Transit Development Plan

Farmville Area Bus

FISCAL YEARS 2016 - 2021











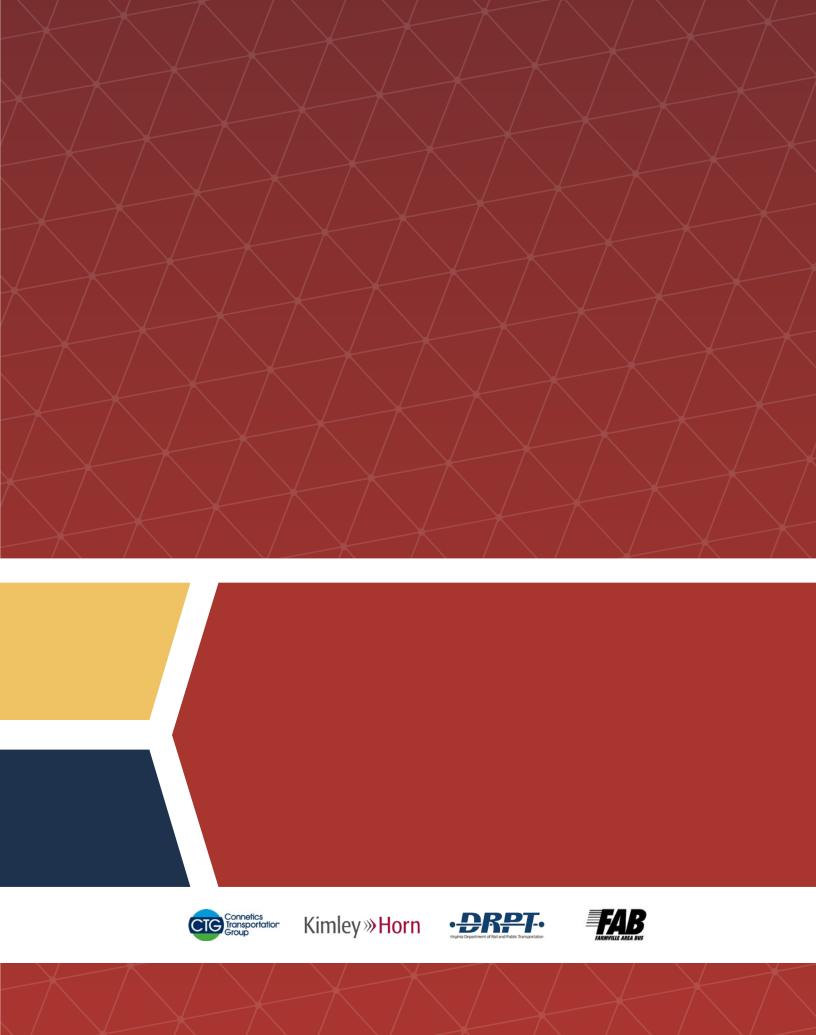
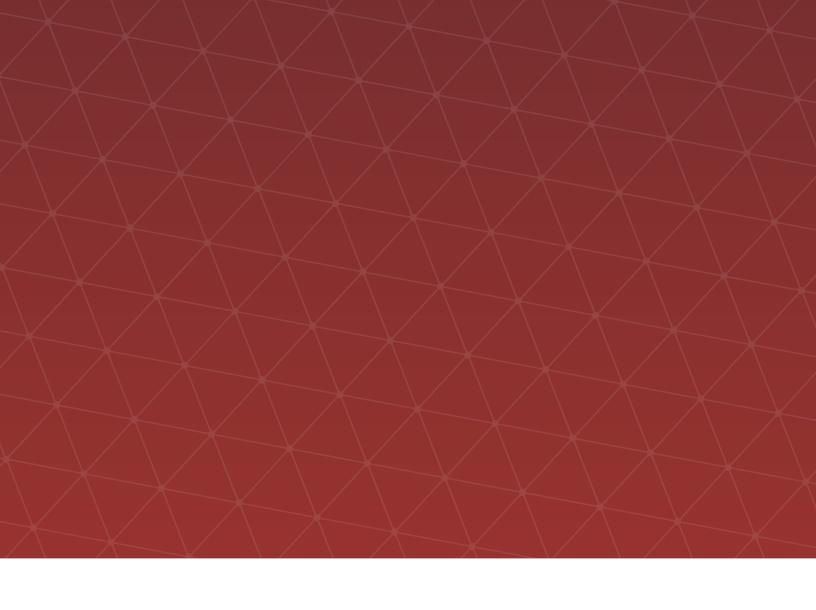


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CHAPTER 1: OVERVIEW OF TRANSIT SYSTEM

1. Overview of Transit System

1.1 History

In August 1990, Farmville Area Bus (FAB) started a fixed-route service on a trial basis. The first route, called the Blue Line and serving the town of Farmville, eventually became permanent. Service was expanded with the introduction of the Red Line, which connected Farmville to Hampden-Sydney College. Service to Hampden-Sydney was discontinued in 1992 and the route was rebranded as an express line that parallels part of the Blue Line but operates a faster trip with fewer stops. Today, FAB operates five fixed-route services and a demand response American Disabilities Act (ADA)-paratransit service that provides door-to-door service within 34 miles of fixed-route service in the town of Farmville. Three of the routes operate entirely inside Farmville: the Blue Line, Express Line, and Campus Line. The Blue Line and Express Line operate throughout the town, whereas the Campus Line, which began in 2005, caters to Longwood University students. Along with local, state, and federal funding, the university provides a significant annual contribution. An additional two routes, the Green and Orange Lines, connect rural parts of Prince Edward County with Farmville. These routes are deviated fixed routes and are operated by FAB, funded by the county, and branded as Prince Edward Regional Transit (PERT) service. All routes are listed below and will be discussed in greater detail in Section 1.4.

- Blue Line
- Express Line
- Green Line (PERT)
- Orange Line (PERT)
- Campus Line

1.2 Governance

FAB operates under the jurisdiction of the Town Council of Farmville (the Council), which operates as a council-manager system. The Council consists of seven members, who are elected every four years. Five of the members are elected through the town's ward system with an additional two members voted at-large. The Council then appoints a town manger to implement the policies and ordinances and supervise

all town departments, including FAB. The current Council was inaugurated in July 2014 and consists of the following members detailed in **Figure 1-1**.

In regards to funding, capital expenditures for FAB and all FAB operated routes are provided through federal funding (80 percent) and a blend of state and local funding (20 percent). Operating expenditures are provided through Federal Transit Administration (FTA) 5311 funding (50 percent) and a blend of state and local sources (50 percent). Local funding comes from a variety of municipalities and organizations, depending on the route. The operations funding formula, which has changed for FY 2016, and other financial matters are discussed in greater detail in Section 7. FAB operates on a July 1 – June 30 fiscal year.

1.3 Organizational Structure

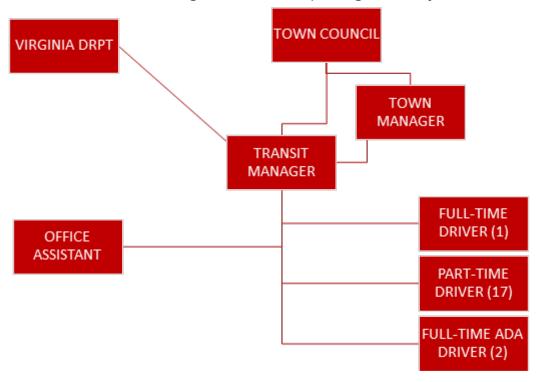
The hierarchical relationship between FAB and the Town of Farmville is detailed in Figure 1-2. FAB staff currently consists of 22 employees, 20 drivers, and two administrative staff. Staff are considered employees of the Town of Farmville and are nonunionized. All but three of the drivers are part-time employees, while bus maintenance is performed by the municipal mechanics at the town maintenance facility, which is separate from the FAB bus facility. Julie Adams, Transit Manager, oversees the daily operations of FAB. The manager reports to the town manager who then reports to the Council. In addition, the transit manager liaisons with a staff member from the State Department of Rail and Public Transportation (DRPT) to assist FAB in coordinating with surrounding transit agencies and to ensure that bus service is meeting state and federal requirements.

Today, FAB operates five fixed-route services and a demand response American Disabilities Act (ADA)-paratransit service that provides door-to-door service within ¾ miles of fixed-route service in the town of Farmville



Figure 1-1: FAB Governance





1.4 Services Provided and Areas Served

FAB operates a total of five routes that serve the Town of Farmville and Prince Edward County. Three of the routes serve Farmville: the Blue Line, the Express Line, and the Campus Line. Two additional routes, the Orange and Green lines, operate in Prince Edward County outside of Farmville. These routes serve rural areas in the county and operate on a deviated fixed-route system that requires a call in advance along certain segments of the route. The system also offers an ADA-Paratransit service in the Town of Farmville in order to satisfy requirements pertaining to ADA and Title VI of the 1964 Civil Rights Act, which prohibits the denial of service based on discrimination. Passengers must call 24 hours in advance to schedule a pick-up.

1.4.1 Blue Line

The Blue Line operates in a one-way directional loop through the town of Farmville and connects passengers with major destinations in the town, including Walmart, Main Street, Longwood University facilities, and Southside Community hospital. Figure 1-3 shows the alignment of the Blue Line. Table 1-1 shows Blue Line operating characteristics. Some residential locations are served on alternating trips. All designated stops are identified with signage but most lack other stop infrastructure. Shelters are primarily located in downtown Farmville and around Longwood University. Most of the route passes through neighborhoods where sidewalks exist and pedestrian connections are favorable. Operations funding is provided by Federal 5311 funds (50 percent), and a blend of state and local funds of \$96,547 which funds both the Blue Line and Express Line (50 percent).

Table 1-1: Blue Line Operating Characteristics

BLUE LINE				
Operating Days	Operating Hours	Peak Buses		
Weekday	7:04 a.m 6:13 p.m.	11	1	
Saturday	8:04 a.m 6:13 p.m.	10	1	

1.4.2 Express Line

The Express Line serves north and south Farmville in a counter-clockwise pattern, shown in Figure 1-4. Table 1-2 shows the Express Line operating characteristics. The major destinations include Longwood University and the shopping centers anchored on South Main Street, which includes a Walmart, Food Lion, and CVS, among other varied retail. Service is reduced during the summer semester and is rebranded as "The Summer Shuffle." Signage is prevalent along the route but benches and shelters are limited to Longwood University and downtown Farmville. Pedestrian access is adequate as the route deviates into shopping centers although sidewalks on both sides of the street become intermittent south of Longwood University. Operations funding is provided by FTA 5311 funds (50 percent), and a blend of state and local funds of \$96,547, which funds both the Blue Line and Express Line (50 percent).

Table 1-2: Express Line Operating Characteristics

EXPRESS LINE				
Operating Days	Operating Hours	Trips	Peak Buses	
Mon-Thurs	12:00 p.m 8:00 p.m.	16	1	
Fri-Sat	12:00 p.m 11:00 p.m.	22	1	
Sunday	12:30 p.m 8:00 p.m.	15	1	

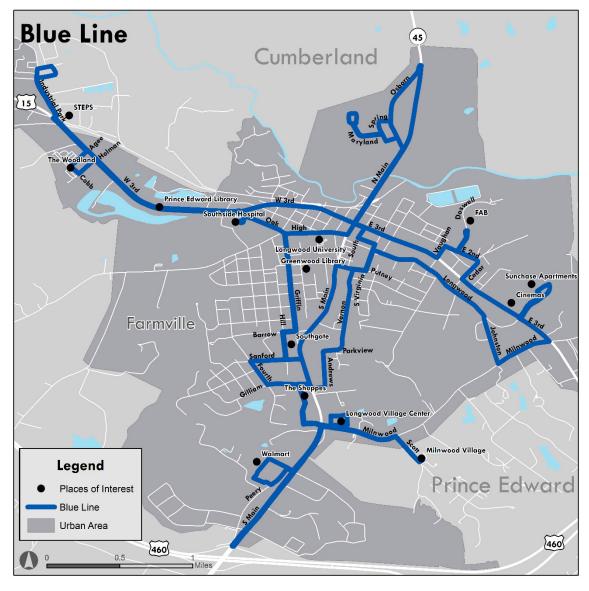


Figure 1-3: FAB Blue Line Alignment

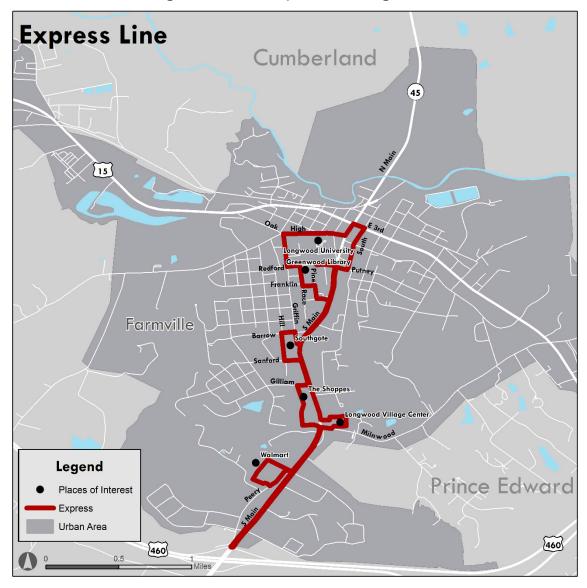


Figure 1-4: FAB Express Line Alignment

1.4.3 Campus Line

The Campus Line, shown in Figure 1-5, connects two Longwood University housing communities with the main campus seven days a week and operates as two patterns. One pattern serves Lancer Park and Longwood University, whereas the longer pattern extends from Longwood University to serve Longwood Village in south Farmville. Lancer Park is served at 20-minute frequencies until 1:35 p.m. and Longwood Village is served at 35-minute frequencies all day. Table 1-2 shows the Campus Line operating characteristics. Signage exists along the route, but other types of stop infrastructure (shelters, benches) are not present. Pedestrian access is adequate as much of the route services the Longwood campus and both housing communities. The route's local match is entirely funded by Longwood University with a \$211,350 contribution in FY 2015.1

Table 1-3: Campus Line Operating
Characteristics

CAMPUS LINE				
Operating Days	Operating Hours	Pattern	Trips	Peak Buses
Mon-Fri	7:15 a.m 1:35 p.m	Lancer Park - Longwood University	19	3
Mon-Fri	7:15 a.m 12:35 a.m.	Lancer Park- Longwood University - Longwood Village	31	1
Sat-Sun	10:36 a.m. – 12:35 a.m.	Lancer Park- Longwood University - Longwood Village	25	1

1.4.4 PERT Green Line

The Green Line, shown in **Figure 1-6**, is a PERT route that operates on Mondays and Thursdays, connecting Pamplin and outer residential areas in western Prince

Edward County with Farmville. The first outbound trip and last inbound trip travels solely on US 460 unless a call is placed beforehand to arrange a pickup along the base route. **Table 1-4** shows the Green Line operating characteristics. Pedestrian access is significantly limited outside of Farmville but all buses are ADA accessible. Stop infrastructure is non-existent outside of Farmville, with the route relying on landmarks to serve as time points. Operations funding is provided by FTA 5311 funds (50 percent) and a blend of state and local funds (50 percent), including a \$25,000 contribution from Prince Edward County, which is shared by both PERT routes.

Table 1-4: PERT Green Line Operating
Characteristics

GREEN LINE			
Operating Operating Trips Peak Days Hours Trips Buses			Peak Buses
Mon + Thurs	8:25 a.m 4:30 p.m.	3	1

1.4.5 PERT Orange Line

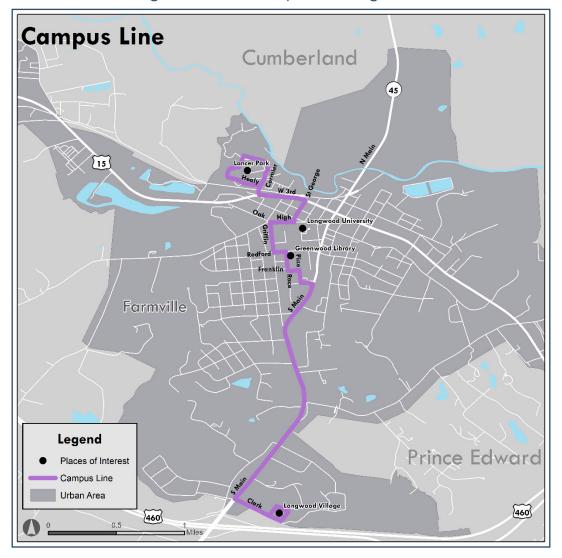
The Orange Line, shown in Figure 1-7, is a PERT route that operates on Tuesdays, Wednesdays, and Fridays, connecting the Meherrin and Green Bay areas in southern Prince Edward County with Farmville. Table 1-5 shows the Orange Line operating characteristics. The first outbound trip and last inbound trip travels solely on US Highways 15 and 360 unless a call is placed beforehand to arrange a pickup along the base route. Pedestrian access is significantly limited outside of Farmville but all buses are ADA accessible. Stop infrastructure is nonexistent outside of Farmville, with the route relying on landmarks to serve as time points. Operations funding is provided by FTA 5311 funds (50 percent) and a blend of state and local funds (50 percent), including a \$25,000 contribution from Prince Edward County which is shared by both PERT routes.

¹ Part of the contribution from Longwood University is used to fund the operations of other Farmville routes.

Table 1-5: PERT Orange Line Operating Characteristics

ORANGE LINE			
Operating Days	Operating Hours	Trips	Peak Buses
Tues + Wed + Fri	8:20 a.m 4:30 p.m.	3	1

Figure 1-5: FAB Campus Line Alignment



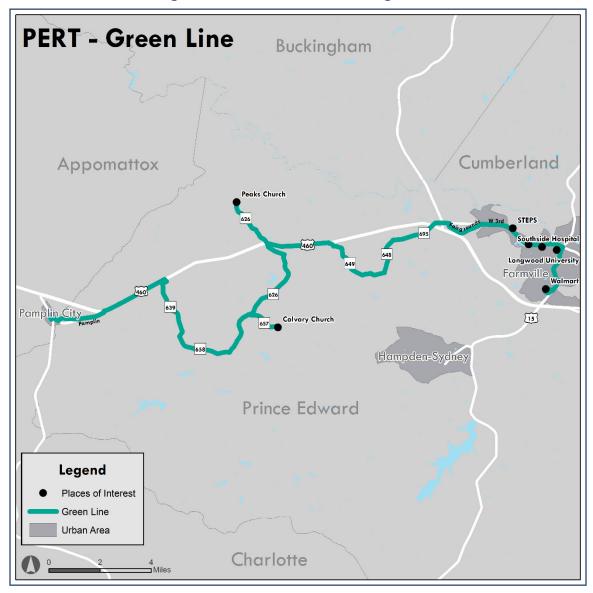


Figure 1-6: PERT Green Line Alignment

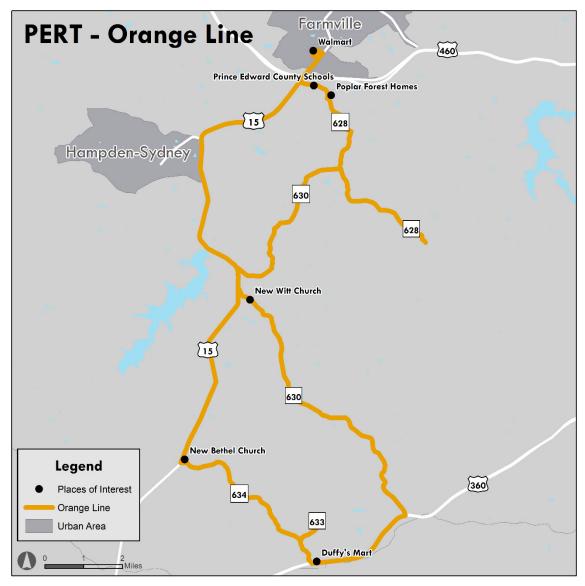


Figure 1-7: PERT Orange Line Alignment

1.5 Fare Structure

As shown in Table 1-6, fares range from \$0.25 to \$1.00 per trip depending on the route, with some passengers riding for free. Routes that stay within the Town of Farmville have a lower fare than the county-oriented PERT routes, with both the Blue and Express Lines charging \$0.25 per trip. Longwood University students, senior citizens (age 60 and over) and children under six are eligible to ride the Blue or Express lines for free. The Campus Line also is free and open to the general public but is largely funded through a student activity fee. ADA-Paratransit charges \$0.50 per passenger but an assistant to a handicapped passenger may ride free of charge. Additional assistants must pay the full fare. There are no free rides or discounts for PERT routes. Systemwide, fare payment is only accepted in cash and only with exact change. Riders must pay the fare for each one-way trip on a bus, and transfers count as separate trips. Fares have not changed for any route since the inception of the system.

Table 1-6: FAB Route Fares

Route	One-way Fare
Blue Line	\$0.25
Express Line	\$0.25
Campus Line	\$0.25
Green Line	\$1.00
Orange Line	\$1.00
ADA-Paratransit	\$0.50

1.6 Fleet

FAB currently operates 15 vehicles, 14 of which are used in revenue service. This is an increase of one revenue vehicle from the fleet described in FAB's 2010 Transit Development Plan (TDP) and is consistent with fleet data reported in the 2013 National Transit Database (NTD). Eight of these vehicles are 18-ft "cutaway" vehicles that seat 19-20 passengers. The other six are vans that seat 5-12 passengers. The agency has one sedan. Passenger vans are typically used for the ADA-Paratransit service, whereas the cutaways are used for fixed-route services. The vehicle roster is presented in Table 1-7. All revenue vehicles are ADA accessible.

To supplement regular service, shift drivers are tasked with assessing vehicle fluids. All subsequent shift drivers are tasked with completing a pre-trip inspection to assess the general condition and operability of the bus. In the event of a mechanical failure mid-route, an available staff member at the bus depot will drive a spare bus to the driver, as FAB does not employ a bus driver on-call. The spare ratio of vehicles is defined as the number of spare vehicles divided by the vehicles required for maximum service. The current FAB spare ratio is 33 percent (or two spares for six vehicles in maximum fixed-route operation). This leaves two vehicles available in the event that a cutaway is unable to service a route.²

The Federal Transit Administration (FTA) defines the service life of a cutaway revenue vehicle as 100,000 miles or four years of service, whichever comes first. FAB cutaways in the existing fleet have an average age of three years, while FAB vans have an average age of nearly five years. Only one of the vehicles currently has more than 100,000 miles, which was also the case for the 2010 TDP. The number of vehicles exceeding useful life is expected to remain low, as the agency has proposed five additional revenue vehicle purchases in FY 2017. Further detail on fleet replacement is presented in **Chapter 6**.

² FTA defines spare ratio as "the number of spare vehicles divided by the vehicles required for annual maximum service". Annual maximum service is defined as "the total number of revenue vehicles operated to meet the annual maximum service requirement."

Table 1-7: FAB Vehicle Inventory, Including Service Vehicles

Vehicle Type	Capacity	Model Year	Age	Mileage
Cutaway	19	2013	2	58,032
Cutaway	19	2013	2	51,522
Cutaway	19	2013	2	53,785
Cutaway	19	2013	2	27,975
Cutaway	19	2012	3	76,987
Cutaway	19	2012	3	93,643
Cutaway	19	2012	3	74,010
Cutaway	20	2006	9	183,350
Van	5	2012	3	13,696
Van	12	2011	4	78,678
Van	12	2011	4	76,928
Van	6	2010	5	41,161
Van	6	2010	5	32,164
Van	7	2007	8	40,015
Sedan	4	2012	3	24,681

1.7 Existing Facilities

FAB is headquartered at their bus depot, located at 502 Doswell Street, Farmville, Virginia 23901. Constructed in August 2001, the facility includes five bays and houses FAB's operational and administrative equipment. The facility's low ceiling height prevents the installation of a hydraulic lift, therefore, all significant maintenance work is conducted off-site at the town's maintenance yard by town mechanics. Since 2010 FAB has discussed the construction of a shared maintenance facility that would be used by both FAB vehicles and the Town of Farmville's municipal vehicles. Construction was anticipated to start in FY 2012, according to a 2011 TDP update submitted to DRPT. However, construction has been delayed due to the inability of the town to provide their share of the funding. The plan is on hold, with both the town and FAB still interested in the facility. According to the 2014 TDP update, the new completion date is anticipated as FY 2019.

There are 75 designated stops with signage in the FAB system all located in the Town of Farmville. There are 14 shelters, an increase of two from the 2010 TDP. These shelters are also only located in Farmville. In the past, these shelters included route

maps and scheduling information placards, but these were removed due to their lack of durability. FAB is open to reintroducing placards that are more weather resistant in the future, which is discussed in **Chapter 4**.

Routes that operate beyond Farmville, such as the two PERT routes, operate on a flag stop system, where passengers wait along a fixed portion of the route and flag the driver to stop. Passengers also can call ahead to arrange a pick-up on the first outbound and last inbound trip of both PERT routes. FAB has had no issues with the Virginia Department of Transportation (VDOT) for approval of signage and stop infrastructure within state right-of-way. With regards to bicycle facilities, FAB vehicles are not equipped with front-end bicycle racks.

FAB has discussed the construction of a shared maintenance facility that would be used by both FAB vehicles and the Town of Farmville's municipal vehicles

1.8 Transit Security Program

In addition to the surveillance cameras at the facility, FAB has enhanced its security measures since 2010 by adding surveillance equipment to most revenue vehicles, which consists of four audio and visual in-vehicle cameras. In addition to the cameras, drivers are trained in safety protocols at point of hire. Moreover, all buses are equipped with public works radios for the drivers to communicate with Farmville Police.

1.9 Intelligent Transportation Systems (ITS) Program

Apart from the recent addition of on-board surveillance cameras, FAB has not employed or expressed an interest in acquiring other ITS technologies like traffic signal priority (TSP) or route scheduling software. There is not a significant need for these technologies based on the rural nature of the service area. However, some technologies could be beneficial to passengers and the agency, such as installing automatic vehicle locator (AVL), which FAB currently lacks. The demand for this particular technology will likely increase in the FAB service area as smart-phone ownership increases

among the American adult rural population, which now stands at roughly 52 percent according to an April 2015 Pew poll³. Smartphone ownership is likely higher in Farmville due to the presence of Longwood University. The same poll cited that 25 percent of all smartphone owners use their phone "at least occasionally to get public transit information", a behavior "especially prevalent among younger smartphone users". Thus, AVLs installed in FAB vehicles could be used to track when the next vehicle arrives via smartphone. Providing real time information could also help FAB attract new riders. These potential capital improvements are discussed in more detail in **Chapter 6**.

1.10 Data Collection, Ridership, and Reporting Methodology

Data collection at FAB consists of manual entries into a manual passenger counter. This information is then entered into a paper spreadsheet by a member of the administrative staff. Other data, particularly financial, are handled exclusively by the administrative staff.

1.10.1 Ridership

Because buses are not equipped with automatic passenger counters (APCs), ridership data is collected manually by each bus driver. The driver counts passengers as either an adult, child, student, senior, or an adult with disability⁴. At the conclusion of the route, the completed form is delivered to FAB administrative staff for entry into a paper spreadsheet. Ridership data is not entered electronically. Stop-level activity of passengers is not collected on a regular basis, although some of this information can be gleaned from the survey that accompanies the TDP. While this information could be collected by the driver, DRPT discourages this practice. This is discussed further in **Chapter 2**.

