

Danville Transit

Transit Development Plan



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Prepared for
Danville Transit



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Chapter 1

Overview of Danville Transit

INTRODUCTION

The Virginia Department of Rail and Public Transportation (DRPT) requires that any public transit (bus, rail, ferry) operator receiving state funding prepare, adopt, and submit a Transit Development Plan (TDP) at least every six years. A TDP is a Short-Range Transit Plan that outlines the services that a grantee intends to implement during the six-year planning horizon. The plan estimates what resources will be needed and what funding opportunities are likely to be available. DRPT provides a set of TDP requirements that form the basis of the planning effort. This TDP is intended to serve as a management and policy document for Danville Transit, provide DRPT with an up-to-date record of Danville Transit's capital and operating budgets and provide Danville Transit with the basis for including capital and operating programs in the Six Year Improvement Program (SYIP), the Statewide Transportation Improvement Program (STIP) and the Constrained Long Range Transportation Plan (CL RTP).

This first chapter of the TDP for Danville Transit provides an overview of the transit program and provides background information and data that will be used for subsequent data collection, analysis, and eventual recommendations for the six-year plan.

BACKGROUND

The City of Danville is located in the south central portion of Virginia; sharing its southern border with North Carolina. Danville is located 75 miles south of Roanoke; 145 miles southwest of Richmond; and 45 miles north of Greensboro, North Carolina. Important transportation corridors in the region include U.S. 29, U.S. 58 and U.S. 360.

According to the 2010 Census, the population of Danville was 43,055. This represents a population decline of 11% from 2000 to 2010. The decline in population between the 2000 Census and the 2010 Census resulted in the re-classification of Danville from an urbanized area to a non-urbanized designation. This geographical re-classification of the city meant that Danville Transit is no longer eligible for FTA's Section 5307 program, but rather the Section 5311 non-urbanized program in which funds flow through DRPT to Danville Transit.

HISTORY

Danville Transit was established in 1977 as a municipal transit system. Initially, operating and capital funds were supplied by Danville's general fund, state aid and passenger revenue. Beginning in 1992, Danville Transit became the recipient of Section 5307 small urban federal funding. Due to the loss of the urbanized area designation, Danville Transit transitioned to Section 5311 rural area funding in fiscal year 2014.

Historically, transit demand in Danville has been predominately influenced by employment activity, disposable income, fuel prices and vehicle availability. Throughout the 1900's Danville's economy was based on tobacco and textile manufacturing. In the early and the mid 2000's, Dan River Inc., the city's major textile manufacturer and top employer, began to cease operations. In response to the transitioning economy, Danville Transit implemented the Reserve-A-Ride program in 2001 to provide flexibility to meet the new level of transit demand.

In 2007, Danville Transit opened a 2,000 square foot intermodal bus facility in downtown Danville. Locally known as the "HUB," the facility is the heart of Danville Transit's fixed route system with timed transfers taking place every 40/80 minutes

Since the 2009 transportation development plan, Danville Transit has implemented a number of service and capital improvements.

The service improvements that were implemented in the last five years include:

- In FY2011, Danville Transit expanded their Reserve-A-Ride weekday hours to 4 a.m. to 1 a.m. Previously, Reserve-A-Ride only operated during the early morning (4 a.m. to 6 a.m.) and evening hours (5 p.m. to 1 a.m.) when the fixed routes were not operating. Saturday Reserve-A-Ride continues to operate 4 a.m. to 6 a.m. and 5 p.m. to 1 a.m.
- FY 2013, Danville Transit incorporated the City's Parks and Recreation's senior transportation program into the Reserve-A-Ride service. This service has been funded through FTA's New Freedom program which is now part of FTA's Section 5310 grant.

The capital improvements that were implemented in the last five years include:

- Acquired and developed a property along Spring Street directly across from the downtown HUB to provide a loading area for the demand-response vehicles and additional parking (see Figure 1-1)
- Obtained automated scheduling software to assist with trip reservation and scheduling
- Installed a bus shelter at Piney Forest Shopping Center bus stop
- Purchase non-revenue vehicle for building and grounds duties
- Applied sealcoat on the downtown HUB parking lot
- Replaced two 20 passenger buses and two 28-passenger buses
- Obtained vehicle diagnostic equipment

- Installed five new fareboxes
- Installed door inside training facility and replaced two bay doors at the maintenance facility.

Figure 1-1: Downtown HUB Demand Response Loading Area



GOVERNANCE

Danville Transit is directed by a Transportation Advisory Committee (TAC) consisting of seven members including the City Manager and a City Council Member. The TAC reviews all grant applications, planning documents, proposed service changes and fare adjustments. Current members of the TAC include:

