# Transit Development Plan

Blackstone Area Bus System

FISCAL YEARS 2016 - 2021











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# CHAPTER 1: OVERVIEW OF TRANSIT SYSTEM

# Chapter 1: Overview of Transit System

# 1.1 History

The development of the Blackstone Area Bus System (BABS) began in 2001 when the results of a municipal survey demonstrated that there was sufficient need for transit in the town of Blackstone. The Blackstone Town Council approved the formation of a public transit system with a single deviated fixed-route (called the BABS Line), beginning operations in January 2003. Throughout the years, the system expanded as nearby municipalities asked for service or had an existing service that they wished to be administered by BABS. Between 2010 and 2015 Blackstone introduced two new routes; the BABS Trolley and the Fort Pickett Line. However, these two routes have since been discontinued and as of 2015 BABS operates seven routes. The current BABS network includes:

- BABS Line
- Brunswick Express
- Crewe-Burkeville
- Town and County Transit
- Dinwiddie Express
- Piedmont Area Transit Cumberland/Buckingham route
- Piedmont Area Transit Amelia route

All existing and discontinued routes listed below are discussed in greater detail in section 1.4.

#### 1.2 Governance

BABS operates under the jurisdiction of the Town Council of Blackstone, which is responsible in passing legislation and the general governance of the town. The Town Council consists of seven members who are elected every 4 years. Five of the members are elected through the town's ward system with an additional two members voted at-large. The council also is tasked with appointing a Town Manager, who reports to the council and is responsible for ensuring the efficient delivery of the town's services, including BABS. The current council was inaugurated July 1, 2014 and consists of the following members detailed in Figure 1-1.



Figure 1-1: BABS Governance

In addition to serving Blackstone, BABS provides transit service in Nottoway County and seven adjacent counties, including Lunenburg, Cumberland, Buckingham, Amelia, Prince Edward, Dinwiddie, and Brunswick counties as well as the City of Petersburg. As a result, representatives from these municipalities are consulted, but not involved in day to day BABS operations. In addition, although these services are operated by BABS and Blackstone town employees, they are funded by the municipalities in which the route serves.

In addition to serving Blackstone, BABS provides transit service in Nottoway County and seven adjacent counties, including Lunenburg, Cumberland, Buckingham, Amelia, Prince Edward, Dinwiddie, and Brunswick counties.

In regards to funding, capital expenditures for BABS are provided through Federal funding (80 percent) and a blend of state and local funding (20 percent). Operating expenditures are provided through the FTA Rural Transportation Assistance Program (5311) funding (50 percent) and a blend of state and local funding (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 Chapter 7.

## 1.3 Organizational Structure

The hierarchical relationship between BABS and the Town of Blackstone is detailed in Figure 1-2, below. BABS staff currently consists of 20 employees; 15 drivers, three mechanics, and two administrative staff. Staff are considered employees of the Town of Blackstone and are non-unionized, while all drivers are part-time employees. Mechanics are full-time employees, but this includes service to Blackstone municipal vehicles at the maintenance facility; as a result, they are only part-time BABS employees. Jennifer Beck, Director of Transportation and Community Development, oversees the daily operations of BABS. The Director reports to the Town Council but routine funding or purchasing matters requires the approval of the Town Manager. In addition, the Director liaisons with a staff member from the State Department of Rail and Public Transportation (DRPT) to assist BABS in coordinating with surrounding transit agencies and ensures that bus service is meeting state and federal requirements.

# 1.4 Services Provided and Areas Served

BABS operates seven routes that travel through eight separate counties and the city of Petersburg, Virginia. BABS provides deviated fixed-route service of up to ¾ mile on all routes. The purpose of deviated fixed-route service is to enhance service along the route in order to satisfy requirements pertaining to the American with Disabilities Act (ADA) and Title VI of the 1964 Civil Rights Act, which prohibits the denial of service based on race. Passengers must call 24 hours in advance to reserve a deviated stop location.

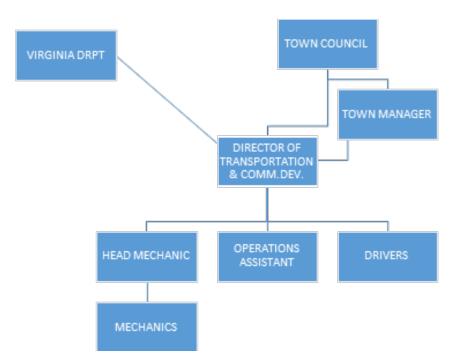


Figure 1-2: BABS Reporting Hierarchy

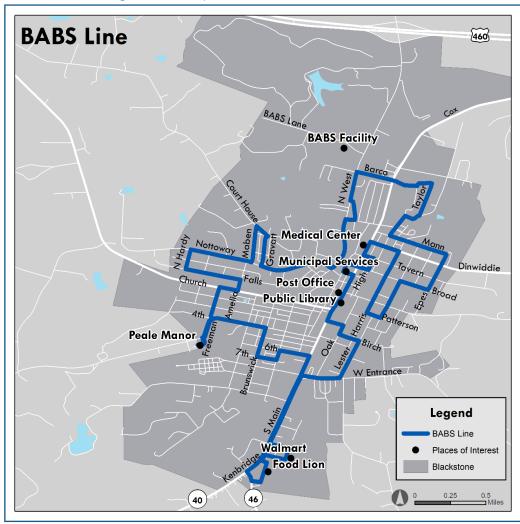


Figure 1-3: Map of BABS Line in Blackstone, VA

#### 1.4.1 BABS Line

The BABS line operates in a one-way directional loop through the Town of Blackstone and connects passengers with the medical center, main street, and major retail destinations (Walmart, Food Lion) along State Route 40. There is a shelter and bench at the medical center with minimal infrastructure at the other stops through the rest of the route. Pedestrian

connectivity is adequate as most of the route passes through residential areas with low traffic speeds. Operations funding is provided by the Federal Transit Administration's (FTA) Federal 5311 funds (50 percent), state funds (14 percent), and local funds (36 percent).

Table 1-1: BABS Operating Characteristics

BABS LINE			
Operating Days	Operating Hours	Trips	Peak Buses
Weekday	6:00 a.m 5:00 p.m.	11	1
Saturday	6:00 a.m 5:00 p.m.	8	1

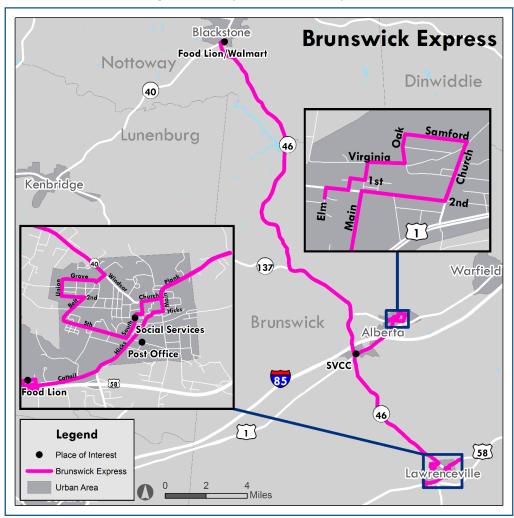


Figure 1-4: Map of Brunswick Express

#### 1.4.2 Brunswick Express

The Brunswick Express operates an irregular route pattern from Blackstone south to Alberta and Lawrenceville in Brunswick County. The major destinations apart from the communities is a Southside Virginia Community College campus (SVCC) and the Food Lion grocery stores that anchor both ends of the route. Alberta is only served twice a day and primarily serves as transportation to SVCC and

Lawrenceville. Signage is prevalent along the route but other stop infrastructure, apart from SVCC, is non-existent. Pedestrian access is adequate as the stop locations at the Food Lion stores and SVCC are nearby. Operations funding is provided by Federal 5311 funds (50 percent), state funds (15 percent), and local funds from SVCC, Brunswick Social Services, and the Town of Lawrenceville (35 percent).

Table 1-2: Brunswick Express Operating Characteristics

Brunswick Express				
Operating Days	Destination	Operating Hours	Trips	Peak Buses
Mon Thurs	SVCC, Lawrenceville	8:00 a.m 3:20 p.m.	6	1
Mon-Thurs	SVCC, Alberta	8:00 a.m 3:51 p.m.	2	1

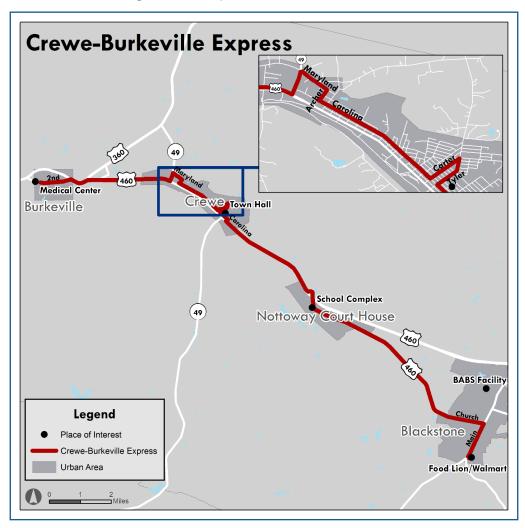


Figure 1-5: Map of Crewe-Burkeville Route

## 1.4.3 Crewe-Burkeville Express

The Crewe-Burkeville Express route connects Blackstone with Crewe and Burkeville in western Nottoway County. Beginning at the Blackstone Food Lion, the route passes the Nottoway Courthouse and then through residential neighborhoods in Crewe, terminating in Burkeville. Stop infrastructure is minimal with limited pedestrian access as the route passes through areas with limited sidewalk access. Operations funding is provided by Federal 5311 funds (50 percent), state funds (14 percent), and local funds (36 percent).

Table 1-3: Crewe-Burkeville Express Operating Characteristics

Crewe-Burkeville Express			
Operating Days	Operating Hours	Trips	Peak Buses
Mon-Tue-Thur	6:45 a.m 5:26 p.m.	5	1

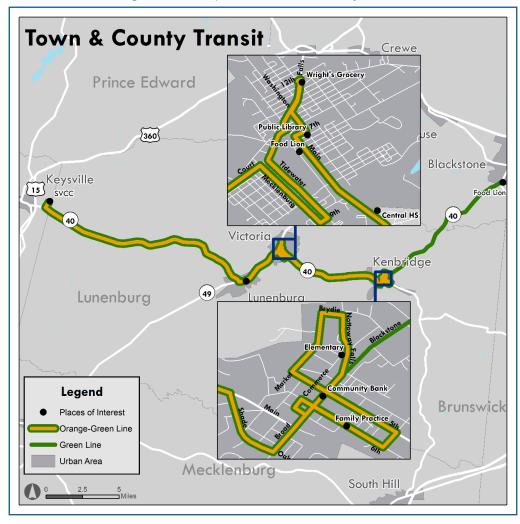


Figure 1-6: Map of Town and County Transit

## 1.4.4 Town and County Transit

Town and County Transit serves Kenbridge and Victoria in Lunenburg County with limited service to Blackstone. Major destinations include the Blackstone Walmart, Victoria Public Library, other public services, and the SVCC Daniel Campus in Keysville. The route began in 2003, and BABS took over administration of the service in 2008. The route is described as having an orange and a green line, but the green

line is simply an extension of the orange line to the Blackstone Walmart that occurs twice a day on designated days. Both signage and pedestrian access is limited between Lunenburg County and Blackstone. Operations funding is provided by Federal 5311 funds (50 percent), state funds (16 percent), and local funds from Lunenburg County, and the towns of Kenbridge and Victoria (34 percent).

Table 1-4: Town and County Operating Characteristics

Town And County Transit				
Operating Days	Pattern	Operating Hours	Trips	Peak Buses
Mon-Wed-Fri	SVCC-Victoria-Kenbridge (Base)	7:00 a.m 4:15 p.m.	5	1
Tue-Thurs	SVCC-Victoria-Kenbridge-Blackstone	7:00 a.m 4:45 p.m.	5	1

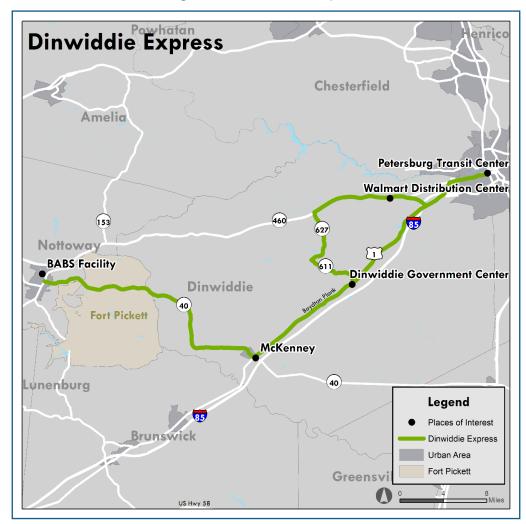


Figure 1-7: Dinwiddie Express

## 1.4.5 Dinwiddie Express

The Dinwiddie Express connects Blackstone with Dinwiddie County and the city of Petersburg. The route operates during the a.m. and p.m. travel peaks, with every trip from Blackstone including two looped trips through various parts of Dinwiddie County. Much of the route travels along US Routes 1, State

Route 40, and State Route 611. Major attractions include employment and destinations in Petersburg, the largest urban area in the BABS service area. Operations funding is provided by Federal 5311 funds (50 percent), state funds (16 percent), and local funds from Dinwiddie County (34 percent).

Table 1-5: Dinwiddie Express Operating Characteristics

Dinwiddie Express			
Operating Days	Operating Hours	Trips	Peak Buses
Weekday	6:00 a.m 6:00 p.m.	4	1

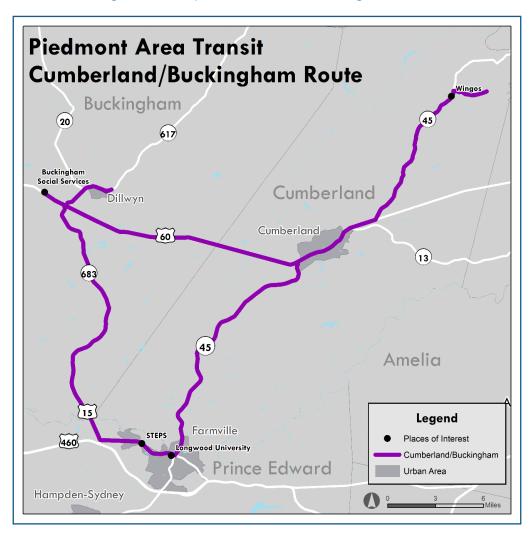


Figure 1-8: Map of Cumberland/Buckingham Route

#### 1.4.6 Piedmont Area Transit

BABS operates two routes under the Piedmont Area Transit (PAT) branding. Service routes are between the Town of Farmville and Buckingham, Cumberland, and Amelia Counties. Neither route serves Blackstone. Major destinations include Longwood University and Buckingham County Social Services. Outside of Farmville, signage and stop infrastructure

are limited with much of the route station on US or State Highways. Operations funding is provided by Federal 5311 funds (50 percent), state funds (14 percent), and local funds from Prince Edward, Cumberland, Buckingham, and Amelia (36 percent) Counties.

Table 1-6: PAT Cumberland/Buckingham Operating Characteristics

Piedmont Area Transit - Cumberland/Buckingham			
Operating Days	Operating Hours	Trips	Peak Buses
Mon-Thurs	5:50 a.m 5:30 p.m.	4	1

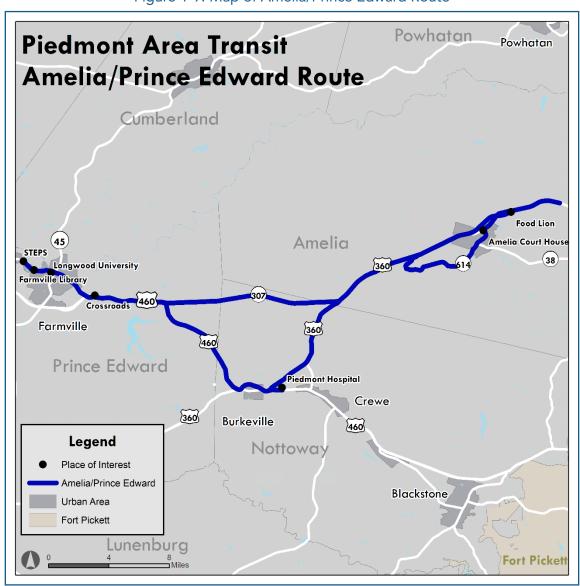
The PAT Amelia/Prince Edward route provides service between the towns of Farmville, Burkeville, Crewe, and Amelia County in an east to west, and south to east pattern. Major attractions include Longwood University, Food Lion, STEPS, Piedmont Hospital, and Amelia Courthouse. Outside of Farmville, signage

and stop infrastructure are limited with much of the route situated on US or state highways. Operations funding is provided by Federal 5311 funds (50 percent), state funds (14 percent), and local funds from Prince Edward, Cumberland, Buckingham, and Amelia (36 percent) Counties.

Table 1-7: PAT Amelia/Prince Edward Operating Characteristics

Piedmont Area Transit - Amelia/Prince Edward				
Operating Days	rating Days Operating Hours Trips Peak Buses			
Weekday	5:55 a.m 4:44 p.m.	4	1	

Figure 1-9: Map of Amelia/Prince Edward Route



#### 1.5 Fare Structure

As seen in Table 18 below, most routes cost \$0.50 per trip, with the exception of Town and County service, which is \$1.00 per trip. Fares have not changed for any route since the inception of the system. Therefore, a roundtrip would cost the rider \$1.00 or \$2.00 on the Town and County route. Fare payment is accepted in three formats; cash, tokens, and punch cards. There are no discounts for any passengers, regardless of age or disability and if passengers are paying in cash, they must have exact change. Riders must pay the fare for each one-way trip on a bus and there are no transfers. Fare increases were considered in the prior Transit Development Plan (TDP) but have not been implemented due to the low-income status of many of passengers.

Table 1-8: BABS Fares by Route

Route	One-way Fare
Blackstone	\$0.50
Brunswick	\$0.50
Crewe-Burkeville	\$0.50
Dinwiddie Express	\$0.50
Piedmont Area Transit	\$0.50
Town and County Transit	\$1.00

#### 1.6 Fleet

BABS currently operates 20 vehicles, 17 of which are used in revenue service and are identified as a "cutaway" in Table 1-9. These vehicles typically carry anywhere from 14 to 19 passengers and all are ADA accessible. This is an increase of four vehicles from the previous 2010 TDP but a decline of two vehicles from the 2013 National Transit Database (NTD) Rural data. The cutaways typically service the same route and are branded. If necessary, any cutaway can be implemented to service any route, regardless of the decal on the vehicle.

Supplementing regular service by maintenance staff, the drivers are tasked with completing a checklist of assessing the general condition and operability of the bus, prior to each trip. This includes checking the vehicle's fluids and electrical functions (lights, doors, cameras). In the event of a mechanical failure mid-route, one of the mechanics on-site would drive a spare bus to the driver, as BABS does not employ a

bus driver on-call. The spare ratio of vehicles (defined as the number of spare vehicles divided by the vehicles required for maximum service) represents the number of vehicles available for service to the number of vehicles in service at maximum pullout. BABS uses seven vehicles during maximum pullout, and an additional 10 vehicles are available in the event that a cutaway is unable to service a route.¹ The system's spare ratio is 143 percent. However, BABS intends to sell two of these vehicles at the next municipal auction, which would leave a spare ratio of 114 percent.

FTA defines the service life of a cutaway revenue vehicle as 100,000 miles or four years of service, whichever comes first. By this metric, the majority of BABS vehicles are exceeding their service life. Most of the BABS fleet was manufactured in 2009 or 2010, resulting in an average age of 5.1 years for revenue vehicles. Furthermore, nine of the vehicles have more than 100,000 miles or 52 percent of the revenue fleet. However, this is an improvement from the 2010 TDP report average of 5.9 years and 54 percent of the revenue fleet over 100,000 miles. This figure is expected to continue to decline throughout the ensuing years, as the agency is now replacing one or two vehicles every year (funding permitting). Further detail on fleet replacement can be found in Chapter 6.

<sup>&</sup>lt;sup>1</sup> 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."

rable 17. BABS vehicle inventory, including service vehicles			
Vehicle Type	Capacity	Year of Manufacture	Mileage
Cutaway	14	2015	4,016
Cutaway	19	2013	25,488
Cutaway	14	2010	53,693
Cutaway	14	2010	61,403
Cutaway	14	2010	65,529
Cutaway	19	2010	70,218
Cutaway	19	2010	72,746
Cutaway	19	2010	98,253
Cutaway	14	2007	176,007
Cutaway	15	2008	185,267
Cutaway	14	2010	185,481
Cutaway	14	2009	206,589
Cutaway	14	2009	222,265
Cutaway	14	2009	241,070
Cutaway	14	2009	252,654
Cutaway	14	2010	272,725
Cutaway	14	2010	281,442
Shop Truck	2	2013	3,747
SUV	5	2010	22,678
Van	5	2004	87,233

Table 1-9: BABS Vehicle Inventory, Including Service Vehicles

## 1.7 Existing Facilities

BABS is headquartered at their maintenance facility, located at 101 BABS Lane, Blackstone, Virginia 23824. Constructed in 2008, the facility includes six bays and one wash bay. The high number of bays relative to the fleet size is due to the maintenance facility serving all other Blackstone municipal vehicles. Prior to the construction of the maintenance facility, BABS would have the vehicles serviced at the Town Hall garage and store the vehicles in the Blackstone Police Department lot, with infrequent break-ins and acts of vandalism committed against the vehicles. Today, BABS vehicles are stored at the maintenance facility and have not experienced further criminal acts.

BABS stop facilities are mainly located in the Town of Blackstone. All designated stops within the town have BABS signage, which includes the BABS phone number. Benches are available at a minority

of designated stops, while only one BABS shelter is provided in the entire route network, located at the Blackstone Medical Center. Route segments between communities typically operate on a flag stop system, where passengers wait along a fixed portion of the route and flag the driver to stop. There are currently no plans to expand the number of shelters. Other issues BABS has with rural stop infrastructure is a lack of local funding for infrastructure and issues with VDOT approving signage and stop infrastructure within state right-of-way on rural routes. Designated stops in communities other than Blackstone typically lack stop signage or other infrastructure. There are also instances of signage in locations that did not correspond with the route map. Most major destinations, such as SVCC in Alberta, have benches and signage. Shelters and benches also are available

at the Petersburg Transit Center, which is the eastbound terminal destination for the Dinwiddie express. With regards to bicycle facilities, most of the vehicles are equipped with front-end bicycle racks.

## 1.8 Transit Security Program

BABS has enhanced its security measures since 2010 by adding surveillance equipment to most revenue vehicles. In addition to the cameras, drivers also are trained in how to manage combative passengers at point of hire and on an annual basis. This protocol was breached in April 2014 and led to the dismissal of a driver. During operations, all buses are equipped with first aid supplies in the event of a medical emergency, as well as radios for the drivers to communicate with each other, the maintenance facility, or emergency services.

# 1.9 Intelligent Transportation Systems (ITS) Program

As mentioned in Section 1.8, apart from the recent addition of on-board cameras, BABS does not employ other ITS technologies like traffic signal priority (TSP), or assistance in scheduling complicated route patterns with Trapeze because there is not a significant need due to the rural nature of the service area. However, some technologies could be beneficial to passengers, such as installing automatic vehicle locator (AVL), which BABS currently lacks. With smart-phone ownership at roughly 52 percent of the American adult rural population according to an April 2015 Pew poll, the ability and demand for real-time information will likely increase within the BABS service area. In addition, providing real time information could help BABS attract new riders<sup>2</sup>. These potential capital improvements are discussed in more detail in Chapter 6.

# 1.10 Data Collection, Ridership, and Reporting Methodology

Data collection at BABS is primarily a process of manual entries punched into a manual passenger counter, which 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

As the buses are not equipped with automatic passenger counters (APCs), ridership data is collected manually by the bus driver on the same inspection sheet used to conduct the safety inspection prior to each work shift. The driver counts passengers as either an adult, child, or wheelchair user, and whether they pay with a punch card or tokens. Punch cards and tokens can be purchased on the bus or at the maintenance facility, although advance notice is required. The third method of payment, by cash, is not recorded by the driver. Cash receipts can be calculated by taking the difference between the number of total passengers minus the total punched cards and token users, and multiplying the amount by the fare cost of the route. This amount should equal the amount of cash collected in the farebox. Any difference would indicate either overpayment or underpayment of some passengers as no passengers are exempt from payment.

At the conclusion of the route, the completed form is delivered to BABS administrative staff for entry into an electronic spreadsheet. This information is aggregated into a single passenger category. 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 this TDP update. While this information could be collected by the driver, DRPT discourages this practice. This is discussed further in Chapter 2.

## 1.10.2 Operations

Vehicle mileage, hours, and fuel usage are all written down on the same driver sheet as ridership information. BABS does not distinguish between total hours and miles with revenue hours and miles. If there are other service issues, the driver is to record that as well. Fares are collected in a locked farebox and a count of other forms of payment, as discussed above, are entered electronically into computer spreadsheets as a total passenger revenue figure. Costs, such as wages, salaries, fuel, and maintenance, among other operating expenses are detailed in an operating invoice that BABS separates by route. This practice is due to the different route funding structures provided by different counties in the BABS service area. Funding is discussed further in Chapter 7.

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 are routinely servicing different 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 and reaching out to social service organizations in the service area, such as STEPS, a work force development program, and SVCC. Bus route information is available at several locations, including SVCC and Walmart. BABS administration also is in contact with community development organizations on an annual basis to assess existing and future transit service. The BABS director stated that the agency currently has a good relationship with local businesses including Walmart and Food Lion, although the director stated that it is sometimes hard to get individuals or groups involved as stakeholders of their public transit system.



# CHAPTER 2: GOALS AND OBJECTIVES

# Chapter 2: Goals and Objectives

## 2.1 Goals and Objectives

Enhancing transportation options to the residents that reside within and adjacent to the BABS service area has long been an objective and is encouraged by Virginia state law, Section 15.2-2200. 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 Blackstone 2014 Comprehensive Plan calls for the establishment of "alternative forms of transportation to the private automobile" and "safe and adequate transportation systems for the movement of people, goods, and services within the Town". Although this plan only reflects the interests of Blackstone, these objectives are echoed in the comprehensive plans and public transit studies of larger governing bodies, such as the Commonwealth Regional Council (CRC) and Southside Planning District Commission, which represents the municipalities that are covered by BABS service. These agencies help facilitate cooperation between local municipalities in order to address and promote regional planning and problemsolving regarding transportation, among other matters.

As a result of this mandate, BABS has developed a framework of goals and objectives in order to fulfill the intentions outlined in the comprehensive plans. BABS is currently guided by five goals, within each are multiple objectives and descriptive measures that BABS should perform in order to achieve those goals. Through this process, one can begin to assess the efficacy of BABS service and determine whether they are achieving their goals. As the region develops, BABS' goals and objectives will 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 Blackstone, Dinwiddie, Brunswick, Amelia, Buckingham, Cumberland, and adjacent areas of Nottoway, Lunenburg, and Prince Edward Counties.

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 on a regular basis with the Town and County Economic Development Agency staff to identify planned new developments that might warrant transit service. This also should 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 easily identifiable and 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 implanting new service
- Work with VDOT staff in expanding sidewalks at stops with high ridership demands
- Monitor ridership activity at high demand stops to determine if passenger shelters are needed. If average daily ridership meets or exceeds 25 passengers during a 1-month survey period, BABS should initiate the process of shelter installation

#### Goal 2

#### Market existing transit services.

Objective 2.1: Market transit services as a travel option within the Town of Blackstone, Dinwiddie, Brunswick, Amelia, Buckingham, Cumberland, and adjacent communities in Nottoway, Lunenburg,

and Prince Edward Counties. This objective is to be accomplished through the following activities:

- Maintain a BABS Route and Schedule Guide for users of the transit system
- Maintain accurate and up-to-date transit information on the BABS web site, www. blackstonebus.com
- Participate in community events to promote public transportation through pamphlets and paraphernalia
- 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: Rebrand the system as "Heartland Transit" in order to emphasize the regional mandate of the service.

- Rebrand the service to an easily identifiable brand name that informs passengers on regional connections beyond the bus line they currently use
- Avoid rebranding the system in a way that promotes one bus line or municipality over another

Rebrand the service to an easily identifiable brand name that informs passengers on regional connections beyond the bus line they currently use

#### Goal 3

Deliver fixed-route bus services in a costeffective manner.

Objective 3.1: Maintain a systemwide 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 year over year trends in passenger trips by route
- Record and monitor year over year trends in transit operations expenses and farebox revenues by

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 annual administrative expenses and farebox revenues

Objective 3.3: Achieve systemwide 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 as part of all training efforts with new staff. Also review with existing staff at least once every two 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 defined service-life of vehicles. For most buses operated by BABS, the defined service- life is four years or 100,000 revenue miles of service, whichever comes first
- Maintain a spare ratio of at least one bus at all times for the BABS fixed-route transit services

#### Goal 5

# Provide transit services that are accessible to citizens.

Objective 5.1: Provide transit services that are accessible to all population groups within the Town of Blackstone, Dinwiddie, Brunswick, Amelia, Buckingham, Cumberland, and adjacent areas of Nottoway, Lunenburg, and Prince Edward Counties. This is to be accomplished through the following activities:

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

# 2.2 Service Performance Standards

The following service performance standards were derived from three statistical categories, which can serve as a tool to asses BABS operational efficiency; 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 systemwide fixed-route ridership should maintain levels equivalent to at least 0.1 passenger trips per revenue mile, whereas the BABS line should maintain a level of 0.2, or higher, due to the higher density of activity that the route serves. If BABS fails to maintain these standards for 12 consecutive months, corrective measures should be taken, as discussed in Section 2.1. Table 2-1 below shows passenger trips per revenue mile for each BABS route in FY 2014.

Table 2-1: BABS Passengers per Revenue Mile

BABS Systemwide Passengers per Revenue Mile FY 2014				
Route	Passengers	Revenue Miles	Passengers/Rev Mile	
BABS	16,791	41,305	0.41	
Brunswick	3,878	31,014	0.13	
PAT-Amelia/Prince Edward	2,100	84,643	0.02	
PAT-Buckingham/Cumberland	1,972	69,625	0.03	
Town and County	3,067	66,390	0.05	
Crewe-Burkeville	4,295	28,158	0.15	
Dinwiddie	7,402	76,816	0.10	
Total	39,505	397,951	0.10	

#### 2.2.2 Cost-Effective Measures

**Fixed-Route Standard:** BABS systemwide farebox recovery ration (farebox revenues as a share of total operating expenses) should match the systemwide average of five percent, which is the systemwide average. If BABS 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, which is the result of taking the systemwide farebox recovery rate.

Table 2-2: BABS Farebox Recovery Ratio Based on FY14 Actual Expenditures

BABS Systemwide Recovery Rate FY 2014							
Route	Farebox Revenues	Operating Expenses	Farebox Recovery Rate				
BABS	\$8,115	\$94,869	8.6%				
Brunswick	\$1,336	\$28,416	4.7%				
Piedmont Area Transit	\$1,875	\$79,614	2.4%				
Town and County	\$2,455	\$38,993	6.3%				
Dinwiddie	\$2,421	\$54,781	4.4%				
Total	\$16,202	\$296,673	5.5%				

#### 2.2.3 Vehicle Maintenance Performance Measures

#### Bus Preventive Maintenance Inspections -

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

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



# CHAPTER 3: SERVICE AND SYSTEM EVALUATION

# Chapter 3: Service and System Evaluation

#### 3.1 Introduction

This chapter assesses the productivity and effectiveness of BABS service through both quantitative and qualitative measures. The main finding of this chapter is that the seven county BABS service area has been mostly stagnant in terms of economic development and population change. In addition, many of the BABS routes have seen slight to moderate declines in ridership. The result is a bus system with declining efficiency in the face of a static demographic trend.