1.10.2 Operations

Fares are collected in a locked farebox. Costs, such as wages, salaries, fuel, and maintenance, among other

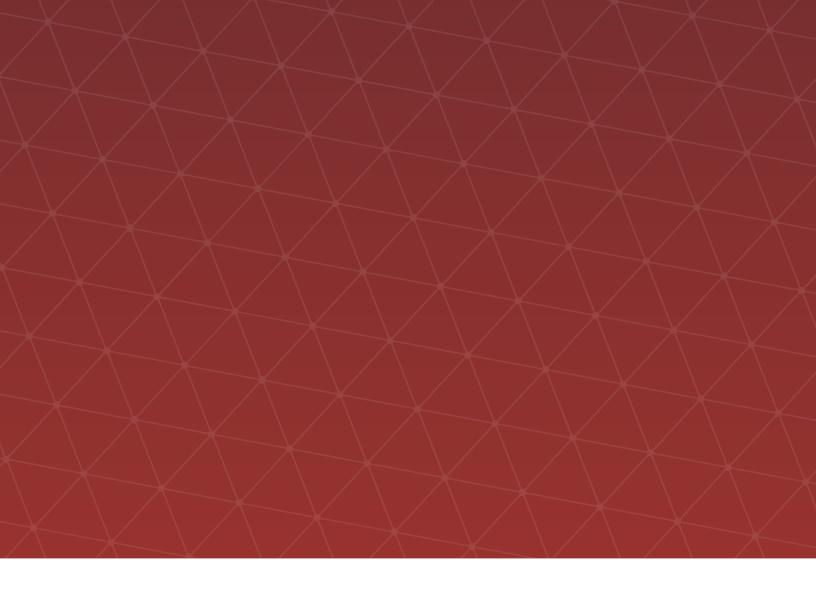
operating expenses are detailed in an operating invoice that represents the entire system. As stated in the previous section, scheduling software is not used. Weekly schedules are manually created in an excel spreadsheet, assigning bus drivers to a specific route and duration of service. Drivers typically work the same routes. Data is not collected on how many times the route deviates to pick up a passenger.

1.11 Public Outreach

Public outreach is conducted through advertising in the local paper and reaching out to social service organizations in the service area, such as STEPS, a work force development program, and educational institutions such as Longwood University. Bus route information is available at the facility, online, or a part of orientation packets for incoming Longwood University freshman. Route maps had been available at various stores in the past but have since been removed due to complaints from business owners about customer behavior.

³ http://www.pewinternet.org/files/2015/03/PI_ Smartphones_0401151.pdf

⁴ Riders with disabilities are categorized as "special" riders on regular fixed-route service and "ADA" riders if they patron ADA-Paratransit specific service.



CHAPTER 2: GOALS AND OBJECTIVES



2. Goals and Objectives

2.1 Goals and Objectives

Enhancing transportation options to the residents that reside within and adjacent to the FAB service area has been a long-standing objective. It is encouraged by Virginia state law, Section 15.2-2200, whereby the state grants power to the development of a planning authority in municipalities in order "to encourage localities to improve the public health, safety, convenience, and welfare of its citizens and to plan for the future development of communities to the end that transportation systems be carefully planned". As a result of this provision, the Town of Farmville continues to assess their transportation network as evident in the 2005 Farmville Comprehensive Plan. The plan identified alternative transportation options as a tool that "would assist workers with transportation to and from work places" and that the lack of transit options "is a serious obstacle to many individuals seeking gainful employment who are unable to afford reliable personable transportation". Since then, Farmville participated in a Transit Connectivity Study commissioned by the Commonwealth Regional Council in April 2012 that identified a need to better publicize and coordinate inter-agency transit use. These agencies help facilitate cooperation between local municipalities in order to address and promote regional planning and problem-solving regarding transportation, among other matters.

As a result of this mandate, FAB has developed a framework of goals and objectives in order to fulfill the intentions outlined in the comprehensive plans. FAB is currently guided by five goals, each of which has multiple objectives and descriptive measures that FAB should perform in order to achieve those goals. Through this process, one can begin to assess the efficacy of FAB service, and determine whether they are achieving their goals. As the region develops, FAB's goals and objectives are expected to evolve to meet the transportation needs of the region.

Goal 1: Provide reliable fixed-route public transportation service that meets the transportation needs of the Town of Farmville and Prince Edward County residents

Objective 1.1: Provide transit service connections between residential areas and commercial areas with jobs, education, shipping, and medical services. This objective is to be accomplished through the following activities:

- Document and record customer service requests
- Work, as needed, with the Town of Farmville and Prince Edward County staff to identify planned new developments that may warrant transit service. This should also include establishing criteria for funding and ridership potential when considering service expansion
- Survey transit riders at least once every 5 years to determine rider service needs

Objective 1.2 Provide easy to identify safe stop locations along routes. This objective is to be accomplished through the following activities:

- Establish safe bus stop locations when modifying an existing bus route alignment or when implementing new service
- Work with VDOT staff in expanding sidewalks at stops with high ridership demands

Goal 2: Market existing transit services

Objective 2.1: Market transit services as a travel option within the Town of Farmville and Prince Edward County. This objective is to be accomplished through the following activities:

- Maintain and update a "Farmville Area Bus System, Route and Schedule Guide" for users of the transit system
- Maintain accurate and up-to-date transit information on the FAB web site, https:// farmvilleva.com/departments/farmville-area-bus
- Participate in community and school events to promote public transportation
- Maintain a mailing list of organizations and social service agencies that represent markets that are likely to ride transit and provide service information to those organizations and agencies

Objective 2.2: Explore potential demand to expand cost-effective transit service to areas outside of the town limits in Prince Edward County if local conditions change. This objective is to be accomplished through the following activities:

■ FAB will explore service expansion if a request is made and will determine if there is sufficient demand for the requested service

Goal 3: Deliver fixed-route bus services in a cost-effective manner

Objective 3.1: Maintain a system-wide farebox recovery ratio (farebox revenues/total operating expenses) that meets or exceeds standards identified in Section 2.2. This objective is to be accomplished through the following activities:

- Record and monitor monthly trends in passenger trips by route and compare with figures from the previous year
- Record and monitor monthly transit operations expenses and farebox revenues

Objective 3.2: Administrative costs are not to exceed 20 percent of the total operating budget. This objective is to be accomplished through the following activities:

 Record and monitor monthly transit administration expenses and farebox revenues Objective 3.3: Achieve system-wide fixed-route ridership levels that meet or exceed standards identified in Section 2.2. This objective is to be accomplished through the following activities:

- Maintain and monitor monthly ridership reports for fixed-route service, with ridership reported on a route segment basis for all fixed-route operations
- Implement corrective measures if ridership falls below established standards for specific routes for more than 12 months in a row. Such corrective measures may include: route re-alignment, service frequency changes, and span of service and/or fare adjustments

Goal 4: Deliver fixed-route bus services in a safe manner

Objective 4.1: Ensure that transit service operators maintain an accident rate and vehicle failure rate of less than the standard identified in Section 2.2. This objective is to be accomplished through the following activities:

- Maintain a training program for new employees
- Review established operating policies and procedures at least once a year and update as necessary
- Review those policies and procedures with existing staff at least once every 2 years

Objective 4.2: Ensure that an adequate fleet of vehicles is maintained for the fixed-route services. This objective is to be accomplished through the following activities:

- Identify the potential need for replacement vehicles based on FTA standards for the defined service-life of vehicles. For most buses operated by FAB, the defined service-life is 4 years or 100,000 revenue miles of service, whichever comes first
- Maintain a spare ratio of at least two buses at all times for FAB fixed-route transit services and at least one vehicle for the demand-responsive services

Goal 5: Provide transit services that are accessible to all citizens

Objective 5.1: Provide transit services that are accessible to all population groups within the Town of Farmville and Prince Edward County. This is to be accomplished through the following activities:

- Comply with the applicable requirements of ADA
- Provide the ADA-eligible population with paratransit service that is comparable to service provided by the fixed-route system

Objective 5.2: Ensure that all future revenue vehicles are ADA accessible

2.2 Service Performance Standards

The following service performance standards were derived from three statistical categories, which can serve as a tool to asses FAB operational efficiency; including ridership, cost, and safety. These measures should be assessed monthly to ensure that routes are meeting these standards.

2.2.1 Ridership Measures

Fixed-Route Standard: Monthly system-wide fixed-route ridership should maintain levels equivalent to at least 0.50 passenger trips per revenue mile on weekdays. If FAB fails to maintain these standards for 12 consecutive months, corrective measures should be taken, as discussed in Section 2.1.

Demand Response Standard: Monthly ADA-Paratransit service should maintain ridership levels equivalent to 1.5 passenger trips per revenue-hour with average ride times not exceeding 30 minutes.

Table 2-1: FAB Passengers per Revenue Mile

FAB System-Wide Passengers per Revenue Mile FY 2015									
Route	Passengers	Miles	Pax/Mile						
Blue	33,517	56,814	0.59						
Express	19,198	49,572	0.39						
PERT	2,723	45,696	0.06						
Campus	88,855	122,706	0.72						
ADA	5,161	24,071	0.21						

2.2.2 Cost-Effective Measures

Fixed Route Standard: FAB's system-wide farebox recovery ratio (farebox revenues as a share of total operating expenses) should be at least 2.5 percent, the system-wide average. If FAB fails to maintain these standards for 12 consecutive months, corrective measures should be taken, as discussed in Section 2.1.

This ratio is tabulated in **Table 2-2** below, which is the result of taking the system-wide farebox recovery rate.

Table 2-2: FAB Farebox Recovery Ratio Based on Actual Expenditures⁵

Route	Farebox Revenues	Operating Expenses	Recovery Rate
FAB	\$9,091	\$367,871	2.5%

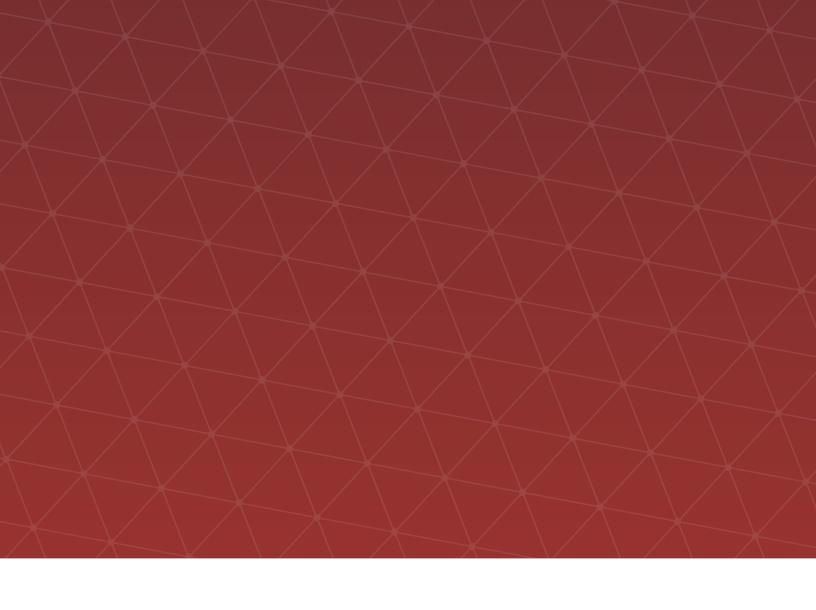
2.2.3 Vehicle Maintenance Performance Measures

Bus Preventive Maintenance Inspections:

Preventive maintenance shall be conducted on all vehicles in the transit fleet per vehicle manufacturer recommendations.

Revenue Vehicle Failures: FAB should maintain a standard of no more than 0.15 revenue vehicle failures per 1,000 bus-miles of service.

⁵ Operating expenses do not include the estimated expenses for the Campus Line.



CHAPTER 3: SERVICE AND SYSTEM EVALUATION



3. Service and System Evaluation

3.1 Introduction

This chapter assesses the productivity and effectiveness of FAB service through both quantitative and qualitative measures. The main finding of this chapter is that the overall FAB system has improved on its performance metrics during the last several years. Yet, a deeper look into the numbers shows uneven ridership growth. The Campus Line added 34,000 annual riders between 2012 and 2015, while the other routes lost ridership. While ridership loss is never good, this finding indicates FAB is putting resources into the routes with the most potential for ridership growth. However, the challenge at hand is to identify why the other routes are not performing as well and make recommendations that improves the efficiency of these routes.

The chapter includes four sections. The first is Demographics and Land Use, which is a review of existing and future population and employment conditions for the FAB service area. The second section, Current System Performance, evaluates existing ridership and operating statistics for the FAB system and determines recent trends. After establishing the baseline conditions in the first two sections, the third section, System Evaluation, presents information from a peer analysis, onboard survey, and stakeholder interviews. The final section is a summary of the chapter and conclusions

on how this information will be used to make recommendations for the TDP update.

3.2 Demographics and Land Use

This section details the most recent US Census demographic estimates within the FAB service area, as well as transit figures over a 1-year period. The transit figures are from the most recent fiscal year, which ran from July 1, 2014 to June 30, 2015.

3.2.1 FAB Service Area Demographic Trends

Table 3-1 shows the population and density from the 2010 US Census Figures, the estimated population for 2014, and a projected figure in 2020. The service area population estimate for Prince Edward County decreased by 2.4 percent between 2010 and 2014, likley due to a number of socio-economic factors. This is contradictory to the population increase of 4.1 percent statewide during the same time period. The 2010 figures are US Census Figures, with 2014 figures based on updated American Community Survey (ACS) figures with the 2010 census as a base. The service area remains unchanged at 354 square miles. Compared with the state figures, Prince Edward has a significantly less dense population, roughly a third of the state average.

Table 3-1: FAB Service Area Population Estimates

		2010		2014		
Location	Area (sq miles)	Population	Density (pop/sq mile)	Population	Density (Pop/ sq mile)	Change (2010-14)
Prince Edward	354	23,630	67	23,074	65	-2.4%
Virginia	42,774	8,001,024	187	8,326,289	195	4.1%

Future population projections are essential to determining potential FAB service changes for the next six years. Table 3-2 shows data provided by the Virginia Employment Commission (VEC). Contradictory to the 2010 US Census Figures the VEC projects that Prince Edward County will have a small increase in population by 2020. However, the projections by the VEC are 10 years into the future (since they are based in part on the 2010 US Census), and typically are imprecise due to a number of economic and social factors. It is possible population growth could occur in Prince Edward County, especially with Longwood University adding students, which would grow the local economy. The study team believes the change in population (positive or negative) is small enough to not materially affect FAB ridership.

FAB serves two distinct demographics, the student population at Longwood University and residents of the town and county, who are typically older than the student body. Any changes in the senior citizen population is of interest to FAB as they also operate a paratransit service. **Table 3-3** details the share of the population 65 years and older. The table shows that the senior citizen population is not only going to increase, but is going to constitute a greater share of the resident population. This will likely increase demand for both fixed-route and paratransit service. Like other rural areas in Virginia, the senior citizen population is expected to constitute a higher share of the resident population than the statewide share.

Table 3-2: FAB Service Area Population Projection

		201	0	2014 20		202	0	
Location	Area (sq miles)	Population	Density (pop/sq mile)	Population	Density (pop/sq mile)	Population	Density (pop/sq miles)	Change (2010-20)
Prince Edward	354	23,630	67	23,074	65	24,865	70	5.2%
Virginia	42,774	8,001,024	187	8,326,289	195	8,811,512	206	10.1%

Table 3-3: FAB Service Area Senior Citizen Share of Population

Area	2010 65+	2014 65+	2020 65+	Change (2010- 2020)
Prince Edward	14%	15%	17%	3%
Virginia	12%	14%	15%	3%

3.2.2 FAB Service Area and Land Use

FAB provides transit service in the Town of Farmville and in Prince Edward County. These two jurisdictions each have comprehensive plans that include summaries of existing and planned future land uses. These future land use plans include discussions of planned or desired development that may eventually benefit from transit access.

Town of Farmville

The Town of Farmville published a comprehensive plan in 2005 that outlines existing and planned future land uses. The 2005 plan summarizes Farmville as a residential community with residences primarily accessed by secondary roads in northern, southern, and eastern parts of the town. Commercial uses are concentrated along major thoroughfares through the town, with three shopping centers located south of downtown along South Main Street. The community also contains two large industrial parks: Prince Edward Industrial Park, a 110-acre site containing three buildings to the south of Farmville, and Riverside Industrial Park, a 38-acre site, containing four buildings to the northwest of Farmville. A train station on the north side of town and a regional airport located northwest of Farmville connect the town to other regional destinations.

The comprehensive plan's future land use closely resembles existing land use designations. Some existing undeveloped property remains at the outskirts of town. The comprehensive plan generally designates this land as future commercial development in locations west of downtown along US Route 15 and as future residential development in other exterior areas of town.

Longwood University is located in Farmville and represents a significant portion of the town's population and land use. The university is in the process of completing a 2025 Campus Master Plan that forecasts growth at the university and envisions development in the near future. Student enrolment at Longwood is expected to increase from 5,100 to 6,000 during the next 10 years. To accommodate this planned growth the university will be constructing new student housing and working with developers to construct additional private housing. Because the master plan has not been officially released, the location of future student accommodations is not

yet known. The master plan prioritizes the compact development of student housing and may make use of residential redevelopment in nearby downtown Farmville. A new parking facility is included in the plan but is considered a low priority by campus planning staff. Beyond this low-priority addition, the plan makes no recommendations on parking restrictions or parking policy.

Student enrolment at Longwood University is expected to increase from 5,100 to 6,000 during the next 10 years

Prince Edward County

Prince Edward County published its most recent comprehensive plan in 2014. The land use sections of the 2014 plan stress the rural and agricultural nature of most of the county. Existing Virginia Enterprise Zones attract commercial development along Main Street and US Business Route 15 in and near the Town of Farmville.

The plan mentions one priority in its discussion of future land uses. It recommends the encouragement of new residential development between Farmville, Hampden-Sydney College, and the community of Worsham to the south of Farmville. The development would accommodate densities of up to four units per acre and would be constrained to the west of US Route 15, with new commercial development proposed directly along US Route 15 in this area.

Potential Future Transit Service Needs

Existing transit service in the Town of Farmville circulates passengers around various business centers, residential neighborhoods, and landmarks such as the Longwood University campus. Development along the outskirts of the town, and the medium-density residential development encouraged by Prince Edward County to the south of Farmville, may both benefit from access to a similar transit service. The growth of Longwood University during the next 10 years may warrant increases in circulator service to the university. In addition, depending upon decisions made regarding parking policy in the vicinity of the university, many students who may commute to the university on a daily basis and park at the periphery of town (in Longwood Village) would benefit from a route that completes their trip to the campus.

3.3 Current System Performance

This section analyzes FAB service for the most recent fiscal year. Historical trends throughout a 3-year period are reviewed in Section 3.3.1.

Table 3-4 categorizes performance by route type, whereas Figure 3-1 details the operating statistics by route for FY 2015. The extent to which Longwood University affects overall ridership is readily apparent in the chart. The Campus Line, the system's highest ridership route, ceases operation in the summer months. Although it operates in the winter, ridership slips as students return home during winter break. The Express Line, which is another route frequently used by university students, also shows a decline in

the months in which the semester ends. The Express Line shuts down during the summer and is run as an altered route called the "Summer Shuffle", where the ridership is roughly 10 percent of the Express Line. As a result, the system's minimum and maximum figures vary quite a bit, ranging from 3,500 riders in May, to more than 22,000 in September. Both PERT routes and Blue Line ridership remain fairly consistent throughout the year. This is most likely due to the consistency in the route pattern and schedule throughout the year as well as the fact that the riders tend to be permanent residents and not transient Longwood students.

Table 3-4: FAB Operating Statistics Delineated by Service Type

Route	Riders	Rev Miles	Rev Hours	Pax/Mile	Pax/Hour
ADA	5,161	24,071	1,284	0.2	4.0
Fixed	145,461	192,660	12,978	0.8	11.2
Total	150,622	216,731	14,262	0.7	10.6

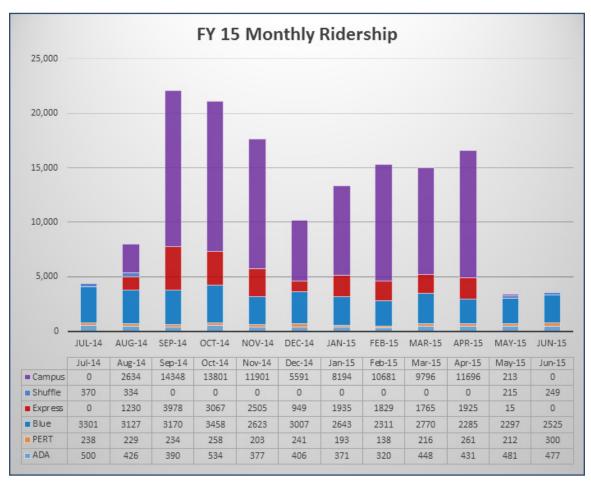


Figure 3-1: FY15 Monthly Ridership

3.3.1 System Performance

This section analyzes FAB service during three fiscal years. The team collected data on ridership, revenue miles, revenue hours, and operating costs. Although these measures alone are helpful to assess system performance, further information can be gathered by analyzing these statistics as a measure of units per passenger. In this way, changes in service that may alter operating costs, for example, can be assessed by corresponding changes in ridership.

Tables 3-5 through 3-10 summarize these measures, followed by Section 3.4 that discusses some of the more significant findings. Although total figures are provided, greater attention should be placed on individual route performance due to the varied nature

of the routes in the FAB system. In **Table 3-5**, FAB operating statistics are detailed for FY15. A 3-year retrospective of operating and capital expenses and revenues is provided in **Appendix 3A**. This data includes years 2012, 2013, and 2015.

FAB ridership has increased significantly from FY12 to FY15, an increase of nearly 20 percent. However, the ridership increase is not uniform across the system. Ridership, in fact, has dropped across all routes except the Campus Line. The Express Line had the biggest decline with 7,000 fewer riders in FY15 than in FY12. PERT ridership also significantly declined by nearly one-third. The Blue Line has largely remained unchanged. The ridership increase came solely from increased ridership on the Campus Line, which grew by 62 percent, translating to 34,000 additional yearly trips.

⁶ Due to FAB's change in their fiscal year calendar, FY14 was not a complete year. FY12 and FY 13, which ran from October to September were used instead. The new fiscal calendar, which is reflected in FY15, runs from June to July.

From FY12 to FY15, revenue miles have consistently increased, resulting in an eight percent increase over the FY12 mileage, as shown in **Table 3-6**. Demandresponse mileage has decreased slightly, which could be due to a variety of factors. The decrease does

not warrant significant concern. Overall, the increase in the revenue mileage could be one factor that has contributed to an increase in ridership on the campus route.

Table 3-5: FAB Ridership by Service

	Ridership						
Route	FY12	FY13	FY15	Change (2012-15)	Percent change (2012-15)		
ADA	6,233	6,271	5,161	-1,072	-17%		
PERT	3,752	3,114	2,723	-1,029	-27%		
Blue	34,096	31,288	33,517	-579	-2%		
Express	26,309	22,226	19,198	-7,111	-27%		
Shuffle	1,591	1,292	1,168	-423	-27%		
Campus	54,751	62,300	88,855	34,104	62%		
Total	126,732	126,491	150,622	23,890	19%		

Table 3-6: FAB Revenue Miles

		F	Revenue M	evenue Miles		
Route	FY12	FY13	FY15	Change (2012-15)	Percent change (2012-15)	
ADA	24,612	26,688	24,071	-541	-2%	
Fixed	176,747	187,162	192,414	15,913	9%	
Total	201,359	213,850	216,485	15,372	8%	

As a result of increased revenue miles, revenue hours also increased systemwide, as shown in Table 3-7. Revenue hours increased nine percent between FY 13 and FY 15, although ADA revenue hours have decreased 18 percent. The slightly greater increase in revenue hours compared to revenue miles is likely due to the shorter, lower average speed campus route.

Passengers per revenue mile, shown in **Table 3-8**, have increased 11 percent since FY12. However, ADA

ridership per mile has fallen 15 percent. Most of the increase in passengers per revenue mile can be attributed to the increased ridership on the Campus Line. On the other hand, **Table 3-9** shows a negligible increase in passengers per revenue hour and even a slight decrease among fixed routes, despite an increase in ridership. ADA service efficiency increased slightly by one percent.

Table 3-7: FAB Revenue Hours

Route	FY12	FY13	FY15	Change (2012-15)	Percent change (2012-15)
ADA	1,563	1,563	1,284	-279	-18%
Fixed	10,583	11,021	11,964	1,381	13%
Total	12,146	12,584	13,248	1,102	9%

Table 3-8: FAB Passengers per Revenue Mile

		Э			
Route	FY12	FY13	FY15	Change (2012-15)	Percent change (2012-15)
ADA	0.25	0.23	0.21	-0.04	-15%
Fixed	0.68	0.64	0.76	0.07	11%
Total	0.63	0.59	0.70	0.07	11%

Table 3-9: FAB Passengers per Revenue Hour

Route	Passengers per Revenue Hour					
	FY12	FY13	FY15	Change (2012-15)	Percent change (2012-15)	
ADA	3.99	4.01	4.02	0.03	1%	
Fixed	11.39	10.91	12.16	0.77	7%	
Total	10.43	10.05	11.37	0.94	9%	

Route	Cost Metrics						
Route	FY12	FY13	FY15	Change	% Δ		
Reported (YOE \$)	\$587,396	\$634,099	\$626,699	\$39,303	7%		
Adjusted	\$605,313	\$643,888	\$623,166	\$17,854	3%		
(2015\$)2							
Cost per Passenger	\$4.78	\$5.09	\$4.14	-\$0.64	-13%		

\$3.01

\$51.17

\$2.88

\$47.04

\$3.01

\$49.84

Table 3-10: Operating Costs and Cost Metrics

Operating costs for the FAB system are shown in Table 3-10, as reported and adjusted for inflation. Although operating costs have slightly increased from FY12 to FY15, the most recent fiscal year is lower than FY13. Nevertheless, cost efficiencies, both in terms of cost per revenue mile and cost per revenue hour, have improved. Revenue mile costs have decreased four percent, whereas costs per revenue hour have dropped six percent, to \$2.80.

Cost per Rev Mile

Cost per Rev

Hour

It is clear that the increase in ridership is solely attributable to the campus line. All other routes have seen a decline in ridership, particularly the two county routes, which had 27 percent fewer riders in FY15 than in FY12. However, due to the significant proportion that the campus route constitutes among fixed route service, service efficiencies in terms of passengers per mile/hour, and cost per mile/hour, have improved for the overall system.

3.4 System Evaluation

The FAB system was evaluated in a number of ways. First, service type performance was compared against

FAB service standards. Then, the FAB network was compared to four peer agencies operating in rural counties across Virginia. Third, an on-board survey was conducted and the results were summarized. Finally, stakeholder and focus group interviews were conducted in the FAB service area, with a summary provided in **Section 3.4.4**. Each of these sections provides additional supporting evidence used to evaluate the FAB system.

-4%

-6 %

-\$0.13

-\$2.80

3.4.1 Service Standard Evaluation

This section compares the FY 15 service data with the service performance standards set in **Chapter 2**. According to the service standards, "monthly systemwide fixed route ridership should maintain levels equivalent to 0.50 passenger trips per revenue mile." As seen in **Table 3-11**, FAB met and exceeded this service standard in FY15. Demandresponse ADA standards also met and exceeded the goal of 1.5 passenger trips per revenue hour.

Table 3-11: FAB Service Standard Compliance

Route	Riders	Rev Miles	Rev Hours	Pax/Mile	Pax/Hour
ADA	5,161	24,071	1,284	0.2	4.0
Fixed	145,461	192,414	11,964	0.8	12.2

With regards to cost effective standards, both fixed-route and demand-response ADA service should obtain a farebox recovery ratio of at least 2.5 percent. As seen in **Table 3-12**, this ratio has not been met.

Due to the majority of riders who do not pay fares, a revision to either the standard, the fare (or both) should be considered.

Table 3-12: Farebox Recovery Ratio

Expenses	Fares	Ratio
\$626,699	\$9,091	1.5%

3.4.2 Peer System Review

In this section, FAB system performance is compared with four comparable rural transit systems in Virginia for Fiscal Year 2013⁷. The purpose of this section is to provide an understanding of how similar systems perform and whether FAB's figures are significantly different, or rather, reflect more general trends of comparable transit systems. Of course, other factors may be attributable to the differences in performance due to service changes.

Table 3-13 compares FAB with the Blackstone Area Bus System (BABS), Winchester, Bristol Virginia Transit (BVT), and Danville Transit. FAB and BABS are categorized as rural transit operators and serve small communities and municipalities in rural areas of Virginia, whereas Winchester, BVT, and Danville are small urban operators. Additionally, all systems except BABS operate a paratransit service, although BABS offers deviated fixed-route service.

