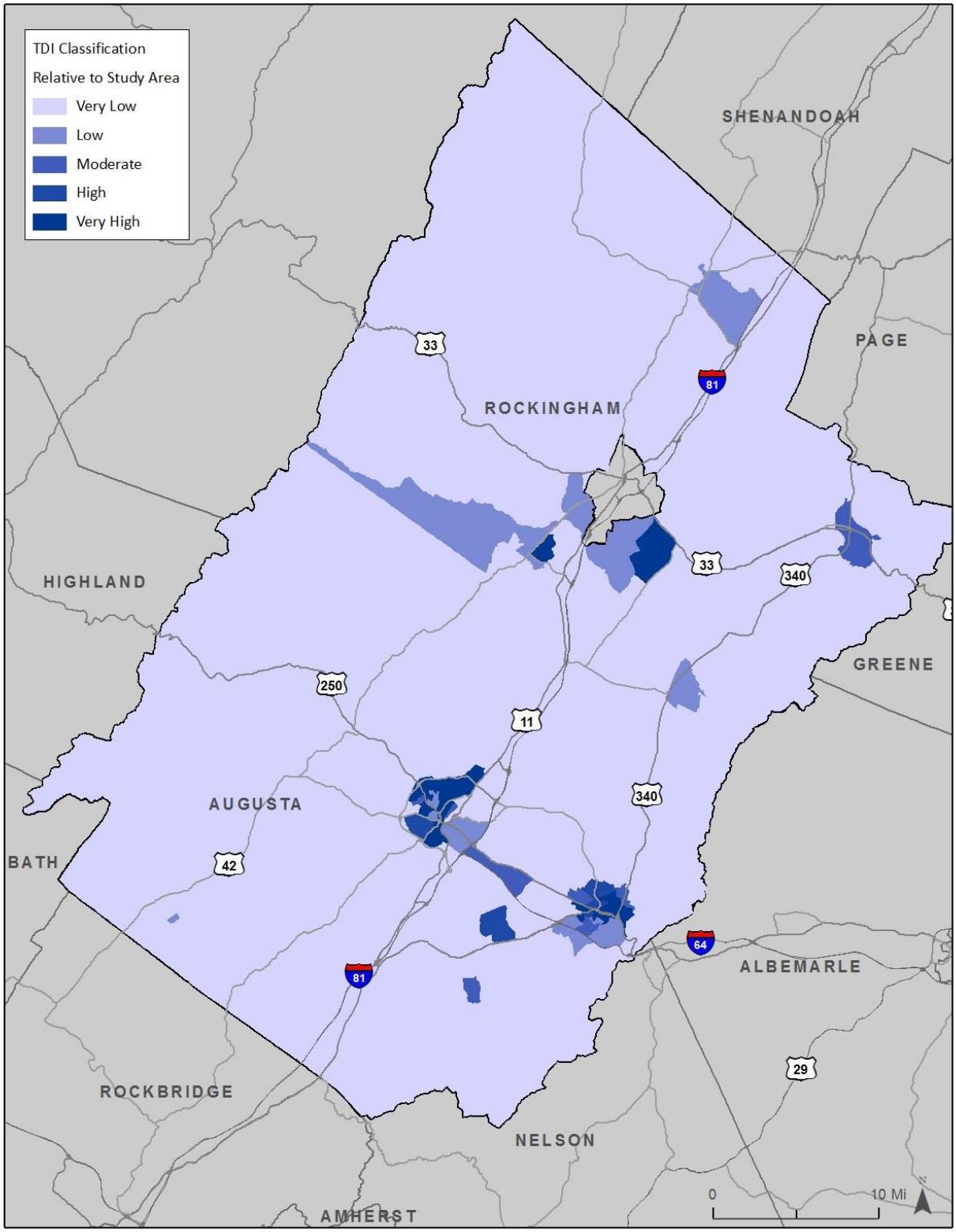


Figure 3-10: Transit Dependence Index Rankings



Autoless Households

Households without at least one personal vehicle are more likely to depend on the mobility offered by public transit than those households with access to a car. Although autoless households are reflected in both the TDI and TDIP measures, displaying this segment of the population separately is important when many land uses are at distances too far for non-motorized travel. Figure 3-12 displays the relative number of autoless households in the region.[3] The greatest numbers occur in Staunton, Jolivue, Waynesboro, Stuarts Draft, Grottoes, Elkton, Bridgewater, and between Harrisonburg and Timberville.

Senior Adult Population

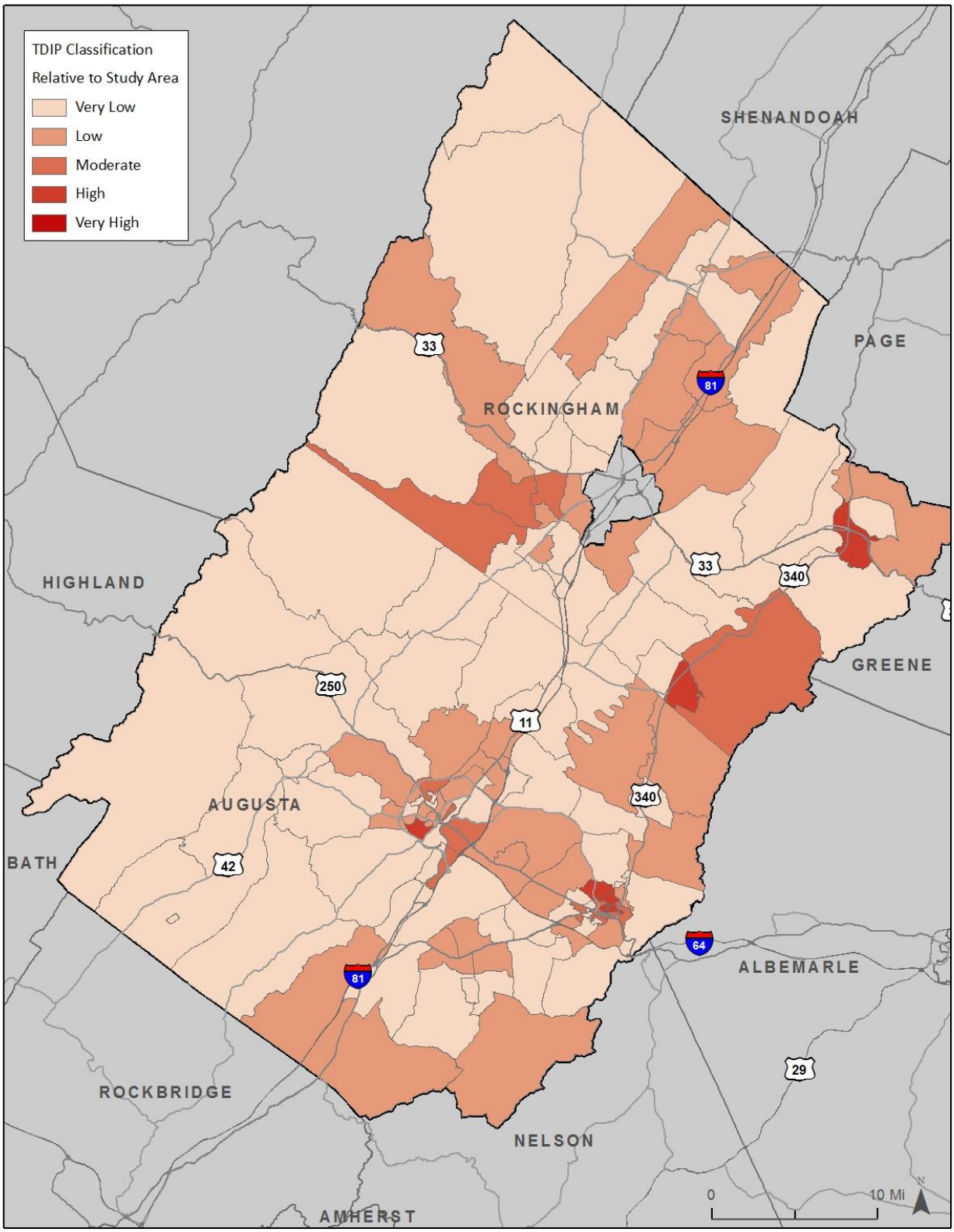
A second socioeconomic group analyzed by the TDI and TDIP indices is the senior adult population. Individuals 65 years and older may scale back their use of personal vehicles as they age, leading to greater reliance on public transportation compared to those in other age brackets. Figure 3-13 displays the relative concentration of senior adults in the study area. The block groups classified as very high are located near Staunton and Fishersville to the south and near Harrisonburg and Bridgewater to the north.

Individuals with Disabilities

Due to changes in Census and American Community Survey reporting, the 2008-2012 ACS provides the most recent data available to analyze the prevalence and geographic distribution of individuals with disabilities. However, unlike the factors above, the data is only available at the tract level not the block group. Though it cannot show finer trends, this information is still important to consider because those with disabilities may be unable to operate a personal vehicle and consequently more likely to rely on public transportation. The area surrounding Fishersville is classified as having the highest number of disabled individuals (Figure 3-14).

[3] The classification scheme of "very low" to "very high" (for autoless households, senior adults, and individuals with disabilities) depicts each block group relative to the study area average. It is important to note that a block group classified as "very low" can still have a significant number of potentially transit dependent persons; "very low" in this scheme only means below the study area average. At the other end of the spectrum, "very high" means a number greater than twice the average.

Figure 3-11: Transit Dependence Index Percentage



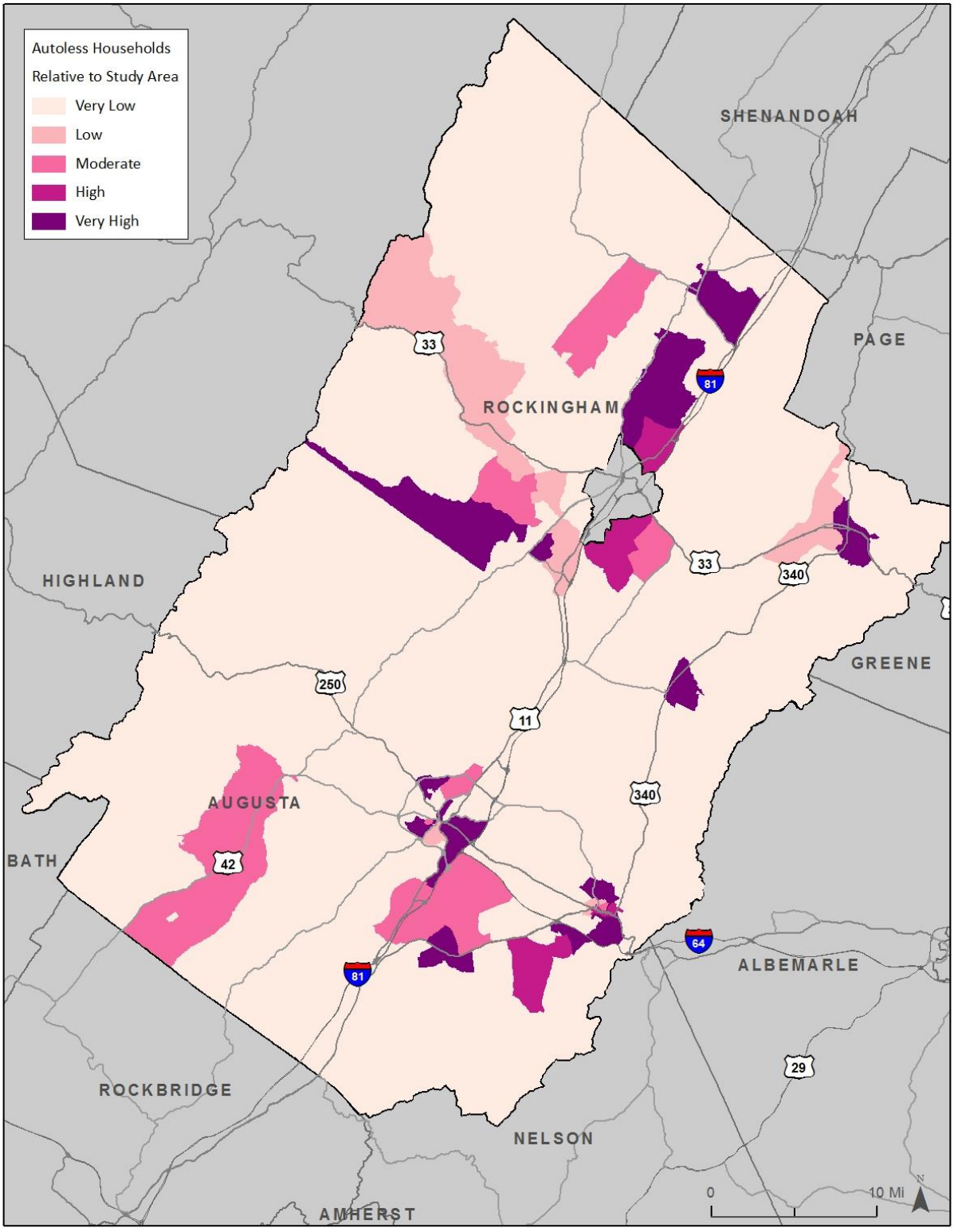

Autoless Households
Relative to Study Area
Very Low
Low
Moderate
High
Very High
SHENANDOAH
PAGE
ROCKINGHAM
HIGHLAND
GREENE
AUGUSTA
BATH
ALBEMARLE
ROCKBRIDGE
NELSON
AMHERST
33
81
340
250
11
42
64
29
0
10 Mi
N

Figure 3-13: Relative Concentration of Senior Adults in the Study Area

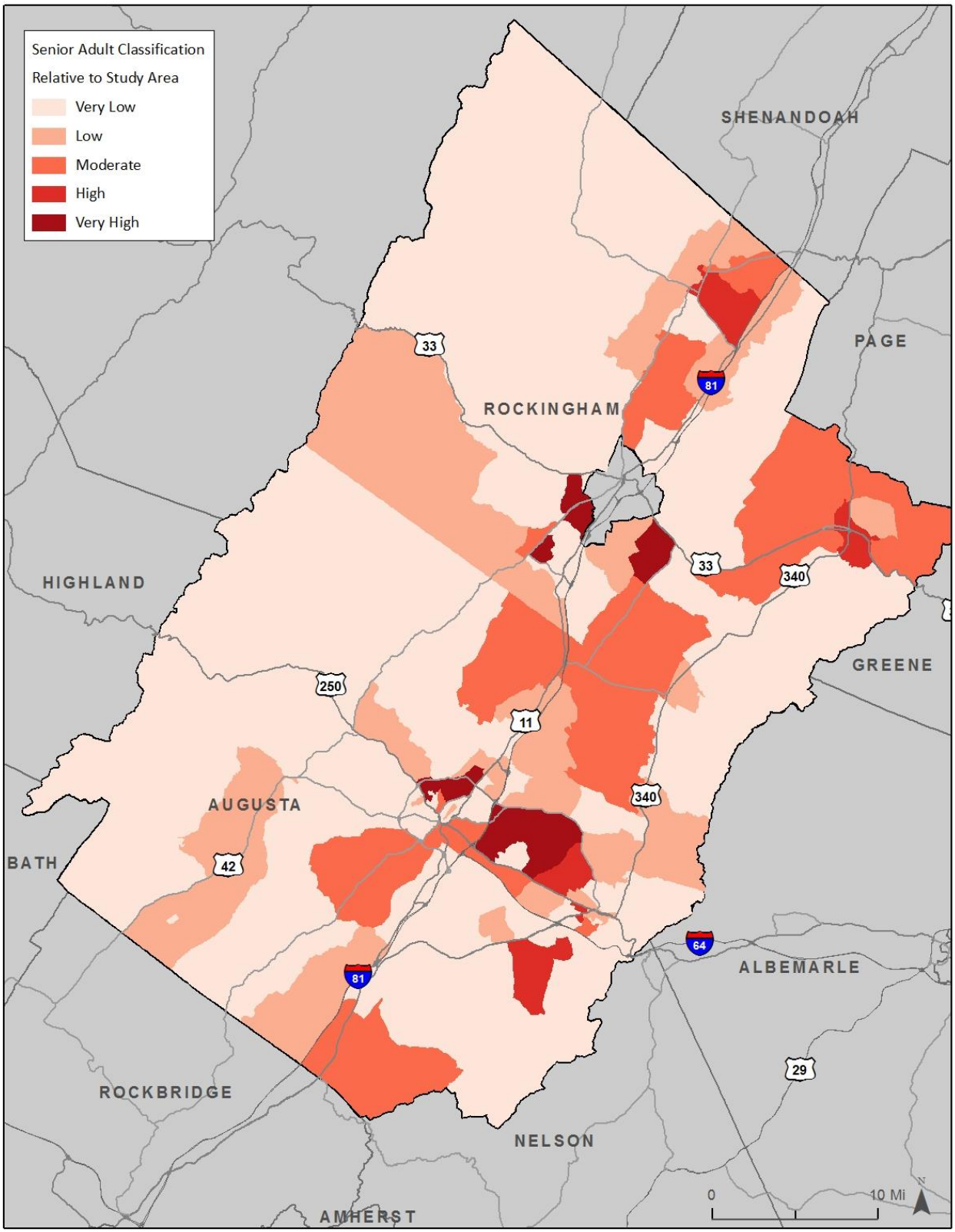
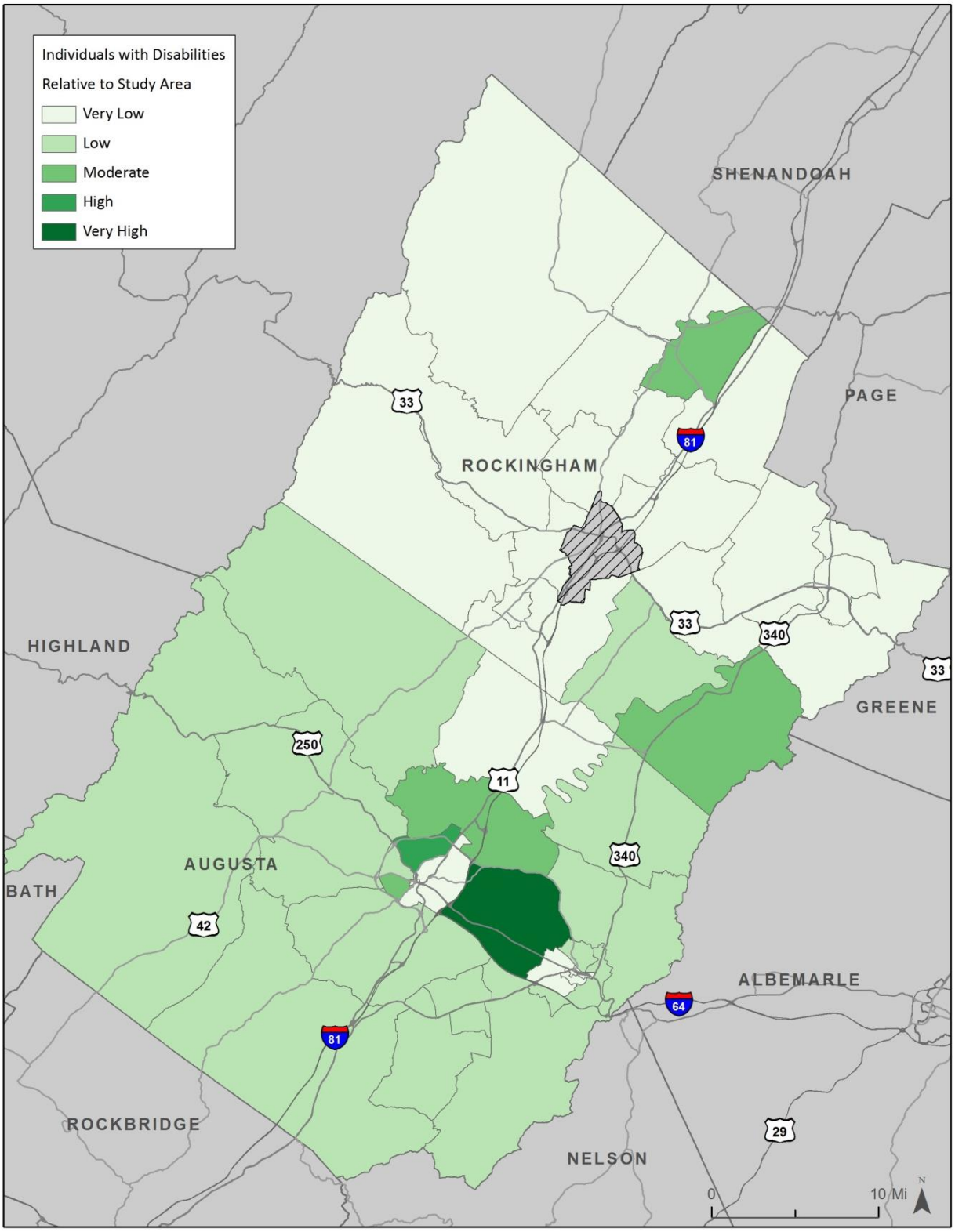


Figure 3-14: Individuals with Disabilities by Census Tract in the Study Area



Title VI Analysis

As part of the Civil Rights Act of 1964, Title VI prohibits discrimination on the basis of race, color or national origin in programs and activities receiving federal subsidies. This includes agencies providing federally funded public transportation. In accordance with Title VI, the following section examines the minority and below poverty populations in the service area. CSPDC is not required to evaluate its service and fare changes under Title VI due to thresholds regarding UZA population and number of vehicles operated during peak service. However, the CSPDC should still consider the following analysis before implementing any changes as a part of this TDP. This section also summarizes the prevalence of residents with Limited-English Proficiency (LEP) in the service area.

Minority Population

It is important to ensure that areas with an above average percentage of racial and/or ethnic minorities are not negativity impacted by any proposed alterations to existing public transportation services. Figure 3-15 depicts the service area based on the percentage of minority persons per block group. Out of 136 total block groups, 51 have a minority population above the area average of 8.3 percent. These are scattered, but generally located in and around the urbanized areas, as well as the western portion of Augusta County.

Low-Income Population

The second socioeconomic group included in the Title VI analysis represents those individuals who earn less than the federal poverty level. These individuals face financial hardships that make the ownership and maintenance of a personal vehicle difficult, and thus they may be more likely to depend on public transportation. Figure 3-16 depicts the percentage of below-poverty individuals per block group. Out of 136 total block groups, 63 have a below-poverty population above the area average of 11.6 percent. Again, these block groups are scattered, covering both the urbanized areas and the outskirts of the counties.

Figure 3-15: Percentage of Minority Persons by Census Block Group in the Region

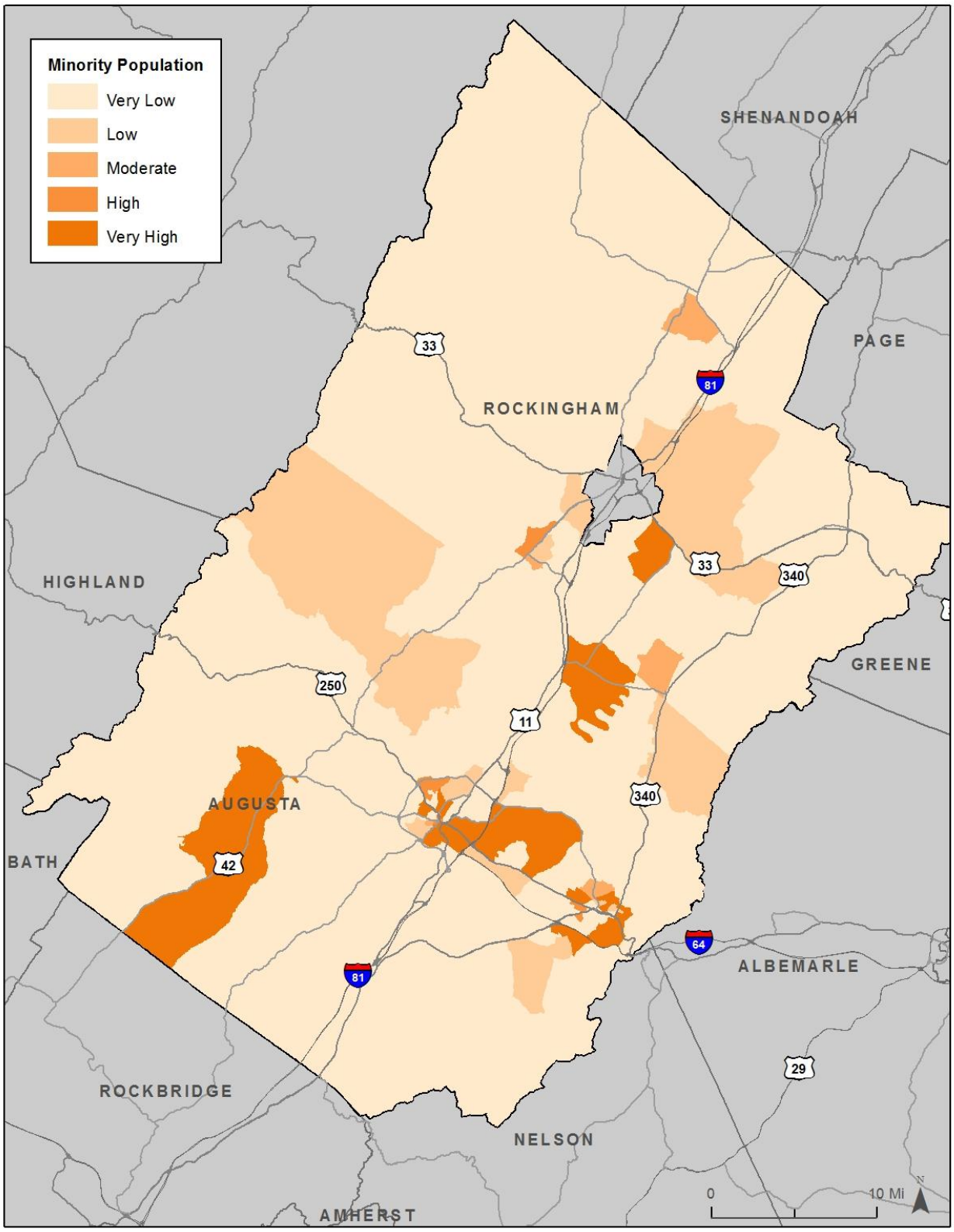
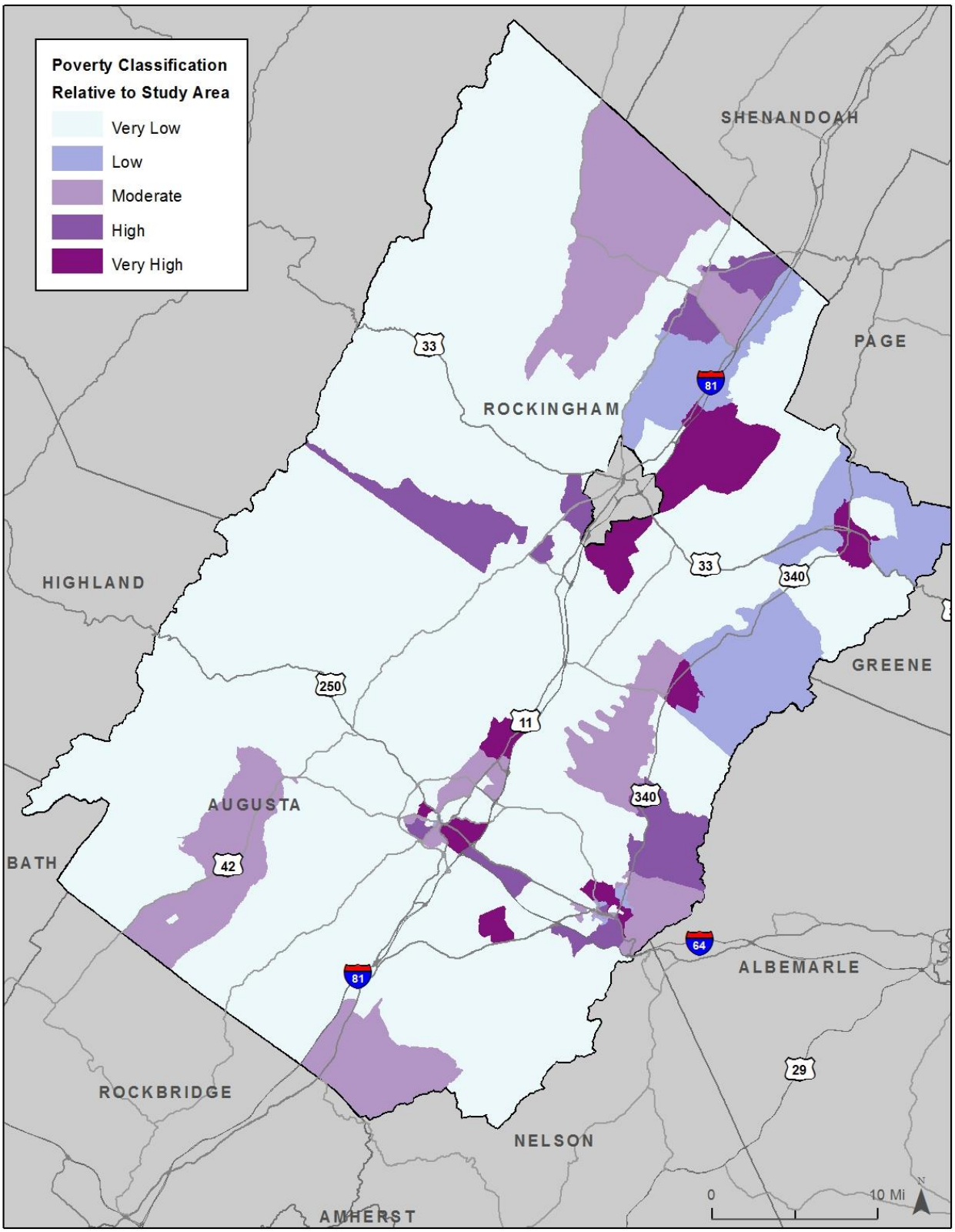


Figure 3-16: Percentage of Below-Poverty Individuals per Block Group in the Region



Limited-English Proficiency (LEP)

In addition to providing public transportation for a diversity of socioeconomic groups, it is also important to serve and disseminate information to those of different linguistic backgrounds. As documented in the CSPDC's Title VI Plan and in Table 3-23, residents in the service area predominately speak English (92 - 97% of the five and older population). Spanish is the largest LEP group. Rockingham County and Waynesboro have greatest percentage of households where a non-English language is spoken at home (8% and 6%). Most of those households are also able to speak English "very well." Less than two percent of the total population in each jurisdiction speaks English "not well" or "not at all," making the need for resources to address the LEP population relatively low.