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 seven county BABS service area. The second section, Current System Performance, evaluates existing ridership and operating statistics for the BABS 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 U.S. Census demographic estimates and projections within the BABS service area, as well as transit figures during a 1-year period. The transit figures are not from the most recent calendar year (January 1st through December 30th), but instead from the most recent Fiscal Year, which for BABS operates from July 1st to June 30th.

# 3.2.1 BABS Service Area Demographic Trends

The table below details the population and population density shift in the BABS service area from 2010 to 2014. 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 is 3,398

square miles, an increase 504 miles from the previous TDP due to the inclusion of Dinwiddie County to the service area.<sup>3</sup> Population has slightly decreased across all counties except Amelia County, which saw a slight increase. Brunswick is estimated to have had the largest population loss both as a share and in total amount among the other counties. The state of Virginia is currently estimated to have had a four percent higher population in 2014 than in 2010, whereas the service area has moved in the opposite direction and is estimated to have lost two percent of its population. On average, Virginia also is significantly denser than the BABS service area, roughly three times as much.

Table 3-1: Total County and State Population Projection

	2010	2014	2020	% Δ
Amelia	12,690	12,855	13,413	5.7%
Brunswick	17,434	16,498	17,191	-1.4%
Buckingham	17,146	16,913	17,761	3.6%
Cumberland	10,052	9,827	10,623	5.7%
Dinwiddie	28,001	27,859	29,542	5.5%
Lunenburg	12,914	12,466	12,953	0.3%
Nottoway	15,853	15,579	16,035	1.1%
Prince Edward	23,368	23,074	24,865	6.4%
Virginia State	8,001,024	8,326,289	8,811,512	10.1%

Future population projections are essential to determining BABS service for the next 6 years. Table 3-1 shows future population projections for each county as provided by the Virginia Employment Commission (VEC). All counties except for Brunswick are expected to see modest population gains by 2020. This projected growth diverges from the narrative established for 2010-2014 from Table 3-2.

The projections by the VEC are 10 years into the future (since they are based on 2010 US Census) and typically are imprecise due to a number of economic and social factors. As best the study team can discern, the population of the BABS service area will be +/- 500 residents from the 2010 US Census figures. This small change in total residents is not likely to impact BABS ridership.

Table 3-2: BABS Service Area Demographics Estimates

		2010 Base		2014 Estimates		
County	Service Area (sq. miles)	Population	Density (pop/sq. mi)	Population	Density (pop/sq. mi)	% Change
Amelia	355	12,695	36	12,855	36	1.3%
Brunswick	566	17,432	31	16,498	29	-5.4%
Buckingham	580	17,143	30	16,913	29	-1.3%
Cumberland	297	10,055	34	9,827	33	-2.3%
Dinwiddie	504	28,001	56	27,859	55	-0.5%
Lunenburg	432	12,916	30	12,466	29	-3.5%
Nottoway	314	15,852	50	15,579	50	-1.7%
Prince Edward <sup>4</sup>	354	23,630	68	23,074	66	-2.4%
Virginia State	42,774	8,001,024	187	8,326,289	195	4.1%
Service Area Total	3,402	137,724	41	135,071	40	-2.0%

Source: US Census

<sup>&</sup>lt;sup>4</sup> Although Prince Edward County is not technically part of BABS service area, it is included here because the PAT Buckingham route stops in Farmville

TThe VEC also provides projections for different age cohorts, including for those aged 65 and older. Table 3-3 shows 2010, 2014, and projected 2020 share of population for senior citizens in each county. While the overall service area population is stagnant, the senior citizen population is projected to become an increasingly greater share of the resident population. In this category, all but Nottoway and Dinwiddie counties are projected to have a higher share of senior citizens than the state share. In three counties, senior citizens will comprise of one-fifth of all residents, nearly five percent higher than the state share. As the survey revealed, roughly 23

percent of BABS riders surveyed identified as senior citizens, a figure likely to increase in the future. This demographic change is the most likely potential ridership growth for the BABS system.

As the survey revealed, roughly 23 percent of BABS riders surveyed identified as senior citizens, a figure likely to increase in the future. This demographic change is the most likely potential ridership growth for the BABS system

Area	2010 65+	2014 65+	2020 65+	Δ
Amelia	15.8%	18.2%	19.5%	3.7%
Brunswick	16.5%	19.2%	20.0%	3.5%
Buckingham	14.3%	16.9%	17.9%	3.6%
Cumberland	16.1%	19.3%	20.0%	3.9%
Dinwiddie	13.7%	16.3%	16.0%	2.3%
Lunenburg	17.2%	19.7%	21.4%	4.2%

18.3%

15.4%

13.8%

17.1%

13.9%

12.2%

Table 3-3: Senior Citizen County and State Population Projection

#### 3.2.2 BABS Service Area Land Use

Nottoway

Prince Edward

Virginia State

A review of comprehensive land use plans was conducted to gain a better understanding of where potential changes and growth may occur within the seven county BABS service area. These comprehensive plans include summaries of existing and planned future land uses, that also discusses planned or desired development that may eventually warrant future transit access.

#### **Amelia County**

The Amelia County 2000 Comprehensive Plan summarizes existing land use in the county as predominantly rural, with more than 80 percent of the county's land area devoted to agricultural uses. Existing housing is clustered around village centers and demand for new housing has recently increased due to improved access to the county from employment centers in Richmond and Petersburg.

Commercial development is largely concentrated along US Route 360 and Virginia Route 153, with a smaller pocket of development in the vicinity of Amelia Courthouse.

2.4%

2.9%

3.2%

19.5%

16.8%

15.4%

Future land use discussions call for guiding residential development to locations around existing community centers, especially in the face of increased demand in areas of the county nearest the region's larger cities. The Commonwealth Regional Council Piedmont Planning District 2012 Land Use Map identifies the land between and around the communities of Amelia Courthouse, Scotts Fork, and Chula as a large residential growth area. As residential development continues in Amelia County, transit service expansion may become favorable. Commuter transit connecting Amelia communities to destinations in Petersburg and Richmond could hold promise, though this service would likely not be operated by BABS.

#### Town of Blackstone

Blackstone adopted a comprehensive plan in 2005. The plan describes existing low- and mid- density residential development as typical for the east and south sides of the town. Major corridors are reserved for commercial development along the thoroughfares of Main Street and Broad Street. The west and northwest portions of town largely consist of high-density residential development and manufacturing uses. The Fort Pickett Military Reservation is a major destination located to the east of Blackstone that also contains a small airport. The comprehensive plan did not list any specific changes to future land use.

#### **Brunswick County**

Brunswick County published a comprehensive plan in 2007 that contains a large land use component. The plan notes existing development around the towns of Alberta, Brodnax, and Lawrenceville, in addition to locations along rural highways and near Lake Gaston at the southern end of the county. The remaining 96 percent of the existing county area is used for forestry and agriculture. The SVCC – Christiana campus is located in the county and is a regional destination.

Future land use plans largely constrain commercial development to areas along the five Interstate 85 interchanges in the county. A multifamily, multiuse residential development is underway along Virginia Route 626 near Lake Gaston. The plan also prescribes the designation of new land for industrial development along US Route 58 both east of Brodnax and east of Lawrenceville. Future transit connecting these large industrial development spaces to nearby communities would represent a promising opportunity for improvements to service. In addition, DRPT has planned a corridor for potential high-speed rail that would pass through the county. If rail stations along this line are planned in the county, they would also benefit from transit access via the BABS Brunswick line.

#### **Buckingham County**

Buckingham County published a comprehensive plan in 2008. The plan focuses upon future development in the form of clustered medium- and high-density residential development in areas between Sprouses Corner and Dillwyn. The Commonwealth Regional Council Piedmont Planning District 2012 Land Use Map identifies additional growth areas which include

locations around the Buckingham Courthouse along US Route 60 and larger areas along US Route 15 in the northeastern portion of the county, near the communities of Gold Hill, Arvonia, and New Canton.

#### **Cumberland County**

Cumberland County published a comprehensive plan in 2013. The plan highlights existing pockets of development along US Route 60 and US Route 45 that feature commercial corridors surrounded by larger areas of low- and mid-density residential use. Other areas on the periphery of Farmville and Cartersville follow a similar pattern of development. The plan depicts future land use in terms of intensity rather than dividing areas by use type. It designates areas along US Route 45 north of Farmville and areas near Cumberland Courthouse for high-intensity development. Areas at the western end of the county and in the vicinity of Cartersville are designated for low-density, residential-only development. Residential redevelopment is currently planned in the vicinity of the county courthouse. This area under redevelopment is already served by the PAT Cumberland-Buckingham route.

#### **Dinwiddie County**

Dinwiddie County published its comprehensive plan most recently in 2012. Existing uses in the plan are agriculture and light and heavy industry, along with Dinwiddie County Airport in the northeastern part of the county. Proposed future land uses include a regional industrial park in northeastern corner of the county near the intersection of Interstate 85 and Virginia Route 460. The plan also prioritizes mixeduse development in an urban growth area southwest of Petersburg moving along Interstate 85 and US Route 1 south to the community of McKenney. The existing Dinwiddie Express bus service runs from Blackstone north to a transit transfer facility that provides access to Petersburg via McKenney. This route could benefit from enhanced service given mixed-use development in the future.

#### **Lunenburg County**

Lunenburg County and the towns of Kenbridge and Victoria jointly published a comprehensive plan in 2006. The plan summarized existing land use as largely agricultural, with residential clusters along secondary roads in community centers within the county. Existing commercial development is

confined to downtown areas and places near the historic courthouse on Virginia Route 49. Existing industrial parks include the Commerce center in Kenbridge and the Victoria Industrial Park. The plan does not mention any planned major changes to land use, though it does acknowledge the potential for boundary adjustments that allow for the towns of Kenbridge and Victoria to grow toward each other.

# 3.3 Current System Performance

This section is important because it established a performance baseline for the current BABS network. Data in this section is from FY15 statistics, while previous years FY12 and FY13 also are used for comparison. Current year operating statistics are presented first, then a look at historical trends for performance metrics.

#### 3.3.1 Operating Statistics

Table 3-4 details the operating statistics by route for FY 2015. The bottom of the table includes projected stats from the previous TDP. The previous TDP report projected a total ridership of 33,093 riders in FY 2015. This projected figure also included an estimated ridership figure for the Dinwiddie Express, which did not begin service until FY 2009. Both revenue miles and revenue hours are slightly lower than the projected, while overall riders are higher than projected. The result is an increase in passengers per revenue mile and hour.

Table 3-4: BABS Operating Statistics by Route

BABS Operating Statistics FY 2015						
Route	Riders	Rev Miles	Rev Hours	Pax/ Mile	Pax/Hour	
Piedmont Area Transit	1,971	82,736	2,225	0.02	0.89	
BABS	15,217	37,003	3,274	0.41	4.65	
Brunswick	3,341	29,573	1,161	0.11	2.88	
Buckingham	2,459	75,657	1,841	0.03	1.34	
Crewe	4,188	26,797	932	0.16	4.49	
Dinwiddie	7,532	76,805	2,038	0.10	3.70	
Town and County	2,831	55,964	2,124	0.05	1.33	
Total	37,539	384,535	13,595	0.10	2.76	
Projected FY 2015	33,093	451,625	15,544	0.07	2.13	

Figure 3-1 details FY 15 ridership by month. As seen in the bar graph, ridership seems somewhat correlated with the weather, as ridership dips during colder months, which is typical. This leads to a system minimum and maximum monthly ridership that may differ by 70 percent, whereas individual route minimum and maximum monthly ridership can

be even more volatile and can fluctuate by more than 150 percent, as seen in the Brunswick route. The in-town BABS line exhibits the most consistent ridership with only a 64 percent difference between FY 15 minimum and maximum figures. Overall, the BABS system facilitates roughly 3,100 trips or 1,150 passengers each month.

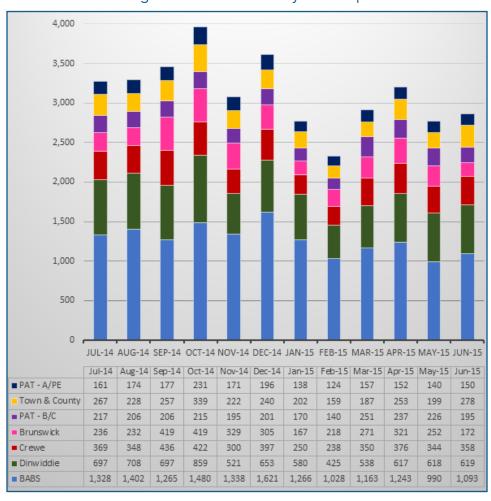


Figure 3-1: FY 15 Monthly Ridership

## 3.3.2 System Performance Metrics

This section analyzes BABS' system performance over three fiscal years, FY12, FY13, and FY15<sup>5</sup>. The study 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 gleaned 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. Below are

a series of tables that enumerate these measures, followed by a discussion of the more salient 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 BABS system. A 3-year retrospective of operating and capital expenses and revenues is provided in Appendix 3A. This data includes years 2012, 2013, and 2015.

<sup>&</sup>lt;sup>5</sup> Due to BABS' change in their fiscal year calendar, FY14 was not reported as a complete year and therefore was not used in this analysis. FY12 and FY13 were used instead. Each of these fiscal years ran from October to September. The new fiscal calendar, reflected in FY15, runs from June to July.

Table 3-5: Annual Ridership By Route, Three-Year Trend

Douto	Annual Ridership				
Route	FY12	FY13	FY15	% ∆	
PAT – Amelia/Prince Edward	3,630	2,708	1,971	-46%	
BABS	20,692	18,408	15,217	-26%	
Brunswick	2,280	2,568	3,341	47%	
PAT – Buckingham/Cumberland	3,801	3,035	2,459	-35%	
Crewe	4,468	4,443	4,188	-6%	
Dinwiddie	6,928	6,717	7,532	9%	
Town and County	3,270	3,420	2,831	-13%	
Total	45,069	41,299	37,539	-17%	

As seen in the table above, five of the seven routes have lost ridership, of which both PAT routes have fallen by almost 50 percent. BABS, which had the greatest drop in real figure ridership (5,475) dropped by a quarter. The drop in ridership cannot be explained by the cessation of service to Fort Pickett, which ceased operations at the beginning of FY13, and whose figures are not included in the

tables<sup>6</sup>. Only two of the seven routes have increased ridership during the past 4 years; Dinwiddie and Brunswick. Systemwide, ridership fell 17 percent, or roughly 7,500 riders. These changes could, in part, be explained by multiple factors, such as an increase or decrease of service, which is examined in the following tables.

Table 3-6: Revenue Miles, Three-Year Trend

Route	Revenue Miles					
Route	FY12	FY13	FY15	% ∆		
PAT – Amelia/Prince Edward	90,221	87,058	85,801	-5%		
BABS	37,778	37,224	37,003	-2%		
Brunswick	19,801	20,639	29,573	49%		
PAT – Buckingham/Cumberland	88,166	84,919	75,657	-14%		
Crewe	29,558	29,123	26,797	-9%		
Dinwiddie	80,038	77,992	76,805	-4%		
Town and County	58,105	57,329	55,964	-4%		
Total	403,667	394,285	387,600	-4%		

In Table 3-6, systemwide revenue mile service dropped four percent. When examining the routes individually, two of the three routes with the greatest percentage decrease in service miles were the two PAT routes, which may explain their significant drops in ridership. The significant increase in Brunswick revenue miles likely explains the 40 percent increase in ridership from FY 12 to FY15. Conversely, four of

the seven routes did not undergo significant changes in revenue miles and other factors likely affected changes in ridership. For example, BABS decreased service by two percent, but ridership fell by 26 percent, whereas Dinwiddie did not see a significant change in revenue miles, yet ridership increased nine percent.

<sup>&</sup>lt;sup>6</sup> Ridership for Fort Pickett in FY12 averaged one daily rider.

Table 3-7: Revenue Hours, Three-Year Trend

Doute	Revenue Hours					
Route	FY12	FY13	FY15	% Δ		
PAT – Amelia/Prince Edward	2,386	2,185	2,225	-7%		
BABS	3,352	3,232	3,274	-2%		
Brunswick	757	801	1,161	53%		
PAT – Buckingham/Cumberland	2,262	2,125	1,841	-19%		
Crewe	896	954	932	4%		
Dinwiddie	2,108	2,052	2,038	-3%		
Town and County	2,183	2,189	2,124	-3%		
Total	13,944	13,538	13,595	-3%		

Similar to the previous table, examining revenue hours is another measure to assess changes in service and may explain subsequent changes in ridership. Changes in revenue hours, in most cases, should correspond with the changes in revenue miles. The changes in revenue hour service closely mirror the trends in the previous table. Again, the Brunswick route had the highest increase, at 53 percent, which would further explain the 40 percent

increase in ridership. Overall, systemwide revenue hours dropped three percent during the last three fiscal years. The data reveals that Crewe revenue hours increased four percent although revenue miles dropped nine percent. The discrepancy is likely due to how drivers report miles and hours, as there was no significant change to this route between FY12 and FY15.

Table 3-8: Passengers per Revenue Mile

Bouto	Passengers per Revenue Mile				
Route	FY12	FY13	FY15	% ∆	
PAT – Amelia/Prince Edward	0.04	0.03	0.02	-43%	
BABS	0.55	0.49	0.41	-25%	
Brunswick	0.12	0.12	0.11	-2%	
PAT – Buckingham/Cumberland	0.04	0.04	0.03	-25%	
Crewe	0.15	0.15	0.16	3%	
Dinwiddie	0.09	0.09	0.10	13%	
Town and County	0.06	0.06	0.05	-10%	
Total	0.11	0.10	0.10	-13%	

When assessing system performance on the number of passengers per revenue mile, five of the seven routes saw decreases over ten percent. The Crewe route saw a slight increase in passengers per revenue mile, which is a result of their decreased mileage, with

marginal decreases in ridership. Dinwiddie also saw an increase, a direct result of increased ridership, with a slight decrease in revenue miles. The BABS route is the most productive at roughly one passenger for every two miles traveled, whereas the PAT routes were the lowest performing routes with roughly 0.02 passengers per mile, or 1 passenger every 50 miles. Overall, however, figures are down 13 percent, from

0.11 passengers per mile to 0.10. The low-figures are a result of the long distances that most of the routes travel in order to connect disparate communities.

Table 3-9: Passengers per Revenue Hour

Route	Passengers per Revenue Hour				
Route	FY12	FY13	FY15	% ∆	
PAT – Amelia/Prince Edward	1.52	1.24	0.89	-42%	
BABS	6.17	5.70	4.65	-25%	
Brunswick	3.01	3.21	2.88	-4%	
PAT – Buckingham/Cumberland	1.68	1.43	1.34	-21%	
Crewe	4.99	4.66	4.49	-10%	
Dinwiddie	3.29	3.27	3.70	12%	
Town and County	1.50	1.56	1.33	-11%	
Total	3.23	3.05	2.76	-15%	

Similar to the previous table, most routes decreased in passengers per revenue hour. The two PAT routes saw significant decreases, with the Amelia route serving less than one passenger per hour. The Dinwiddie route was the only route that increased as a result of increased ridership without an increase in revenue hours, serving nearly four riders per hour. Systemwide, passengers per revenue hour fell 15 percent.

The following five tables incorporates operating cost as a measure to reveal system performance by cost per passenger. First, some of the routes need to be combined due to how funding is allocated to BABS. The Amelia and Buckingham routes were collated into a single PAT category, whereas the Crewe and BABS line were grouped as Nottoway. The PAT routes, when combined, reveals the overall drop in ridership within the PAT service area. Nottoway routes dropped 23 percent, although the majority of the ridership is associated with the BABS route.

Table 3-10: Ridership by Route Funding

Route	Ridership by Allocation Funding					
Route	FY12	FY13	FY15	% ∆		
PAT	7,431	5,743	4,430	-40%		
Nottoway	25,160	22,851	19,405	-23%		
Brunswick	2,280	2,568	3,341	47%		
Dinwiddie	6,928	6,717	7,532	9%		
Town and County	3,270	3,420	2,831	-13%		
Total	45,069	41,299	37,539	-17%		

		•		
Davita	Operating E	nding Allocation (in 2015 dollars		
Route	FY12	FY13	FY15	% Δ
PAT	\$119,607	\$115,854	\$103,445	-14%
Nottoway	\$166,046	\$138,157	\$123,760	-25%
Brunswick	\$26,652	\$28,544	\$36,316	36%
Dinwiddie	\$70,643	\$61,806	\$65,369	-7%
Town and County	\$52,336	\$52,551	\$55,565	6%
Total	\$435,284	\$396,912	\$384,455	-12%

Table 3-11: Operating Expenses by Funding Allocation

Operating expenses are funded, in part, by the county in which the route operates. These do not include capital costs to purchase new vehicles, but does include maintenance, fuel, and labor costs, among others. The figures in Tables 3-11 through Tables 3-14 have been adjusted for inflation<sup>7</sup> and all are in FY15 dollars. Nottoway and PAT routes have

seen significant decreases in operating expenses, whereas Brunswick and Town and County had cost increases of 36 and six percent, respectively. Brunswick County's significant increase in costs explains the increases across all other metrics previously discussed. Systemwide, FY15 operating expenses have steadily decreased since FY12.

ı	able	3-	12:	Cost	per	Passen	ger

Route	Cost per Passenger (in 2015 dollars)				
Route	FY12	FY13	FY15	% ∆	
PAT	\$16.10	\$20.17	\$23.35	45%	
Nottoway	\$6.60	\$6.05	\$6.38	-3%	
Brunswick	\$11.69	\$11.12	\$10.87	-7%	
Dinwiddie	\$10.20	\$9.20	\$8.68	-15%	
Town and County	\$16.00	\$15.37	\$19.63	23%	
Total	\$9.66	\$9.61	\$10.24	6%	

The cost per passenger presented in Table 3-12 was calculated by taking the inflation adjusted costs and dividing by the number of annual riders. Thus all metrics are in 2015 dollars, which allows for an even comparison across years. The PAT routes have consistently been the most expensive to operate, with costs increasing 45 percent throughout the period of study. This is likely due to the greater proportion of ridership loss to service reductions. Likewise, Town and County increased 23 percent. Nottoway routes are the most cost efficient at \$6.38 per passenger and decreased their costs by three percent. Despite the increase in operating expenses, the Brunswick route has seen a decrease in costs per passenger

due to the increased ridership that occurred with an increase in service. The Dinwiddie route has likewise seen efficiency gains with passenger costs declining 15 percent, due to increasing ridership and decreasing costs. Overall, however, costs per passenger have steadily increased over the past three fiscal periods by six percent, to \$10.24.

Despite the increase in operating expenses, the Brunswick route has seen a decrease in costs per passenger due to the increased ridership that occurred with an increase in service. The Dinwiddie route has likewise seen efficiency gains with passenger costs declining 15 percent, due to increasing ridership and decreasing costs

Table 3-13: Costs per Revenue Mile

Route	Cost Per Revenue Mile (in 2015 dollars)				
Route	FY12	FY13	FY15	% ∆	
PAT	\$0.67	\$0.67	\$0.64	-4%	
Nottoway	\$2.47	\$2.08	\$1.94	-21%	
Brunswick	\$1.35	\$1.38	\$1.23	-9%	
Dinwiddie	\$0.88	\$0.79	\$0.85	-4%	
Town and County	\$0.90	\$0.92	\$0.99	-10%	
Total	\$1.08	\$1.01	\$0.99	-8%	

The costs per revenue mile also was compared in FY15 dollars, with the calculation showing a modest decrease for most routes. With the Nottoway routes seeing a decrease of 21 percent, or \$.53 cents per mile, although it is still the most expensive route permile, most of which is due to the service provided

on the low-mileage in-town BABS route. PAT routes have the lowest cost per revenue mile, which can be attributed to long-distances traveled along the route. Systemwide, costs per mile have remained steady for the 3-year period with a slight decrease of \$.09 cents per mile.

Table 3-14: Costs per Revenue Hour

Route	Cost per Revenue Hour (in 2015 dollars)				
Route	FY12	FY13	FY15	% ∆	
PAT	\$25.73	\$26.88	\$25.44	-1%	
Nottoway	\$39.09	\$33.01	\$29.42	-25%	
Brunswick	\$35.22	\$35.66	\$31.28	-11%	
Dinwiddie	\$33.51	\$30.12	\$32.08	-4%	
Town and County	\$23.97	\$24.00	\$26.16	9%	
Total	\$31.22	\$29.32	\$28.28	-9%	

Cost per revenue hour patterns are similar to the findings in the previous table. Nottoway and Brunswick routes have seen the highest decreased costs per revenue hour. Town and County was the only route that increased in cost per revenue hour, due to the combination of a decrease in revenue hours but an increase in operating costs. Systemwide, costs per revenue hour have steadily decreased.

With the exception of the Brunswick and Dinwiddie routes, ridership is down systemwide. The Dinwiddie route is unique in that ridership has increased despite decreases in revenue miles, hours, and operating costs, whereas the Brunswick appears to have increased service to meet existing demand.

Despite significant cuts in operating costs for PAT routes of nearly 20 percent, costs per passenger have increased significantly, as the two measures do not necessarily follow a linear relationship. It was stated at the beginning of this chapter, that it is more useful to analyze the data by individual routes. It is apparent that although cost efficiencies systemwide have improved in terms of cost per revenue mile and hour, it is now more expensive to transport passengers (as a unit cost) than in FY12. It must be noted, however, that loss of ridership could be attributed to more than reductions in service, but to other factors, such as an improved economy or route restructuring.

# 3.4 System Evaluation

This section is the evaluation of the BABS system. The evaluation was conducted in a number of ways. First, individual route performance was compared against BABS service standards. Then, the BABS network was compared to four peer agencies (Farmville, Pulaski, Bristol, and Graham) operating in rural counties across Virginia. Third, an on-board survey was conducted and the results were summarized here. Finally, stakeholder and focus group interviews were conducted in the BABS service area, with the summary provided in Section 3.4.4. Each of these sections provides additional supporting evidence used to evaluate the BABS system.

#### 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 which, "monthly systemwide fixed route ridership should maintain levels equivalent to at least 0.10 passenger trips per revenue mile". As seen in the accompanying Figure 3-2, BABS has hovered close to the service standard throughout the fiscal year, although never dropping lower than 0.08 riders per revenue mile, which was the last TDP standard. As the route did not fall below the current standard for more than 12 months, corrective measures do not need to be taken. The in-town BABS route has a higher standard due to the route serving a more urban environment, "should maintain a level equivalent to 0.20 passenger trips per revenue mile." This standard level has been met and exceeded for every month in FY15, as seen in Figure 3-3.

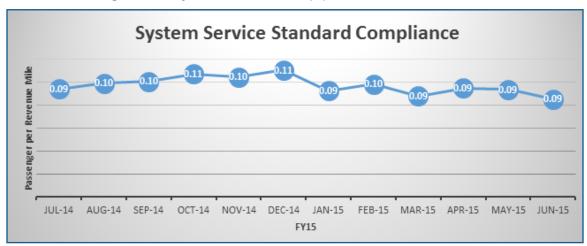
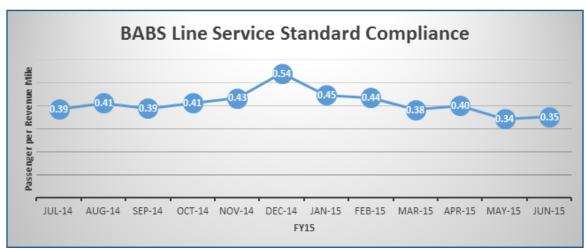


Figure 3-2: Systemwide Ridership per Revenue Mile in FY15





The farebox recovery ratio standard for each route was identified as five percent, as identified in Chapter 2. As seen in Table 3-15, the farebox recovery ratio exceeded the five percent standard for four of the seven system routes (except for PAT and Brunswick routes) and on a systemwide level. The PAT were the poorest performers whereas the Nottoway routes far exceeded the standard, although this may not be the case for the Crewe route. Fare collection is up roughly two thousand dollars from 2010, while system expenses have decreased, which would explain the rise in the farebox recovery ratio.

Table 3-15: FY15 Farebox Recovery Ratio

Farebox Recovery Ratio						
Route	FY15	Revenue	Ratio			
PAT	\$104,031	\$3,880	3.7%			
Nottoway	\$124,462	\$10,183	8.2%			
Brunswick	\$36,521	\$1,641	4.5%			
Dinwiddie	\$65,739	\$3,812	5.8%			
Town and County	\$55,880	\$2,879	5.2%			
Total	\$386,634	\$22,395	5.8%			

#### 3.4.2 Peer System Review

A peer review is a good way to see how the BABS network performs compared to other similar sized rural transit systems in Virginia. FY13 was selected for BABS data because it is the most recent data available for a full year (with FY14 only reporting nine months from October 2013 to June 2014). The purpose of this section is to provide an understanding of how similar systems are performing and assess whether BABS' figures are significantly different, or rather, reflect wider trends. Other factors like geography and the labor market also may contribute to the differences in performance.

Table 3-16 compares BABS with Farmville Area Bus (FAB), Pulaski Transit, Bristol Transit, and Graham Transit. All of the systems are categorized as rural transit operators and serve small communities and municipalities in rural areas of Virginia. All of the systems also primarily use cutaway vehicles to transport passengers. As seen, the BABS system is significantly different with regards to service area due to the operation of routes in seven counties under one service provider. When compared to the average of the four systems, BABS has lower passenger performance in terms of passenger per revenue mile,

hour, and higher passenger costs. This can largely be attributed to the significantly longer distances that BABS route travels, as the revenue miles are more than twice the average (and as a result, translates into a lower cost per mile figure).

However, systems such as Bristol and FAB primarily serve a single municipality or town and FAB also operates a paratransit service, whose figures are included in the analysis. BABS operates deviated fixed-route service which is similar to paratransit service in some respects (all vehicles are ADA accessible) but not as robust. A better comparison would be to compare the route serving Blackstone with FAB and Bristol route networks. If this were done, the figures would be significantly closer with the averages. Conversely, the other BABS routes, particular the two PAT routes, would more accurately be compared with the two Prince Edward County routes that operate under FAB. Therefore, while the peer system review provides a way to compare rural transit systems with other rural transit systems, the purpose and makeup of the routes within the system, can lead to misconceptions on route performance.

Table 3-16: Peer System Analysis for FY13

Category	BABS	FAB	Pulaski	Bristol	Graham	Average <sup>8</sup>
Ridership	41,299	126,497	81,430	94,993	32,862	83,946
Rev Miles	394,285	213,850	189,617	129,275	104,200	159,236
Rev Hours	13,538	12,584	13,784	9,438	6,920	10,682
Operating Cost	\$390,878	\$643,888	\$506,809	\$437,595	\$252,804	\$460,274
Pax per Rev Mile	0.1	0.59	0.4	0.7	0.3	0.5
Pax per Rev Hour	3.1	10.1	5.9	10.1	4.7	7.7
Cost per pax	\$9.46	\$5.09	\$6.22	\$4.61	\$7.69	\$5.90
Cost per rev mile	\$0.99	\$3.01	\$2.67	\$3.38	\$2.43	\$2.87
Cost per rev hour	\$28.87	\$51.17	\$36.77	\$46.37	\$36.53	\$42.71
Service Area	3,398	354	330	13.2	520	304
Fleet Size	19	14	11	4	4	8

<sup>&</sup>lt;sup>8</sup> The average excludes BABS.