FAB is generally comparable to other systems as most of the peer services transport at least 100,000 passengers annually and travel at least 200,000 revenue miles. As shown in Table 3-13 FAB ranks second or third out of five by most performance measures. Some of the differences between the systems could be due to size and nature of the routes and the communities. For example, neither Danville nor Winchester provide extended countywide routes, whereas FAB does. Although FAB and most of the other systems serve urban areas, Danville and Winchester have tens of thousands of more residents. Although the PERT routes do not constitute a significant portion of the system's costs or figures, it would have some effect. Again, BABS is different because it only has one in-town route compared to

With regards to passengers per mile and hour, FAB is on par with all other paratransit system providers. FAB also is comparable in terms of passenger cost, with BVT and Danville seeing similar costs. Cost per revenue mile and hour also are comparable to the other paratransit providers.

the other systems, which for the most part, operate exclusively in urban or semi-urban areas. It would be more accurate to compare the systems to a handful of routes that were more similar in nature. Therefore, while the peer system review provides a way to compare FAB with other rural transit systems, the purpose and makeup of the routes within the system can lead to misconceptions on route performance.

⁷ FY14 was not used for this comparison due to the ninemonth reporting year previously noted. FY13 was used as the most recent complete fiscal year.

		•	•			
	FAB	BABS	Winchester	Bristol	Danville	3Average
Ridership	126,497	41,299	130,190	94,993	285,136	137,905
Revenue Miles	213,850	394,285	198,778	129,275	454,302	294,160
Revenue Hours	12,584	13,538	17,589	9,438	27,238	16,951
Operating Cost	\$643,888	\$390,878	\$928,894	\$437,595	\$1,528,240	\$821,402
Passengers per Revenue Mile	0.6	0.1	0.7	0.7	0.6	0.5
Passengers per Revenue Hour	10.1	3.1	7.4	10.1	10.5	7.8
Operating Cost per Rider Trip	\$5.09	\$9.46	\$7.13	\$4.61	\$5.36	\$6.64
Operating Cost per Revenue Mile	\$3.01	\$0.99	\$4.67	\$3.38	\$3.36	\$3.10
Operating Cost per Revenue Hour	\$51.17	\$28.87	\$52.81	\$46.37	\$56.11	\$46.04
Service Area (square miles)	354	3,398	9.3	13.2	44	866
Fleet Size	14	19	11	7	25	16

Table 3-13: Peer System Analysis for FY13

3.4.3 ONBOARD SURVEYS

An on-board survey of the primary fixed routes was completed for a 1-week period in late September 2015⁸. Each route was surveyed once, over the entirety of one full-day of service. Team members distributed and assisted riders in completing the one-page survey. The survey consisted of questions that asked general demographic information, travel behavior, attitude towards different aspects of FAB service, and for a ranking of potential improvements. Questions enquiring about transfer activity and patronage of other routes in the FAB system were askedto determine if changes to scheduling would be beneficial to riders.

A total of 209 riders completed the survey. Some of the routes produced less than 10 completed surveys and should not be interpreted as a reliable sample to derive definitive sentiments and conclusions. The combined results, however, do reveal general themes for each of the questions asked with key findings summarized below. Additional analysis, as well as charts and a copy of the survey form, can be found in **Appendix 3B**.

Age: The intent of this question was to find out if youth or seniors dominate the service of the route.

Therefore, answers were limited to three options: youth (19 and under), adult (20-64), and senior (65+). Most of the respondents were adults, while only four percent of respondents were seniors. The low percentage of senior respondents can likely be attributed to no surveys being conducted on FAB's ADA-Paratransit vehicles. Another unexpected finding was that teenagers constitute a higher number and percentage of riders on the Express Line than on the Campus Line. This could be due to the fact that first year Longwood University students would generally be 19 or younger, likely not have a car available, and would need the Express Line to get around. Students taking the Campus Line on the other hand, could be of any age, have a car, and may take the Campus Line to get to class but use their vehicles for other trips.

Gender: Women use FAB transit services disproportionately more than men, relative to the gender makeup of the area's population. This may largely be due to the higher ratio of female students at Longwood University. This imbalance, however, holds true even for routes that are less used by students.

Education: Only one percent of respondents did not complete high school. However, there may have been some confusion regarding the question because 36 percent of Campus Line riders surveyed answered that they had a college degree or higher level of

⁸ The Summer Shuffle and ADA-Paratransit services were not surveyed.

education. Since Longwood is mostly comprised of undergraduate students, it is likely most of these students have not actually earned their degree yet. Education level among PERT riders remains ambiguous, as 81 percent of riders did not answer the question. None of the PERT riders responded with having any level of education beyond high school.

Frequency: Most survey respondents use the bus with regular frequency. The Express Line has the most irregular riders and the lowest percentage of surveyed riders who ride frequently. Campus Line ridership frequency is strong, with 94 percent of respondents using the route at least two days a week. The PERT findings are significant because the riders are frequent even though the service is limited, which signifies the importance of the route to the riders. As a whole, 69 percent of all riders are frequent riders of the system.

69 percent of all riders are frequent users of the system, as defined by riding it at least two days per week

Using Multiple Routes: About half of PERT riders use another FAB route when they get in town, which raises the need to time the arrival of the PERT routes appropriately. Generally, it appears Longwood students do not use the Blue, Green, and Orange Lines, but will use the Express Line. Across the system, about 35 percent of FAB users profess to using more than one route, not an insignificant figure for a system of this size.

Transfer Activity: This question received similar responses to the question asking about use of multiple routes. Approximately 18 percent of riders were actively using another route that day to complete their trip. This appeared to be highest (proportionally) for the Blue Line and PERT riders and lowest for the Campus Line.

Origin-Destination: "Home" represented the highest share of origins, while "School" represented the highest share of destinations. Shopping constituted

24 percent of all trip activity. Respondents on the Blue Line provided the most varied responses, presumably because that route serves the greatest variety of destinations. The PERT routes appear to be important lifeline routes for residents needing to shop for goods as this trip purpose was highest, proportionally, when compared to other routes.

Reason for Riding: The majority of respondents on the PERT, Blue, and Express Lines answered that they are transit dependent. The answers are more nuanced for Longwood students, which are reflected in the charts presented in Appendix 3B. Some of the reasons selected by Longwood students were a desire to save gas. However, convenience also played a role, with students stating they were "too lazy to walk" or something similar. Many of the "No Car" answers were also more subtle. For example, many of those surveyed had cars, but could not park on campus or could only park on campus after a certain time.

Service Satisfaction: FAB riders, particularly PERT riders, are generally satisfied with the service, but respondents identified clear areas in need of improvement. The lowest rated route was the Campus Line, which may be due to the ridership demographic on this route. The consultant team heard from Longwood students that on-time performance was an issue on the Campus Line (see focus group summary in Appendix 3C). Generally, on-time performance was poorly rated across all other routes, except the Blue Line, which rated frequency of service as a greater concern. Fare cost was the most highly rated aspect of FAB as fares have not changed since the inception of the service and for many of the riders, service is free. The cleanliness of the buses, stops, and driver demeanor also were highly rated.

Improvements: PERT riders desire more coverage and connections, while riders in Farmville are interested in real-time bus tracking. The bus tracking technology rated highest on the Campus Line.

PERT riders desire more coverage and connections, while riders in Farmville are interested in real-time bus tracking

Although most PERT riders recorded "2-3 days a week", this is the maximum level of service for the routes. One rider put "4 or more days a week", but this would require the individual patron to use both the Orange and Green route, which is unlikely.

Neither coverage expansion, nor connecting with other systems is a priority on the in-town routes, but more frequent service was typically requested. A key finding was that Blue Line riders desired more direct routing, due to the emphasis on coverage that the route places. Options to reduce travel time on this route should be examined. Riders across all routes asked for new and additional infrastructure in the form of shelters, signs, and benches. This should be considered, as there are currently no plans for additional shelters.

Conversations with students prompted improvements that included having the Campus Line detour into the shopping centers, somewhat similar to the Express Line, but differing on frequency and routing. A small number of students desired service to Hampden-Sydney College. Some Express Line riders wanted the route to extend to the Sun Chase Apartments and the movie theatre on the east side of Farmville. They may or may not be aware the Blue Line makes this connection, but it also is possible the one-way loop and the 6:00 p.m. end of service deters riders from using this route.

3.4.4 Stakeholder Interviews

Stakeholder interviews were conducted during the course of a few days in late September 2015. The study team met with county administrators, mangers, school officials, and students in order to develop an understanding of how FAB service is perceived by those who are responsible for its funding, as well as those who use the service. From the meetings there appears to be a unanimous consensus that fixed-route service is important to Farmville and Prince Edward County, and that there is general support at all levels of local government. Those interviewed expressed general satisfaction of the service provided, although it was acknowledged that Longwood University is ultimately the most significant party that affects changes to fixed-route service. There also was a discussion of service expansion to Hampden-Sydney College and the Southside Virginia Community College (SVCC) campus in Keysville, although cost could inhibit such expansion. Appendix 3C provides summaries of stakeholder interviews.

3.4.5 Focus Group Interviews

Interviews were conducted with focus groups consisting of rider and non-rider students from Hampden Sydney College, Longwood University, and SVCC-Keysville. The non-rider focus group (from Hampden-Sydney College and SVCC-Keysville) professed an interest in bus service but noted that service would have to be frequent enough for them to use the system. This was a particular concern for the community college students as they commute to classes, whereas Hampden-Sydney students would use transit to travel to/from Farmville for errands and socializing.

The rider focus group consisted of Longwood University students. The most pressing concern among these students was a lack of schedule adherence and chronic on-time performance problems. These findings closely mirrored the survey results for the Campus Line. They related that the introduction of a real-time tracking system would be enthusiastically received by the student community. **Appendix 3C** provides summaries of focus group interviews.

3.4.6 ITS Technology Review

The only employment of ITS by FAB is surveillance equipment to most revenue vehicles, which consists of four audio and visual in-vehicle cameras. In addition to the cameras, drivers are trained in safety protocols at point of hire. All buses are equipped with public works radios for the drivers to communicate with Farmville Police.

3.4.7 Facility and Equipment Review

FAB is headquartered at their bus depot, located at 502 Doswell Street, Farmville, Virginia 23901. Constructed in August 2001, the facility includes five bays and houses FAB's operational and administrative equipment. The facility's low ceiling height prevents the installation of an automotive lift and therefore, all significant maintenance work is conducted off-site at the town's maintenance yard by town mechanics. Since 2010, FAB has discussed the construction of a shared maintenance facility to be used by both FAB vehicles and the Town of Farmville's municipal vehicles. Construction was anticipated to start in FY 2012, according to a 2011 TDP update submitted to DRPT. However, construction has been delayed due

to the inability of the town to provide their share of the funding. The plan is on hold, with both the town and FAB still interested in the facility. According to the 2014 TDP update, the new completion date is anticipated for FY 2019.

There are 75 designated stops with signage in the FAB system and all are located in the Town of Farmville. .

There also are a total of 14 shelters, which is an increase of two from the 2010 TDP. An additional five to 10 shelters are planned in FY 2017. These shelters are only located in Farmville. In the past, these shelters included route maps and scheduling information placards but were removed due to their lack of durability. FAB plans on reintroducing new placards that are more weather resistant in the future.

3.4.8 FTA Title VI and Triennial Review

FAB is required to prepare both a Title VI report and an FTA Triennial Review as a designated subrecipient of FTA capital and operating assistance funding through DRPT, whose services are provided in a rural portion of the Commonwealth,. The Title VI report was completed in April 2015 and is good for a 3-year period 2015-17. The report ensures that FAB practices non-discrimination as it provides services to the public. **Appendix 3D** provides FAB's most current Title VI report.

The triennial review ensures compliance with FTA Section 5311 Formula Grants for Other Than Urban Areas. The FAB triennial review was completed in October 2015 after a 1-year delay and replaces the previous review completed in 2011. **Appendix 3E** provides FAB's 2015-17 Triennial Review.

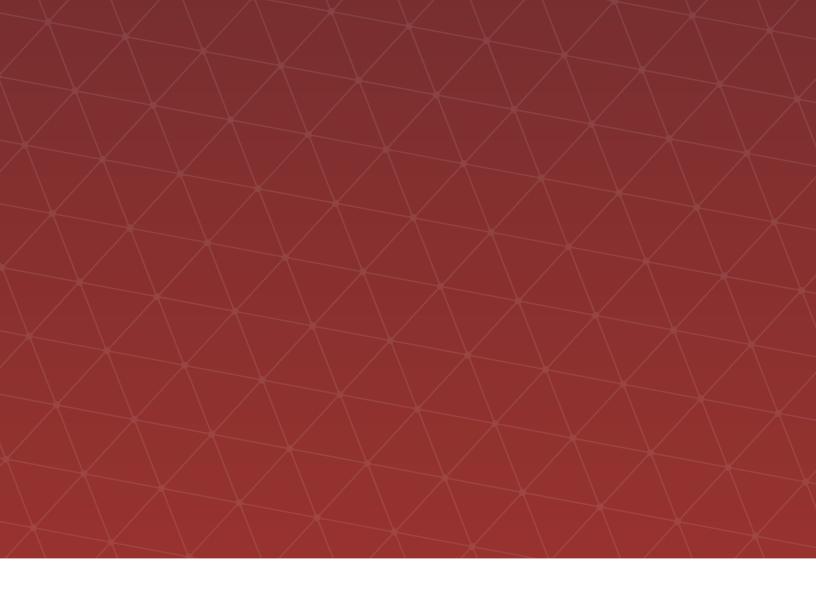
3.5 Conclusions

At first glance FAB's ridership is doing very well, with an increase of 25,000 annual riders from FY12 to FY15. However, a closer look at the data reveals some concerning patterns. As observed in the system performance section, ridership has dropped across all routes except the Campus Line, which increased by 34,000 riders. The increases in the Campus Line ridership has offset drops in other parts of the system. The most likely reason for the increase has been the addition of more trips on the Campus Line.

Despite these warning signs, cost efficiencies have improved for the FAB system as a whole. This result reinforces the significant impact that Longwood has on system performance, and demonstrates that FAB is correct in putting resources where they will see the most ridership return.

It must be noted that the Campus Line, although open to everyone, is not a route that is particularly useful to non-students, as the route only stops at the university and the various clusters of student residences. Therefore, as a measure of general public service, FAB should examine why ridership has fallen across the routes that are designed to serve all residents, not just students. The survey revealed a few possible reasons as to the decline in ridership, such as on-time performance issues and lack of direct routing. FAB should remain aware of these changes and make efforts to boost ridership in other parts of the system.

Ridership has dropped across all routes except the Campus Line, which increased by 34,000 riders. The increases in the Campus Line ridership has offset drops in other parts of the system.



CHAPTER 4: SERVICE IMPROVEMENT EVALUATION



4. Service Improvement Evaluation

This chapter presents service improvement projects to be considered by FAB for future implementation. As the name of the chapter suggests, the projects are presented and evaluated here, with the strongest projects recommended for implementation at the end of the chapter. The potential projects range from minor to substantial and are based on existing service conditions, stakeholder interviews, and anticipated changes in the demographics and urban fabric of the FAB service area. Some of the projects are similar to one another and may share the same goals, but differ in approach or cost. These can be viewed as projects with several alternatives. Lastly, the projects

are scored and ranked through an evaluation matrix containing a number of metrics, which aids in distinguishing the projects and potential alternatives.

4.1 Demographic Overview

This section reviews the demographics of the FAB service area, which consists of Prince Edward County in its entirety. Table 4-1 shows population, race, and senior citizen categories for 2010 (US Census) and 2020 (projected by the VEC), and the magnitude of any changes. The maps in Figures 4-1 to 4-6 show the various demographic concentrations on the census block group level.

Prince Edward County	Area (sq. miles)	Total	White	Black	Asian	Hispanic	Other	Senior	Density (pop/ Sq. mile)
2010	350	23,368	14,796	7,756	205	525	86	3,248	67
2020	350	24,865	14,470	8,870	396	1,015	114	4,179	71
Percent Change (2010-20)	0%	6%	-2%	14%	93%	93%	33%	29%	6%

Table 4-1: 2010 and 2020 Demographics

4.1.1 Total Population

Prince Edward County is projected to increase in population by six percent, or roughly 1,500 residents between 2010 and 2020. Figure 4-1 shows population density for Prince Edward County, which shows most of the population concentrated in Farmville.

The increase in population, however, is not projected to be uniform across all races, as VEC projects some significant shifts in the racial demographics of the county. Asian and Hispanic populations are projected to increase significantly (close to 100 percent each) over the 10-year time period, with the black population seeing a more modest 14 percent gain. Although the changes are significant, the Asian and Hispanic populations currently only constitute roughly three percent of the county population in 2010. This percent is far below the state share, and would still represent a small share of county residents in 2020. Figures 4-2 through 4-5 show the

population densities of White, Hispanic, Asian, and Black residents, respectively, across the study area. The Black and Hispanic populations tend to live in the south and western parts of the county, whereas the Asian population predominately lives in and to the east of Farmville. The white population is projected to decrease by two percent, although it still constitutes a significant majority of the county's population.

Most significantly, the VEC projects the senior population to increase by 29 percent to 4,179 residents between 2010 and 2020. This information may be useful in anticipating increased demand in both fixed and ADA transit service within the county. The map in **Figure 4-6**, which used data from the 2010 US Census, shows a high concentration of elderly residents in the southern part of the county, where there is currently no transit service.

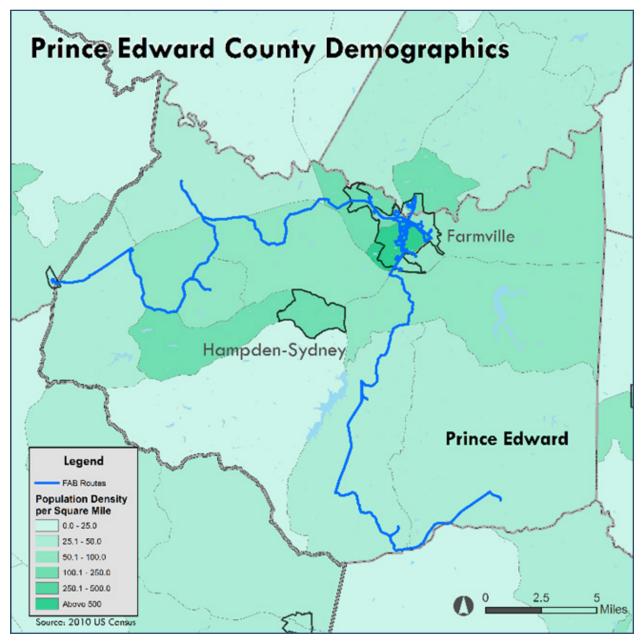


Figure 4-1: Population Density by Census Block Group

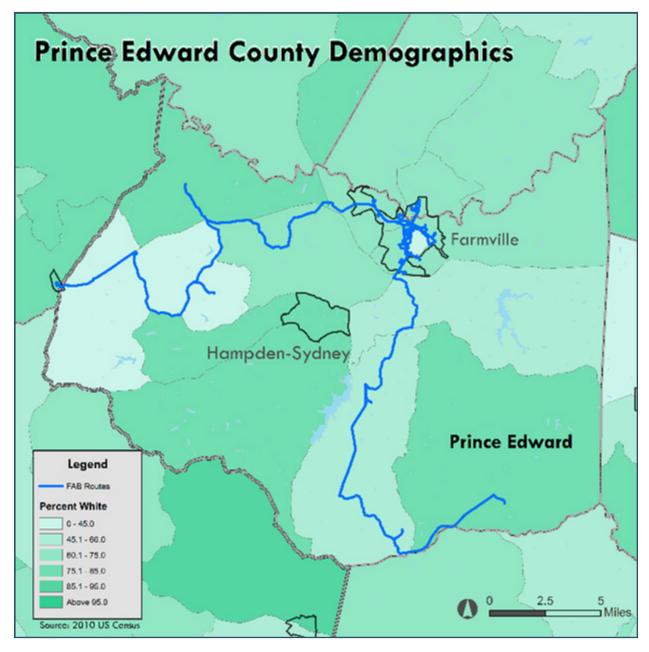


Figure 4-2: Percent White, 2010 US Census

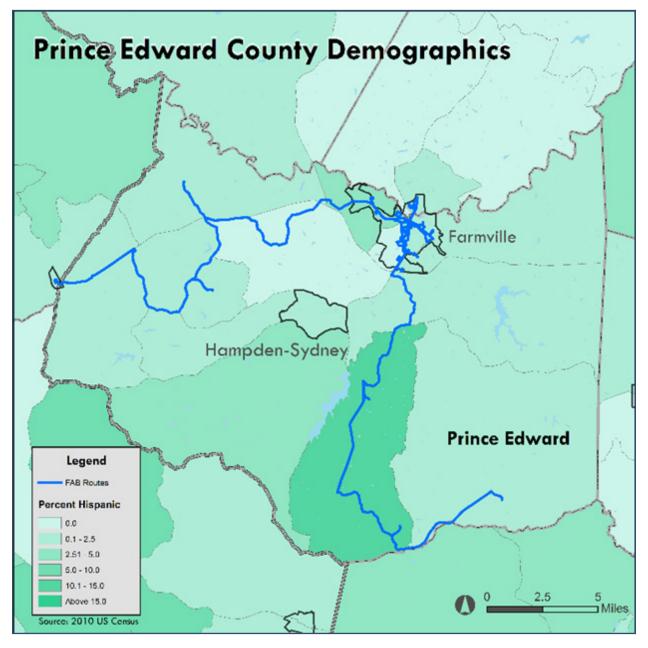


Figure 4-3: Percent Hispanic, 2010 US Census

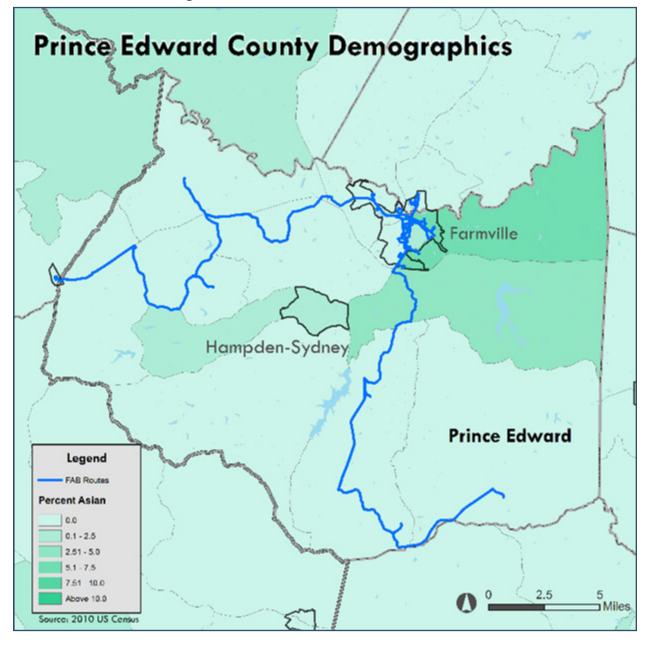


Figure 4-4: Percent Asian, 2010 US Census

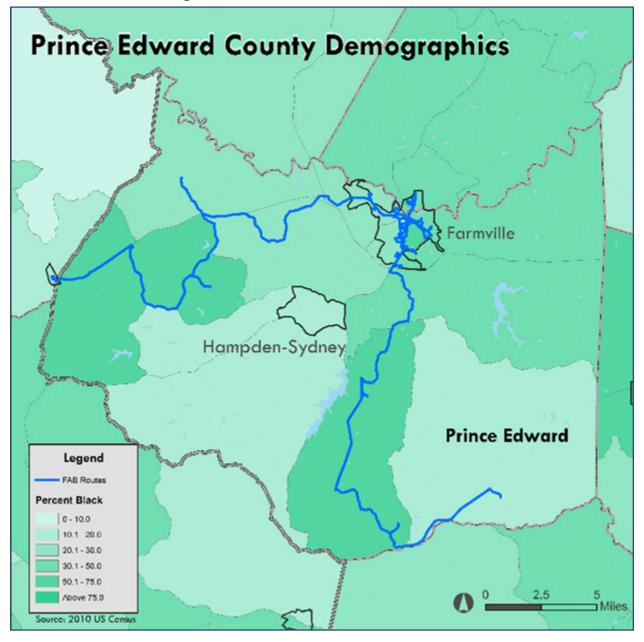


Figure 4-5: Percent Black, 2010 US Census

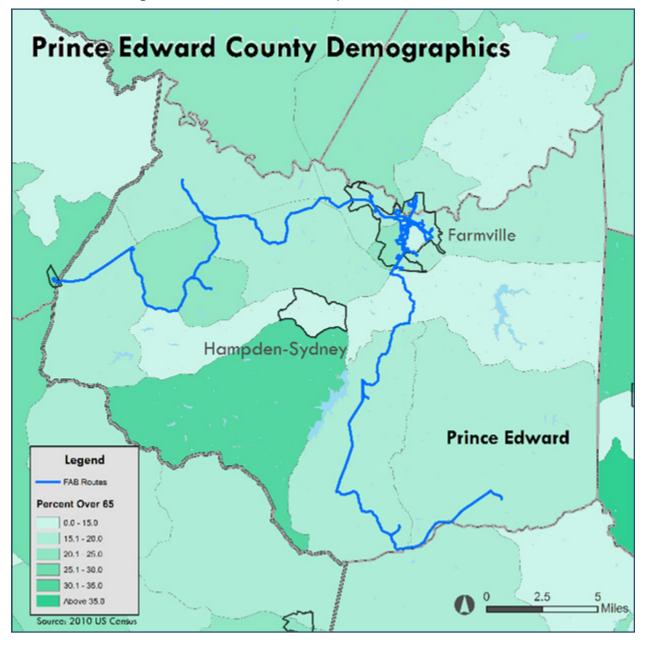


Figure 4-6: Percent Senior Population, 2010 US Census

4.2 Proposed Service Improvements

This section describes eight service improvement projects evaluated for the FAB network. The majority of these projects directly or indirectly deal with additional demand expected from Longwood University. The forthcoming comprehensive plan for Longwood University envisions almost 1,000 additional students and several new buildings and structures. This will significantly increase the pool of potential transit riders and influence future FAB operations. The proposed service improvements mostly consider ways to accommodate this additional growth. For some of the route improvements, more than one alternative is discussed, and many improvements consist of a realignment of the existing service, route expansion, or an entirely new service. These improvements and their associated costs and ridership impacts are detailed below.

Note that the operations cost in this section is estimated by taking the number of revenue hours and multiplying by \$40.65 per additional revenue hour, the FY15 cost per revenue hour for FAB fixed route service. The cost per revenue hour includes transportation costs (fuel, driver labor, vehicle maintenance), but does not include administration costs because it is assumed the FAB administration would remain the same with each proposed project.

4.2.1 Service Improvement 1: Extend Campus Line to Sunchase Apartments

Conversations with Longwood University stakeholders indicated current and future students would likely live on the east side of Farmville in Sunchase Apartments. Currently, these units are served by the Blue Line, which comes once an hour, is circuitous, and as the survey revealed in the previous chapter, is not frequently used by the student body. Therefore, Service Improvement 1 considers extending the Campus Line to provide Sunchase residents with a level of service similar to students living at Longwood Village and Lancer Park. The extension is shown in Figure 4-7.

Extending the Campus Line to the Sunchase Apartments would result in an additional 4.7 miles for each roundtrip and would require an additional bus to operate the extension.

The ridership impact for this improvement is potentially high. Extending the Campus Line to Sunchase would provide a comparable frequency to what other off-campus apartment complexes now enjoy, which would in turn see an increase in riders from the east side of Farmville using this route.

4.2.2 Service Improvement 2: Split Campus Line Service between Lancer Park and Sunchase Apartments

Another approach to serve the Sunchase Apartments would be to split the Campus Line so that some trips end at Sunchase instead of Lancer Park. The Sunchase branch would operate with one vehicle and 30-minute frequency, while the Lancer Park branch would operate with two vehicles instead of the three that currently serve the route¹⁰. These changes would provide four service hours for the new Sunchase branch, but because the new branch would require a service span identical to Longwood Village, daily service would still increase by an additional 13.5 revenue hours, as shown in Table 4-3.