- Judy P. Keesee
- Ralph C. Price
- John L. Moody
- Wade E. Key

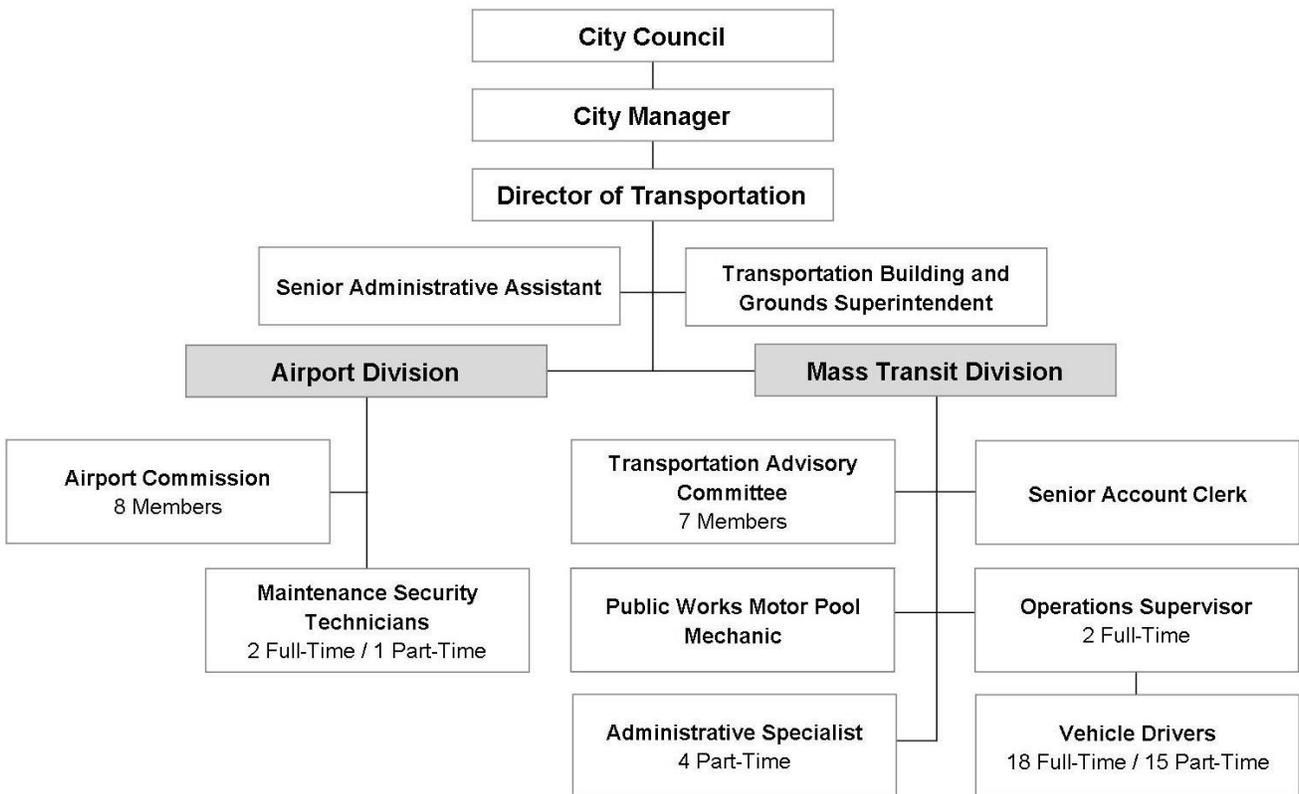
- Alexis Erhardt
- L. G. “Larry” Campbell, City Council
- Joseph C. King, City Manager

ORGANIZATIONAL STRUCTURE

As a municipal service, Danville Transit is a division under the City of Danville’s Transportation Services Department. This department oversees the Danville Regional Airport and Danville Transit.

Danville has a council-manager form of government. The City Council is comprised of nine members elected at large. The Council and City Manager provide oversight for Danville Transit. Danville Transit is managed by the Director of Transportation Services with assistance from the Transportation Building and Grounds Superintendent, Senior Administrative Assistant, Senior Account Clerk, four administrative specialists, two operations supervisors, bus operators, and maintenance personnel. The organizational chart for the city’s Transportation Department is provided in Figure 1-2.