Table 3-22: Limited English Proficiency

Place of Residence	Augusta		Rockingham		Staunton		Waynesboro	
Population 5 years and older	69,983		71,802		22,581		19,600	
Language Spoken at Home:								
English	67,830	97%	65,855	92%	21,623	96%	18,463	94%
Spanish	1,261	2%	3,698	5%	442	2%	617	3%
Other Indo-European languages	664	1%	1,968	3%	431	2%	408	2%
Asian/Pacific Island languages	157	0%	141	0%	85	0%	84	0%
Other languages	71	0%	140	0%	0	0%	28	0%
Speak non-English at home	2,153	3%	5,947	8%	958	4%	1,137	6%
Ability to Speak English:								
"Very Well" or "Well"	1757	2.5%	4,551	6.3%	862	3.8%	993	5.1%
"Not Well" or "Not at All"	396	0.6%	1,396	1.9%	96	0.4%	144	0.7%

Source: *American Community Survey, Five-Year Estimates (2008-2012), Table B16004.*

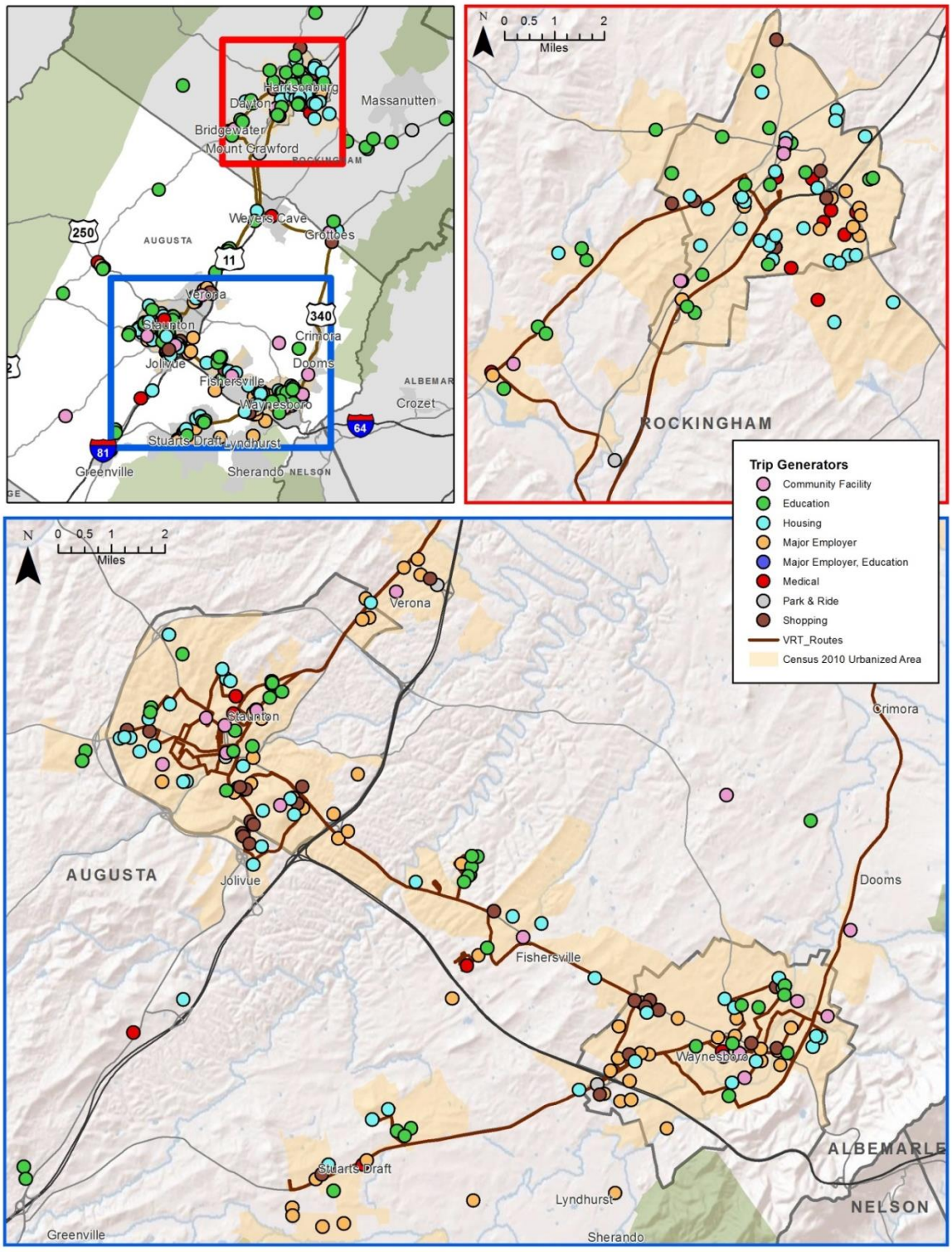
Land Use Analysis

Identifying major trip generators in the service area complements the above demographic analysis by indicating where transit services may be most needed. Trip generators attract transit demand and include common origins and destinations like multi-unit housing, major employers, medical facilities, educational facilities, non-profit and governmental agencies, and shopping centers. Trip generators are mapped in Figure 3-17.

The region's Wal-Mart stores are important trip generators, as are grocery stores such as Food Lion and Kroger. The Staunton Mall, Statler Square, Terry Court, Willow Oak, Waynesboro Town Center, and the cluster of development at the intersection of US-250 and Lew Dewitt Boulevard are also important as shopping trip generators. The Augusta Health campus is a significant regional medical center and there are a number of medical providers in close

proximity. Blue Ridge Community College, the Staunton and Waynesboro public libraries, Gypsy Hill Park, the Staunton-Augusta YMCA, and the Shenandoah Valley Social Services

Figure 3-17: Major Trip Generators in the Service Area



offices in Verona and Waynesboro are all key educational and community facility trip generators. Regional destinations like Charlottesville and Harrisonburg are important as well, though no transit services currently connect residents in Staunton or Waynesboro to Charlottesville.

Travel Patterns

In addition to considering the region's major employers, it is also important to take into account the commuting patterns of residents and workers. According to ACS five-year estimates for 2008-2012, about half of residents work in the county where they live. Waynesboro is the exception, with more than 60 percent commuting to other counties. As shown in Table 3-23, most residents drive alone to work, only about eight percent carpool. Staunton has the highest percentage of those walking to work (7%).

Table 3-23: Journey to Work Travel Patterns

Place of Residence								
	Augusta		**Rockingham**		**Staunton**		**Waynesboro**	
Workers 16 Years and Over	33,824		36,555		11,070		9,137	
Location of Workplace:								
In County of Residence	17,093	51%	19,386	53%	5,155	47%	3,456	38%
Outside County of Residence	16,540	49%	16,685	46%	5,826	53%	5,653	62%
Means of Transportation to Work:								
Car, Truck, or Van- drove alone	29,202	86%	29,739	81%	8,643	78%	7,849	86%
Car, Truck, or Van- carpooled	2,433	7%	3,228	9%	1,098	10%	718	8%
Public Transportation	80	0%	228	1%	18	0%	13	0%
Walked	536	2%	1,157	3%	785	7%	153	2%
Taxicab, motorcycle, bicycle, other	498	1%	425	1%	209	2%	276	3%
Worked at Home	1,075	3%	1,778	5%	317	3%	128	1%

Source: ACS, Five-Year Estimates (2008-2012), Table B08130.

Another source of data that provides an understanding of employee travel patterns is the United States Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) 2011 dataset. LEHD draws on federal and state administrative data from the Census, surveys, and administrative records. Table 3-24-shows that Staunton, Fishersville and Waynesboro are the common top employment destinations for residents of Augusta County, Staunton and Waynesboro. Residents of Rockingham County have slightly different commuting patterns, with most workers going to Harrisonburg (33%).

Table 3-24: Top 5 Work Destinations (Places), by Percentage of Resident Workers

Augusta Residents		Rockingham Residents		Staunton Residents		Waynesboro Residents	
Destination	%	Destination	%	Destination	%	Destination	%
Staunton	11%	Harrisonburg	33%	Staunton	27%	Waynesboro	25%
Fishersville	11%	Bridgewater	4%	Fishersville	10%	Staunton	8%
Waynesboro	9%	Elkton	3%	Harrisonburg	7%	Fishersville	8%
Harrisonburg	7%	Timberville	2%	Waynesboro	6%	Charlottesville	7%
Stuarts Draft	7%	Broadway	2%	Verona	5%	Stuarts Draft	6%

Source: *US Census, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2011).*

Demographic Summary

This section analyzed the demographic characteristics of the CSPDC service area with an emphasis on transit-dependent populations. The TDI and TDIP indicated that the greatest concentrations of transit-dependent persons are located within the urbanized areas. Pockets of need are scattered throughout the region, particularly to the east of I-81. The assessment of major trip generators in comparison with existing transit service found that many important origins and destinations are along existing routes and have some level of regular service, however, residents in some of areas of Augusta County outside of Staunton and Waynesboro lack transit options.

Review of Previous Plans and Studies

Augusta County Comprehensive Plan Update (April 2007)

The Augusta County Comprehensive Plan's transportation element notes that the County's transportation system is influenced both by terrain and by low density land use patterns. The roadway network is mostly made up of rural two-lane roads with minimal traffic volume and congestion. Major corridors include I-81, I-64, and Routes 340, 250, and 11. The plan notes limited passenger rail service through the Staunton Amtrak station, e.g. Amtrak's Cardinal operates between New York and Chicago three days a week. *The plan does not acknowledge transit as a component of the transportation system*.

A major theme of the Comprehensive Plan's Land Use element is the need to balance residential development with agricultural preservation and the County's rural character. Approximately 35 percent of the land in the County is public and not available for future development (e.g. national forests/parks). Agricultural land is the next most prevalent (34%), followed by residential use (13%). The county has designated urban service areas, i.e., places that are intended to accommodate future development. These include Fishersville, Stuarts

Draft, Verona, and Weyers Cave. Community Development Areas (e.g. Churchville and Greenville) are existing settlements and more appropriate for small scale future development. The majority of new development in the county is single family residential, occurring near highway interchanges in areas surrounding Fishersville, Weyers Cave, Jolivue, and Stuarts Draft. These places of growth may be where new or enhanced transit services will be needed in the future.

City of Waynesboro Comprehensive Plan Land Use Guide (2008)

The Land Use Guide sets out recommendations and strategies intended to reinforce the Waynesboro downtown, revitalize designated areas, and address growth pressures (e.g. auto-oriented development in western Waynesboro and residential development in northern portions of the City). The guide notes the goal of reinvigorating the downtown core but acknowledges the growth of commercial corridors near I-64.

The summary of transportation issues and opportunities does not mention transit but it notes the opportunity to increase bicycle and pedestrian connectivity. This emphasis on creating a bicycle and pedestrian friendly environment is also reinforced in the City's Bicycle Plan (adopted into the Comprehensive Plan in 2012) and the Downtown Design Guidelines (adopted into the Comprehensive Plan in 2011). Concerning transit, the guide recommends continuing "to pursue a means to provide transit options to improve circulation and expand transportation choices, especially in regards to individuals that may have special mobility needs."

City of Waynesboro Transit Feasibility Study (October 2010)

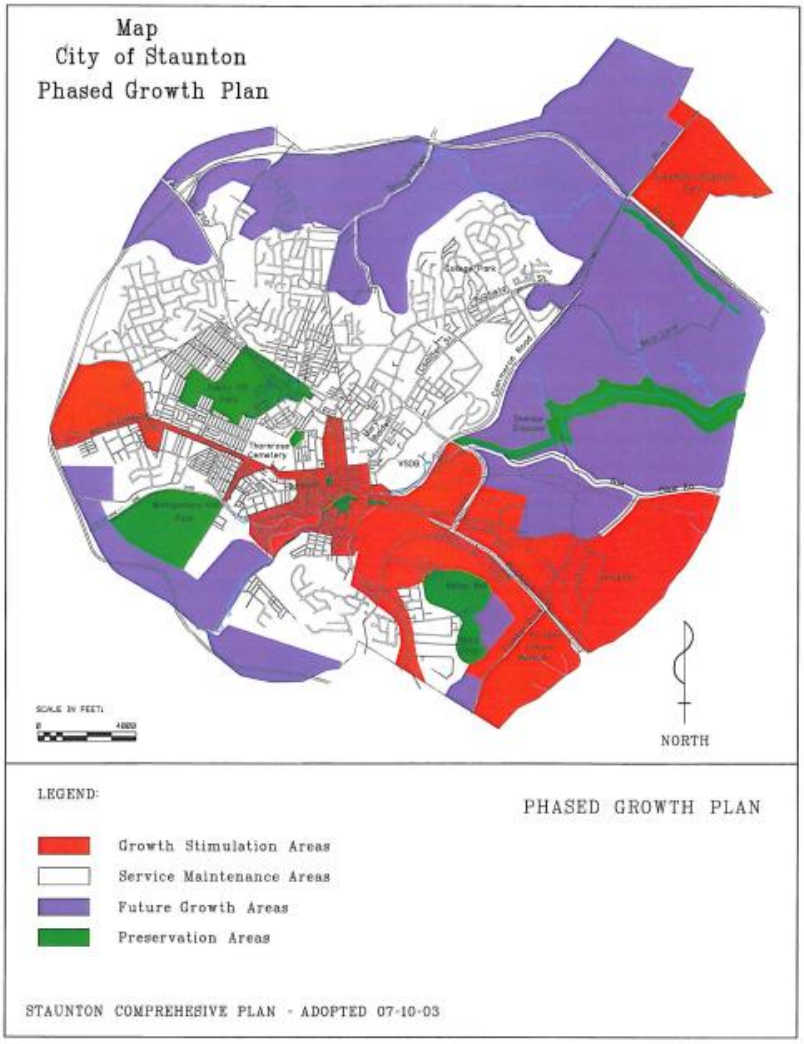
This study aimed to identify and analyze transit need in Waynesboro. It assessed the Waynesboro Circulator, concluding that low ridership was due to "the lack of frequent service, the limited service area, and its short span of service." The study included four service options, one of which was no change from the current operations. Service Option 2 recommended increasing the span by two hours from 7:45 a.m. – 5:45 p.m. to 6 a.m. to 6 p.m. Service Option 3 had two routes running 12 hours a day, with 60 minute base frequencies and 30 minute peaks. The Commercial Loop Route served the western side of the city and the East Side Route served the residential areas on the eastern side. Service Option 4 was the preferred alternative with four routes radiating from a proposed downtown transit center. A King Avenue Route and a Downtown Waynesboro Route were added to the routes in Option 3.

The study noted that the preferred alternative would require additional local match from the City, "in a time when future City revenues are projected to be stagnant." It recommended that Waynesboro develop public-private partnerships in order to fund the local match needed to implement the preferred alternative. The Waynesboro Circulator now operates from 6:45 a.m. to 6:45 p.m., similar to Option 2.

City of Staunton, Virginia Comprehensive Plan, 2010 - 2030 (adopted February 2012)

This plan aims for future development within the City of Staunton to occur in an efficient, economically and environmentally sound manner. The plan maps out four priority areas: 1) Growth stimulation, 2) Service maintenance, 3) Future growth, and 4) Preservation. Shown in the diagram in this section, Figure 3-18, the growth stimulation areas are places for new development, while the service maintenance areas are intended to maintain present density and usage. Future growth areas may be slated for development after other areas have reached desired capacities, and preservation areas are to be protected and conserved. The area along Route 250 is slated for growth, particularly the southwestern portion of the City.

Figure 3-18: Growth Stimulation Areas



The plan also details priority initiatives dealing with transportation and parking. One goal is to reduce the emphasis on parking quantity and increase the importance of parking design and use. To achieve this, the plan recommends strategies like reducing parking minimums, promoting shared parking and maximizing the use of garages and lots. A second goal is to "provide for a variety of transportation options and designs that balance pedestrian, bicycle, auto, and public transportation within the City and among key destinations." The accompanying strategies focus on traffic calming, street design, pedestrian safety and bike infrastructure. Extending the trolley routes and providing better information on schedules is specifically noted.

CSPDC 2035 Rural Long Range Transportation Plan (2011)

The CSPDC's Rural Long Range Transportation Plan states the following regional transportation goals: 1) Increase the safety of the transportation system, 2) Protect and enhance the natural, historic, and neighborhood environment while making improvements to the existing system or building new sections,

3)Preserve the existing transportation system, 4) Align transportation projects with economic development goals and opportunities, and 5) Improve the coordination of transportation planning between VDOT, cities, counties, and towns.

The plan documents existing public transit options but the bulk of the plan is dedicated to listing and mapping roadway deficiencies and associated recommendations by jurisdiction. In terms of recommendations for transit, the plan cited the strategies contained in the 2008 Central Shenandoah Coordinated Human Service Mobility Plan.

The plan also notes the importance of transportation demand management for decreasing single-occupant vehicle trips and offering commuting options. It references the Thomas Jefferson PDC's RideShare program and Roanoke's RIDE Solutions. These include commuter matching, guaranteed ride home programs, vanpool assistance, and bicycle and pedestrian resources.

Central Shenandoah Coordinated Human Service Mobility Plan (September 2013)

Augusta County, Rockingham County, Staunton, and Waynesboro are part of the larger Central Shenandoah Planning District Commission (PDC 6). Completed in 2013, the PDC 6 Coordinated Human Service Mobility (CHSM) Plan meets federal requirements for a locally developed coordinated plan. It assessed available transportation services, detailed the unmet needs of seniors, individuals with disabilities, and individuals with lower incomes, and prioritized strategies to address identified transportation gaps.

Participants in the planning process identified a variety of unmet needs. Among others, these concerned access to evening employment and GED/college classes, options for non-Medicaid health care trips, transportation on weekends and from the more rural areas of the PDC, and the need for increased marketing, outreach, and travel training. Participants identified the following strategies to address the issues/needs:

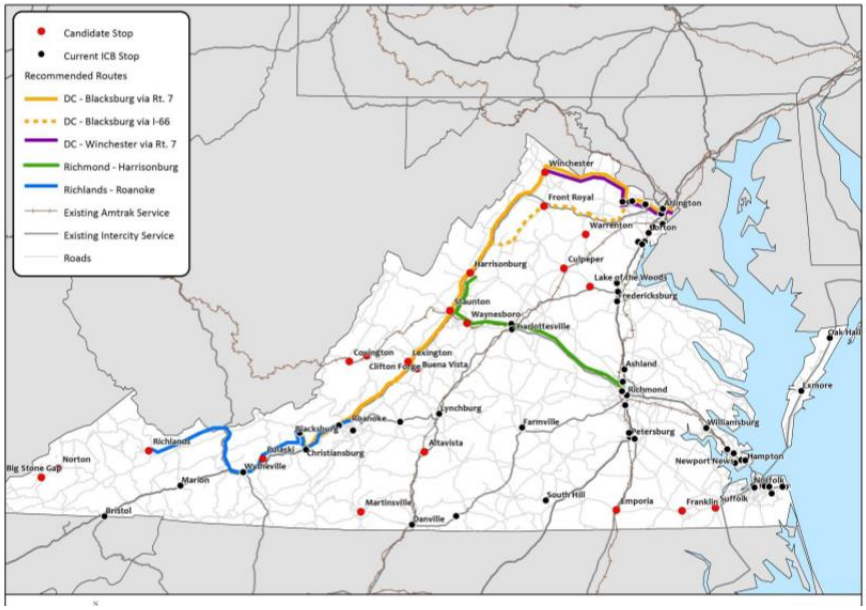
- Continue to support and maintain capital needs of coordinated human service/public transportation providers
- Build coordination among existing public, private, and human service transportation providers
- Expand outreach and information on available transportation options in each area of the region, including establishment of a central/single point of access
- Provide flexible transportation options and more specialized transportation services or one-to-one services through expanded use of volunteers

- Expand availability of demand-response services and specialized transportation services to provide additional trips for older adults, people with disabilities, veterans, and people with lower incomes
- Implement new public transportation services or operate existing public transit services on a more frequent basis
- Establish or expand programs that train customers, human service agency staff, medical facility personnel, and others in the use and availability of transportation services
- Bring new funding partners to public transit/human service transportation
- Provide targeted shuttle services to access employment opportunities

Virginia Statewide Intercity Bus Study (September 2013)

The Virginia Statewide Intercity Bus Study inventoried existing intercity services and prioritized potential routes based on based on demand, financial efficiency, and current service availability. This study is particularly important given stakeholder feedback that the TDP should explore intercity and commuter bus services connecting Harrisonburg, Staunton, Waynesboro, and Charlottesville.

Figure 3-19: Routes for Implementation



Greyhound operates daily service throughout Virginia, including two daily round trips between Baltimore and Charlottesville and three daily round trips between Richmond and Nashville via Charlottesville. Other carriers include Megabus, which operates on I-81 between Washington, D.C. and Knoxville via Christiansburg, and the NYCShuttle, which operates between Charlottesville and New York City. Despite these services, the study noted that major intercity service gaps occur within the state. Greyhound reduced its service significantly over the past decade by cutting stops in Harrisonburg, Staunton, and Waynesboro. Intercity providers, public transit systems, and regional planning agencies surveyed for the study also

requested service to the northwestern Shenandoah region (Winchester, Front Royal, Harrisonburg, and Staunton).

Depicted above in Figure 3-19, the study prioritized four routes for implementation: Two covered the CSPDC region: 1) Washington, DC to Blacksburg via Harrisonburg and Staunton, and 2) Richmond to Harrisonburg via Charlottesville, Waynesboro, and Staunton.

CHAPTER SUMMARY

The system evaluation and needs analysis involved collecting and reviewing data and input from many different sources: performance data, boarding/alighting counts, passenger surveys, community surveys, stakeholder interviews, demographics, and land use and transportation plans. The results of the system evaluation and the priorities identified in this needs analysis were used as a basis for the alternatives presented in Chapter 4.

Chapter 4 - Alternatives for Improvement

INTRODUCTION

This fourth chapter prepared for the CSPDC TDP provided a range of organizational and service alternatives for the stakeholders to consider when planning transit services for the six-year planning horizon covered by the TDP. These alternatives were developed based on the data compiled and analyzed in chapters 1-3, combined with initiatives already underway in the region. For each alternative there is a description of the concept; for those where a decision regarding implementation has not yet been determined, there is also a discussion concerning the advantages and disadvantages, and a cost estimate. Organizational alternatives are presented first, followed by service alternatives. These alternative concepts were considered by the TDP Committee, with several chosen for the six-year plan (Chapter 5)

ORGANIZATIONAL ALTERNATIVES

Organizational alternatives include proposals for potential changes that affect the way that transit is guided, administered, and managed in the region. There are several potential changes that fall under this category that are relevant for the regional stakeholders to consider. The first organizational alternative has already been determined by DRPT, the ones that follow were discussed by regional stakeholders during the alternatives analysis phase of the TDP.

Organizational Alternative #1 – Change in Rural Grantee

In February 2015, DRPT sent a letter to the CSPDC indicating that, beginning with FY17, the CSPDC will become the designated sub-recipient for federal S.5311 rural transit funding in the region. DRPT staff indicated that the Commonwealth has been shifting its sub-recipient policies such that local governmental entities, rather than third party transit providers, will be the designated local grant sub-recipients. For the CSPDC region, this will combine the rural and urban grant oversight functions so that the CSPDC will manage both programs. For FY16, VRT will remain the designated 5311 sub-recipient in the region. The CSPDC will need to conduct a procurement process to choose a contractor for both the urban and rural service, starting with FY17.

Fishersville Facility

FTA guidance indicates that as an FTA/DRPT- funded facility, VRT's Fishersville facility is to remain in use in support of public transportation in the region for its useful life. Continued DRPT and FTA guidance will be needed to sort through how to handle the ownership details with regard to this facility.

There are also several tenants leasing space in the facility. This is permissible under FTA guidance, which states "income received from the incidental use may be retained by the grantee if the income is used for eligible transit capital and operating expenses. This income cannot be used as part of the local share of the grant from which it was derived, but may be used as part of the local share for a different FTA grant."[1]

Organizational Alternative #2- Develop Cohesive Brand and Improve Community Awareness

One of the issues that the CSPDC identified prior to beginning work on the TDP is that of brand confusion with regard to the name and identity of the public transportation program in the region. This brand confusion was confirmed by the rider and public surveys, with riders and the public identifying with several different names for the program (CATS, VRT, individual route names, etc.) It is not surprising that there is brand confusion, given that each service has evolved independently for different constituencies. While there is brand confusion, the services do operate as a cohesive system, operated by same transit provider (VRT), with timed connections between services at key locations.

In order to help reduce or eliminate this brand confusion, the CSPDC and DRPT added a branding task to the TDP to develop a cohesive brand, logo, and strategies to improve community awareness of transit in the region. Pulsar Advertising, a sub-contractor to KFH Group, has been working through this task concurrently as the TDP work has progressed. Documentation of Pulsar's complete work will be included as a companion to the TDP and is summarized below.

With input from the study committee, Pulsar has developed a brand personality statement for the transit program that reads:

> "*CSPDC Service*, our regional public transit service, with helpful friendly staff and safe reliable buses, provides affordable transportation to get me where I need to go."[2]

Pulsar staff then developed a series of potential names based on input provided by the study committee. The first list of 10 names was presented to the study committee in February. Some of these names were discarded, and a few were added by CSPDC staff and stakeholders. The

[1] FTA Circular 5010.1C Grant Management Guidelines, August 27, 2012.
[2] *CSPDC Service* is a placeholder for the name of the transit program.

committee narrowed the list to four names: BRITE (Blue Ridge Intercity Transit Express); Mountain Valley Transit; ShenanGO (ShenanGOah); and Blue Ridge Transit. Two to three logos for each of these names were also developed for committee review.

Of these names, BRITE was chosen to move forward with full logo development. When the branding task is completed, Pulsar will deliver Electronic files for logo and type treatment (*.eps, *.pdf, *.png), as well as a brand standards fact sheet that will include logo and identity usage guidelines (e.g., font, visual elements, and logo color usage)

Once the branding work is completed, the CSPDC will need to work on a re-branding effort. The full list of tasks will include the development of:

- Maps and schedules
- Vehicle exterior paint scheme
- Signage
- Social media
- Website

The re-branding campaign will serve to improve community awareness of transit as well as provide an opportunity to re-design the system maps and schedules. These are important improvements, as stakeholder input suggested that the current maps and schedules are confusing for riders to understand. It may be helpful to include a stakeholder who represents people with intellectual disabilities in the process when designing the new schedules.

Costs

There are significant costs associated with re-branding the transit program, though some of them are costs that are already being incurred by the system, such as map and brochure development and printing. There are also a number of activities associated with the re-branding effort, some of which can be handled internally, while others will likely need to be performed by outside contractors.

These costs are estimated below:

Map/Schedule Design and Printing	$20,000
Vehicle Exterior Paint Scheme	$20,000
Signage	$ 7,800
Website and Social Media	$25,000

Organizational Alternative #3 - Transit Advisory Group

A transit advisory group is typically comprised of community stakeholders who have an interest in preserving and enhancing transit in the community, much like the advisory committee that has been organized to help guide the TDP for the CSPDC. Over the past several years, the CATS Board has served in this advisory role to VRT, helping to guide the region's transit program. It is suggested that a transit advisory group be established to provide input and feedback to the CSPDC, to assist them in transit-related decision-making.

The following groups (which include several current CATS Board members) should be considered for inclusion on the transit advisory group:

- Local funding partners
  - Augusta County
  - Augusta Health
  - Blue Ridge Community College
  - City of Staunton
  - City of Waynesboro
  - Shenandoah Valley Social Services
  - Staunton Downtown Development
  - Woodrow Wilson Rehabilitation Center
  - A member of the CATS Board

- Future Funding Partners

- Other interested stakeholders, which could include:
  - An at-large community representative designated by the CATS Board
  - Advocates for senior citizens and people with disabilities
  - Chamber of commerce and/or economic development representatives
  - MPO representation
  - Other human service agency representatives
  - A transit rider representative

The role of a transit advisory group is to help the transit program better meet mobility needs in the community by serving as a link between the citizens served by the various entities and public transportation. A transit advisory group is a good community outreach tool for transit programs, as having an ongoing dialogue with stakeholders allows for a greater understanding for transit staff of transit needs in the community, as well as greater understanding by the community of the various constraints faced by the transit program. Transit advisory groups also typically serve in an advisory capacity for transportation development plans and other transit initiatives. It is suggested that this board be comprised of no more than 15 members, and that they meet quarterly, at a minimum.