The ridership impact for this improvement is moderate. The provision of service to Sunchase would result in a ridership increase, but this would be balanced by a reduction of service frequency to Lancer Park.

4.2.3 Service Improvement 3: Split Blue Line into Two Routes

Service Improvement 3 seeks to improve the connection of Sunchase and the eastern side of Farmville to the university by splitting the Blue Line into two routes with more direct routing. The current Blue Line is an indirect one-way loop, which means riders have to ride the entire route to return to their origin. When compared with other apartment locations (which benefit from a direct connection via the Campus Line), it is unlikely, given the current indirect routing of the Blue Line, that students would choose to live at Sunchase without having a car to travel to

¹⁰ Three vehicles operate on the Lancer Park Line for the first 4 hours of service, with the remainder of the route operating on two service vehicles. Therefore, the entirety of service would rely on two vehicles.

campus. Service Improvement 3 looks at reducing the amount of time and distance that the riders on the east side would need to travel by dividing the route

into two, more direct patterns. Figure 4-8 shows the split of the Blue Line into east (light blue) and west (dark blue) routes.

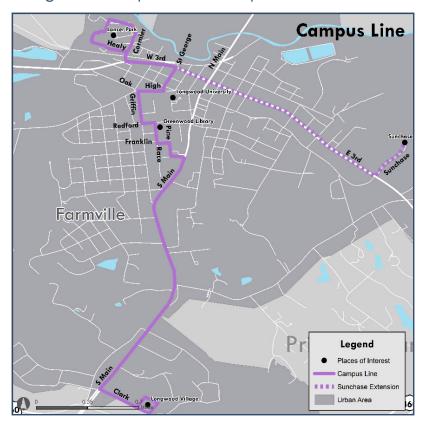


Figure 4-7: Map for Service Improvements 1 and 2

Table 4-2: Service Improvement 1 Revenue Hours Estimate

Service		Daily	Rev Hours		Annual Days of Operation				Total
Improvement 1	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	35	35	14	14	108	27	27	27	5,481
Proposed	52.5	52.5	28	28	108	27	27	27	8,600
Net Change	17.5	17.5	14	14	0	0	0	0	3,119

- Operations cost: 3,119 revenue hours x \$40.65 per hour = \$126,787 annually (2015 dollars)
- Capital cost: 1 new vehicle X \$80,000 = \$80,000
- Ridership Impact: High

Table 4-3: Service Improvement 2 Reve	nue Hours Estimate
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Campus -		Daily	Rev Hours		1	Total			
Sunchase 2	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	35	35	14	14	108	27	27	27	5,481
Proposed	48.5	48.5	28	28	108	27	27	27	8,060
Sum Diff	13.5	13.5	14	14	0	0	0	0	2,579

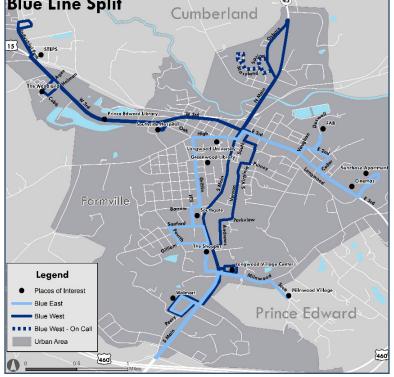
Operations cost: 2,579 revenue hours x \$40.65 per hour = \$104,836 annually (2015 dollars)

■ Capital cost: 0 new vehicle X \$80,000 = \$0

■ Ridership Impact: Moderate

Blue Line Split Cumberland

Figure 4-8: Map for Service Improvement 3



The east route would be 11.6 miles long and would connect Sunchase Apartments and eastern Farmville with Longwood University before traveling south and serving Walmart. The west route, at 9.8 miles, would serve western and northern Farmville, before traveling south on Main Street to serve Walmart. Service on both routes is proposed to have 60-minute frequencies for each route, with 30-minute frequencies on the shared segment to Walmart due to overlapping service.

The ridership impact for this improvement is moderate. Splitting the route into two would provide more direct service for riders, especially for those originating on the east side of Farmville. Overall travel times to and from destinations would therefore improve. However, frequency would not increase on the route, so riders would still have long waits for either the Blue East or the Blue West routes to arrive.

Table 4-4:	Service	Improvement	3 Revenue	Hours	Estimate
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Blue Line		Daily	Rev Hours		1	Total			
Diue Line	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	11	11	10	0	208	52	52	0	3,380
Proposed East	11	11	10	0	208	52	52	0	3,380
Proposed West	11	11	10	0	208	52	52	0	3,380
Sum Diff	11	11	10	0	208	52	52	0	3,380

Operations cost: 3,380 revenue hours x \$40.65 per hour = \$137,397 annually (2015 dollars)

Capital cost: 1 new vehicle X \$80,000 = \$80,000

■ Ridership Impact: Moderate

4.2.4 Service Improvement 4: New Service to Hampden-Sydney College

Hampden-Sydney College has expressed interest in new transit service to connect the college to Farmville in order to allow students without vehicles to access the town. Only \$3,000 in funding was offered from the college, which would cover one trip in each direction for one day a week. The proposed route, seen in Figure 4-9, follows a direct alignment from the school to Walmart for a roundtrip distance of 10.2 miles. The route does not reach East Main Street or Longwood University, although the stop at Walmart does provide connections to other routes that service those areas. Conversely, Hampden-Sydney would have greater flexibility in operating the route as a standalone service and could easily alter or adapt the service to fit the needs of the student body.

Due to the limited funds that the school has offered, options are limited to once a week service that operates two revenue hours. The timing of the service would likely be consecutive service hours in order to lower labor costs. The estimated cost for this service would be \$2,195. No new vehicles would be required by FAB to operate a new route to Hampden-Sydney College.¹¹

The ridership impact of this route is expected to be very low. Offering service once a week for one or two trips will not have many riders. Focus group interviews with Hampden-Sydney students indicated that most had a car or knew of someone who could give them a ride. If someone needed to run an errand on a Tuesday, it is unlikely they would wait until Friday to use the bus with high auto availability on campus.

¹¹ FAB plans to purchase three additional vehicles in the next fiscal year while decommissioning two and retaining one, which means an older vehicle would be available for operation on this route.

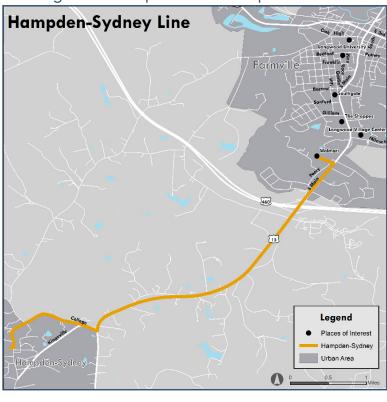


Figure 4-9: Map for Service Improvement 4

Table 4-5: Service Improvement 4 Revenue Hours Estimate

HSC		Daily	Rev Hours			Total			
пзс	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	0	0	0	0	0	0	0	0	0
Proposed	0	2	0	0	0	27	0	0	54
Sum Diff	0	2	0	0	0	27	0	0	54

Operations cost: 54 revenue hours x \$40.65 per hour = \$2,195 annually (2015 dollars)

■ Capital cost: 0 new vehicle X \$80,000 = \$0

■ Ridership Impact: Very low

4.2.5 Service Improvement 5: Express Line Extension to Hampden-Sydney

A second alternative to servicing Hampden-Sydney would be to use an existing route. This service improvement would see the Express Line operate select trips to and from Hampden-Sydney, as seen in Figure 4-10. The benefit of running this service would be increased access to other parts of Farmville through timed transfers at Walmart with the main Express Line. The drawback is that riders at Walmart expecting the Express Line to return north would instead have a 30-minute round trip to Hampden-

Sydney. Riders not wishing to travel to Hampden-Sydney would instead transfer to a northbound Express Line bus.

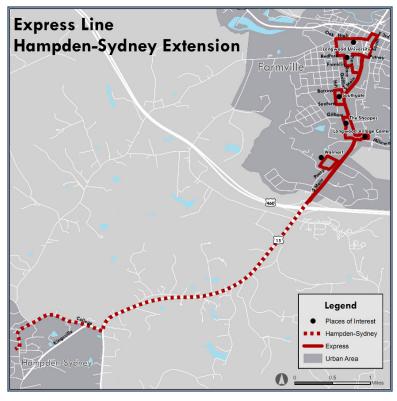


Figure 4-10: Map for Service Improvement 5

The run time of the extension is estimated at 22 minutes, with eight minutes of layover time for the route. The extension would more than double the length of the route from 7.6 miles to 17.8 miles. The details for the extension are shown in **Table 4-6**.

One additional vehicle would be required to operate this route extension. Similar to Service Improvement 4, FAB would use an older spare vehicle to operate this route, and Hampden-Sydney College would not be required to purchase a new vehicle. The ridership impact of this route is expected to be very low. As with Service Improvement 4, offering service once a week for one or two trips will not have many riders. Extending the Express Line (as opposed to a new route) would provide a bit of an increase, but overall the ridership for this improvement would be very low.

Table 4-6: Service Improvement 5 Revenue Hours Estimate

Hampden-		Daily	Rev Hours		Annual Days of Operation				Total
Express	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	8	11	11	8.5	108	27	27	27	1,688
Proposed	8	13	11	8.5	108	27	27	27	1,742
Sum Diff	0	2	0	0	0	0	0	0	54

Operations cost: 54 revenue hours x \$40.65 per hour = \$2,195 annually (2015 dollars)

■ Capital cost: 0 new vehicle X \$80,000 = \$0

■ Ridership Impact: Very low

4.2.6 Service Improvement 6: New SVCC and Hampden-Sydney Route

Service Improvement 6 would be a combined service to Hampden-Sydney College and the SVCC campus in Keysville. Stakeholder conversations with SVCC administrators revealed an interest in renewing service between Keysville and Farmville in order to accommodate students without reliable transportation to the school. SVCC has indicated they could provide \$10,000 annually to provide service. Combining the two funding sources would improve the viability of the route.

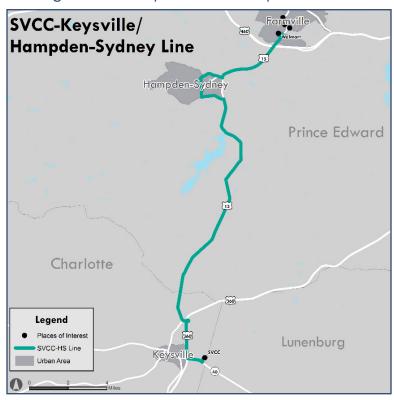


Figure 4-11: Map for Service Improvement 6

It is in the interest of SVCC to provide three round trips a day five days a week in order to best accommodate student schedules and make the service as attractive as possible. The cost of this type of service is outlined in **Table 4-7**. The estimated runtime for a roundtrip from Farmville to Keysville and back would be 75 minutes. Three daily roundtrips at morning, midday, and afternoon would result in four daily service hours and an operational cost that is higher than the amount that has been offered.

One vehicle would be required to operate this new route, which, similar to Service Improvements 4 and 5, would be an older vehicle provided by FAB. The ridership impact of this route is expected to be low. Combining service to Hampden-Sydney and SVCC would provide more riders than serving each destination individually, but the availability of automobiles for both Hampden-Sydney and SVCC students would result in low ridership demand.

Table 4-7: Service	Improvement 6	Revenue	Hours Estimate
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SVCC-	Daily Rev Hours			Annual Days of Operation				Total	
Hampden	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	0	0	0	0	0	0	0	0	0
Proposed	4	4	0	0	108	27	0	0	540
Sum Diff	4	4	0	0	108	27	0	0	540

- Operations cost: 540 revenue hours x \$40.65 per hour = \$21,951 annually (2015 dollars)
- Capital cost: 0 new vehicles x \$80,000 = \$0
- Ridership Impact: Low

4.2.7 Service Improvement 7: Proposed SVCC-Keysville Line

A second alternative to providing service to SVCC-Keysville would be for an independent route serving the campus without stopping at Hampden-Sydney College. This would protect SVCC and FAB in the event that Hampden-Sydney decides to discontinue their funding support due to low ridership. Not serving Hampden-Sydney would result in a slight reduction in cost, mileage, and cycle time. The new alignment is seen in Figure 4-12. The removal of the deviation to Hamden-Sydney also would prove to be more attractive to SVCC students. In addition, SVCC would have greater control over the service. Although it should attempt to have a timed connection with

other routes at Walmart, that may not work while also fitting the SVCC class schedule.

The proposed route would serve two permanent stops, one at the Walmart in Farmville in the north and one at the SVCC-Keysville campus, along with flag stops on US Route 15.

One vehicle would be required to operate this route extension, at no cost as the route would use an existing spare vehicle provided by FAB. The ridership impact of this route is expected to be low. Some SVCC students would likely use this route, although previous service to SVCC was not very well used.

Table 4-8: Service Improvement 7 Revenue Hours Estimate

SVCC	Daily Rev Hours			Annual Days of Operation				Total	
	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	0	0	0	0	0	0	0	0	0
Proposed	3	3	0	0	108	27	0	0	405
Sum Diff	3	3	0	0	108	27	0	0	405

- Operations cost: 405 revenue hours x \$40.65 per hour = \$16,463 annually (2015 dollars)
- Capital cost: 0 new vehicles x \$80,000 = \$0
- Ridership Impact: Low

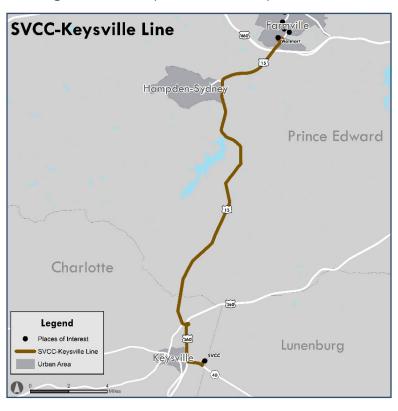


Figure 4-12: Map for Service Improvement 7

4.2.8 Service Improvement 8: Extend Express Line to SVCC Keysville

A third alternative to servicing SVCC-Keysville would be to extend the Express Line on select trips during the weekday. This alternative would require an additional vehicle in order to maintain the 30-minute headway on the existing route. The estimated run-time to service Keysville from Walmart is approximately 30 minutes one-way. Conducting three roundtrips a day would add an additional three service hours and require one additional vehicle to operate the service. This improvement is very similar to the previous one but with the benefit of using existing service that enables passengers to travel from many parts of Farmville to the college on a oneseat ride. The negative consequence of the service would be that passengers still riding the Farmville bus at Walmart, but not traveling south to Keysville, would have to transfer to a waiting Farmville Bus that would continue the normal route. SVCC also would be subject to stricter headways in order to maintain service schedule with the Farmville segment of the route.

One vehicle would be required to operate this route extension, with FAB providing an older existing spare vehicle to operate the route. The ridership impact of this route is expected to be low.

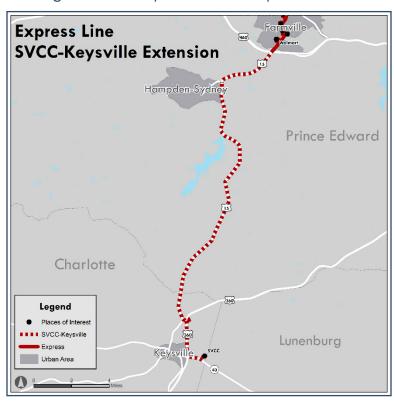


Figure 4-13: Map for Service Improvement 8

Table 4-9: Service Improvement 8 Revenue Hours Estimate

SVCC-		Daily	Rev Hours		Annual Days of Operation			Total	
Express	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	8	11	11	8.5	108	27	27	27	1,688
Proposed	11	14	11	8.5	108	27	27	27	2,174
Sum Diff	3	3	0	0	0	0	0	0	405

Operations cost: 405 revenue hours x \$40.65 per hour = \$16,463 annually (2015 dollars)

■ Capital cost: 0 new vehicles x \$80,000 = \$0

■ Ridership Impact: Low

4.3 Evaluation

This section documents the evaluation of the eight Service Improvement projects described in Section 4.2. The eight projects were evaluated using four criteria: operations cost, capital cost, ridership impact, and ease of execution. A qualitative

evaluation was conducted by the study team to determine points by project. Points were assigned to these four categories to come up with a cumulative score for each improvement. The points for each category include the following:

Annual Operations Cost

\$ 0	6 points
\$1-\$10,000	5 points
\$10,001-\$25,000	4 points
\$25,001-\$30,000	3 points
\$30,001-\$40,000	2 points
■ More than \$40,000	1 point

Capital Cost

Zero required vehicles	3 points
One required vehicle	1 point

Ridership Impact

■ High	5 points
Moderate	3 points
Low-Moderate	2 points
Low	1 point
■ Very Low	0 points

Ease of Execution

Add new route	3 points
Extend existing route	2 points
■ Split existing route	1 point

Table 4-10 presents the evaluation of the eight service improvements. All eight improvements are clustered closely together. The indication is that operations cost is positively correlated with ridership benefit. However, the evaluation does give enough information to make recommendations. These are presented in the following section.

Table 4-10: FAB Service	Improvement Evaluation
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Project	Route	Description	Operations	Capital	Ridership	Execution	Total Points
1	Campus Line	Extend Campus Line to Sunchase Apartments	1	3	5	2	11
2	Campus Line	Split Lancer Park pattern into two routes to serve Sunchase	1	3	3	1	8
3	Blue Route	Split Blue Line into two routes to serve Sunchase	1	1	3	1	6
4	New	New Hampden-Sydney route	5	3	0	3	11
5	Express Line	Extend Express Line to serve Hampden-Sydney	5	3	0	2	10
6	New	New Hampden-Sydney + SVCC route	4	3	3	3	13
7	New	New SVCC route	4	3	2	3	12
8	Express Line	Extend Express Line to serve both HSC and SVCC	4	3	2	2	11

4.4 Final Recommendations

This section presents the final recommendations for the FAB network. These recommendations will affect the rest of the TDP, including the operations plan (Chapter 5), the capital plan (Chapter 6), and the financial plan (Chapter 7). There are two subsections. One presents the service recommendations, while the other presents additional organization recommendations for the FAB network.

4.4.1 Service Improvement Recommendations

The eight service improvements generally fall into two distinct categories:

 How to serve Sunchase Apartments and Longwood students on the east side of Farmville (Service Improvements 1-3) How to serve Hampden-Sydney and SVCC-Keysville (Service Improvements 4-8)

Recommendation 1: Extend Campus Line to Sunchase Apartments

Based on the evaluation, the best way to serve Sunchase and the east side of Farmville is Service Improvement 1, an extension of the Campus Line. This would provide fast, direct service for students living on this side of town to travel to both the university and retail destinations on the south side of Farmville.

The current frequency on the Campus Line (every 15 minutes) means this extension will be expensive to operate. The annual operations cost for this extension is estimated to be \$126,787 in FY2015 dollars. Therefore, Longwood University must be a willing partner in order to fund this extension.

A careful review of Longwood's long-term plans shows an expanded enrollment to 6,000 students and the possibility of off-site parking for commuter students. An extended Campus Line would serve both of these goals. The expanded enrollment means market-rate apartments must absorb 500 students. While a location for these potential apartments is not yet identified, it is likely these apartments could be sited on the east side of the town.

Since the route improvement is not expected to be implemented in the near term, FAB must work closely with Longwood University to identify locations of students and ensure that transit service is in the best interest of both the students and the long-term policies of the university.

Recommendation 2: New Routes to Hampden-Sydney and SVCC-Keysville

The evaluation matrix revealed some differences between the five projects that would provide service to Hampden-Sydney and SVCC-Keysville. Ultimately, the recommendation is for FAB to operate a combined service to both Hampden-Sydney and SVCC-Keysville, as discussed in Service Improvement 6. This improvement would cost approximately \$21,951 per year in FY2015 dollars.

Providing a combined route is the most efficient way for FAB to begin the service. This would prove more attractive to Hampden-Sydney students, who would have 15 weekly roundtrips to the college (instead of two under Service Improvements 4 and 5). Combining the services could pose a future problem if either Hampden-Sydney or SVCC decides they no longer want to participate in the program. Service Improvements 4 and 7 detail the costs associated if Hampden-Sydney or SVCC were to pay for the service without the other partner. The externalities associated with a cessation of Hampden-Sydney service would likely have little effect on riders whose destination is SVCC-Keysville.

As mentioned earlier, this recommendation would not require the purchase of an additional vehicle for operation for either route. This is significant as neither Hampden-Sydney nor SVCC would have to pay the full cost of a vehicle, which is likely high enough to deter a fleeting interest in transit. To put it another way, the absence of capital costs to begin the route would mean that Hampden-Sydney or SVCC would have a relatively inexpensive opportunity to explore

new ways to improve connectivity to their students' desired destinations.

4.4.2 Non-service Recommendations

This section provides additional recommendations for the FAB system. These are not service related recommendations, rather they are improvements that will help improve other aspects of the FAB system related to providing the transit service. Recommendations include:

Bicycle racks on-board all vehicles

Bicycles are an important part of the overall transportation network in Farmville, and they can augment transit service by extending where and how riders travel in the town. Further, the study team heard the suggestion for bicycle racks when conducting focus group interviews with Longwood students. Therefore, when FAB procures their next set of vehicles (slated for 2017), they are recommended to include bicycle racks on-board their vehicles.

Weatherproof shelter signage

FAB's current practice is to laminate schedules and place them in shelters on Longwood's campus. Laminated schedules have become weathered, faded, and illegible when exposed to the elements over time. The schedules are necessary because there is a consistent and significant contingent of new riders added to the system every fall. Therefore, providing legible schedule and route information is significant for FAB's relationship with the university. The recommendation is for FAB to install weatherproof display cases at all Longwood shelters that would eliminate fading and other weather-related issues with the current practice.

Measures to improve on-time performance

One issue heard throughout this study, especially from Longwood students, is the poor on-time performance of FAB vehicles. Unfortunately, FAB does not have AVLs on board their vehicles, so it is difficult to determine how significant of a problem on-time performance has been. One way FAB can improve their on-time performance is to include AVLs on all of their vehicles. AVLs have gone down in cost significantly in the last 10 years and can now be implemented with something as simple as a tablet.

FAB should choose a date to begin AVL implementation on-board vehicles. The large vehicle procurement slated for 2017 may be the best place to begin implementation. It is important to remember that the system chosen will have legacy costs in the future. Therefore, choosing a flexible technology (like the tablet example) may cost more in the short term but may be best for FAB in the long run.

Having AVLs on board will allow FAB to track their buses and implement a real-time arrival system to better communicate to riders when the next bus will arrive. Information from the real-time system is recommended to be made available to the public through the FAB website, with both a desktop and mobile web version. Providing this information will remove uncertainty with FAB bus operations and improve reliability for many riders in the system.

Improved ridership data collection

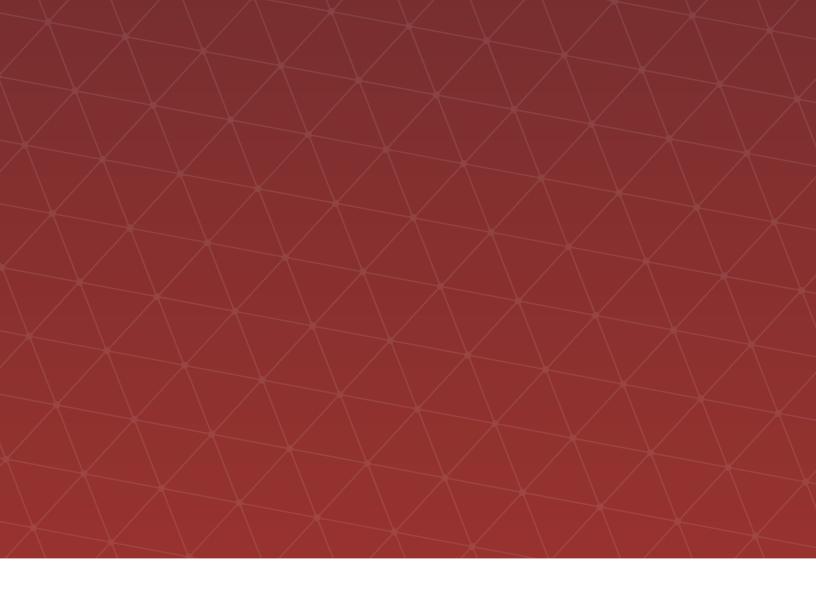
FAB currently collects all of its ridership information from farebox data, and then tabulates that information with pen and paper, summarizing ridership on monthly report sheets. This system makes it extremely difficult to review recent ridership and to look for trends. Therefore, there are two recommendations for the agency.

In the short term FAB is recommended to tabulate ridership reports in Microsoft Excel. This will allow administrators (and other interested parties) to quickly review ridership by route and time period, which in turn will allow ridership trends to be more easily discerned.

In the long term, FAB should consider including APCs on board newly purchased vehicles. APCs collect information on boardings and alightings at each stop, which are then uploaded into a computer software program. This allows administrators to review data by location, route, time of day, and individual run to determine ridership patterns. APCs are not perfect, and there can be issues with the data. However, it would be a leap forward for FAB to have this information available for service planning. This plan recommends adding APCs with the 2017 bus procurement and adding APCs with each subsequent bus purchase until they are on all buses in the system.

LED banners on all new buses

One issue identified (particularly with Longwood students) is not knowing the direction the vehicle is traveling. This is particularly an issue with the Campus Line on Longwood's campus. As a result of this (and the general idea to make transit as easy to understand as possible), a recommendation is for FAB to include LED banners on all new buses purchased by the agency. The LED banners can list the destination (for example: Lancer Park), which would clear up any confusion about direction of travel. The banners can display a color so that riders can easily discern Blue, Express, and Campus buses where they converge.



CHAPTER 5: OPERATIONS PLAN



5. Operations Plan

Implementing the service recommendations detailed in the previous chapter would require a change to the number of revenue hours and miles that FAB operates. This chapter outlines the service that will be provided throughout the next six fiscal years and describes the changes to the services currently provided, and how those changes will be implemented during the TDP planning horizon.

5.1 Planned Service Improvements

In order to have a sense of how much service is being provided during the TDP planning horizon, it is useful to chart proposed changes to existing service in terms of revenue hours, revenue miles, and system cost. **Table 5-1** uses the recommendations from **Chapter 4** to project these metrics during the next six fiscal years. The cost per revenue hour developed in **Chapter 4** is used here to estimate the operating cost for each fiscal year, with a 2.5 percent inflation rate year over year. By FY 2021, FAB is projected to increase revenue hours and miles by 29 percent, while system costs will escalate to 40 percent more than FY 2015 costs.

In acknowledgement of budgetary constraints, some of the service recommendations would be implemented incrementally, which would allow the agency to assess the effectiveness of the initial changes before implementing further service improvements. None of the routes are recommended to change during fiscal years 2016 or 17. in order to provide the agency enough time to properly evaluate the recommendations.

Figures 5-1 through 5-3 present the year over year change in revenue hours, revenue miles, and system cost during the six fiscal years of this TDP update.

5.1.1 Hampden-Sydney/SVCC Route

The Hampden-Sydney and SVCC-Keysville route is projected to begin service in FY 18. Because students will be the primary users of this route, it is highly recommended to begin operations in August 2017 at the beginning of a new school year. The recommendation from **Chapter 4** proposes three daily roundtrips between Farmville and the two

school campuses. By implementing the route in full at the beginning, the route has a higher chance of capturing potential riders.

5.1.2 Campus Line Extension to Sunchase Apartments

While an expansion of off-campus housing is anticipated, it is unknown where exactly this expansion would occur. For purposes of this TDP it was assumed additional students would be living at and near the Sunchase Apartments on the east side of Farmville. Therefore, the Campus Line was recommended to be extended to Sunchase as an incremental change over a number of years. The most important reason for an incremental implementation is the significant expense of implementing and operating the full recommendation. FAB must work with Longwood University to identify funding for the route extension, which will take time. This route is intended to serve the new student apartments constructed in Farmville. If those apartments are not constructed on the east side of town, then FAB may need to reevaluate this route change. Delaying the implementation gives FAB time to determine where this new student market will be located.