Figure 1-2: Danville Transit’s Organizational Structure



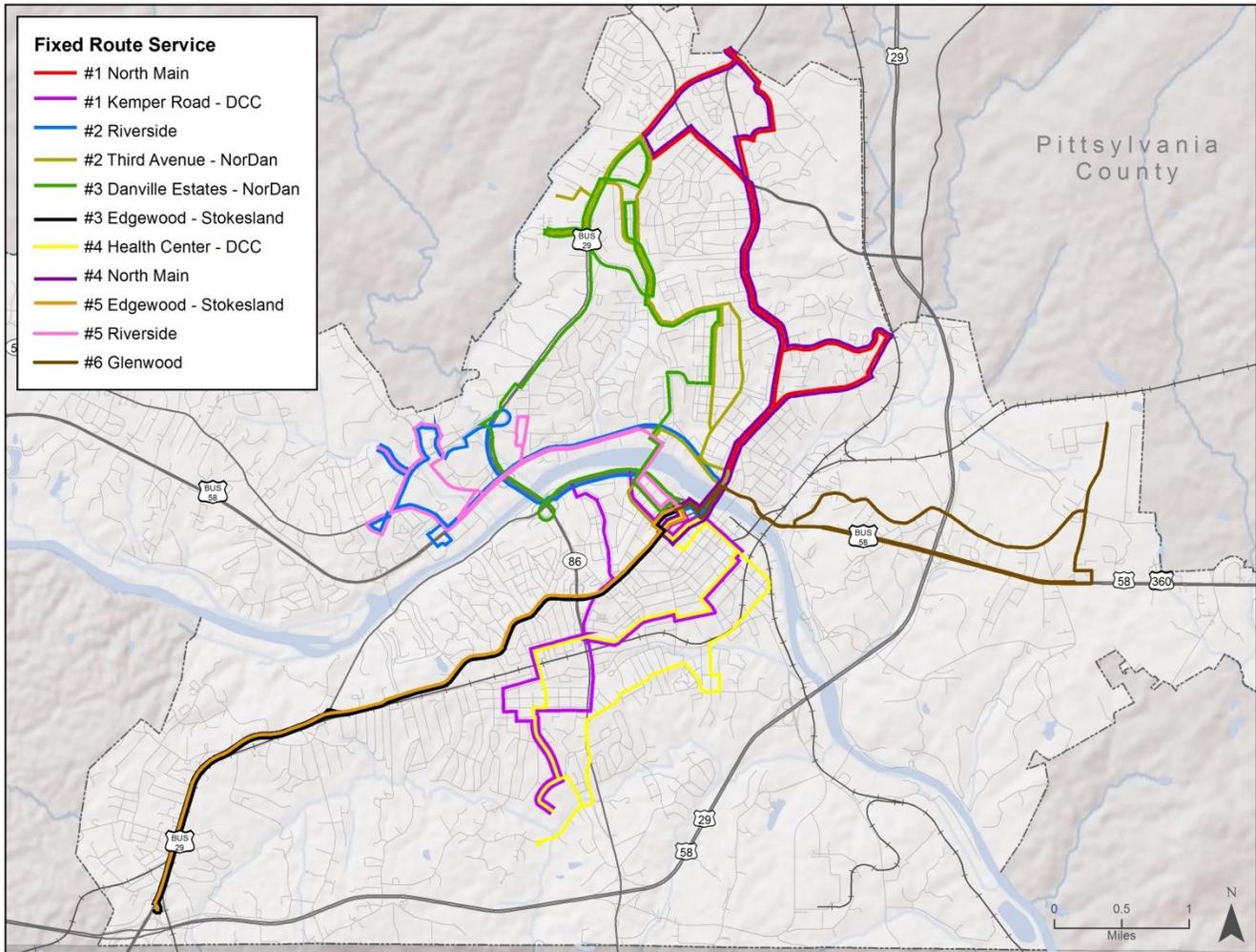
TRANSIT SERVICES PROVIDED AND AREAS SERVED

Danville Transit operates 11 fixed routes, a 24-hour advanced notice Reserve-A-Ride service, paratransit (Handivan) service and Senior Transportation service. Transit services are provided throughout Danville, and the Reserve-A-Ride service provides service to the Cane Creek Industrial Park in Pittsylvania County. Services are operated Monday through Saturday.

Fixed Route Service

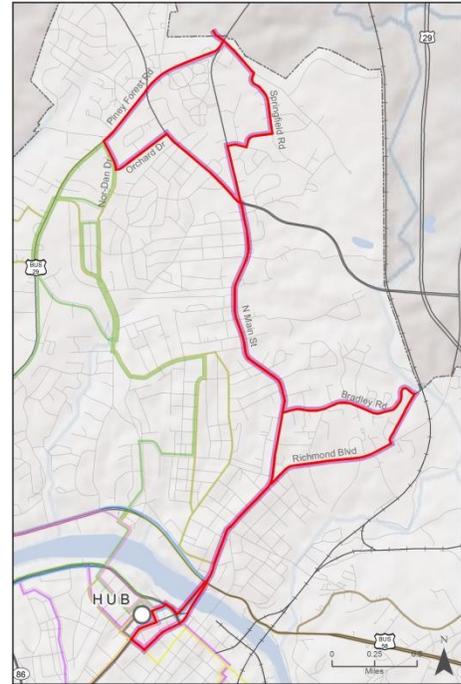
Danville Transit operates the following fixed route services, Monday through Saturday from 6:00 a.m. to 6:00 p.m., with the exception of Route #6 Glenwood. Route #6 only provides weekday commuter service. Figure 1-3 provides a system-wide map illustrating the coverage of the fixed routes service.

Figure 1-3: Danville Transit Fixed Route Service



Route #1 North Main (1NM)

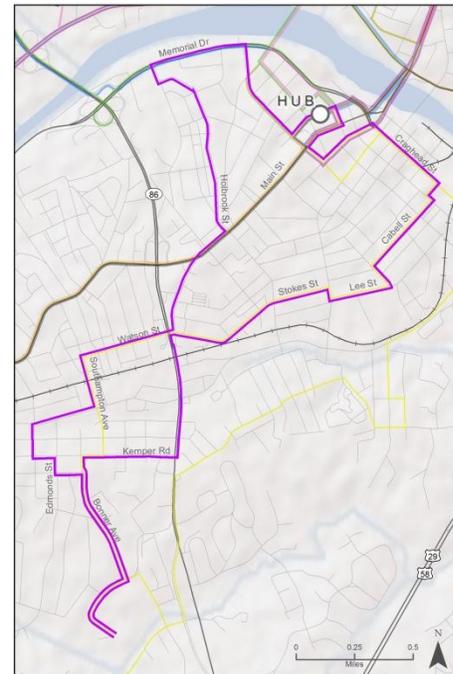
The #1 North Main Route connects the downtown HUB to the NorDan Shopping Center via N. Main Street and the Franklin Turnpike. The outbound route deviates along Richmond Boulevard and Bradley Road, and the inbound route deviates along Seminole Drive and Springfield Road. Major stops along the route include Purdum Woods Apartments, Roman Eagle Nursing Home, North Pointe Apartments, NorDan Shopping Center, and Market Square.