#### 3.4.3 On-Board Survey Results

An on-board survey was conducted to gauge rider preferences and other pertinent information from all of the routes in the BABS system. The survey was conducted over a 1-week period from September 28 through October 1, 2015. Each route was surveyed once, over the entirety of 1 full-day service. Team members distributed and assisted riders in completing the one-page survey. The survey consisted of general demographic questions, travel behavior, and attitude towards different aspects of BABS service and the ranking of potential improvements. The survey is very similar to the previous TDP, but some of the questions were replaced with ones enquiring about transfer activity and patronage of other routes in the BABS system. This change was to determine if changes to scheduling would be beneficial to aid riders.

A total of 71 riders completed the survey. Although 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 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, is 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, we limited the answers to three options; youth, middle-aged, and senior. Although most respondents fell into the middle category (20-59), the elderly do appear to constitute a large minority (23 percent). Teenagers constitute only four percent, and outside of commuting to SVCC, do not appear to use the system in large numbers.

Education: More than half of surveyed riders do not have education beyond a high school degree. The survey revealed eight riders who professed having a college degree or higher and had varying reasons for taking transit.

Frequency: Slightly more than half of the riders use the service "frequently" (more than once a week). Many of the Blackstone riders did not answer, probably due to the shorter route and time constraints, so the overall figure is most likely much higher.

Using Multiple Routes: Roughly half of the riders only use one route. The in-town BABS route had the highest number of respondents who used it as either their primary or secondary route. One rider listed Farmville, which was not an option. There are likely more riders who would have selected this had it been an option. Many of the respondents though appeared confused and listed the same route they were currently riding on.

Transfer Activity: This was a similar question to the one about using multiple routes, and elicited roughly the same results. Most people riding did not transfer, a quarter didn't answer, but 13 did transfer. Most of these transfers involved BABS in some way but the team received fewer transfers than expected from Dinwiddie riders. Again, there may have been some confusion with the question as many of the Dinwiddie riders probably transfer to a Petersburg bus at some point as half of the respondents put the Petersburg Transit Facility as their destination.

Origin-Destination: Work and shopping constituted the majority of trips, whereas essential civic or healthcare needs, such as medical and government services do not constitute a large number of trips, most likely due to the infrequent need for those services. Home trips were listed as an option but excluded from the analysis.

Reason for Riding: This is a sensitive question to ask, and some riders did not answer the question, even anonymously. More than half of the respondents either did not answer or answered "Other". Many of those who answered "Other" did not clarify, or listed some trip destination or trip purpose.

Service Satisfaction: The riders are generally very satisfied. The area that had the least satisfaction was frequency of service and with some routes making less than half a dozen round trips a day. The current fare price was uniformly well-received, likely due to the fact that it hasn't changed since the inception of the system despite inflation. The availability of bus information was fairly well-rated but may increase with the creation of a system-map and updated website.

Improvements: Increasing bus frequency was the highest rate priority for most surveyed riders. Expanding coverage does not appear to be a priority and connecting with other systems also was a low priority. Real-time tracking information also was very low, the lowest, in fact. This is likely due to the older demographic of the riders. The team did not ask questions regarding smart phone ownership and probably should have, but some of the students we spoke with at the SVCC campus, who owned smart phones, said they could simply call dispatch for updates on bus positions and were pleased with this service. This may be the best option for now and attempts to make this more widely known may be warranted.

#### 3.4.5 Stakeholder Interviews

Stakeholder interviews were conducted over 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 BABS service is perceived by those who are responsible for its funding, and by those who use the service. From the meetings there appears to be a consensus that BABS is an important service for the various communities, and all those interviewed expressed appreciation and satisfaction in the centralized structure that allows one agency to operate routes across multiple counties. However, some administrators also expressed a desire for more frequent communication from BABS regarding operating costs and progress reports. Others also expressed a desire to have access to updated route materials to show prospective businesses. Although officials were generally very pleased with BABS, few expressed interest in expanding service. Both cost and a perceived lack of demand for expanding the service were the reasons most often cited. A full summary of each interview is provided in Appendix 3C.

From the meetings there appears to be a consensus that BABS is an important service for the various communities, and all those interviewed expressed appreciation and satisfaction in the centralized structure that allows one agency to operate routes across multiple counties

#### 3.4.6 Focus Group Interviews

Focus group interviews were conducted with SVCC students at the Christiana campus on September 30, 2015. Riders of the Brunswick route were interviewed,

but an attempt to meet with student non-users of the route proved unsuccessful. Interviewed riders were generally pleased with the service, citing lowcost fares and reliability. The riders did, however, ask for increased payment options and noted difficulty connecting from Crewe to the Brunswick on Wednesdays. Summaries of each interview is included in Appendix 3C.

#### 3.4.7 ITS Technology Review

ITS technology, defined as on-board cameras, automatic vehicle locators (AVLs), traffic signal priority (TSP) or automatic passenger counters (APCs) is not currently employed by BABS on any of its vehicles.

#### 3.4.8 Facility and Equipment Review

BABS is headquartered at their maintenance facility, located at 101 BABS Lane, Blackstone, Virginia 23824. Constructed in 2008, the facility includes six bays and one wash bay. The high number of bays relative to the fleet size is due to the maintenance facility serving all other Blackstone municipal vehicles. Prior to the construction of the maintenance facility, BABS would have the vehicles serviced at the Town Hall garage and store the vehicles in the Blackstone Police Department lot, with infrequent break-ins and acts of vandalism committed against the vehicles. Today, BABS vehicles are stored at the maintenance facility and have not experienced further criminal acts.

BABS stop facilities are mainly located in the Town of Blackstone. All designated stops within the town have BABS signage, which includes the BABS phone number. Benches are available at a minority of designated stops, while only one BABS shelter is provided in the entire route network, located at the Blackstone Medical Center. Route segments between communities typically operate on a flag stop system, where passengers wait along a fixed portion of the route and flag the driver to stop. There are currently no plans to expand the number of shelters. Other issues BABS has with rural stop infrastructure is a lack of local funding for infrastructure and issues with the Virginia Department of Transportation (VDOT) approving signage and stop infrastructure within state right-of-way on rural routes. Designated stops in communities other than Blackstone typically lack stop signage or other infrastructure. There are also instances of signage in locations that did not correspond with the route map. Most major

destinations, such as SVCC in Alberta, have benches and signage. Shelters and benches also are available at the Petersburg Transit Center, which is the terminal eastbound destination for the Dinwiddie express. With regards to bicycle facilities, most of the vehicles are equipped with front-end bicycle racks.

#### 3.4.9 FTA Title VI and Triennial Review

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

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

#### 3.5 Conclusions

The finding of this chapter is one of contrasts, between rural and suburban portions of the BABS service area, and between demographic and system performance findings for the BABS network. The demographic review shows that most of the BABS service area has seen a slight decrease in population and a lack of economic development. The one exception to this are areas closest to Richmond and Petersburg in Amelia and Dinwiddie counties, which are experiencing outward suburban growth tied to their respective cities. The result is a rural-suburban contrast. In the rural parts of the service area little has changed. The potential for additional transit riders is occurring only in the developing suburban parts of the service area.

The system performance review is another study in contrast. One would think that stagnant demographic and development trends would mean that ridership would also be static. However, ridership is indeed dropping across most routes. The longer view shows that since 2009 BABS has undergone an expansion and then a contraction in service, with both the

Blackstone Trolley and the deviated fixed-route to Fort Pickett having ceased operations due to low ridership. The remaining BABS routes have generally showed signs of ridership decline. Two routes that have improved are the Dinwiddie and Brunswick routes. Brunswick ridership has improved, in part, because of a significant increase in service, with the increases enough to improve the cost per passenger as well. The Dinwiddie route, on the other hand, increased ridership despite a decrease in funding and a loss of service hours and miles. Therefore, while demographic trends may point to future issues, the Brunswick example shows that an increase in service can increase ridership and route efficiencies, while Dinwiddie shows that future resources also should be channeled towards growth areas.

In order to reverse the trend of declining ridership on other routes, especially in a climate where funding to expand service may be difficult, finding further efficiency gains in the existing service may be one of the best options. The BABS service area is already one of the largest in the state and shifting the approach from one of coverage, to one that is more balanced, could be helpful. This strategy among others, will be further examined in the subsequent chapters, to determine a cost-effective and sensible approach to enhancing BABS service.



# CHAPTER 4: SERVICE IMPROVEMENT EVALUATION

### Chapter 4: Service Improvement Evaluation

The primary focus of this chapter is service improvements for the BABS transit network. Section 4.1 reviews demographics in the BABS network, which is used to inform service expansion projects for the system. Section 4.2, Proposed Service Improvements, includes a description of each potential improvement along with an estimate of service hours, operations cost, capital cost, and potential riders for each improvement. Section 4.3 evaluates all of the improvements, while Section 4.4 presents the final recommendations.

#### 4.1 Demographic Overview

This section reviews demographics in the BABS service area, including Amelia, Brunswick, Buckingham, Cumberland, Dinwiddie, Lunenburg, and Nottoway counties. Table 4-1 shows demographics for 2010 (from the US Census) and 2020 (projected by the Virginia Employment Commission). As noted in Chapter 3, VEC projections tend to be imprecise because they are completed for a ten-year period based on 2010 census data.

Table 4-1: 2010 and 2020 Demographics by County

	Area	Area 2010 Demographics (US Census)							2020 Demographics (projected)						
	Sq Mi	Total	White	Black	Asian	Hispanic	Senior	Density	Total	White	Black	Asian	Hispanic	Senior	Density
Amelia	359	12,690	9,332	2,932	27	290	1,999	35.3	13,413	9,764	2,968	50	532	2,619	37.4
Buckingham	584	17,146	10,644	6,014	63	288	2,452	29.4	17,761	10,741	6,253	101	504	3,180	30.4
Brunswick	563	17,434	7,048	9,992	49	298	2,882	31.0	17,191	6,603	10,017	82	511	3,435	30.5
Cumberland	300	10,052	6,427	3,278	35	181	1,617	33.5	10,623	6,676	3,388	57	352	2,122	35.4
Dinwiddie	507	28,001	17,899	9,204	122	674	3,826	55.2	29,542	18,576	9,487	210	1,273	4,732	58.3
Lunenburg	432	12,914	7,856	4,487	25	470	2,221	29.9	12,951	7,617	4,434	49	819	2,770	30.0
Nottoway	316	15,853	8,698	6,227	50	609	2,521	50.2	16,034	8,746	6,253	89	1,059	3,122	50.7

Table 4-2 dives deeper into the numbers by calculating the overall change in population, as well as the percent change by race and change in population density.

Table 4-2: 2010-2020 Change in Demographics

			Cha	nge		
	Total Population	Percent White	Percent Black	Percent Asian	Percent Hispanic	Percent Senior
Amelia	723	-1%	-1%	0%	2%	4%
Buckingham	615	-2%	0%	0%	1%	4%
Brunswick	-243	-2%	1%	0%	1%	3%
Cumberland	571	-1%	-1%	0%	2%	4%
Dinwiddie	1,541	-1%	-1%	0%	2%	2%
Lunenburg	37	-2%	-1%	0%	3%	4%
Nottoway	181	0%	0%	0%	3%	4%

#### 4.1.1 Total Population

Overall, most counties are projected to have modest population growth. Dinwiddie County leads the way due to its proximity to Petersburg, while Amelia, Buckingham, and Cumberland also show growth due to their proximity to corridors leading to Richmond (US 60 and US 360). Brunswick County is expected to lose population, while Lunenburg and Nottoway counties remain flat.

The calculated population density matches these trends, with the counties closer to Richmond and Petersburg experiencing positive change in population density. Figure 4-1 shows population density by square mile from the 2010 US Census. The towns of Blackstone, Crewe, Victoria, and Kenbridge show higher population density than the surrounding area. Dinwiddie County is interesting because of the contrast between the higher density northeast corner (adjacent to Petersburg) and the rest of the county.

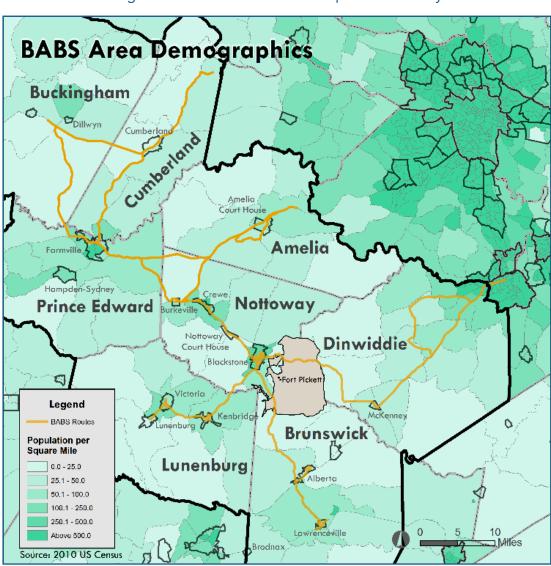


Figure 4-1: BABS Service Area Population Density

#### 4.1.2 Racial Overview

While populations in most counties are projected to grow by 2020, there is a disparity between growth trends amongst racial groups. As shown in Table 4-2, all counties show a decrease in the percentage of white residents, and some also see a decrease in the percentage of black residents. Both groups are growing at a slower rate than other racial groups across the seven counties. Overall, Hispanic and Asian minority groups are projected to increase at the greatest rates, matching racial demographic trends across Virginia and the country.

Figures 4-2 through 4-5 show percentages of population for white, black, Hispanic, and Asian residents from the 2010 US Census. While there exists residency data for white and black residents that goes back decades (if not centuries), the patterns for Hispanic and Asian residents are only now emerging. The eastern sides of Lunenburg and Brunswick Counties are places where Hispanics lived in 2010, and it is likely this trend will continue in 2020. This emerging transit market warrants further investigation in the future.

#### 4.1.3 Senior Population

Another population group with potential transit rider growth is represented by senior citizens (defined as those of ages 65 and older). All counties show growth in senior population, which mirrors the national trend due to the Baby Boomer generation reaching retirement age. As people age they tend to drive less frequently, but still require transportation for daily activities like attending doctor appointments and shopping at the grocery store. Figure 4-6 shows the percent of the senior population from the 2010 US Census. Western Nottoway County shows the largest concentration of seniors, with northern Brunswick County also having a high share. Neither of these places is located along an existing transit route. This trend of growing populations of seniors should be monitored, and it should be determined if additional transit service is needed at a future time.

Figure 4-2: Percent White Population, 2010 US Census

Figure 4-3: Percent Black Population, 2010 US Census **BABS Area Demographics** 

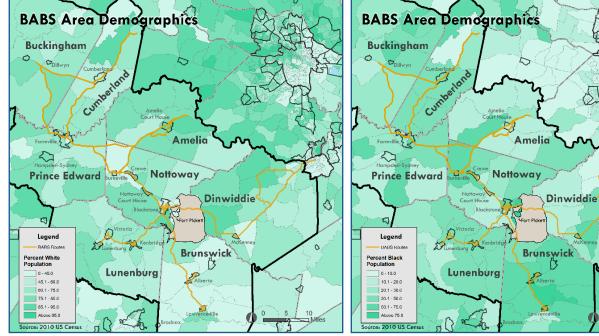
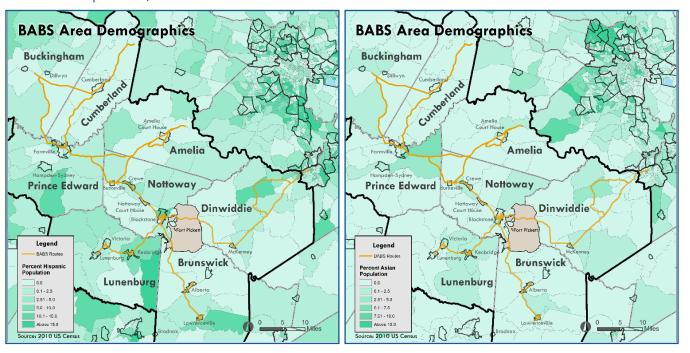


Figure 4-4: Percent Hispanic Population, 2010 US Census

Figure 4-5: Percent Asian Population, 2010 US Census



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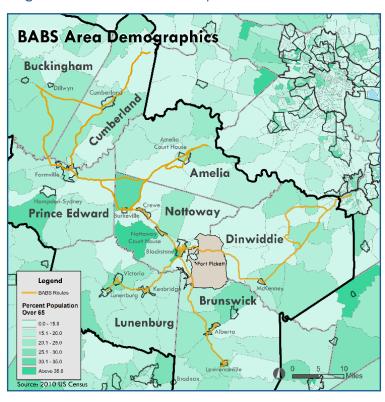


Figure 4-6: Percent Senior Population, 2010 US Census

#### 4.2 Proposed Service Improvements

This section describes nine proposed service improvements for the BABS system, along with an estimate of operations cost, capital cost, and ridership.

The existing FY2015 cost per revenue hour for each operator in the BABS network is shown in Table 4-3. The cost per revenue hour includes transportation costs (fuel, driver labor, vehicle maintenance), but does not include administration costs because it is assumed the BABS administration would remain the same with each proposed project. The costs shown in Table 4-3 are used to estimate operations cost in this section of Chapter 4.

Table 4-3: Cost per Revenue Hour by Operator

Operator	Cost
Nottoway	\$21.15
Dinwiddie	\$25.98
Brunswick	\$25.24
PAT	\$23.41
Town and County	\$24.28

### 4.2.1 Service Improvement 1: BABS – Extend Service Span

Service improvement 1 proposes to extend the service span of the BABS route so that it ends at 8:00 p.m. instead of the current 5:00 p.m. The extension would apply Monday through Friday, but Saturday service would continue with the same span as existing. This improvement would allow riders that work during the daytime to use the BABS route at night to run errands and participate in recreational activities. It also would allow shift workers that end work after 5:00 p.m. to use transit for their return trip home. Extending hourly service would result in three additional daily trips. Table 4-4 shows the estimated revenue hours for the improvement.

Nottoway		Daily R	ev Hours	5		Annual Days of Operation				Total
		M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
	Existing	11	11	8	0	208	52	52	0	3,276
Blackstone	Proposed	14	14	8	0	208	52	52	0	4,056
	Difference	3	3	0	0	0	0	0	0	780

Table 4-4: Service Improvement 1 Revenue Hours Estimate

- Operations cost: 780 revenue hours x \$27.15 per hour = \$21,177 annually
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 780 hours x 4.65 passengers per hour = 3,627 annual riders

#### 4.2.2 Service Improvement 2: Crewe - Add Wednesday and Friday Service

Currently, the Crewe route operates three days a week; Monday, Tuesday, and Thursday. Conversations with stakeholders and an analysis of the survey results indicates the need for service on all weekdays. Service improvement 2 is the addition of Wednesday and Friday service on the Crewe route. This improvement would allow riders in Crewe and Burkeville to travel to Blackstone for groceries five days a week. It also would allow SVCC students to connect to the school on Wednesdays and Fridays, broadening their education opportunity.

In addition to service expansion, trip scheduling under this improvement would be modified to allow for transfers to the in-town Blackstone route at the Walmart/Food Lion shopping center in South Blackstone. The first morning trip to Blackstone, which currently arrives at 7:48 a.m., would be adjusted to arrive five minutes earlier to allow for transfers to the Blackstone route, instead of requiring potential transfers to wait an additional 55 minutes. Table 4-5 shows the estimated number of revenue hours for this improvement.

Table 4-5: Service	Improvement 2	Revenue	Hours	Estimate
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Nottoway			Dail	y Rev Hrs		Ar	Annual Days of Operation				
INO	ttoway	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs	
	Existing	6	0	0	0	156	0	0	0	936	
Crewe	Proposed	6	6	0	0	208	52	0	0	1,560	
	Difference	0	6	0	0	52	52	0	0	624	

- Operations cost: 624 revenue hours x \$21.15 per hour = \$13,197 annually
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 624 revenue hours x 4.49 passengers per hour = 2,802 annual riders

#### 4.2.3 Service Improvement 3: Dinwiddie – Add One New Midday Trip

Currently the Dinwiddie route has a four hour break in service in the middle of the day. This extended break discourages riders who may have a need or want to travel to Petersburg on non-work related trips and only require to be there for a short period of time. Service improvement 3 would add a new midday trip to the Dinwiddie route to better accommodate these travelers, and provide return service for employees

who have an emergency in the middle of the day. This service improvement would result in an additional 2.5 daily service hours and five additional weekly trips. Table 4-6 shows the revenue hour estimate for this improvement.

Dimerialdia	Daily Rev Hrs				Ar	Annual Days of Operation				
Dinwiddie	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs	
Existing	8	8	0	0	208	52	0	0	2,080	
Proposed	10.5	10.5	0	0	208	52	0	0	2,730	
Difference	2.5	2.5	0	0	0	0	0	0	650	

Table 4-6: Service Improvement 3 Revenue Hours Estimate

- Operations cost: 650 revenue hours x \$25.98 per hour = \$16,887 annually
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 650 revenue hours x 3.70 passengers per hour = 2,405 annual riders

#### 4.2.4 Service Improvement 4: Dinwiddie – Add One New Evening Trip

Service improvement 4 is similar to improvement 3, but the newly added Dinwiddie trip occurs in the evening time period. Adding an evening trip will allow for more flexibility for daytime workers returning home and can facilitate shift workers who get done

later than the 6:00 p.m. end of service. It also will provide a later connection from Petersburg for later evening riders there. Table 4-7 shows the estimated revenue hours for this improvement.

Table 4-7: Service In	nprovement 4 Revenue	Hours Estimate
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Dinwiddie		Dail	y Rev Hrs		Ar	Annual Days of Operation				
Dinwidale	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs	
Existing	8	8	0	0	208	52	0	0	2,080	
Proposed	9.5	9.5	0	0	208	52	0	0	2,470	
Difference	1.5	1.5	0	0	0	0	0	0	390	

- Operations cost: 390 revenue hours x \$25.98 per hour = \$10,132 annually
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 390 revenue hours x 3.70 passengers per hour = 1,443 annual riders

#### 4.2.5 Service Improvement 5: Brunswick – Cost Neutral Route Adjustments

Service improvement 5 is a cost-neutral adjustment to the Brunswick route. The adjustment would remove service to Alberta, replacing it instead with additional service in the morning and afternoon in Lawrenceville. The Alberta branch serves very few riders, however, it is highly likely an additional trip through Lawrenceville would provide greater benefit. The time saved from eliminating service to Alberta would provide an additional 23 minutes in the morning and another 23 minutes in the afternoon for the route. The additional morning roundtrip in Lawrenceville would require roughly 29 minutes?

However, it is important that the route arrives at SVCC in time for 9:00 a.m. classes. Therefore, the first morning trip from the Blackstone Food Lion should leave 15 minutes earlier, at 7:45 a.m. instead of 8:00 a.m., which would facilitate transfers for riders between the Blackstone, Brunswick, and Crewe bus routes.

The leg to the Lawrenceville Food Lion would be excluded due to the need to reach SVCC by 9am.

The Brunswick route also would start its last trip 50 minutes later in the afternoon (2:37 p.m. instead of the current 1:47 p.m.). This would allow riders to connect to the BABS route at the Blackstone Food

Lion at 4:45 p.m. The change in the morning pattern and the effect on the schedule is outlined in a condensed schedule, shown in Table 4-8.

Table 4-8: Brunswick Schedule Adjustment

Charles	AM	Trip	PM	Trip
Stop Location	Existing	Proposed	Existing	Proposed
Food Lion - Blackstone	8:00 a.m.	7:45 a.m.	1:47 p.m.	2:37 p.m.
Danieltown Market	8:14 a.m.	-	2:05 p.m.	-
SVCC	8:23 a.m.	8:08 a.m.	2:14 p.m.	3:00 p.m.
Taft St	8:32 a.m.	8:17 a.m.	2:23 p.m.	3:09 p.m.
Union St	8:36 a.m.	8:21 a.m.	2:27 p.m.	3:13 p.m.
Walnut St	8:38 a.m.	8:23 a.m.	2:29 p.m.	3:15 p.m.
Downtown	8:42 a.m.	8:27 a.m.	2:34 p.m.	3:19 p.m.
Tech Center		8:32 a.m.	2:39 p.m.	3:24 p.m.
Pine Crest Apt		8:34 a.m.	2:41 p.m.	3:26 p.m.
Downtown		8:38 a.m.	2:46 p.m.	3:30 p.m.
Food Lion - Lawrenceville		-	3:00 p.m.	3:44 p.m.
Downtown		8:38 a.m.	3:10 p.m.	3:54 p.m.
Walnut St		8:42 a.m.	3:14 p.m.	4:04 p.m.
Union St		8:44 a.m.	3:17 p.m.	4:07 p.m.
Taft St	8:46 a.m.	8:47 a.m.	3:20 p.m.	4:10 p.m.
SVCC	8:55 a.m.	8:57 a.m.	3:27 p.m.	4:17 p.m.
Main/2nd Alberta	9:00 a.m.	-	3:32 p.m.	-
Samford/Pine Alberta	9:03 a.m.	-	3:35 p.m.	-
Alberta Manor Apt	9:06 a.m.	-	3:40 p.m.	-
Main/2nd Alberta	9:09 a.m.	-	3:43 p.m.	-
SVCC	9:17 a.m.	9:17 a.m.	3:51 p.m.	-
Danieltown Market	-	-	4:00 p.m.	-
Food Lion - Blackstone	-	-	4:17 p.m.	4:40 p.m.

- Operations cost: 0 revenue hours x \$25.24 per hour = \$0 annually
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 260 revenue hours x 2.88 passengers per hour = 749 annual riders<sup>10</sup>

#### 4.2.6 Service Improvement 6: Brunswick – Add Friday Service

Service improvement 6 proposes to add Friday service to the Brunswick route. The expectation is this improvement would have a similar increase in ridership as when Monday service was added in FY15,

benefitting full-time workers and SVCC students that have Friday classes. The connection from Blackstone also would be useful for SVCC students. The additional revenue hours are shown in Table 4-9.

	table 47. Service improvement o Revenue Flours Estimate										
Brunswick	Daily Rev Hrs				Ar	Annual Days of Operation					
brunswick	M-Th	Friday	Saturday	Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs		
Existing	6	0	0	0	208	0	0	0	1,248		
Proposed	6	6	0	0	208	52	0	0	1,560		
Difference	0	6	0	0	0	52	0	0	312		

Table 4-9: Service Improvement 6 Revenue Hours Estimate

- Operations cost: 312 revenue hours x \$25.24 per hour = \$7,875 annually
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 312 revenue hours x 2.88 passengers per hour = 899 annual riders

### 4.2.7 Service Improvement 7: Town and County – Add Two Daily Trips to Blackstone

Currently, the Town and County routes only connects with Blackstone and other BABS routes twice a day, twice a week. Service improvement 7 would make two changes to the route.

The second change would add two additional trips to Blackstone on Tuesday and Thursday. While there are some reservations by Lunenburg administrators about consumer dollars potentially leaving the county with more trips to Blackstone, this view is mistaken. Instead, the additional connectivity to Blackstone would increase economic opportunity for those in the county, thereby increasing dollars being spent in the county. Additional revenue hours associated with this change are shown in Table 4-10.

Table 4-10: Service Improvement 7 Revenue Hours Estimate

Durmarriale		Dail	y Rev Hrs		Ar	Total			
Brunswick	M-Th Friday Saturday			Sunday	M-Th	Friday	Saturday	Sunday	Rev Hrs
Existing	8	9.5	0	0	156	94	0	0	2,141
Proposed	8	11	0	0	156	94	0	0	2,282
Difference	0	1.5	0	0	0	0	0	0	141

- Operations cost: 141 revenue hours x \$24.28 per hour = \$3,423 annually
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 141 revenue hours x 1.33 passengers per hour = 188 annual riders

# 4.2.8 Service Improvement 8: Adjust Start Times to Better Connect Riders on Different Routes

Service improvement 8 would adjust the start times of various routes in order to have them connect at the same time and location, as alluded to in some of the improvements. This adjustment would be cost neutral and would allow riders to connect to different routes in the system.

The first adjustment is for the BABS, Crewe, and Brunswick routes to all connect at the Blackstone Food Lion at 7:45 a.m. and 4:45 p.m. To do this the BABS route would need to be adjusted to arrive 4 minutes later, at 0:45 of every hour. The initial Crewe

trip would start 3 minutes earlier, thus arriving at Food Lion at 7:45 a.m. (instead of 7:48 a.m.). Finally, the Brunswick route would begin its afternoon trip 50 minutes later, which would result in arriving at Food Lion at 4:45 p.m., after which it would turn into the Crewe route for its last trip of the day.

A second adjustment would be for the Dinwiddie route to start at the Blackstone Food Lion instead of the BABS garage facility, shown in Figure 4-7. Adjusting the Dinwiddie route to arrive at 9:45 a.m. at the Food Lion would provide a connection to the BABS route. Adjusting the afternoon Dinwiddie trip to leave Food Lion at 2:45 p.m. (instead of the current 2:15 p.m.) would provide another connection with the BABS route. Table 4-11 summarizes the proposed schedule changes.

Table 4-11: Service Improvement 8 Proposed Schedule Changes

Donto	Arri	vals	Depa	rtures
Route	Existing	Proposed	Existing	Proposed
BABS	7:41 AM	7:45 AM		
Crewe	7:48 AM	7:45 AM		
Brunswick			8:00 AM	7:45 AM
BABS	9:41 AM	9:45 AM		
Dinwiddie	9:47 AM	9:45 AM		
BABS	2:41 PM	2:45 PM		
Dinwiddie			2:15 PM	2:45 PM
BABS	4:41 PM	4:45 PM		
Crewe			4:20 PM	4:45 PM
Brunswick	4:17 PM	4:45 PM		

- Operations cost: 0 revenue hours = \$0,000 annually.
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 370, or 1 percent change in annual ridership<sup>11</sup>

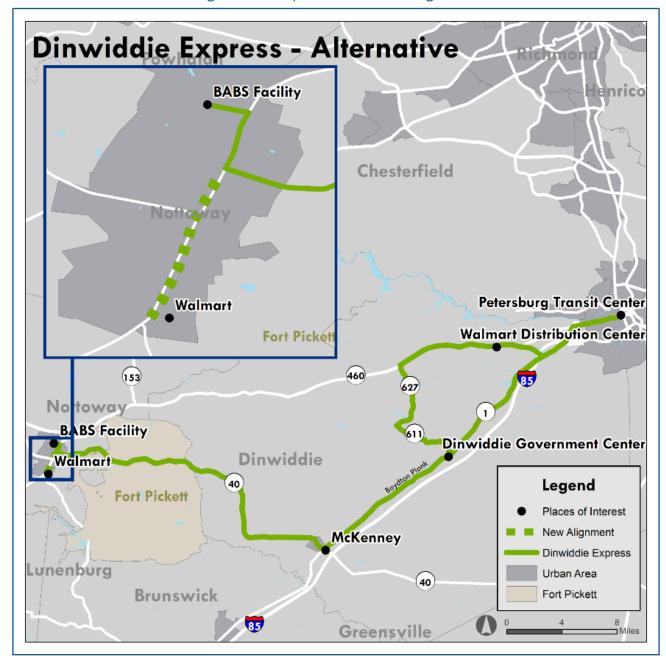


Figure 4-7: Proposed Dinwiddie Alignment

### 4.2.9 Service Improvement 9: New Service to Fort Pickett

Service improvement 9 would be a new route from Blackstone to Fort Pickett. This service improvement was mentioned by Nottoway County stakeholders as a way to connect troops staying at the base for FAST-C (Foreign Affairs Security Training Center) to services in the town. While it is likely that troops at the base might use transit services to go into town, the travel market would be unpredictable. This is

because there is no set schedule as to when troops may be on base for training. Even when they are on base it is up to individual commanders as to whether they can leave the base. Finally, in some cases troops may bring cars to the base.