Advantages

- Provides a forum for dialogue between the community and the transit program
- Maintains continuity from the current CATS Board by including all funding partners
- Provides a venue for community networking
- Can be a good community relations and marketing tool
- Provides input to the CSPDC Commission transit decision-making process

Disadvantages

- Takes staff time to organize and document committee meetings and initiatives

Cost

- The expenses associated with forming a transit advisory group are modest and include the cost associated with the staff time spent planning and organizing the meetings, as well as any printing and presentation materials needed for the meetings.

Organizational Alternative #4 – Vehicle Ownership- CSPDC or Contractor?

As a relatively new S.5307 grantee, the CSPDC has not historically owned vehicles. Currently, the vehicles operated in the region are owned by CSPDC's contractor, VRT, with DRPT maintaining a financial interest in the vehicles through their useful life. These vehicles were purchased through DRPT, with funding assistance from the federal S.5311 (80%) program, DRPT (up to 16%), and the remaining local matching funds provided by VRT and local partners.

For the current year (FY15), the CSPDC is using FTA's Capital Cost of Contracting provisions, which allow the CSPDC to categorize half of the contract with VRT as capital, providing for an 80 percent matching ratio for that portion of the contract. While the CSPDC is using this provision during the current grant year, the agency is interested in determining the optimal scenario with regard to vehicle ownership, specifically, is it more advantageous for the agency to own the transit vehicles or to continue to include the vehicles as part of the "Turnkey" contract with its contractor?[3]

[3] Currently the CSPDC categorizes the contract with VRT as "Turnkey," with the contractor providing the vehicles, maintenance, and transit service. Under this classification, 50 percent of the contract costs are eligible for 80 percent federal share and 50 percent of the costs are eligible for 50% federal share. This scenario falls under the FTA's "capital cost of contracting," which recognizes the capital consumed by the contractor for the delivery of public transportation service. The FTA Circular states that "only the costs attributable to the privately owned assets are eligible under this policy." Items purchased with federal, state, or local government assistance are not eligible.

In order to help the CSPDC decide which direction to pursue in the future, an analysis of the advantages, disadvantages, and financial implications associated with vehicle ownership is provided below.

Advantages

As documented in the Transportation Research Board's Special Report 258, "Contracting for Bus and Demand Response Transit Services: A Survey of U.S. Practice and Experience,"[4] there are several advantages that can be realized by public agency grant recipients that choose to own the vehicles that are operated by their contractors. These are:

- The public agency can take advantage of federal and state capital grant assistance to purchase the vehicles. This assistance is currently significant, with 2015 DRPT match rates of 80 percent federal, 16 percent state, and four percent local.
- There are likely to be more potential contractors interested in submitting bids to provide the service if they do not have to furnish the vehicles, particularly for a relatively small contract.
- Without the need for the contractor to amortize the vehicles over several years, the contract duration can be shorter.
- If the contractor is not performing, it is quicker and easier for a public agency to re-bid the contract if it owns the vehicles used for the service.

In GAO Report 13-783 "Transit Agencies' Use of Contractors to Provide Service"[5], a survey of transit agencies found that less than half of the agencies that contracted out for service included vehicles. The interviews conducted for the GAO report found that transit agencies generally preferred to own vehicles for similar reasons that were documented in the TRB report. These are:

- More flexibility to terminate a contract without service interruption
- The ability to attract bidders who would otherwise be hesitant to buy expensive vehicles without the assurance that they would be used beyond the initial length of the contract
- Control in making decisions about vehicle replacement and major repairs, such as replacing engines and transmissions. Contractors may anticipate and budget for these expenses in a contract without knowing for certain if they will be needed in order to minimize financial risk.

[4] TRB Special Report 258, "Contracting for Bus and Demand Response Transit Services: A Survey of U.S. Practice and Experience," 2001.
[5] GAO Report to Congressional Committees, "Transit Agencies' Use of Contracting to Provide Service," September 2013.

These two studies suggest that ownership of the vehicles would give the CSPDC more control of the fleet, with a greater ability to specify vehicle choices, vehicle condition, and useful life.

Disadvantages

In addition to the advantages described above, there are also some disadvantages for the PDC to consider when contemplating vehicle ownership. These are:

- Purchasing vehicles with federal and state funds requires staff time to submit grants and ensure compliance with numerous federal and state requirements. Discussions with other grantees in Virginia indicated that if the PDC were to purchase vehicles through the DRPT contract, the time and effort involved in the process would be significantly less than if the PDC were to purchase vehicles on their own.

- Purchasing vehicles requires the PDC to provide local matching funds (though the current investment is just 4 percent local share).

- The amount of funding needed each year is variable, depending upon the vehicle replacement/expansion needs for the year. This variability can be difficult for some agencies to manage from a cash flow perspective. There would be less year-to-year variance if the cost of the vehicles were to be included in a blended contract rate.

- There may be less flexibility with regard to expanding and/or reducing service if the PDC owns the vehicles. For example, a private contractor may be able to provide vehicles more quickly if a new service or expanded service were to be needed. The PDC would likely have to wait for the grant cycle and DPRT procurement process, which can take about ten to 14 months from start to finish.

- There are a number of different types of vehicles in service in the region, making it more complicated and time consuming to order vehicles.

Costs

In addition to looking at programmatic advantages and disadvantages to public vehicle ownership, there are also cost considerations. These are discussed below.

Contractor Pricing and the Capital Cost of Contracting

Typically, when a contractor provides the capital, the transit agency will pay not only for the actual cost for the capital items, but also usually a mark-up by the contractor that accounts for the use of the contractor's funds. Most private companies look at their return on investment (ROI), and if they are investing their funds to purchase vehicles or some other large cost items that must be purchased for the contract, they will evaluate the return their money could get elsewhere. The contractor's mark-up accounts for this valuation. This has not occurred yet in

this region, as VRT is using vehicles that were purchased with FTA/DRPT funds. When transit agencies have capital grant funds, it may be more cost effective to use those funds to acquire needed capital equipment.

The actual cost that is passed along to the transit agency will vary depending upon the type of the vehicle and the length of the contract. Transit industry research suggests that this cost is in the range of $6.00 to $10.00 per revenue vehicle service hour. For CSPDC, this would represent an annual cost of between $105,000 and $175,000, based on the annual urbanized area vehicle revenue hours of about 17,500. The CSPDC could recoup some of this cost through the capital cost of contracting provisions that are allowed with a turnkey contract. The FTA allows 50 percent of a turnkey contract to be funded at 80 percent federal match, with fifty percent of the contract funded at 50 percent federal match. This compares to a service contract where the transit agency owns the vehicles and the contractor operates and maintains them, which allows forty percent of the contract to be funded at eighty percent federal match, with sixty percent of the contract funded at fifty percent match.

The cost implications for the following three scenarios are presented below in Table 4-1. One: A service contract where the transit agency owns the vehicles and the contractor operates service and maintains the vehicles at a rate of $59 per hour. Two: A turnkey contract where the contractor owns, operates and maintains the vehicles at a rate of $65 per hour. Three: A turnkey contract at a rate of $69 per hour. Under each scenario, an additional eleven percent should be added to the contractor's cost, to reflect CSPDC oversight expenses. Additional cost of vehicle ownership expenses are also included under the first scenario. The CSPDC expenses would need to be split using the fifty percent federal match formula.

Table 4-1: Capital Cost of Contracting Examples- Urbanized Area Only

Assumptions	
Hours of service	17,500
Hourly rate not including vehicles	$59
Low end of hourly rate including vehicles	$65
High end of hourly rate including vehicles	$69
Contract cost without vehicles	$1,032,500
Contract cost with vehicles- low end rate	$1,137,500
Contract cost with vehicles- high end rate	$1,207,500

Table 4-1: Capital Cost of Contracting Examples- Urbanized Area Only (continued)

Budget Line Items	Contract Cost - Vehicles Owned by CSPDC	Contract Cost- Add'l Vehicle Cost @ $69.00 Per Vehicle Hour	Contract Cost- Add'l Vehicle Cost @ $10.00 Per Vehicle Hour
Service Contract - 40% of the contract eligible for 80% share	$1,032,500		
Service Contract - 50% of the contract eligible for 80% share		$1,137,500	$1,207,500
CSPDC Expenses	$127,926	$122,926	$122,926
Total	$1,160,426	$1,260,426	$1,330,426
Fares	$45,000	$45,000	$45,000
Net Deficit	**$1,115,426**	**$1,215,426**	**$1,285,426**
Federal- 50 or 60% at a 50% match	$296,250	$273,125	$290,625
Federal- 40% or 50% at an 80% match	$316,000	$437,000	$465,000
Federal - 50% of CSPDC Cost	$63,963	$61,463	$61,463
Total allowable federal for operating with matching ratios	$676,213	**$771,588**	**$817,088**
Federal S. 5307 allocation	$760,922	$760,922	$760,922
Federal allocation left for capital	**$84,709**	**($10,666)**	**($56,166)**
Left to cover with state and local	$439,213	$454,504	$524,504
Current state and local combined: $512,046			

These examples suggest that if vehicles are included in the contract rate, the S.5307 allocation would not be sufficient to allow for any other capital, and at the highest level would require additional local and state funds to support the current level of service.

Expenses and Other Financial Issues Associated with Vehicle Ownership

While the actual local cash requirements to purchase vehicles are relatively low with the current grant programs (4%), there are some other costs to consider with regard vehicle ownership. These are as follows:

- **Insurance.** Vehicle insurance is a cost associated with vehicle ownership but it is not likely to be a decisive factor, as the PDC will either pay directly for vehicle insurance or pay for vehicle insurance through its contract. Currently the vehicles are owned and insured through VRT and the cost is included as part of the annual operating budget and resulting contract rate. If the PDC were to own vehicles, they would need to investigate the most cost effective option. There are examples in the industry where the

contractor insures the agency's vehicles as well as examples where the public agency insures the vehicles.

- **Staff Time.** There is staff time associated with vehicle ownership. Particular staff tasks include the following:
    - Grant completion
    - Vehicle ordering
    - Vehicle inspection and DMV tagging
    - Compliance monitoring – the transit agency is responsible for ensuring that federally funded vehicles are properly maintained.
    - Vehicle disposal

  Based on discussions with other transit operators in the Commonwealth, KFH Group has estimated that the staff time associated with vehicle ownership (when purchasing vehicles using the state contract) equates to about 10 percent of a staff person's time, assuming 2-3 vehicles are replaced each year. If the salary and fringe of the staff member equates to $50,000 annually, the associated cost would be about $5,000 annually. This cost may reduce over time, as staff become more experienced with the process.

  The issue for the PDC may be that of staff availability and expertise– Do any current staff members have the capacity and ability to add this to their workload?

  Another option that the PDC is exploring is the use of a third-party to manage the vehicle-related tasks for the PDC. A third party would conduct the tasks listed above for the PDC, for a mutually agreed upon price. This arrangement would require the PDC to follow FTA-approved procurement steps.

- Maintenance is also a significant cost associated with vehicle ownership, but these expenses would be covered by the contractor, as part of the contract fee. Recognition of maintenance costs is why the FTA allows 40 percent of a service contract to be covered at the 80 percent match rate (preventive maintenance can be capitalized).

Finally, if the vehicles were to be owned by the CSPDC, there would be some revenue associated with vehicle disposal. The revenue earned through vehicle disposal must be put back into the transit program. If the vehicles have been well-maintained, they will typically sell for between 4 and 10 percent of their original cost through govdeals.com, or local auctions. If the agency disposes of two vehicles a year, this would likely net between $4,000 and $10,000 annually for the program. Eventually, the proceeds from vehicle disposal may be enough to cover the cost of the staff time associated with vehicle ownership – either PDC or third-party.

Organizational Alternative #5 – Formalization of Local Funding Formula

The initiation and growth of transit services in the region has been incremental in nature, with each service evolving separately, each with its own financing arrangements, to make the funding situation work between federal, state, and local partner financing. Although not formalized, the current arrangement to assign local match among funding partners is as follows:

- The gross operating cost for each service is calculated, based on the fully allocated cost per revenue hour.
- Estimated fare revenue, based on the previous year's data is applied to arrive at a net deficit per service. Fare revenue is calculated by individual route, to reflect the significant differences in fare revenue that is collected on each route.
- Federal and state funding is applied to arrive at the local match required per service.
- Each partners' share is estimated based on the number of hours assigned to each partner. This is relatively simple for the single payer routes (i.e., Waynesboro), but more difficult to estimate for the routes that have multiple partners.

While this is the general arrangement, the allocation of the amounts provided by each partner are a little different from this, as is shown in Tables 4-2 and 4-3. These tables show that some of the Augusta County funds, as well as some of the BRCC funds are being allocated to the Waynesboro Circulator. In addition, BRCC funds are being allocated to the 340 Connector. These allocation anomalies make it appear that the BRCC routes are under-funded, and creates a surplus for the 340 Connector and the Waynesboro Circulator. In addition, the allocation among the Staunton services shows a surplus for the on-demand service, but deficits for the Green and Silver Trolleys.

In order to help clarify the true financial condition of each of the routes, it is proposed that the local amounts be re-allocated among the services. The proposed reallocated local funds are shown in Table 4-4 and Table 4-5.

Table 4-2: Current Funding Allocations- Urban Routes

	Urban Routes						
Partners	**250 Connector**	**Staunton Green**	**Staunton Silver**	**Staunton Red**	**Staunton On-Demand**	**Waynesboro Circulator**	**Total**
Augusta County							$ -
Augusta Health	$ 69,888					$ 7,770	$ 77,658
BRCC						$ 8,774	$ 8,774
City of Staunton		$ 32,311	$ 26,280	$ 4,389	$ 42,042		$ 105,022
City of Waynesboro						$ 46,301	$ 46,301
Shenandoah Valley DSS	$ 8,939	$ 5,968	$ 4,851	$ 810		$ 4,832	$ 25,400
Staunton DDA		$ 5,000		$ 5,000			$ 10,000
WWRC	$ 30,000						$ 30,000
Total	**$ 108,827**	**$ 43,279**	**$ 31,131**	**$ 10,199**	**$ 42,042**	**$ 67,677**	**$ 303,155**
Local Match Needed	**$ 99,482**	**$ 45,188**	**$ 37,882**	**$ 5,877**	**$ 29,438**	**$ 48,198**	**$ 266,065**
Difference	**$ 9,345**	**$ (1,909)**	**$ (6,751)**	**$ 4,322**	**$ 12,604**	**$ 19,479**	**$ 37,090**

Source: CSPDC

Table 4-3: Current Partner Allocations- Rural Routes

Partners	340 Connector	BRCC North	BRCC South	Augusta On-Demand	Total
Augusta County	$ 22,628			$ 5,040	$ 27,668
BRCC	$ 25,551	$ 61,890	$ 57,512		$ 144,953
Total	**$ 48,179**	**$ 61,890**	**$ 57,512**	**$ 5,040**	**$ 172,621**
Local Match Needed	**$ 32,531**	**$ 79,426**	**$ 77,898**	**$ 7,202**	**$ 197,057**
Difference	**$ 15,648**	**$ (17,536)**	**$ (20,386)**	**$ (2,162)**	**$ (24,436)**

Table 4- 4: Potential Re-Allocation of Local Funding

	Urban Routes						
Partners	**250 Connector**	**Staunton Green**	**Staunton Silver**	**Staunton Red**	**Staunton On-Demand**	**Waynesboro Circulator**	**Total**
Augusta County							$ -
Augusta Health	$ 69,888						$ 69,888
BRCC							$ -
City of Staunton		$ 34,220	$ 33,031	$ 4,389	$ 33,402		$ 105,042
City of Waynesboro						$ 46,301	$ 46,301
Shenandoah Valley DSS	$ 8,939	$ 5,968	$ 4,851	$ 810		$ 4,832	$ 25,400
Staunton DDA		$ 5,000		$ 5,000			$ 10,000
WWRC	$ 30,000						$ 30,000
Total	**$ 108,827**	**$ 45,188**	**$ 37,882**	**$ 10,199**	**$ 33,402**	**$ 51,133**	**$ 286,631**
Local Match Needed	**$ 99,482**	**$ 45,188**	**$ 37,882**	**$ 5,877**	**$ 29,438**	**$ 48,198**	**$ 266,065**
Difference	**$ 9,345**	**$ -**	**$ -**	**$ 4,322**	**$ 3,964**	**$ 2,935**	**$ 20,566**

Table 4-5: Potential Local Funding Re-Allocation, Rural Routes

Partners	340 Connector	BRCC North	BRCC South	Augusta On-Demand	Total
Augusta County	$ 30,398			$ 5,040	$ 35,438
BRCC		$ 79,426	$ 74,302		$ 153,728
Total	**$ 30,398**	**$ 79,426**	**$ 74,302**	**$ 5,040**	**$ 189,166**
Local Match Needed	**$ 32,531**	**$ 79,426**	**$ 77,898**	**$ 7,202**	**$ 197,057**
Difference	**$ (2,133)**	**$ -**	**$ (3,596)**	**$ (2,162)**	**$ (7,891)**

As these tables show, there is currently a small surplus on the urban side and a small deficit on the rural side. If some local adjustments were made between the urban and rural (perhaps with some of the DSS funds being shifted), the current arrangements are pretty close to being in balance.

In order to develop a fair methodology to divide the local share required among the routes for future improvements, as well as shortfalls that may occur if funding partners drop out, the revenue hours and revenue miles per jurisdiction were calculated. It is proposed the following methodology be used for future allocations**:**

1) If an improvement is an entire route or service desired by a new funding partner, then the entire local portion of the cost of the improvement would be paid by the new partner on a cost per hour basis. The average current local share per hour is $15.18 on the urban side and $22.91 on the rural side. Adding a 1ten percentcapital fund contribution on top of these hourly rates would equate to an urban local cost per hour of $16.70 and a rural local cost per hour of $25.20. These proposed costs assume that there are federal and state matching funds available.

2) If an improvement is desired collectively for the public and is split among jurisdictions, it is proposed that the local cost of the improvement be calculated on a local cost per hour basis ($16.70 urban; $25.20 rural), and then divided among the jurisdictions based on the percentage of service in each jurisdiction (either revenue miles or revenue hours). These proposed costs assume that there are federal and state matching funds available. Table 4-6 provides the current breakdown of service by jurisdiction.

3) If an improvement is desired by a particular agency or jurisdiction (i.e., such as a dedicated stop) and requires a modest deviation in an existing route, then the local cost of the deviation (based on hours of service), should be calculated and used as the cost basis to charge the agency.

Table 4-6: Current Revenue Miles and Hours Per Jurisdiction

	Total revenue miles in each jurisdiction					
Service	**Augusta**	**Harrisonburg**	**Rockingham**	**Staunton**	**Waynesboro**	**Total**
250 Connector	50,567	-	-	20,053	17,437	87,185
Staunton Green	-	-	-	17,907	-	17,907
Staunton Silver	-	-	-	20,476	-	20,476
Staunton Red	-	-	-	6,180	-	6,180
Waynesboro Circulator	-	-	-	46,441	46,441	46,441
Staunton On Demand	-	-	-	24,864	-	24,864
Urban Totals	**50,567**	**-**	**-**	**135,921**	**63,878**	**203,053**
% Total	**25%**	**0%**	**0%**	**67%**	**31%**	
340 Connector	31,369	-	1,459	-	4,012	36,475
BRCC North	11,927	15,903	37,770	-	-	66,263
BRCC South	40,130	-	-	21,609	-	61,739
Augusta On-Demand	6,988	-	-	6,988	-	6,988
Rural Totals	**90,414**	**15,903**	**39,229**	**28,597**	**4,012**	**171,465**
% Total	**53%**	**9%**	**23%**	**17%**	**2%**	

	Total revenue hours in each jurisdiction					
Service	**Augusta**	**Harrisonburg**	**Rockingham**	**Staunton**	**Waynesboro**	**Total**
250 Connector	3,816	-	-	1,513	1,316	6,580
Staunton Green	-	-	-	3,035	-	3,035
Staunton Silver	-	-	-	2,467	-	2,467
Staunton Red	-	-	-	412	-	412
Waynesboro Circulator	-	-	-	-	2,958	2,958
Staunton On Demand	-	-	-	2,072	-	2,072
Urban Totals	**3,816**	**-**	**-**	**9,499**	**4,274**	**17,524**
	22%	**0%**	**0%**	**54%**	**24%**	
340 Connector	1,255	-	58	-	160	1,459
BRCC North	636	848	2,014	-	-	3,534
BRCC South	2,135	-	-	1,149	-	3,284
Augusta On-Demand	325	-	-	-	-	325
Rural Totals	**4,350**	**848**	**2,073**	**1,149**	**160**	**8,602**
	51%	**10%**	**24%**	**13%**	**2%**	

Organizational Alternative #6 – Seek Additional Local Funding Partners

There are currently eight funding partners that contribute annually to the transit program, in support of either their constituents (Cities of Staunton and Waynesboro); Augusta County; Staunton Downtown Development); their students (Blue Ridge Community College and Woodrow Wilson Rehabilitation Center); or their clients (Augusta Health and Shenandoah Valley Social Services). The funding provided by these partners provides matching funds so that the CSPDC and VRT can access a significant level of federal and state funding, which allows the system to provide needed services to the targeted constituent groups, as well as the public.

In addition to these eight funding partners, there are other entities in the region whose constituencies benefit from public transportation services. Some of these are already directly served by transit services, while others could be served with route adjustments. While this list is not exhaustive, the following entities currently enjoy transit access for their clients and do not currently contribute towards its operation:

- Bridgewater College
- Mary Baldwin College/Murphy-Deming
- Valley Program for Aging Services
- Vector Industries (call-in stop)
- Virginia Department for the Blind and Visually Impaired
- Virginia Employment Commission

The Murphy-Deming College of Health Sciences (part of Mary Baldwin) opened a new Health Sciences building in Fishersville (June 2014), close to the Augusta Health campus. Students can use the 250 Connector to access the site, but it does not have a direct stop.

These entities could be approached to see if they are willing and able to contribute to the system to support public transportation services in the region in support of their constituencies. Additional matching funds could be used to expand services to better support specific constituent needs, as well as public needs.

Approaching potential funding partners is typically a sensitive topic for transit programs to handle, as all riders are members of the public, with a right to access services offered through FTA/DRPT funding. The key differences for the constituencies of the partners are:

- Direct access
- Participation in system planning and decision-making
- Tailored services
- Fare-free for the riders (in some instances)

These are the benefits to partnership that the CSPDC could highlight and formalize when approaching potential new partners. If additional partners are added, it will be important to ensure that the financial participation directly offsets the benefits of participation offered by the CSPDC (be it direct access, tailored service, or fare-free service). The formalization of the local funding formula should ensure this (Organizational Alternative #5).

SERVICE ALTERNATIVES

The service alternatives were developed through the analysis of specific route performance data coupled with the gaps in current services identified through input from riders, residents, and other stakeholders. The proposed alternatives draw on the information gathered in the previous three chapters and focus on the following:

- General System and Infrastructure Improvements
- Improving the Efficiency, Effectiveness, or Convenience of Current Services
- Geographic System Expansions

Each service alternative is detailed in this section, and includes:

- A summary of the service alternative
- Potential advantages and disadvantages
- An estimate of the operating and capital costs
- Ridership estimates (if applicable)

The cost information for these alternatives 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 expansions. This does overstate 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. These cost estimates were based on FY15 operating budgets. The potential funding for each alternative is also presented, based on current federal/state/local splits. It should be noted that availability of federal and state funds may limit the implementation of these alternatives. The alternatives are not presented in any particular order.

General System and Infrastructure Improvements

Improve Transit Infrastructure

One of the common themes from survey respondents and stakeholders was the need to improve transit infrastructure in the region, including additional and improved bus stops, signage, and shelters. Of the 75 "official" system stops, 67 are signed. The larger issue is the number of "unofficial" stops and the need to add signage to mark these locations. In addition,

when improving bus stops, it is required that a transit agency bring the stop into compliance with the Americans with Disabilities Act. As a companion task to the TDP, KFH Group has conducted an ADA assessment of all of the bus stops in the service area. This assessment will be available at the culmination of the TDP process.

Seven of the current "official" stops have passenger waiting shelters. This alternative proposes the following improvements:

- Sign all fixed-route stops, including those that are currently "unofficial" stops
- Eliminate flag stops
- Reduce call stops, especially on the 250 Connector
- Improve signage at transfer locations, particularly the Waynesboro hub
- Add shelters at key stops, choosing a ridership threshold for consideration (such as 25 daily boardings)

This alternative is particularly relevant given the re-branding effort that is underway. The re-branding of the system, coupled with improved infrastructure will likely increase the presence of the system within the community.

Advantages

- Eliminates rider confusion about where the bus stops are located
- Eliminates the need for the driver to determine if a stop is safe
- Raises awareness of the system within the community
- Provides more comfortable wait locations for riders

Disadvantages

- Will require some effort to determine the locations of the "unofficial" stops and work through signage regulations among the jurisdictions served.
- Once in place, the additional signed stops and shelters will require maintenance to ensure that they remain in good condition.

Costs and Funding Sources

- The costs to add bus stops are variable, depending upon whether just a sign is needed, or whether a concrete pad, pole, and sign are all needed. If just the sign itself is required, the cost is estimated to be about $100 per stop. For a concrete pad, pole, and sign, the cost rises to about $4,000 per stop.

- The installation of passenger wait shelters would need to include the concrete pad, pole, and sign, as well as the shelter itself. These costs together are about $9,000 ($4,000 for the pad, sign, and pole; $5,000 for the shelter).

- As a capital expense, bus stop infrastructure is currently funded at eighty percent federal, sixteen percent state, and four percent local.

Standardize Fixed Route Fare Structure

As previously discussed, the transit program in the region has evolved from a combination of individual services. As such, the fare structures are not standard, even among similar service types. Different fares for different services do sometimes make sense (i.e., lower fares for circulators and higher fares for longer distances), but in this region, only the Staunton Trolleys have a lower fare. It should be noted that generally the fares in the region are lower than in peer regions.

While the fare structure was not mentioned by survey respondents or stakeholders as an issue, it came to light when examining the fare for ADA complementary paratransit in Staunton. Federal guidance indicates that the ADA fare can only be twice the fixed route fare. In this instance, the ADA fare is $1.00 and the trolley fares are only $.25. This issue will need to be addressed in order for the program to be in compliance with the ADA. This means that either the trolley fares need to be raised to $0.50 (similar to the rest of the system), or the ADA fare needs to be reduced to $0.50. Raising the fare would standardize the fare structures, but would result in an additional 100 percent fare increase for the trolley routes (note that the trolleys were free prior to FY14). Alternatively, reducing the ADA fare is not consistent with promoting the use of fixed route services over on-demand services and would reduce revenue.

Advantages

- Standardizing the fixed route fare structure would reduce confusion among riders of the system and allow system fare information to be consolidated.

- A consistent fare structure will result in a definitive allowable ADA fare.

- Raising the trolley fare by $0.25 will result in increased fare revenue. Using the standard fare elasticity that assumes ridership would drop as much as 30 percent, and the applying the simple cash fares of $0.25 versus $0.50, the resulting fare revenue would increase from $18,663 to $26,129. Note this overstates the fares, as discounts are not included in the example.

Disadvantages

- Standardizing the fixed route fare structure will either result in another fare increase for the trolleys or a fare decrease for ADA paratransit, neither of which is appealing for the system.

- If the fare is increased on the trolleys, ridership will likely decline, but not as dramatically as when the fare was introduced. The reduction in ridership could be as much as thirty percent, using standard transit elasticity formulas that suggest for every one percent increase in fares, there is a corresponding 0.03 percent drop in ridership. This suggests that a 100 percent increase in fares would result in a thirty percent drop in ridership. This is likely to be on the high end, given the current low fares. If this ridership loss were to occur, it would represent about 22,400 passenger trips.

- Lowering the current ADA fare would represent a loss of about $964 annually.

Develop Transit Pass Program

Stakeholders have expressed an interest in developing a pass program for frequent users of the system. There are a number of issues to consider when developing a pass program. The major ones include:

- How much of a discount (if any) should be offered to frequent users?
- How much will this affect fare revenue?
- How will the CSPDC track and secure passes to reduce fraud or theft?
- What outlets will the CSPDC use to sell passes?

There are a several different types of pass programs currently in use in the Commonwealth. Table 4-7 summarizes the features of five Virginia transit pass programs.

Table 4-7: Examples of Transit Pass Programs in Virginia

Transit Program	Base Fare	Passes available
Charlottesville Area Transit	$0.75	Unlimited day pass - $1.50; Reduced fare day pass - $0.75; Monthly passes: $20/$10 reduced fare
Greater Lynchburg Transit Authority	$2.00	Day pass - $4.00; Monthly/31 day pass - $50.00; 15-day pass- $25.00
Harrisonburg Department of Public Transportation	$ 1.00	Coupon book - 25 trips for $20.00; half-fare book - 25 trips for $10.00
Valley Metro (Roanoke)	$ 1.50	Unlimited monthly pass - $48.00; Weekly - $14.00
Winchester Transit	$ 1.00	Coupon book - 20 trips for $17.00

While a complete analysis concerning the effects of a pass program is not possible without developing additional details, the general advantages and disadvantages are offered below.