Route 1: North Main

Route #1 Kemper Road – DCC (1KR)

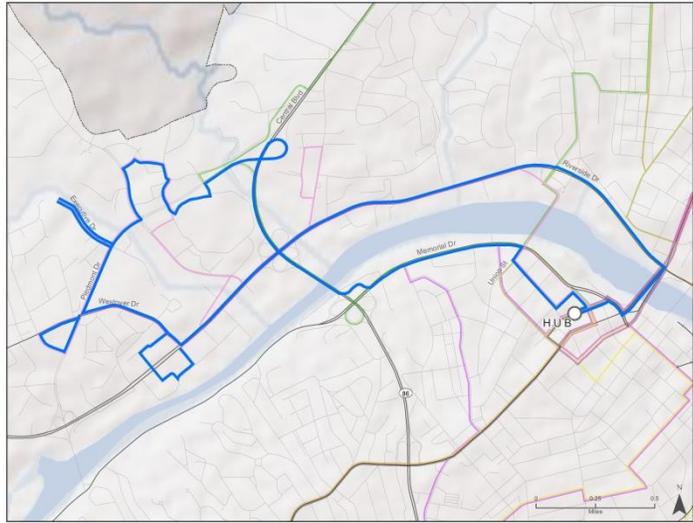
The #1 Kemper Road – DCC Route connects the downtown HUB to the Health Department. This route is aligned in the shape of a figure eight with multiple deviations along neighborhood streets. Outbound service runs primarily along Stokes Street and Watson Street with inbound service running primarily along S. Main Street and Holbrook Street. Major stops along the route include Cedar Place, Danville Regional Medical Center, True Holiness Church, Cardinal Village Apartments, Health Department, and Danville Community College.



Route 1: Kemper Road – DCC

Route #2 Riverside (2RS)

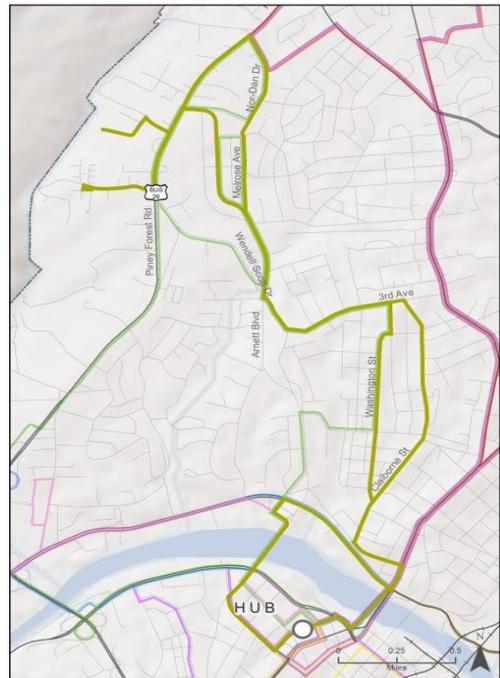
The #2 Riverside Route connects the downtown HUB to Walmart. This route is aligned in the shape of a figure eight with outbound service along Memorial Drive, Central Boulevard, and Piedmont Drive; and inbound service along Westover Drive and Riverside Drive. Major stops along the route include Cedar Terrace, Danville Mall, Walmart, Piedmont Regional Medical Center, Goodwill Industries, and K-Mart.



Route 2: Riverside

Route #2 Third Avenue – NorDan (2TA)

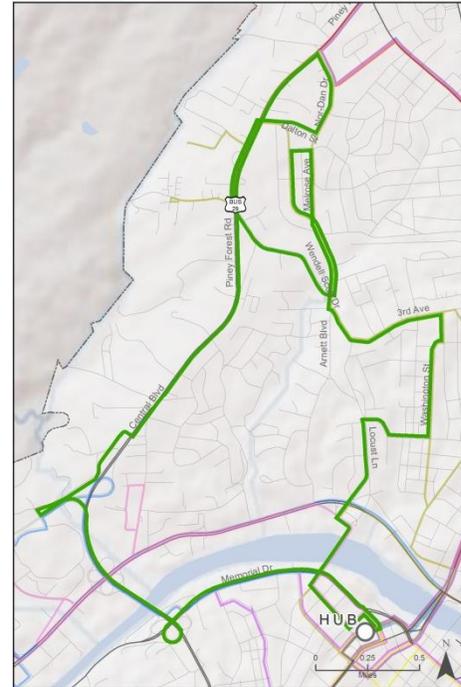
The #2 Third Avenue – NorDan Route connects the downtown HUB to the NorDan Shopping Center. Outbound service runs along Poplar Street, Riverside Drive, Washington Street, Third Avenue, Arnett Boulevard, and Ruskin Street. Inbound service runs along Piney Forest Road, Arnett Boulevard, Third Avenue, Claiborne Street, and N. Main Street. Major stops along the route include the NorDan Shopping Center, Sterling Trace Apartments and, if requested, Janie’s Hope Apartments.