As a result, a fixed route service would not likely have any more riders than the previous Fort Pickett service that was eliminated in 2013. For evaluation purposes it was assumed a new route would operate three revenue hours per day and 255 service days a year.

Table 4-12: Service Improvement 9 Revenue Hours Estimate

Daily Rev Hrs						Annual Days of Operation				
Nottoway	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	208	52	0	0	780	
Difference	3	3	0	0	208	52	0	0	780	

The evaluation also assumed a similar number of riders per revenue as the previous Fort Pickett route.

- Operations cost: 780 revenue hours x \$21.15 per hour = \$16,497 annually
- Capital cost: 0 new vehicles x \$65,000 = \$0
- Ridership: 780 revenue hours x 0.45 passengers per hour = 351 annual riders

#### 4.3 Evaluation

This section documents the evaluation of the nine service improvement projects described in section 4.2. The nine projects were evaluated using four criteria: operations cost, capital cost, projected ridership, and ease of implementation. Points were assigned to these four categories to come up with a 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-\$15,000	4 points
\$15,000-\$20,000	3 points
\$20,000-\$25,000	2 points
More than \$25,000	1 point

Projected Annual Ridership Gain

More than 3,000	5 points
2,501-3,000	4 points
2,001-2,500	3 points
1,501-2,000	2 points
Less than 1,500	1 point

Capital costs are not expected to be a factor in any of the proposed service improvements. This is because all of the proposed improvements add service to existing routes. Thus, there would be no need for new vehicles or new stop locations.

Implementation was rated on a five-point scale based on how easy the changes would be to make for the service improvement. This category is more qualitative than quantitative, and is based on the opinion of the study team. In general, adjusting the schedule of the Brunswick route (service improvement 5) will take less effort than adding Friday service

to the Crewe route (service improvement 2), which accounts for the difference in points in this category.

Table 4-13 presents the evaluation of the nine service improvements. Of the nine improvements evaluated, the best rated is service improvement 5, which has the ability to add riders with little additional cost. Three other improvements – numbers 1, 2, and 8 – do fairly well with 10 or 11 points each. Most of the other projects rate at 7-8 points, while the Fort Pickett service performs the worst of all the service improvement projects. Recommendations based on this evaluation are presented in the following section.

Table 4-13: Evaluation Matrix

			Opera	tions	Ca	pital	Ridership		Implementation	Total
Project	Route	Description	Cost	Points	Cost	Points	Riders	Points	Points	Points
1	BABS	Extend Service Span	\$16,497	3	0	n/a	3,625	5	2	10
2	Crewe	Add Friday Service	\$13,197	4	0	n/a	2,804	4	2	10
3	Dinwiddie	Add 1 New Midday Trip	\$16,887	3	0	n/a	2,402	3	2	8
4	Dinwiddie	Add 1 New Evening Trip	\$16,887	3	0	n/a	2,402	3	2	8
5	Brunswick	Cost Neutral Route Adjustments	\$0	6	0	n/a	3,844	5	4	15
6	Brunswick	Add Friday Service	\$7,875	5	0	n/a	898	1	2	8
7	Town and County	Add 2 Daily Trips to Blackstone	\$3,423	5	0	n/a	188	1	2	8
8	various	Adjust schedules for better connections	\$0	6	0	n/a	370	1	4	11
9	new	Service to Fort Pickett	\$15,989	3	0	n/a	350	1	1	5

#### 4.4 Final Recommendations

This section presents the final recommendations for the BABS network. These recommendations will inform the rest of the transit development plan, including the operations plan (Chapter 5), the capital plan (Chapter 6), and the financial plan (Chapter 7). There are two sub-sections. One presents the service improvement recommendations, while the other presents additional organization recommendations for the BABS system.

### 4.4.1 Service Improvement Recommendations

There are two challenges with making service improvement recommendations for the BABS network. The first is the fact that there are five providers (PAT, Brunswick, Nottoway, Dinwiddie, and Lunenburg) that each pay in differing amounts to the system and have different expectations for service. This fact makes it extremely difficult to coordinate routes across the network. The second issue is that BABS does not have a dedicated funding source and most service improvements are "pay to play," meaning the service is based on the amount of funding available.

The result of these issues is that resources are not effectively dispersed across the region where they can provide the best return on investment. Dinwiddie may easily come up with additional funds for a new midday trip while Nottoway cannot, even though there is likely a better return by adding service to the BABS route. Thus, service improvements fall into three broad categories:

### Category 1: Should be implemented immediately

These improvements are recommended because they will cost the least to implement other than the administrative cost of adjusting the service.

- Service improvement 5: Cost neutral changes to Brunswick
- Service improvement 8: Schedule adjustments for better connectivity

### Category 2: Should be implemented if funding becomes available

These improvements are fundamentally good ideas, but will only go as far as the funding allows. However, many of the service improvements, such as 1 and 2, could be instituted in parts, as funding becomes available. BABS should lay the groundwork for these improvements with the individual providers.

- Service improvement 1: Extend BABS Service Span
- Service improvement 2: Add Wednesday and Friday Service to Crewe route
- Service improvement 3: Add one new midday trip to Dinwiddie route
- Service improvement 4: Add one new evening trip to Dinwiddie route
- Service improvement 6: Add Friday service to Brunswick route
- Service improvement 7: Add two daily trips to Blackstone for Town and County route

#### Category 3: Should not be implemented

This category includes improvements that should not be implemented. For service improvement 9, the low anticipated ridership and unpredictable travel market make this route a non-starter.

Service improvement 9: New Fort Pickett route

#### 4.4.2 Non-service Recommendations

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

#### Rebrand as Heartland Transit

Objective 2.2 in Chapter 2 states that BABS should rebrand as Heartland Transit in order to promote regional transit travel in the seven county service area. Rebranding is not an inexpensive or easy proposition, and should not be taken lightly. During the course of the TDP update the study team has heard multiple comments about BABS serving the best interest of Blackstone and not the other partner counties. The problem with this view

- is that it is incorrect and marginalizes the need for transit service for many people in the service area.
- The rebranding would seek to improve the view of a Blackstone-centric service. While the umbrella brand would be Heartland Transit, each individual provider would still be named, so services would be Heartland/Blackstone or Heartland/Brunswick, for example. The overall effect would be to disassociate the service with a single town and present it as cohesive service for passengers across a larger swath of Southside Virginia.
- Riders also would see an improvement. The rebranding, along with revised schedules and a new system map (see below), would educate riders on exactly where Heartland Transit goes and how to transfer between routes.

#### Revise the system map

A further recommendation is to redesign the BABS system map (along with rebranding it as Heartland Transit) to show all routes and the seven county area on a single map. This recommendation goes back to the goals set in Chapter 2. Goal 2 states that transit services need to be marketed effectively. Some of the recommended schedule changes would allow for riders to transfer seamlessly between routes and provide a whole new level of connectivity. A new system map showing all of the regional transit services would allow a Town and County rider to realize they can connect to SVCC via the Brunswick route or to Petersburg via the Dinwiddie route. These connections will only be made if riders understand the resources available to them, and a system map is one effective way to communicate the concept.

#### Update the schedule design

■ The current design of the schedules, with both inbound and outbound trips on the same listing, could be confusing to riders, especially those still learning the system. One recommendation is to redesign the schedules to show inbound and outbound trips as separate tables. Table 4-14 shows an example for the revised Brunswick route. This will make the direction and timepoints much easier to understand for all riders. Schedules for all routes are recommended to be updated to this type of table.

The current design of the schedules, with both inbound and outbound trips on the same listing, could be confusing to riders, especially those still learning the system. One recommendation is to redesign the schedules to show inbound and outbound trips as separate tables

Table 4-14: Proposed Schedule Format									
Brunswick Southbound									
Leave Food Lion (Blackstone)	7:45 a.m.	-	-	2:37 p.m.					
SVCC	8:08 a.m.	9:17 a.m.	10:26 a.m.	3:00 p.m.					
Taft St	8:17 a.m.	9:27 a.m.	10:35 a.m.	3:09 p.m.					
Union St	8:21 a.m.	9:30 a.m.	10:39 a.m.	3:13 p.m.					
Walnut St	8:23 a.m.	9:32 a.m.	10:41 a.m.	3:15 p.m.					
Downtown	8:27 a.m.	9:35 a.m.	10:45 a.m.	3:19 p.m.					
Tech Center	8:32 a.m.	9:40 a.m.	10:49 a.m.	3:24 p.m.					
Pine Crest Apt	8:34 a.m.	9:42 a.m.	10:52 a.m.	3:26 p.m.					
Downtown	8:38 a.m.	9:46 a.m.	11:00 a.m.	3:30 p.m.					
Arrive Food Lion (Lawrenceville)	-	9:56 a.m.	11:10 a.m.	3:44 p.m.					
Brunswick Northbound									
Leave Food Lion (Lawrenceville)	-	9:57 a.m.	11:11 a.m.	3:45 p.m.					
Downtown	8:38 a.m.	10:06 a.m.	11:20 a.m.	3:54 p.m.					
Walnut St	8:42 a.m.	10:10 a.m.	11:26 a.m.	4:04 p.m.					
Union St	8:44 a.m.	10:12 a.m.	11:29 a.m.	4:07 p.m.					
Taft St	8:47 a.m.	10:15 a.m.	11:32 a.m.	4:10 p.m.					
SVCC	8:57 a.m.	10:25 a.m.	11:45 a.m.	4:17 p.m.					
Arrive Food Lion (Blackstone)	-	-	-	4:40 p.m.					

Table 4-14: Proposed Schedule Format

#### Provide bi-annual status reports to all providers

■ Interviews with county stakeholders revealed a desire for more communication from BABS management on the state of the network. This was specifically heard in Dinwiddie and Lunenburg counties, but the spirit of these comments could be applied to all BABS routes. The recommendation is for BABS to complete bi-annual reviews (January and July) for each of the five providers - PAT, Nottoway, Lunenburg, Brunswick, and Nottoway. The review should include data on ridership, operations cost, farebox revenues, and anticipated capital costs. This communication is vital so that county administrators know how the route is performing and can anticipate any potential capital costs for the coming 6 months. Communication also can help BABS anticipate any service requests or changes to funding.

This communication is vital so that county administrators know how the route is performing and can anticipate any potential capital costs for the coming 6 months. Communication also can help BABS anticipate any service requests or changes to funding.



# CHAPTER 5: OPERATIONS PLAN

### Chapter 5: Operations Plan

This chapter outlines the service that will be provided over the next six fiscal years. Implementing any of the service improvements detailed in the previous chapter would require a change to BABS' operations plan and, in most cases, show changes in service provided over time. However, as none of the service improvements are recommended for implementation during the six-year period, the team expects service provided to remain constant, barring significant changes in financial resources.

#### 5.1 Existing Services Overview

BABS currently provides deviated fixed-route service to the seven counties that contribute funds for service. Service is typically provided by 14 or 19-passenger van cutaways that are ADA-accessible. The routes are deviated in that, with prior notification, the buses will deviate off of the fixed-route by up to ¾ mile to pick up passengers. BABS does not, however, provide individualized ADA-paratransit type service. Even if the recommendations, detailed in the previous chapter, were instituted, they reflect a continuation of existing service delivery (cutaways) and are not anticipated to change during the course of this TDP. Operational changes, however, may come in the form of route realignment, service expansion,

and schedule modification, resulting in a significant increase of service for passengers.

# 5.2 Planned Service Improvements

In order to have a sense of the amount of service to be provided over the TDP planning horizon, it is useful to outline the service in terms of revenue service miles and hours over time.

The table below shows the extended operations service plan, where the x-axis shows the fiscal years and revenue service miles and hours provided. The y-axis lists the services that are or will be operated in the system. The revenue miles and hours for each service are estimated with a planning horizon of six fiscal years. In acknowledgement of budgetary constraints shared by all of the counties in the service area, none of the service improvements are recommended to be implemented during the course of this TDP. Of course, administrative and financial conditions may change throughout the next six years, whereby BABS could explore immediate or incremental changes to the operations plan within the next six fiscal years.

Table 5-1: Operations Plan Implementation	on
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System	2016		20	17	2018		20	2019		2020		2021	
System	Miles	Hours											
Blackstone	36,993	3,276	36,993	3,276	36,993	3,276	36,993	3,276	36,993	3,276	36,993	3,276	
Brunswick	29,536	1,248	29,536	1,248	29,536	1,248	29,536	1,248	29,536	1,248	29,536	1,248	
Crewe- Burkeville	26,801	936	26,801	936	26,801	936	26,801	936	26,801	936	26,801	936	
Dinwiddie	76,804	2,080	76,804	2,080	76,804	2,080	76,804	2,080	76,804	2,080	76,804	2,080	
Town and County	54,854	2,141	54,854	2,141	54,854	2,141	54,854	2,141	54,854	2,141	54,854	2,141	
PAT-Amelia	64,480	1,430	64,480	1,430	64,480	1,430	64,480	1,430	64,480	1,430	64,480	1,430	
PAT- Cumberland	52,416	1,352	52,416	1,352	52,416	1,352	52,416	1,352	52,416	1,352	52,416	1,352	

<sup>&</sup>lt;sup>12</sup> The revenue service hours and miles reflect existing service and are not expected to change.

If changes were implemented, some improvements could occur within one fiscal year. Other transit services such as the Dinwiddie improvements, would benefit from more incremental change due to the robust changes recommended for the service that would incur a significant number of additional revenue hours and cost. A piecemeal approach would be done in order to gauge ridership changes before proceeding with more expensive elements of the improvement.

5.3 Service Reduction

None of the routes are recommended for service reduction as no improvements are recommended to occur at this time.

In the event that some of the improvements would be implemented, evaluating service reduction in the BABS system must be scrutinized differently due to the disaggregated type of funding that the transit system relies on. As explained earlier, transit funding from one county cannot be used to increase service on another county's route. As a result, it is harder to asses or justify the cuts in service for one county route in comparison to overall system improvements. In other words, cuts in one service will result in less money for BABS, while increases in service for another route, will require more funds from the county that funds that specific route.

With this in mind, service reduction would occur to some of the routes in various forms, although overall, the service recommendations are intended to enhance service in the system In acknowledgement of budgetary constraints shared by all of the counties in the service area, none of the service improvements are recommended to be implemented during the course of this TDP.



# CHAPTER 6: CAPITAL IMPROVEMENT PROGRAM

### Chapter 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 including vehicles, facilities, and equipment. It includes capital projects needed to implement the service recommendations included in this TDP. The recommendations in the CIP reflects those projects for which BABS reasonably anticipates local funding to be available. Recommendations for vehicles, facilities, passenger amenities, tools and equipment, and technology upgrades are included below.

# 6.1 Vehicle Replacement and Expansion Program

This section presents the vehicle replacement and expansion program, including vehicle life cycles, a replacement schedule, and costs. As noted in Chapter 1, BABS currently operates a fleet of 17 revenue service vehicles and three additional nonrevenue support vehicles. Given that several revenue service vehicles are at or exceeding their service life, vehicle replacements will be an important component of the capital program. The revenue service fleet is comprised of cutaway body-on-chassis (BOC) minibuses. These vehicles are ADA-accessible and gasoline powered, with the exception of one diesel powered vehicle. Typically, the cutaways serve the same route for which they are branded, but this is not a requirement. BABS also owns two supervisory vehicles (an SUV and a van) as well as a shop truck. Since all service recommendations are vehicle capital cost-neutral, the focus of this section of the CIP is on vehicle replacement.

The vehicle plan was developed using FTA's and DRPT's useful life policy, a minimum of four years or 100,000 miles for light-duty vehicles. By this metric, all of the vehicles in the fleet will become eligible for replacement during the years covered by this TDP. The plan also is based on historical vehicle usage, the purchasing habit of BABS, and the anticipated availability of local funds. The proceeds from a vehicle sale at the time of replacement are typically used towards the local match. BABS is currently in the habit of purchasing two new vehicles a year, however, this replacement rate may need to increase given the fleet age and mileage. BABS also intends

to sell two revenue service vehicles at the next municipal auction. The recommendation for future years is to replace two to three vehicles in a given year. Table 6-1 summarizes the current 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.

BABS is currently in the habit of purchasing two new vehicles a year, however, this replacement rate may need to increase given the fleet age and mileage.

## 6.2 Major System Maintenance and Operations Facilities

The BABS Operations and Maintenance Facility located in the Town of Blackstone was recently constructed in 2008. The facility is well equipped to handle the BABS fleet and there is no need for facility expansion or improvements in the near-term. No additional maintenance and operations facilities projects are identified in the CIP.

Table 6-1: Vehicle Inventory with Replacement Year Estimate

Vehicle No.	Vehicle Type	Number of Passengers	Model Year	Total Mileage¹	Estimated Replacement Year
1	Cutaway	14	2010	65,529	2020
2	Cutaway	14	2010	53,693	2020
3	Cutaway	19	2013	25,488	2022
4	Cutaway	19	2010	72,746	2019
5	Cutaway	14	2010	185,481	2019
6	Cutaway	15	2008	185,267	2017
7	Cutaway	14	2007	176,007	2018
8	Cutaway	14	2015	4,016	2022
9	Cutaway	14	2010	272,725	Retire
10	Cutaway	14	2010	281,442	Retire
11	Cutaway	14	2009	252,654	2016
12	Cutaway	14	2009	206,589	2016
14	Cutaway	14	2009	222,265	2018
15	Cutaway	14	2009	241,070	2017
16	Cutaway	19	2010	70,218	2021
17	Cutaway	19	2010	98,253	2019
18	Cutaway	14	2010	61,403	2021
SUV	SUV	5	2010	22,678	2022
Truck	Shop Truck	2	2013	3,747	2023
Van	Van	5	2004	87,223	2020
<sup>1</sup> As of March 2015					

Table 6-2: Vehicle Program

Number of Vehicles	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Replacement							
Cutaway	2	2	2	3	2	2	13
Van	0	0	0	0	1	0	1
Expansion							
Cutaway	0	0	0	0	0	0	0
Total Vehicles	2	2	2	3	3	2	14
Vehicle Costs							
Replacement							
Cutaway	\$130,000	\$135,200	\$140,608	\$219,348	\$152,082	\$158,165	\$ 935,403
Van	\$ -	\$ -	\$ -	\$ -	\$ 35,096	\$ -	\$ 35,096

Number of Vehicles	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Expansion							
Cutaway	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Projected Vehicle Costs (YOE\$)	\$130,000	\$135,200	\$140,608	\$219,348	\$187,178	\$158,165	\$ 970,499

Table 6-2 provides the overall vehicle replacement and expansion program for FY 2016 through FY 2021, including costs in year of expenditure (YOE) dollars. New revenue service vehicles will be of similar types to those used in the current fleet, that is, ADA-accessible, gasoline powered, cutaways. While the actual costs will vary at the time of purchase, estimates are based on unit costs of \$65,000 for a cutaway and \$30,000 for a van in FY 2016 dollars. The cost estimates include a four percent annual escalation rate. The need for fleet expansion is not anticipated, and the other support vehicles will likely remain in service for the entire time horizon covered by this TDP.

#### 6.3 Passenger Amenities

A non-service recommendation from Chapter 4 is rebranding BABS as Heartland Transit to promote regional transit travel across the large service area. The new branding would still allow for individual providers to be named, but would create a more cohesive image for passengers. There will be capital costs associated with this effort including professional design services, revised schedules and maps, a new website, new bus decals, and new bus stop signs. The rebranding effort is assumed to occur in FY 2018 of the CIP.

The overall program for these non-vehicle capital expenses is shown in Table 6-3 in year of expenditure dollars. The capital costs for the rebranding effort cover professional design services, redesigned schedule brochures, a new system map, a redesigned website, and new vehicle decals for the fleet. Alternatively, new vehicle decals could be phased in throughout the vehicle replacement plan, but this may create passenger confusion by having a mix of old and newly branded vehicles. The design services cost includes developing logos, service brands, and slogan to be integrated for placement

on vehicles, signage, brochures, and website pages. The rebranding also provides an opportunity to deploy new bus stop signage for passengers. All bus stops within the Town of Blackstone currently have BABS signage, however, many of these are outdated. Replacement or addition of bus stop signs at the approximately 170 scheduled stops and timepoints in the system is included in the CIP to supplement the rebranding effort. A breakdown of estimated costs for these components of the program is included in Table 6-4, also in year of expenditure dollars. BABS does not anticipate additional capital needs for other passenger waiting facilities such as shelters.

All bus stops within the Town of Blackstone currently have BABS signage, however, many of these are outdated. Replacement or addition of bus stop signs at the approximately 170 scheduled stops and timepoints in the system is included in the CIP to supplement the rebranding effort.

				•			
Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Bus Stop Signs	\$ -	\$ -	\$ 17,000	\$ -	\$ -	\$ -	\$ 17,000
Rebranding (Design Services, Schedules/Maps, Website, Vehicle Decals)	\$ -	\$ -	\$ 39,800	\$ -	\$ -	\$ -	\$ 39,800
ADP Hardware	\$ -	\$ 3,000	\$ 17,000	\$ -	\$ -	\$ -	\$ 3,000
Total Non-Vehicle Capital Expenses (YOE\$)	\$ -	\$ 3,000	\$ 56,800	\$ -	\$ -	\$ -	\$ 59,800

Table 6-3: Non-Vehicle Capital Program

Table 6-4: Non-Vehicle Capital Cost Assumptions

ltem	Cost Assumptions			
Design Services	\$12,500 (125 hours at \$100 hourly rate)			
Schedule Brochures	\$3,600 (36 hours at \$100 hourly rate)			
System Map	\$7,200 (72 hours at \$100 hourly rate)			
Website	\$7,000 (70 hours at \$100 hourly rate)			
Vehicle Decals	18 at a unit cost of \$500			
Printing	Lump sum of \$500			
Bus Stop Signs	170 at a unit cost of \$100			

#### 6.4 Tools and Equipment

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

#### 6.5 Technology Upgrades

Routine upgrades to automatic data processing (ADP) hardware are anticipated for FY 2017 (see Table 6-3). The CIP includes a recommendation for technology improvements to assist with operations planning and performance management. Upgrades would include a system that provides AVL and enhanced ridership data collection abilities. Such technology would provide BABS with the data to monitor on-time performance of vehicles and streamline dispatching and data collection processes. The most likely form of such a system involves in-vehicle tablets that use global positioning system (GPS) to track the vehicle's location. The tablet also 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.

Upgrades would include a system that provides automatic vehicle location and enhanced ridership data collection abilities. Such technology would provide BABS with the data to monitor on-time performance of vehicles and streamline dispatching and data collection processes

In addition to the benefits the technology upgrades could have for BABS 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. BABS should work closely with DRPT on potential funding opportunities given 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.



# CHAPTER 7: FINANCIAL PLAN

### Chapter 7: Financial Plan

The intent of this chapter is to identify and detail BABS' operating and capital funding sources for 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 includes a reasonable forecast for BABS to use over the next six fiscal years. 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 prior TDP conducted a financial plan that detailed the costs and funding sources for day-today operations and maintenance up through FY15. This TDP replicates that method, but with updated assumptions. It is worth noting, however, that the further into the projection, the less reliable it is due to possible changes in circumstances. For a comparison, below are two columns of figures that represent funding sources for FY15. The left column represents the prior TDP FY15 funding levels, which had been projected six-years into (at the time) future, whereas the right column details the actual funding BABS received. As is readily apparent, the figures are significantly higher in the projected column across most measures. This is due partly to the assumptions made with regards to expected funding sources, but also differences in the service provided at the time. During the prior TDP, service hours were higher and BABS has since eliminated one of the routes, which would explain some of the differences.

- FY15 Projected
  - Budgeted \$646,605
  - Federal \$282,000 (43%)
  - State \$93,556 (14%)
  - Local \$249,799 (38%)
  - Farebox \$21,250 (3%)

- FY15 Actual
  - Budgeted \$512,090
  - Federal \$242,025 (47%)
  - State \$72,608 (14%)
  - Local \$169,418 (33%)
  - Farebox \$28,000 (6%)

It must be noted that 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 throughout the course of this section. FY16, 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 are seen in Table 7-1.

			•		-	
Financial Plan	FY16	FY17	FY18	FY19	FY20	FY21
Service Hours	12,463	12,463	12,463	12,463	12,463	12,463
Operating Costs	\$499,200	\$511,680	\$524,472	\$537,584	\$551,023	\$564,799
Federal	\$235,323	\$241,563	\$247,959	\$254,514	\$261,208	\$267,582
State	\$70,088	\$72,043	\$74,104	\$76,201	\$78,205	\$80,113
Local	\$165,234	\$169,519	\$173,855	\$178,313	\$183,055	\$188,549
Federal Share <sup>13</sup>	50.0%	50.0%	50.0%	50.0%	50.0%	49.9%
State Share	14.9%	14.9%	14.9%	15.0%	15.0%	14.9%
Local Share	35.1%	35.1%	35.1%	35.0%	35.0%	35.2%
Farebox	\$28,555	\$28,555	\$28,555	\$28,555	\$28,555	\$28,555
Farebox Ratio	5.7%	5.6%	5.4%	5.3%	5.2%	5.1%

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

#### 7.1.1 Assumptions

The projections in this chapter are based on a number of assumptions. Operating costs are anticipated to increase by 2.5 percent per annum as a result of annual inflation. This is slightly higher than the two percent per annum inflation increase that was used in the prior TDP. An assumption of 2.5 percent was chosen for a couple of reasons. One, it is a conservative approach that results in a higher operating cost estimate in order to ensure that future costs do not exceed what had been projected. Secondly, the actual costs of operations may increase as well. Labor and fuel, two of the largest costs to run service is currently low. Conversations with the BABS transit manager revealed some difficulty in finding qualified drivers, which require an increase in wages in order to attract qualified applicants. Fuel prices, at this time, are relatively low, but could increase in the future.

Although costs are expected to increase at a constant rate, state operating assistance funds are assumed to increase at varying rates as shown in Table 7-2, based on the six-year DRPT forecast of operating assistance from the Mass Transit Fund found in the 2016 DRPT Six-Year Improvement Program (SYIP). As is evident in the table, state operating assistance is expected to increase at a higher rate than the inflation rate applied to operating costs (2.5 percent), except for the final projected fiscal year.

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%		

Federal funds are assumed to increase at the same levels 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).

Service hours provided are also assumed to remain constant. This was determined in Chapter 4 and Chapter 5, where, although the team developed alternatives for future service expansion, under existing conditions, none were recommended, save for modest scheduling changes. Since service hours remain constant, it is assumed that fare revenues will remain constant, remaining at FY 2016 projection levels that are shown in the DRPT SYIP. No fare increase has been assumed for the TDP six-year time period. BABS' fares have not changed since inception of the service.

<sup>&</sup>lt;sup>13</sup> Shares for federal, state, and local are based on the operating costs, less expected farebox revenue.

It must be noted that 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 operational costs as a share of statewide operational costs. Therefore, the higher a system's operational costs, the greater the funding from state operating assistance. Beginning in FY14, DRPT has begun to transition to a performance-based system, with full implementation occurring in FY16. Under the new system, if statewide operating assistance funds exceed \$160 million then 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

As shown in Table 7-1, funding across all levels are to increase incrementally and constitute generally the same share over the forecast period. Again, the financial plan detailed are only projections. Factors such as the elimination or expansion of a route could significantly alter funding levels.

## 7.2 Bus Purchase Costs and Funding Sources

As detailed in the previous chapters, BABS is not recommended to undergo service expansion, and therefore, will not require an increase in the size of its fleet. Vehicle replacements, however, will continue to occur. Table 7-3 is a breakdown of service vehicle purchase plans through FY21, based on both the DRPT SYIP and BABS TDP updates.

	<u>'</u>			,			
Financial Plan	FY16	FY17	FY18	FY19	FY20	FY21	
Bus Replacements	2	2	2	3	2	2	
Bus Cost	\$130,000	\$135,200	\$140,608	\$219,348	\$152,082	\$158,165	
Van Replacements	-	-	-	-	1	-	
Van Cost	-	-	-	-	\$35,096	-	
Total Cost	\$130,000	\$135,200	\$140,608	\$219,348	\$187,178	\$158,165	
Anticipated Funding by Source							
Federal	\$104,000	\$108,160	\$112,486	\$175,478	\$149,742	\$126,532	
State	\$20,800	\$21,632	\$22,497	\$21,935	\$18,718	\$15,817	
Local	\$5,200	\$5,408	\$5,624	\$21,935	\$18,718	\$15,817	
Federal Share	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	
State Share	16.0%	16.0%	16.0%	10.0%	10.0%	10.0%	
Local Share	4.0%	4.0%	4.0%	10.0%	10.0%	10.0%	

Table 7-3: Capital Financial Funding Levels and Sources

#### 7.2.1 Assumptions

Capital funding assistance is allocated using a different method than operating funding assistance. Traditionally, as used 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, however, 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 is reflected in the Table 7-3 with FY16 serving as a base year. This also assumes that BABS will continue to purchase the same type of vehicle for service and that any changes to the vehicle would

<sup>&</sup>lt;sup>14</sup> Performance-based funding is evaluated based on system size, ridership, and ridership efficiency in terms of service cost, miles, and hours provided.

<sup>&</sup>lt;sup>15</sup> System size is a variable in the performance-based system to prevent smaller systems with similar performances to a larger system, from receiving more money than the larger system.

not result in price changes significantly different than four percent. If BABS pursues service expansion, additional buses would likely be needed, requiring further changes to the capital and financial plans.

# 7.3 Facility Improvement Costs and Funding Sources

At this time, BABS is neither expecting nor recommended to undergo facility improvements as the recommendations set forth in this TDP does not require an upgraded facility. Furthermore, the existing service facility was recently built in 2008 and is primarily dedicated to servicing BABS vehicles, although other county-owned vehicles are currently serviced there. Until a need is recognized, there is no need to expend capital funds in this area.



# CHAPTER 8: TDP MONITORING

### **Chapter 8: TDP Monitoring**

The development of the goals, standards, and recommendations presented in this TDP should be supported by a proper and regular assessment of the system to ensure that they are being attained. The aforementioned objectives was developed in the following ways:

- An evaluation of existing service statistics was conducted in order 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 in order to comprehend the varying degrees of satisfaction and obtain a cursory understanding of the travel patterns and sociodemographic characteristics of the riders. The survey also gauged the aspirations of what they hope or expect to see from the system in the future
- A peer agency review comparing BABS to other comparable systems in the state helped clarify the performance of the system. Although no two transit agencies 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 their costs were analyzed with one schedule change ultimately recommended
- An analysis of the impact on capital costs was estimated and a 6-year capital plan was formed that will cover the system 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 over the horizon of this TDP and 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, which details 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, if not entirely consistent, should be compatible with the other local, state, and regional plans with respect to their transportation elements. With regards to BABS, this includes roughly a dozen county and regional plans, due to BABS representing service to several counties in the area. These plans include the Town of Blackstone's Comprehensive Plan¹6, the Amelia County Comprehensive Plan, the statewide long-range transportation plan (LRTP), among others. Of course, the TDP should be realistic with respect to prospective funding, as would be outlined in the DRPT SYIP.

It is important that the goals and aspirations of this TDP should be, if not entirely consistent, compatible with the other local, state, and regional plans with respect to their transportation elements

The Blackstone Comprehensive Plan and many other county plans have not been updated in more than a decade and therefore, BABS should ensure that when the new comprehensive plan is developed, county and local planners are aware of this updated TDP in order to communicate how BABS envisions itself within the community. Although public transportation did not play a significant role in these previous comprehensive plans and there are likely no significant changes that would alter service, BABS should nevertheless participate and assist when these plans are updated.