Advantages

- Potentially offers a discount for frequent users.
- Could increase ridership if frequent users make more trips/
- Reduces the need for riders to have exact change.
- Provides a mechanism for the CSPDC to provide partner agencies with fare discounts (other than the current tokens).
- Convenient for riders, as they do not have to carry cash.

Disadvantages

- There will be significant staff time involved with pass sales, securing passes, and tracking passes.
- There may be a reduction in fare revenue reflecting the discounts offered.

Costs

- The costs involved in implementing a pass program include the cost of the fare media used; the staff time to sell and track passes; and the fare revenue lost through providing a discount. This cannot be accurately estimated until more specifics are sorted out concerning the development of a pass program.

Improving the Efficiency, Effectiveness, or Convenience of Current Services

The data analysis, rider input, and stakeholder input documented in Chapter 3 provided the basis for formulating a number of service alternatives with regard to the current routes. These alternatives are described below and were considered by stakeholders.

250 Connector

Several issues were documented in Chapter 3 concerning the Route 250 Connector. These issues are:

- The route is the strongest in the network in terms of total ridership and productivity, so care should be taken when making changes.
- The schedule if very tight, making it difficult to complete requested deviations and stay on time.
- There are two breaks in the schedule built in for driver breaks. This is not convenient for riders.

- There are often standees on the bus during peak times.

The alternatives offered below serve to address these issues.

Alternative #1: Close the Service Breaks

The first alternative associated with the 250 Connector is to eliminate the breaks in service that currently occur at 12:30 p.m. and at 6:30 p.m. during the week and at 3:30 p.m. on Saturdays. These breaks in service are very inconvenient for riders, particularly those that are transferring from other routes and making connections. The service breaks are currently in place so that the drivers can get a meal break. An alternative solution would be to create a part-time relief shift position that could cover these breaks in service. With two vehicles operating on the route, the shift could cover both the eastbound and westbound vehicles at different times. For example, the relief driver could be positioned at Augusta Health at 12:10 p.m. to relieve driver 1 (heading eastbound), travel to Waynesboro and back westbound to arrive back at Augusta Health at 12:45 (heading westbound). Driver 1 would then take over after his/her break and head west on the route and the relief driver would relieve driver 2 at 1:10 (heading eastbound), travel to Waynesboro and back westbound to arrive back at August Health at 1:45 p.m. Alternatively, this pattern could start at 11:10 a.m., depending upon the most desirable shift/break times. This break pattern could be repeated for the evening break and for the Saturday break.

A second, and potentially less costly, way to close the service breaks would be to change the driver scheduling more significantly, so that the 250 Connector drivers are split into three shifts during the week and two shifts on Saturdays, such that a meal break is not necessary. While this method would save the contractor money, the service hours would still be increased by the same amount per week.

Advantages

- Eliminates the breaks in service that are inconvenient for the riders.
- Provides a consistent hourly schedule, eliminating one source of schedule confusion.
- Adds four revenue hours on weekdays and two revenue hours on Saturdays, which will help balance the ridership load for the route, especially for the hour of service that currently follows the break in service.
- May result in incremental ridership increases.

Disadvantages

- Creates a new shift, along with the associated expenses; or significantly changes the drivers' shifts.
- Offers the drivers a shorter break than they currently get. Note that the operating staff may have alternative ideas for the break arrangement than the one offered.

Cost and Funding Sources

- Closing these breaks would add four revenue hours per day (weekday); and two revenue hours per day (Saturday), for a total of 22 additional revenue hours per week, or 1,144 annually. These hours equate to about $78,959 annually. After applying fare revenue, the estimated annual net deficit for this improvement would be $76,092. These expenses could potentially be eligible for $43,068 in federal S.5307 funding; $18,186 in state funding; and $14,838 in local funding.

Alternative #2 – Adjust the Route to Eliminate Staunton Mall Area

One of the issues with the 250 Connector is that the schedule is very tight. Ridership has increased on the route each year, which impacts operating speed, and results in the route not being able to cover the same mileage in the same amount of time as when the schedule was initially constructed. The call-in stops also add to the schedule problem. In addition to having difficulty keeping to the schedule, the bus is also crowded at many times throughout the day. The average number of passenger trips per revenue hour is 16.22, the highest in the network.

In order to help the route stay on schedule and reduce the passenger load, it is proposed that the route eliminate the Staunton Mall area stops, and travel more directly between the Lewis Street Hub and the Staunton Walmart, much like how the Red Trolley route currently makes this linkage. This change would eliminate about 3 miles each round trip, reducing the round trip route mileage from 25.5 miles to 22.5 miles. This would give the route a cushion for call-ins, heavy ridership, or traffic delays. The key to making this concept work will be to add the Staunton Mall area to one of the Staunton routes. This companion alternative is discussed in connection with the Staunton Trolley alternatives. The proposed route map is provided as Figure 4- 1.

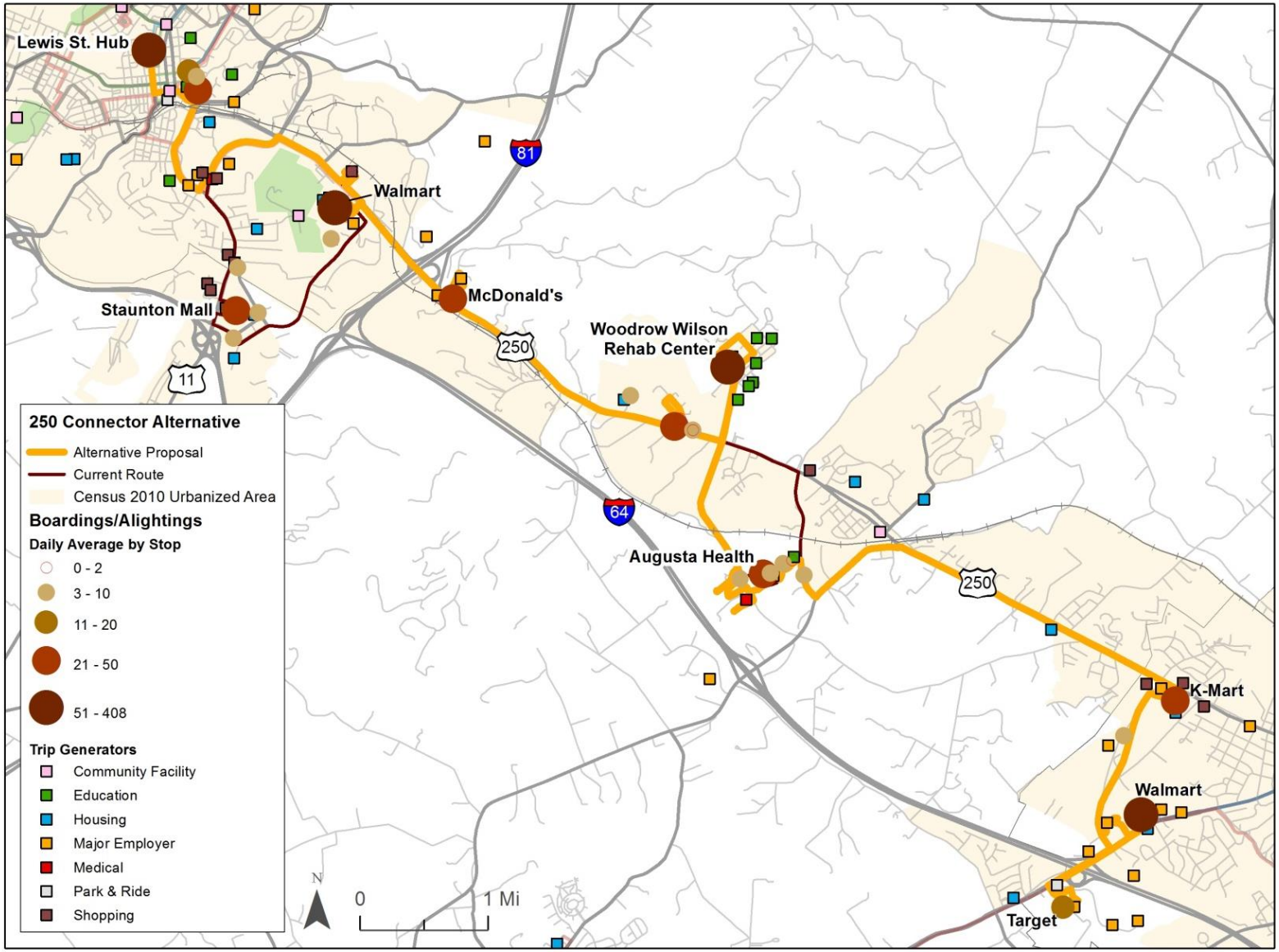
Advantages

- Helps alleviate the scheduling problems with the 250 Connector
- Helps provide additional capacity on the 250 Connector
- Provides a more direct route for through riders
- Reduces the mileage for the route, serving to slightly reduce costs

Disadvantages

- Eliminates the Staunton Mall area from the route. This area does have significant passenger activity. This activity will need to be accommodated by a different route (this is proposed in conjunction with the Staunton Trolley alternatives).
- May force a transfer for people who are traveling from Waynesboro to the Staunton Mall.

Figure 4-1: Proposed Routing Alternative for the 250 Connector



Cost

- The cost of the 250 Connector will be slightly reduced with the reduction in mileage; however, there will be significant additional costs added to one of the Staunton routes to accommodate the Staunton Mall area.

Ridership

- Taking the Staunton Mall cluster from the 250 Connector will likely cause a reduction in ridership on the route, but this ridership should show up on the re-directed Staunton route. The re-directed annual ridership is expected to be about 4,000 passenger trips.

Alternative #3 – Add Valley View Apartments as a Regular Stop

The Valley View apartments on Frontier Ridge Court, near the Staunton Wal-Mart, are currently served with a call-in stop. This stop is used frequently, and it is proposed that it be formalized to be a regular stop on the schedule.

Advantages

- Eliminates the need for Valley View residents to call ahead to schedule their trips
- Reduces confusion about whether the apartments are served
- Aligns with the operational goal of reducing/eliminating call-in stops

Disadvantages

- Adds a stop to the 250 Connector, which is a time-stressed route

Costs

- There are minor additional costs associated with adding the stop. These costs are those associated with minor additional time/mileage that is required to serve the stop.

Alternative #4 – Use a Larger Vehicle

As the most productive route in the network, and also one of the longest, there are times when there are standees on the bus for significant periods of time. The current vehicles, while equipped with grab bars, are not designed to have standees for long periods of time. In addition, when there are wheelchairs on board, seats are lost to accommodate wheelchair securement. This alternative proposes that larger vehicles be ordered as vehicles are replaced for the 250 Connector. This may have implications for routing, as larger vehicles need more space to maneuver.

Advantages

- Adds needed capacity to the route
- Provides a more comfortable trip for riders
- Allows for ridership growth

Disadvantages

- Larger vehicles are more difficult to maneuver, making stop adjustments likely.

Costs

- Larger vehicles are more expensive to purchase and slightly more expensive to operate
- Depending upon the particular model, a medium duty 30-foot bus is likely to cost about $140,000, as compared to a 19-passenger body-on-chassis vehicle that costs about $75,000. Note that currently capital purchases require a 4 percent local match.

Alternative #5 – Improved Frequency

Another option for adding capacity for the Route 250 Connector would be to increase the frequency of service. This alternative proposes to offer 30 minute frequencies on the route, Monday through Friday, from 7:30 a.m. until 5:30 p.m. This would represent a significant increase in service for the route, increasing the annual revenue service hours by 5,200 (assuming two additional vehicles are required, ten hours per day each, five days per week, 52 weeks per year).

Advantages

- Adds needed capacity to the route
- Improves the convenience for riders, essentially doubling their options during week
- Allows for ridership growth

Disadvantages

- This alternative is very costly
- Offering 30-minute headways along this route would result in every other trip not being a connecting trip for riders who transfer to the Waynesboro Circulator, the Silver Trolley, or the BRCC shuttles

Costs and Potential Funding Sources

- Adding 5,200 annual revenue service hours would cost about $358,904,000 annually, with a net deficit of $346,624. The estimated federal share for this improvement could be up to $196,189; the state share $85,778; and the local share $64,657. While these amounts are consistent with the current ratios, there is not likely to be sufficient federal and state funds to support these matches.

- Two additional vehicles would be needed at a cost of between $75,000 and $140,000 each, depending upon the size chosen. The cost for vehicles is currently split 80 percent federal; 16 percent state; and 4 percent local.

Alternative #6- Additional Saturday Service

The 250 Connector currently operates on Saturdays, but not until 12:30 p.m. This alternative proposes to add four hours of service (8 vehicle hours) to the schedule so that service starts at 8:30 a.m.

Advantages

- Provides regional mobility on Saturday mornings.
- Allows for the possibility of work trips on Saturdays.

Disadvantages

- Adds service that is likely to be less productive than current services.

Costs and Potential Funding Sources

- The cost to add Saturday morning service on the route is estimated to be $28,712 annually, with a net deficit of 27,507. The potential federal share could be $15,569; state share $6,574; and local share $5,364.

340 Connector

The 340 Connector is currently the least productive fixed route in the system. It is difficult to determine if this is due to low demand for service between Stuarts Draft, Waynesboro, and Blue Ridge Community College, or if this is due to the limited services offered. The current scenario is not sustainable for a fixed route, as the productivity is only 2.42 trips per revenue hour and the cost per trip is $23.23.

Given that the primary ridership currently is between Waynesboro and Blue Ridge Community College and there is very little ridership on the Rt. 340 segment between Waynesboro and Grottoes or the Rt.257 between Grottoes and Weyers Cave, and there have been multiple

comments expressing the need for additional service for Stuarts Draft, it is proposed that this route be changed to an express service that either provides service between Stuarts Draft, Waynesboro, and BRCC, or provides service between Stuarts Draft, Waynesboro, Staunton, and BRCC.
The concept would be for the route to function as it currently does in Stuarts Draft to the Waynesboro Hub. From that point, there are two options for the route.

Alternative #1 – Express between Waynesboro and BRCC

This first route proposal would have the 340 Connector operate directly from the Waynesboro Hub to BRCC using Routes 64 and 81. This would allow the route to be completed in one hour each direction. A suggested schedule would be 7:00 a.m. start at Highland Hills Apartments; 7:30 from the Waynesboro Hub (meeting the Waynesboro Circulator), arriving at BRCC just before 8:00 a.m. The route would then travel back to Waynesboro (8:30 a.m.) and back to Stuarts Draft for a second morning run at 9:00 a.m., serving Waynesboro at 9:30 a.m. and BRCC just before 10:00 a.m. At this point, the bus would go out of service.

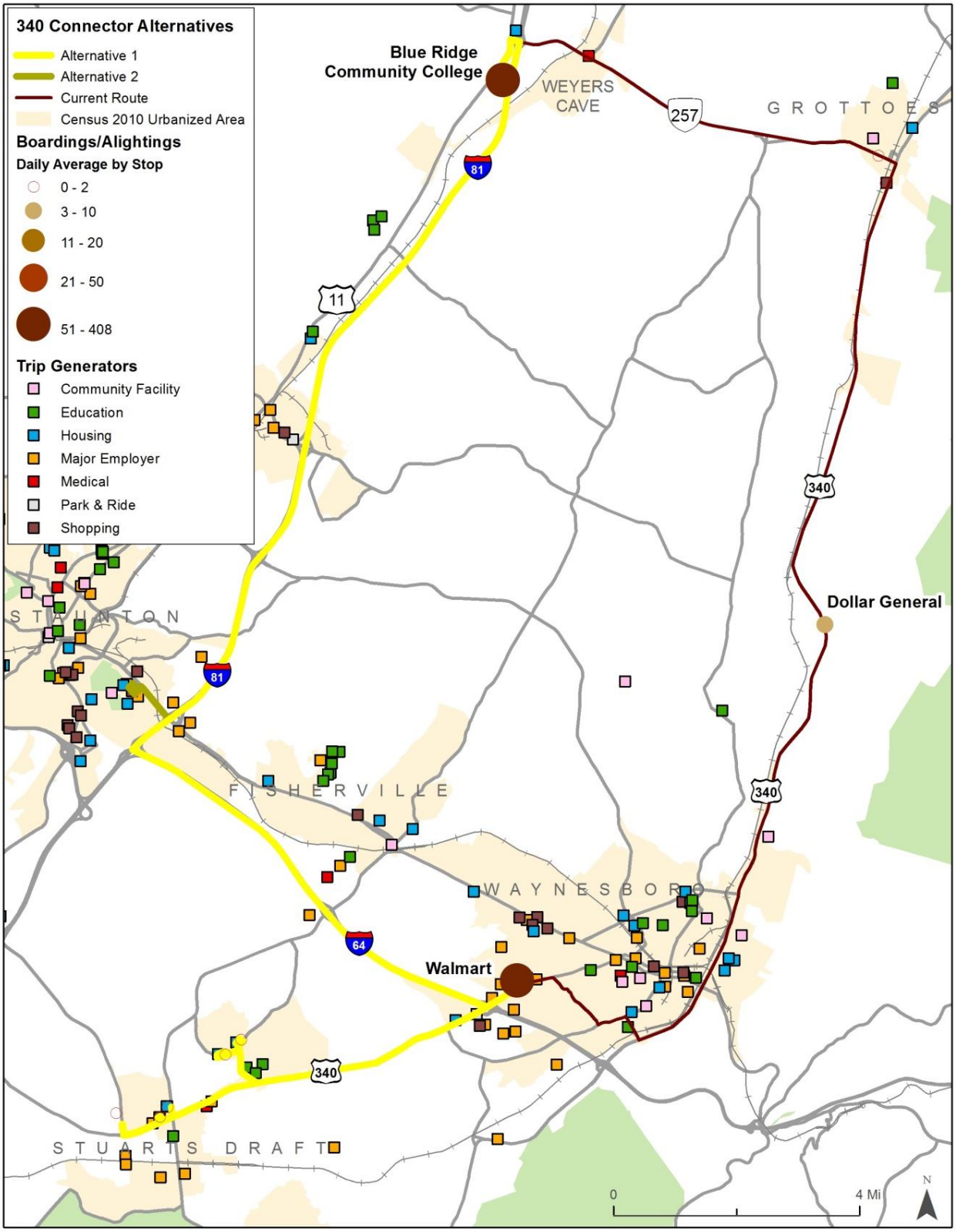
For the afternoon, the route would originate at BRCC at 3:00 p.m., travel to Waynesboro (3:30 p.m.), then onto bring people back to Stuarts Draft (4:00 p.m.). The route would make one more trip in service, leaving Stuart's Draft at 4:00 p.m.; Waynesboro at 4:30 p.m., and back to BRCC for a last run at 5:00 p.m., returning to Waynesboro at 5:30 p.m. and Stuarts Draft at 6:00 p.m.

The vehicle revenue hours for this schedule, assuming Monday-Friday would total 6 hours per day, which is a little higher than the current 5.1 hours per day. The proposed route is shown in Figure 4-2.

Advantages

- Takes some passenger pressure off of the 250 Connector by offering a direct connection from Waynesboro to BRCC
- Provides a fast, convenient trip for the primary current riders of this route (those traveling between Waynesboro and BRCC)
- Is timed to connect with the Waynesboro Circulator
- Provides Stuarts Draft residents two morning trips to Waynesboro and BRCC, rather than the current one trip
- Provides Stuarts Draft residents two afternoon trips from BRCC and Waynesboro, rather than the current one trip

Figure 4-2: Proposed Routing Alternatives for the 340 Connector



- Provides one bi-directional option in the morning, and one in the afternoon, allowing Stuart's Draft residents more convenient access to the Waynesboro area
- Would likely be more convenient for Stuart's Draft riders

Disadvantages

- Eliminates the 340/256 Corridor that includes Crimora and Grottoes. The ridership data collected in October suggests that there are about 13 passenger trips per week along this corridor (6 from Crimora and 7 from Grottoes). These riders would no longer have service.
- Adds operating costs, by adding one service hour per day.

Costs and Potential Funding Sources

- Adding about one service hour per day, five days a week will total $17,919 annually, with a net deficit of about $17,700 annually. The estimated potential federal share is $8,865; the estimated state share is $3,297; and the estimated local share is $5,567.

Ridership

- The current major ridership pattern on this route is between Waynesboro and BRCC. Making this connection more convenient, and adding more convenient service for Stuarts Draft will likely increase ridership above the current levels, even with the loss of the Crimora and Grottoes riders. This option also adds two trips to service, which will serve to increase ridership.

Alternative #2 – Express between Waynesboro and Staunton and then Express to BRCC

The second way in which this service could operate would be for the route to express from the Waynesboro Hub to an Eastern Hub in Staunton (perhaps at the Staunton Walmart), and then travel directly to BRCC using I-81. This would add travel time to the route, as compared to the first alternative, but would add additional potential riders by offering an express service between Waynesboro and Staunton.

The proposed timing for the route would begin in the same fashion as the first alternative, with the route originating in Stuart's Draft at 7:00 a.m., meeting the Waynesboro Circulator at 7:30 a.m., then traveling directly to an eastern Staunton hub (possibly Walmart) using I-81, arriving at 7:45 a.m. and leaving at 7:50 a.m. This would allow people using the 250 Connector from Staunton to connect pretty directly to the express bus. People traveling from Waynesboro to access other places in Staunton would have a 15 minute wait for the 250 Westbound bus (which may negate any features of "express").

The route would then express to BRCC, arriving at 8:15 a.m. This timing suggests that adding Staunton may increase ridership, but would reduce the "express" features of the route.

Traveling back to Staunton, Waynesboro, and Stuarts Draft would be as follows: BRCC 8:20; Staunton 8:50; Waynesboro 9:05; Stuarts Draft 9:35. This timing is not as convenient as the first alternative, as the bus would miss the Waynesboro Circulator connection. One round trip with this alternative is just over 2.5 hours, making it much more costly to add a second trip. For one round trip in the morning and one round trip in the afternoon, the service hours would be about the same as they are now (5.1 hours). If a second trip were to be added, the service hours would double to just over ten.

Advantages

- Takes some passenger pressure off of the 250 Connector by offering a direct connection from Waynesboro to Staunton.
- Is partially timed to connect with the Waynesboro Circulator.
- Is timed to connect with the Eastbound 250 Connector.
- Provides one bi-directional option in the morning, and one in the afternoon, allowing Stuart's Draft residents more convenient access to the Waynesboro area.
- Would likely be more convenient for Stuart's Draft riders.

Disadvantages

- Eliminates the 340/256 Corridor that includes Crimora and Grottoes. The ridership data collected in October suggests that there are approximately thirteen passenger trips per week along this corridor (six from Crimora and seven from Grottoes). These riders would no longer have service.
- Adding Staunton to the route increases the travel time to almost the current travel time (assuming time connections are desirable).

Costs and Potential Funding Sources

- Cost neutral with one trip in each direction. Adding a second trip would add about 5 revenue service hours per weekday, or 1300 per year, at a cost of about $89,596 annually, with a net deficit of $88,676. These expenses could potentially be funded as follows: $44,338 federal; $16,486 state; and $27,852 local.

Ridership

- The current major ridership pattern on this route is between Waynesboro and BRCC. Making this connection more convenient, and adding more convenient service for Stuarts Draft will likely increase ridership above the current levels, even with the loss of

the Crimora and Grottoes riders. There will also likely be additional riders interested in traveling directly between Waynesboro and Staunton.

BRCC North

The BRCC North's primary ridership pattern provides service between BRCC and James Madison University (JMU) in Harrisonburg. In the southbound direction the route also serves the Walmart on Route 42, Dayton, Bridgewater College, and Mt. Crawford. The route travels along I-81 in northbound direction, primarily due to time constraints. One possibility that was explored for the route is to travel bi-directionally along VA Route 42 and US 11 so that bi-directional mobility is offered along this corridor. This would add a significant amount of time to the route, increasing the travel time from the current northbound time of seventeen minutes to about 38 minutes, an increase of 21 minutes. This would extend one round trip from 55 minutes currently (allowing for hourly headways) to 76 minutes (likely necessitating ninety minute headways and severely complicating the connections). Given this negative effect, this particular alternative has not been further explored.

Even with the use of I-81, this route does sometimes get behind schedule, largely due to traffic and pedestrian congestion on the JMU campus. If a suitable stop for the BRCC could be found on the edge of campus, rather than at the main transfer center, this may help the BRCC stay on schedule. Additional dialogue with HDPT is needed to pursue this option.

While no routing proposals are further explored for the BRCC North, there are two alternatives proposed that offer service expansions through additional hours of service. Saturday service in the corridor is also explored, in combination with the BRCC South. These expansions address issues that were articulated either through the survey efforts or by local stakeholders.

Alternative #1 – Close the 7:00 p.m. Service Gap (Monday-Thursday)

As with the 250 Connector and the BRCC South, the BRCC North also includes an hour gap in service so that driver can take a meal break. This is not convenient for passengers and adds confusion to the schedule. Operationally, the contractor can either add a relief shift, or split the service day into additional shifts so that a full meal break is not required.

Advantages

- Eliminates a gap in the schedule, allowing additional travel options for BRCC riders
- Adds consistency to the schedule, so that hourly service is offered throughout the service day
- Addresses a concern expressed by stakeholders

Disadvantages

- Creates a new shift, along with the associated expenses; or significantly changes the drivers' shifts
- May offer the drivers a shorter break than they currently get, depending upon how the break is re-scheduled

Costs and Potential Funding Sources

- Adding one service hour to the route, four days a week equates to four additional service hours per week, or 208 additional annual service hours. This improvement is estimated to cost $14,335 annually, with a net deficit of $14,135. Potential funding sources include federal ($7,068); state ($2601); and local ($4,467).

Ridership

- Minor incremental increases in ridership can be expected through the elimination of this service gap

Alternative #2 – Add a 6:00 p.m. Trip on Fridays

Currently the BRCC North makes its last round trip at 5:00 p.m. on Fridays, ending service southbound at 5:55 p.m. This makes it difficult for people to use the service if they work until 5:00 p.m. While the major constituent group for the route is the BRCC student body, there are other riders on the route as well, including those who use the route for work purposes. This alternative would add one more round trip to the service day on Fridays (6:00 p.m.), ending service at 6:55 p.m.

Advantages

- May offer additional work opportunities for riders, offering an additional service hour at the end of the day.
- May allow riders to complete after work errands without missing the last bus.
- Addresses a concern expressed by stakeholders.

Disadvantages

- There may not be strong demand for this last hour of service, given that BRCC classes are completed for the day.
- Adding a service hour with lower demand will reduce the overall productivity of the route.

Costs and Potential Funding Sources

- Adding one service hour to the route, one day a week equates to 52 annual service hours, for a total annual operating cost of about $3,584 and a net deficit of $3,534. Potential funding sources include federal ($1,767), state ($650); and local ($1,117).

Ridership

- Minor incremental increases in ridership can be expected through the addition of this service hour.

BRCC South

The BRCC South route appears to operate well. As such, no routing proposals are explored for the route. As with the BRCC North, there are two alternatives proposed that offer service expansions through additional hours of service. Saturday service in the corridor is also explored, in combination with the BRCC North. These expansions address issues that were articulated either through the survey efforts or by local stakeholders.

Alternative #1 – Close the 7:00 p.m. Service Gap (Monday-Thursday)

As with the 250 Connector and the BRCC North, the BRCC South includes an hour gap in service so that driver can take a meal break. This is not convenient for passengers and adds confusion to the schedule. Operationally, the contractor can either add a relief shift, or split the service day into additional shifts so that a full meal break is not required.

Advantages

- Eliminates a gap in the schedule, allowing additional travel options for BRCC riders.
- Adds consistency to the schedule, so that hourly service is offered throughout the service day.
- Addresses a concern expressed by stakeholders.

Disadvantages

- Creates a new shift, along with the associated expenses; or significantly changes the drivers' shifts.
- May offer the drivers a shorter break than they currently get, depending upon how the break is re-scheduled.

Costs

- Adding one service hour to the route, four days a week equates to four additional service hours per week, or 208 additional annual service hours. This improvement is estimated to cost $14,335 annually, with a net deficit of $13,812. Potential funding sources include: federal ($6,906); state ($2,541); and local ($4,365).

Ridership

- Minor incremental increases in ridership can be expected through the elimination of this service gap.

Alternative #2 – Add a 5:30 p.m. Trip on Fridays

Currently the BRCC South makes its last round trip at 4:30 p.m. on Fridays (serving BRCC at 5:00 p.m.), ending service in Staunton at 5:30 p.m. This makes it difficult for people to use the service if they work until 5:00 p.m. While the major constituent group for the route is the BRCC student body, there are other riders on the route as well, including those who use the route for work purposes. This alternative would add one more round trip to the service day on Fridays (5:30 p.m., from Staunton), ending service at 6:30 p.m.

Advantages

- May offer additional work opportunities for riders, offering an additional service hour at the end of the day.
- May allow riders to complete after work errands without missing the last bus.
- Addresses a concern expressed by stakeholders.

Disadvantages

- There may not be strong demand for this last hour of service, given that BRCC classes are completed for the day.
- Adding a service hour with lower demand will reduce the overall productivity of the route.

Costs and Potential Funding Sources

- Adding one service hour to the route, one day a week equates to 52 annual service hours, for a total annual operating cost of about $3,584, with a net deficit of $3,453. Potential funding sources include: federal ($1,793); state ($635) and local ($1,026).

Ridership

- Minor incremental increases in ridership can be expected through the addition of this service hour.