Route 2: Third Avenue - NorDan

Route #3 Danville Estates – NorDan (3DE)

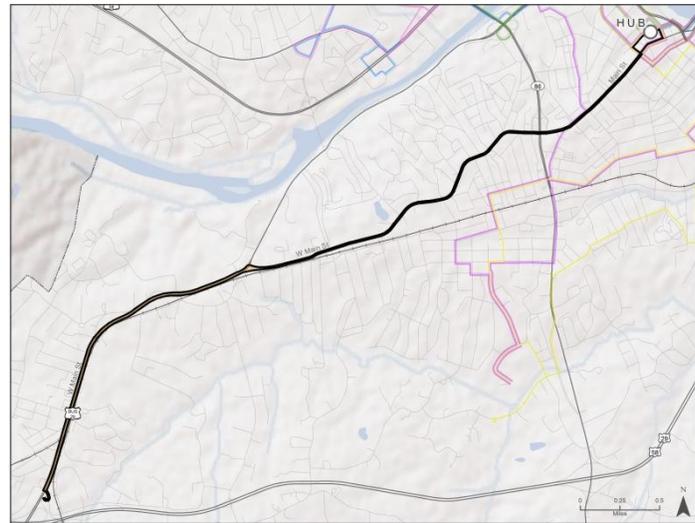
The #3 Danville Estates – NorDan Route connects the downtown HUB to the NorDan Shopping Center. The route is aligned as a loop with multiple deviations into neighborhoods and shopping centers. The route runs along Washington Street, Third Avenue, Arnett Boulevard, Piney Forest Road, Central Boulevard, and Memorial Drive. Major stops along the route include the NorDan Shopping Center, Sterling Trace Apartments, Beavers Mill, Dick’s Sporting Goods and Cedar Trace.



Route 3: Danville Estates - NorDan

Route #3 Edgewood – Stokesland (3EW)

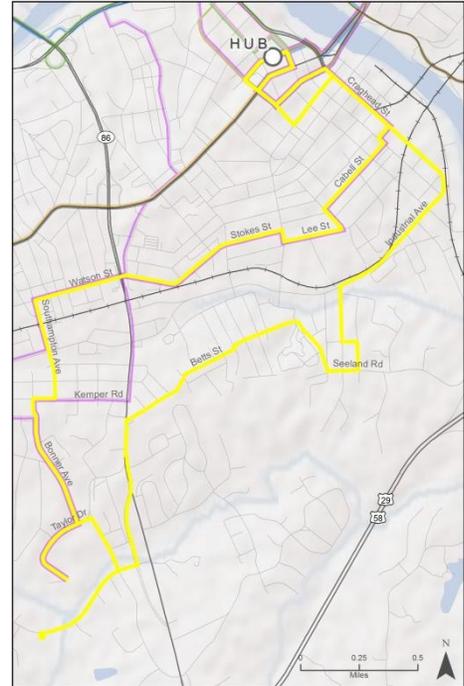
The #3 Edgewood – Stokesland Route connects the downtown HUB to Carter’s Store via Main Street and W. Main Street. Major stops along the route include the Danville Regional Medical Center, Averett University, Ballou Park and Ballou Park Shopping Center.



Route 3 Edgewood - Stokesland

Route #4 Health Center – DCC (4HC)

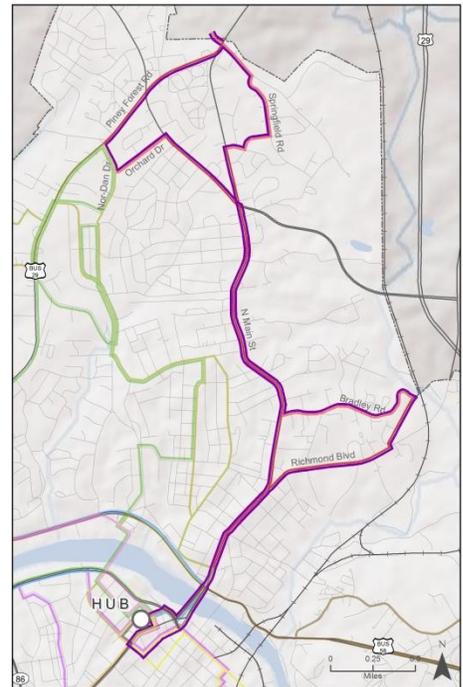
The #4 Health Center – DCC Route connects the downtown HUB to Danville Community College and the Health Center. The route is aligned as a loop with various deviations into residential neighborhoods and the downtown area. The route runs along Stokes Street, Watson Street, Bonner Avenue, College Park Drive, Lockett Drive, S. Main Street, Broadnax Street, Industrial Avenue and Craghead Street. Major stops along the route include Downtown Danville, Danville Community College, Health Department, various residential neighborhoods and the Tobacco Warehouse District.