Implementation of the proposed Campus Line extension is staggered throughout three fiscal years, before reaching full implementation in FY20. Initially, only weekday service would be implemented in FY18, allowing students on the east side to commute to Longwood for classes during the week. Implementing this initial phase would constitute more than three guarters of the proposed full service expansion (76 percent). If the service proves to be viable after the first fiscal year, service would increase in FY19 to include Saturday service. Then, in FY 20, if warranted, service would be extended to Sundays, which would mirror the service span offered by the existing Campus Line. The incremental phasing of this route provides the agency some flexibility in adapting and assessing service before investing further into the route. Due to the uncertainty regarding where the expected influx of students will reside in Farmville, the details of this recommendation may change during the span of this TDP.

Table 5-1: Projected Revenue Hours and Miles, 2016-21

Route	2016	9	2017	2	20	2018	2019	19	20	2020	2021	21
	Rev Miles	Rev Hours										
Blue	61,584	3,380	61,584	3,380	57,928	3,380	57,928	3,380	57,928	3,380	57,928	3,380
Express Line	25,372	1,661	25,372	1,661	26,244	1,688	26,244	1,688	26,244	1,688	26,244	1,688
Campus Line	65,367	5,481	65,367	5,481	86,170	7,843	89,081	8,222	91,992	8,600	91,992	8,600
Summer Campus Service	2,970	220	2,970	220	2,970	220	2,970	220	2,970	220	2,970	220
Hampden-Sydney / SVCC-Keysville	1	1	1	ı	23,976	540	23,976	540	23,976	540	23,976	540
PAT-Orange	18,917	702	18,917	702	29,328	780	29,328	780	29,328	780	29,328	780
PAT-Green	18,212	520	18,212	520	17,264	520	17,264	520	17,264	520	17,264	520
ADA	var	1284										
Total	192,422	13,248	192,422	13,248	243,880	16,255	246,791	16,634	249,702	17,012	249,702	17,012
Inflation	2.5%	%	2.5%	%	2.5	2.5%	2.5%	%	2.5	2.5%	2.5	2.5%
Cost per Hour (YOE dollars)	\$41.67	67	\$42.71	1,1	\$43	\$43.78	\$44.87	.87	\$45	\$45.99	\$47.14	.14
Operating Cost (YOE dollars)	\$551,994	994	\$565,794	794	\$711,551	,551	\$746,345	,345	\$782,389	,389	\$801,948	,948
Admin Cost (YOE dollars)	\$90,438	138	\$92,699	660	\$95,016	,016	\$97,392	392	\$99,826	826	\$102,322	,322
Total System Cost (YOE dollars)	\$642,432	432	\$658,493	493	\$806,567	,567	\$843,737	737	\$882	\$882,215	\$904,270	,270

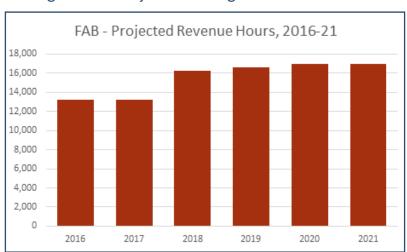


Figure 5-1: Projected Change in Revenue Hours

Figure 5-2: Projected Change in Revenue Miles

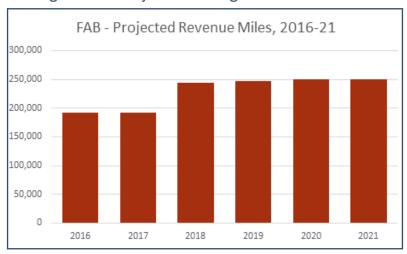
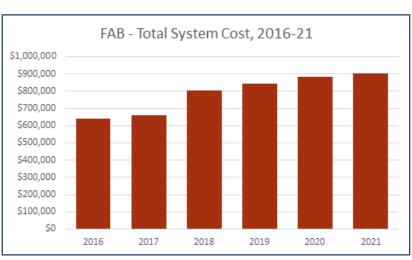
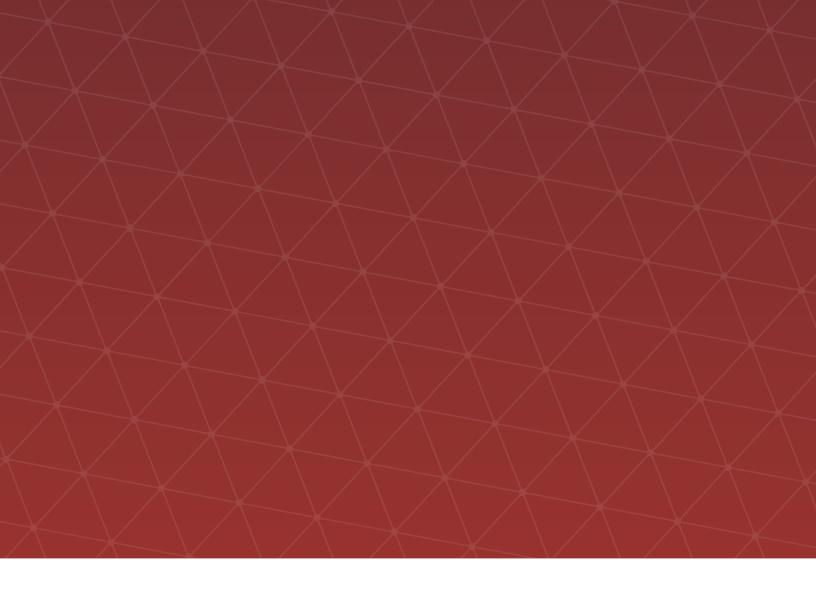


Figure 5-3: Projected Change in FAB System Cost





CHAPTER 6: CAPITAL IMPROVEMENT PROGRAM

6. Capital Improvement Program

This chapter presents the capital improvement program (CIP) required to carry out the operations and services set forth in the operating plan. It includes capital projects needed to implement the service recommendations included in this TDP. The recommendations included in the CIP reflect those projects for which FAB reasonably anticipates local funding to be available. Recommendations for vehicles, facilities, passenger amenities, tools and equipment, and technology upgrades are described below.

6.1 Vehicle Replacement and Expansion Program

Vehicle replacement is anticipated to be a major component of the CIP. This section describes the vehicle replacement and expansion plan, including a discussion on vehicle types, life cycle, and estimated costs. As noted in **Chapter 1**, FAB currently operates a fleet of 15 vehicles, of which 14 are revenue service vehicles and one a supervisory vehicle. Six of the revenue service vehicles are vans primarily used for ADA-Paratransit services and eight are cutaway body-on-chassis (BOC) minibuses. All of the existing revenue service vehicles are gasoline powered and ADA accessible. Vehicles are rotated throughout the system and are not dedicated to specific routes, with the exception of two raised roof vans (vehicle numbers 807 and 808) which are used for the PERT routes.

The vehicle plan was developed using FTA's and DRPT's useful life policy, which is a minimum of four years or 100,000 miles for all light-duty vehicles used by FAB. By this metric, all of the vehicles in the fleet will become eligible for replacement during the years covered by this TDP. FAB already has a planned capital project for the replacement of five revenue service vehicles in FY 2017. This replacement will include three 19-passenger body on chassis cutaways and two 14-passenger vans. The recommendations for the remaining years are based on average annual mileage and vehicle age. Table 6-1 summarizes the current vehicle inventory and recommended replacement year. A detailed vehicle inventory table can be found in Appendix 6A. Vehicle replacement will be important to avoid high operating costs associated with over-age vehicles and to maintain vehicle reliability.

Table 6-1: Vehicle Inventory with Replacement Year Estimate								
Vehicle No.	Vehicle Type	Number of Passengers	Model Year	Total Mileage¹	Estimated Replacement Year			
803	Van	5	2012	13,696	2023			
804	Van	12	2011	78,678	2017			
805	Van	12	2011	76,928	2017			
807	Cutaway	19	2013	58,032	2018			
808	Cutaway	19	2013	51,522	2018			
809	Van	7	2007	40,015	2018			
810	Van	6	2010	41,161	2018			
811	Van	6	2010	32,164	2019			
812	Cutaway	19	2013	53,785	2018			
815	Cutaway	20	2006	183,350	2017			
818	Sedan	4	2012	24,681	2021			
819	Cutaway	19	2012	76,987	2017			
820	Cutaway	19	2012	93,463	2017			
821	Cutaway	19	2012	74,010	2018			
822	Cutaway	19	2013	27,975	2020			

Table 6-1: Vehicle Inventory with Replacement Year Estimate

Any expansion or addition in service would likely require an additional vehicle given the current spare ratio of vehicles. The two service improvement recommendations need to be considered in the CIP. The first recommendation, extension of the Campus Line to Sunchase Apartments, will require an additional cutaway vehicle to maintain the existing headways of this route. The purchase of this additional vehicle is programmed for FY 2020. Implementation of this improvement must remain flexible as FAB works closely with Longwood University to determine the exact timing and location of this service expansion, and as funding becomes available. The second recommendation, a new route to Hampden-Sydney and SVCC-Keysville, also will require an additional vehicle. Given the uncertainty in funding for this new route, FAB has indicated that an existing cutaway vehicle replaced in the FY 2017 procurement will be kept to provide initial service on this route. A more permanent fleet expansion would be needed if FAB finds this route to be successful. An additional cutaway vehicle purchase should be programmed when this decision is made.

Table 6-2 provides the overall vehicle replacement and expansion program for FY 2016 through FY 2021,

along with costs in year of expenditure (YOE) dollars based upon a four percent annual escalation rate. New revenue service vehicles will be similar to those used in the current fleet, that is, gasoline powered and ADA-accessible. While the actual costs will vary at the time of purchase, estimates are based on unit costs of \$80,000 for a cutaway, \$50,000 for a van, and \$30,000 for a sedan in FY 2016 dollars. It is recommended that bicycle racks be included in the future procurements of cutaway vehicles; unit costs for transit bicycle racks typically range from \$500 to \$1,000. Additionally, LED destination banners should be included in all future cutaway vehicle purchases. This equipment typically ranges in cost between \$3,000 and \$4,000 per unit.

¹ As of September 2015

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Number of Vehicles	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total	
Replacement								
Cutaway	0	3	4	0	1	0	8	
Van	0	2	2	1	0	0	5	
Sedan	0	0	0	0	0	1	1	
Expansion								
Cutaway	0	0	0	0	1	0	1	
Total Vehicles	0	5	6	1	2	1	15	
Vehicle Costs								
Replacement								
Cutaway	\$ -	\$249,600	\$346,112	\$ -	\$ 93,589	\$ -	\$ 689,301	
Van	\$ -	\$104,000	\$108,160	\$ 56,243	\$ -	\$ -	\$ 268,403	
Sedan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,500	\$ 36,500	
Expansion								
Cutaway	\$ -	\$ -	\$ -	\$ -	\$ 93,589	\$ -	\$ 93,589	
Total Projected Vehicle Costs (YOE\$)	\$ -	\$353,600	\$454,272	\$ 56,243	\$187,177	\$ 36,500	\$ 1,087,792	

Table 6-2: Vehicle Program

6.2 Major System Maintenance and Operations Facilities

As noted in previous chapters, construction of a new maintenance facility has been an ongoing discussion and continues to be an interest of FAB. It was identified in the previous 2010 TDP and subsequent TDP updates. The new facility would most likely be shared with the Town of Farmville and operate as a multi-function facility able to provide the full range of transit system administrative, operational, and maintenance functions. In 2011, a feasibility study was conducted by the Town of Farmville to better define the size, potential location, and function of this facility. FAB also secured a DRPT grant to partially fund the facility; however, the project was put on hold due to the town's difficulty in securing the local match. Should this effort resume in the coming years, a new feasibility study would be needed. Additional state-of-good-repair facility rehabilitation is anticipated during the horizon of this TDP. This includes capital expenditures for flooring replacement and resealing in the Administrative/

Maintenance facility. Estimated costs are included in Table 6-3.

6.3 Passenger Amenities

Bus stop improvements included in the CIP include new route map and schedule placards for all shelters. FAB currently has 14 shelters in place. The recommended extension of the Campus Line may require new shelters at key stops. Since the exact location of the route extension is undetermined, additional shelters are not included in the capital plan but should be included in the future once this service improvement is better defined. There also is a need for new route map and schedule information placards at shelters. The previous installations lacked durability and weather resistance, so FAB is currently planning on deploying new double-sided information placards in all of its shelters. This upgrade is programmed for FY 2017; the cost estimate is based on \$500 per installation for approximately 14 locations. No additional bus stops signs or other passenger amenities are necessary at this time. Table 6-3 shows the anticipated costs for passenger amenities capital projects.

Table (6-3: I	Non-V	ehicle (Capital	Program

Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Facility Rehabilitation (YOE\$)	\$ -	\$ -	\$ 16,000	\$ 5,000	\$ -	\$ -	\$ 21,000
Bus Shelter Placards (YOE\$)	\$ -	\$ 7,000	\$ -	\$ -	\$ -	\$ -	\$ 7,000
Total Non-Vehicle Capital Expenses (YOE\$)	\$ -	\$ 7,000	\$ 16,000	\$ 5,000	\$ -	\$ -	\$ 28,000

6.4 Tools and Equipment

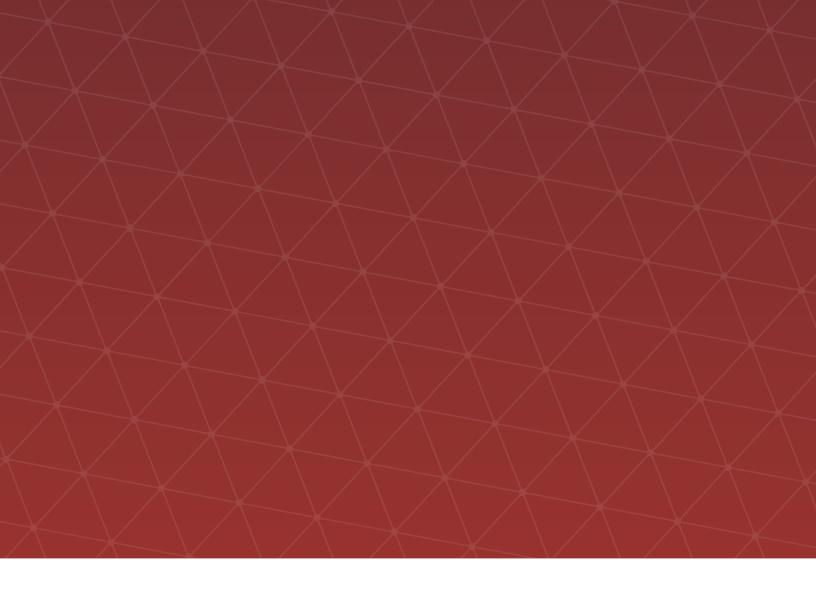
There are no specific recommendations for additional tools and equipment included in the CIP.

6.5 Technology Upgrades

This TDP recommends technology improvements to assist with operations planning and performance management. This includes a system that provides AVLs and enhanced ridership data collection abilities. Such technology will provide FAB with the data to monitor on-time performance of vehicles and potentially provide passengers with real-time arrival information through a mobile website. The most likely form of such a system involves in-vehicle tablets that use Global Positioning Systems (GPS) to track the vehicle's location. The tablet could be equipped with software or an application that allows the driver to record ridership. The technology has the potential to greatly reduce the amount of manual paper recording and data entry done by drivers and administrative staff.

In addition to the benefits the technology upgrades will have for FAB operations and its customers, it also will align with the direction DRPT is heading with performance data collection and reporting. The upgrade would meet the recommendation of the Commonwealth's Transit Service Delivery Advisory Committee (TSDAC) for all grantees to transition to a "simple electronic system" for collecting ridership, revenue miles, and revenue hours data. FAB should work closely with DRPT on potential funding opportunities given that this is an evolving topic of discussion. The technology upgrade is not included in the CIP since a specific funding source has not been identified, but it should be added when additional funds become available. To that end, a planning-level cost estimate is provided in Appendix 6B for future guidance on this capital improvement.

The previous installations lacked durability and weather resistance, so FAB is currently planning on deploying new double-sided information placards in all of its shelters



CHAPTER 7: FINANCIAL PLAN



7. Financial Plan

The intent of this chapter is to identify and detail FAB'S operating and capital funding sources throughout the next six fiscal years. By using a number of assumptions and the most recent fiscal year, FY16, to create a base for projecting future funding levels, this chapter produces a reasonable forecast. The chapter is divided into three sections that discuss the costs and funding sources for operations and maintenance, bus purchases, and facility improvements.

7.1 Operating and Maintenance Costs and Funding Sources

The previous TDP developed a financial plan that outlined the costs and funding sources for dayto-day operations and maintenance up through FY15. This TDP update also outlines a financial plan but uses updated assumptions. It is worth noting, that the further into the future the projection is, the less reliable it is due to potential changes in circumstances. For example, below are two sets of figures that represent funding sources for FY15. The left column represents a 6-year projection for FY15 funding levels from the prior TDP, whereas the right column details the funding FAB actually received in the most recent fiscal year. Federal funding constituted a larger share than was originally projected and farebox revenue has been revised significantly downward. The differences observed are due to both the assumptions made with regards to expected funding sources and the changes to service that were not anticipated in the previous TDP.

FY15 Projected

- Budgeted \$705,508
- Federal \$305,000 (43%)
- State \$117,939 (17%)
- Local \$253,569 (36%)
- Farebox \$29,000 (4%)

FY15 Actual

- Budgeted \$676,295
- Federal \$332,898 (49%)
- State \$133,767 (20%)
- Local \$199,130 (29%)
- Farebox \$10,500 (2%)

These amounts are what had been budgeted and do not reflect the actual amount spent to provide service. In the case of FY15, both the projected and actual funding levels overestimate the amount of funds needed to operate the system. Nevertheless, a conservative approach to funding is taken in this section. FY 2016, the most recent period where funding has been distributed, is used as a base year to project future funding levels. The breakdown of funding for operation and maintenance costs in FY16 and beyond is provided in Table 7-1. Service hours provided are assumed to increase due to one new bus route and the expansion of an additional Campus Line service. Although service hours are increasing, fare revenues are assumed to remain constant at \$10,500 per annum as reported in the DRPT Six Year Improvement Program (SYIP) as most of the new ridership will come in the form of students, who are exempt from on-board payment.12

¹² Students pay for FAB service through university fees that are used to fund the school's contribution to FAB.

idea 7 in operating i maneral i and ing 20100 and obarese by i local real							
Financial Plan	FY16	FY17	FY18	FY19	FY20	FY21	
Service Hours	13,248	13,248	16,255	16,634	17,012	17,012	
Operating Costs	\$642,432	\$658,493	\$806,567	\$843,737	\$882,215	\$904,270	
		Anticipated	Funding by S	ource			
Federal	\$321,216	\$329,247	\$395,218	\$404,994	\$424,345	\$434,050	
State	\$125,917	\$129,065	\$154,861	\$158,622	\$166,739	\$170,003	
Local	\$195,299	\$200,182	\$256,488	\$279,277	\$292,013	\$299,313	
Federal Share	50.0%	50.0%	49.0%	48.0%	48.1%	48.0%	
State Share	19.6%	19.6%	19.2%	18.8%	18.9%	18.8%	
Local Share	30.4%	30.4%	31.8%	33.1%	33.1%	33.1%	
Farebox	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	
Farebox Ratio	1.6%	1.6%	1.3%	1.2%	1.2%	1.2%	

Table 7-1: Operating Financial Funding Levels and Sources by Fiscal Year

7.1.1 Assumptions

The projections are based on a number of assumptions. Operating costs are anticipated to increase at least 2.5 percent per annum with several of the future fiscal years recommended to undergo service expansion, which would result in increases higher than 2.5 percent. For example, the expansion of the Campus Line and new service to the two nearby higher education institutions are instituted incrementally beginning in FY18, creating significant differences in operating cost from year to year. The assumption of 2.5 percent was chosen in order to be conservative in the event costs exceed prior inflation rates. Labor and fuel, two of the largest costs to run service, are currently low. Additionally, conversations with the FAB transit manager revealed some difficulty in finding qualified drivers with commercial driver's licenses. Longwood University students would need to obtain a CDL, which decreases the likelihood of using student labor. As a result, the system may need to increase wages in order to attract qualified applicants. Fuel prices, at this time, are at their lowest since 2009 but will likely increase in the future. 13

Similar to operating costs, state operating assistance funds are assumed to increase at varying rates, based on the 6-year DRPT forecast of operating assistance from the Mass Transit Fund found in the 2016 DRPT SYIP. As is evident in **Table 7-2**, state operating assistance is expected to increase at a higher rate than the inflation rate applied to operating costs (2.5

Statewide operating assistance is changing in an effort to improve the effectiveness of state support for transit operations. Under the traditional formula, transit systems received state funding based on their individual operating costs as a share of statewide operating costs. Therefore, the higher a system's operating costs, the greater the funding from state operating assistance. Beginning in FY14, DRPT began to transition to a performance-based system, with full implementation occurring in FY16. Under the new system, when statewide operating assistance funds exceed \$160,000,000, performance-based funding would be triggered.¹⁴ Therefore, the state figures in Table 7-1, are actually a blend of the traditional formula and another formula based on system performance.15

percent), except for the final projected fiscal year. Federal funds are assumed to increase at the same level as state operating assistance, but with a limit of 50 percent of the net deficit. Thus, federal funds are projected to increase by 2.5 percent (same as the assumed inflation rate), with exception of the last year, when a 2.4 percent federal fund increase is assumed (matching the state operating rate increase).

¹⁴ Performance-based funding is evaluated based on system size, ridership, and ridership efficiency in terms of service cost, miles, and hours provided.

¹⁵ System size is a variable in the performance-based system to prevent smaller systems from receiving more money than the larger systems that perform similarly.

¹³ www.eia.gov

Table 7-2: Year over Year State Operating Assistance Rate Increases

Year	Percent Increase
FY 2016 to FY 2017	2.8%
FY 2017 to FY 2018	2.9%
FY 2018 to FY 2019	2.8%
FY 2019 to FY 2020	2.6%
FY 2020 to FY 2021	2.4%

7.2 Bus Purchase Costs and Funding Sources

As detailed in the previous chapters, FAB is recommended to undergo service expansion, and therefore will require an increase in the size of its fleet in addition to regular vehicle replacements. Table 7-3 shows a breakdown of service vehicle purchase plans through FY21, based on both the DRPT SYIP and FAB TDP updates.

Table 7-3: Capital Financial Funding Levels and Sources Plan: Service Vehicles

Financial Plan	FY16	FY17	FY18	FY19	FY20	FY21
Bus Replacements	-	3	4	0	1	0
Bus Cost	-	\$249,600	\$346,112	-	\$93,589	-
Van Replacements	-	2	2	1	0	0
Van Cost	-	\$104,000	\$108,160	\$56,243	-	-
Sedan	-	-	-	-	0	1
Sedan Cost	-	-	-	-	-	\$36,500
Total Cost	-	\$353,600	\$454,272	\$56,243	\$93,589	\$36,500
		Anticipated	Funding by S	ource		
Federal	-	\$282,880	\$363,418	\$44,994	\$74,871	\$29,200
State	-	\$56,576	\$72,684	\$5,624	\$9,359	\$3,650
Local	-	\$14,144	\$18,171	\$5,624	\$9,359	\$3,650
Federal Share	-	80.0%	80.0%	80.0%	80.0%	80.0%
State Share	-	16.0%	16.0%	10.0%	10.0%	10.0%
Local Share	-	4.0%	4.0%	10.0%	10.0%	10.0%

7.3 Assumptions

Capital funding assistance is allocated using a different method than operating funding assistance. Traditionally, and in the previous TDP, capital funding was delineated by an 80 percent federal, 10 percent state, and 10 percent local contribution breakdown. However, due to the presence of additional state bonds, there has been an increase in state assistance, which relieves the financial pressure on local municipalities to match the state at 10 percent. It is unclear how long the bonds will continue to fund the state's higher share. Therefore, for the first three fiscal years, through FY18, the federal, state, and local funding breakdown is assumed to be 80/16/4, respectively. After FY18, this has been assumed to return to the traditional 80/10/10 split.

Vehicles costs are estimated to escalate four percent per annum and this assumption is reflected in **Table 7-3** with FY16 serving as a base year. This also assumes that FAB will continue to purchase the same type of vehicle for service and that any changes to the vehicle would not result in price changes significantly different than four percent. The relatively high number of vehicle purchases, which will be five in FY17, is due to bus replacements. The system's relatively high vehicle spare ratio, as discussed in **Chapter 1**, shows a capacity for new service recommended to begin in FY17.

7.4 Facility Improvement Costs and Funding Sources

At this time, FAB is currently seeking facility improvements in the form of a new town maintenance facility. As had been discussed in the **Chapter 1**, the existing garage, which was constructed in 2001, is insufficient to perform maintenance and repairs due to the low height of the ceiling. Repairs and routine maintenance are performed offsite with other county-owned vehicles at another in-town facility. Obtaining sufficient local funding is still the largest obstacle to begin construction of the maintenance facility. According to the 2014 TDP update, the new completion date is anticipated for FY 2019.

FAB, however, is considering improving passenger amenities, specifically, the installation of weather-resistant route and schedule placards installed at a number of bus stops. Conversations with the transit manager revealed a lack of quality with the previous frames that were used to display information and a strong interest in acquiring ones that were both weather and UV-resistant. This would raise the profile and accessibility of FAB, which is particularly important as route maps are no longer available in local stores. As mentioned in **Chapter 6**, a total project estimate of \$7,000 (\$500 per placard) has been assumed. **Table 7-4** details the funding plan for this project.

In Chapter 6, technological upgrades, such as AVL technology, were explored and detailed, but were not recommended, due to cost. Consequently, these upgrades have not been included in the capital cost projection.

Table 7-4: Capital Financial Funding Levels and Sources Plan: Placards

Financial Plan	FY16	FY17	FY18	FY19	FY20	FY21		
Bus Shelter Placards	-	\$7,000	-	-	-	-		
Anticipated Funding by Source								
Federal	-	\$5,600	-	-	-	-		
State	-	\$1,120	-	-	-	-		
Local	-	\$280	-	-	-	-		
Federal Share	-	80.0%	80.0%	80.0%	80.0%	80.0%		
State Share	-	16.0%	16.0%	16.0%	16.0%	16.0%		
Local Share	-	4.0%	4.0%	4.0%	4.0%	4.0%		

¹⁶ The transit manager expressed a belief that an existing bus could serve the new Hampden-Sydney/Keysville route, which is expected to begin FY17.



CHAPTER 8: TDP MONITORING AND EVALUATION

8. TDP Monitoring and Evaluation

The development of goals, standards, and recommendations presented in this TDP, should be supported by a proper and regular assessment of the system to ensure that those goals and standards are being attained and that recommendations are still applicable. The recommendations and evaluation presented in this TDP have been developed through a culmination of research through multiple approaches which include:

- An evaluation of existing service statistics to identify advantages and disadvantages in the service being offered
- An evaluation of the existing performance standards and goals in order to assess potential changes, with consideration of the existing services being provided
- An on-board survey of existing ridership on all bus routes to comprehend the varying degrees of satisfaction and obtain a cursory understanding of the travel patterns and socio-demographic characteristics of the riders. The survey also gauged the aspirations of what they hope or expect to see from the system in the future
- The team conducted a peer agency review between FAB and other comparable systems, which helped to explain other details about the service being provided. Although no two systems are identical, elementary standards of performance and efficiency can be established when comparing systems with similar operating costs, goals, and other service characteristics
- A number of new service concepts and changes were explored and ultimately, a select few were recommended for implementation
- Lastly, the economic impact these recommendations would have on capital costs were assessed and a capital plan was developed that would lead up to the next TDP

Ensuring that the actions taken to improve the system are successful requires a number of different strategies to be undertaken throughout the horizon of this TDP. These actions include but are not limited to, the need to coordinate with other comprehensive plans and institutions, consistent monitoring of service provision, and the completion of annual TDP

updates, detailing overall system performance and capital expenditures.