Saturday Corridor Service

Stakeholders and survey respondents indicated that service in the corridor between Harrisonburg and Staunton is needed on Saturdays. The focus of this proposal is to add this service using a route that combines the BRCC North and South into one route that would offer two-hour headways through the corridor on Saturdays. It is proposed that the schedule coordinate with the 250 Connector schedule, which leaves the Staunton Hub on the :30. The actual hours of service would still need to be determined, as the current Saturday offerings follow different patterns. For the purposes of analysis, we will assume that the route will complete four round trips, for a total of eight service hours.

Advantages

- Addresses a concern expressed by stakeholders.
- Provides mobility in the Staunton-Harrisonburg corridor on Saturdays.

Disadvantages

- Adds service that is likely to be less productive that weekday services in the corridor.

Costs and Potential Funding Sources

- Adding eight service hours, one day a week equates to 416 annual service hours, for a total annual operating cost of about $28,671 and a net deficit of $27,935. If this route were to be considered a new route, potential funding sources could include DRPT's demonstration grant program, which starts at a 95% state share the first year, and then reduces over time to the traditional funding formulas.

Ridership

- Saturday ridership is likely to be less than weekday ridership is in this corridor. If the route can accomplish seven trips per operating hour, the route will provide 56 passenger trips each Saturday, which equates to about 2,900 annual passenger trips.

Staunton Trolleys

The Staunton Trolleys currently provide a mix of circulator services for Staunton residents and visitors. The Green Trolley is the shortest of the three routes, operates as a true small city

circulator, and serves the major downtown attractions. The Silver and Red Trolleys operate longer, more circuitous routes. There are several proposals to be considered for the Silver and Red Trolley routes.

Alternative #1 – Transition Vehicle Choice from Trolley to Small Transit Bus

Given that the Silver and Red trolley routes are more oriented to residents rather than visitors, and the routes are longer, it is proposed that the use of trolley buses for the route be phased out, in favor of more comfortable, less expensive, and more reliable small transit vehicles. This will also reduce confusion for visitors who are most likely interested in riding the Green Trolley route, as it serves the downtown tourist attractions. In addition, small transit vehicles are easier to maneuver than trolleys. This is a significant concern in the City of Staunton, as there are many steep grades and tight corners that the vehicles must navigate.

Advantages

- Small transit vehicles offer a more comfortable ride for passengers. This is not so much of an issue with a very short route, but becomes more so with longer routes.
- Serves to differentiate the tourist-oriented service (Green) from the more locally-oriented services (Silver and Red).
- Small transit vehicles are easier to maneuver than trolleys.

Disadvantages

- Part of the identity of transit in the City of Staunton is the use of trolleys. This may cause some confusion among long-time users, though there are many times when small buses are used on the routes rather than trolleys (i.e., when the trolleys need a repair).

Costs

- Small transit vehicles are less expensive to purchase than trolleys and are also less expensive to maintain. Body on chassis vehicles with lifts are about $75,000 each, as compared with trolleys that are about $190,000 each. There are also some vehicle choices in between these two price points.

Alternative #2 – Split the Silver Trolley into two 30-minute Routes

One of the issues that was identified in association with the Silver Trolley route was the circuitous nature of the route and the associated long ride time. One way to address this without incurring additional costs is to split the route into two shorter routes that are interlined at the Lewis Street Hub. This will offer more direct service from origin to destination, though frequency would remain hourly (the same vehicle would be used for both routes). Through riders could stay on the vehicle without incurring a new fare, so that the change would not cause riders to incur additional transit expenses. The direction of travel for

each of the two proposed loops should be further discussed with stakeholders to maximize travel convenience.

The proposal is to develop a Staunton East Route and a Staunton West route. These proposed routes are shown in Figure 4-3.

Advantages

- Provides a shorter ride time for short local trips.
- Some trips will be more direct.
- Provides the same geographic coverage.

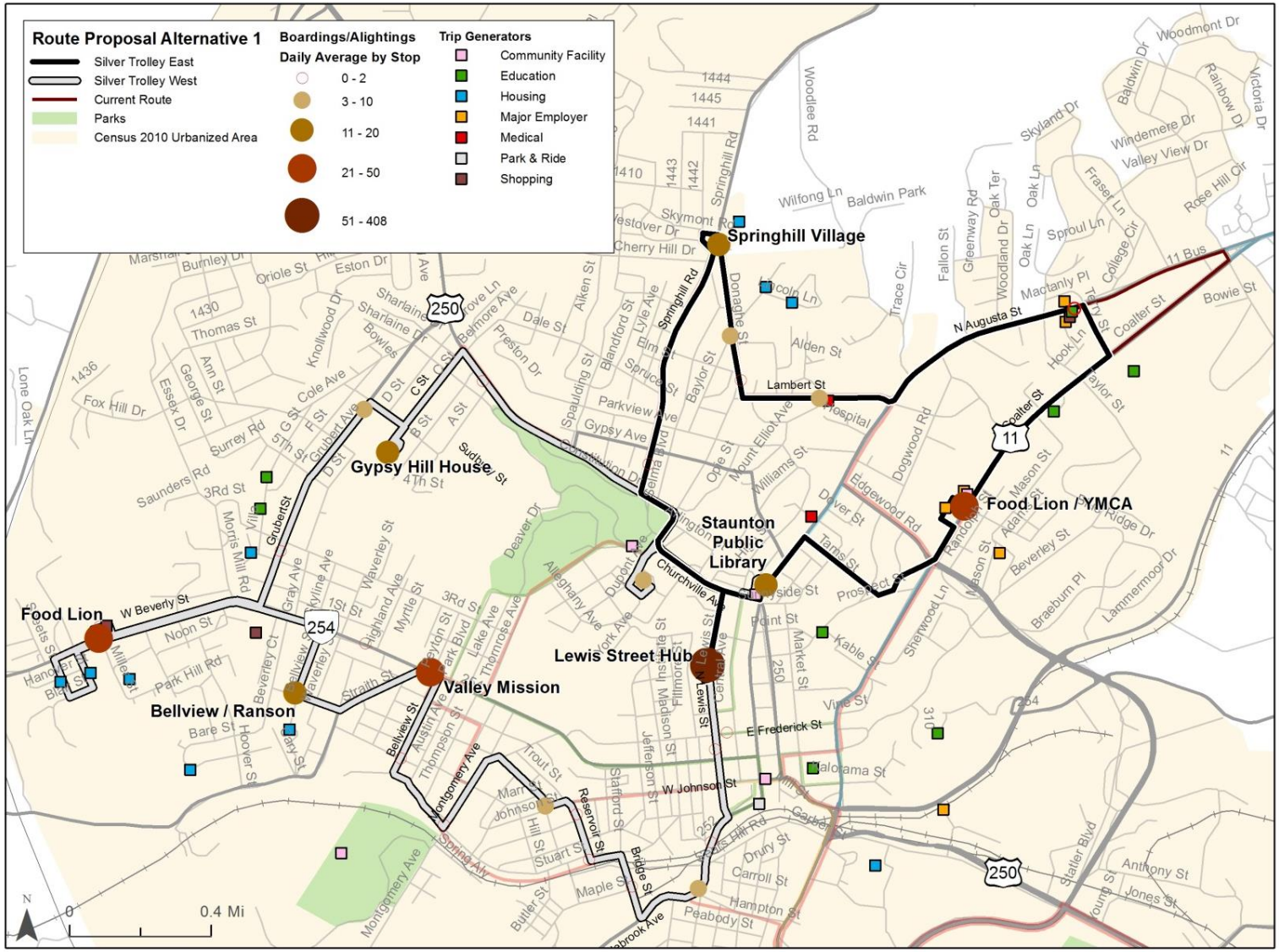
Disadvantages

- Because the two routes will be interlined, service at any particular stop will still be on hourly headways.
- For longer trips within the City, travelers will still likely have a long ride time, as the two routes are proposed to be operated with the same vehicle.

Costs

- This alternative is cost neutral.

Figure 4-3: Proposed Silver Trolley Route Split- Option One



Alternative #3 – Split the Silver Trolley into one 30-minute Route and one 60-minute Route

This concept is tied together with the 250 Connector alternative that proposes to eliminate the Staunton Mall. It is also tied with the proposal to absorb the Red Trolley route, as the proposed Silver East route would travel to Walmart on an hourly basis throughout the day. The concept is to split the Silver Trolley route into two routes – a Silver West route (similar to Alternative #2) and a Silver East Route. The Silver West route would operate on 30-minute headways and the Silver East route would operate on hourly headways. The Silver East route could operate at the top of the hour from the Lewis Street Hub, to complement the 250 Connector service between the Lewis Street Hub and Walmart (offering service every 30 minutes between the two points). This routing arrangement is shown in Figure 4-4.

Advantages

- Offers 30 minute frequency for the Silver West portion of the route.
- Offers more direct travel options within Staunton.
- Offers more service to Staunton Walmart, which is a significant trip generator.
- Allows the 250 Connector to be streamlined by accommodating the Staunton Mall stops.

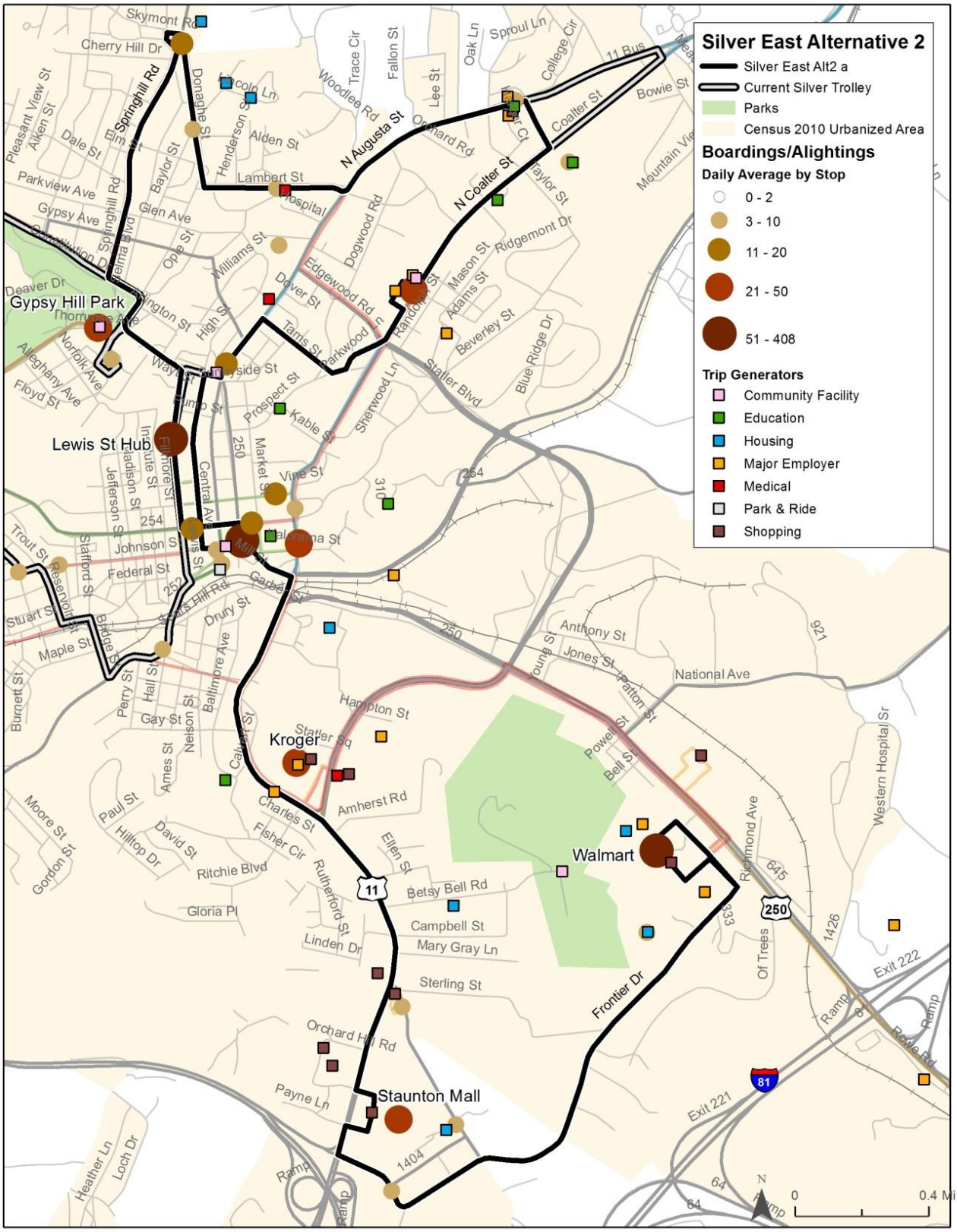
Disadvantages

- Adds significant cost to the route.
- There may be some jurisdictional sensitivities, as Staunton Mall is not in the City of Staunton.

Costs and Potential Funding Sources

- This proposal would require a vehicle, estimated to be about $75,000. Potential capital funding sources for vehicles include federal ($60,000); state ($12,000); and local ($3,000).
- If a ten-hour span of service is offered five days per week, the total additional service hours would be 2,600 annually, at an operating cost of about $179,452, with a net deficit of $173,327. Potential funding sources include federal ($98,103); state ($41,425); and local ($33,799).

Figure 4-4: Proposed Silver Trolley Route Split – Option 2



Alternative #4 – Add a Second Vehicle to the Route

Another way to improve service along the Silver Trolley Route would be to add a second vehicle to the route, traveling in the opposite direction so that bi-directional service is offered along the route. Alternatively, a second vehicle could be used to implement Alternative #2 that contemplated splitting the route. Either scenario would decrease travel time for riders as they would not have to ride the entire circuit to get to their destination.

Advantages

- Offers more direct travel options within Staunton.
- Offers a shorter travel time.

Disadvantages

- Adding a second vehicle is an expensive upgrade.
- The current ridership may not support adding capacity to the route, however, more riders may be attracted to the route if it is more convenient to use.

Costs and Potential Funding Sources

- This proposal would require a vehicle, estimated to be about $75,000. Potential capital funding sources for vehicles include federal ($60,000); state ($12,000); and local ($3,000).
- If a ten-hour span of service is offered five days per week, the total additional service hours would be 2,600 annually, at an operating cost of about $179,452, with a net deficit of $173,327. Potential funding sources include federal ($98,103); state ($41,425); and local ($33,799).

Alternative #5 – Combine the Red and Silver Trolley Routes

Currently the Red Trolley Route operates only Friday and Saturday evenings, from 6:00 p.m. to 10:00 p.m. The Route covers many of the same segments as the Silver Route, and then travels to the Staunton Walmart. With some route adjustments, these two routes could be combined into one streamlined route. The Friday and Saturday evening hours could be maintained, or these eight service hours could be spread out over the course of the week.

Advantages

- Reduces confusion among riders.
- Potentially takes advantage of the high ridership stops while eliminating low ridership stops.

Disadvantages

- Would likely eliminate some segments.

Costs

- Cost neutral if the same number of service hours are maintained.

Alternative #6 – Adjust the Fares

While the fare structure was not mentioned by survey respondents or stakeholders as an issue, it came to light when examining the fare for ADA complementary paratransit in Staunton. Federal guidance indicates that the ADA fare can only be twice the fixed route fare. In this instance, the ADA fare is $1.00 and the trolley fares are only $.25. This issue will need to be addressed in order for the program to be in compliance with the ADA. This means that either the trolley fares need to be raised to $0.50 (similar to the rest of the system), or the ADA fare needs to be reduced to $0.50. Raising the fare would standardize the fare structures, but would result in an additional 100 percent fare increase for the trolley routes (note that the trolleys were free prior to FY14). Alternatively, reducing the ADA fare is not consistent with promoting the use of fixed route services over on-demand services.

Advantages

- Standardizing the fixed route fare structure would reduce confusion among riders of the system and allow system fare information to be consolidated.
- A consistent fare structure will result in a definitive allowable ADA fare.
- Raising the trolley fare by $0.25 will result in increased fare revenue. Using the standard fare elasticity that assumes ridership would drop as much as 30 percent, and the applying the simple cash fares of $0.25 versus $0.50, the resulting fare revenue would increase from $18,663 to $26,129. Note this overstates the fares, as discounts are not included in the example.

Disadvantages

- Standardizing the fixed route fare structure will either result in another fare increase for the trolleys or a fare decrease for ADA paratransit, neither of which is appealing for the system.
- If the fare is increased on the trolleys, ridership will likely decline, but not as dramatically as when the fare was introduced. The reduction in ridership could be as much as 30 percent, using standard transit elasticity formulas that suggest for every 1 percent increase in fares, there is a corresponding .03 percent drop in ridership. This suggests that a 100 percent increase in fares would result in a 30 percent drop in

ridership. This is likely to be on the high end, given the current low fares. If this ridership loss were to occur, it would represent about 22,400 passenger trips.

- Lowering the current ADA fare would represent a loss of about $964 annually.

Alternative #7 – Additional Hours of Service

The results of the passenger surveys indicated a desire for later hours of service, as well as additional Saturday service and Sunday service. The Green Trolley already operates on Saturdays, as well as until 9:00 p.m. May through October. This alternative focuses on adding evening and weekend hours for the Silver Trolley. The weekday proposal is to extend service until 9:00 p.m. (from the current 6:00 p.m.). Saturday service is proposed to operate from 8:00 a.m. until 4:00 p.m. If one vehicle is in operation for the Silver Trolley, then the additional weekday hours would total about 765 annually and the additional Saturday hours would total about 416 annually.

Advantages

- Provides additional mobility options for Staunton riders during the evenings and on Saturdays.
- Meets a need that was articulated by riders.

Disadvantages

- Adds service that is not likely to be as productive as current service.
- Adds operating expenses.

Costs and Potential Funding Sources

- Weekday service: if three additional service hours were to be provided Monday-Friday on the Silver Trolley the additional annual operating cost would be about $52,800, with a net deficit of $51,000. Potential funding sources include federal ($28,866); state ($12,619); and local ($9,515).
- Saturday Silver Trolley service is estimated to cost about $28,712 annually, with a net deficit of $27,736. Potential funding sources include federal ($15,699); state ($6,629); and local ($5,409).

Waynesboro Circulator

Alternative #1- Adjust the Route

The Waynesboro Circulator currently provides hourly service throughout the City of Waynesboro, offering two different service patterns, as well as deviating from the route for people with disabilities, and allowing some call-in stops. These three issues together can create problems for the route, including rider confusion and an inability to stay on schedule. Given the timed connections within the system, it is important for the routes to maintain their schedules so that the entire network is not negatively impacted. There are also very few riders who use the alternate route.

The two primary goals for the changes proposed for the Waynesboro Circulator are to trim the route so that a small time cushion is available and to eliminate the alternate route to reduce rider confusion. The focus of the segment eliminations was on those areas with little to no riders, and or those that could be transitioned a block or two away for better travel time. Another feature of the proposed route revision is a reversal of the direction of travel, from clockwise to counter- clockwise. This allows some easier turns and takes advantage of some locations that have sidewalks only on one side of the street. The first draft of the alternatives proposed to move the stop from the Shenandoah Valley Social Services office in Waynesboro to a few blocks away, as the ridership data showed little to no usage. DSS staff reported that there is usage of the stop and requested that it remain on the route. The proposed revised route (revision #2), along with the current route, is shown in Figure 4-5.

Advantages

- Trims the route to offer more time for ADA deviations.
- Eliminates the alternate routing that is confusing to riders and not well used.
- Eliminates some difficult turning movements.

Disadvantages

- Eliminates some segments, which will inconvenience a few passengers.
- Initial implementation may be confusing, with the circulation pattern reversed.

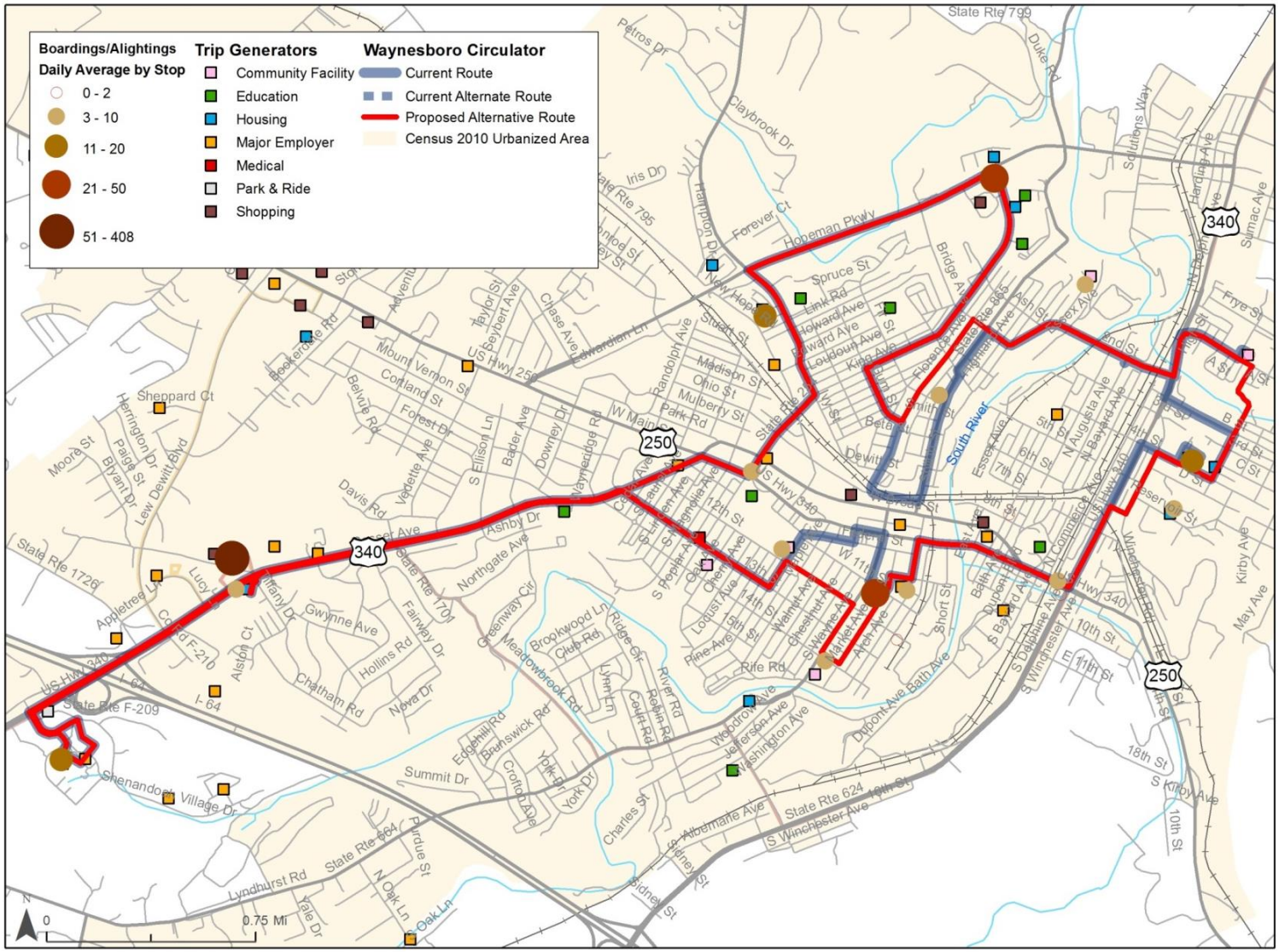
Costs

- This proposal is cost neutral from an operational perspective, but there will be some minor costs associated with re-locating bus stop signs.

Alternative #2 – Add Saturday Service

Survey respondents and stakeholders indicated a desire to have Saturday service for the Waynesboro Circulator. This is understandable, given that the Circulator serves a number of

Figure 4-5: Proposed Revised Waynesboro Circulator



shopping destinations, the 250 Connector offers Saturday service, and there is Saturday service in Staunton. This alternative proposed a limited Saturday service, operating between 8:30 a.m. and 4:30 p.m. The annual service hours for this alternative would be 416. No additional vehicles would be needed to implement Saturday service.

Advantages

- Provides mobility for Waynesboro riders on Saturdays.
- Allows afternoon connectivity with the 250 Connector.
- Meets a need identified through survey and stakeholder outreach.

Disadvantages

- Adds service that is not likely to be as productive as the current service.
- Adds operating expenses.

Costs and Potential Funding Sources

- Adding 416 additional revenue service hours would cost about $28,712, with a net deficit of $27,248. Potential funding sources could include federal ($15,423); state ($6,512); and local ($5,313).

Ridership

- Assuming a Saturday circulator could average 8 passenger trips per revenue hour, the total additional ridership would be about 2.900 annual passenger trips.

Staunton On-Demand

While it was reported that the Staunton On-Demand service is sometimes over-capacity, the VRT manager indicated that they are continuing efforts to direct non-ADA riders from the On-Demand service to the regular route services in Staunton. This effort will continue so that the existing capacity will be focused on ADA riders and will not need to be expanded in the near term.

Augusta On-Demand

The Augusta On-Demand was once county-wide, offering service to different parts of the county on different days of the week. In an effort to manage demand, some of these resources were directed to implementing the 340 Connector (beginning in FY2012), and the Augusta On-Demand was limited to once a week service in the Craigsville area. Over time fewer and fewer of the passengers who originally used this service are still riding. The current route statistics

suggest that keeping this service is not sustainable, as the FY2014 data indicated that there were only .49 passenger trips per revenue hour and that the cost per trip was $116.50. It is proposed that this service be eliminated. VRT can investigate other services that may be available to provide mobility for the few passengers that currently use the August On-Demand service.

Advantages

- Eliminates a service that is not cost effective
- Frees up some resources that can be used elsewhere in the system

Disadvantages

- Eliminating the service will inconvenience the few riders who currently use it.

Costs

- Eliminating the Augusta On-Demand service will reduce expenses by about $22,000 annually.

Geographic System Expansions

Alternative #1 – Provide Service to Charlottesville

The results of the survey and stakeholder input showed a desire for area residents to travel to Charlottesville. Trip purposes include work, medical, and recreation, with the University of Virginia and its associated medical facilities located in Charlottesville. This alternative proposes commuter and intercity bus service between the region and Charlottesville. As a potential regional service, the details regarding the feasibility and implementation are beyond the scope of this local TDP. DRPT is planning to support the development of a full feasibility and implementation study following this TDP, in conjunction with Virginia's intercity bus program. The study will outline the feasibility, including the full costs of providing this type of service, the potential funding sources, potential stops, likely ridership, and implementation issues. It is anticipated that there will be a regional steering group to oversee the study, with representation from a number of stakeholders including the CSPDC (including the Harrisonburg-Rockingham MPO and the SAW MPO); the Thomas Jefferson PDC; DRPT; the University of Virginia; and the connecting transit programs (HDPT, Charlottesville Area Transit).

Alternative #2 – Provide Service for Rural Augusta County

Offering service to rural Augusta County has proven to be difficult for the region's transit program. On-demand service has been costly and not particularly productive. It is proposed that local human service agency programs be approached to see if the public transit program could purchase trips on existing human service transportation programs to help accommodate some limited public transportation mobility in a coordinated manner. This alternative can be further developed if there is interested among the stakeholders to do so.

Summary of Service Alternatives

Table 4-5 provides a summary of the service alternatives that have been discussed and have cost implications.

Choosing Alternatives for the Plan

The alternatives discussed in this chapter were presented to the TDP Committee in April, 2015, and further refined in May, 2015. Several individual stakeholder meetings were held in May to address the specific needs of area stakeholders and refine the alternatives. Once these alternatives were refined, stakeholders were offered a few weeks to provide input with regard to which alternatives should move forward to the six-year plan. The chosen alternatives are discussed in Chapter 5, which is the six-year Operations Plan.