#### 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 not met for 12 consecutive months, then actions should be taken to correct the poor performances, which may include route re-alignment, frequency or service span changes, and possibly fare adjustments.

Beyond collecting ridership statistics, which is already mandated, BABS should conduct intermittent surveying of rider satisfaction regarding bus load issues and on-time performance, as not every rider will make the effort to lodge a formal complaint. This effort would be separate from the on-board surveying that is conducted every 6 years as part of the work conducted to produce another TDP. The transit manager already reports to the Town Manager and if requested, the Town Council.

Finally, BABS is the transit operator for seven distinct counties, Nottoway, Dinwiddie, Brunswick, Lunenburg, Amelia, Cumberland, and Buckingham. It would be worthwhile if the BABS transit manager conducted bi-annual updates with local county officials so they are kept up to date on all capital and operating expenses and any anticipated needs that BABS may have.

#### 8.3 Annual TDP Monitoring

Presently BABS must submit an annual review letter to DRPT, detailing progress toward maintaining the standards and fulfilling (if any) recommendations outlined in the adopted TDP. The purpose of the letter is to assign accountability to the transit provider and allow DRPT to monitor progress. As service can change due to numerous factors during the course of a year, the letter should discuss a number of operating and capital matters. This may include route re-alignments, changes in ridership, and expected capital expenditures, among other details. As the letters are due December 1st, which is roughly halfway between the system's fiscal year, the data will be roughly six months old. However, 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 is not limited to:

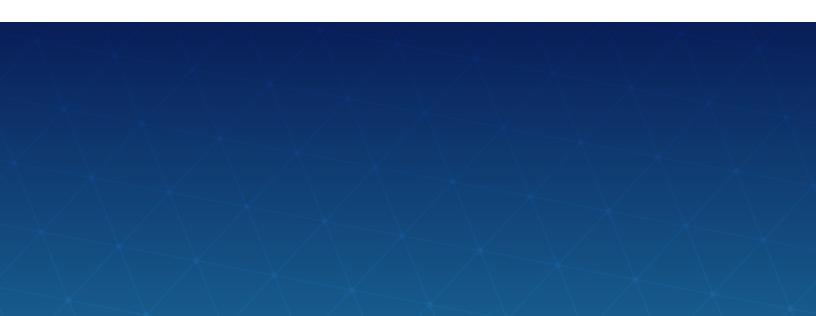
- A summary of progress made toward obtaining the TDP goals and objectives outlined in Chapter 2
- Ridership trends from the previous fiscal year
- A summary of projected and actual operating and capital costs
- Detailing advancements made toward capital improvements and a timeline of anticipated capital 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 that have been conducted or planned to improve the service



## **APPENDICES**



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

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

	FY12	FY13	FY15
Operations	\$422,400	\$390,878	\$386,634
Capital	\$49,474	\$0	\$45,026
Revenue	\$25,277	\$29,190	\$22,395

### Appendix 3B: On-Board Survey Results

On-Board Survey Process

BABS 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 being 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 BABS' 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 BABS Service and Identifying Future Transit Needs — perceptions regarding BABS' existing service and perceptions regarding needed improvements

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

Figure A-1: On-Board Survey Questionnaire of Blackstone Area Bus (Fixed-Route Service)

De	ackstone Area Bus Su oute	Boarding Time							
	The second second second	boarding Time							
	w Are We Doing?	C . (DADC):						DI .	e la companya de la c
	ar Rider: Blackstone Area B vey. Thank you for your he		evaluating	existing	g and tu	ture trar	sit servi	ce. Pleasi	e take a minute to fill out th
AG	E:								
	19 and under	□ 20-59			□60	and abov	e		
GE	NDER:								
	Male	☐ Female							
ED	UCATION:								
	Did not complete High Scho High School Diploma/GED	iol				llege Deg her Profe			
Ho	w often do you ride BABS?								
	ess than once a month Once or twice a month		Once a weel 2-3 days a w	veek				□4 or m	ore days a week
	w many different Blackstone BABS		lo you typica Town and C		in any	given mo	nth?	□ Dimu	iddia
	Brunswick		Crewe-Burk					☐ Dinw ☐ Piedr	
Ha	ve you ever transferred fron	one BABS bus rout	e to anothe	r BABS	bus rou	te to com	plete a 1	trip?	
	Yes	□ No							
Ab	out Your Trip Today								
De	ar Rider: The following que	stions are about you	ır current tr	ip.					
Wŀ	nere did your trip begin?								
	Home	☐ School			□M∈	edical			☐ Other
	Work	$\square$ Shopping			☐ Go	vt. Servi	es		
	Home Work	☐ School ☐ Shopping				edical wt. Servi	es.		Other
	nere did your trip end? Pleas		tersection	or near					
	ione and your crip oner mous	0,000 an address, n		0, 1,00,	<i>y</i> 10110				
Wł	y did you ride the bus today	(select all that appl	у)						
	doobility	inancial Reasons		Oth	er			_	
	isability 🗆 F								
		entifyina Futura	Transit N	Veeds					
Ra	ting BABS Service & Id	77. 17.		Veeds					
Ra		77. 17.	o 5 (great).						
<b>Ra</b> Ple	ting BABS Service & Id	77. 17.	o 5 (great).		<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
Ra	ting BABS Service & Id	scale from 1 (poor) t	o 5 (great).	Veeds		<u>3</u>	<u>4</u>	<u>5</u>	
Ra Ple 1 2 3	ting BABS Service & Ia ase Rate BABS service on a service on a service Areas that are served by the Bus on-time performance	scale from 1 (poor) t	o 5 (great).	<u>1</u>	<u>2</u>				
Ra Ple 1 2 3 4	ting BABS Service & Ia ase Rate BABS service on a service Frequency of bus service Areas that are served by to Bus on-time performance Hours of bus service	cale from 1 (poor) the routes	o 5 (great).	<u>1</u>	<u>2</u>				
Ple 1 2 3 4 5	ring BABS Service & Idase Rate BABS service on a service Areas that are served by the Bus on-time performance Hours of bus service Availability of bus informations.	cale from 1 (poor) the routes	o 5 (great).	1 	<u>2</u>				
Ple 1 2 3 4 5 6	ring BABS Service & Idase Rate BABS service on a service Areas that are served by the Bus on-time performance Hours of bus service Availability of bus informations of the fare	cicale from 1 (poor) the routes	o 5 (great).	<u>1</u>	<u>2</u>				
Ple 1 2 3 4 5 6 7	ring BABS Service & Idase Rate BABS service on a service Areas that are served by the Bus on-time performance Hours of bus service Availability of bus informations.	che routes tion ps	o 5 (great).		<u>2</u>				
Ple 1 2 3 4 5 6 7 8 9	requency of bus service Areas that are served by the Bus on-time performance Hours of bus service Availability of bus informations of the fare Security on bus and at sto Cleanliness of drivers	che routes tion ps	o 5 (great).		<u>2</u>				
Ple 1 2 3 4 5 6 7 8 9	requency of bus service Areas that are served by the Bus on-time performance Hours of bus service Availability of bus informations to the fare Security on bus and at sto Cleanliness of bus and sto	che routes tion ps	o 5 (great).		<b>2</b>				
Ple 1 2 3 4 5 6 7 8 9 10	requency of bus service Areas that are served by the Bus on-time performance Hours of bus service Availability of bus informations of the fare Security on bus and at sto Cleanliness of drivers	che routes tion ps ps	o 5 (great).	<u>1</u>	<b>2</b>				portant).
Ra Ple 1 2 3 4 5 6 7 8 9 10	requency of bus service Areas that are served by the Bus on-time performance Hours of bus service Availability of bus informations of the fare Security on bus and at stote Cleanliness of drivers Overall service wimportant are the following assertion of the following the service wimportant are the following assertion of the service wimportant are the following assertice as a service on the service of the serv	che routes tion ps ps ps ing improvements to	o 5 (great).	1	2 	ot impor	ant) to	5 (very im	portant).
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#### Responses to Survey Questions

#### Survey Response Rates

The total of 70 ridership surveys were complete for all fix-routes in the BABS system. Weekday fixed route ridership averages approximately 183 riders per day<sup>17</sup>. Table A-1 presents the number of surveys complete for each fixed route.

Table A-1: Distribution of Passenger Surveys by Fixed-Route

Service Area/Fixed Route	No. of Surveys Complete
Brunswick	7
Dinwiddie	11
Piedmont	11
Crewe-Burkeville	9
Town and County Green Line	7
Blackstone	25
TOTAL	70

#### **Demographics**

Survey questions focused on the demographic characteristics of the rider (e.g., gender, age) are summarized in the following sections. Figures A-2 to A-7 summarize the passenger characteristics of the current BABS ridership based upon the information patrons provided in the surveys. General conclusions and overall observations are summarized below.

- The majority of the passengers are female (57 percent)
- The passengers' ages are relatively well-distributed across each of the different ranges
- Approximately 72 percent of the passengers indicated that they either possessed a high school degree (52 percent) or had not graduated from high school (20 percent)
- Most of the riders that participated in this survey reported using BABS services on a regular basis
- The majority of the passengers indicated that they do not use another transit service

Figure A-2: Survey Results, Gender

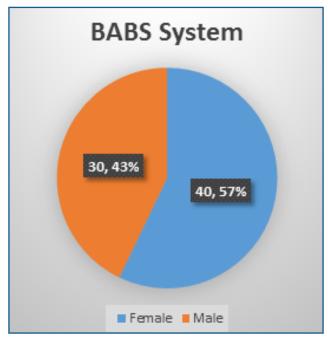


Figure A-3: Survey Results, Age

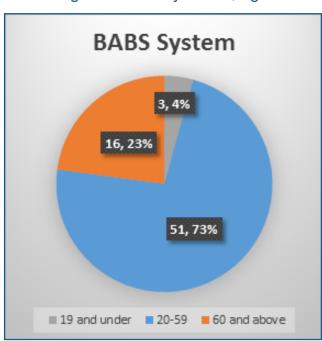


Figure A-4: Survey Results, Educational Level

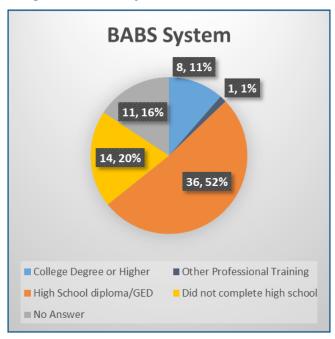


Figure A-5: Survey Results, Frequency of Ridership

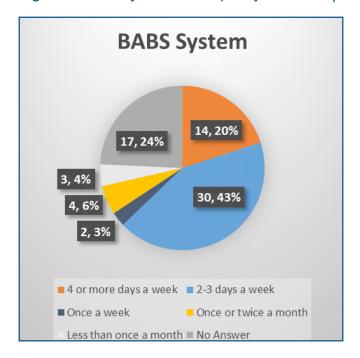


Figure A-6: Survey Results, Other Usage

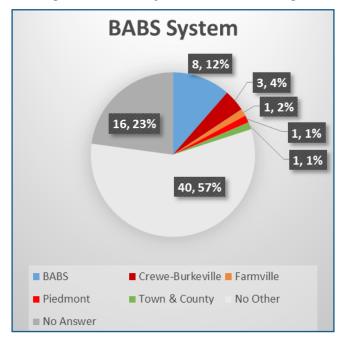
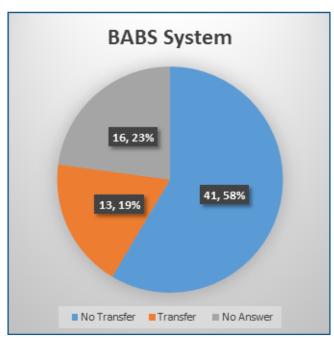


Figure A-7: Survey Results, Transfer



Female riders represent a slightly larger portion of the total ridership in BABS. As shown in Figure 2, females represent 57 percent of the ridership and male ridership reported at 43 percent.

The passengers' ages are relatively well-distributed across each of the different ranges. Based on the ridership survey results, 73 percent of BABS riders are between 20 and 59 years old. Those age 60 or older account for 23 percent of the total ridership.

With respect to the reported educational level, approximately 72 percent of the passengers indicated that they either possessed a high school degree (52 percent) or had not graduated from high school (20 percent). Approximately 11 percent of the riders reported having a college degree or higher, one percent reported having a professional training, and 16 percent of responders chose not to answer the question.

Most of the riders that participated in the survey reported using BABS services on a regular basis. A total of 20 percent of the riders reported a ridership frequency of 4or more days a week, with an additional 43 percent reporting use of the system 2 to 3 days a week. Combining these two values indicates that 63 percent of the total passengers surveyed use BABS services more than 2 days per week, and can thus be classified as "regular" rather than occasional riders. This high level of repeat ridership further indicates that BABS is providing an essential mobility service to a broad cross section of its passengers.

Across the whole system, about 57 percent of BABS users indicated that they do not use another fixed-route transit system or route (other than the route they currently use). Approximately 20 percent of riders reported using multiple services within BABS. Specifically, on the Dinwiddie route, 10 out of 11 (91 percent) of riders reported using "Another System" – which was noted to be the Petersburg Transit System.

Most of the ridership uses BABS for a one-seat ride for their trip. Approximately 58 percent of the responders reported that they did not complete a transfer for their trip. However, 19 percent of total ridership indicated a transfer for the trip. The remaining 23 percent of riders chose not to response to the question.

#### **Trip-Specific Survey Results**

Figures A-8 and A-9 summarize responses to survey questions related to the trip being made at the time of the survey. General conclusions and overall observations about the specific trips are summarized below.

The top two origin-destinations, comprised of 60 percent of the response, were shopping (36 percent) and work (24 percent). Medical and government services did not constitute a large portion of trip destinations. Note this analysis excludes home as an origin-destination.

The principal reasons given for riding the bus were "No Car" (19 percent) and "Financial" (14 percent). These responses indicate that current ridership can be classified as "transit captives". Some riders (27 percent) indicated "Other" as their reason for riding the bus. Where additional information was provided those reasons included "save gas" and "just to ride the bus". An additional 27 percent of riders chose not to answer the question.

Figure A-8: Survey Results, Origin-Destination

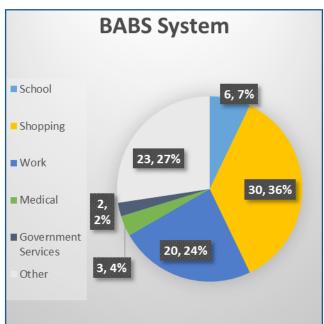
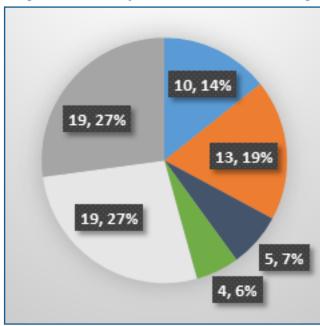


Figure A-9: Survey Results, Reason for Riding



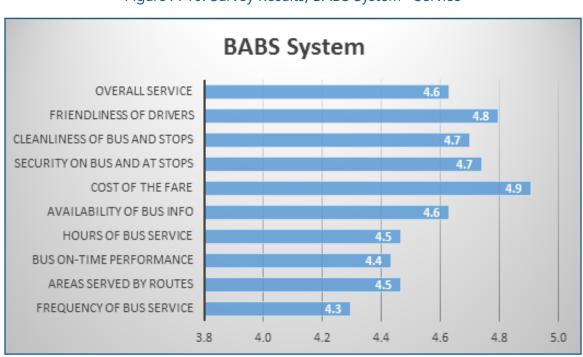
#### Services Ratings

Figure A-10 summarizes the responses to those survey questions that sought to obtain the view of the current riders as to the quality of service being offered by BABS. 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 bus information
- Cost of bus fare
- Security on the buses and at stops
- Cleanliness of buses and stops
- Friendliness of bus drivers
- Overall Service

Rating categories ranged from "Very Good" (5) to "Very Poor" (1). The responses to reach of these categories were averaged to calculate a score. These calculations resulted in scores ranging from 4.3 to 4.9. The frequency of bus service received the lowest score, while the cost of the fare received the highest score. With some routes making less than six round trips per day, the frequency of the service is a concern to many patrons. The cost of service has not changed since inception and therefore riders are pleased with fare structure. While the availability of bus information was fairly well-rated, there may be an opportunity to improve this service by providing a system map and update to the website.

Figure A-10: Survey Results, BABS System - Service



#### Service Improvement Needs

Figure A-11 summarize the responses to those survey questions that sought to rate the importance of potential improvements to BABS. 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 improvement was more frequent bus service, which received the highest score of 4.4. Expanding coverage and connecting with other systems ranked relatively low in priorities. Real-time bus tracking information received the lowest score of 3.1.

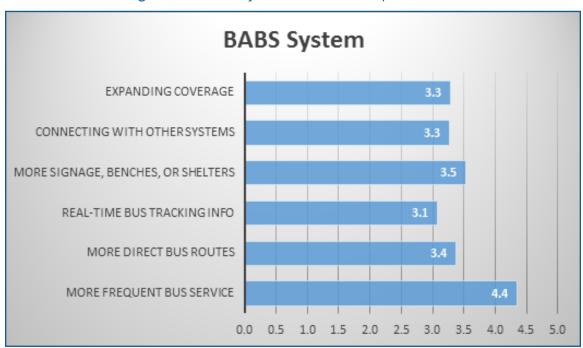


Figure A-11: Survey Results, Service Improvements

## Appendix 3C: Stakeholder and Focus Group Summary

#### Stakeholder Summary

#### **Lunenburg County**

Robyn Fowler, Town Administrator, Town of Kenbridge

Jay Dayton, Town Administrator, Town of Victoria

Tracy Gee, County Administrator, Lunenburg County

- Overall population and economic growth of the county has been stagnant
- There is no political opposition to the transit service nor has there been an issue regarding funding but the administrators expressed concern that it may not be able to afford another significant increase in operating or capital costs. They claimed it is nearly double to what it was several years ago
  - The administrators expressed a desire to have greater stability and communication regarding the monthly invoices. Would prefer the same cost per month for budgeting reasons instead of paying a different amount each month based on days of service
- The administrators believe that there may be an insufficient amount of transit information available to the transit users at the two low-income complexes; Victoria Place and Village Estates
  - The administrators get complaints regarding reliable service to the two complexes. We let them know that the bus will drive away if it does not see riders at the stops
  - Victoria Place is already listed as a timepoint on the route map. This may require further analysis to see if a designated layover would benefit riders in catching the bus
  - The administrators also suggested that there needs to be better, brighter stop signage. As long as those places are within Kenbridge or Victoria town limits, installation should not be a problem
- They expressed no desire to extend service into Keysville (beyond the SVCC campus) or Farmville,

but thought service extension to South Hill may be worthwhile

- South Hill has services that Kenbridge does not have, such as a full-service Department of Motor Vehicles (DMV) and an unemployment office
- They noted some in county may not support service to South Hill because it takes business out of the county

#### **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. Twenty-five 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 line to the Christiana campus
- There is currently no shuttle 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 shuttle 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 though 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 line
  - 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 4days, 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

#### Dinwiddie County

Tammie Collins (Deputy Administrator of Planning and Community Development)

- Dinwiddie contributes \$17,000 to fund the route
  - Expressed satisfaction with the funding levels, indicated that it could go up to \$20,000 if warranted
- When the route started it had almost all positive reviews, but this has recently changed
  - There is some question whether the route is still performing ¾ fixed route deviations. However, it appears this could be a single complaint from one customer
  - Tammie would like to have a quarterly report from Jennifer that discusses ridership performance and identifies issues with the route

- Tammie also expressed that the maps need to be updated because they are used by the county when talking to prospective employers (or developers) about relocating or expanding in the county. The issue is the map and schedule is a bit difficult to understand
  - Tammie said she would get back to us regarding Amazon's shift times so we can determine if schedule adjustments to the route are needed
  - The county is very satisfied with the connection the route provides to the Petersburg Transit Center
  - We discussed the fact that the eastern part of the county is experiencing development at a much higher rate than the western part of the county. Tammie mentioned that the Petersburg Area Transit has expressed interest in serving the eastern part of the county (in particular, warehouses on US 460 and residential area off River Road).

#### **Nottoway County**

John Prosise (County Administrator)

- Provides \$8,000 to BABS for this service and it will unlikely be increasing in the near future
- Pleased with the service and sees it as indispensable. Agrees that the residents would benefit from a regional map
  - Reiterated the importance of the Crew-Burkeville service due to the closing of a grocery store. Walmart and Food Lion in Blackstone is their primary source of food and supplies
- The county wants to make sure people are spending their dollars in Nottoway County (and not Farmville or any surrounding county)
- The opening of the FAST-C center at Fort Pickett may present an opportunity for additional transit service. However, since there is a shortage of housing in and around Blackstone, many of the FAST-C attendees would likely stay at hotels near Petersburg
- John stated that Fort Pickett needs to market itself (to National Guard units as a training center) in order to stay in business. An amenity like transit service could help with marketing, but the county does not have the money to operate a service to the base. Thus, any transit service would be funded by the base

■ The one connection to Farmville that could benefit Nottoway residents is to the Centra Southside Community Hospital. The problem is there are several different health networks that patients use (i.e. Centra, Bon Secours, and Virginia Commonwealth University [VCU]) and once someone is in one network they are reluctant to switch. Therefore, John questioned the viability of such a route.

#### User And Non-User Focus Groups

#### **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)

#### **SVCC-Brunswick**

- All three of these students were transit-dependent and rode the BABS Brunswick route to attend class
- They were generally favorable toward the service but felt there could be some improvement
  - They wanted to be able to purchase tokens on the bus since they sometimes do not always have exact change and forget to bring quarters. They may have a dollar and would like to purchase four trips but are not able to
  - One of the riders expressed frustration that the Crewe-Burkeville route does not operate on Wednesdays. On this day the rider cannot take transit to Food Lion to connect with the Brunswick route. As a result, he has to rely on a neighbor with a car to take him to Food Lion. This is not a problem on Mondays, Tuesdays, or Thursdays when the Crewe-Burkeville route operates
- All riders were happy with the ability to call dispatch to enquire about the bus location. They also were happy with the frequency of the service
- Riders stated they have seen more regular riders on the Brunswick route recently, noting six or eight regulars

## Appendix 3D: BABS 2015 Title VI Report

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

**Town of Blackstone- Blackstone Area Bus** 



Adopted date

**April 20, 2015** 

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II.	Overview of Services	3
III.	Policy Statement and Authorities	4
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V.	Plan Approval Document	6
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VII.	Procedures for Notifying the Public of Title VI Rights and How to File a Complaint	10
VIII.	Language Assistance Plan for Persons with Limited English Proficiency (LEP)	19
IX.	Requirements of Transit Providers	28
APPI	ENDICES	
A	Title VI Notice to the Public; List of Locations	
В	Title VI Complaint Form	
C	Investigations, Lawsuits and Complaints Document	
D	Summary of Outreach Efforts	
	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 Progr submission, including evidence that the board or other governing entity or official(s) approved the results of the analysis	

#### 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 the Town of Blackstone-Blackstone Area Bus incorporates nondiscrimination policies and practices in providing services to the public. The Town of Blackstone-Blackstone 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

Blackstone Area Bus System is a deviated fixed route transit system that provides service in the following localities:

Blackstone
Crewe
Nottoway County
Prince Edward
Amelia
Cumberland
Buckingham
Lunenburg
Dinwiddie
Brunswick
The Blackstone route was the first route which began in January 2003.

#### III. POLICY STATEMENT AND AUTHORITIES

#### Title VI Policy Statement

The Town of Blackstone-Blackstone 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 Blackstone-Blackstone Area Bus Title VI Manager is responsible for initiating and

monitoring Title VI activities, preparing re	equired reports, and other	r responsibilities as required by			
Title 23 Code of Federal Regulations (CFR) Part 200, and Title 49 CFR Part 21.					
·					
	-				
Signature of Authorizing Official		Date			
Signature of Authorizing Official		Daic			

#### **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 sub-recipients 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, the Town of Blackstone- Blackstone 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, the Town of Blackstone-Blackstone 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 Town of Blackstone- Blackstone 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 the Town
of Blackstone'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	

Philip Vannoorbeeck, Town Manager

**Town of Blackstone** 

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 **Blackstone Area Bus's** Director of Transportation and Community Development 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 Manager 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 Manager 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 Manager 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, Blackstone 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, Blackstone Area Bus System 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. Blackstone Area Bus System 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 Manager 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. Blackstone Area Bus System 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 Manager 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 Director of Transportation and Community Development

#### 8. Title VI clauses in contracts

In all federal procurements requiring a written contract or Purchase Order (PO), Blackstone Area Bus System's contract/PO will include appropriate non-discrimination clauses. The Title VI Manager will work with the individual 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, Blackstone 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. The following Sample Public Notice is to be included as APPENDIX A- Title VI Notice to the Public; List of Locations, and displayed in your vehicles and facilities. Place Notice on agency letterhead:

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).

Blackstone Area Bus System 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 Blackstone Area Bus, or otherwise being discriminated against because of your race, color, national origin, gender, age, or disability, our contact information is:

Jennifer Beck
Director of Transportation and Community Development
Town of Blackstone
101 BABS Lane
Blackstone, Virginia 23824
434-292-3025

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 Blackstone Area Bus System 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, 5<sup>th</sup> floor – TCR, 1200 New Jersey Avenue SE, Washington, DC 20590.

Blackstone Area Bus System 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:

Blackstone Area Bus System 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 Blackstone Area Bus System's nondiscrimination policies and procedures, or to file a complaint, please visit the website at www.blackstonebus.com or contact Jennifer Beck, Director of Transportation and Community Development, 101 BABS Lane, Blackstone, Virginia 23824

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 Blackstone Area Bus System's bus route brochure.

A copy of Blackstone Area Bus System's Title VI Complaint Form is attached as APPENDIX B.

#### SAMPLE - TITLE VI COMPLAINT FORM

Section I:					
Name:					
Address:					
Telephone (Home):		Telephone	e (Work):		
Electronic Mail Address:					
Accessible Format	Large Print		Audio Tape		
Requirements?	TDD		Other		
Section II:					
Are you filing this complain	nt on your own behalf?		Yes*	No	
*If you answered "yes" to t	his question, go to Secti	on III.			
If not, please supply the nat for whom you are complain		ne person			
Please explain why you hav			<u> </u>		
Trease capana may journal	ve mea ter a ama parij.				
Please confirm that you hav	abtained the normicsi	on of the	Yes	No	
aggrieved party if you are f			Tes	NO	
Section III:					
I believe the discrimination I experienced was based on (check all that apply):					
[] Race [] Color [] National Origin					
Date of Alleged Discrimination (Month, Day, Year):					
Explain as clearly as possible what happened and why you believe you were discriminated against. Describe all persons who were involved. Include the name and contact information of the person(s) who discriminated against you (if known) as well as names and contact information of any witnesses. If more space is needed, please use the back of this form.					
Section IV	771-2 TT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 11	\;	
Have you previously filed a Title VI complaint with this Yes No agency?					
Section V					
Have you filed this compla or State court?	int with any other Federa	al, State, or l	ocal agency, or v	with any Federal	
[] Yes []	] No				

If yes, check all that apply:		
[] Federal Agency:		
[] Federal Court	[] State Agency	
[] State Court	[] Local Agency	
Please provide information about a contact filed.	person at the agency/court where the complaint was	
Name:		
Title:		
Agency:		
Address:		
Telephone:		
Section VI		
Name of agency complaint is against:		
Contact person:		
Title:		
Telephone number:		
You may attach any written materials or othe complaint.	er information that you think is relevant to your	
Signature and date required below		
Signature	Date	

## 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 Blackstone Area Bus System 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 Manager. 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 Blackstone Area Bus System's Title VI Manager at 101 BABS Lane, Blackstone, Virginia 23824 **or** jennifer.beck@blackstonebus.com
  - e. Complaints received by any other employee of Blackstone Area Bus System will be immediately forwarded to the Title VI Manager.
  - 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 Manager. Under these circumstances, the complainant will be interviewed, and the Operations Assistance (Janet Matthews) will assist the complainant in converting the verbal allegations to writing.
- 2. Upon receipt of the complaint, the Title VI Manager will immediately:
  - a. notify DRPT (no later than 3 business days from receipt)
  - b. notify the Town of Blackstone
  - c. ensure that the complaint is entered in the complaint database
- 3. Within 3 business days of receipt of the complaint, the Title VI Manager 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 Manager 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 Manager 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 Manager 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 Manager 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 Town of Blackstone, DRPT, and, if appropriate, Town of Blackstone's legal counsel.
- 12. The Title VI Manager 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 Blackstone Area Bus System. 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.

The sample below is provided for the purposes of tracking and documenting your civil rights (Title VI, EEO and ADA) investigations, lawsuits and/or complaints. It may be modified but must include all essential elements contained in the sample, and it may not be used to replace the agency's Complaint Form.

SAMPLE 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.				

**SEE APPENDIX C- Investigations, Lawsuits and Complaints Document** 

#### **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 Blackstone Area Bus System 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.

Blackstone Area Bus System 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.

Blackstone Area Bus System 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.

#### A SAMPLE OF EFFECTIVE PUBLIC OUTREACH PRACTICES INCLUDES:

- a. Determining and identifying what meetings and program activities lend themselves to client public participation.
- b. Scheduling meetings at times and locations that are convenient and accessible for minority and LEP communities.
- c. Employing different meeting sizes and formats.

- d. Coordinating with community and faith-based organizations, educational institutions, and other organizations to implement public engagement strategies that reach out specifically to members of affected minority and/or LEP communities.
- e. Considering radio, television, or newspaper ads on stations and in publications that serve LEP populations. Outreach to LEP populations could also include audio programming available on podcasts.
- f. Providing opportunities for public participation through means other than written communication, such as personal interviews or use of audio or video recording devices to capture oral comments.

**SEE APPENDIX D-Summary of Outreach Efforts** 

## 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 Blackstone Area Bus System is based on FTA guidelines.

As required, Blackstone Area Bus System developed a written LEP Plan (below). Using 2010 and American Community Survey (ACS) Census data, Blackstone Area Bus System 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 <a href="www.census.gov">www.census.gov</a> by Blackstone Area Bus System's service area. The agency's service area includes a total of 1,012 persons (1.55%) 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. Languages spoken at home by those with LEP are presented below. These data indicate the extent to which translations into other language are needed to meet the needs of LEP persons.

•	Spanish	[827]	[1%]
•	Indo-European	[132]	[.18%]
•	Asian and Pacific Island Languages	[46]	[.06%]
•	Other Languages	[7]	[.009%]

It is noted that there are relatively 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

Blackstone Area Bus System reviewed the relevant benefits, services, and information provided by the agency and determined the extent to which LEP persons have come into contact with Blackstone Area Bus System is not frequent.

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 development 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

Blackstone Area Bus System provides the following programs, activities and services:

Reaching out to community service groups and social services.

Based on past experience serving and communicating with LEP persons and interviews with community agencies, we learned that the following services/routes/programs are currently of particular importance LEP persons in the community.

#### The courthouse complexes on all routes

The following are the most critical services provided by Blackstone Area Bus System 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

#### Costs

The following language assistance measures currently being provided by Blackstone Area Bus System

• If necessary using translator service provided by individuals. This cost would be averaged around \$1,000

We anticipate that these activities and costs will increase if translators are having to be brought in from other areas.

Based on the analysis of demographic data and contact with community organizations and LEP persons, Blackstone Area Bus System has determined that the following additional services are ideally needed to provide meaningful access:

#### • None at this time

#### Resources

The available budget that could be currently be devoted to additional language assistance expenses is \$0 This amount is likely to be stable over time.

In addition, in-kind assistance may be available through police departments with specialized computer equipment.