8.1 Coordination with Other Plans and Programs

It is important that the goals and aspirations of this TDP are compatible with the other local, state, and regional plans with respect to their transportation elements. The Town of Farmville's comprehensive plan, the county comprehensive plan, the statewide long-range transportation plan (LRTP), and of course, the TDP should be realistic with respect to prospective funding, as would be outlined in the DRPT SYIP.

The Farmville Comprehensive Plan has not been updated in more than a decade. FAB should ensure that upon the completion of the new comprehensive plan, that the planners are made aware of this updated TDP to communicate how FAB envisions itself within the community. Although public transportation did not play a significant role in the previous comprehensive plan (consisting of one page of text, and two maps), it will have an increased role as FAB has significantly expanded, particularly with its relationship with Longwood University.

FAB should ensure that upon the completion of the new comprehensive plan, that the planners are made aware of this updated TDP to communicate how FAB envisions itself within the community

The relationship between FAB and the university is significant and, therefore, perhaps the most important document to note would be the upcoming Longwood University Comprehensive Master Plan¹⁷. This plan demonstrates the vision for the future, in terms of improving the structural to human interactions within the Town of Farmville. The plan will call for greater walkability and centralized activity within the university. It also plans for an increase of more than 1,000 students during the next decade,

¹⁷ To be released in 2016. The plan is an updated vision of the 2020 Master Plan developed in 2008.

which would necessitate the need for additional off-campus housing. The transportation of these students in a convenient and efficient manner is critical to fulfilling the vision detailed in the master plan. Therefore, it is important that FAB works closely with the university to adequately plan for potential increases in service expansion.

8.2 Service Monitoring

The purpose of **Chapter 2** was to update performance guidelines for the system to adhere to based on the existing characteristics of the routes. If performance targets are consistently unmet, then actions should be taken to correct the poor performances. As mentioned previously, corrective measures, which may include route realignment, frequency or service span changes, or fare adjustments, should be taken if the route underperforms for more than 12 consecutive months.

However, as reported in both the current and previous TDP update, on-time performance is still a significant issue within the system, particularly with routes oriented to serving the university. It is likely that this perception is fueled by image and reality. AVL technology and a mobile web presence to track buses could improve this perception, as discussed at the end of **Chapter 6**. Additional surveying should be conducted at least once more within the time period of this TDP. Intermittent surveying of rider satisfaction regarding bus load issues and on-time performance, should be done in order to collect a representative sample of riders.

The transit manager already reports monthly to the town manager and if requested, the Council. The transit manager also attends Rock the Block events during Longwood orientation as outreach to the university community.

Annual TDP Monitoring

Currently, FAB is required to submit an annual review letter to DRPT, detailing progress toward fulfilling the standards and or recommendations outlined in the adopted TDP. The purpose of the letter is to create accountability for the service provided, between the transit provider and DRPT. As service can change due to numerous factors throughout the course of a year, the letter should discuss a number of topics, both operating and capital in nature. This may include

route re-alignments, ridership fluctuations, and expected capital expenditures, among other details. The letters are due December 1st, roughly halfway between this system's fiscal year, and the data should not include the most recent figures. The difference between the submittal date and the end of the prior fiscal year should provide the system manager sufficient time to collect and analyze the data and assess performance. These TDP updates should include but should not be limited to:

- A summary of progress made toward obtaining the TDP goals and objectives outlined in Chapter 2
- Ridership trends from the previous fiscal year
- A summary of projected and actual operating and capital costs
- Detailing advancements made toward capital improvements and a timeline of anticipated capital expenditures during the next several fiscal years.
 If there is a departure from the Chapter 7 capital plan, it should be noted and the discrepancy explained
- A summary of revenue collected, both projected and actual
- A description of under-performing routes and the corrective actions conducted or that are planned to improve the service



APPENDIX 3A:

FY 2012, 2013, and 2015 Operating and Capital Cost Data

Appendix 3A: FY 2012, 2013, and 2015 Operating and Capital Cost Data

The table below provides operations expenditures, capital expenditures, and revenues for the FAB system.

Table 3A-1: Three-Year Retrospective of Costs and Revenues

	FY12	FY13	FY15
Operations	\$587,396	\$634,099	\$626,699
Capital	\$269,473	\$297,513	\$665,295
Revenue	\$11,807	\$10,512	\$9,091



APPENDIX 3B: FAB ON-BOARD SURVEY RESULTS

Appendix 3B: FAB On-Board Survey Results

On-Board Survey Process

FAB conducted a comprehensive onboard passenger survey for use in the agency's 2015 TDP. Results from this ridership survey are being used to determine rider characteristics, trip-making characteristics, and perceptions regarding quality of transit services and future needs. The summary of the survey responses is used as one element of the service evaluation process. The survey was conducted during the week of September 28, 2015.

Survey questions were developed and reviewed with FAB staff. The survey instrument asked patrons to respond to several questions in the following categories:

- How Are We Doing? socioeconomic status and rider characteristics
- About Your Trip Today general characteristics of the trip they were making at the time of the survey, such as trip purpose, origin, and destination
- Rating FAB Service and Identifying Future Transit Needs - perceptions regarding FAB's existing service and perceptions regarding needed improvements

A copy of the survey form is shown in Figure 3B-1.

Figure 3B-1: On-Board Survey Questionnaire of Farmville Area Bus (Fixed-Route Service)

Koute	vey / September 2015 Boarding Time:						
	boarding rime						
How Are We Doing? Dear Rider: The Farmville Area	Bus system (FAR) is evaluati	ing evicti	ng and f	iture tra	nsit com	rice Pleas	e take a minute to fill out this
survey. Thank you for your help		- ig CAISU	g and n	acure trai	JIL SELV	nec. Fieds	e take a minute to mi out this
AGE:							
\square 19 and under	□ 20-59		□60	and abov	re		
GENDER:							
☐ Male	☐ Female						
EDUCATION:							
□ Did not complete High School□ High School Diploma/GED	اد			llege Deg her Profe	•	•	
How often do you ride FAB?	7-					¬ .	
□Less than once a month □Once or twice a month	□Once a w □2-3 days a					⊔4 or m	ore days a week
How many different Farmville A			in any gi	ven mon	:h?		
☐ Blue Line	☐ Green Lir						wood Shuttles
☐ Express Line	☐ Orange L	ine (PER	Т)			□ ADA	Paratransit – Van Service
Have you ever transferred from		er FAB bi	us route	to compl	ete a tri	p?	
☐ Yes	□ No						
About Your Trip Today							
Dear Rider: The following ques	tions are about your current	trip.					
Where did your trip begin?							
☐ Home	☐ School		□М	edical			☐ Other
□ Work	☐ Shopping		□ Go	ovt. Servi	ces		
Where are you going now? Home	☐ School		⊏м	edical			Other
☐ Work	☐ Shopping		□ Go	ovt. Servi	ces		
Where did your trip end? Please	give an address, intersection	n, or nea	rby land	mark.			
Why did you ride the bus today	(select all that apply)						
and the vertiles are seen		□ No	Car	□∩ti	ner		
□Disability □ Fi	nancial Reasons		Cui				
□Disability □ Fi	inancial Reasons						
□Disability □ Fi Rating FAB Service & Iden		Needs					
	ntifying Future Transit						
Rating FAB Service & Idea Please Rate FAB service on a sca	ntifying Future Transit	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
Rating FAB Service & Idea Please Rate FAB service on a sca 1 Frequency of bus service	ntifying Future Transit sle from 1 (poor) to 5 (great)	1 _					
Rating FAB Service & Idea Please Rate FAB service on a sca Frequency of bus service Areas that are served by the	ntifying Future Transit sle from 1 (poor) to 5 (great)	1 _ _	<u>2</u> □ □				
Rating FAB Service & Idea Please Rate FAB service on a sca 1 Frequency of bus service	ntifying Future Transit sle from 1 (poor) to 5 (great)	1 _ _ _					
Rating FAB Service & Idea Please Rate FAB service on a sca Frequency of bus service Areas that are served by the service Hours of bus service Availability of bus informat	ntifying Future Transit sle from 1 (poor) to 5 (great) ne routes						
Rating FAB Service & Idea Please Rate FAB service on a sca Frequency of bus service Areas that are served by the Bus on-time performance Hours of bus service Availability of bus informat Cost of the fare	ntifying Future Transit sle from 1 (poor) to 5 (great) ne routes	1 					
Rating FAB Service & Idea Please Rate FAB service on a sca Frequency of bus service Areas that are served by the service Hours of bus service Availability of bus informat	ntifying Future Transit sale from 1 (poor) to 5 (great) ne routes sion						
Rating FAB Service & Ider Please Rate FAB service on a sca 1 Frequency of bus service 2 Areas that are served by th 3 Bus on-time performance 4 Hours of bus service 5 Availability of bus informat 6 Cost of the fare 7 Security on bus and at stop 8 Cleanliness of bus and stop 9 Friendliness of drivers	ntifying Future Transit sale from 1 (poor) to 5 (great) ne routes sion						
Rating FAB Service & Ider Please Rate FAB service on a sca 1 Frequency of bus service 2 Areas that are served by th 3 Bus on-time performance 4 Hours of bus service 5 Availability of bus informat 6 Cost of the fare 7 Security on bus and at stop 8 Cleanliness of bus and stop 8	ntifying Future Transit sale from 1 (poor) to 5 (great) ne routes sion						
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Rating FAB Service & Idea Please Rate FAB service on a sca Frequency of bus service Areas that are served by the service Hours of bus service Availability of bus informate Cost of the fare Security on bus and at stop Cleanliness of bus and stop Friendliness of drivers Overall service Hour morphology for the service of the service o	ntifying Future Transit sale from 1 (poor) to 5 (great) ne routes sition os g improvements to you? Plea	. 1				5 (very imp	portant).
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Rating FAB Service & Idea Please Rate FAB service on a sca Frequency of bus service Areas that are served by the service Hours of bus service Availability of bus informate Cost of the fare Security on bus and at stop Cleanliness of bus and stop Friendliness of drivers Overall service Hour morphology for the service of the service o	ntifying Future Transit sele from 1 (poor) to 5 (great) ne routes sion os g improvements to you? Plea	. 1				5 (very imp	portant).
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Rating FAB Service & Idea Please Rate FAB service on a sca 1 Frequency of bus service 2 Areas that are served by th 3 Bus on-time performance 4 Hours of bus service 5 Availability of bus informat 6 Cost of the fare 7 Security on bus and at stop 8 Cleanliness of bus and stop 9 Friendliness of drivers 10 Overall service How important are the following 11 More frequent bus service 12 More direct bus routes and 13 Real-time bus tracking info	ntifying Future Transit sele from 1 (poor) to 5 (great) he routes sion os g improvements to you? Plea If fewer deviations rmation (GPS) es, or shelters h other bus systems	. 1	From 1 (n	ot impor		5 (very imp	portant).

Responses to Survey Questions

Survey questions focused on the demographic characteristics of the rider (e.g., their gender, age, income, etc.) and are summarized in the following sections.

Survey Response Rates

A total of 210 ridership surveys were completed for all fixed routes in the FAB system. FAB averages approximately 117 riders per day. **Table 3B-1** presents the number of surveys complete for each fixed route. Note that the individual responses do not always add up to 210 because not every question was answered by every respondent.

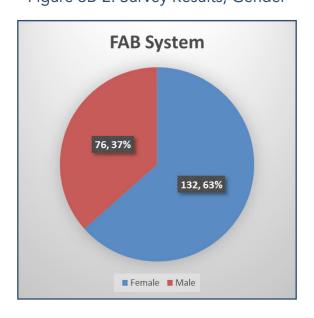
Table 3B-1: Distribution of Passenger Surveys by Fixed-Route

System		Service Area/Fixed Route	No. of Surveys Complete
PERT		Green-Prospect/Pamplin	8
		Orange-Meherrin / Green Bay	9
	FAB	Blue	36
Farmville	FAD	Express	60
	Longwood	Campus	97
FAB System		TOTAL	210

Gender

Female riders represent a larger portion of the total ridership in the FAB System. As shown in **Figure 3B-2**, females represent 63 percent of the ridership and male ridership reported at 37 percent. This tilt towards female riders is present across all service types, even among the younger riders, which were predominately on the Campus Line.

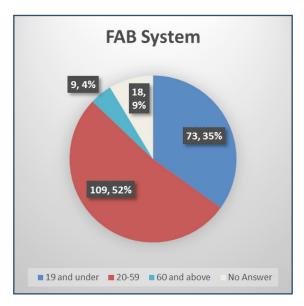
Figure 3B-2: Survey Results, Gender



Age

Responses to the age survey question can be seen in Figure 3B-3. Based on the ridership survey results, those riders who are age 59 or younger are the major users of FAB fixed-route service and represent a combined 87 percent of the total ridership. Riders between the age of 20 and 59 represent the largest portion of riders (52 percent). The 19 years and under age category is the second highest percentage, representing 35 percent of the total ridership. The remaining responders were either 60 years old and above (four percent) or chose not to answer the question (nine percent). Given the focus of several of the system's routes on the movement of Longwood University students to and from the campus, these findings are not unexpected. These findings suggest that FAB is providing basic mobility services to a broad cross-section of the service area population and is not, as some might perceive it to be, a system transporting only elderly residents.

Figure 3B-3: Survey Results, Age



Education

With respect to the reported educational level, responses are summarized in Figure 3B-4. Approximately 59 percent of the passengers indicated that they had either a high school diploma or GED. Nearly 20 percent of patrons reported that they had a college education, which appears to include college students that may have selected "College Degree or Higher" when they technically have not completed college. This would explain the higher percentage of college graduates riding the Campus Line. In general, the riders appear to be fairly well educated as only a very small percentage did not complete high school, although 40 participants chose not to answer the question.

Frequency of Ridership

Figure 3B-5 shows the survey responses regarding how often patrons use FAB. Most of the riders that participated in this survey reported using FAB services on a regular basis. A total of 40 percent of riders reported a frequency of four or more days a week, with an additional 29 percent reporting use of the system two to three days a week. Combining these two values show that approximately 69 percent of the total passengers that responded use FAB services more than two days per week and can thus be classified as "regular" rather than occasional

riders. This is indicative of a stable base of regular riders.

This level of repeat ridership further indicates that FAB is providing an essential mobility service to a broad cross-section of its passengers.

Figure 3B-4: Survey Results, Educational Level

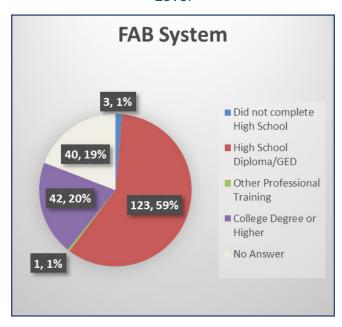
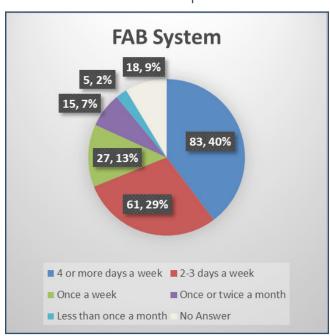


Figure 3B-5: Survey Results, Frequency of Ridership



Other Usage

The next survey question asked riders to identify the different FAB services they typically ride in any given month. Some PERT service riders (which includes responses from Green and Orange lines) reported using the FAB services when they need to travel to Farmville. Approximately 30 percent of PERT riders indicated that they also use the Blue Line in the FAB system as shown in **Figure 3B-6**. It would be worthwhile to coordinate and time these routes with each other.

In general, Longwood students using the Campus Line to avoid other FAB services except the Express Line. **Figure 3B-7** shows that approximately 33 percent of Longwood Campus Line riders reported also using the Express Line.

Figure 3B-6: Survey Results, PERT Service – Other Usage

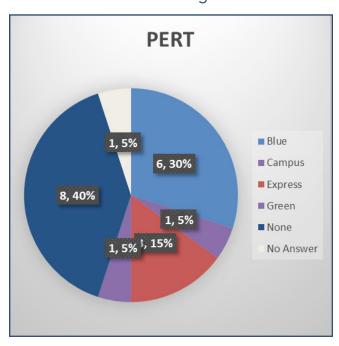
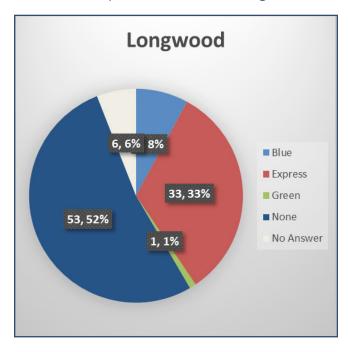


Figure 3B-7: Survey Results, Longwood Campus Line – Other Usage



Trip Origins and Destinations

Figure 3B-8 provides a summary of the origin and destinations reported from the survey. This summary chart excludes the home segment of the trips. Responses indicated 52 percent of riders reported school as an origin or destination for their trip and 26 percent of riders identified shopping/retail as the origin or destination for their trip.

Looking closely at specific routes, school is the dominant trip purpose for the Campus Line and a share of the other Farmville routes. The Blue Line serves the most varied trip purposes including school, shopping, work, medical, and government services including trips to the bank and post office as shown in **Figure 3B-9**. Combined, the PERT routes provide access to shopping for 61 percent of trips. These results demonstrate that the current ridership is using the FAB system for basic mobility purposes between their homes and school and other important destinations.

Figure 3B-8: Survey Results, FAB System - Origin-Destination

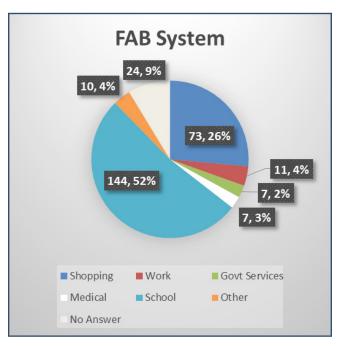
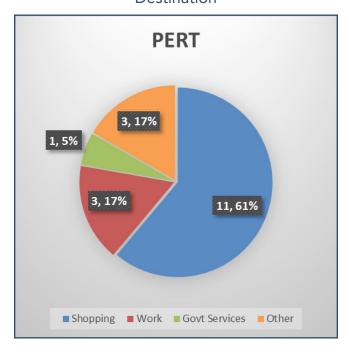


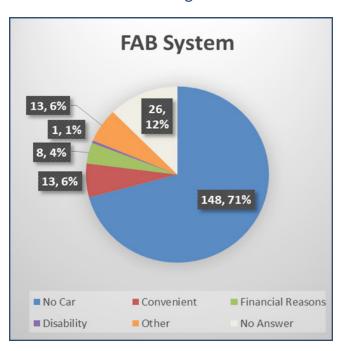
Figure 3B-9: Survey Results, PERT - Origin-Destination



Reason for Riding

Figure 3B-10 summarizes the reasons riders use the FAB system. When asked to identify the principal reason for why they were riding the bus, survey respondents most frequently indicated that they "Did Not Have a Car", at 71 percent of responses. Approximately six percent reported the service was "Convenient" and another six percent reported "Other" as a reason for riding the bus. Only four percent identified "Financial Reasons" as a reason. The remaining 12 percent of riders chose not to answer and one percent cited a "Disability". These responses indicate that the current ridership can be classified as "transit captives"; that is, they have few if any other travel options available and if the current transit service was not provided, the subject trip would probably not be made.

Figure 3B-10: Survey Results, Reason for Riding



Services Ratings

Figure 3B-11 summarizes the responses to those survey questions that sought to obtain the view of the current riders to the quality of service being offered by FAB fixed-route service. The service factors presented for rating were as follows:

- Frequency of bus service
- Areas that are served by bus routes
- Bus on-time performance
- Hours of bus service
- Availability of schedules and route information
- Cost of bus fare
- Sense of security on the buses

- Cleanliness of buses
- Courtesy/friendliness of bus drivers
- Overall service rating

Rating categories ranged from "Very Good" (5) to "Very Poor" (1). The responses to each of these categories were averaged to calculate a score. These calculations resulted in scores ranging from 3.2 to 4.8. The bus on-time performance received the lowest score, while the cost of the fare received the highest score.

Satisfaction varied slightly for different routes. The PERT patrons are very satisfied with their service with scores ranging from 4.7 to 5.0 as shown in **Figure 3B-12**.

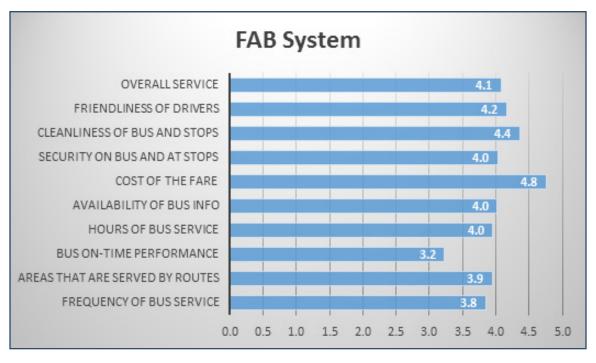


Figure 3B-11: Survey Results, FAB System – Service

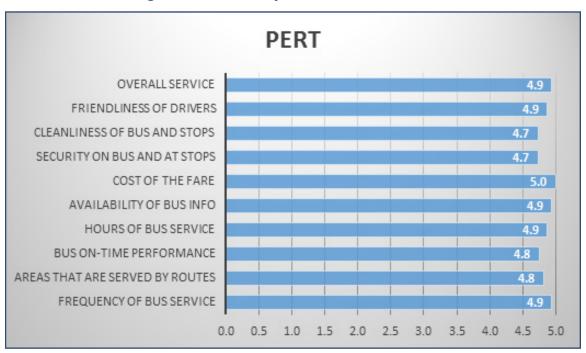


Figure 3B-12: Survey Results, PERT – Service

Other routes were not as highly rated. Specifically, the Campus Line was the lowest-rated route. As shown in Figure 3B-13, the route received scores ranging from 2.8 to 4.7. Similar to the overall system evaluation, the bus on-time performance received the lowest score, while the cost of the fare received the highest score. The lower rated satisfaction may be due to the ridership demographic on this route, which includes a higher number of college students. Some of the riders likely have experienced other transit systems before and can compare that transit system to their FAB experience. On-time performance is a concern for this route and all other routes across the system, which also rated this measure the lowest, with the exception of the Blue Line that rated frequency of the service slightly lower.

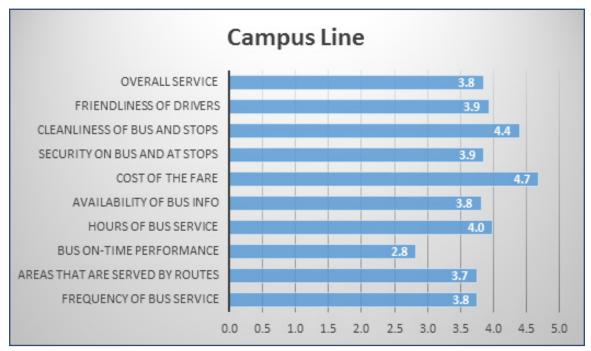


Figure 3B-13: Survey Results, Longwood – Service

Service Improvement Needs

Figure 3B-14 summarize the responses to those survey questions that sought to rate the importance of potential improvements to the FAB system. The service improvements presented for rating were as follows:

- More frequent bus service
- More direct bus routing to destinations
- Real-time bus tracking information (GPS)
- Increase in signage, benches, or shelters
- Improving connections with other bus systems
- Expanding service to areas not currently served

Of these ratings, the top three improvements were: increase in infrastructure amenities (signage, benches, or shelters); real-time bus tracking information (GPS); and more frequent bus service.

On the PERT routes, riders want more infrastructure, coverage, and connections. **Figure 3B-15** shows a high score of 4.9 for these service improvements on PERT routes. The riders are less concerned about real-time tracking technology in this service area as that improvement received a score of 2.6.

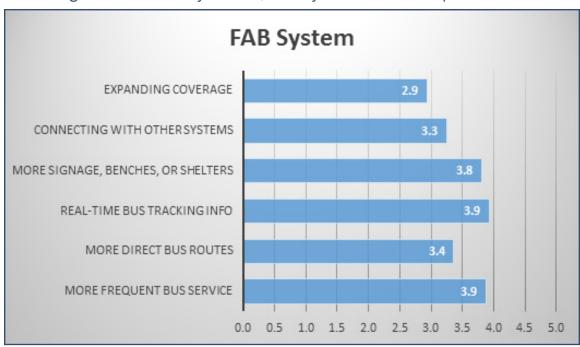
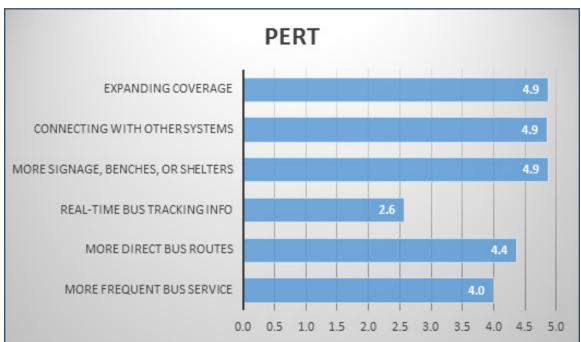


Figure 3B-14: Survey Results, FAB System - Service Improvements

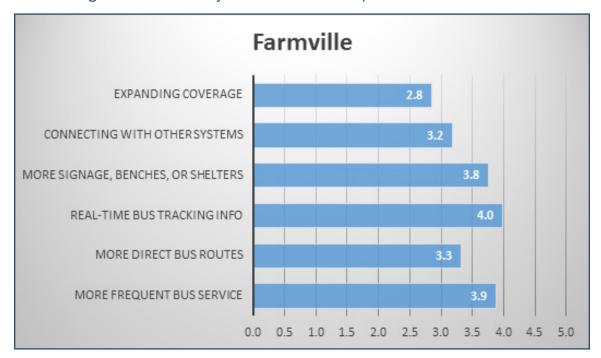


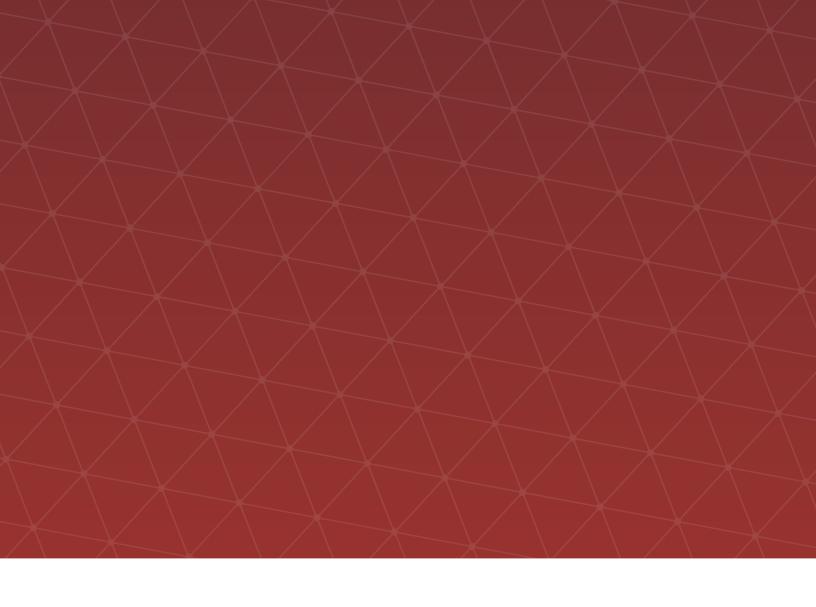


Considering all Farmville routes in town, there is a high demand for real-time technology. **Figure 3B-16** shows a high score of 4.0 for real-time technology.

Specifically on the Blue Line, patrons want more direct and frequent service.