Table 4-8: Summary of Specific Route Alternatives

Project	Annual Operating Hours	Estimated Annual Operating Cost	Estimated Net Deficit	Estimated Annual Federal Share	Estimated Annual State Share	Estimated Annual Local Share	Capital Cost	Federal Share	State Share	Local Share
250 Connector Alternatives										
Alternative #1- Close the Service Breaks	1,144	$ 78,959	$ 76,092	$ 43,068	$ 18,186	$ 14,838	$ -	$ -	$ -	$ -
Alternative #5 - Use a Larger Vehicle	0	Minor Added Expenses					$ 280,000	$ 224,000	$ 44,800	$ 11,200
Alternative # 6 -Improved Frequency	5,200	$ 358,904	$ 346,624	$ 196,189	$ 85,778	$ 64,657	$ 150,000	$ 120,000	$ 24,000	$ 6,000
Alternative #7- Additional Saturday a.m.	416	$ 28,712	$ 27,507	$ 15,569	$ 6,574	$ 5,364	$ -	$ -	$ -	$ -
340 Connector Alternatives										
Alternative #1 - Express between Waynesboro and BRCC	260	$ 17,919	$ 17,729	$ 8,865	$ 3,297	$ 5,567	$ -	$ -	$ -	$ -
Alternative #2 - Express between Waynesboro, Staunton, and BRCC- two trips	1,300	$ 89,596	$ 88,676	$ 44,338	$ 16,486	$ 27,852	$ -	$ -	$ -	$ -

Project	Annual Operating Hours	Estimated Annual Operating Cost	Estimated Net Deficit	Estimated Annual Federal Share	Estimated Annual State Share	Estimated Annual Local Share	Capital Cost	Federal Share	State Share	Local Share
Alternative #2 - Add a 6:00 p.m. Trip on Fridays	52	$ 3,584	$ 3,534	$ 1,767	$ 650	$ 1,117	$ -	$ -	$ -	$ -
BRCC South Alternatives										
Alternative #1 - Close 7:00 p.m. Service Gap, Monday- Thursday	208	$ 14,335	$ 13,812	$ 6,906	$ 2,541	$ 4,365	$ -	$ -	$ -	$ -
Alternative #2 - Add a 5:30 p.m. Trip on Fridays	52	$ 3,584	$ 3,453	$ 1,726	$ 635	$ 1,091	$ -	$ -	$ -	$ -
BRCC North and South Corridor Service on Saturdays										
Provide service between Staunton and Harrisonburg on Saturdays	416	$ 28,671	$ 27,935	$ 13,967	$ 5,140	$ 8,827	$ -	$ -	$ -	$ -
Staunton Trolleys										
Alternative #1 - Transition Vehicle Choice from Trolley to Small Bus for Red and Silver Trolleys	-	$ -					$(115,000)	$ (92,000)	$ (18,400)	$ (4,600)
Alternative #3 - Split the Silver Trolley into one 30-minute Route and one 60-minute Route	2,600	$ 179,452	$ 173,327	$ 98,103	$ 41,425	$ 33,799	$ 75,000	$ 60,000	$ 12,000	$ 3,000
Alternative #4- Add a second vehicle to the route	2,600	$ 179,452	$ 173,327	$ 98,103	$ 41,425	$ 33,799	$ 75,000	$ 60,000	$ 12,000	$ 3,000

Project	Annual Operating Hours	Estimated Annual Operating Cost	Estimated Net Deficit	Estimated Annual Federal Share	Estimated Annual State Share	Estimated Annual Local Share	Capital Cost	Federal Share	State Share	Local Share
Alternative #7 - Additional hours of service- weekday evenings	765	$ 52,800	$ 51,000	$ 28,866	$ 12,619	$ 9,515	$ -	$ -	$ -	$ -
Alternative #7 - Additional hours of service- Saturdays	416	$ 28,712	$ 27,736	$ 15,699	$ 6,629	$ 5,409	$ -	$ -	$ -	$ -
Waynesboro Circulator										
Alternative #2 - Add Saturday Service	416	$ 28,712	$ 27,248	$ 15,423	$ 6,512	$ 5,313	$ -	$ -	$ -	$ -
Augusta On-Demand										
Eliminate the service	-325	$ (22,107)	$ (21,896)	$ (10,948)	$ (4,068)	$ (6,880)	$ -	$ -	$ -	$ -
TOTALS (1)	**11,620**	**$ 802,239**	**$ 774,103**	**$ 435,201**	**$ 185,921**	**$ 152,981**	**$ 225,000**	**$ 180,000**	**$ 36,000**	**$ 9,000**
Urban	**10,957**	**$ 756,252**	**$ 729,535**	**$ 412,917**	**$ 177,724**	**$ 138,894**	**225,000**	**$ 180,000**	**$ 36,000**	**$ 9,000**
Rural	**663**	**$ 45,986**	**$ 44,567**	**$ 22,284**	**$ 8,197**	**$ 14,087**	**-**			

(1) Using Alt #1 for the 340 and one additional vehicle for the Silver Trolley.

Chapter 5 – Operations Plan

INTRODUCTION

The development of the CSPDC TDP has included four chapters that provided an overview of public transportation in the Central Shenandoah region and developed alternatives for improvement. These chapters discussed goals, objectives, and standards; analyzed the current services operating in the region; documented unmet transit needs; and proposed financially constrained and vision alternatives for the CSPDC and local stakeholders to consider for implementation over the six-year TDP planning period. A TDP Working Group, with input from DRPT and CSPDC staff, provided guidance throughout the process.

This Operations Plan details the specific projects that the CSPDC and local stakeholders have chosen to implement, presented as short-term and vision phases. While the short-term projects follow a six-year timeline, the vision projects have not been specifically assigned to a year, as funding has not been identified for implementation. Including the vision projects in the plan allows the CSPDC to adapt to changing circumstances, and consider accelerated implementation during its yearly reviews, if funding opportunities are presented. The Operations Plan includes a discussion of organizational changes, followed by the short- term service projects and vision service projects. Chapters 6 and 7 provide companion capital and financial plans to support this operations plan.

A primary focus of the projects included in this TDP is on the development of a combined urban-rural system that ties together the current public transportation services operating in the region. The development of the program will lay the foundation for future growth, as community awareness increases and additional partners are sought. Modest service improvements are included within the plan, as constrained by the currently available funding resources.

ORGANIZATIONAL CHANGES

There are a number of organizational changes that are included as part of the six-year plan. These are:

- The transit program will be unified under a new brand, BRITE. A brand awareness campaign will be implemented to educate the public.
- A Transit Advisory Committee will be formed.

- The sub-recipient for rural funding in the region will shift from Virginia Regional Transit to the Central Shenandoah Planning District Commission.
- The CSPDC may own vehicles used for public transportation in the region.
- Additional local funding partners will be solicited.
- The local funding formula will be formalized for any future funding partners.

The details for each of these changes are documented below.

Develop Cohesive Brand and Improve Community Awareness

One of the issues that the CSPDC identified prior to beginning work on the TDP is that of brand confusion with regard to the name and identity of the public transportation program in the region. This brand confusion was confirmed by the rider and public surveys, with riders and the public identifying with several different names for the program (CATS, VRT, and individual route names). It is not surprising that there is brand confusion given that each service has evolved independently for different constituencies. While there is brand confusion, the services do operate as a cohesive system, operated by the same transit provider (VRT), with timed connections between services at key locations.

In order to help reduce or eliminate this brand confusion, the CSPDC and DRPT added a branding task to the TDP to develop a cohesive brand, logo, and strategies to improve community awareness of transit in the region. Pulsar Advertising, a sub-contractor to KFH Group, has been working through this task concurrently as the TDP work has progressed. Documentation of Pulsar's complete work will be included as a companion to the TDP and is summarized below.

Brand Development

The branding process included a number of different choices for names and logos. Of these names, BRITE was chosen to move forward with full logo development. Pulsar is currently finalizing the logo designs for BRITE. When the branding task is completed, Pulsar will deliver electronic files for logo and type treatment (*.eps, *.pdf, and *.png), as well as a brand standards fact sheet that will include logo and identity usage guidelines (font, visual elements, and logo color usage).

The CSPDC will then begin a re-branding effort. The full list of tasks will include the development of:

- Website
- Social media
- Maps and schedules
- Vehicle exterior paint scheme
- Signage

The branding campaign will serve to improve community awareness of transit as well as provide an opportunity to redesign the system maps and schedules. These are important improvements, as stakeholder input suggested that the current maps and schedules are confusing for riders to understand, particularly for people with intellectual disabilities. It may be helpful to solicit feedback from stakeholders who represent people with intellectual disabilities in the process when designing the new schedules.

The CSPDC has requested funding assistance through DRPT to start the re-branding process in FY16, including the development of the website, brochure, and map. Vehicle decals and bus stop signs can be included as part of the annual capital budget. The re-branding effort will continue on throughout the life of the plan.

In 2017, the CSPDC became active on social media, continued to produce printed timetables for all routes, branded all of the buses and the Downtown Trolley, completed installation of BRITE stop signs on all routes, and completed a procurement for development of a BRITE website.

Transit Advisory Group

A transit advisory committee (TAC) is typically comprised of stakeholders who have an interest in preserving and enhancing transit in the community, much like the working group that has been organized to help guide the TDP for the CSPDC. Over the past several years, the CATS Board has served in this advisory role to VRT, helping to guide the region's transit program. An ongoing TAC will be developed to provide input and feedback to the CSPDC and assist them in making transit-related decisions.

The following groups (which may include several current CATS Board members) will be considered for inclusion on the transit advisory committee:

- Local funding partners
  - Augusta County
  - Augusta Health
  - Blue Ridge Community College
  - City of Staunton
  - City of Waynesboro

  - Shenandoah Valley Social Services
  - Staunton Downtown Development
  - Wilson Workforce Rehabilitation Center
  - A representative of the CATS Board

- Future Funding Partners
- Other interested stakeholders who may periodically be engaged could include:
  - An at-large community representative designated by the CATS Board
  - Advocates for senior citizens and people with disabilities
  - Chamber of commerce and/or economic development representatives
  - MPO representation
  - Other human service agency representatives
  - A transit rider representative

The suggested representation for the committee is one member from each of the funding partners and one to two community members.

The role of the transit advisory committee will be to help the transit program better meet mobility needs in the community by serving as a link between the citizens served by the various entities and public transportation. A transit advisory group is a good community outreach tool for transit programs, as having an ongoing dialogue with stakeholders allows for a greater understanding for transit staff of transit needs in the community, as well as a greater understanding by the community of the various constraints faced by the transit program. Transit advisory groups also typically serve in an advisory capacity for transportation development plans and other transit initiatives. It is suggested that this board be comprised of no more than fifteen members, and that they meet quarterly, at a minimum.

The BRITE Transit Advisory Committee (BTAC) was appointed by the CSPDC in 2016, and meets at a minimum of six times per year to advise staff on all things transit service related.

Federal and State Public Transportation Grant Recipients in the Region

Population growth in the region, as reflected in the 2010 Census, resulted in the development of a new urbanized area (UZA) - the Staunton-Augusta-Waynesboro Urbanized Area. This designation resulted in a number of changes in the way in which public transportation is funded, managed, and operated in the region. Census-designated small urbanized areas (concentrations of populations of between 50,000 and 200,000) are eligible for funding assistance under the Federal Transit Administration's (FTA) Section 5307 program, which provides funding to help support public transportation programs in urbanized areas. Public transportation in the region has historically been supported in part by the FTA's Section 5311 program, which provides funding assistance for public transportation in rural areas and is administrated through DRPT.

The major organizational change that resulted from the introduction of a UZA in the region has been the need to designate a public body as the recipient of the FTA Section 5307 funds for this region. The CSPDC became the designated recipient of these transit funds effective January 1, 2014. Currently about 67 percent of the revenue service hours are provided for routes that provide service within the urbanized area and 33 percent of the revenue hours are provided for rural routes. VRT continues to operate the urbanized area routes, through a contractual agreement with CSPDC.

DRPT is changing its sub-recipient policies such that local governmental entities, rather than third party transit providers, will be the designated local grant sub-recipients for Section 5311 funds. For the CSPDC region, this will combine the rural and urban grant oversight functions so that the CSPDC will manage both programs. For FY16, VRT will remain the designated S.5311 sub-recipient in the region, with the CSPDC taking on this role in FY2017.

Contract to Provide Transit Services

CSPDC contracts with VRT to provide public transportation services in the urbanized area of the region. This contract is due to expire at the end of FY2016. The new contractual period will begin in FY2017 and will include both the urban services (which are now provided under the contract), as well as the rural services that are currently operated directly by VRT as a sub-recipient of S.5311 funds. The CSPDC will need to begin working on the procurement process early in FY2016, as the RFP process typically takes a significant amount of time to complete, and must follow FTA's procurement regulations.

Fishersville Facility

VRT's local operating facility in Fishersville was funded through FTA/DRPT grant assistance. FTA guidance indicates that as an FTA/DRPT- funded facility, it is to remain in use in support of public transportation in the region for its useful life. Continued DRPT and FTA leadership will be needed to sort through how to handle the shift in local grantee status with regard to this facility.

Vehicles

The vehicles that are currently used for service within the region will likely remain in use within the region, regardless of the contractor, as they were purchased using federal and state funds for the purpose of providing public transportation services in the CSPDC service area. This issue has not yet been fully resolved and will likely impact the CSPDC's decision regarding vehicle ownership for the initial new contract period.

Vehicle Ownership

As a relatively new S.5307 grantee, the CSPDC has not historically owned transit vehicles. Currently, the vehicles operated in the region are owned by CSPDC's contractor, VRT, with

DRPT maintaining a financial interest in the vehicles through their useful life. These vehicles were purchased through DRPT, with funding assistance from the federal S.5311 (80%) program, DRPT (up to 16%), and the remaining local matching funds provided by VRT and local partners.

The CSPDC is currently using FTA's Capital Cost of Contracting provisions, which allows the CSPDC to categorize half of the contract with VRT as capital, providing for an eighty percent matching ratio for that portion of the contract. While the CSPDC is using this provision during the current grant year, the agency was interested in determining the optimal scenario with regard to vehicle ownership. Specifically, is it more advantageous for the agency to own the transit vehicles or to continue to include the vehicles as part of the "Turnkey" contract with its contractor?[1]

A thorough review of this issue was developed in Chapter 4 and showed that in general terms it would likely be more beneficial for the CSPDC own its own vehicles, largely due to the federal and state funding assistance that is available to help purchase vehicles, the greater control over the vehicles that is possible with vehicle ownership, as well as the greater flexibility afforded to the CSPDC with regard to hiring a service contractor. However, this may not be logistically or financially feasible in the short-term, given the need to conduct the RFP process for transit services in FY2016. The CSPDC is planning to ask potential bidders to provide a proposal with and without vehicles to help determine the most appropriate local scenario.

As vehicles for the program are replaced, with the CSPDC as the grant recipient for public transportation funding in the region, the CSPDC may assume ownership of the regional fleet, depending upon future financial and logistical feasibility. The budgets in Chapter 7 have included both options. The CSPDC will need to provide DRPT with an update with regard to the vehicle ownership issue as soon as is feasible after the procurement process, as DRPT has indicated that only one scenario should be reflected in the TDP. The CSPDC's annual TDP update will need to reflect the chosen scenario.

Formalization of Local Funding Formula

The initiation and growth of transit services in the region has been incremental in nature, with each service evolving separately, each with its own financing arrangements, to make the funding situation work between federal, state, and local partner financing. Although not formalized, the current arrangement to assign local match among funding partners is as follows:

[1] Currently the CSPDC categorizes the contract with VRT as "Turnkey," with the contractor providing the vehicles, maintenance, and transit service. Under this classification, 50 percent of the contract costs are eligible for 80 percent federal share and 50 percent of the costs are eligible for 50% federal share. This scenario falls under the FTA's "capital cost of contracting," which recognizes the capital consumed by the contractor for the delivery of public transportation service. The FTA Circular states that "only the costs attributable to the privately owned assets are eligible under this policy." Items purchased with federal, state, or local government assistance are not eligible.

- The gross operating cost for each service is calculated based on the fully allocated cost per revenue hour.

- Estimated fare revenue, based on the previous year's data is applied to arrive at a net deficit per service. Fare revenue is calculated by individual route, to reflect the significant differences in fare revenue that is collected on each route.

- Federal and state funding is applied to arrive at the local match required per service.

- Each partners' share is estimated based on the number of hours assigned to each partner. This is relatively simple for the single payer routes (i.e., Waynesboro), but more difficult to estimate for the routes that have multiple partners.

In order to develop a fair methodology to divide the local share required among the routes for future improvements, as well as shortfalls that may occur if funding partners drop out, the revenue hours and revenue miles per jurisdiction were calculated (see Chapter 4 for these data). It is proposed that the following methodology be used for future allocations:

1) If an improvement is an entire route or service desired by a new funding partner, then the entire local portion of the cost of the improvement would be paid by the new partner on a cost per hour basis. The average current local share per hour is $15.18 on the urban side and $22.91 on the rural side. Adding a ten percent capital fund contribution on top of these hourly rates would equate to an urban local cost per hour of $16.70 and a rural local cost per hour of $25.20.

2) If an improvement is desired collectively for the public and is split among jurisdictions, it is proposed that the local cost of the improvement be calculated on a local cost per hour basis ($16.70 urban; $25.20 rural), and then divided among the jurisdictions based on the percentage of service in each jurisdiction (either revenue miles or revenue hours).

3) If an improvement is desired by a particular agency or jurisdiction (i.e., such as a dedicated stop) and requires a modest deviation in an existing route, then the local cost of the deviation (based on hours of service), should be calculated and used as the cost basis to charge the agency.

Each of these three proposed cost-sharing arrangements assumes that there are federal and state matching funds available.

Seek Additional Local Funding Partners

There are currently eight funding partners that contribute annually to the transit program, in support of either their constituents (Cities of Staunton and Waynesboro); Augusta County; Staunton Downtown Development; their students (Blue Ridge Community College and

Woodrow Wilson Rehabilitation Center); or their clients (Augusta Health and Shenandoah Valley Social Services). The funding provided by these partners provides matching funds so that the CSPDC and VRT can access a significant level of federal and state funding, which allows the system to provide needed services to the targeted constituent groups, as well as the public.

In addition to these eight funding partners, there are other entities in the region whose constituencies benefit from public transportation services. Some of these are already directly served by transit services, while others could be served with route adjustments. While this list is not exhaustive, the following entities currently enjoy transit access for their clients and do not currently contribute towards its operation:

- Bridgewater College
- Mary Baldwin College/Murphy-Deming
- Valley Program for Aging Services
- Vector Industries (call-in stop)
- Virginia Department for the Blind and Visually Impaired
- Virginia Employment Commission

The Murphy-Deming College of Health Sciences (part of Mary Baldwin College) opened a new Health Sciences building in Fishersville (June 2014), close to the Augusta Health campus. Students can use the 250 Connector to access the site but it does not have a direct stop.

These entities could be approached to see if they are willing and able to contribute to the system to improve public transportation services in the region in support of their constituencies. Additional matching funds could be used to expand services to better serve specific constituent needs, as well as public needs.

Approaching potential funding partners is typically a sensitive topic for transit programs to handle, as all riders are members of the public, with a right to access services offered through FTA/DRPT funding. The key differences for the constituencies of the partners are:

- Direct access
- Participation in system planning and decision-making
- Tailored services
- Fare-free for the riders (in some instances)

These are the benefits to partnership that the CSPDC could highlight and formalize when approaching potential new partners. If additional partners are added, it will be important to ensure that the financial participation directly offsets the benefits of participation offered by the CSPDC (be it direct access, tailored service, or fare-free service). The formalization of the local funding formula should ensure that a direct cost-benefit relationship occurs.

SHORT TERM SERVICE PROJECTS

The projects in the "short-term" category are those that will begin to be implemented in either FY2016 or FY2017.

General System and Infrastructure Improvements – Updated December 2017

Improve Transit Infrastructure

One of the common themes from survey respondents and stakeholders was the need to improve transit infrastructure in the region, including additional and improved bus stops, signage, and shelters. Of the 75 "official" system stops, 67 are signed. The larger issue is the number of "unofficial" stops and the need to add signage to mark these locations. Seven of the current "official" stops have passenger waiting shelters. This project proposes the following improvements:

- Sign all fixed-route stops, including those that are currently "unofficial" stops
- Eliminate flag stops in the urbanized area
- Flag stops are not totally eliminated, but with the BRITE stop signage, flag stops in Staunton and Waynesboro have been decreased.
- Reduce call stops
- Through route improvements, many of the call stops have been eliminated.
- Improve signage at transfer locations, particularly the Waynesboro hub
- Transfer locations have improved signage, indicating specifying all routes that serve the Hub / transfer location.
- Add shelters at key stops, choosing a ridership threshold for consideration (such as 25 daily boardings)

It should be noted that there are ADA compliance issues to consider when making bus stop improvements. If improvements are made to a stop (not including sign replacement), then the stop must be brought into compliance with the ADA. KFH Group has completed an ADA assessment of the bus stops in the service area, and it is available as a companion to the TDP.

The bus stop sign project was completed in FY 2017. All stops in the urban and rural areas are now signed as BRITE Stops. Additionally, a shelter was added at the Springdale stop in Waynesboro, and two benches were added to stops on the Staunton West Loop, and one bench was relocated to the Staunton Public Library. Develop Transit Pass Program

Stakeholders have expressed an interest in developing a pass program for frequent users of the system. The CSPDC has some level of pass program infrastructure in place already, as it

provides tokens for the DSS to distribute to clients. The pass program will replace the token program for the DSS, offering an increased ability to track usage.

CSPDC is planning to start the pass program by using a coupon book, similar to the programs in place in Harrisonburg and Winchester. A coupon book is a simple mechanism to start a pass program, as the books are numbered for tracking purposes. Harrisonburg and Winchester sell books of 25 and 20 trips, respectively. The CSPDC will still need to iron out the details of the program, including how many trips to include within the coupon books; the level of discount to offer (Harrisonburg offers a 20% discount; Winchester offers a 15% discount); the method of sales and the sales outlets; and the tracking procedures. This improvement can be implemented in FY16.

Alternate fare media was examined, and recommendations were made, as a task of the BRITE ITS study which was completed in November, 2017. CSPDC and Virginia Regional Transit staff(s) are collaboratively researching fare collection systems that are appropriate for smaller agencies.

Improving the Efficiency, Effectiveness, or Convenience of Current Services

The data analysis, rider input, and stakeholder input documented in Chapter 3 provided the basis for formulating a number of service alternatives (Chapter 4) with regard to the current routes. Several of the alternatives were chosen to move forward to the six-year plan. These improvements are organized by route, with the urbanized area routes presented first, followed by the rural routes.

250 Connector

Close the Service Breaks

The first improvement associated with the 250 Connector is to eliminate the breaks in service that occur at 12:30 p.m. and at 6:30 p.m. during the week and at 3:30 p.m. on Saturdays. These breaks in service are very inconvenient for riders, particularly those that are transferring from other routes and making connections.

The CSPDC is planning to implement this improvement in FY16, as there are funds available for this improvement.

The service breaks were closed on the 250 Connector Route in 2016.

Add Valley View Apartments as a Regular Stop

The Valley View apartments on Frontier Ridge Court, near the Staunton Walmart, are served with a call-in stop. This stop is used frequently and it is proposed that it be formalized to be a

regular stop on the schedule. Adding this stop will eliminate the need for Valley View residents to call ahead to schedule their trips, and reduce confusion about whether the apartments are served. This stop can be added during the next schedule change, likely to occur in the fall of FY16.

Valley View Apartments was added as a regular stop on the 250 Connector Route and is signed as a BRITE stop.

Use a Larger Vehicle

As the most productive route in the network, and also one of the longest, there are times when there are standees on the bus for significant periods of time. The current 20-24 passenger vehicles, while equipped with grab bars, are not designed to have standees for long periods of time. When there are wheelchairs on board, seats are lost to accommodate wheelchair securement.
It is recommended that a larger vehicle be used for the route, within the limits of safe maneuverability as there are some turning movements along this route that will limit the size of the vehicle chosen. The operating staff indicated that the largest vehicle likely to be feasible is a 28-30 passenger bus. As the vehicles for this route are replaced, larger vehicles will be purchased.

Beginning with the new FY 2017 turnkey operating contract, the vehicles on the 250 Connector route were upgraded to 30 passenger capacity.

Additional Saturday Service

The 250 Connector currently operates on Saturdays but not until 12:30 p.m. It is recommended that this route begin service at 8:30 a.m. on Saturdays. This improvement is relatively low cost, adding just 416 annual service hours and will improve regional mobility on Saturdays, including allowing for work and shopping trips that were not previously possible. This improvement is scheduled for FY16.

Effective in FY2016, Saturday operating hours on the 250 Connector were extended to begin at 8:30 AM and run through 7:30 PM.

Future Improvements

One of the ongoing issues associated with the 250 Connector is the need to shorten the route in some manner to allow more time for each cycle to be completed. A service alternative for the route was presented in Chapter 4 but funding was not available to add significant resources at this time. The minor improvements that are included in this plan will provide some relief and more will likely be needed.

The addition of a second urban On Demand bus operating six hours per day has relieved the 250 Connector by eliminating many of the deviation requests on this route.

Staunton Trolleys

The Staunton Trolleys provide a mix of circulator services for Staunton residents and visitors. The Green Trolley is the shortest of the three routes, operates as a true small city circulator, and serves the major downtown visitor attractions. The Silver and Red Trolleys operate longer, more circuitous routes, providing service geared to people who live in Staunton and need to access shopping, employment, and medical destinations.

Transition Vehicle Choice from Trolley to Small Transit Bus for Silver Route

Given that the Silver trolley route is more oriented to residents rather than visitors, and that the route is longer, it is proposed that the use of trolley buses for the route be phased out in favor of more comfortable, less expensive, and more reliable small transit vehicles. This will reduce confusion for visitors who are most likely interested in riding the Green Trolley route, as it serves the downtown tourist attractions. In addition, small transit vehicles are easier to maneuver than trolleys. This is a significant concern in the City of Staunton as there are many steep grades and tight corners that the vehicles must navigate.

Effective with the FY 2017 contract, the North and West Loop routes (replacing the Silver Trolley) are now operated by a 24 passenger BOC bus.

Split the Silver Trolley into Two 30-minute Routes

One of the issues that was identified in association with the Silver Trolley Route was the circuitous nature of the route and the associated long ride time. One way to address this without incurring additional costs is to split the route into two shorter routes that are interlined at the Lewis Street Hub. This will offer more direct service from origin to destination, though frequency will remain hourly (the same vehicle will be used for both routes). Through-riders can stay on the vehicle without incurring a new fare so that the change will not cause riders to incur additional transit expenses. The direction of travel for each of the two proposed loops should be further discussed with stakeholders to maximize travel convenience. These proposed routes are shown in Figure 5-1. This change is scheduled to be implemented in FY16.

Effective in FY 2016, this route has been split into two 30-minute route – the North and West Loops.

Combine the Red and Silver Trolley Routes

The Red Trolley Route operates only on Friday and Saturday evenings, from 6:00 p.m. to 10:00 p.m. The route covers many of the same segments as the Silver Route, with the exception of the Walmart, which is also served by the 250 Connector. The original purpose of the Red Trolley was to provide service for young people on Friday and Saturday evenings. System data suggests that this ridership has not developed. It is recommended that the Red Trolley be discontinued

and the annual service hours previously devoted to the Red Trolley be used to add one hour of service in the evening for the Silver Trolley, Monday through Friday, extending the span of service to 7:00 p.m. This change can be implemented in conjunction with the split of the Silver Trolley route in FY16.

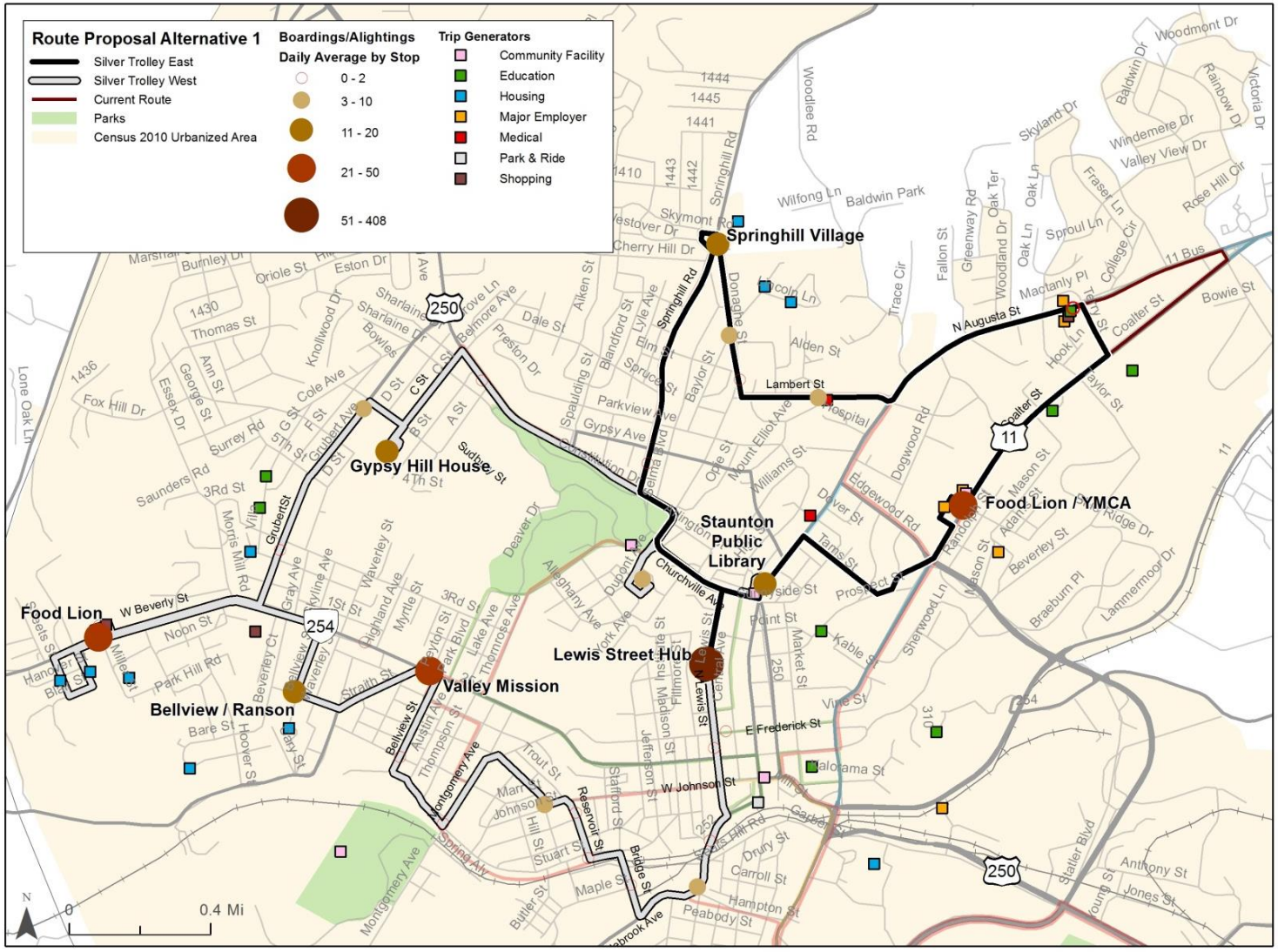
The Red Trolley route was replaced by a Saturday Night Trolley Route in 2016. The Saturday Night route combines the Downtown Trolley route with the more popular stops on the North and West Loops.