#### 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:

#### As needed translator services

## **LEP Implementation Plan**

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

- Language Line Translation Services for telephone contacts.
- In-person translation for ADA eligibility assessments.]

#### Staff Access to Language Assistance Services

Agency staff who come into contact with LEP persons can access language services by offering the individual language identification card. 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: *indicate* language translation line if used

## Responding to Written Communications from LEP Persons

The following procedures are followed when responding to written communications from LEP persons: *computer programs to translate word documents* 

## Responding to LEP Individuals in Person

The following procedures are followed when an LEP person visits our customer service and administrative office: use of language translation services if appropriate.

The following procedures are followed by operators when an LEP person has a question on board a Blackstone Area Bus System vehicle: *volunteer translation assistance from fellow passengers, etc.*].

#### Staff Training

As noted previously, all Blackstone Area Bus System 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:

- following our Title VI policy statement included on our vital documents.
- through signs posted on our vehicles and in our customer service and administrative offices.
- through ongoing outreach efforts to community organizations, schools, and religious organizations.

LEP persons will also be included in all community outreach efforts related to service and fare changes.

#### 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, Blackstone Area Bus System will solicit feedback on the effectiveness of language assistance provided and unmet needs. In addition, we will conduct periodic community meetings, internal meetings with staff who assist LEP persons, 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, Blackstone Area Bus System 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, Blackstone Area Bus System 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 Blackstone Area Bus System will attempt to identify the most cost-effective approaches.

As the community grows and new LEP groups emerge, Blackstone Area Bus System will strive to address the needs for additional language assistance.

## 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

Blackstone Area Bus System 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. Blackstone Area Bus System 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 core block groups for below poverty. 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.

The following system-wide service standards are used to guard against service design or operations decisions from having disparate impacts. 24 hour notice for advance deviation. All of Blackstone Area Bus System's services meet the agency's established standards; thus it is judged that services are provided equitably to all persons in the service area, regardless of 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 14 all of Blackstone Area Bus System'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. The standard for vehicle headways is 4 hours all of Blackstone Area Bus System's services meet this standards
- 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 within 5 minutes, all of Blackstone Area Bus System'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 5 miles. All of Blackstone Area Bus System's services meet this standard.

## Service and Operating Policies

The Blackstone Area Bus System'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. Blackstone Area Bus System 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 bus stop frequency of passengers.
- Vehicle assignment Vehicle assignment refers to the process by which transit vehicles are placed into service and on routes throughout the system. Blackstone Area Bus System 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 Director of Transportation and Community Development 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.

## **Monitoring Title VI Complaints**

As part of the complaint handling procedure, the Title VI Manager 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**

Blackstone Area Bus System monitors service reductions and fare increases. With each proposed service or fare change, Blackstone Area Bus System 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.

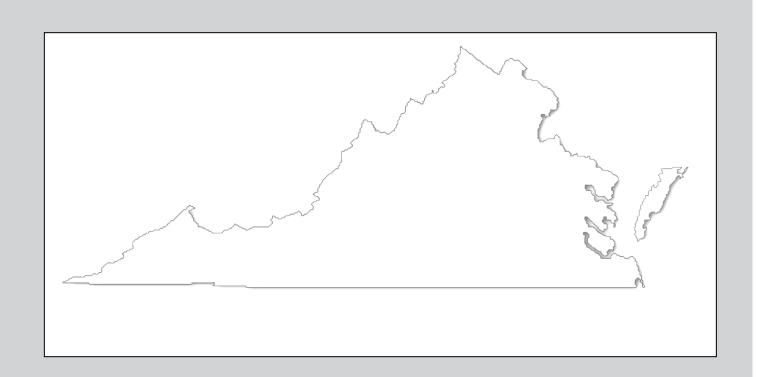
# Appendix 3E: BABS 2015 Triennial Review

# VIRGINIA RURAL PUBLIC TRANSIT COMPLIANCE REVIEW WORKBOOK

For FTA Section 5311 Grantees

**Grantee: Blackstone Area Bus** 

**Date: May 3, 2011** 





Virginia Department of Rail and Public Transportation 600 East Main Street, Suite 2102 Richmond, VA 23219 www.drpt.virginia.gov

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## **OVERVIEW**

The Virginia Department of Rail and Public Transportation (DRPT) is required by the Federal Transit Administration (FTA) to ensure that recipients of Section 5311 and other FTA assistance comply with federal requirements. To meet this federal mandate, DRPT conducts periodic reviews of its Section 5311 grantees. Additional objectives of the reviews are to ensure compliance with state requirements, encourage progress, and identify training and technical assistance needs.

This workbook contains a series of review questions. Most of the questions address FTA and state requirements. Some questions address good practices. The review process is as follows:

- 1. DRPT will review materials and reports on file in its office and answer as many questions in the workbook that it can. DRPT notes findings from the last review and the agreed upon corrective actions.
- 2. GRANTEES will review the information, provide any updates to the material listed, and answer as many questions as possible. After completing the workbook, email it to your Rural Transit Program Administrator
- 3. DRPT will review your responses and follow up with you during a site visit, which should last no more than one and a half days. During the site visit, DRPT will: discuss answers to selected questions, tour any facilities, review maintenance records, and follow up on corrective actions taken for findings from the last review.
- 4. After the site visit, DRPT will send a letter listing findings, corrective actions needed, and recommendations. No corrective action will be made for those items labeled good practices; however, suggestions may be made regarding these items. The corrective actions will have a specified time frame for implementation.

Jeff Sizemore Ken Pollock

Rural Transit Program Administrators

## **REQUESTED MATERIALS**

Documents			Comment
Documents	Y or N	Date	Comment
Governance			
Organization chart that shows the reporting relationship to the Board	N		Town
Articles of incorporation or ordinance	Υ		Town Charter
Bylaws	Υ		Town Charter
Sample board minutes	Υ		Council Minutes
Sample board financial report			
Financial Management			
Accounting policy and procedures manual			
Current operating/capital budget approved by the Board	Y		
Travel policies/procedures	N		Town does not have one
List of all sources of local match from previous fiscal year and current fiscal year. Include amount contributed by each locality.	Y		
Sample monthly financial report	Υ		
Satisfactory Continuing Control			
Sample page from fixed-asset (inventory) system	Y		OLGA
Procurement			
Written procurement manual/procedures	Υ		Town Code
Written code of conduct governing procurements	Y		Town Code
Personnel			
Written personnel manual/procedures	N/A		Being developed
EEO			
Sample job application	Υ		Standard Town Application
Sample job posting and advertisement	Y		
Maintenance			
Written vehicle maintenance plan	Υ		
Pre-trip inspection form	Y		
Written facility maintenance plan			

Documents			Comment
Documents	Y or N	Date	Comment
Service Provision			
Service policy/operator manual	N		Recommended
Sample monthly performance data sheet	Y		
Marketing			
Written marketing plan	N		
Sample marketing materials (schedules, brochures, newspaper ads, etc.). These materials must be updated at time of review.	Y		
Drug and Alcohol			
Written Drug and Alcohol Policy	Y		Currently being updated
Sample MIS Report	Y		Attachment B
Name and Address of All Collection Sites	Y		Farmville Alcohol and Drug

## **BACKGROUND**

## **REVIEW INFORMATION**

Rural Transit Program Administrator: Ken Pollock

Address: 600 East Main Street Suite 2102, Richmond, VA

Phone: 804-786-7858

Fax: Email:

FTA Section 5311 Transit System Contact: Jennifer Beck Address: 101 BABS Lane, Blackstone, VA 23824

Phone: 434-292-3025 Fax: 434-292-3026

Email: Jennifer.beck@blackstonebus.com

Review Dates
Desk review:

Initial workbook emailed to grantee: Initial workbook received by reviewer:

Site visit dates: Rescheduled to May 3, 2011 at grantee's request

Draft workbook emailed to grantee: Final workbook received by reviewer:

Review closed:

## INSTITUTIONAL STRUCTURE

Paratransit Operating Contractor(s)

Maintenance Contractor(s):

Name: Town of Blackstone Blackstone Area Bus				
Type of Organization (City, Transit Authority, Non-Profit, etc.):				
Municipal Government				
Year established: 2003				
Year service started: 2003				
Governing Board: Town Council				
Name of Board Member	Board Office Held (if applicable)	Appointing Jurisdiction (county,		
		city, organization, etc.)		
See attachment A				
List of Contractors (if applicable):				
- Management Contractor				
- Fixed Route Operating Contractor(s)				

## SERVICE DESCRIPTION

Areas/communities serviced: serves Nottoway, Lunenburg, Brunswick, Prince Edward, Amelia, Cumberland, Buckingham, Dinwiddie and Fort Pickett

Population: @10,000

Square miles:

Number of routes: 8

Days and hours of operation: Monday- Friday (6-11p.m.) and Saturday and Sunday- varies

Number of revenue service vehicles in fleet:

Number of employees (full-time and part-time): Full Time2 Part Time20

Ridership for most recent fiscal year: FY2010 (January -October 35873) All of 2009= 41,160

Coordination/transfers with: Farmville Area Bus, Petersburg Area Transit

## **FIXED ASSETS**

Facilities:	No. of Facilities	Name/Location	Federal and/or State Interest (yes or no)
Administrative/Maintenance Facility	1	101 BABS Lane, Blackstone	Yes
Administrative Facilities			
Maintenance Facility			
Service Vehicles		101 BABS Lane, Blackstone	Yes
Transfer/Intermodal Center			
Storage Facility			

## PROJECT ACTIVITY

Please provide a brief description of noteworthy projects that are on-going or planned.

We have just completed a fencing system and landscaping with irrigation. In November, we began the Fort Pickett route and are completing a back enclosure to our facility.

## ADMINISTRATION AND MANAGEMENT

## **GOVERNANCE**

Grantees must have the legal capacity to receive federal and state grants. Grantees must have a designated body legally responsible for the overall organization, management and operation of the transportation system. The Board should be both representative of the community to provide management with community advice and bring management and other expertise from which transit management can draw. The Board should meet regularly and must conduct business in an open and transparent manner. The Board should set policy, goals, and objectives for the system and not involve itself in day-to-day operations. Most of the questions in this section address good practices.

1.	legally re organiza	the name of the designated body esponsible for the overall tion, management, and operation ansit system?	Blackstone Town Council
2.	Do the articles of incorporation or ordinance specifically mention public transportation, coordination of transportation or other passenger transportation functions?		No
3.		e Board have written bylaws for its noce which include (Answer Yes or	Yes
	a. Dutie	es and responsibilities	a. Yes
	b. Meth	nod of member selection	b. Yes
	c. Term	ns of office	c. Yes
		uency and notification of tings	d. Yes
	e. Proc	edure for appointing manager	e. Yes
	i) S ii) F	ding conflict of interest in: Selection of Board members Purchasing and doing business with service Employment	f. Yes

4. Is the Board representative of the communities it serves? a) # Members: Total b) # Members: Private sector c) # Members: Public sector d) # Members: Elected officials e) # Members: Consumers f) # Members: Minorities g) # Members: Minorities g) # Members: Minorities f) # Members: Minorities g) # Members: Disabled h) # Members: Disabled j) # Members: By the goographic areas or political subdivisions k) Vacancies k)  5. What key skills or knowledge do Board members bring that can be leveraged by transit management (finance, legal, management, human services) at no cost to the agency?  6. Does the sample of Board records indicate that Board minutes are complete and signed by the elected or appointed secretary?  7. Are Board meetings open to the public? 8. How are Board members selected for the Board (please describe)?  9. Does a majority of Board members regularly attend meetings?  10. How many times in a year does the Board meet? (Quarterly, monthly, etc.)?  11. Are financial reports submitted to the Board for its review and action? How often?  12. Have strategic goals, objectives, and targets which are reasonable for the resources available been adopted by the Board for the transportation program? If yes:  a. What are the goals, objectives, and targets for the current year?  b. How were they developed?  c. How often does the Board review and revise the goals, objectives, and targets?			
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targets for the current year?  b. How were they developed?  c. How often does the Board review and revise the goals, objectives, and		targets which are reasonable for the resources available been adopted by the Board for the transportation program?	no
c. How often does the Board review and revise the goals, objectives, and			
revise the goals, objectives, and		b. How were they developed?	
		revise the goals, objectives, and	

d. How often does the Board review the progress toward achievement of each goal, objective, and target?	
13. Does the Board involve itself in day-to-day operations?	no
Has training been provided to the Board concerning its role and responsibilities?     How is this accomplished?	N/A
15. Are Board members provided a handbook or policy manual?  If yes, what does it contain?	N/A
16. Does the Board formally review the performance of the chief executive officer, manager or executive director at least annually?	Transit Manager's performance reviewed annually by Town Manager.

## PROJECT MANAGEMENT/GRANT ADMINISTRATION

Grantees must have the managerial capability to implement the project, manage grants, and comply with federal and state requirements. To demonstrate managerial capability, grantees must have an adequate number of staff; maintain adequate documentation of key policies; have a systematic process for determining the number and size of vehicles for the fleet; and submit timely, accurate, and complete quarterly reports. Grantees must comply with the provisions of the special labor protection warranty [Section 5333(b)].

1.	Who is responsible for the day-to-day management of the transit program?	Jennifer Beck
2.	Please describe your staffing and the responsibilities of key staff. Do you have an organizational chart? Reviewer: Does the number of staff appear appropriate for the number and complexity of tasks and the size of the program?	Jennifer Beck reports to the Town Manager. An operations assistant with drivers and a receptionist report to Jennifer
3.	Are back-up personnel familiar with program rules and regulations?	Yes
4.	What training has the manager and staff undertaken in the past year?	JB- CTAA, CTAV, Essentials of HR, Grantee Workshops Staff and Jennifer- Wheelchair securement, Fire Extinguisher training, Diversity training
5.	How are financial reports, service reports and statistical data used in day-to-day management of transit service?	Used to determine the efficiency of routes.

6. What policies do you have documented in writing?

DRPT requires several written procedures and has included procedures that would be classified as good practices.

Written Procedure	Y or N	Date of Last Update or Revision
e. Facility Maintenance Plan (required for those grantees with FTA-funded facilities)	Y	2010
f. Vehicle Maintenance Plan (required)	Υ	2010
g. Drug and alcohol policy (required)	Υ	2006
h. Fare collection procedures (required)	Υ	2010
i. Complaint resolution procedures (required)	Υ	2006
j. Marketing plan (recommended)		
k. Emergency Response Plan (recommended)		
Hazard and Security Plan (recommended)	Υ	2006

					1
	m. Purchasing procedures (required)			Y	Town Code
	n. Code of Conduct (required)			Υ	Town Code
		ocation plan (required if you cha costs to the 5311 operating bud		N	
	p. System	safety plan and procedures (red	quired)	Υ	
		ors' manual/service policies mended)		N	
	r. Job des	criptions (recommended)		Υ	
	s. Accoun	ting manual (recommended)		N	
	t. Personi	nel policies (recommended)		N	
	u. Board p	olicy manual (recommended)		N	
	v. Disaste	r recovery plan (recommended)		N	
	w. Travel p	policies (required)		N/A	
	x. Hazard	and Security plan (recommende	ed)	Υ	July 2006
7.	7. Who is responsible for preparing and submitting the reports?		Jennifer	Beck	
8.	8. Were the reports submitted on time? If not, what are the reasons for the delay?		Yes		
9.	9. The reviewer may have listed comments or issues with the reports. Please respond to the reviewer's comments.				
10.	10. Has the transit system developed a Hazard and Security Plan?  Required by DRPT.		Yes		
11.	Do you have procedures	e disaster recovery ? If yes:	Yes		
	a. Please describe.		Data is	backed up	nightly
	b. What documents and data do the procedures address?		Everythi	ing	
12.	12. What three (3) management steps have		1. Trair	ning- Offer	red more in 2010
	you taken in the last twelve months that would demonstrate that you have		2. Review and revised schedules		
	effectively n	nanaged your program and ound management practices?	3. Adde	ed farebox	es to all vehicles
13.	federal certi	monstrating compliance with fications and requirements are rinspection?	Yes		

14. Is the special labor protection warranty [Section 5333(b)] posted clearly for all employees to see?	YES- Front Lobby
Grantees must post the special labor protection warranty where affected employees may see it. Reviewer will check for posting.	
15. Have any special labor-protection warranty complaints been received?	NO
If yes, were they reported to the DRPT?	
How were the complaints resolved?	
Is the warranty posted where all employees can see it?	
Grantees must report any special labor warranty complaints and how they were resolved to DRPT.	
16. Do you contract with private operators or other agencies? If yes, please identify and answer the following questions.	No
Who is responsible for managing the contract?	
What procedures are used to ensure that quality service is provided?	
Has DRPT reviewed the contract?	
Grantees must have procedures for managing service contractors to ensure that quality service is provided.	
ON LINE GRANT	S ADMINISTRATION (OLGA)
17. Did you complete and submit your OLGA applications by Feb 1?	Yes
Was a public hearing publicized and held in a timely manner? (required for capital applications)	Yes
Were board resolutions passed by Feb 1 and submitted with the application?	Yes
18. Did you submit your Capital Budget 6 Year Plan in OLGA by September 30?	Yes
19. Has an asset inventory been completed and submitted in OLGA by June 30? Is it updated regularly? Monthly/Quarterly/Annually?	Yes Updated with new vehicles and quarterly
Is performance data submitted in OLGA monthly?  Who is responsible for submitting performance data?	Yes Janet Matthews

## FINANCIAL MANAGEMENT

Grantees must have sufficient local resources to provide the required match and carry out the proposed project. At least half of the local share must come from non-federal sources. Grantees must also have the financial management systems to account for and report on Section 5311 assistance. Grantees must maintain financial records for at least 3 years from the expiration date of the grant. Grantees must submit a copy of audit findings relating to the transit program to the state. Grantees must resolve audit findings in a timely manner. Grantees that charge indirect costs to grants must have an approved cost allocation plan developed in accordance with Office of Management and Budget (OMB) Circular A-87 or A-122. Grantees that expend more than \$500,000 in federal funds from all sources in a year must have a single audit conducted that complies with OMB Circular A-133. Grantees must document in-kind costs used as local match for a grant. Grantees must exhibit sound financial practices.

1.	Reviewer, list the sources of local funding from the application.	Source	Amount per Application	Actual Amount
	Grantee, confirm the sources of local funding for operating and capital expenses. Note any changes.	See Appendix A		
	Are the sources of local funding sufficient to implement the project and maintain project equipment?			
	Grantees must have sufficient local resources to carry out the proposed project and maintain project equipment.			
2.	Are operating expenses covered in a fiscally responsible and Board-approved manner before being reimbursed by the state?	Yes		
3.	Does at least half of the local share for operating expenses come from non-federal sources?  Half of the local share must come from	Yes		
	non-federal sources.			
	<ul> <li>a. How are match funds received from local governments (monthly, quarterly, annually)?</li> </ul>	Varies- some are monthly, some quarterly, some annually		
	<ul> <li>b. How are local match funds allocated between operating and capital budgets?</li> </ul>	Localities are asked for budgets separately.		
4.	Are financial records retained for at least 3 years after DRPT closes the Grant Project in TEAM?	Yes		
	Grantees must maintain financial records for at least 3 years after DRPT closes the Grant Project in TEAM.			

5.	When is your next financial audit scheduled? Please provide the date.	Completing FY 2010 now to start in June 2011	preliminary work scheduled
6.	Have you submitted an audit to the DRPT six months after the close of the fiscal year? If not, please provide a written explanation.	Yes	
7.	If more than \$500,000 in federal funds were expended during the last fiscal year, was a single audit conducted in accordance with Office of Management and Budget (OMB) Circular A-133?  OMB Circular A-133 requires that any grantee that expends more than \$500,000 in federal funds in a year must have an independent single audit conducted.	N/A	
8.	Have corrective actions been implemented addressing the following financial audit or single audit findings?	Yes from the Town's side	
Fin	ding	Corrective Action	
			Status
9.	Are indirect costs charged to grants?	No	
	If yes, please answer questions a – f.		
[Per Office of Management and Budget (OMB) Circular A-87 or A-122, indirect costs are costs that are incurred for a common or joint purpose that benefits more than one cost objective and are not readily assignable to the cost objectives specifically benefited without effort disproportionate to the results achieved. Examples of indirect costs are accounting and personnel services.]			
mu cos	antees that charge indirect costs to grants ust do so in accordance with an approved st allocation plan that was developed in cordance with OMB Circular A-87 or A-122.		
	a. Is there a cost allocation plan to support indirect administrative costs related to a grant program?	a.	
	b. Was the plan developed in accordance with OMB Circular A-87 or A-122?	b.	
	c. Has the plan been submitted to the DRPT?	C.	

<ul> <li>d. Have procedures been established to ensure that costs are classified as either direct or indirect (but not both)?</li> </ul>	d.
e. Has the plan been followed?	e.
f. Has the rate been updated annually?	f.
Are two signatures required on all accounts (checking, savings, investment, etc.) and checks?  Whose signatures are required?  For checks, what is the dollar threshold for two signatures?	Yes Town Manager and Deputy Treasurer All checks require two signatures
Are reports showing actual versus budgeted expenses and variances being reviewed on a monthly basis?  Who performs the comparisons?	Yes Town and Jennifer
12. Does the Board approve the budget?	Yes
13. Is the budget prepared in sufficient time to allow full review and interaction by the Board?	Yes
14. Is the Board provided a budget with sufficient detail to make decisions about the allocation of program resources?	Yes
15. Are all anticipated farebox revenue, contributions, grants, contracts and other program income projected in the overall transportation budget?	Yes
When changes are made in the budget line items and funds are transferred between line items, is this being documented? What is the threshold for Board approval?	Yes
16. Does the Board approve these changes?	No
17. Is the Section 5311 contract balance monitored on a monthly basis?	Yes
18. Are adequate steps taken to ensure that the system is able to operate within its yearly Section 5311 allocation?	Yes
Do your farebox collection procedures adequately address security and assurance?	Yes
Please answer (describe where necessary) the following questions:	
a. How often are the fareboxes pulled?	a. Daily

	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	L All burners are in the manager of about in the fourth area.
D.	. What are the procedures for the driver to turn in the fares?	b. All buses are in the process of changing to fareboxes.
C.	How often are drivers required to turn in the fares?	c. Fares are collected from office personnel from the bus
d.	. Where are the fares stored until a deposit is made?	d. Counting room and then transfer to Town Office
e.	. How often are the fares deposited?	e. Daily
f.	Who has the keys to the vaults or fareboxes?	f. Office
g.	. Where are the keys kept?	g. In the counting room
h.	. Is this a secure location?	h. Yes
i.	Who makes the deposit?	i. Town Office
j.	Is there a requirement that more than one person be present when fares are counted?	j. No
k.	Who reconciles the fares, driver's logs, and scheduler sheets?	k. Jennifer and/or Janet
re tra	the drivers count fares and do econciliations, have you designated ansit system personnel to monitor these ctivities?	Jennifer will monitor through video camera system.
սլ m	o you have written procedures governing p-front money that drivers have for haking change or other expenditures uch as bus washes?	We do not carry change
pi a pa sy	ave you implemented risk management rocedures such as estimating how much route should produce based on assenger counts to ensure the transit ystem is receiving the proper amount of arebox revenue?	Yes
If pi ex	yes, are there written policies and rocedures in place for petty cash expenditures which include what it is used or and who is eligible to withdraw funds?	No
of co	re you and your Board members aware f ineligible expenses as defined in the orresponding OMB Circulars (A-87 or A- 22 for Non-Profits)?	Yes
re	ave financial, project and inventory ecords been retained for three years after udit?	Yes
	o you generate revenue through dvertising?	no

27. Do you have Board approved guidelines governing the acceptance of advertisements?	N/A
28. Are you able to determine advertising profit? (Only profit from advertising can be used as match)	N/A
29. Does the agency have an adequate cash flow? If not, what steps are being taken to ensure this?	Yes
30. Are there written travel policies for staff and Board members which detail at a minimum:	
Use of per diem rate or actual expenses, basis of reimbursement and reasonable dollar limits.	a. No
Requirements for receipts for lodging and meals when reimbursement is made for actual cost.	b. No
c. Requirement for approval of travel requests.	c. No
d. Requirement for travel expense vouchers to show purpose of trip.	d. No
31. Are timesheets approved by an individual who is not responsible for their preparation? By whom?	Yes. approved first my Janet- then Jennifer then goes to payroll for approval
32. Are there written procedures for: (Good Practice)	
a. The retention of records.	a. No
b. Reporting requirements, including a schedule of report deadlines.	b. No
c. Requirements and schedules for audits.	c. NO
33. Are monthly financial reports reviewed by management? Board?	Yes

## SATISFACTORY CONTINUING CONTROL

Grantees must use FTA-funded equipment and facilities to provide public transportation. The number of spare vehicles must be appropriate to the size and age of the fleet, the amount of peak demand, and the projected ridership growth. Grantees must maintain a combined single limit of insurance coverage of at least \$1 million on FTA-funded vehicles and must submit proof of insurance annually. Grantees must carry enough insurance to replace any FTA funded facility or equipment such as bus washers, bus lifts, etc. Grantees must obtain prior written approval from DRPT before selling, leasing, or disposing of vehicles, equipment or facilities that have remaining federal interest. Grantees must have procedures to prevent loss, damage, or theft of FTA-funded property and inventory.

1.	Is property (includes rolling stock, facilities, materials, equipment, etc.) that was purchased with FTA funds being used for transit purposes?	Yes
2.	Can you account for all equipment or facilities purchased with FTA funds?	Yes
3.	Do you have a written fixed asset (inventory) system of all equipment, vehicles, and real property?  Is it updated yearly?	Yes
4.	At a minimum, do the inventory records contain the following information?	
	a. Description	a. Yes
	b. Purchase Date	b. Yes
	c. Serial Number	c. Yes
	d. ID/Fleet Number (if applicable)	d. Yes
	e. Purchase Price	e. Yes
	f. Year/Model/Manufacturer	f. Yes
	g. Funding Source	g. Yes
	h. Location	h. Yes
5.	What is the dollar threshold for inclusion in the asset inventory? (>\$5,000 required)	\$5000
6.	Is there a current, complete inventory of all equipment?	Yes
7.	Is a physical inventory of equipment taken at least annually that is reconciled to the inventory records?	Yes
8.	Is all equipment permanently tagged or stamped with an identification number?	Yes

How many vehicles were in use at the time of the visit? (Reviewer will answer.)	
10. How many vehicles were parked or in the garage at the time of the visit? (Reviewer will answer.)	
<ul><li>11. Regarding your vehicle fleet:</li><li>a. What is the number of revenue vehicles?</li></ul>	a. 24
b. What is the number of vehicles required for maximum service?	b. 9
c. What is the number of spare vehicles (a minus b)?	c. 16
<ul><li>d. What is the spare ratio (c divided by b)? (&gt; 50 vehicles the maximum spare ratio is 20%)</li></ul>	d. We are in the process of stripping vehicles for the Town to declare surplus
12. How often is the maximum number of vehicles required?	Daily
13. Do future ridership projections indicate a need for additional vehicles?	Yes- Fort Pickett
14. Does the spare ratio appear reasonable given the size and age of the fleet, the frequency of peak service demand, and the projected ridership growth?	See 11 d
15. Are the vehicles used appropriate for the type of service, ridership volumes, and scheduling patterns?	Yes
16. What is your procedure for disposing of FTA or state funded vehicles/equipment that have met their useful life?	Town must declare equipment surplus and set a date for an auction
Do you have a written policy?	
17. How do you ensure that the proceeds from the sale of FTA or state funded vehicles/equipment are used for transit capital purchases?	That has not happened. Funds will probably be placed in a separate account.
18. Do you have written procedures for the disposal of vehicles damaged or totaled before they have met their useful life?	No
Are insurance settlements from these vehicles reported to DRPT?	Yes
Are the proceeds used to purchase a replacement vehicle?	
19. Are facility use or lease agreements current for all facilities?	n/a
Has DRPT reviewed these lease	1

Do you carry risk, liability, workman's compensation, and fire insurance?      Do you carry Terrorism insurance?	Yes
22. If self-insured, is there a self-insurance reserve account?	N/A
23. Is there a workers' compensation management system which provides for verification of accident/injury, administration of benefits, vocational rehabilitation?	Yes
24. Are inventory item statistics maintained such as inventory level policy, consumption record, reorder points, economic order quantities, recent bidders and prices, and acquisition times? (Replacement not just historical)  Good Practice	

## **PROCUREMENT**

All grantees must comply with the provisions of FTA Circular 4220.1F. In addition, all grantees must have written procurement procedures, written code of ethical conduct and written protest procedures. Conduct all procurements in a manner that provides for full and open competition; include federally required clauses in contracts; document the history of all procurements; conduct a cost or price analysis for all procurements; and not provide preferences for in-state or local contractors.

1.	Who is responsible for the procurement process?	Jennifer and the Town Manager
2.	Are procurement procedures approved by the Board?	Yes
3.	Do you have a written code of standards of ethical conduct governing the performance of employees engaged in the award and administration of contracts that prohibits any employer, officer, or agency from participating in the selection, award, or administration of contracts? Written procedures are required by DRPT.	Town Code
4.	Do any potential conflicts of interest exist between policy Board members/employees and consultants/vendors/suppliers or between a management contractor and consultants/vendors/suppliers?	No
5.	Are contracts split to avoid competition?	No
6.	For purchases over \$2,500 do you obtain price or rate quotations from at least three qualified sources?	Yes
7.	Do the procedures ensure the most efficient and economic purchase?	Yes
8.	Do procedures ensure awards are made only to responsible contractors?	Yes
9.	Do the procedures address protest procedures?	Yes
10.	Do the procedures provide for settlement of contract issues and disputes?	Yes
11.	Do the procedures provide for competition in the award of revenue contracts?	Yes

12.	Have you attached the federal terms and conditions to all purchase orders?	Yes
13.	Are the federal terms and conditions updated yearly? (Please provide a sample)	Yes
14.	Have you followed the Section 5311 purchasing procedures as outlined in the operating contract?	Yes
15.	Is the documentation for quotes, price sheets, etc. kept on file for the life of the vehicle or equipment?	Yes
16.	At anytime since the last site visit has the lowest responsive bidder not been taken? Why?	No
17.	Please list major capital procurements, (Attach additional sheets, if necessary)	exceeding \$3000, you have made since the last site visit
	Item	Amount
Revenu	ue Vehicles	
Suppor	t Vehicle	
a.	What procedures were followed for	Vehicles- State Bid
	each of the purchases?	Bid out other items
b.	Did the procedures followed provide for free and open competition?	Yes
C.	Who administers the contracts?	Jennifer and the Town Manager
d.	Do the files document the procurement history? Reviewer, use the attached procurement file review sheet.	Yes
DR trai DR app	Do you have contracts for transportation services? RPT must be made aware of all insportation service contracts. The RPT reserves the right to review and prove all contracts for transportation rvices.	No

## PROCUREMENT FILE REVIEW SHEET

Grantee Blackstone Area Bus	Amount\$3,420
Contract Number	Purpose <u>Misc. Equipment</u>
Award Date7/16/2010	Number of Bids Received N/A
Awarded To Quill	Date File Inspected 5/3/2011

Item	Yes	No	NA
Does the file contain an index or checklist of items that it should contain? (Good practice)		Х	
Does the file contain the rationale for the method of procurement and contract type?		Х	
Does the file contain the invitation for bids or the request for proposals?			X
Does the file contain the notices and advertisements?			X
Does the file include all bids received?			X
Does the file document the evaluation and the results of the evaluation?			Х
Does the file contain a signed contract?			Х
Are materials filed in chronological order?	Х		
If a pre-bidders' conference was held, does the file document the bidders notified of the conference, the date and time of the conference, and the list of the attendees?			Х
If the procurement was a sole source, single bid, brand name, or award to other than low bidder, does the procurement file contain a justification for the award?			Х
Do the files contain a cost or price analysis? (required)	Х		
Do the files indicate that the grantee ensured that goods and services were received?	X		
Does the file include all contract modifications and amendments?			Х
Does the file contain copies of all correspondence with the vendor?	Х		

## PROCUREMENT FILE REVIEW SHEET

Grantee Blackstone Area Bus	Amount\$4,900
Contract Number	Purpose <u>Digital Recording System</u>
Award Date <u>6/16/2010</u>	Number of Bids Received 3
Awarded To Sonny Merryman, Inc	Date File Inspected 5/3/2011

Item	Yes	No	NA
Does the file contain an index or checklist of items that it should contain? (Good practice)		Х	
Does the file contain the rationale for the method of procurement and contract type?		Х	
Does the file contain the invitation for bids or the request for proposals?	X		
Does the file contain the notices and advertisements?	Х		
Does the file include all bids received?	Х		
Does the file document the evaluation and the results of the evaluation?		Х	
Does the file contain a signed contract?	РО		
Are materials filed in chronological order?	Х		
If a pre-bidders' conference was held, does the file document the bidders notified of the conference, the date and time of the conference, and the list of the attendees?			Х
If the procurement was a sole source, single bid, brand name, or award to other than low bidder, does the procurement file contain a justification for the award?			Х
Do the files contain a cost or price analysis? (required)	Х		
Do the files indicate that the grantee ensured that goods and services were received?	X		
Does the file include all contract modifications and amendments?			Х
Does the file contain copies of all correspondence with the vendor?	Х		

## **BUY AMERICA**

Buy America law requires grantees to purchase steel, iron, and manufactured products that are produced in the United States for FTA-funded projects, unless FTA through DRPT granted a waiver or the product is subject to a general waiver. General waivers are listed in Appendix A to 49 CFR 661.7 and include final assembly in the United States for 15-passenger vans produced by Chrysler Corporation, microcomputer equipment, software, and small purchases (currently less than \$100,000) made with capital, operating, or planning funds. Revenue service rolling stock not subject to a general waiver must be assembled in the United States and have a 60-percent domestic content.