Route 4 Health Center - DCC

Route #4 North Main (4NM)

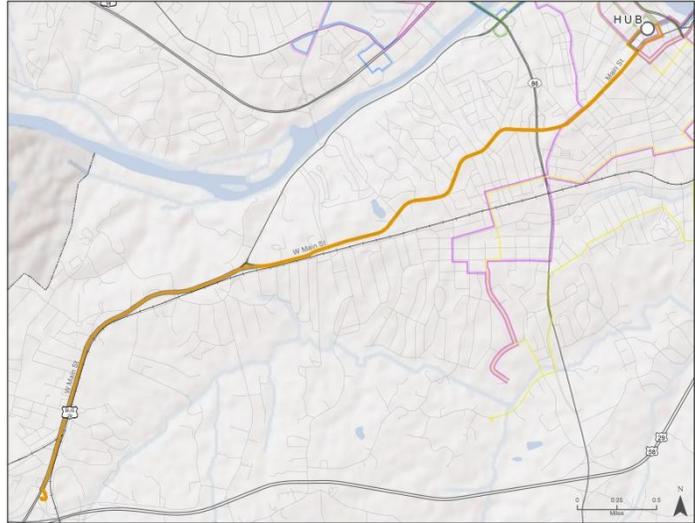
The #4 North Main Route connects the downtown HUB to the NorDan Shopping Center via N. Main Street and the Franklin Turnpike. The route alignment is exactly the same as the #1 North Main Route.



Route 4 North Main

Route #5 Edgewood – Stokesland (5EW)

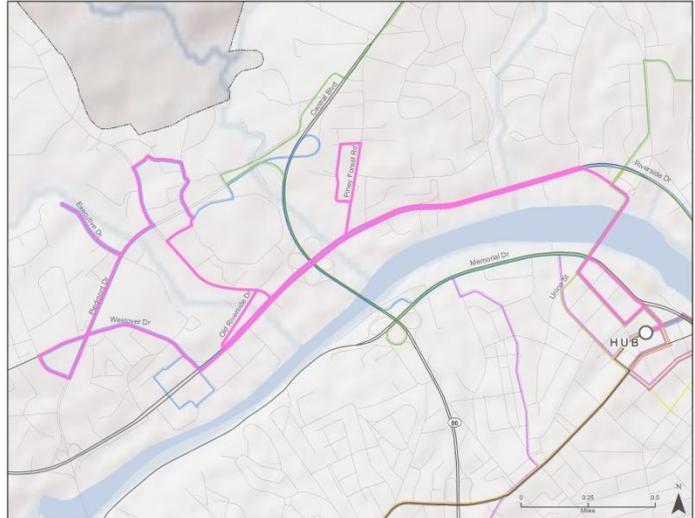
The #5 Edgewood – Stokesland Route connects the downtown HUB to Carter’s Store via Main Street and W. Main Street. The route alignment is exactly the same as the #3 Edgewood – Stokesland Route.



Route 5 Edgewood - Stokesland

Route #5 Riverside (5RS)

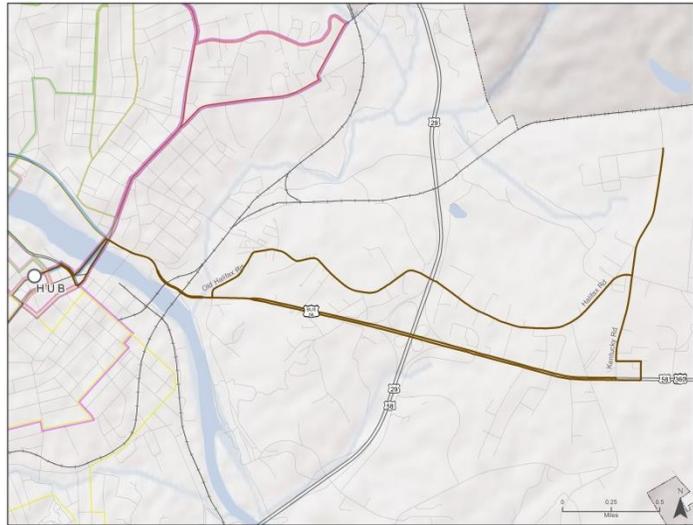
The #5 Riverside Route connects the downtown HUB to Walmart and the Danville Mall. The route’s alignment is nearly identical to Route #2 Riverside. Key differences between the routes include service to Danville Pittsylvania Community Services that is provided by Route #5 but not Route #2, and Route #5 does not provide service along Memorial Drive whereas Route #2 does.



Route 5 Riverside

Route #6 Glenwood (6GW)

The #6 Glenwood Route connects the downtown HUB to the Cain Creek Shopping Center via River Street and U.S. Route 58. Route deviations are allowed by advanced request along Halifax Road and Oakland Avenue. This is Danville Transit’s only fixed commuter route. It has one outbound run in the morning and one inbound run in the evening. Major stops along the route include the Cain Creek Shopping Center and EBI, LLC.



Route 6 Glenwood

Reserve-A-Ride Service

Danville Transit operates a Reserve-A-Ride service that is available to the general public. Reserve-A-Ride is designed to enhance the fixed route system by providing transportation during early morning and late evening hours when the fixed routes are not running, and to provide transportation to destinations which are not served by fixed route. Services are provided to and from any location within the city limits of Danville and the Cane Creek Industrial Park, Monday through Friday from 4:00 a.m. to 1:00 a.m. and Saturdays from 4:00 a.m. to 6:00 a.m. and 5:00 p.m. to 1:00 a.m. To use this service, riders must make a reservation by 11:00 a.m. on the day prior to the trip. Cancellations must be made at least 60 minutes before the scheduled pickup time or the rider will be subject to Danville Transit’s No Show Policy.