Green Trolley Extended Hours

The span of service for the Green Trolley is currently extended to include evening hours (6:00 p.m. to 9:00 p.m.) from May through October. While discussing the trolley hours during the development of the short-term service plan, CSPDC staff asked VRT to look at the ridership during the evening hours to see if these extended hours are used before Memorial Day and after Labor Day, as well as to see if the extended hours are used Monday through Thursday. These data show that daily ridership is unpredictable throughout the season, with some Mondays and Tuesdays exhibiting higher ridership than Fridays and Saturdays. The data showed that ridership is the highest during this service period in July and August, but does not drop significantly until October. It is recommended that the CSPDC and the City of Staunton monitor the extended hour ridership for the remainder of this season to see if the drop in October ridership continues as a trend that would suggest ending this service in September.

Ridership has been monitored, and the extended service hours have been retained for May through October. The Green Trolley is now designated as the Downtown Trolley Route.

Figure 5-1: Proposed Silver Trolley Route Split



Adjust the ADA Complementary Paratransit Fare in Staunton

While the fare structure was not mentioned by survey respondents or stakeholders as an issue, it came to light when examining the fare for ADA complementary paratransit in Staunton. Federal guidance indicates that the ADA fare can only be twice the fixed route fare. In this instance, the ADA fare is $1.00 and the trolley fares are only $.25. This means that either the trolley fares need to be raised to $0.50 (similar to the rest of the system), or the ADA fare needs to be reduced to $0.50.

The City of Staunton has decided that it would prefer to reduce the ADA fare from $1.00 to $0.50, rather than raising fares on the trolley routes. Lowering the current ADA fare will represent a loss of about $964 annually. This adjustment should be implemented as soon as is feasible, to ensure ADA compliance.

The ADA fare in Staunton has been reduced to comply with FTA guidelines.

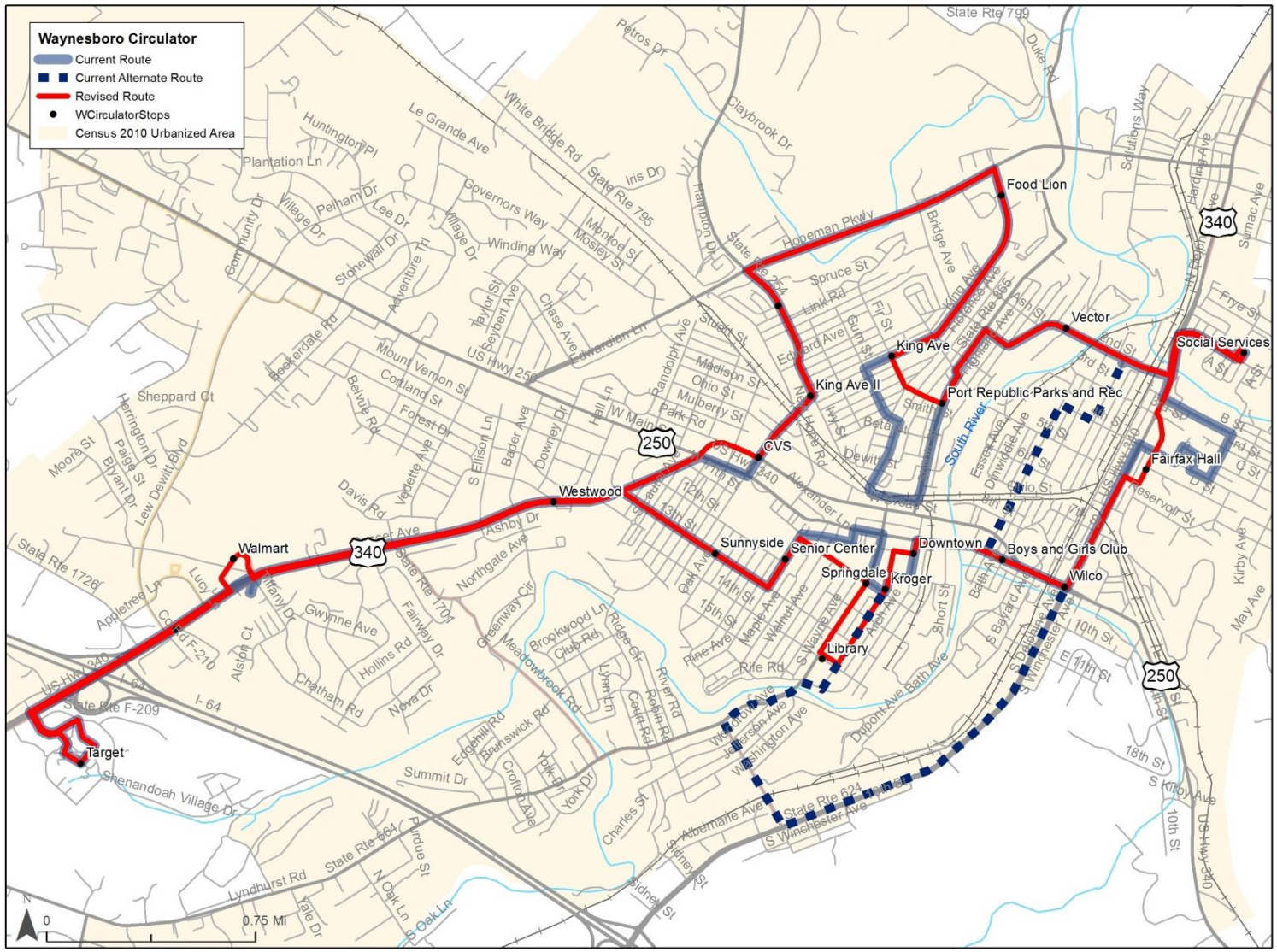
Waynesboro Circulator

The Waynesboro Circulator provides hourly service throughout the City of Waynesboro, offering two different service patterns, as well as deviating from the route for people with disabilities, and allowing some call-in stops. These three issues together can create problems for the route, including rider confusion and an inability to stay on schedule. Given the timed connections within the system, it is important for the routes to maintain their schedules so that the entire network is not negatively impacted. There are also very few riders who use the alternate route.

The two primary goals for the changes proposed for the Waynesboro Circulator are to trim the route so that a small time cushion is available and to eliminate the alternate route to reduce rider confusion. The focus of the segment eliminations was on those areas with little to no riders, and or those that could be transitioned a block or two away for better travel time. Another feature of the proposed route revision is a reversal of the direction of travel, from clockwise to counter- clockwise. This allows some easier turns and takes advantage of some locations that have sidewalks only on one side of the street. The revised route was developed in consultation with the City of Waynesboro and the Shenandoah Valley Department of Social Services, with the City developing the final design. The proposed revised route, along with the current route, is shown in Figure 5-2. This service change can be made during FY16, as it is revenue neutral.

In FY 2017, the Waynesboro Circulator Route was completely revamped to include the most popular portions of the alternate route, and now runs the same route, with minimal deviations. A public meeting was held in advance of implementation of the route changes, and the new route has been well received.

Figure 5-2: Revised Waynesboro Circulator



Augusta On-Demand

The Augusta On-Demand was once county-wide, offering service to different parts of the county on different days of the week. In an effort to manage demand, some of these resources were directed to implementing the 340 Connector (beginning in FY2012) and the Augusta On-Demand was limited to once a week service in the Craigsville area. Over time fewer and fewer of the passengers who originally used this service are still riding. The current route statistics suggest that keeping this service is not sustainable, as the FY2014 data indicated that there were only 0.49 passenger trips per revenue hour and that the cost per trip was $116.50. It is proposed that this service be eliminated. This change is proposed for FY17.

The Augusta On-Demand service was discontinued in FY 2016.

340 Connector

The 340 Connector is currently the least productive fixed route in the system. It is difficult to determine if this is due to low demand for service between Stuarts Draft, Waynesboro, and Blue Ridge Community College, or if this is due to the limited services offered. The current scenario is not sustainable for a fixed route as the productivity is only 2.42 trips per revenue hour and the cost per trip is $23.23.

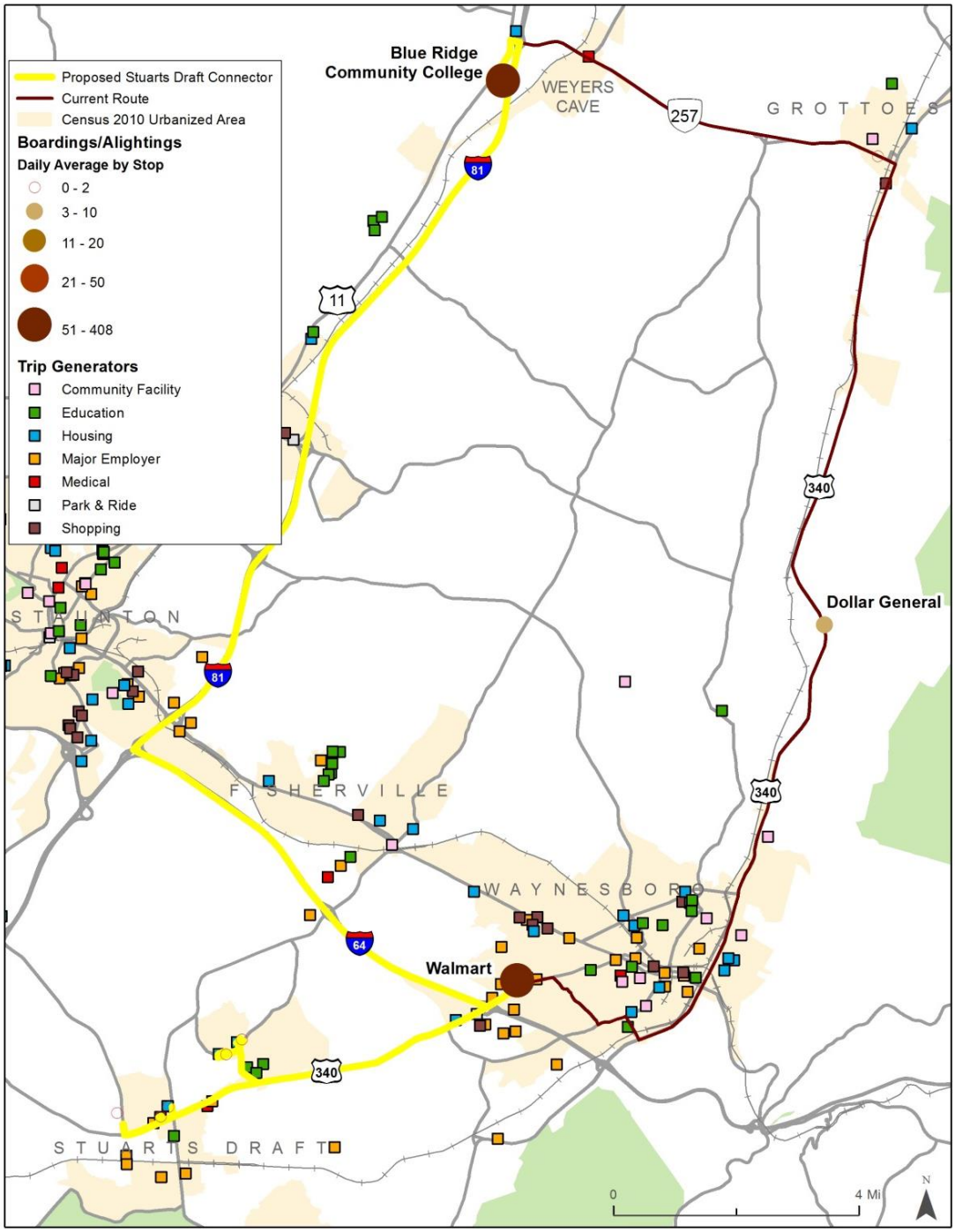
Given that the primary ridership is between Waynesboro and Blue Ridge Community College, there is very little ridership on the Rt. 340 segment between Waynesboro and Grottoes or the Rt.257 between Grottoes and Weyers Cave, and there have been multiple comments expressing the need for additional service for Stuarts Draft. It is proposed that this route be changed to an express service to provide service between Stuarts Draft, Waynesboro, and BRCC. The concept is for the route to function as it currently does in Stuarts Draft to the Waynesboro Hub. From that point, the route will provide express service to Blue Ridge Community College using Routes 64 and 81. This will allow the route to be completed in one hour for each direction. A suggested schedule, based on current system scheduling patterns, would be a 7:00 a.m. start at Highland Hills Apartments; and a 7:30 a.m. start from the Waynesboro Hub (meeting the Waynesboro Circulator), arriving at BRCC just before 8:00 a.m. The route would then travel back to Waynesboro (8:30 a.m.) and back to Stuarts Draft for a second morning run at 9:00 a.m., serving Waynesboro at 9:30 a.m. and BRCC just before 10:00 a.m. At this point, the bus would go out of service.

For the afternoon, the route would originate at BRCC at 3:00 p.m., travel to Waynesboro (3:30 p.m.), then on to bring people back to Stuarts Draft (4:00 p.m.). The route would make one more trip in service, leaving Stuarts Draft at 4:00 p.m.; Waynesboro at 4:30 p.m., and back to BRCC for a last run at 5:00 p.m., returning to Waynesboro at 5:30 p.m. and Stuarts Draft at 6:00 p.m.

The vehicle revenue hours for this schedule, assuming Monday-Friday will total six hours per day, which is a little higher than the current 5.1 hours per day. It is proposed that the savings realized by discontinuing the Augusta On-Demand service be used to fund the expected additional expenses associated with an additional hour of revenue service each weekday. The proposed route is shown in Figure 5-3. It is suggested that the route name be changed to reflect its different route alignment, perhaps calling it the Stuarts Draft Connector. This change is proposed for FY17.

The 340 Connector has been replaced by the Stuarts Draft Link, retaining many of the Stuarts Draft stops, and providing single seat service to Augusta Health.

Figure 5-3: Proposed Stuarts Draft Connector



BRCC North and BRCC South

Close the 7:00 p.m. Service Gaps (Monday-Thursday)

As with the 250 Connector, the BRCC North and BRCC South routes include an hour gap in service so that the drivers can take a meal break. This is not convenient for passengers and adds confusion to the schedule. It is proposed that the service break be eliminated on these two routes, with the contractor providing the meal breaks using a break driver or an alternative scheduling design.

The service breaks were closed in FY2017.

Evaluate Summer Services

Throughout the TDP process there has not been a discussion regarding the demand for BRCC North and BRCC South services during the summer. Summer classes are held through July, so there is likely a need for both of the routes to operate throughout the summer. However, the ridership in the summer is not as high as it is during the fall and spring semesters. It is recommended that the summer ridership be evaluated to see if the level of service provided throughout the summer is appropriate.

The service gaps on the BRCC routes have been eliminated in FY 2017, and summer ridership has been, and will continue to be evaluated. At this time, about 45% of the ridership on these two routes is unrelated to the College.

Short Term Service Plan Summary

Table 5-1 summarizes the service projects planned for the short-term. The TDP identifies an implementation year for each project for planning purposes, but actual implementation may be impacted by the availability of funding, future partnerships, and other changes in circumstances that may arise. The short-term plan is conservative, projecting an increase of 1,027 revenue service hours (3.7%) over the six-year period. The service increases are scheduled for implementation during the first two years of the plan. This schedule reflects the budget limitations of the local funding partners.

Table 5-1: Summary of TDP Short-Term Service Improvements

Years of Planned Deployment	Urban/ Rural	Service Project	Annual Revenue Hours	Annual Revenue Miles
Existing	Urban	Current Urbanized Area Services	17,599	210,873
Existing	Rural	Current Rural Area Services	9,794	171,464
		Current Total	**27,393**	**382,337**
FY2016	Urban	Route 250 Connector- Close service breaks	875	11,594
FY2016	Urban	Route 250 Connector- Additional Saturday service	408	5,406
FY2016	Urban	Split the Silver Trolley Route	Minor change	Minor change
FY2016	Urban	Combine Silver/Red- extend Silver 1 hour	Minor change	Minor change
FY2016	Urban	Adjust the Waynesboro Circulator	Minor change	Minor change
FY2017	Rural	Eliminate Augusta On-Demand	(325)	(6,988)
FY2017	Rural	Modify the 340 Connector- Stuarts Draft Connector	260	9,100
FY2017	Rural	BRCC North and South- Close service breaks	416	7,800
		Projected Total	**29,027**	**409,249**

All of these Short-Term Service improvements have been implemented, and effective July 1, 2017, projected service hours for the service are 21,311 for the urban routes, and 8964 for the rural routes, for a total of 30,275 annual service hours.

VISION PROJECTS

The vision projects included in this TDP are those that the CSPDC and the local partners are interested in pursuing, but do not have the funding identified to implement in the foreseeable future. Keeping them in the TDP will allow them to be implemented, should funds become available. Table 5-2 provides a summary of these projects, with the full description of each service provided in Chapter 4. The list of projects is not presented in priority order. The highest priority for service improvements currently revolves around the need to find additional time-saving opportunities for the Route 250. Adding a second vehicle to the Silver Trolley (i.e., improving frequency) could allow this route to extend to the Staunton Mall area thus making it possible for the Route 250 to skip that area and reduce its route mileage.

Table 5-2: Summary of Vision Projects

Urban/Rural	Project	Annual Revenue Hours	Annual Revenue Miles
Urban	Route 250- Improved Frequency	5,200	68,900
Urban	Silver Trolley - Saturday Service	416	3,453
Urban	Silver Trolley- Evenings 7 - 9 pm	510	4,233
Urban	Silver Trolley - Improved Frequency	2,600	21,580
Urban	Waynesboro- Saturday Service	416	7,779
Rural	Add a trip on Fridays to the BRCC North	52	975
Rural	Add a trip on Fridays to the BRCC South	52	978
Rural	Saturday BRCC Corridor Service	416	7,488
	Projected Total	**9,662**	**115,386**

Saturday service on the North and West Loops and Waynesboro Circulator is planned to be added in FY 2020. Additional hours of Friday service and Saturday service on the BRCC is not planned for implementation within the ten year planning timeframe.

Real Time Transit Information

The provision of real-time transit information was discussed as a vision project, though not likely to occur within the six-year planning horizon of the TDP.

ITS solutions to improve the efficiency of service delivery and customer experience were explored and prioritized in an ITS Plan that was completed by Kimley-Horn in October, 2017. A copy of the ITS Plan is included as a new Appendix to this TDP. Conversations are underway with the contracted service provider, Virginia Regional Transit, as to the most effective way to implement the components of the plan. The costs of certain of these ITS solutions are included in the Capital Financial Plan.

OTHER INITIATIVES

Feasibility Study for Charlottesville Service

The results of the survey and stakeholder input showed a desire for area residents to travel to Charlottesville. Trip purposes include work, medical, and recreation, with the University of Virginia and its associated medical facilities located in Charlottesville. As a potential regional service, the details regarding the feasibility and implementation are beyond the scope of this local TDP. The three MPOs located in the adjacent counties of Rockingham, Augusta, and Albemarle, with support from DRPT, are planning to develop a full feasibility and implementation study following this TDP, possibly in conjunction with Virginia's intercity bus program. Funding and or technical assistance for the consultant study will come from transit planning funds from the three MPOs. The study will outline the feasibility, including the full costs of providing this type of service, the potential funding sources, potential stops, likely ridership, infrastructure needs, and implementation issues. It is anticipated that there will be a regional steering group to oversee the study, with representation from a number of stakeholders including the CSPDC (including the Harrisonburg-Rockingham MPO and the SAW MPO); the Thomas Jefferson PDC; DRPT; the University of Virginia; and the connecting transit programs (HDPT, Charlottesville Area Transit).

The feasibility study was prepared by the KFH Group, with guidance from a steering committee comprised of MPO representatives, the local transit agencies, and the two universities. The initial portion of the study was completed in 2017, and presented at MPO meetings. Following subsequent discussions with DRPT and the stakeholders, it was agreed that the approach to implementation of the service would be phased, with the initial phase focused on Staunton, Augusta County and Waynesboro connectivity to Charlottesville employment and medical destinations. This approach was presented to DRPT staff in December, 2017, and at their suggestion, staff will prepare an application for FY 2019. Demonstration grant funds to refine the service plan and initiate operation of service sometime during the second half of FY 2019. Subsequent years of operation will be included in the CSPDC's future 5311 grant applications.

Advertising Policy and Revenue

The topic of advertising policies and revenue did not come up during the TDP process. It is relevant for the CSPDC to consider developing advertising policies to be included in the upcoming contract for service. VRT currently does place advertisements on the vehicles that operate in the region.

An advertising policy has been developed and is being administered by the Staunton Downtown Development Association, with oversight from the CSPDC. All revenues of

the advertising program (net development costs) are directed to the BRITE transit program.

Chapter 6 - Capital Improvement Program

INTRODUCTION

This chapter outlines the capital infrastructure projects needed to implement the service recommendations described in Chapter 5. The Capital Improvement Program (CIP) provides the basis for CSPDC's requests to DRPT for federal and state funding for capital replacement, rehabilitation, and expansion projects. The recommended projects are those for which CSPDC reasonably anticipates local funding to be available. The recommendations for different types of capital projects, including vehicles, passenger amenities, facilities, and technology, are described below.

VEHICLE REPLACEMENT AND EXPANSION PLAN

The CSPDC has made the decision to include provision of vehicles by the contractor in the Turnkey operating contract. The contractor includes the capital cost of the vehicles in their service rate, and FTA and DRPT grants for the service include a capital cost of contracting capital grant. Thus, this section of the capital improvement plan does not apply to the current service.

BRCC Shuttle Vehicle

FACILITIES

Effective June 30, 2017, ownership of the transit facility located in Fishersville transferred from Virginia Regional Transit to the CSPDC. This facility supports the BRITE transit service, and is more than adequate to support the management, administration, and maintenance functions for the TDP planning period.
The second level of the administrative portion of the facility is leased to Augusta Health Business Offices, and all lease payments are designated for transit use. This incidental use was approved by FTA prior to the transfer of ownership of the facility.

PASSENGER AMENITIES

An important capital project recommended in the TDP is the installation of ADA accessible bus shelters and benches at the highest use bus stops, which are identified in Chapter 4. An ADA assessment of the region's bus stops was also conducted in conjunction with this TDP, and should be used as a reference during the implementation of shelters and benches. Additional shelters and benches were also requested by passengers. The TDP has included two shelters per year as part of the financial plan (Chapter 7). During FY 2017, a bus shelter was installed in Waynesboro, and two new benches were installed in Staunton and one bench was relocated to the Staunton Public Library. Future years capital grant applications will include funding for additional shelters and benches.

The replacement of the region's bus stop signs to reflect the implementation of the Brite Bus brand is also included in the capital plan. **This task was completed in 2017, and all stops are now signed with BRITE stop signs, indicating which specific routes serve that stop.**

EQUIPMENT

It is anticipated that any equipment needed to support transit services in the region during the six-year planning period will be handled by the CSPDC's transit service contractor. If publicly-funded equipment is needed, the CSPDC can address this need through its annual TDP update. With the change in ownership of the transit facility, the CSPDC is now responsible for maintenance and replacement of the shop equipment. However, none of the equipment is programmed for replacement in the six year plan timeframe.

TECHNOLOGY

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A transit ITS study and six year plan was completed by for the CSPDC by Kimley-Horn in 2017. The study included rider survey questions and interaction with the BRITE Transit Advisory Committee. Recommendations of the study include initiatives by the CSPDC and by the contracted service provider. Certain of these recommendations are programmed for inclusion in the Capital Improvement Program and the TIP. CSPDC and the contracted service provider staff are in discussion regarding the most cost efficient manner to implement these recommendations.

Chapter 7 - Financial Plan

INTRODUCTION

This chapter provides a financial plan for funding existing and proposed public transportation services in the CSPDC service area for the TDP's six-year planning period. The financial plan addresses both operations and capital budgets, focusing on financially constrained project recommendations. The budgets were constructed with the information that is currently available, including the Commonwealth Transportation Board's FY2016 Public Transportation Improvement Plan, the FY2016 DRPT grant information from CSPDC and VRT, as well as the existing transit budgets that were reviewed for Chapter 3 of the TDP.

For the first year of the plan (FY16), there will continue to be two public transportation grant recipients in the region: the CSPDC, which serves as the grantee for public transportation funds targeted for the urbanized area within the region (S.5307); and VRT, which serves as the grantee for public transportation funds targeted for the rural areas within the region (S.5311). Beginning in FY17, the CSPDC will be the local grant recipient for both the S.5307 and S.5311 funds. Effective FY 2018, the CSPDC assumed responsibility for the S.53111 grant funding, unifying the urban and rural transit oversight.

Additionally, the multiyear turnkey contract effective July 1, 2017, requires that the Contractor provide all of the revenue vehicle fleet and adequate spares to operate the transit service. The CSPDC will not own vehicles under this contract.

In addition to these somewhat unique local circumstances, there are also other unknown factors, including the future economic condition of the region and the Commonwealth of Virginia, and the availability of local match for the federal and state funds. The multi-year federal transportation funding program has also not been finalized, which could affect the level of federal funding. The exact revenue available each year will depend upon the availability of funding from the federal Sections 5307 and 5311 programs, the Commonwealth Transportation Fund, and local sources.

OPERATING EXPENSES AND FUNDING SOURCES

The Tables at the end of this chapter provide a financial plan for the provision of public transportation services in the region under the financially-constrained five-year plan, and the fiscally-unconstrained second five years.

The original Tables of the TDP have been replaced to reflect service and funding as it now occurs. These tables reflect the current contracted service hour rates for the initial five years (constrained), and service rate assumptions for the second five years (unconstrained). The Tables include ten year forecasts for operating and capital for the urban (5307) routes, rural (5311) routes, and the planned Inter-regional service from Staunton, Augusta County, and Waynesboro to Charlottesville.

Urban S.5307 Operations and Capital Financial Plan

Years FY 2019 through FY 2023 Constrained; Subsequent Years Unconstrained

Operating Cost Summary	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28
Payroll & Indirect Costs	199,548	158,920	168,387	183,839	186,265	191,853	197,608	203,536	209,643	215,932
Service Costs (50%)	512,849	547,796	578,695	599,953	617,398	635,920	654,997	674,647	694,887	715,733
Other Contracted Services	9,344	9,344	9,344	9,344	9,344	9,624	9,913	10,210	10,517	10,832
Misc. Costs	15,157	13,911	14,465	15,157	13,911	14,328	14,758	15,201	15,657	16,127
Fuel Costs	128,179	143,736	165,718	187,528	206,281	212,469	218,844	225,409	232,171	239,136
Facility Costs	58,470	60,581	62,968	65,073	67,026	69,037	71,108	73,241	75,438	77,702
Total Costs	$ 923,547	$ 934,288	$ 999,577	$ 1,060,894	$ 1,100,225	$ 1,133,231	$ 1,167,228	$ 1,202,245	$ 1,238,313	$ 1,275,461
Fares	$ 59,671	$ 60,830	$ 62,695	$ 63,403	$ 63,403	$ 65,305	$ 67,264	$ 69,282	$ 71,361	73,501
Net operating cost	$ 863,876	$ 873,458	$ 936,882	$ 997,491	$ 1,036,822	$ 1,067,926	$ 1,099,964	$ 1,132,963	$ 1,166,952	$ 1,201,960
Service Hours	21,311	21,725	22,391	22,644	22,644	22,644	22,644	22,644	22,644	22,644
Capital Cost Summary	**FY 19**	**FY 20**	**FY 21**	**FY 22**	**FY 23**	**FY 24**	**FY 25**	**FY 26**	**FY 27**	**FY 28**
Shelters / Benches	-	8,000	8,000			8,500	-	12,000	-	8,000
ITS	-	46,550	66,500	-	31,920	-	-	-	-	-
Replacement Lift				25,000						
Capital Cost of Contracting	512,849	547,796	578,695	599,953	617,398	635,920	654,997	674,647	694,887	715,733
Total Capital Cost	512,849	602,346	653,195	624,953	649,318	644,420	654,997	686,647	694,887	723,733

Rural S.5311 Operations and Capital Financial Plan

Years FY 2019 through FY 2023 Constrained; Subsequent Years Unconstrained

Operating Cost Summary	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28
Payroll & Indirect Costs	88,767	69,346	71,293	76,965	77,981	80,320	82,730	85,212	87,768	90,401
Service Costs (50%)	228,136	239,038	245,011	251,173	258,476	266,230	274,217	282,444	290,917	299,645
Other Contracted Services	4,156	4,156	4,156	4,156	4,156	4,281	4,409	4,541	4,678	4,818
Misc. Costs	6,743	6,189	6,435	6,743	6,189	6,375	6,566	6,763	6,966	7,175
Fuel Costs	100,532	110,586	123,706	138,423	152,265	156,833	161,538	166,384	171,376	176,517
Facility Costs	26,010	26,435	26,659	27,243	28,061	28,903	29,770	30,663	31,583	32,530
Total Costs	$ 454,344	$ 455,750	$ 477,260	$ 504,703	$ 527,128	$ 542,941	$ 559,230	$ 576,007	$ 593,287	$ 611,086
Fares	$ 13,746	$ 13,746	$ 13,746	$ 13,746	$ 13,746	$ 14,158	$ 14,583	$ 15,021	$ 15,471	$ 15,935
Net operating cost	$ 440,598	$ 442,004	$ 463,514	$ 490,957	$ 513,382	$ 528,783	$ 544,647	$ 560,986	$ 577,816	$ 595,151
Service Hours	9480	9480	9480	9480	9480	9480	9480	9480	9480	9480
Capital Cost Summary	**FY 19**	**FY 20**	**FY 21**	**FY 22**	**FY 23**	**FY 24**	**FY 25**	**FY 26**	**FY 27**	**FY 28**
Shelters	-	-	-	8,000	8,500	-	-	8,000	-	8,000
Capital Cost of Contracting	228,136	239,038	245,011	251,173	258,476	266,230	274,217	282,444	290,917	299,645
Total Capital Cost	228,136	239,038	245,011	259,173	266,976	266,230	274,217	290,444	290,917	307,645

Proposed Inter-regional Service Plan (Three Year Initial Plan)

- **Phase I Connects Staunton, Augusta County, Waynesboro with Charlottesville**
- **Initial Funding from Demonstration Funds, and Subsequent Years from Rural S.5311**
- **Operations and Capital Financial Plan**

	Annual Operating Costs	Farebox Revenue	Federal 5311	State Assistance	Local Assistance
FY 19	239,661	40,540	-	159,297	39,824
FY 20	375,630	97,296	82,690	137,976	57,668
FY 21	393,941	113,512	171,014	48,424	60,992
FY 22	202,223	56,756	88,324	25,145	31,998
	1,211,455	308,104	342,027	370,841	190,483

ITS Study and 6-Year Plan

BRITE Transit Advisory Committee Meeting

November 8, 2017

What is ITS?