Grantees are required to conduct pre-award and post-delivery reviews to confirm Buy America, Federal Motor Vehicle Safety Standards (FMVSS), and purchaser's requirements compliance for all revenue service rolling stock procurements. Revenue rolling stock purchases below the federal small purchase threshold are exempt from Buy America pre-award and post-delivery review requirements; however, a certification that the rolling stock is exempt from Buy America requirements is still required. Revenue rolling stock purchases below the federal small purchase threshold are still subject to pre-award and post-delivery review requirements for FMVSS and purchasers requirements. Unmodified mass produced vans are exempt from all pre-award and post-delivery review requirements.

1.	As part of the Post-Delivery Review, have you visually inspected and road tested vehicles received to ensure that they meet the contract specifications?	Yes
2.	Are Buy America documents part of all vehicle procurement files?	Yes
3.	Are Buy America documents part of all non-vehicle procurements and construction projects that are \$100,000 or more?	N/A

#### SUSPENSION/DEBARMENT

Grantees are prohibited from contracting for goods and services from individuals or organizations that have been suspended or debarred from receiving federally assisted contracts. Grantees awarded grants exceeding \$25,000, must obtain a certification from contractors awarded contracts in excess of the federal small purchase threshold stating that they are not suspended or debarred from receiving federally assisted contracts. Grantees must provide immediate written notice to DRPT for reporting to FTA if they learn that their certification or the certification of any contractors is no longer valid.

The Government Services Administration publishes the *List of Parties Excluded from Federal Procurement and Non Procurement Programs*. Grantees can search the list on the Internet at http://epls.arnet.gov.

	Answer these questions only if you received a grant that exceeded \$25,000.		
1.	Was the required certification clause included in all procurements exceeding \$25,000? [See clause checklist]	Yes	
	The debarment and suspension certification clause must be included in all procurements \$25,000.		

## **LOBBYING**

Grantees and contractors may not use federal appropriated funds to pay for influencing or attempting to influence an officer or employee of any federal department or agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal grant, cooperative agreement, or any other federal award. The restrictions do not apply to influencing policy issues, only to influencing the award of a grant or a contract. Recipients of grants and contracts exceeding \$100,000 must certify that they have not and will not use federal appropriated funds to pay for lobbying.

Grantees and contractors may use nonfederal funds for lobbying. Recipients of a grant or contract that exceeds \$100,000 that is paid for in whole or in part with federal funds must file an initial disclosure form (standard form LLL) if they use nonfederal funds for lobbying and must submit the form every calendar quarter in which there was a cumulative increase of \$25,000 or more in the amount paid or expected to be paid for lobbying; a change in the person lobbying; or a change in the officer(s), employee(s), or member(s) lobbied to. Grantees must forward all disclosure forms of contractors and subcontractors to the state for reporting to FTA.

	Answer these questions only if yo	ou received a grant that exceeded \$100,000.
1.	Have you completed and submitted Standard Form-LLL, "Disclosure Form to Report Lobbying?	Yes
	Recipients of a grant or contract that exceed \$100,000 that is paid for in whole or in part with federal funds must file an initial disclosure form (standard form LLL) if they use nonfederal funds for lobbying and must submit the form every calendar quarter in which there was a cumulative increase of \$25,000 or more in the amount paid or expected to be paid for lobbying; a change in the person lobbying; or a change in the officer(s), employee(s), or member(s) lobbied to. Grantees must forward all disclosure forms of contractors and subcontractors to the state for reporting to FTA.	

## **DISADVANTAGED BUSINESS ENTERPRISE (DBE)**

Grantees must not discriminate based on race, color, national origin, or sex in the award and performance of FTA-assisted contracts. Grantees must provide Disadvantaged Business Enterprises (DBEs) the maximum opportunity to compete for and perform contracts and subcontracts financed in whole or in part with federal funds. Grantees that expend more than \$250,000 in FTA funds on third-party contracts must meet additional requirements as determined by DRPT in consultation with FTA.

1.	Did the grantee report on DBE activity in the semi-annual reports? If not, please list the semi-annual reports the grantee did not submit DBE information.  Grantees must submit semi-annual DBE activity reports.	Yes
2.	Do the reports indicate that the grantee has been successful in contracting with DBEs?	No
3.	What good faith efforts have been taken to ensure that DBEs have the maximum opportunity to compete for and perform contracts and subcontracts financed in whole or in part with FTA funds?	RFP's are advertised in the newspaper and are sent to certified DBE vendors in the region that provide the product or service.
	Grantees must make good faith efforts to ensure that DBEs have the maximum opportunity to compete for and perform contracts and subcontracts financed in whole or in part with FTA funds.  Examples of good faith efforts include advertising in newspapers that serve minority communities, maintaining a list of minority vendors, and contacting other agencies for potential DBE contractors.	
4.	Do you have a current listing of certified DBE firms?	We visit the DBE website
5.	Were any DBE complaints received since the last review? If yes:  Describe the complaint and how it was resolved.  What is the process for handling and resolving such complaints?	No

### **PERSONNEL**

Grantees should have Board-approved, comprehensive personnel policies. Current job descriptions should be on file for every position. Maintain records for every employee, including annual employee performance evaluation.

1.	Who is responsible for personnel management?	Jennifer and Town Manager
	Is the person by reason of education, training, and experience qualified for the responsibility?	Yes
2.	Are personnel policies written and approved by the Board?	A personnel policy for all town employees including transit staff is under development
3.	Do the policies address:	
	a. Personnel selection and appointment	a.
	b. Required probationary period before permanent appointment	b.
	c. Grounds for dismissal/appeals	C.
	d. Grievance procedures	d.
	e. Hours of work	e.
	f. Annual and sick leave	f.
	g. Holidays	g.
	h. Promotion and/or salary increases	h.
	i. Insurance benefits	i.
	j. Retirement plans	j.
4.	Are there written job descriptions on file for all positions in the transportation program?	Yes
5.	Do you review your personnel policies on a periodic basis to ensure compliance with all applicable laws or regulations?	Yes
6.	Do you review your employee handbook on a periodic basis and issue updates when needed?	n/a
7.	Does the Board approve changes in the personnel policies?	Yes
8.	Do the job descriptions identify:	
	a. Job title	a. Yes
	b. Primary responsibilities	b. Yes
	c. Applicable performance standards	c. Yes
	d. Wage rate or salary range	d. no

9. Are time and attendance records kept for and signed by all employees, including part-time and in-kind (or volunteer)? [Sample]	Yes
Is each employee appraised on performance at least annually?      Good Practice	no

## **EQUAL EMPLOYMENT OPPORTUNITY (EEO)**

Grantees may not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. Grantees must take affirmative action to ensure that applicants and employees receive fair treatment without regard to race, color, creed, national origin, sex, disability, or age. Grantees must post in conspicuous and accessible places and make available to employees and applicants for employment notices setting forth an EEO policy.

1.	Who is responsible for ensuring that EEO obligations are fulfilled? To whom does this individual report for EEO matters?	Town Manager
2.	Have you posted an EEO statement in a conspicuous and accessible place?  An EEO statement must be posted in a conspicuous place where employers and applicants will see it.	Yes
3.	Is an EEO policy included in your personnel policies and/or employee handbook?  An EEO policy should be included in personnel policies and/or employee handbook.	N/A-It will be included when the personnel policy is completed.
4.	Do all employees have a policies and procedures handbook?	N/A
5.	Are EEO statements included on your job applications and employment notices/job postings? [Recipient to provide sample]  Job applications and employment notices should include an EEO statement.	Yes
6.	If requested, were reasonable accommodations made for hiring a person with disabilities in accordance with Title III of the ADA?	Yes
7.	Were any EEO complaints or lawsuits received since the last site visit? If yes:  Describe the complaint and how it was resolved.  What is the process for handling and resolving such complaints?	No
8.	Were EEO complaints (if any) indicated on your annual Title VI certification submitted with the FTA Section 5311 application on February 1?	No

### **INFORMATION TECHNOLOGY**

Grantees should use information technology to improve productivity and provide needed financial and performance information. Procedures should be in place to protect hardware and software. Policies should be in place governing personal use of public computers. FTA-funded computers must be used to support the transit program. All grantees must have a disaster recovery program.

1 What computer applications are used			
What computer applications are used:     a. For finance?	a. Bright and Associates		
b. For office use?	b. Yes		
c. For transportation?	c. No		
d. For maintenance?	d. Yes- R.O. Writer		
e. For the operating system?	e. Yes		
f. For security?	f. Yes		
g. For anti-virus protection?	g. Yes- Kaspersky		
h. For a fire wall?	h. Yes		
i. For back ups?	I. Yes		
j. Other?	j.		
Are computer applications current with respect to needs and appropriate to the hardware environment?	Yes		
Do you assess whether the use of computer applications is cost effective?     When was the last analysis completed?     Good Practice	No		
4. Who maintains the software?  Does this person/entity possess the necessary training, education, and experience to provide adequate technical support?	Eric Stiles  Yes- IT at the Bank is his regular job		
Is software regularly updated with patches and security updates?     How frequently?     Are all security/patches current?			
6. How often are the servers backed up?	Nightly		
7. How frequently are virus definitions updated?	Nightly		
Are virus definitions current?  How frequently do you scan for viruses?	Yes Daily		
8. Do you use a local area network?	Yes		

Who maintains the hardware and network?	Eric Stiles/ Jennifer Beck	
Does this person/entity have the necessary training, education, and experience to provide adequate technical support?	Eric has the training	
Do the servers have an uninterruptible power supply (UPS)?	Yes	
Are all computer equipment items protected from power surges?	Yes	
12. Do you have access to the Internet?  Which employees have access to the Internet?	Yes	
internet?	Shop, Jennifer, Janet, Everett	
13. Have you used the Internet to access FTA regulations and circulars?	Yes	
14. Do you have a written policy regarding personal use of the computer, including use of the Internet?	No	
15. Do you have a website?	www.blackstonebus.com	
Who maintains it?	Eric and Jennifer	
16. Is access to data restricted to only those who require the data to perform their job?	Yes	
17. Are the procedures for information security adequate to protect the integrity of the data?	No	
18. Are computers purchased with FTA funds being used to support the transit program?	Yes	
Are they used to support other programs as well?	Yes	
19. Do you provide general computer/ application training? If yes, when was the last time that the training took place.	No	
The DRPT encourages computer training which is an eligible expense under the Section 5311 grant. Courses may be available in your local areas at community colleges.		
20. Do you have a computer disaster recovery	Yes	
plan? Are your computers covered by insurance?	Yes	
DRPT requires that all grantees have a computer disaster recovery plan.		
21. Are you familiar with DRPT's Statewide ITS Plan?	Yes	

### **OPERATIONS AND SERVICE PROVISION**

#### **MAINTENANCE**

Grantees must have the managerial capability to maintain FTA-funded equipment and facilities. Grantees must have a written maintenance plan for vehicles and facilities and facility-related equipment. Grantees must maintain project equipment and facilities at a high level of cleanliness, safety, and mechanical soundness. Grantees must maintain all accessibility features and equipment in good operating condition. Grantees must have procedures to track when preventive maintenance inspections are due and to schedule preventive maintenance inspections in a timely manner.

Grantees must have a pre-trip inspection program that addresses vehicle condition, appearance, cleanliness, and safety. Deficiencies noted in a pre-trip inspection must be repaired in a timely manner and properly reviewed by management.

Grantees must repair accessibility features promptly and take reasonable steps to continue service to persons with disabilities while repairs are being made. Grantees must maintain a file on each piece of equipment that contains daily logs, inspection checklists, and repair records.

VE	VEHICLE MAINTENANCE		
1.	1. Review the grantee's files for the 3 vehicles, completing the <b>Vehicle File Review Sheet</b> and <b>Preventative Maintenance Review Sheets</b> .		
2.	Who is responsible for maintenance?	Tim Barnes	
3.	Please describe the preventive maintenance program.	Preventative maintenance will be performed every 5000 miles with a 1,500 mile window.	
4.	Is the maintenance plan written?  DRPT requires that grantees have a written maintenance program.	Yes	
5.	Do preventive maintenance schedules for each type of vehicle in the fleet meet the manufacturer's minimum requirements for service operations?	Yes	
	Preventive maintenance schedules must meet manufacturers' minimum requirements for severe operations.		
6.	Is a preventive maintenance program in place for lifts and other accessibility features such as ramps, public announcement systems, tie-downs, etc.? Grantees must maintain all accessibility features and equipment in operating condition.	Yes	

7.	What procedures are used to track when preventive maintenance inspections are due and to schedule preventive maintenance inspections?  Grantees must have procedures to track when preventive maintenance inspections are due and to schedule preventive maintenance in a timely manner.	Pre-trip inspections are recorded into a special system
8.	Reviewer: Review the maintenance files for the same 3 vehicles reviewed in question 2 using the preventive maintenance review sheet. Note the date and mileage of all preventive maintenance inspections since the last site visit using the preventive maintenance review sheet.  Does the review of the maintenance records indicate that at least 80 percent of the inspections are performed on time? Please allow a 10 percent or 500-mile variance, whichever is greater, when deciding whether an inspection was performed on time.	No. PM inspections were completed on time 39% of the time. According to BABS' policy the inspections were completed 83% of the time but BABS' policy does not meet the minimum requirements determined by DRPT.  BABS should revise their PM maintenance policy to meet DRPT's minimum guidelines.
9.	Are pre-trip inspections conducted prior to placing a vehicle in service?  Pre-trip inspections must be conducted prior to placing a vehicle in service.	Yes
10.	Is the pre-trip inspection form used?  If no, does the pre-trip inspection address safety; vehicle operation, appearance, and cleanliness; and passenger comfort?  The pre-trip inspection must address safety; vehicle operation, appearance, and cleanliness; passenger comfort and ADA equipment.	Yes
11.	Are deficiencies noted in pre-trip inspections repaired in a timely manner and properly reviewed by management?  Deficiencies noted in pre-trip inspection must be repaired in a timely manner and properly reviewed by management.	Yes
12.	Does the pre-trip inspection ensure that all items, such as boxes with bi-directional reflective triangles and gallons of washer fluid, are secured to the vehicle?  Safety and other equipment must be secured so that they are not loose to injure a passenger or damage the vehicle.	Yes

13. Does the pre-trip inspection program address lifts and other accessibility features, such as ramps, public announcement systems, and tie-downs? Grantees must have a regular system of checks and inspections for lifts and other accessibility features.	Yes
14. Do your drivers cycle the lift daily to keep it in good working order?	Yes
15. When a lift is found to be inoperative, is the vehicle taken out of service by the beginning of the next service day and repaired before returning it to service?  What alternative arrangements are made for riders?	Yes  Spare bus is the alternative arrangements
Grantees must remove vehicles with inoperative lifts from service before the next day unless no spare is available and taking the vehicle out of service would reduce the level of service. Alternative arrangements are required if a vehicle with an inoperable lift is used on a fixed route and the headway to the next accessible vehicle exceeds 30 minutes.	
16. Are FTA-funded vehicles leased to other providers?  DRPT does not allow this without prior written approval.	No
17. Reviewer: Do the vehicles meet an acceptable level of cleanliness (exterior and interior)?	
18. Are the manufacturer's warranty provisions being followed?	Yes
19. Are vehicle warranties on file?	Yes
20. How are warranties tracked?	
21. Are warranty claims pursued effectively, promptly to conclusion and reported to DRPT?	Yes
22. Have you submitted documentation to DRPT that all deficiencies contained in recall notices have been corrected?	?
FACILITY MAINTENANCE	Yes
23. Are the facilities inspected at least once a year to determine what repairs and/or maintenance are needed to the equipment or building?  What was the date of the last inspection?	November 15, 2010
1	

24. Is there a written facility maintenance plan and inspection checklist?  Is the checklist completed at least yearly?	Yes
25. Does the written plan or inspection checklist address equipment such as hydraulic lifts, bus washers, roofing systems, and HVAC systems?	Yes
26. Does the written plan or inspection checklist address maintenance of ADA accessibility features, such as powerassist doors, as required by ADA?	?
27. Do preventive maintenance checklists follow the minimum requirements determined by the manufacturer, supplier or builder?	Yes
28. Are files maintained on maintenance of facilities and related equipment and that maintenance is performed in accordance with the manufacturer's recommendations?	Yes
29. Do the files indicate that preventive maintenance inspections of facilities and related equipment are conducted at the intervals required by the plan? [Reviewer, sample maintenance records.]	Yes
30. Are any features of facilities or related equipment under warranty? If yes, please list.  Are warranty claims pursued?	Floor- They have contacted Kenbridge construction. After the winter season, The Carpet house will fix the floor
31. Reviewer: Are the facilities clean and well maintained? Are there any visible defects? Does the facility need to be painted? If yes, when is this scheduled?	
32. Is all of your shop equipment valued in excess of \$5,000 included in DRPT's Asset Management System (OLGA)	Yes

# (a) VEHICLE FILE REVIEW SHEET

Grantee: <u>Blackstone Area Bus</u>	Vehicle # <u>16</u>
Vehicle: <u>4500</u>	Make <u>Chevy</u> Model <u>BOC</u>
Date File Inspected: <u>5/3/2011</u>	Vehicle Model Year 2010
Reviewer: Pollock	

Question	Yes	No
Are the files in chronological order?		
Do the files contain the daily log?		X (Maintained in a separate file)
Do the files contain the pre-trip inspection checklist?		X
Are they signed and dated?		Х
Do the files contain vehicle maintenance record?	Х	
For lift-equipped vehicles, do the files contain the daily pre-trip wheelchair lift safety check?		Х
If the grantee maintains the vehicles in-house, are preventive maintenance checklists:		
Completed?	Х	
Signed?	Х	
Dated?	Х	
Do the work orders fully document vehicle maintenance?	Х	
Is the date and mileage noted on each work order?	Х	

**Reviewer Comments:** 

# (b) VEHICLE FILE REVIEW SHEET

Grantee: _	Blackstone Area Bus		Vehicle # <u>14</u>
Vehicle:	<u>G3500</u>	_ Make_	<u>Chevy</u> Model <u>BOC</u>
Date File Iı	nspected: <u>5/3/2011</u>		Vehicle Model Year_2009
Reviewer:	Pollock		

Question	Yes	No
Are the files in chronological order?	Х	
Do the files contain the daily log?		X (Maintained in a separate file)
Do the files contain the pre-trip inspection checklist?		X
Are they signed and dated?		Х
Do the files contain vehicle maintenance record?	Х	
For lift-equipped vehicles, do the files contain the daily pre-trip wheelchair lift safety check?		Х
If the grantee maintains the vehicles in-house, are preventive maintenance checklists:		
Completed?	Х	
Signed?	Х	
Dated?	Х	
Do the work orders fully document vehicle maintenance?	Х	
Is the date and mileage noted on each work order?	Х	

**Reviewer Comments:** 

# (c) VEHICLE FILE REVIEW SHEET

Grantee: _	Blackstone Area Bus	_ Veh	icle #	<u>6</u>	-
Vehicle: _	<u>3500</u>	_ Make_	<u>Chevy</u>	_ Model	BOC
Date File I	nspected: <u>5/3/2011</u>		Vehicle M	odel Year_	2008
Reviewer:	Pollock				

Question	Yes	No
Are the files in chronological order?	Х	
Do the files contain the daily log?		X (Maintained in a separate file
Do the files contain the pre-trip inspection checklist?		X
Are they signed and dated?		Х
Do the files contain vehicle maintenance record?	Х	
For lift-equipped vehicles, do the files contain the daily pre-trip wheelchair lift safety check?		х
If the grantee maintains the vehicles in-house, are preventive maintenance checklists:		
Completed?	X	
Signed?	Х	
Dated?	Х	
Do the work orders fully document vehicle maintenance?	Х	
Is the date and mileage noted on each work order?	Х	

**Reviewer Comments:** 

# (d) PREVENTIVE MAINTENANCE REVIEW SHEET

Grantee: Blackstone Area E	<u>Bus</u>		
Vehicle:			
Date File Inspected:5/3	3/2011		
Reviewer: Pollock			
Percentage of inspections cor whichever is greater):. <u>57</u>		in a 10 percent or 50	00-mile variance,
VEHICLE: #14	5000 miles	s with 1,500 mile window	(policy)
Percentage of inspections complevariance, whichever is greater):	eted on time (within a 1	0 percent or 500-mile	
Type of Inspection	Date	Mileage	Mileage Since Last Inspection
Oil Change/PM	4/13/11	82626	5180
Oil Change/PM	3/15/11	77446	6945
Oil Change/PM	2/10/11	70501	6586
Oil Change/PM	1/11/11	63915	5356
Oil Change/PM	12/13/11	58559	5548
Oil Change/PM	11/15/11	53011	4788
Oil Change/PM	10/22/10	48223	5068
VEHICLE: 6	5000 miles	s with 1,500 mile window	(policy)
Percentage of inspections complevariance, whichever is greater): 1		0 percent or 500-mile	
Type of Inspection	Date	Mileage	Mileage Since Last Inspection
Oil Change/PM	11/5/10	134055	5923
Oil Change/PM	7/12/10	128132	5389
Oil Change/PM	4/20/10	122743	5536
Oil Change/PM	2/26/10	117207	6991
Oil Change/PM	12/30/10	110216	5728
Oil Change/PM	11/2/10	104488	5979
Oil Change/PM	8/10/10	98509	6072

7/1/10

6012

92437

Oil Change/PM

VEHICLE:16	5000 miles	(policy)	
Percentage of inspections complevariance, whichever is greater): 6			
Type of Inspection	Date	Mileage	Mileage Since Last Inspection
Oil Change/PM	4/1/11	16491	5328
Oil Change/PM	2/10/11	11163	5804
Oil Change/PM	12/9/10	5359	5359

#### **SERVICE PROVISION**

Grantee should have effective procedures in order to ensure quality service delivery to the public. A comprehensive training program is a key component of a quality assurance program. Grantee should collect and use financial and operating data to monitor the effectiveness and efficiency of operations. Grantee should report key financial and operating data to the Board.

1.	Who is responsible for the day-to-day supervision of transit operations? Is the person by reason of education, training, and experience qualified for the responsibility?	Transit Manager
2.	Do the procedures for monitoring daily operations ensure that the schedule is adhered to, dispatchers and operators follow policy and procedures, and quality and courteous service is provided?	Yes
3.	What kind of training do you provide operators/drivers?	Wheelchair securement, behind the wheel
4.	What kind of training do you provide schedulers/dispatchers?	N/A
<ul><li>5.</li><li>6.</li><li>7.</li></ul>	Are all staff trained in the basics of transit?  a. How to drive a bus?  b. How to take a reservation?  c. How to dispatch a trip?  d. How to complete driver paperwork?  Is there a written service policy or operators' manual?  Does the policy/manual accurately and completely document current policies governing the delivery of service?  Is the assignment of drivers and vehicles appropriate for service demands, equipment, training and other relevant	a. Yes b. Yes c. Yes d. Yes No *It is recommended that BABS develop an operator's manual. yes
8.	factors?  Is schedule making and service frequent and timely?  When were the last time routes and schedules revised for fixed and/or deviated route services?	Yes November 2010
9.	Is schedule making coordinated with public information, dispatching and operations supervision?	Yes

Do you use Scheduling/Dispatch software? If so, please describe the software you use and for what purpose.	N/A
For demand-response service, what are the procedures for scheduling and dispatching trips?      Are "no-can-dos" tracked and periodically reviewed by management?	N/A
12. How are financial reports, service reports and statistical data used in day-to-day management of transit service?	Monthly financial reports are used for tracking. Service reports are used for vehicle records
13. How often is the operational data that is reported on the Monthly Project Expenditure Report reviewed and discussed with management and employees?	Monthly
14. To whom do you report the operational data and what key management decisions have been made with the operational data?	Town of Blackstone
15. What data is reported to the Board and how often?	Ridership
16. Describe the progress that you are making towards ensuring that your performance indicators fall within the acceptable or successful categories (see table below)?	

Section 1.02

# (i) PERFORMANCE INDICATORS

DEMAND RESPONSE SERVICES/RURAL ROUTE SERVICE	Successful	Acceptable	Needs Review	FY2010 Data
Operating Cost per Hour	< \$35	\$35-\$45	> \$45	26.34
Operating Cost per Mile	< \$2.00	\$2.00-\$3.00	> \$3.00	1.22
Operating Cost per Passenger Trip	< \$10.00	\$10.00-\$14.00	> \$14.00	10.01
Farebox Recovery Ratio	> 15%	12%-14%	< 12%	5%
Passenger Trips per Mile	> 0.25	0.15-0.25	< 0.15	.12
Passenger Trips per Hour	> 4	2.5 – 4	< 2.5	2.6

This system is located in a very rural area. They average 802 miles per trip. That is why the passenger trips per mile is low.

#### **SAFETY and SECURITY**

Grantees must document that drivers have a valid operator's license, have a safe driving record, and received training in the CTAA PASS course. DRPT requires that all drivers have at least six hours of documented safety training per year and a physical every two years. All safety devices must be in operative condition. All vehicles must have a blood-borne pathogens kit, first-aid kit, fire extinguisher, bi-directional reflective triangles, and web cutters. Drivers and in some instances passengers must wear seat belts. Smoking is prohibited on all vehicles. Drivers must focus on driving and limit distractions when vehicles are in motion.

Drivers and other personnel must understand the need for vigilance in public transportation settings to help prevent terrorism and – equally important – to deter crime and increase safety throughout transit systems.

1.	Who is responsible for system safety? Security?	Jennifer
2.	Do you have a Board approved written safety plan?	No
3.	Do you have a Board approved written emergency response plan?	No
4.	Is documentation maintained which verifies that all drivers of vehicles (owned, leased, loaned) have (reviewer will verify):	
	a. A valid, appropriate vehicle operator's license (and current US DOT physical if driver is a CDL holder)	a. Yes
	b. A safe driving record acceptable for insurance coverage (Please provide the date of the last driver record check)	b. N/A
	Completed an American Red Cross, or equivalent, first aid and CPR program to handle emergency health situations and accidental injuries.  Best Practice	c. No
	c. Each employee covered as a vehicle operator has a physical at least once every two years.  CDL-Required  Non-CDL-Best Practice	d. Local Government Exempt
	<ul> <li>d. Training in defensive driving techniques (How many drivers?)</li> </ul>	e. Training in January-February

	e.	Training in passenger assistance and safety ( PASS course)	f. No
		Was this course completed by all new hires within three months of the hire date?	
		Recommended , reviewer will verify.	
	f.	Training in operation of lifts and other accessibility equipment Required by ADA.	g. Yes
	g.	Substance misuse/abuse training.  Required by FTA.	h. Yes
5.	to a	we written procedures been established assure that project sponsored unteers, whether reimbursed for penses or not, driving vehicles have:	N/A
	a.	A valid appropriate vehicle operator's license (and current DOT physical if driver is a CDL holder)	a.
	b.	A safe driving record (DMV check)	b.
	C.	Personal automobile liability coverage that is appropriate for type of use	c.
6.	the nar the	you retain a record of who attended safety/security training including mes, sign-in sheet and the content of training including a list of any videos own?	Yes
7.	saf (ful	n you document at least six (6) hours of ety training each year for every driver I and part-time)? quired reviewer will verify.	Yes Training is offered 3-4 times per year.
8.		es the pre-trip inspection address the owing required safety equipment:	
	bor ext	vehicles must be outfitted with a blood- ne pathogens kit, first-aid kit, fire inguisher, bi-directional reflective ngles, and web cutters.	
	a.	first aid kit (full)	a. Yes
	b.	fire extinguisher (charge and inspection date)	b. Yes
	C.	bi-directional reflective triangles	c. Yes
	d.	blood-borne pathogen kit	d. No
	e.	web cutters	e. No

		,
9.	How often does the manager or the person responsible for system safety spot check these items on the pre-trip inspections to ensure that the driver's are not merely checking off these items?	Weekly
10.	Are all required safety devices or systems installed and functioning properly on vehicles?	Yes
	Are fire extinguishers secure, accessible, of the correct type, and in date? (Sample)	
	All safety devices must be maintained in operative condition. Fire extinguishers must be secure, accessible, and in date.	
11.	Is there a written procedure to handle accidents and medical emergencies? Terrorist and criminal emergencies? Weather-related emergencies? If yes, please provide copies.	Yes
	Grantees must have a written procedure for handling accidents and medical emergencies.	
	a. Are these procedures kept on board the vehicles?	Yes
	b. When were these written procedures adopted by the Board? (Provide date)	
12.	Are passengers required to wear a seat belt?	No but they are requested to wear seatbelts.
13.	Is smoking prohibited on vehicles?	Yes
14.	Are drivers allowed to bring food or drinks on Board vehicles?	Yes
	If yes, are drivers allowed to eat or drink while the bus is in motion?	No
15.	Are drivers allowed to use a cell phone while the bus is in motion?	no
16.	Are all carry-on items properly stowed before moving vehicle?	Yes
17.	What are the procedures for investigating accidents?	Accidents are investigated by the town police department.
18.	Who is responsible for investigating accidents?	Police Department
19.	Are written reports made?	Yes

		<del>,</del>
20.	To whom do the reports go?	Transit Manager and Town Manager
21.	What follow-up action is taken and by whom?	Remedial training, if necessary
22.	Do you collect information on safety incidents?  If yes, what is done with the data?	No
23.	What key safety issues have been identified and how are they being addressed?	Evening bus service coming in late- safety concerns.
24.	Is there a process for hazard identification?	Notification
25.	Do job descriptions address safety responsibilities?	Yes
26.	Do you perform criminal background checks on applicants?  State	No
	National How often do you do this?	*Recommended
27.	Are the vehicles stored in a safe place?	Yes
28.	Please identify all locations where vehicles are stored.  Are the vehicles stored at ALL times out of the flood plain or areas prone to flooding?	Bus shop
29.	Do operations personnel receive training and retraining in crime prevention?  What on-vehicle and at-facility crime prevention activities does the service employ? Examples include video cameras, locks, fencing, lighting, and silent codes.	No Cameras on buses, secured locks, fencing, and lighting
30.	Do you have a system in place to insure against loss/damage/theft? Please explain.	
31.	Have you worked with local law enforcement, fire departments, medical services and county emergency management agencies on county/regional emergency response efforts? What is your role in the plan?	Yes NIMS training
32.	Have you conducted or participated in field drills, table top exercises, or assessments of potential emergency events? If yes, when? Please describe.	Yes- November 2009
33.	Do you provide training in recognizing and reporting suspicious behavior?	no
33.		110

None
No
Yes in the facility maintenance plan
Door system with fence
No Yes
Keys are inside the facility
Yes
Keys are inside the facility

### **ADA**

Titles II and III of the Americans with Disabilities Act of 1990 (ADA) provide that no entity shall discriminate against an individual with a disability in connection with the provision of transportation service. The law sets forth specific requirements for vehicle and facility accessibility. Public entities operating a fixed-route system must provide paratransit or other special service that is comparable to the level of service provided to individuals without disabilities who use the fixed-route system.