Figure 3B-16. Survey Results: Service Improvements – Farmville





APPENDIX 3C:

STAKEHOLDER AND FOCUS GROUP SUMMARY

Appendix 3C: Stakeholder and Focus Group Summary

Stakeholder Interviews

Prince Edward County

Wade Bartlett, County Administrator Sarah Puckett, Assistant County Administrator Rob Fowler, Planning and Zoning Administrator

- No complaints about the FAB or PERT service. The board met 3 months ago and the Orange route was modified per the representative on the County Board of Supervisors. The Green Line operates through two different districts, but neither representative wanted to change the route
- Prince Edward County contributes \$25,000 a year to fund part of the PERT Orange and Green lines. This is an increase from \$20,000 in FY 2013
 - There was a lengthy discussion about county funding issues, which may result in the county cutting their transit contribution. Nothing is finalized but the administrators noted all cuts were being considered
 - The administrators expressed displeasure with the Virginia General Assembly due to cuts in funding to local counties. The administrators also stated that the County Board of Supervisors was not interested in raising property taxes (their main way of funding the county government), which is why cuts are being considered
- In terms of in-town FAB service, the YMCA was noted as a destination that is not being served by transit. The YMCA serves a lot of low-income residents with recreation and membership discounts, but lies outside of the town limits and the town government restricts FAB routes to intown travel. A PERT route could serve the YMCA, but is not frequent enough to attract many riders
- There used to be more PERT service. A Blue Line served the nearby unincorporated community of Rice and the Green Line had a second alignment. These were cut due to funding issues
- The administrators believe that FAB driver pay is enough to attract workers in the county. The school system pays much less (\$7.50) for their drivers.

Town of Farmville

Gerry Spates, Town Manager

- Gerry believes the ADA-Paratransit service works very well and wishes it operated further outside of town. The only real barrier to this expansion is a contribution from the county
- The town is annexing to the southwest, but overall population is expected to remain steady
- There is some employment growth, particularly the Southside Hospital and the Immigration Detention Facility
- Rarely gets a complaint regarding FAB
- Funding has been pretty level
- Liked the idea of exploring the idea of restarting service to the SVCC-Keysville campus but doubts sufficient ridership to justify the expansion
- We asked about the planned shared public works facility for the town and FAB. Gerry stated that he thinks a funding solution will be coming soon and expects a FY18 target date for completion
- With regards to Longwood, Gerry believes that the student cap would be about 6,000. The school is undergoing a masterplan revision at the moment but he does not believe the university has any desire (or space) to go beyond 6,000 students.

Hampden-Sydney College

Sandy Cooke, Director of Student Affairs

- Hampden-Sydney College has 1,150 students, and Sandy estimates about 30 percent lack personal vehicles
- The college is interested in reestablishing transit service for the first time since 1992
 - Sandy expressed an interest in M-W-F evening service that would connect students to the Walmart on the south end of Farmville

- The figure Hampden-Sydney is willing to fund for this service is roughly \$3,000 \$4,000, which is likely not enough for 3 day a week service
- Sandy stated the student activity fee (about \$400 per student) was recently increased, and college administration is reluctant to raise it again to fund transit service
- We discussed the possibility of extending the FAB Express Line to Hampden-Sydney College (for select trips) as a less expensive alternative to providing transit to the college
- Sandy said the bus would not need to traverse the entire campus, just have a single stop near the front of campus
- Sandy expressed that the administration is against a nighttime bus service. Hampden-Sydney College does not want to promote drinking among the student body
- We stated that we could cost-out the various alternatives as part of the TDP update to help Hampden-Sydney College decide the best course of action going forward.

Southside Virginia Community College (SVCC)

Peter Hunt, Vice President of Finance and Administration

- SVCC campuses serve around 6,000 students and covers a 4,000 square mile area with each campus having a slightly different emphasis in education. There has been a slight drop in enrollment in recent years due to tuition increases. 25 percent of classes are now offered online
 - Peter believes they are getting more students from Farmville than before
- Does not survey transit needs of students before they begin school. They do provide transit information at orientation
 - We suggested that a short survey could be done either online or in person when they register for courses so SVCC could estimate the number of students who may benefit from bus service
- SVCC currently pays about \$10,000 to fund the BABS-Brunswick route to the Alberta campus

- There is currently no route that runs between SVCC campuses. We asked if students sometimes need to connect to multiple campuses, with the answer being a yes, but not that many. SVCC has a 25-seat bus that could possibly be used as a route between campuses.
- We asked Peter if he was aware of the transportation study being conducted by Southside Virginia Higher Education Center and DRPT looking at connecting students to educational opportunities in the region
- We discussed the possibility of connecting Farmville to the SVCC Keysville campus. Peter expressed reservations at SVCC running the service themselves, as the cost would be prohibitive when labor costs are included. He believes it is possible to obtain \$10,000 to fund a route from Farmville to Keysville, similar to the BABS-Brunswick route
 - With regards to frequency, Peter agreed that three roundtrips a day would be sufficient. A morning, midday, and early evening service when classes end. Late night classes would not be served
 - Days of service also was discussed. Courses are typically offered on 2 or 3 days a week. Peter's initial recommendation was to operate service Tuesday-Thursday, but after review there are more Monday-Wednesday courses offered. They likely cannot afford service for all 4 days, so they would need to choose
 - Service would coincide with the school year and not in the summer
- Discussed the possibility of BABS serving the Keysville campus with its PAT routes that already travel through Farmville
 - Peter believes a Keysville to Farmville route would be more useful than Keysville to Blackstone

Longwood University

Laura Rice, Parking Manager Robert Beach, Chief of Police

Laura and Robert discussed the soon to be completed Capital Plan (which also appears to have masterplan elements) and how it envisions a more walkable campus. This will result in the

- closure of some parking lots and subsequent infill construction of buildings and green space. This is a major change for the university. It will force parking to the periphery of the campus (and the town)
- Robert listed the parking accommodation priority with the next capital plan:
 - Commuter students
 - Visitors
 - Staff
 - Residential students
- Robert expressed support for a route to bring people from these peripheral lots to the campus
- One complaint the parking office gets is lack of parking near athletic fields on Johnson Drive
- Longwood has a lottery system in place to allow a limited number (approximately 200) freshman to have a parking permit. This was the result of pressure from students
- Robert and Laura also stated that parking availability helps attract some students to attend Longwood instead of other schools
- Robert discussed the possibility of Longwood operating their own transit service, and noted this is discussed now and then but has never been acted upon. The outcome of the capital plan will provide a clearer picture of a Longwood operated service
- We asked if they would be open to Longwood students driving FAB buses. They said that students are already trained to drive school vans but are not trained for a CDL. They are open to the idea of students driving FAB routes but will not sponsor them to be CDL trained. That would be FAB's responsibility

Jerry Jerome, Facilities Planner

Tom Frisbie-Fulton, Facilities Planner

- Jerry and Tom discussed the 2025 Campus Master Plan, which is slated for release in the next few months. Among the highlights of the plan are:
 - Increase of student enrollment from 5,100 to 6,000, an increase of 18 percent over 10 years
 - The master plan is based on new urbanist principles, with 75 percent of students located within a 10-minute walk of the main campus

- Nearly all new buildings would be constructed in this central campus area
- The growth in students would be accommodated by both Longwood construction and the private sector
- Approximately 500 new dorm beds would be added, with an additional 500 new bedrooms constructed by the private sector in the form of apartments
- A new parking garage is part of the plan, but it is still unclear if there is enough funding to construct it. It is considered lower on the priority list
- A key missing piece of the discussion is future parking policy. Jerry and Tom noted the master plan was neutral on parking restrictions, meaning there is nothing in the plan that makes a recommendation regarding parking policy. They said this was an issue that would be dealt with administration, not by the master plan
- Jerry also noted that the Town of Farmville has expressed interest in redeveloping apartments in the downtown area
- Regarding transit service, Jerry stated that they do not know exactly where private sector housing would be constructed. As a result, it is difficult to know where additional transit service may be needed in the future
- Jerry and Tom also discussed the potential of having commuter students park on the periphery of town (Longwood Village) and take a route to the campus. They think this is unlikely to occur, but could potentially require additional transit trips and therefore must be considered with the FAB transit plan update

User & Non-User Focus Groups

Hampden-Sydney College

- One of the two students interviewed had a car.
 Both students were freshmen and had only been on campus a few weeks
- We discussed the possibility of transit service to Hampden-Sydney College. The students were doubtful a once-a-week early evening service would be used by many people. There are enough

- students with cars that a ride can be obtained fairly easily
- Students expressed a strong desire for nighttime service with the viewpoint that it would be safer to provide this service than to have students drink and drive
- They did not see a significant connection with Longwood University students. There are a limited number of structured social interactions. Most of the interaction involved partying and football games

SVCC-Keysville

- Both of the students we spoke with had cars. One of the students said that some courses have classes 4 days a week but admitted this is rare
- Certain programs, such as nursing, definitely requires private ownership of a vehicle because of off-campus travel for clinic work
- They mentioned that some of their friends are unable to attend SVCC because of transportation problems (and lack of transit service from Farmville)

Longwood University

- Two of the three students interviewed have cars on campus
- All of the students expressed a need for the buses to coordinate better with the start of class times. If the bus is just a few minutes late, then students will be late for their class
- Students do not know which direction a bus is heading in when it stops at the campus
- This is particularly an issue with the Campus Line. They do not know if the bus is going to Lancer Park or the Village. Having some kind of sign or electronic banner indicating the direction of travel, would be helpful
- Students would like FAB to extend nighttime service to transport people who drink. Students see this as a safer alternative to driving. However, they also noted the problems associated with drunk students
- Parking is seen as a general problem throughout campus

- All of the students stated they have never used the Blue Line, which they see as more of a service for town residents, not students
- The students felt that the Blue Line took too long and was unreliable to be on time
- One of the students thinks the routes may be better distinguished with different colors on the bus. Sometimes it is difficult to distinguish between the Blue and Express Lines. We discussed the possibility of new buses having LED banners with the ability to change colors
- Students stated that a shelter by Greenwood library would be very useful
- During bad weather students typically wait inside the library before running out for the bus
- All three students believed that students would use a smartphone app that tracks the bus location and arrival times
- Overall, the students agreed that the town is generally walkable and would simply like more reliable service



APPENDIX 3D: FAB 2015 TITLE VI REPORT

Title VI Plan and Procedures Title VI of the Civil Rights Act of 1964

FARMVILLE AREA BUS



Adopted date

April, 2015

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	sit Providers that operate 50 or more fixed route vehicles in peak service and are ed in an Urbanized Area (UZA) of 200,000 or more people must submit:	
	Demographic and service profile maps and charts	
	Demographic ridership and travel patterns, collected by surveys	
	A description of the public engagement process for setting the "major service change policy," disparate impact policy, and disproportionate burden policy	
	Results of service and/or fare equity analyses conducted since the last Title VI Program submission, including evidence that the board or other governing entity or official(s) approved the results of the analysis	1

I. INTRODUCTION

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. Specifically, Title VI provides that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." (42 U.S.C. Section 2000d).

The Civil Rights Restoration Act of 1987 clarified the intent of Title VI to include all programs and activities of Federal-aid recipients, sub-recipients, and contractors whether those programs and activities are federally funded or not.

Recently, the Federal Transit Administration (FTA) has placed renewed emphasis on Title VI issues, including providing meaningful access to persons with Limited English Proficiency.

Recipients of public transportation funding from FTA and the Virginia Department of Rail and Public Transportation (DRPT) are required to develop policies, programs, and practices that ensure that federal and state transit dollars are used in a manner that is nondiscriminatory as required under Title VI.

This document details how Farmville Area Bus incorporates nondiscrimination policies and practices in providing services to the public. Farmville Area Bus's Title VI policies and procedures are documented in this plan and its appendices and attachments. This plan will be updated periodically (at least every three years) to incorporate changes and additional responsibilities that arise.

II. OVERVIEW OF SERVICES

The Town of Farmville, in conjunction with the Virginia Department of Rail and Public Transportation and Longwood University, provides a fixed-route transit service seven days a week. The Farmville Area Bus provides service utilizing two (2) in-town routes.

Regular fare for all lines, except PERT, is 25 cents; however, children under six and senior citizens (60 and over) ride free. Longwood University students ride for free by showing their student I.D. when boarding. Their fares are paid through student fees at the University.

The <u>Blue Line</u> remains within the Town limits and provides transportation to various businesses, senior citizen complexes and medical facilities. It operates Monday through Friday from 7:04 a.m. until 6:15 p.m., and on Saturday from 8:04 a.m. until 6:15 p.m.

The **Express Line** is a half hour shuttle from Longwood University to various business establishments throughout Town. It operates Monday through Thursday from 12:00 noon until 8:00 p.m., Friday and Saturday from 12:00 noon until 11:00 p.m., and on Sunday from 12:30 noon until 8:00 p.m.

The **Campus** and **Campus Direct** Lines are circular shuttles geared more for Longwood University students. They assist in transporting the off-campus housed students to and from campus.

ADA Paratransit Van Service - The Farmville Area Bus is proud to also offer ADA Paratransit Van Service. The Paratransit Service provides accessible public transportation throughout the Town and the Paratransit operators will provide door-to-door assistance for handicap individuals. For more information on this service, please call our office.

The Farmville Area Bus also operates the **Prince Edward County Transit (PERT)**. **PERT** serves the Meherrin/Green Bay and Prospect/Pamplin areas on alternating weekdays. Fares for this line is \$1.00 each way.

PERT services include:

The <u>Green Line</u> which operates in the Prospect/Pamplin Area on Monday and Thursday of each week.

The <u>Orange Line</u> which operates in the Meherrin/Green Bay area on Tuesday, Wednesday and Friday of each week.

The Farmville Area Bus is located at 502 Doswell Street.

III. POLICY STATEMENT AND AUTHORITIES

Title VI Policy Statement

Farmville Area Bus is committed to ensuring that no person shall, on the grounds of race, color, national origin, as provided by Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 (PL 100.259), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity, whether those programs and activities are federally funded or not.

The Town of Farmville Title VI Counselor is responsible for initiating and monitoring Title VI activities, preparing required reports, and other responsibilities as required by Title 23 Code of Federal Regulations (CFR) Part 200, and Title 49 CFR Part 21.

Signature of Authorizing Official	Date	

Authorities

Title VI of the 1964 Civil Rights Act provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance (refer to 49 CFR Part 21). The Civil Rights Restoration Act of 1987 broadened the scope of Title VI coverage by expanding the definition of the terms "programs or activities" to include all programs or activities of Federal Aid recipients, sub recipients, and contractors, whether such programs and activities are federally assisted or not.

Additional authorities and citations include: Title VI of the Civil Rights Act of 1964 (42 U.S.C. Section 2000d); Federal Transit Laws, as amended (49 U.S.C. Chapter 53 et seq.); Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601, et seq.); Department of Justice regulation, 28 CFR part 42, Subpart F, "Coordination of Enforcement of Nondiscrimination in Federally-Assisted Programs" (December 1, 1976, unless otherwise noted); U.S. DOT regulation, 49 CFR part 21, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation— Effectuation of Title VI of the Civil Rights Act of 1964" (June 18, 1970, unless otherwise noted); Joint FTA/Federal Highway Administration (FHWA) regulation, 23 CFR part 771, "Environmental Impact and Related Procedures" (August 28, 1987); Joint FTA/FHWA regulation, 23 CFR part 450 and 49 CFR part 613, "Planning Assistance and Standards," (October 28, 1993, unless otherwise noted); U.S. DOT Order 5610.2, "U.S. DOT Order on Environmental Justice to Address Environmental Justice in Minority Populations and Low-Income Populations," (April 15, 1997); U.S. DOT Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient Persons, (December 14, 2005), and Section 12 of FTA's Master Agreement, FTA MA 13 (October 1, 2006).

IV. NONDISCRIMINATION ASSURANCES TO DRPT

In accordance with 49 CFR Section 21.7(a), every application for financial assistance from the Federal Transit Administration (FTA) must be accompanied by an assurance that the applicant will carry out the program in compliance with DOT's Title VI regulations. This requirement is fulfilled when the Virginia Department of Rail and Public Transportation (DRPT) submits its annual certifications and assurances to FTA. DRPT shall collect Title VI assurances from subrecipients prior to passing through FTA funds.

As part of the Certifications and Assurances submitted to DRPT with the Annual Grant Application and all Federal Transit Administration grants submitted to the DRPT, **Town of Farmville/Farmville Area Bus** submits a Nondiscrimination Assurance which addresses compliance with Title VI as well as nondiscrimination in hiring (EEO) and contracting (DBE), and nondiscrimination on the basis of disability (ADA).

In signing and submitting this assurance, Farmville Area Bus confirms to DRPT the agency's commitment to nondiscrimination and compliance with federal and state requirements.

V. PLAN APPROVAL DOCUMENT

I hereby acknowledge the receipt of the Farmville Area Bus Title VI Implementation Plan 2015-2018. I have reviewed and approve the Plan. I am committed to ensuring that no person is excluded from participation in, or denied the benefits of Farmville Area Bus's transportation services on the basis of race, color, or national origin, as protected by Title VI according to Federal Transit Administration (FTA) Circular 4702.1B Title VI requirements and guidelines for FTA sub-recipients.

Signature of Authorizing Official

DATE

Lisa Hricko, Title VI Equal Opportunity Counselor

Town of Farmville / Farmville Area Bus

NOTE: **Provide here** a copy of meeting minutes, resolution, or other appropriate documentation showing that the board of directors or appropriate governing entity of official(s) responsible for policy decisions has reviewed and approved the Title VI Program.

VI. ORGANIZATION AND TITLE VI PROGRAM RESPONSIBILITIES

The **Town of Farmville**'s Title VI Counselor is responsible for ensuring implementation of the agency's Title VI program. Title VI program elements are interrelated and responsibilities may overlap. The specific areas of responsibility have been delineated below for purposes of clarity.

Overall Organization for Title VI

The Title VI Counselor and staff are responsible for coordinating the overall administration of the Title VI program, plan, and assurances, including complaint handling, data collection and reporting, annual review and updates, and internal education.

Detailed Responsibilities of the Title VI Manager

The Title VI Counselor is charged with the responsibility for implementing, monitoring, and ensuring compliance with Title VI regulations. Title VI responsibilities are as follows:

- 1. Process the disposition of Title VI complaints received.
- 2. Collect statistical data (race, color or national origin) of participants in and beneficiaries of agency programs, (e.g., affected citizens, and impacted communities).
- 3. Conduct annual Title VI reviews of agency to determine the effectiveness of program activities at all levels.
- 4. Conduct Title VI reviews of construction contractors, consultant contractors, suppliers, and other recipients of federal-aid fund contracts administered through the agency.
- 5. Conduct training programs on Title VI and other related statutes for agency employees.
- 6. Prepare a yearly report of Title VI accomplishments and goals, as required.
- 7. Develop Title VI information for dissemination to the general public and, where appropriate, in languages other than English.
- 8. Identify and eliminate discrimination.
- 9. Establish procedures for promptly resolving deficiency status and writing the remedial action necessary, all within a period not to exceed 90 days.

General Title VI responsibilities of the agency

The Title VI Counselor is responsible for substantiating that these elements of the plan are appropriately implemented and maintained, and for coordinating with those responsible for public outreach and involvement and service planning and delivery.

1. Data collection

To ensure that Title VI reporting requirements are met, Farmville Area Bus will maintain:

- A database or log of Title VI complaints received. The investigation of and response to each complaint is tracked within the database or log.
- A log of the public outreach and involvement activities undertaken to ensure that minority and low-income people had a meaningful access to these activities.

2. Annual Report and Updates

As a sub-recipient of FTA funds, Farmville Area Bus is required to submit a Quarterly Report Form to DRPT that documents any Title VI complaints received during the preceding quarter and for each year. Farmville Area Bus will also maintain and provide to DRPT an annual basis, the log of public outreach and involvement activities undertaken to ensure that minority and low-income people had a meaningful access to these activities.

Further, we will submit to DRPT updates to any of the following items since the previous submission, or a statement to the effect that these items have not been changed since the previous submission, indicating date:

- A copy of any compliance review report for reviews conducted in the last three years, along with the purpose or reason for the review, the name of the organization that performed the review, a summary of findings and recommendations, and a report on the status or disposition of the findings and recommendations
- Limited English Proficiency (LEP) plan
- procedures for tracking and investigating Title VI complaints
- A list of Title VI investigations, complaints or lawsuits filed with the agency since the last submission
- A copy of the agency notice to the public that it complies with Title VI and instructions on how to file a discrimination complaint

3. Annual review of Title VI program

Each year, in preparing for the Annual Report and Updates, the Title VI Counselor will review the agency's Title VI program to assure implementation of the Title VI plan. In addition, they will review agency operational guidelines and publications, including those for contractors, to verify that Title VI language and provisions are incorporated, as appropriate.

4. Dissemination of information related to the Title VI program

Information on our Title VI program will be disseminated to agency employees, contractors, and beneficiaries, as well as to the public, as described in the "public outreach and involvement "section of this document, and in other languages when needed according to the LEP plan as well as federal and State laws/regulations.

5. Resolution of complaints

Any individual may exercise his or her right to file a complaint if that person believes that he, she or any other program beneficiaries have been subjected to unequal treatment or discrimination in the receipt of benefits/services or prohibited by non-discrimination requirements. Farmville Area Bus will report the complaint to DRPT within three business days (per DRPT requirements), and make a concerted effort to resolve complaints locally, using the agency's Title VI Complaint Procedures. All Title VI complaints and their resolution will be logged as described under Section 1. Data collection and reported annually (in addition to immediately) to DRPT.

6. Written policies and procedures

Our Title VI policies and procedures are documented in this plan and its appendices and attachments. This plan will be updated periodically to incorporate changes and additional responsibilities that arise. During the course of the Annual Title VI Program Review (item 3 above), the Title VI Counselor will determine whether or not an update is needed.

7. Internal education

Our employees will receive training on Title VI policies and procedures upon hiring and upon promotion. This training will include requirements of Title VI, our obligations under Title VI (LEP requirements included), and required data that must be gathered and maintained. In addition, training will be provided when any Title VI-related policies or procedures change (agency-wide training), or when appropriate in resolving a complaint.

Title VI training is the responsibility of the Title VI Counselor.

8. Title VI clauses in contracts

In all federal procurements requiring a written contract or Purchase Order (PO), Farmville Area Bus's contract/PO will include appropriate non-discrimination clauses. The Title VI Counselor will work with the Transit Manager, who is/are responsible for procurement contracts and PO's to ensure appropriate non-discrimination clauses are included.

VII. PROCEDURES FOR NOTIFYING THE PUBLIC OF TITLE VI RIGHTS AND HOW TO FILE A COMPLAINT

Requirement to Provide a Title VI Public Notice

Title 49 CFR Section 21.9(d) requires recipients to provide information to the public regarding the recipient's obligations under DOT's Title VI regulations and apprise members of the public of the protections against discrimination afforded to them by Title VI. At a minimum, Farmville Area Bus shall disseminate this information to the public by posting a Title VI notice on the agency's website and in public areas of the agency's office(s), including the reception desk, meeting rooms, in federally-funded vehicles, etc.

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. Specifically, Title VI provides that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance" (42 U.S.C. Section 2000d).

<u>Farmville Area Bus</u> is committed to ensuring that no person is excluded from participation in, or denied the benefits of its transportation services on the basis of race, color, or national origin, as protected by Title VI in Federal Transit Administration (FTA) Circular 4702.1B. If you feel you are being denied participation in or being denied benefits of the transit services provided by <u>Farmville Area Bus</u>, or otherwise being discriminated against because of your race, color, national origin, gender, age, or disability, our contact information is:

Mrs. Lisa M. Hricko
Title VI Equal Opportunity Counselor
Town Of Farmville
116 North Main Street
Farmville, VA 23901
434-392-5686
lhricko@farmvilleva.com

NOTE: As part of Title VI requirements, sub-recipients are also required to maintain a list of locations where their Title VI Notices have been posted or displayed. This list is to be included as part of APPENDIX A - Title VI Notice to the Public; List of Locations.

Title VI Complaint Procedures

Requirement to Develop Title VI Complaint Procedures and Complaint Form.

In order to comply with the reporting requirements established in 49 CFR Section 21.9(b), all recipients shall develop procedures for investigating and tracking Title VI complaints filed against them and make their procedures for filing a complaint available to members of the public. Recipients must also develop a Title VI complaint form. The form and procedure for filing a complaint shall be available on the recipient's website and at their facilities.

Sample of Narrative

Any individual may exercise his or her right to file a complaint with **Farmville Area Bus** if that person believes that he or she has been subjected to unequal treatment or discrimination in the receipt of benefits or services. We will report the complaint to DRPT within three business days (per DRPT requirements), and make a concerted effort to resolve complaints locally, using the agency's Nondiscrimination Complaint Procedures. All Title VI complaints and their resolution will be logged and reported annually (in addition to immediately) to DRPT.

A person may also file a complaint directly with the Federal Transit Administration, Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5th floor – TCR, 1200 New Jersey Avenue SE, Washington, DC 20590.

Farmville Area Bus includes the following language on all printed information materials, on the agency's website, in press releases, in public notices, in published documents, and on posters on the interior of each vehicle operated in passenger service:

Farmville Area Bus is committed to ensuring that no person is excluded from participation in, or denied the benefits of its transportation services on the basis of race, color or national origin, as protected by Title VI in the Federal Transit Administration (FTA) Circular 4702.1B. For additional information on Farmville Area Bus's nondiscrimination policies and procedures, or to file a complaint, please visit the website at http://farmvilleva.com/departments/farmville-area-bus or contact Mrs. Lisa Hricko, 116 N. Main Street, Farmville, VA 23901, 434-392-5686.

Instructions for filing Title VI complaints are posted on the agency's website and in posters on the interior of each vehicle operated in passenger service and agency's facilities, and are also included within Farmville Area Bus's **schedule** brochure.

A copy of Farmville Area Bus's Title VI Complaint Form and all locations that it is posted are attached as APPENDIX B.

Procedures for Handling and Reporting Investigations/Complaints and Lawsuits

Should any Title VI investigations be initiated by FTA or DRPT, or any Title VI lawsuits are filed against **Farmville Area Bus**, the agency will follow these procedures:

Procedures

- 1. Any individual, group of individuals, or entity that believes they have been subjected to discrimination on the basis of race, color, or national origin may file a written complaint with the Title VI Counselor. The complaint is to be filed in the following manner:
 - a. A formal complaint must be filed within 180 calendar days of the alleged occurrence.
 - b. The complaint shall be in writing and signed by the complainant(s).
 - c. The complaint should include:
 - the complainant's name, address, and contact information
 - (i.e., telephone number, email address, etc.)
 - the date(s) of the alleged act of discrimination (if multiple days, include the date when the complainant(s) became aware of the alleged discrimination and the date on which the alleged discrimination was discontinued or the latest instance).
 - a description of the alleged act of discrimination
 - the location(s) of the alleged act of discrimination (include vehicle number if appropriate)
 - an explanation of why the complainant believes the act to have been discriminatory on the basis of race, color, and national origin
 - if known, the names and/or job titles of those individuals perceived as parties in the incident
 - contact information for any witnesses
 - indication of any related complaint activity (i.e., was the complaint also submitted to DRPT or FTA?)
 - d. The complaint shall be submitted to the Town of Farmville's Title VI Counselor at 116 North Main Street, Farmville, VA 29301 or lhricko@farmvilleva.com.
 - e. Complaints received by any other employee of **Farmville Area Bus** will be immediately forwarded to the Title VI Counselor.
 - f. In the case where a complainant is unable or incapable of providing a written statement, a verbal complaint of discrimination may be made to the Title VI Counselor. Under these circumstances, the complainant will be interviewed, and the **Transit Manager** will assist the complainant in converting the verbal allegations to writing.
- 2. Upon receipt of the complaint, the Title VI Counselor will immediately:
 - a. notify DRPT (no later than 3 business days from receipt)
 - b. notify the Farmville Area Bus Transit Manager
 - c. ensure that the complaint is entered in the complaint database

- 3. Within 3 business days of receipt of the complaint, the Title VI Counselor will contact the complainant by telephone to set up an interview.
- 4. The complainant will be informed that they have a right to have a witness or representative present during the interview and can submit any documentation he/she perceives as relevant to proving his/her complaint.
- 5. If DRPT has assigned staff to assist with the investigation, the Title VI Counselor will offer an opportunity to participate in the interview.
- 6. The alleged discriminatory service or program official will be given the opportunity to respond to all aspects of the complainant's allegations.
- 7. The Title VI Counselor will determine, based on relevancy or duplication of evidence, which witnesses will be contacted and questioned.
- 8. The investigation may also include:
 - a. investigating contractor operating records, policies or procedures
 - b. reviewing routes, schedules, and fare policies
 - c. reviewing operating policies and procedures
 - d. reviewing scheduling and dispatch records
 - e. observing behavior of the individual whose actions were cited in the complaint
- 9. All steps taken and findings in the investigation will be documented in writing and included in the complaint file.
- 10. The Title VI Counselor will contact the complainant at the conclusion of the investigation, but prior to writing the final report, and give the complainant an opportunity to give a rebuttal statement at the end of the investigation process.
- 11. At the conclusion of the investigation and **within 60 days** of the interview with the complainant, the Title VI Counselor will prepare a report that includes a narrative description of the incident, identification of persons interviewed, findings, and recommendations for disposition. This report will be provided to the FAB Transit Manager, DRPT, and, if appropriate, Town of Farmville's legal counsel.
- 12. The Title VI Counselor will send a letter to the complainant notifying them of the outcome of the investigation. If the complaint was substantiated, the letter will indicate the course of action that will be followed to correct the situation. If the complaint is determined to be unfounded, the letter will explain the reasoning, and refer the complainant to DRPT in the event the complainant wishes to appeal the determination. This letter will be copied to DRPT.
- 13. A complaint may be dismissed for the following reasons:
 - a. The complainant requests the withdrawal of the complaint.
 - b. An interview cannot be scheduled with the complainant after reasonable attempts.
 - c. The complainant fails to respond to repeated requests for additional information needed to process the complaint.
- 14. DRPT will serve as the appealing forum to a complainant that is not satisfied with the outcome of an investigation conducted by the Town of Farmville/Farmville Area Bus. DRPT will analyze the facts of the case and will issue its conclusion to the appellant according to their procedures.