ITS = Intelligent Transportation Systems

- Technologies to enhance service delivery and customer experience

BRITE's Current Systems

- Demand response scheduling software
- Radio communication
- On-board and facility camera systems

Study Scope

1. Data Collection and Observation
2. Study Report 6-Year Plan
3. Presentation to BTAC

Purpose

Explore ITS that may improve the **reliability of data**, foster **efficiency in service delivery**, and enhance the **transit experience for customers**. The outcome of the study was a 6-year plan and program for implementing technology solutions appropriate for BRITE.

Application Areas

- Vehicle Tracking and Dispatch
- Traveler Information
- Scheduling
- Passenger Counting
- Business Intelligence
- Fare Collection
- Safety and Security
- Maintenance

Methodology

Assessment

- Bus Operations
- Facility Operations
- Customer Survey

User Needs

- Customers
- Operators
- Managers

Projects

- 8 Projects
- Cost Estimates
- Schedule
- Lifecycle

6-Year Program

- FY 2019 to FY 2024
- Capital and Operations & Maintenance Costs
- Staffing

Assessment
Observations

Bus Observations

- Spotty communication with dispatch
- Difficult to enforce or verify fares
- Route deviations can cause delays = stressed operators and customers

Facility Observations

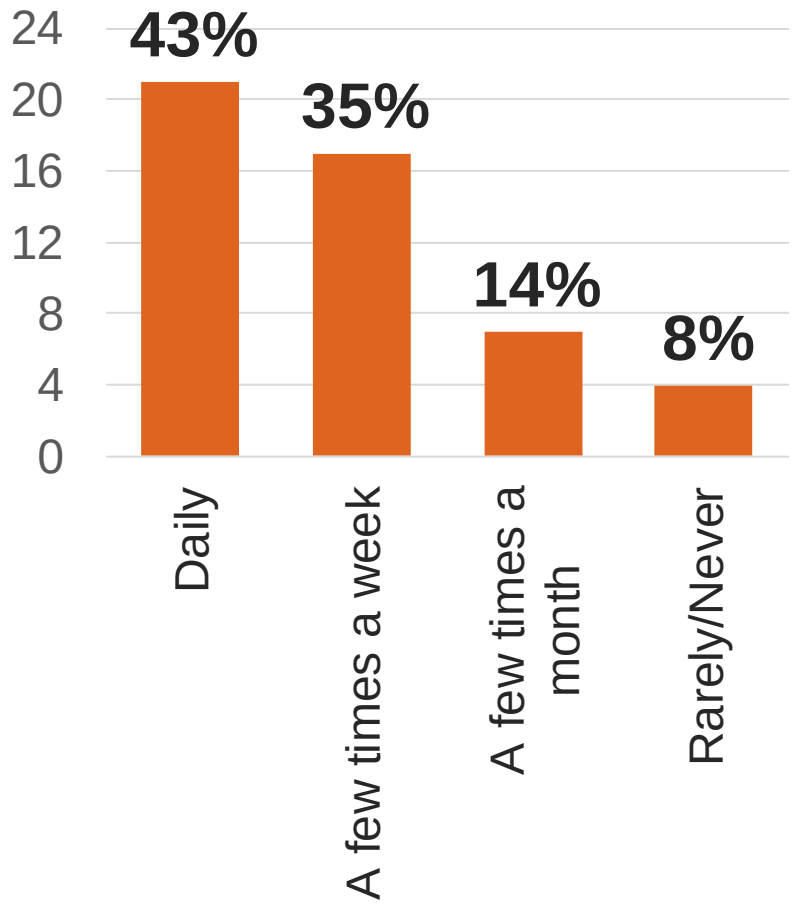
- Manual scheduling
- A lot of paperwork
- Sound methods, but time consuming

Image Source: CSPDC

Assessment
Customer Survey

- Respondents from 6 routes and demand response
  - **25** in-person
  - **24** online
- Regular riders
  - **78%** use the service at least weekly
  - **76%** use the same route
- Common trip purposes
  - Work – **33%**
  - Shopping – **24%**
  - College/University – **20%**

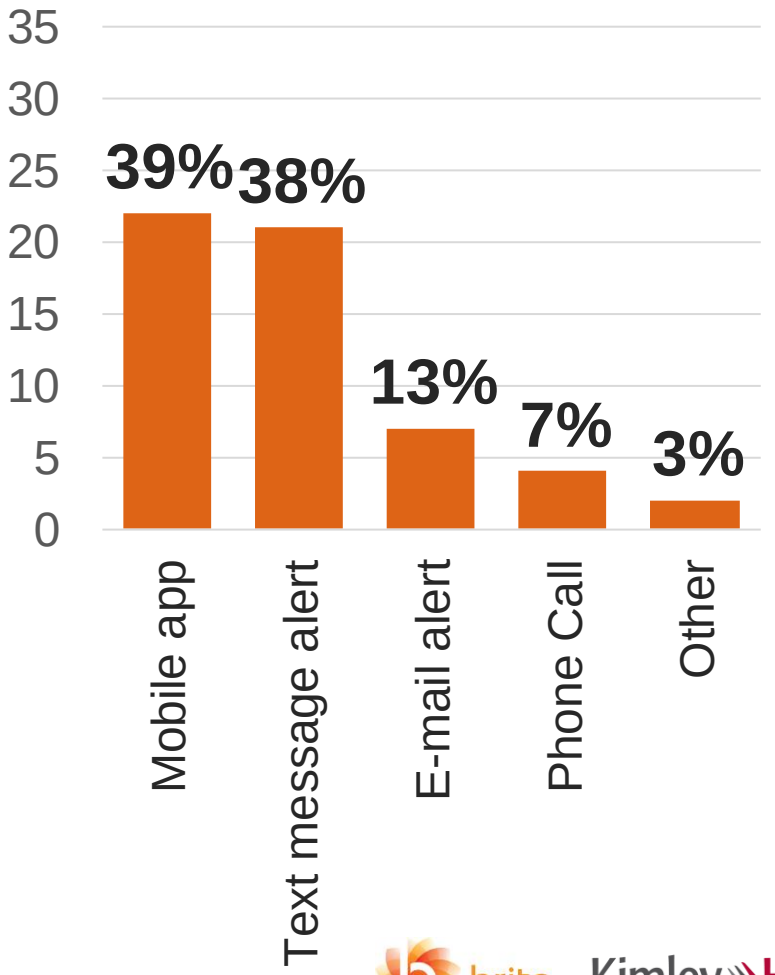
How often do you ride the bus?



Assessment
Customer Survey

- Evaluated desire for real-time information or other technology
- **76%** desire real-time information
- Those that do not need information stated the service was reliable

How would you like to receive information about your bus?



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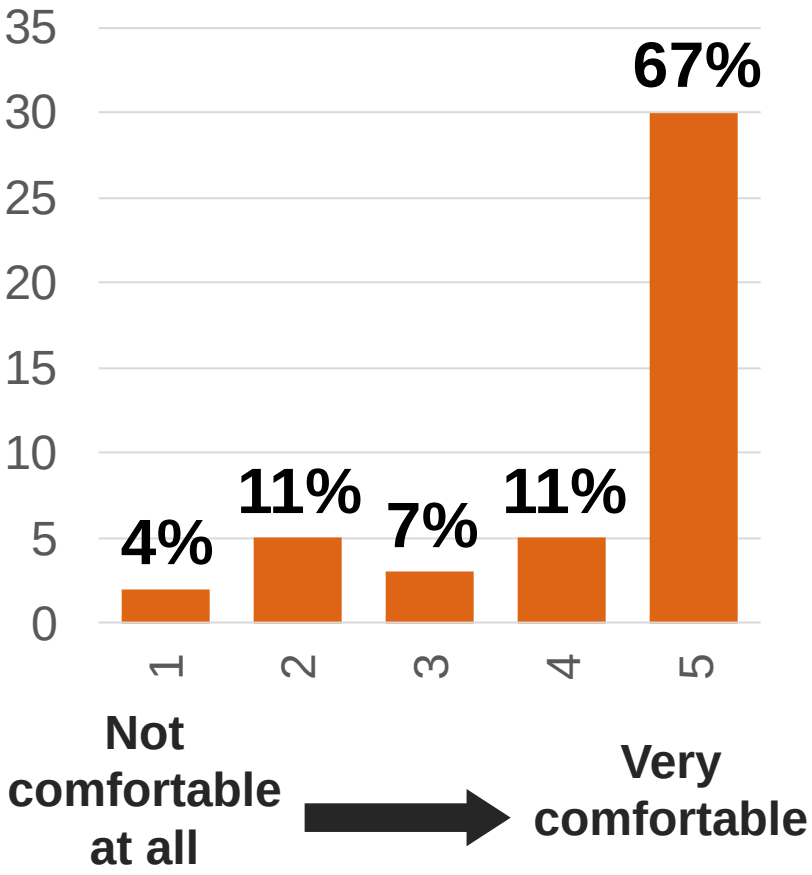
Assessment
Customer Survey

- **78%** own a smartphone
  - **88%** on BRCC Shuttles
  - **79%** on 250 Connector
  - **70%** on Waynesboro Circulator

How comfortable are you with using technology to receive information?



User Needs – *Highlights*

- **Customers**
  - Effective information for a range of rider demographics
- **Operators**
  - Reliable communication with dispatch
  - Information on service impacts from traffic
  - Reduced burden of cash collection
- **Managers**
  - Transition from manual methods to more technology-assisted methods
  - Ability to track bus location

Projects

- 8 projects over 6 years (FY 2019 – FY 2024) to meet user needs

Requires upfront **capital costs**, on-going **operations and maintenance (O&M) costs**, **lifecycle replacement** when systems reach the end of their useful life, and **additional staff skills and responsibilities** for the contractor and the CSPDC.

P-1: GTFS Data Feed and Integration with Google Transit

- Develop General Transit Feed Specification (GTFS) data feed for schedule – included in website upgrade
- Publish on BRITE's website
- Establish partnership with Google

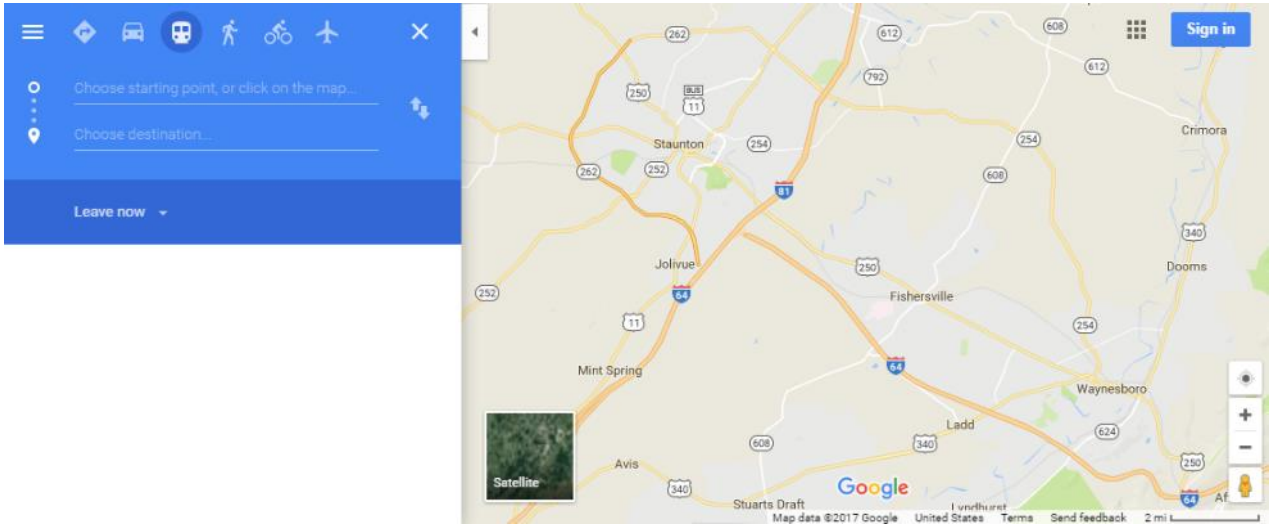


Image Source: Google

P-2: Mobile Data Collection System

- GPS and cellular-enabled mobile devices on buses
- Bus location tracking
- Bus operator counts passengers, enters mileage, tracks fuel
- Demand response trip manifest
- On-time performance feedback
- Data reporting

Image Source: Kimley-Horn

P-3: Next Generation Paratransit and Deviated Fixed-Route Scheduling Software

- New scheduling software with greater intelligence
- Optimized or manual scheduling
- Integrated with mobile data collection system
- VRT committed to implement in 2018

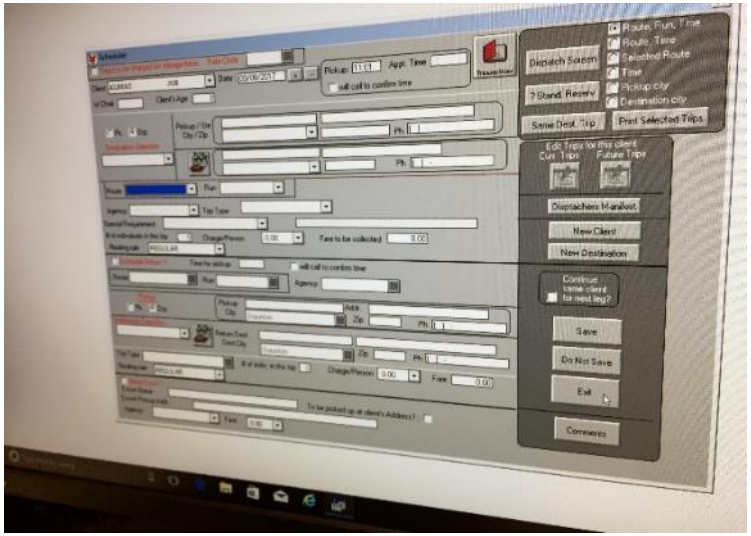


Image Source: Kimley-Horn

P-4: Real-Time Data Feed for Third-Party Applications

- Generate GTFS Realtime feed
- Bus arrival times and other service alerts
- Data feed consumed by free and publicly available mobile apps
- Reduced capital costs associated with app development and maintenance

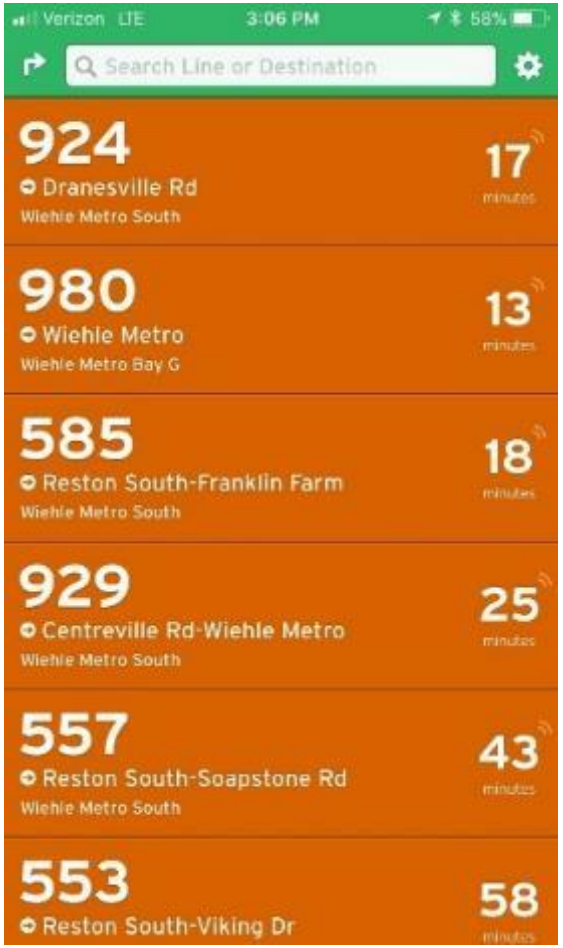


Image Source: Transit App

P-5: Next Bus Arrival Text Message Service

- Customer texts stop ID and receives text back with next bus arrival times
- Additional sign panels at bus stops
- Customers can subscribe to service alerts

Image Source: Kimley-Horn

P-6: Traveler Information Displays at Major Activity Centers

- Indoor digital signage displays at major activity centers
  - BRCC
  - Augusta Health
  - WWRC
- Customized information
  - Bus arrivals
  - Service alerts
  - Traffic conditions
  - Weather
  - Organization announcements
  - Advertising

Image Source: Arlington County Commuter Services

P-7: Advanced Driver-Assistance System

- Sensors that monitor the road and alerts bus operator of potential hazards
- Visual and audible alerts
- Feedback for:
  - Forward collision warning
  - Lane departure warning
  - Pedestrian and cyclist detection
  - Blind spot detection
- Responsibility of service contractor

Image Source: Mobileye

P-8: Mobile Ticketing

- Customers purchase bus pass on smartphone (day or month)
- Customer activates ticket and shows bus operator when boarding
- Ticket animations or countdown to easily identify valid passes
- Opportunities for expanding for unbanked or underbanked customers in future
- Reduced reliance on cash collection

Image Source: Virginia Railway Express

6-Year Program

	Project	6-Year Schedule					
		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
P-1	GTFS Data Feed and Integration with Google Transit		O&M →				
P-2	Mobile Data Collection System			O&M →			
P-3	Next Generation Paratransit and Deviated Fixed-Route Scheduling Software			O&M →			
P-4	Real-Time Data Feed for Third-Party Applications				O&M →		
P-5	Next Bus Arrival Text Message Service				O&M →		
P-6	Traveler Information Displays at Major Activity Centers					O&M →	
P-7	Advanced Driver-Assistance System						
P-8	Mobile Ticketing				O&M →		
	Capital Cost:	$37,300	$235,500	$89,800	$45,600	$16,600	$97,600
	Annual O&M Cost:	$0	$0	$52,700	$63,200	$68,500	$68,500

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Staffing Requirements

- Skillsets
  - Maintenance of on-board equipment
  - Maintenance of software in coordination with vendor support
  - Familiarity with GTFS data format
  - Basic spreadsheet and database skills
  - Bus operator familiarity with basic mobile device functionality
- 0.5 – 1.0 FTE or contracted support

Questions

Tyler Beduhn, EIT

Kimley-Horn

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December 15, 2016

Mr. Jitender Ramchandani
Virginia Department of Rail and Public Transportation
600 East Main Street, Suite 2102
Richmond, VA 23219

Re: 2016 Transit Development Plan Update Letter for the Central Shenandoah Planning District Commission BRITE Transit service.

Dear Mr. Lindsey:

We are pleased to submit this first annual TDP Update Letter to the Department of Rail and Public Transportation (DRPT).

FY 2016 Ridership Trends

Ridership for the BRITE Transit service has grown 3% from FY2015 to FY2016. Monthly ridership trends for the 2.5 years of CSPDC administrations are as follows:

Fixed Route	FY2016	FY2015	FY2014
July	20,518	19,854	
August	19,840	19,307	
September	19,322	19,006	
October	20,325	19,823	
November	16,710	14,685	
December	16,754	16,350	
January	15,445	17,023	16,981
February	16,500	15,066	15,913
March	19,376	17,073	15,234
April	18,125	18,294	18,766
May	18,700	18,871	18,835
June	19,860	19,768	19,076
Total	**221,475**	**215,120**	**104,805**

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Expenses and Revenue Sources

Actual FY2016 and FY2017 budget expenses and revenues sources are as follows:

		O & M		Capital	
		FY 2016 Actual	FY 2017 Projected	FY 2016 Actual	FY 2017 Projected
Expenditures	Fixed Route	725,737	881,562	536,373	659,441
	Total		881,562		659,441
Revenue(s)	Farebox	58,794	60,872		
	Federal	333,497	400,345	429,103	527,553
	State	151,071	199,298	85,819	105,510
	Local	182,375	221,047	21,451	26,378
	Total	725,737	881,562	536,373	659,441

TDP Goals and Objectives

The following actions have been taken in 2016 to advance the goals and objectives contained in the TDP:

Goal 1: Provide coordinated, cost-efficient and effective public transportation services that support mobility and economic development goals of the communities served.

Actions:

- A comprehensive database of transit performance indicators has been created, and is maintained and used as the basis for a monthly report called the BUZZ, which is sent to all stakeholders and posted on the website.
- Two under-performing routes were revamped to better serve the community needs.
- A feasibility study was undertaken to examine a potential inter-regional route serving the cities of Harrisonburg, Staunton, Waynesboro, and Charlottesville.
- CSPDC staff worked with local jurisdictions to submit SmartScale applications for funding to expand, improve and develop park and ride lots.

Goal 2: Maintain the current ridership base while seeking opportunities to increase ridership and serve new markets.

Actions:

- Breaks in service schedule throughout the day were eliminated on the 250 Connector Routes and the BRCC shuttles.
- Additional Saturday morning hours were added to the 250 Connector Route.

- The former Silver Trolley route was revamped to add some popular destinations and split into two 30 minute "Loops". Extended evening hours were added to the West and North Loop schedule.
- The underperforming 340 Connector route was completely revamped to better serve the residents of the rapidly growing community of Stuarts Draft, providing new and frequent service to Waynesboro and the Augusta Health campus.
- The Waynesboro Circulator route was revamped to eliminate the under-utilized mid-day deviations that confused riders and made transfers difficult.
- The underperforming Augusta County On-demand service was eliminated.
- A new on-demand service was added in the Waynesboro area and 250 Connector corridor to serve paratransit riders, and eliminate the frequent deviations that were occurring on these routes, and negatively impacting the reliability.
- The under-performing Red Trolley route was eliminated, and a Saturday Night Trolley, serving the historic Staunton area and popular retail and dining destinations, was added to serve existing riders, and attract new riders.
- The demand for express service to Harrisonburg and Charlottesville is being explored through a feasibility study.

Goal 3: Maintain strong relationships with area human service transportation providers and neighboring transit programs to maximize mobility options in the region.

Actions:

- Three area human service agencies are represented with voting membership on the BRITE Transit Advisory Committee (BTAC).
- The CSPDC hosted the CHSM annual meeting.
- CSPDC staff have conducted numerous presentations at Senior Centers and retirement communities, and participated in transportation fairs at area colleges.
- The regional transit providers (HDPT, CAT, and JAUNT) were represented on the Steering Committee of the Inter-regional Transit Feasibility study. The study summary has been presented to the three regional MPO's.
- CSPDC staff is participating in the update of the HDPT Transit Development Plan.

Goal 4: Establish, strengthen, and market a brand identity for the transit program.

Actions:

- A brand identity was developed by the TDP Stakeholder committee.
- Web pages have been developed in the CSPDC website, and are maintained with current information.
- Community websites are linked to the Britebus.org page(s) for transit information.
- Service schedules have been created and are distributed throughout the service area.
- All press releases and marketing includes the BRITE name and logo.

- All buses and the historic trolley used in service delivery have been rebranded with the BRITE logo and graphics.
- A bus stop sign design has been developed by the BTAC; a complete inventory of existing bus stops has been completed; and procurement is underway for the signs. Installation is planned to occur beginning in early 2017.

Goal 5: Responsibly leverage federal and state funds with local funds and fare revenue to ensure financial viability of the system.

Actions:

- A six-year financial plan is in place, monitored and updated, and serves as the source of the annual budget and the federal and state grant applications.
- Federal and state funding sources are reviewed and evaluated for funding for capital and planning projects. Additionally, as a component of the scope of the Inter-regional transit study, additional funding sources have been explored.
- The fare structure, and the potential of rider multi-trip passes is being discussed and explored by the BTAC with a goal of implementing a multi-trip fare media in 2017.
- A structured advertising plan is being finalized.
- During the FY 2014 through FY 2017 period, contributions from local jurisdictions and private funding partners have remained stable, with no increase while increasing transit service hours.

Goal 6: Provide a safe and secure transit system.

Actions:

- The turnkey operating contract with the service provider has stringent safety training requirements, both for new hires, and refresher training.
- The service provider is required to provide a written report of all incident and accidents within 24 hours of occurrence, and real time notification on any accident involving property damage or injury.
- The new contract, effective July 1, 2017, will include specific language related to functionality of security equipment.

FY 2018 Proposed Service Improvements (included in Work Plan)

- Review and update (as necessary) the FY 2018 fare policy, and develop and implement a multi-trip fare media.
- Accept transfer of ownership of the Fishersville Transit Facility, and assume responsibility for maintenance and security requirements.
- Transition planning and oversight of the three rural routes, and administration of the rural grants to the CSPDC.
- Commence a new multi-year turnkey contract for operations and maintenance.

- Complete an ITS study that evaluates technology needs, prepares a plan for implementation, and develops a budget for related costs, including ongoing maintenance.

FY 2019 through FY 2021 Proposed Service Improvements (TDP Timeframe)

- Improve frequency of service on 250 Connector route, as funding allows.
- Initiate Inter-regional commuter bus service, contingent on availability of funding.
- Implement ITS plan recommendations, based on recommended schedule.

TDP Financial Plan Update for O & M Costs (FY2016 - FY 2022)

	Actual 2016	Budgeted 2017	Projected 2018**	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Weekday Peak Buses*	12	12	12	12	12	12	12
Saturday Peak Buses*	4	4	4	4	4	4	4
Annual Revenue Hours (fixed)	16,607	17,634	26,518	26,518	26,518	26,518	26,518
Annual Revenue Hours (demand)	2,149	3,055	3,698	3,698	3,698	3,698	3,698
Total Revenue Hours	18,756	20,689	30,216	30,216	30,216	30,216	30,216
Projected O&M Costs	$ 725,737	$ 881,562	$ 1,653,107	$ 1,702,700	$ 1,753,781	$ 1,806,395	$ 1,860,586
Change from prior year			88%	3%	3%	3%	3%
Anticipated funding sources:							
Farebox	$ 58,794	$ 60,872	$ 79,960	$ 82,358.80	$ 84,830	$ 87,374	$ 89,996
Advertising				$ 5,000	$ 5,500	$ 6,050	$ 6,655
Miscellaneous			$ 72,000	$ 72,000	$ 72,000	$ 72,000	$ 72,000
Federal	$ 333,497	$ 400,345	$ 750,574	$ 771,671	$ 795,726	$ 820,485	$ 845,968
State	$ 151,071	$ 199,298	$ 300,229	$ 246,935	$ 254,632	$ 262,555	$ 270,710
Local Funding	$ 182,375	$ 221,047	$ 450,344	$ 524,736	$ 541,094	$ 557,930	$ 575,258
Total Revenues	$ 725,737	$ 881,562	$ 1,653,107	$ 1,702,700	$ 1,753,781	$ 1,806,395	$ 1,860,586
Change from prior year		21%	88%	3%	3%	3%	3%
				$ 1,543,341	$ 1,591,452	$ 1,640,970	$ 1,691,936

TDP Financial Plan Update for Capital Costs (FY2016 - FY 2022)

	Actual 2016	Budgeted 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Cost of Capital Contracting	$ 536,373	$ 659,441	$ 906,465	$ 933,659	$ 961,669	$ 990,519	$ 1,020,234
Facility Improvments							
Passenger Amenities		$ 25,000					
Total Capital Costs	$ 536,373	$ 684,441	$ 906,465	$ 933,659	$ 961,669	$ 990,519	$ 1,020,234
Anticipated funding sources:							
Federal	$ 429,103	$ 547,553	$ 725,172	$ 746,927	$ 769,335	$ 792,415	$ 816,187
State	$ 85,819	$ 109,510	$ 145,034	$ 149,385	$ 153,867	$ 158,483	$ 163,237
Local	$ 21,451	$ 27,378	$ 36,259	$ 37,346	$ 38,467	$ 39,621	$ 40,809
Total Funding	$ 536,373	$ 684,441	$ 906,465	$ 933,659	$ 961,669	$ 990,519	$ 1,020,234

* Buses owned by contracted service provider

** CSPDC assumes responsibility for rural routes and costs related to maintaining the transit facility.

If you have any questions related to this update, kindly feel free to contact me.

Nancy Gourley
Transit Manager

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