Handivan Service

Danville Transit’s Handivan is the complementary ADA service for the fixed route system. Riders must be pre-qualified for Handivan and unable to use the fixed route services. Handivan service is provided Monday through Saturday from 6:00 a.m. to 6:00 p.m. Advanced reservations are required for this service.

Senior Transportation Service

In 2013, Danville Transit began operating Danville’s Senior Transportation service. This service was previously operated by Danville’s Park and Recreation Department. Despite Danville Transit operating the service, the Parks and Recreation Department continues to manage the trip scheduling process and customer satisfaction phone line. Senior Transportation riders must be at least 60 years of age and a resident of Danville. Transportation is provided to and from medical appointments, grocery shopping and other errands. An advanced reservation is required for this service.

FARE STRUCTURE

Fares on Danville Transit's fixed route system are \$1.00 per one-way trip. A half-price, \$0.50 fare, is available from 6:00 a.m. to 12:00 p.m. to riders age 60 and above, Medicare cardholders and disabled passengers. Children age 12 and below may ride free with a fare paying adult; one child per fare paying adult. The fare for the Handivan Service is \$2.00 per one-way trip. The fare for the Reserve-A-Ride service is \$4.00 per one-way trip and two children age 12 and below may ride free with a fare paying adult.

Danville Transit utilizes fare tokens as an alternate method to cash fares. Tokens provide a 10% discount to cash fares. Ten tokens may be purchased for \$4.50 and 20 tokens for \$9.00. Tokens may only be purchased from bus drivers during service hours. Table 1-1 provides an overview of the current fare structure.

The Danville Transit No Show Policy requires that scheduled trips must be cancelled at least 60 minutes prior to the scheduled pickup time or the rider is responsible for paying the missed bus fare. If a passenger has three no shows they must pay for each missed trip before service can be scheduled again.



Danville Transit Fare Token

Table 1-1: Danville Transit Fare Structure

Service	Cash Fare	Tokens
Fixed Route		
Base Fare	\$1.00	2
Discount Fare (seniors, disabled, Medicare) <i>Available 6:00 a.m. to Noon</i>	\$0.50	1
Children Aged 12 or Younger <i>Only 1 Child per Paying Customer</i>	Free	Free
Transfers (To Be Used Immediately)	Free	Free
Handivan Service		
Base Fare	\$2.00	4
Reserve A Ride		
Base Fare	\$4.00	8
Children Aged 12 or Younger <i>Only 2 Children per Paying Customer</i>	Free	Free

FLEET

Danville Transit operates a fleet of 21 revenue and four non-revenue vehicles. The majority of fleet consists of 20- and 28-passenger vehicles and the average vehicle age is 3.5 years. The vehicle inventory is shown in Table 1-2.

Table 1-2: Danville Transit Vehicle Inventory

Vehicle No.	Service Type	Make	Model	Year	Passenger Capacity	Mileage 5/1/15
725	Non-Revenue	Chevrolet	ECAB	2006	N/A	35,668
726	Non-Revenue	Chevrolet	Lumina	2008	4	70,856
727	Revenue	Ford	Eldorado	2015	20	6,473
729	Revenue	Chevrolet	Supreme 3500	2009	9	149,700
730	Revenue	Chevrolet	Supreme	2014	20	21,075
731	Revenue	Chevrolet	Supreme	2013	28	21,298
732	Revenue	Ford	Supreme	2011	12	101,994
734	Revenue	Ford	Eldorado	2015	20	5,926
735	Revenue	Chevrolet	Supreme	2013	28	90,472
736	Revenue	Chevrolet	Supreme	2014	20	53,716
737	Revenue	Chevrolet	Supreme	2014	20	18,366
738	Revenue	Chevrolet	Supreme	2013	28	103,362
739	Revenue	Chevrolet	5500 Supreme	2010	28	147,338
740	Revenue	Chevrolet	Supreme	2013	28	100,350
745	Revenue	Freightliner	Trolleybus	2005	26	17,263
746	Revenue	Freightliner	Trolleybus	2005	26	14,188
747	Non-Revenue	Ford	"Pickup Truck"	2012	N/A	16,520
748	Non-Revenue	Chevrolet	"Mini-van"	2009	8	51,327
749	Revenue	Chevrolet	Supreme	2012	20	117,456
750	Revenue	Chevrolet	Supreme	2012	20	133,870
751	Revenue	Ford	Eldorado	2015	20	6,378
752	Revenue	Ford	Eldorado	2015	20	1,370

EXISTING FACILITIES

The office of Danville Transit’s Director is located in the Danville Regional Airport’s Terminal Building at 424 Airport Drive, Danville, VA 24540. Danville Transit’s Administrative and Maintenance facility is located in Danville’s Public Works Complex at 998 South Boston Road, Danville, VA 24540. The facility includes management offices and a mechanics shop where all of Danville Transit’s vehicles are stored, fueled and maintained. Danville also utilizes this location to store school buses.