1.	Is your system fixed route or deviated fixed route or demand responsive?	Deviated fix route
2.	Does your system have a copy of 49 CFR Parts 28 and 37 and the ADA Paratransit Handbook?	Yes
3.	Have any complaints of discrimination due to disability been received from riders or employees?	no
	If yes, please describe the complaints.	
	What is the process to resolve the complaints?	
	DRPT requires to be notified within five (5) working days.	
4.	Are facilities accessible?	yes
5.	Do you take steps to ensure that when planning new or rehabilitated facilities that they comply with ADA?	yes
6.	If you have non-accessible vehicles in your demand-responsive fleet, how do you ensure that equivalent service is provided?	N/A
	ADA requires that service to individuals with disabilities be equivalent to the service provided other individuals with respect to response time, fares, geographic service area, hours and days of service, and capacity.	
7.	Are system brochures, application forms, rider handbooks, and occasional bulletins available in alternative formats upon request?	yes
	ADA requires public information to be made available in alternative formats upon request. Examples of alternative formats include large type, audio-tapes, and Braille.	

8. Is your system's TDD number printed on all public materials where your voice telephone number appears?  The TDD number should be listed on public materials wherever the voice telephone number appears.	They access the Virginia Relay System.
9. Are all accessible vehicles marked with the blue accessibility symbol?  ADA requires that all accessible vehicles be identified with the international accessibility symbol.	yes
Do all accessible vehicles have a securement system for wheelchairs?      ADA requires that all accessible vehicles have a securement system for wheelchairs.	Yes
11. If service is scheduled in advance (fixed, deviated or demand responsive) have you made arrangements to have an answering machine take calls after business hours to schedule or cancel a ride?	yes
12. What is your policy for providing service if a mobility device cannot be secured?  ADA requires that service must be provided even when a mobility device cannot be secured.	Our policy is to try everyway possible to secured the mobility device
13. Do you require wheelchair users to transfer to a seat?  ADA stipulates that operators may request but not require that wheelchair users transfer to a seat	no
14. Do you require wheelchair users to wear a seat belt?  Unless ALL passengers are required to wear a seatbelt, you may request but not require that wheelchairs use a seatbelt.	Request
15. Do drivers provide assistance to passengers as necessary and upon request with lifts, and securement devices?  ADA requires drivers and other personnel to provide assistance as necessary and upon request.	Yes
16. Do you permit individuals that do not use wheelchairs to use lifts?  ADA requires operators to deploy lifts for standees upon request.	yes

17. What is your policy regarding service animals?  ADA requires that operators permit service animals to travel with riders.  a. Are service animals allowed on the buses?  b. Do you recognize animals other than guide dogs as service animals?  c. Do you require service animals to be certified?  d. Have you had problems with passengers bringing animals that do not appear to be service animals? How did you address the problem?  Did you notify the Division?  18. Are drivers required to deploy lifts at any designated stop unless the lift cannot be deployed, the lift will be damaged if deployed, the lift will be damaged if deployed, or a temporary condition such as construction precludes the safe use of the lift?  19. Do you provide service to persons using respirators or portable oxygen?  ADA requires operators to provide service to persons using respirators or portable oxygen.  20. What is your policy regarding the time allowed for Boarding and alighting?  ADA requires that operators allow adequate time for passengers with disabilities to Board and alight vehicles.  21. Do you require drivers to make use of all available accessibility equipment when needed.  22. How are policies governing providing service to passengers covered under the ADA conveyed to drivers?  23. Are all drivers trained in PASS and are new employees trained in PASS within three months after being hired?  ADA requires that drivers receive training in passenger assistance and sensitivity.		
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passengers bringing animals that do not appear to be service animals? How did you address the problem? Did you notify the Division?  18. Are drivers required to deploy lifts at any designated stop unless the lift cannot be deployed, the lift will be damaged if deployed, or a temporary condition such as construction precludes the safe use of the lift?  19. Do you provide service to persons using respirators or portable oxygen? ADA requires operators to provide service to persons using respirators or portable oxygen.  20. What is your policy regarding the time allowed for Boarding and alighting? ADA requires that operators allow adequate time for passengers with disabilities to Board and alight vehicles.  21. Do you require drivers to make use of all available accessibility equipment? ADA requires that operators make use of all available accessibility equipment when needed.  22. How are policies governing providing service to passengers covered under the ADA conveyed to drivers?  23. Are all drivers trained in PASS and are new employees trained in PASS within three months after being hired? ADA requires that drivers receive training		c. no
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respirators or portable oxygen?  ADA requires operators to provide service to persons using respirators or portable oxygen.  20. What is your policy regarding the time allowed for Boarding and alighting?  ADA requires that operators allow adequate time for passengers with disabilities to Board and alight vehicles.  21. Do you require drivers to make use of all available accessibility equipment?  ADA requires that operators make use of all available accessibility equipment when needed.  22. How are policies governing providing service to passengers covered under the ADA conveyed to drivers?  All riders have a right to ride unless they have created a nuisance on the bus (cussing, etc)  Yes  Yes  Yes	18. Are drivers required to deploy lifts at any designated stop unless the lift cannot be deployed, the lift will be damaged if deployed, or a temporary condition such as construction precludes the safe use of	Yes- if someone is there
allowed for Boarding and alighting?  ADA requires that operators allow adequate time for passengers with disabilities to Board and alight vehicles.  21. Do you require drivers to make use of all available accessibility equipment?  ADA requires that operators make use of all available accessibility equipment when needed.  22. How are policies governing providing service to passengers covered under the ADA conveyed to drivers?  23. Are all drivers trained in PASS and are new employees trained in PASS within three months after being hired?  ADA requires that drivers receive training	respirators or portable oxygen?  ADA requires operators to provide service to persons using respirators or portable	Yes
21. Do you require drivers to make use of all available accessibility equipment?  ADA requires that operators make use of all available accessibility equipment when needed.  22. How are policies governing providing service to passengers covered under the ADA conveyed to drivers?  23. Are all drivers trained in PASS and are new employees trained in PASS within three months after being hired?  ADA requires that drivers receive training	allowed for Boarding and alighting?  ADA requires that operators allow adequate time for passengers with	Adequate time
service to passengers covered under the ADA conveyed to drivers?  23. Are all drivers trained in PASS and are new employees trained in PASS within three months after being hired?  ADA requires that drivers receive training	21. Do you require drivers to make use of all available accessibility equipment?  ADA requires that operators make use of all available accessibility equipment when	yes
new employees trained in PASS within three months after being hired?  ADA requires that drivers receive training	service to passengers covered under the	
	new employees trained in PASS within three months after being hired?	Yes

24. Are drivers trained in use of accessibility equipment?  How soon after being hired does the training occur?  ADA requires that drivers receive training in the use of the accessibility equipment.	Yes Within 2 weeks
25. How do you monitor drivers to ensure that they comply with ADA requirements?  Examples: Follow-up on complaints, ghost riders, road supervision, ADA advisory committee.	Follow-up on complaints
26. Do you provide deviated fixed-route service?  If yes, do public materials and bus schedules clearly state eligibility requirements and procedures for requesting deviated fixed-route service?  Your marketing materials should avoid using technical terminology such as "deviated" and "complementary." The materials should state that the system may provide service from your house directly to the destination for any person as well as persons with disabilities and to call for information and eligibility requirements.	Yes
27. Do you have a policy governing stop announcements?  Does it meet ADA requirements?  For fixed-route service, ADA requires drivers to announce stops at transfer points with other fixed routes, major intersections and destination points, upon request, and at intervals along a route sufficient to permit individuals with visual impairments or other disabilities to be oriented to their location.	Drivers announce major stops.
28. Do you have written passenger complaint procedures that include ADA related complaints? <i>Good Practice</i>	Yes
The following only apply to operators of fixed roand Alcohol section.	ute service All other Grantees can skip to the Drug
29. When multiple routes serve the same stop, what mechanism is in place to alert individuals with visual impairments or other disabilities to the route number and destination?  ADA requires that operators have such a mechanism.	

The purpose of the following 10 questions is to determine if there is a capacity constraint. Grantees may not restrict capacity to limit the number of complementary paratransit trips.		
44. What is the average telephone wait time for a reservation?		
45. For next day service, at what time of day are reservations cut off?		
46. At peak times, can a caller reach the reservation office?		
47. Do you have excess non-subscription capacity?		
If no, does subscription service exceed 50 percent of available resources?		
Subscription service may not exceed 50 percent of available resources if there is no excess non-subscription capacity.		
48. What percent of requests are denied? How do you monitor trip denials?		
49. What do you consider an on-time trip? How do you monitor on-time performance? What is your on-time performance rate?		
50. How do you monitor missed trips? What percent of trips are missed?		
51. Do you have standards for excessively long trips?		
Do you monitor for excessively long trips?		
52. Do the answers to the above questions indicate that a capacity constraint exists?		

## **DRUG AND ALCOHOL PROGRAM**

Grantee and sub-contractors must have a drug and alcohol-testing program in place for all safety-sensitive employees. Maintenance contractors for providers in nonurbanized areas are not required to have a drug and alcohol-testing program.

Who is the Program Manager for the Drug and Alcohol program?	Jennifer
2. Review of Drug and Alcohol policy	Yes
How do you securely maintain employee drug and alcohol records? Who has access to these records?	Locked room- file and counting room Transit Manager and Administrative Assistant
How does this transit system maintain up- to-date lists of safety-sensitive employees subject to random testing?	Trident emails and asked for an updated list quarterly.
5. What is your procedure for selecting employees for random drug and alcohol testing?	Trident randomly selects
Do you conduct random drug and alcohol testing during all work days and work shifts?	Yes
7. What is your procedure and timeframe for notifying an employee of a random drug or alcohol test?	Random test within 1-2 hours after notification
8. Have all transit system officials and supervisors authorized to make FTA reasonable suspicion testing referrals received appropriate training (at least 60 minutes of training on the indicators of probable drug use; and 60 minutes of training on the indicators of probable alcohol misuse)?	Yes
9. Does this transit system maintain a record that each employee has received a copy of the anti-drug and alcohol misuse policy, or a written notice that the policy is available for review?	Yes
10. Were the actual job duties at this transit system reviewed to decide who performed safety-sensitive functions?	Yes
11. At what point in the hiring process do you require applicants for safety-sensitive positions to pass a FTA pre-employment drug test?	After interview

	Transit Manager
12. Who has the primary responsibility for assuring that post-accident testing is accomplished?	
	Use FTA guidelines
13. What is the procedure for determining if a post accident test should be conducted?	
	Yes
14. Does this transit system have a second chance policy for employees who test positive on an FTA drug and/or alcohol test? If yes, what is your return-to-duty policy?	Counseling and random drug testing
	Yes
15. Does this transit system maintain a list of qualified SAPs readily available to assist employees?	
	Yes
16. Has this transit system obtained and reviewed documentation of the professional credentials of your MRO, SAP, laboratory, and collectors?	
	Yes
17. Do you use a consortium or third-party administrator (C/TPA)?	
	Yes
18. Do you use a consortium or third-party administrator (C/TPA)?	
	N/A
19. Does your agreement with your contractor(s) contain a requirement that they comply with the FTA drug and alcohol testing program regulations?	
	n/a
20. How do you monitor the drug and alcohol programs of your contractors?	

#### **CHARTER BUS**

Grantees are prohibited from using federally funded equipment and facilities to provide charter service except on an incidental basis and then only when one or more of the seven allowable exceptions apply. FTA defines incidental charter service as charter service which does not interfere with or detract from the provision of public transportation service, is provided only during non-peak hours, does not reduce the useful life of vehicles for public transportation service, and recovers fully allocated costs. Coordinated service and subscription service are not charter service.

1.	Do you operate charter service? Charter service is the transportation of a group of persons who, pursuant to a common purpose, under a single contract, and at a fixed charge for the vehicle or service, have acquired the exclusive use of the vehicle or service for travel together under an itinerary either specified in advance or modified after leaving the place of origin.	No
	If <b>yes</b> , describe the charter service provided and answer the balance of the questions in this section.	
	If <b>no</b> , go on to the School Bus section.	
	If you are <b>not sure</b> , describe the service in question and the reviewer will determine whether the service was charter service and go through the balance of the questions with you during the site visit.	
	[Reviewer, please review the most recent audit on file with the state for any charter revenue. Review service brochures to see if the grantee promotes charter service.]	
2.	Under what exception is the charter service operated?	
	Did you follow the procedures required by the exception?	
	Please have the paperwork ready for the site visit documenting that you have complied with the procedures.	
3.	If you provide charter, do you have a cost allocation plan?	

4.	What do you charge for the service? Please describe all the charges, including minimum charges. What are your fully allocated costs? Do your fees recover fully allocated	
	costs?  Can you demonstrate that what you charge (must include depreciation) for charter service makes a profit or breaks even?	
	Fees must cover fully allocated costs including all capital costs.	
5.	What time of the day and days of the week do you provide charter service?	
	In the past year, were you unable to serve public transit passengers because of a charter trip?	
	Charter service may not detract from public transit service.	
6.	In the past year, how much money did you earn in charter revenues?	
7.	Do you keep a record by vehicle of the amount of charter service so that the time and mileage can be subtracted from the use of the vehicle for determining whether the vehicle has met its useful life?  Time spent in charter service may not be counted towards the useful life of an FTA-	
	funded vehicle.	
8.	Are replica trolley buses operated in charter service?	
	If yes, is the service operated under an allowed exception (Exception 1 or 7)?	
9.	Have any complaints been filed alleging that the charters are in violation of the FTA regulations?	
10.	Is charter service provided with locally owned vehicles?	
	If yes, are the vehicles maintained or stored in an FTA-funded facility?	
	If yes, the service must comply with the charter regulations.	
	If no, the grantee must maintain separate books for the service.	

#### **SCHOOL BUS**

Grantees are prohibited from providing exclusive school bus service unless the service qualifies under an allowable exemption and is approved by the FTA Administrator. In no case can federally funded equipment or facilities be used to provide exclusive school bus service. Head Start transportation is considered human service transportation, not school bus service.

- 1. Do you provide school "tripper" service? A tripper is an extra bus that is added to a route to provide capacity or service that cannot be accommodated by the buses already in service. If yes, does the tripper service meet the following criteria to be considered public transit service?
  - a. Regularly scheduled mass transportation service?
  - b. Buses are clearly marked as open to the public?
  - c. Service has been modified to meet needs of students/school personnel?
  - d. Service uses various fare collection systems or subsidies?
  - e. Buses have no special designations (e.g., school bus, school special)?
  - f. Buses use regular bus stops?
  - g. Service is noted on published schedules?

If not, the service does not qualify as public transit service and cannot be provided with FTA-funded equipment or out of FTA-funded facilities.

Reviewer: Please review all schedules and signs used on buses to ensure that the tripper service complies with the stated criteria.

No

- 2. Is exclusive school bus service operated? If yes, does it qualify for one of the three statutory exceptions?
  - The grantee operates a school system and operates a separate and exclusive school bus service.
  - Existing private school bus operators are unable to provide adequate, safe transportation.
  - The grantee is a public body that operated school bus service prior to 1973.

Has the FTA administrator approved the service?

Is it operated only with non-federally funded equipment and from non-federally funded facilities?

Grantees are prohibited from providing exclusive school bus service unless the service qualifies under an allowable exemption and is approved by the FTA administrator. In no case can federally funded equipment or facilities be used to provide exclusive school bus service.

## **MEAL DELIVERY AND INCIDENTAL USE**

Grantees may provide incidental service, including meal delivery, with FTA-funded vehicles but the service must not interfere with the provision of transit service and must bear the costs of providing the service.

i	Do you deliver meals or provide ncidental services? If yes, then please answer the following:	no
a	<ul> <li>How many meals or other incidental services do you deliver?</li> </ul>	a.
k	o. At what times of the day?	b.
C	<ul> <li>Do the services interfere with the provision of transit service?</li> </ul>	C.
C	I. Do the incidental services bear the costs of the service?	d.
6	e. How much is the transportation program reimbursed for meal delivery?	e.

### **MARKETING**

Grantees should have a marketing program that attracts riders and promotes a positive image to the community. DRPR recommends that grantees have a written marketing plan. Public information should be attractive, widely distributed, and accessible in various formats. The Division supports statewide transit marketing program.

1.	Have grantees completed an annual updates of their marketing plan?	n/a
	Has the plan been implemented?	
2.	How do you advertise your transit service? What media is used and how often?	Newspaper- quarterly
3.	The following questions will aid us in our efforts to assist your marketing efforts.	
	<ul> <li>a. How much "promo" items do you have on hand? – None, Little, Average, a Lot</li> </ul>	a. A Lot
	b. How do you use these items? (Please describe)	b. Passengers and events
	c. Do your primarily distribute these items to your regular riders?	c. Often
	d. Do you find these items useful to your marketing efforts?	d. Very useful
	e. What items do you like the most or the least?	e.
4.	What group from the following list has the most knowledge and name recognition of your service?	Older Adults
	Older adults (age 60+)	
	Youth (up to age 16)	
	Other ages (age 16-60)	
	Developmentally disabled Other group (Please specify)	
5.	What other types of marketing/promotion are	Visiting entities
J.	you doing for your transit program?	visiting critics
6.	Do you collect various data on a regular basis and use it in the marketing and planning process such as:	
	a. Cleanliness of vehicles	a.
	b. Cost, revenue and number of riders	b.
	c. Customer comments	C.

d. Customer requests for information	d.						
e. Other (please list)	e.						
7. Do you have complaint/comment resolution procedures?  If yes, are they written?	Yes						
Do you have a system in place to obtain information on rider and non-rider attitudes and demographics?	No						
Are the public information systems complete, easy to understand and available in alternative formats?							
a. Schedules and time tables	a. Yes						
b. Route maps	b. Yes						
c. Signage and other user aides	c. Yes						
d. How-to-ride information	d. Yes						
Telephone information system (including a dedicated number for general public service)	e. Yes						
Is the fare policy formally adopted by the Board based on financial and socio-economic considerations?	N/A						
11. Is the fare policy reviewed annually?	No						
12. What activities are undertaken to enhance and draw attention to the public image of your service?	Cleanliness- in Christmas Parades, etc						
13. How and where are marketing materials (brochures, schedules) distributed?	To different organizations						
14. Are they displayed at key public locations such as city halls, libraries, community centers, shopping malls?	Yes						
15. Have arrangements been made with the institutions to notify you when the racks need replenishing?	Yes						
16. Is there a regular schedule for replenishing the racks?	No						
17. Do you have a website? Does the website provide information on:	Yes						
a. Hours and days of service?	a. Yes						
b. Types of service?	b. Yes						
c. How to plan a trip?	c. Yes						
d. Bus schedules and routes?	d. Yes						
e. Public meetings and hearings?	e. No						

f. Route and schedule changes?	f. No
g. Transit advisory committee?	g. No
h. List of Board members and telephone numbers	h. no
i. Customer service number	i. Yes
j. Links to other Virginia transit system websites (CTAV, VTA, DRPT etc.)	j.No

### TITLE VI--NONDISCRIMINATION IN THE DELIVERY OF SERVICE

FTA and DRPT prohibit discrimination on the grounds of race, color, national origin, sex, age, physical or mental disability, or religion in the delivery of public transit services. FTA also prohibits discrimination on the grounds of low-income status. Title VI complaints must be reported to DRPT within 24 hours of receipt of the complaint.

	The following questions are designed to determine whether the service provided meets Title VI requirements.							
1.	When considering changes in service, have you ensured that Title VI was taken into consideration?	Yes						
2.	What is the racial make up of your service area?	40%- 60%						
3.	Do you provide service to areas with minority populations?	Yes						
	Is it the same level and quality of service that is provided in areas without minority populations?	Yes						
4.	Please describe the location of transit services and facilities. Have you ensured that decisions on the location of transit services and facilities are made without regard to race, color, creed, national origin, sex, age, or disability?	Yes						
5.	Have any complaints concerning discrimination in the delivery of service been received since the last review or last grant application?	No						
	If yes, how were the complaints identified and resolved?							
	Did you report the complaints to DRPT within 24 hours of receipt of the complaint?							
	Title VI complaints must be reported to DRPT within 24 hours of receipt of the complaint.							
6.	How are individuals provided opportunities to participate in the transit planning and decision-making processes without regard to race, color, creed, national origin, sex, age, or disability?  Have representatives of these groups expressed a need for transportation improvements? If yes, please describe.	Town Council Meetings						

7.	How do you promote your service to minority populations?	
	Please provide a copy of the materials used to promote your service to minority populations.	
8.	Is the employment poster displayed in a conspicuous place? (Reviewer will verify)	Yes
	LIMITED EN	GLISH PROFICIENCY
	Grantees are required to assess their service Proficient persons.	ce area to ensure meaningful access for Limited English
9.	Have you conducted a Limited English Proficiency Assessment and/or Four Factor Analysis?	Yes
	Do you have a Limited English Proficiency Plan?	No
10.	What products and/or services do you offer to Limited English Proficiency persons?	None

### **PLANNING AND COORDINATION**

Grantees must incorporate planning activities in the administration of their grants. Grantees must coordinate to the maximum extent feasible with transportation assisted from other federal sources. .

1.	Do you have a transportation development plan (TDP)?	Yes
2.	When was the TDP last updated?	11/15/2010
3.	Working with a six year planning horizon, please describe how your agency will address service changes and develop operating budgets which includes all revenue sources and capital expenditures needs?	The Transportation Development Plan has a 6 year horizon and addresses operational and capital needs. It is updated annually.
4.	What changes will you have to make in personnel or service, to address any projected revenue shortfalls (federal, state, local, farebox or contract)?	Layoffs, service cuts
5.	List the annual ridership figures for the past 6 years below. In the box on the right, please explain why ridership is increasing, decreasing, or staying the same.	
	Year	Ridership
	2006	22751
	2007	28672
	2008	33136
	2009	41160
	2010	43546
6.	Please describe how you are coordinating with other transportation providers in the area.	Transfer with Farmville Area Bus.
7.	Which of the following coordination activities occur?  a. Consolidated purchase of service b. Central information center c. Centralized dispatch d. Planning e. Maintenance f. Purchasing (vehicles, parts, fuel) g. Training h. Management (marketing, information system, billing)	Training

	i. Other (please describe)	
8.	Are there more opportunities for coordination?	Not at this time

## **PUBLIC INVOLVEMENT**

Grantees must involve the public in service planning. An effective public involvement program addresses transit riders, the non-riding public, special populations, community leaders, and civic groups.

1.	If the service has implemented substantial service or fare changes, was an opportunity for a public hearing afforded?	Yes						
2.	Have any public hearings for any reason been held in the last 3 years? Required for applying for FTA capital funds.	Yes						
3.	Were the hearings scheduled at a reasonable time and accessible place?	Yes						
4.	Are hearings conducted in accordance with due process procedures and are they fair and open?	Yes						
5.	Has the service adequately addressed comments that were made in the hearings?	Yes						
6.	Do you have a regular and systematic way to secure contractor, public and rider input into the system (such as annual reviews, suggestion boxes, surveys, rides by management staff and Board members to assess service and interact with the public)?	No						
7.	What outreach efforts were undertaken to identify minority groups, low income persons, the elderly, and persons with disabilities?	Social Services						
8.	Have special efforts been undertaken to involve low income persons, minority groups, the elderly, and persons with disabilities in the planning process?	Yes- TDP Surveys						
9.	Have you cultivated working relationships with community leaders? For example, are you a member of the chamber of commerce and do you attend meetings regularly?  If there is a downtown or central business	Yes						
	district (CBD) association, do you meet with them periodically?							
	Are you involved or do you periodically consult with local planning agencies and governmental units?							

 Have you developed coalitions to support transit? If yes, please describe activities such as developing relationships with faith-based organizations and other volunteer organizations.

Have you used them as a source of funding or volunteers?

Have you developed relationships with the league of women voters or other non-partisan advocacy groups?

Social Services, STEPS, Piedmont Geriatric Hospital

# **ON-SITE ATTENDANCE SHEET**

Name	Title	Phone	Email
Jennifer Beck	Transit Manager		

# **SUMMARY OF CORRECTIVE ACTIONS**

Please note that recommendations do not have any response days/date.

Finding	Corrective Action	Response	Response Days/ Date	Comment	Date Closed
Preventative maintenance inspections are done in a timely manner 39% of the time.	Preventative maintenance inspections should be done in a timely manner 80% of the time,		180 days		
Recommendations:					
Develop a personnel policy for transit staff		No response required			
Develop an operator's manual for transit drivers.		No response required			

# Appendix 6A: Blackstone Area Transit System Vehicle Inventory

Comments	Funded 100% by ARRA	Funded 100% by ARRA		Funded 100% by ARRA	Funded 100% by ARRA	Funded by state and local governments	Funded by state and local governments		Funded 100% by ARRA	Funded 100% by ARRA	Funded by state and local governments	Funded 100% by ARRA	Funded 100% by ARRA	Funded 100% by ARRA	80% Federal 16% State		Funded by state and local governments			
Location of I tem	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Lunenburg County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County	Nottoway County
Average Miles Traveled per week	200	200	200	200	1000	750	200	009	006	400	1000	1000	200	200	400	400	300	200	15	0
Average H ours operated per week	20	15	15	30	30	20	30	20	20	20	40	40	20	20	20	20	41	2	10	20
Primary Route Type	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural
T otal <sup>I</sup> M ileage <sup>1</sup>	62,529	53,693	25,488	72,746	185,481	185,267	176,007	4,016	272,725	281,442	252,654	206,589	222,265	241,070	70,218	98,253	61,403	22,678	3,747	87,223
	× 88	Υœ	Υœ	Υœ	Υœ	Υœ	Yes	Υœ	Υœ	Yes	Yes	Yes	Υœ	Yes	Yes	Υœ	88	9	9	2
Purchase Wheelchair Price Accessible	\$ 56,997	\$ 56,997	\$ 68,875	\$ 59,284	\$ 56,992	\$ 48,349	\$ 48,000	\$ 58,851	\$ 56,997	\$ 56,997	\$ 49,904	\$ 49,904	\$ 49,904	\$ 49,904	\$ 70,218	\$ 59,284	\$ 56,997	\$ 21,943	\$ 27,420	\$ 17,300
Purchased N ew	× 88	Υœ	Yes	Yes	Yœ	Υœ	Yes	Υœ	Yes	Yes	Yes	Yes	Υœ	Yes	Yes	Yes	× 8	× 8	× 8	Υœ
Purchase Pu Date	9/ 3/ 2010	9/ 3/ 2010	3/8/2013	9/ 3/ 2010	10/ 13/ 2010	4/ 8/ 2008	6/ 4/ 2007	12/ 17/ 2014	10/ 13/ 2010	10/ 13/ 2010	3/ 30/ 2009	3/ 30/ 2009	3/ 30/ 2009	3/ 30/ 2009	9/ 3/ 2010	10/ 13/ 2010	10/ 13/ 2010	1/ 28/ 2010	11/ 20/ 2013	12/ 5/ 2004
Engine Type	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	No. 2 Grade Diesel Fuel (Std)	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline
Description	Chevy Vehide-#1	#2 - Chevy Gas	2015 Supreme BOC #3	#4 - Chevy Gas	Chevy Gas BOC	Chevy BOC - #6	Ford BOC - 54L	Starcarft Allstar BOC	#9 - Chevy BOC	# 10 - Chevy BOC	Chevy Supreme E350-PAT #11	Chevy Supreme PAT #12	Chevy Supreme # 14	Chevy Supreme #15	#16 - Chevy Gas	#17 - Chevy Gas	#18 - Chevy Gas	Ford Explorer	Shop Truck	2004 Chevy Venture Minivan
M odel Y ear	2010 C	2010	2013 <sup>20</sup>	2010	2010	2008	2007	2015	2010	2010 #	2009	2009	2009	2009	2010	2010	2010	2010	2013	2004
Number of Mode Passengers Year	14	4	19	19	41	15	41	4	41	14	41	41	41	14	19	19	41	5	2	ro.
VIN	1GB9G5AG3A1105076	1GB9G5AG9A1104149	1GB6G5BG1C1197695	1GB9G5AG1A1142109	1GB9G5AG3A1175127	1BGJG31K681156426	1FDXE45P77DA59249	1FDFE4FS4FDA07526	1GB95GAG3A1175788	1GB9G5AG1A1174509	1GBJG31KX91116318	1GBJ331K591117747	1GBJG31KX91118344	1GBJ31K091111337	1GB9G5AG6A1139450	1GB9G5AG9A1175861	1BG9G5AG6A1174294	1FMEU7DE4AUA4281 6	1FDBF2B63EEA86432	1GNDXO3EX4D18775 7
FTA Code	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.15 - Vans	11.12.16 - Sedan / Station Wagon	11.12.15 - Vans	11.12.15 - Vans					
Grantee	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus	Blackstone Area Bus					
Vehicle Type	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	Cutaway	SUV	Shop Truck	Van
Vehicle No.	-	7	ო	4	5	9	7	∞	<b>o</b>	10	11	12	4	15	16	17	18	SUV	Truck	\san

<sup>1</sup>Mileage as of March 2015

# 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 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 BABS 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 GPS, allows the driver to enter the number of boarding and alighting passengers at each stop on the tablet. The data is then transmitted in real-time to backend software via cellular communications. An additional feature is to predict arrival times at stops. Though not included in the estimate, BABS could consider passengers accessing this information through a mobile website. 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
- Tablets and associated equipment (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 the charger wiring at unit cost \$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

The costs in the table below are in current year (2016) dollars.

Table A-2: Anticipated Technology Costs

ltems	Cost Estimate (2016\$)							
items	Total Low	Total High						
Capital Costs								
Software								
CAD/AVL	\$ 120,000	\$ 140,000						
Hardware								
Tablet, Mount, Case, Charger (15 units)	\$ 10,500	\$ 22,500						
Implementation (Services)	\$ 12,000	\$ 30,000						
Installation (15 units)	\$ 2,250	\$ 12,000						
Total Capital Costs	\$ 144,750	\$ 204,500						
Recurring Costs (Annual)								
Data Plan (15 units)	\$ 1,275	\$ 6,120						
License, Maintenance, Support	\$ 8,000	\$ 30,000						
Data Hosting	\$ 2,000	\$ 2,200						
Total Recurring Costs	\$ 9,275	\$ 36,120						