Transportation-Related Title VI Investigations, Complaints, and Lawsuits

Background

All recipients shall prepare and maintain a list of any of the following that allege discrimination on the basis of race, color, or national origin:

- Active investigations conducted by FTA and entities other than FTA;
- Lawsuits; and
- Complaints naming the recipient.

This list shall include the date that the transportation-related Title VI investigation, lawsuit, or complaint was filed; a summary of the allegation(s); the status of the investigation, lawsuit, or complaint; and actions taken by the recipient in response, or final findings related to the investigation, lawsuit, or complaint. This list shall be included in the Title VI Program submitted to DRPT every three years and information shall be provided to DRPT quarterly and annually.

List of Investigations, Lawsuits and Complaints

	Date (Month, Day, Year)	Summary (include basis of complaint: race, color or national origin)	Status	Action(s) taken
Investigations				
1.		_		
Lawsuits				
1.		_		_
Complaints		_		_
1.				

Public Outreach and Involvement

PUBLIC PARTICIPATION PLAN

Introduction

The Public Participation Plan (PPP) is a guide for ongoing public participation endeavors. Its purpose is to ensure that Farmville Are Bus utilizes effective means of providing information and receiving public input on transportation decisions from low income, minority and limited English proficient (LEP) populations, as required by Title VI of the Civil Rights Act of 1964 and its implementing regulations.

Under federal regulations, transit operators must take reasonable steps to ensure that Limited English Proficient (LEP) persons have meaningful access to their programs and activities. This means that public participation opportunities, normally provided in English, should be accessible to persons who have a limited ability to speak, read, write, or understand English.

In addition to language access measures, other major components of the PPP include: public participation design factors; a range of public participation methods to provide information, to invite participation and/or to seek input; examples to demonstrate how population-appropriate outreach methods can be and were identified and utilized; and performance measures and objectives to ensure accountability and a means for improving over time.

Farmville Area Bus established a public participation plan or process that will determine how, when, and how often specific public participation activities should take place, and which specific measures are most appropriate.

Farmville Area Bus will make these determinations based on a demographic analysis of the population(s) affected, the type of plan, program, and/or service under consideration, and the resources available. Efforts to involve minority and LEP populations in public participation activities may include both comprehensive measures, such as placing public notices at all transit stations, stops, and vehicles, as well as targeted measures to address linguistic, institutional, cultural, economic, historical, or other barriers that may prevent minority and LEP persons from effectively participating in our decision-making process.

PUBLIC OUTREACH AND INVOLVEMENT

As an agency receiving federal financial assistance, we have made or are making the following community outreach efforts:

Public Meetings. When new service is proposed, it is taken before the Farmville Town Council to discuss the feasibility of the service. All are welcome to attend the Council Meetings. Meetings are held once a month.

Customer Complaint Process. Citizens may call the Farmville Area Bus office at 434-392-7433 to lodge a complaint or comment. All complaints/comments are written down in a complaint book and given to the Transit Manager to research the complaint and respond back to the citizen.

Public Notice. We submit to the Virginia Department of Rail and Public Transportation annually with an application for funding. The application requests funding for both capital and operating assistance. Part of the annual application is a public notice in our local newspaper, *The Farmville Herald*, which includes a two week public comment period. We also post public notices at major passenger/public facilities and in all vehicles.

Website. The Town of Farmville maintains a website with a direct link to Farmville Area Bus: www.farmvilleva.com

Customer Comment. Farmville Area Bus management is always open to input via phone or email – fab@moonstar.com.

VIII. LANGUAGE ASSISTANCE PLAN FOR PERSONS WITH LIMITED ENGLISH PROFICIENCY (LEP)

LANGUAGE ASSISTANCE PLAN FOR PERSONS WITH LIMITED ENGLISH PROFICIENCY (LEP)

Introduction and Legal Basis

LEP is a term that defines any individual not proficient in the use of the English language. The establishment and operation of an LEP program meets objectives set forth in Title VI of the Civil Rights Act and Executive Order 13116, Improving Access to Services for Persons with Limited English Proficiency (LEP). This Executive Order requires federal agencies receiving financial assistance to address the needs of non-English speaking persons. The Executive Order also establishes compliance standards to ensure that the programs and activities that are provided by a transportation provider in English are accessible to LEP communities. This includes providing meaningful access to individuals who are limited in their use of English. The following LEP language implementation plan, developed by Farmville Area Bus is based on FTA guidelines.

As required, **Farmville Area Bus** developed a written LEP Plan (below). Using 2010 and American Community Survey (ACS) Census data, **Farmville Area Bus** has evaluated data to determine the extent of need for translation services of its vital documents and materials.

LEP persons can be a significant market for public transit, and reaching out to these individuals can help increase their utilization of transit. Therefore, it also makes good business sense to translate vital information into languages that the larger LEP populations in the community can understand.

Assessment of Needs and Resources

The need and resources for LEP language assistance were determined through a four-factor analysis as recommended by FTA guidance.

Factor 1: Assessment of the Number and Proportion of LEP Persons Likely to be Served or Encountered in the Eligible Service Population

The agency has reviewed census data on the number of individuals in its service area that have limited English Proficiency, as well as the languages they speak.

U.S. Census Data – American Community Survey (2006-2010)

Data from the U.S. Census Bureau's American Community Survey (ACS) were obtained through www.census.gov by Farmville Area Bus's service area. The agency's service

area includes a total of 85 persons with Limited English Proficiency (those persons who indicated that they spoke English "not well," and "not at all" in the 2006-2010 ACS Census).

Information from the 2006-2010 ACS also provides more detail on the specific languages that are spoken by those who report that they speak English less than very well. The data indicate the extent to which translations into other language are needed to meet the needs of LEP persons.

.38% of the total population of Prince Edward County "does not speak English well".

It is noted that there is a very low number of LEP persons in the service area - no language is spoken by over 5% or a total of 1,000 persons in the LEP population.

Factor 2: Assessment of Frequency with Which LEP Individuals Come Into Contact with the Transit Services or System

Farmville Area Bus reviewed the relevant benefits, services, and information provided by the agency and determined the extent to which LEP persons have come into contact with these functions through *one or more of* the following channels:

- Contact with transit vehicle operators;
- Contact with transit station managers;
- Calls to Farmville Area Bus's customer service telephone line;
- Visits to the agency's headquarters;
- Access to the agency's website;
- Attendance at community meetings or public hearings hosted by the Town of Farmville;
- Contact with the agency's ADA complementary paratransit system (including applying for eligibility, making reservations, and communicating with drivers).

We will continue to identify emerging populations as updated Census and American Community Survey data become available for our service area. In addition, when LEP persons contact our agency, we attempt to identify their language and keep records on contacts to accurately assess the frequency of contact. To assist in language identification, we use a language identification flashcard based on that which was developed by the U.S. Census. (http://www.lep.gov/ISpeakCards2004.pdf)]

Factor 3: Assessment of the Nature and Importance of the Transit Services to the LEP Population

(Farmville Area Bus service area does not rise to the percentage needed to participate in these services. If the percentage should rise above the threshold, FAB will complete these steps.)

The following are the most critical services provided by **Farmville Area Bus** for all customers, including LEP persons.

- Safety and security awareness instructions
- Emergency evacuation procedures
- Public transit services, including reduced fare application process
- ADA paratransit services (if your agency operates fixed-route), including eligibility certification process
- Other paratransit services
- Services targeted at low income persons

Factor 4: Assessment of the Resources Available to the Agency and Costs

(Based on the analysis of demographic data, the Farmville Area Bus service area does not rise to the percentage needed to complete this step. Should the percentage rise above the threshold, FAB will complete this step.)

Feasible and Appropriate Language Assistance Measures

Based on the available resources, the following language assistance measures are feasible and appropriate for our agency at this time:

- Longwood University has translators (professors) that are willing to translate should FAB encounter a LEP customer.
- FAB has Language Identification flashcards at the front desk, as well.

LEP Implementation Plan

Through the four-factor analysis, Farmville Area Bus has determined that the following types of language assistance are most needed and feasible:

Staff Access to Language Assistance Services

Agency staff that come into contact with LEP persons can access language services by using Voiance Language Services, LLC, as well as Language Identification Flashcards. All staff will be provided with a list of available language assistance services and additional information and referral resources (such as community organizations which can assist LEP persons). This list will be updated at least annually.

Responding to LEP Callers

Staff who answer calls from the public respond to LEP customers as follows: FAB can use Voiance Language Services. The Town of Farmville has a contract with them.

Responding to Written Communications from LEP Persons

The following procedures are followed when responding to written communications from LEP persons: Longwood University Translators, although FAB has never encountered this.

Responding to LEP Individuals in Person

The following procedures are followed when an LEP person visits our customer service and administrative office: Language Identification Flashcards and Longwood University Translators, although FAB has never encountered this.

The following procedures are followed by operators when an LEP person has a question on board a **Farmville Area Bus** vehicle: call to FAB office or Town of Farmville Police Dispatch office. FAB drivers have never come into contact with an LEP customer.

Staff Training

As noted previously, all **Farmville Area Bus** staff are provided with a list of available language assistance services and additional information and referral resources, updated annually.

All new hires receive training on assisting LEP persons as part of their sensitivity and customer service training. This includes:

- A summary of the transit agency's responsibilities under the DOT LEP Guidance;
- A summary of the agency's language assistance plan;
- A summary of the number and proportion of LEP persons in the agency's service area, the frequency of contact between the LEP population and the agency's programs and activities, and the importance of the programs and activities to the population;
- A description of the type of language assistance that the agency is currently providing and instructions on how agency staff can access these products and services; and
- A description of the agency's cultural sensitivity policies and practices.

Also, all staff who routinely come into contact with customers, as well as their supervisors and all management staff, receive annual refresher training on policies and procedures related to assisting LEP persons.

Providing Notice to LEP Persons

LEP persons are notified of the availability of language assistance through the following approaches:

Based on the demographic data, Farmville Area Bus staff, both office personnel as well as drivers, have never come into contact with a LEP person, therefore, this plan serves as the only notice provided to LEP persons.

Monitoring/updating the plan

This plan will be updated on a periodic basis (at least every three years), based on feedback, updated demographic data, and resource availability.

As part of ongoing outreach to community organizations, Farmville Area Bus will solicit feedback on the effectiveness of language assistance provided and unmet needs. In addition, we will conduct periodic *review of updated Census data* of the adequacy and quality of the language assistance provided, and determine changes to LEP needs.

In preparing the triennial update of this plan, **Farmville Area Bus** will conduct an internal assessment using the Language Assistance Monitoring Checklist provided in the FTA's "Implementing the Department of Transportation's Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons: A Handbook for Public Transportation Providers."

Based on the feedback received from community members and agency employees, Farmville Area Bus will make incremental changes to the type of written and oral language assistance provided as well as to their staff training and community outreach programs. The cost of proposed changes and the available resources will affect the enhancements that can be made, and therefore Farmville Area Bus will attempt to identify the most cost-effective approaches.

As the community grows and new LEP groups emerge, **Farmville Area Bus w**ill strive to address the needs for additional language assistance.

MINORITY REPRESENTATION ON PLANNING AND ADVISORY BODIES

Title 49 CFR Section 21.5(b)(1)(vii) states that a recipient may not, on the grounds of race, color, or national origin, "deny a person the opportunity to participate as a member of a planning, advisory, or similar body which is an integral part of the program."

Farmville Area Bus does not have any transit-related, non-elected planning boards, advisory councils or committees, or similar committees, the membership of which we select.

IX. REQUIREMENTS OF TRANSIT PROVIDERS

Requirements and Guidelines for Fixed Route Transit Providers

The requirements apply to all providers of fixed route public transportation (also referred to as transit providers) that receive Federal financial assistance, inclusive of States, local and regional entities, and public and private entities.

Transit providers that are sub-recipients will submit the information to their primary recipient (the entity from whom they directly receive transit funds) every three years on a schedule determined by the primary recipient. The requirements are scaled based on the size of the fixed route transit provider.

REQUIRED: Service Standards and Policies

- Service Standards
 - o Vehicle load, Vehicle headway, On-time performance, Service availability
- Service Policies
 - o Transit amenities, Vehicle assignment

Farmville Area Bus is required to plan and deliver transportation services in an equitable manner. This means the distribution of service levels and quality is to be equitable between minority and low income populations and the overall population. Farmville Area Bus has reviewed its services and policies to ensure that those services and benefits are provided in an equitable manner to all persons.

Service Standards

The agency has set standards and policies that address how services are distributed across the transit system service area to ensure that the distribution affords users equitable access to these services. As shown in the following maps, the agency's routes serve all areas in town equally. The agency's demand responsive services are available to all callers on a first-come first-served basis, without regard for race, color or national origin.

- **Vehicle load** -Vehicle load is expressed as the ratio of passengers to the total number of seats on a vehicle at its maximum load point. The standard for maximum vehicle load is *38:19*, all of Farmville Area Bus's services meet this standards
- Vehicle headway -Vehicle headway is the amount of time between two vehicles
 traveling in the same direction on a given route. A shorter headway corresponds to
 more frequent service. FAB does not have vehicle headway due to the small area of
 service.
- On-time performance -On-time performance is a measure of runs completed as scheduled. This criterion first must define what is considered to be "on time." The standard for on-time performance is 5 to 10 minutes after scheduled stop time, all of Farmville Area Bus's services meet this standards
- Service availability Service availability is a general measure of the distribution of routes within a transit provider's service area or the span of service. The standard for service availability is equally available in all populated geographic areas of Farmville. All of Farmville Area Bus's services meet this standard.

Service and Operating Policies

The Farmville Area Bus's service and operating policies also ensure that operational practices do not result in discrimination on the basis of race, color, or national origin.

- Distribution and Siting of Transit Amenities -Transit amenities refer to items of comfort, convenience, and safety that are available to the general riding public. Farmville Area Bus has a policy to ensure the equitable distribution of transit amenities across the system. This policy applies to seating (i.e., benches, seats), bus shelters and canopies, (c) provision of information, Intelligent Transportation Systems (ITS), waste receptacles (including trash and recycling). Passenger amenities are sited based on population and lay of the land, as well as customer requests.
- Vehicle assignment Vehicle assignment refers to the process by which transit vehicles are placed into service and on routes throughout the system. Farmville Area Bus assigns vehicles with the goal of providing equitable benefits to minority and low income populations. Vehicles are assigned with regard to service type (fixed-route, demand-response, or a hybrid type) and ridership demand patterns (routes with greater numbers of passengers need vehicles with larger capacities). For each type of assignment, newer vehicles are rotated to ensure that no single route or service always has the same vehicle. The Transit Manager reviews vehicle assignments on a monthly basis to ensure that vehicles are indeed being rotated and that no single route or service always has the old or new vehicles.

All FAB vehicles are essentially the same in comfort, age, etc. They all get rotated through all the routes equally.

Monitoring Title VI Complaints

As part of the complaint handling procedure, the Title VI Counselor investigates possible inequities in service delivery for the route(s) or service(s) about which the complaint was filed. Depending on the nature of the complaint, the review examines span of service (days and hours), frequency, routing directness, interconnectivity with other routes and/or fare policy. If inequities are discovered during this review, options for reducing the disparity are explored, and service or fare changes are planned if needed.

In addition to the investigation following an individual complaint, the Title VI Manager periodically reviews all complaints received to determine if there may be a pattern. At a minimum, this review is conducted as part of preparing the Annual Report and Update for submission to DRPT.

Fare and Service Changes

Farmville Area Bus follows its adopted written policy for the public comment process for major service reductions and fare increases. With each proposed service or fare change, **Farmville Area Bus** considers the relative impacts on, and benefits to, minority and low income populations, including LEP populations. All planning efforts for changes to existing services or fares, as well as new services, have a goal of providing equitable service.



APPENDIX 3E: FAB 2010 TRIENNIAL REVIEW





COMMONWEALTH of VIRGINIA

Thelma D. Drake
Director

DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION 600 EAST MAIN STREET, SUITE 2102 RICHMOND, VA 23219-2416 (804) 786-4440 FAX (804) 225-3752 VIRGINIA RELAY CENTER 1-800-828-1120 (TDD)

March 15, 2011

FTA Section 5311 Triennial Review

Ms. Julie Adams Transit Manager PO Drawer 368 Farmville, VA 23901

Dear Julie:

The Virginia Department of Rail and Public Transportation (DRPT) conducted an on-site FTA 5311 Triennial Review of Bay Transit's rural public operations on December 8&9, 2010. DRPT found two instances of non-compliance to FTA Section 5311 program requirements:

- Preventative Maintenance inspections not completed in a timely manner. Two vehicle
 files were reviewed. Preventative Maintenance inspections were performed in a timely
 manner 14% of the time. FTA guidelines require that preventative maintenance
 inspections be performed in a timely manner at least 80% of the time.
- No written procedures for handling accidents and medical emergencies. FTA guidelines require grantees to have a written procedure for handling accidents and medical emergencies.

Please develop a corrective action plan for these findings and submit it to DRPT within 90 days of receipt of this letter.

I would like to thank you and your staff for the great work you do and the hospitality you showed me during my visit.

If you have any questions please call me at 804-786-7858.

Warm regards,

Ken Pollock

Rural Transit Program Administrator

Cc: File



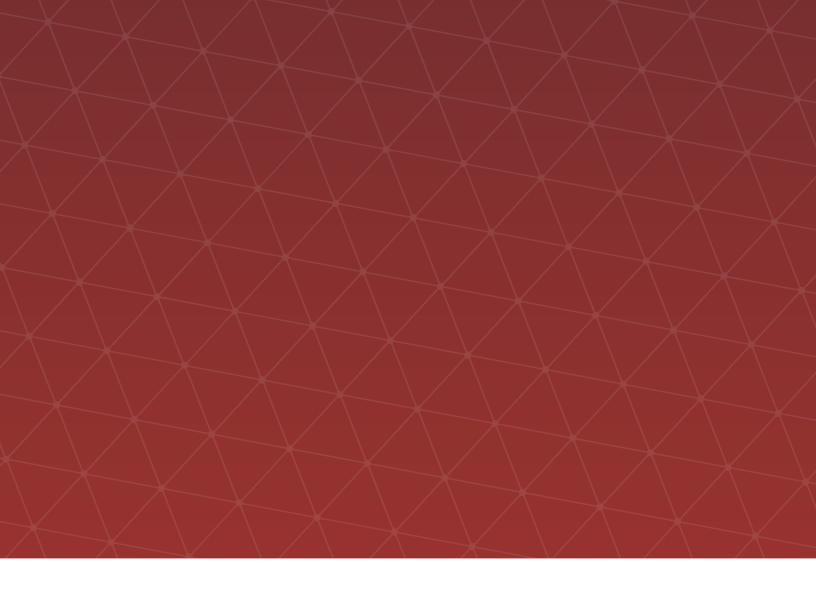
APPENDIX 6A:

FARMVILLE AREA BUS VEHICLE INVENTORY



Vehicle No.	Vehicle Type	Grantee	FTA Code	VIN	Number of Passengers		Description	Engine Type	Purchase Date	Purchased New		Wheelchair Accessible		LVDe	Average Hours operated per week	Miles Traveled	Location of Item	Comments
803	Van	Farmville Area Bus	11.12.15 - Vans	2C4RDGBG2CR398501	5	2012	# 803 - Dodge Caravan	Gasoline	1/22/2013	Yes	\$ 37,513	Yes	13,696	Rural	20	40	Prince Edward County	
804	Van	Farmville Area Bus	11.12.15 - Vans	1FTDS3EL8BDA04177	12	2011	# 804 - E350 Raised Roof Ford Super Cargo Van	Gasoline	10/17/2011	Yes	\$ 44,900	Yes	78,678	Rural	16	420	Prince Edward County	Used for PERT Line in Prince Edward County.
805	Van	Farmville Area Bus	11.12.15 - Vans	1FMS3ELXGDA04178	12	2011	# 805 - E350 Raised Roof Ford Super Cargo Van	Gasoline	10/17/2011	Yes	\$ 44,930	Yes	76,928	Rural	16	420	Prince Edward County	
807	Cutaway	Farmville Area Bus	11.12.15 - Vans	1GB6G5BGXC1196349	19	2013	# 807 - Chevy Supreme BOC	Gasoline	3/1/2013	Yes	\$ 62,034	Yes	58,032	Rural	35	500	Prince Edward County	
808	Cutaway	Farmville Area Bus	11.12.15 - Vans	1GB6G5BG3C1196273	19	2013	# 808 - Chevy Supreme BOC	Gasoline	3/1/2013	Yes	\$ 62,034	Yes	51,522	Rural	35	550	Prince Edward County	
809	Van	Farmville Area Bus	11.12.15 - Vans	1D4GP24E07B25T484	7	2007	# 809 - Dodge Caravan	Gasoline	6/18/2007	Yes	\$ 31,202	Yes	40,015	Rural	Varies	Varies	Prince Edward County	Used for ADA Service. Usage varies.
810	Van	Farmville Area Bus	11.12.15 - Vans	2D4RN4DE5AR350045	5 6	2010	# 810 - Dodge Entervan Grand Caravan	Gasoline	7/29/2010	Yes	\$ 35,529	Yes	41,161	Rural	10	10	Prince Edward County	
811	Van	Farmville Area Bus	11.12.15 - Vans	2D4RN4DE7AR350046	5 6	2010	# 811 - Dodge Entervan Grand Caravan	Gasoline	7/29/2010	Yes	\$ 35,304	Yes	32,164	Rural	10	10	Prince Edward County	
812	Cutaway	Farmville Area Bus	11.12.15 - Vans	1GB6G5BG7C1196423	19	2013	# 812 - Chevy Supreme BOC	Gasoline	3/1/2013	Yes	\$ 62,034	Yes	53,785	Rural	35	550	Prince Edward County	
815	Cutaway	Farmville Area Bus	11.12.15 - Vans	1FDXE45S76DB00515	20	2006	# 815 - Ford Supreme (BOC)	Gasoline	10/13/2006	Yes	\$ 48,339	Yes	183,350	Rural	Varies	Varies	Prince Edward County	Used for fixed route service. Miles and hours vary.
818	Sedan	Farmville Area Bus	11.12.16 - Sedan / Station Wagon	2GKFLTE50C6194505	4	2012	#818 - GMC Terrain - Supervisory Vehicle	Gasoline	12/19/2011	Yes	\$ 22,352	No	24,681	Rural	15	100	Prince Edward County	
819	Cutaway	Farmville Area Bus	11.12.15 - Vans	1GB6G5BG9C119665	19	2012	# 819 - Chevy Supreme BOC	Gasoline	1/10/2012	Yes	\$ 59,844	Yes	76,987	Rural	40	100	Prince Edward County	
820	Cutaway	Farmville Area Bus	11.12.15 - Vans	1GB6G5BG0C119909	19	2012	# 820 - Chevy Supreme BOC	Gasoline	1/10/2012	Yes	\$ 59,844	Yes	93,463	Rural	40	200	Prince Edward County	
821	Cutaway	Farmville Area Bus	11.12.15 - Vans	1GB6G5BG9C1119195	19	2012	# 821 - Chevy Supreme BOC	Gasoline	1/10/2012	Yes	\$ 59,844	Yes	74,010	Rural	40	100	Prince Edward County	
822	Cutaway	Farmville Area Bus	11.12.15 - Vans	1GB6G5BG4E1115364	19	2013	# 822 - Chevy Supreme BOC	Gasoline	12/20/2013	Yes	\$ 65,249	Yes	27,975	Rural	35	500	Prince Edward County	

¹ Mileage as of September 2015



APPENDIX 6B: TECHNOLOGY UPGRADE COST ESTIMATE



Appendix 6B: Technology Upgrade Cost Estimate

The following cost estimate is provided for the technology upgrade discussed in this TDP, that is, an electronic system for computer-aided dispatch (CAD)/ AVL capable of providing real-time arrival information to passengers and a means to electronically record ridership data. The recommended technology upgrade is not included in the constrained CIP because a funding source has not been identified. However, this cost estimate provides FAB with planning level information to budget for the upgrade should a funding source be identified. The estimate contains low and high total costs for upfront capital and annual recurring costs associated with the system. It is based on information gathered from several vendors that offer such systems and Virginia transit agencies that have procured them. More specifically, it assumes an in-vehicle tablet based system that tracks the vehicle's location using the device GPS, allows the driver to enter the number of boarding and alighting passengers at each stop on the tablet, and transmits this data in real-time to backend software via cellular communications. Additionally, the backend software predicts arrival time at stops and feeds this information to a mobile website that can be accessed by passengers. The cost items in the table below include:

- CAD/AVL licenses fees for backend software, tablet software, and additional modules offered by vendors such as deviated fixed route management
- Traveler Information license fee including real-time bus arrival information on a web portal and alert messaging
- Tablets and their in-vehicle mounts, cases, and chargers. The estimate is based on a unit cost of \$700 to \$1,500, which includes these components
- Implementation services including project management, design, deployment, testing, and training by the vendor
- Installation of the tablet mounts and charger wiring at unit cost of \$150 to \$800
- A monthly data plan at a unit cost of \$6.25/vehicle/ month to \$30/vehicle/month. The cost can vary depending on whether this is purchased through the vendor or by the agency on its own, and the wireless carrier used

- On-going technical support, maintenance, and software updates. These plans are typically purchased for the first year or several years during the initial procurement and then purchased annually in future years
- Hosting of historical data

All costs in the table are presented in 2016 dollars.

Table 6B-1. Cost Estimates for Technology Upgrades

News	Cost Estin	nate (2016\$)
Items	Total Low	Total High
Capital Costs		
Software		
CAD/AVL	\$ 120,000	\$ 140,000
Traveler Information	\$ 20,000	\$ 35,000
Hardware		
Tablet, Mount, Case, Charger (14 units)	\$ 9,800	\$ 21,000
Implementation (Services)	\$ 12,000	\$ 30,000
Installation (14 units)	\$ 2,100	\$ 11,200
Total Capital Costs	\$ 163,900	\$ 237,200
Recurring Costs (Annual)		
Data Plan (14 units)	\$ 1,050	\$ 5,040
License, Maintenance, Support	\$ 8,000	\$ 30,000
Data Hosting	\$ 2,000	\$ 2,200
Total Recurring Costs	\$ 9,050	\$ 35,040