Danville Transit’s Administrative and Maintenance Facility



Danville Transit Center downtown "HUB"

Danville Transit utilizes a downtown transfer center known as the “HUB.” The HUB features six bus bays, outdoor shelters, an indoor waiting area, restrooms, vending machines and an information office. Greyhound Lines, Inc. operates a ticket and package office in the HUB with Greyhound’s Richmond, Charlotte and Atlanta Routes providing twice daily service. The HUB is located in downtown Danville at 515 Spring Street, Danville, VA 24541.

Directly across Spring Street from the downtown HUB is Danville Transit’s demand response loading area. The lot consists of four bus bays, and 24 parking spaces.



Downtown HUB Demand-Response Loading Area

TRANSIT SECURITY PROGRAM

Danville Transit has developed a comprehensive set of operating rules and procedures to establish the importance of security and emergency preparedness throughout the organization. These rules and procedures are thoroughly outlined in the Danville Transit Operating Policies and Procedures Manual which every employee must read and sign.

Additionally, Danville Transit has developed an expansive network of audio and visual monitoring devices placed in every vehicle, at the downtown HUB and the administrative and maintenance facility.



Surveillance at Danville Transit Operations Facility

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PROGRAM

Danville Transit currently uses RouteMatch Software for scheduling their demand response trips. The scheduling software helps transit system staff in recording the trip requests and scheduling. While the current method of communication between drivers and dispatchers is two-way radio, Danville Transit is in the process of procuring portable tablets for installation in each vehicle which would allow trip confirmations and automatic vehicle locators (AVL). Installation of the portable tablets is expected to occur in early 2015. The transit system is also looking at acquiring an interactive voice response (IVR) system to help with the large volume of calls.

PUBLIC OUTREACH

Danville Transit regularly works and cooperates with community stakeholders, institutions and residents to meet the needs of the community. Danville Transit maintains a Transportation Advisory Committee that is comprised of seven members including the city manager and a city councilman. This committee reviews all grant applications, planning documents, proposed service changes and fare adjustments. Public outreach is conducted and documented via this committee whenever a major service change or fare adjustment is proposed.

Chapter 2

Goals, Objectives and Standards

GOALS AND ISSUES FOR THE TRANSIT DEVELOPMENT PLAN

An important first step in the development of the TDP is to meet with Danville Transit staff and local stakeholders to discuss the challenges, issues and goals regarding transit in Danville. A discussion of the goals and issues was held during the TDP kick-off meeting with Danville Transit on November 6, 2014. On-site stakeholder interviews were also conducted during that time. A summary of the challenges and issues are provided below.

Fixed route Challenges and Issues

- Drivers do not consistently stop in the same location at some stop locations.
- Some of the routes have very tight running times.
- The one directional loops on the routes do not make it convenient if rider needs to travel the opposite direction. They also require riders to cross the road to get to and from the stop.
- Many bus stops are not ADA compliant and have maintenance issues.

Demand response Challenges and Issues

- Within the last two years, the demand response service, Reserve-A-Ride, has grown approximately 40%.
- Approximately 20% of the growth is due to the incorporation of senior transportation service from the Parks and Recreation Department.
- Increased demand has resulted in an increase of demand response vehicles from two to seven during peak periods.
- Houses with no address posted make it difficult for drivers to find.
- The 24 hour reservation period for Reserve-A-Ride is harmful to employee retention since some employees may not know their shift until less than 24 hours before.
- The Handi-Van and Reserve-A-Ride service is late on a regular basis.
- There are high call volumes regarding where the bus is and how far away it is.

Vehicle Maintenance Issues

- Maintenance is not guaranteed to be performed quickly.
- Warranty work must be done in Lynchburg or Roanoke.
- The mechanic is a city employee under the supervision and direction of the Department of Public Works. Transit vehicles may not always be first priority.

- Environmental requirements make the diesel vehicles unreliable. Vehicles must run at high speeds (60 mph +) to filter out containments. The DEF system causes most of the frequent breakdowns and the closest diesel particulate filter cleaning machine is over 50 miles away which can result in the vehicle being out of service for a week or more.

Administrative Challenges Issues

- Driver pay scales are not competitive with regional employers making it difficult to attract and retain drivers.
- There is no dedicated maintenance staff under the direction of transit services.
- Increased demand of the demand response service is putting a strain on current level of resources.

Specific Service Gap Challenges and Issues

- There has been growth in the need for transit service to and from Blairs.
- Fixed route service to the industrial areas such as TelVista and Ikea.
- Night classes at DCC end around 9:00 pm.
- No evening service for retail employees who work until 9:00 pm or 10:00 pm.
- Fixed route service to the DCC Training Center.

These challenges and issues helped to formulate the goals and objectives and were explored during the TDP process.

TRANSIT PROGRAM MISSION

Organizationally, with Danville Transit being under the city's transportation department, there are two mission statements that relate to transit services. The mission statements below were also documented in the 2009 Transit Development Plan and are still consistent with the city's focus and purpose for transit services.

The overall mission statement for the Transportation Service Department is:

"To facilitate safe, reliable, convenient and economical operations that support economic development."

For the Mass Transit Division, the mission statement is:

"Provide reliable fixed route and demand responsive service that is safe and convenient which facilitates cost effective transportation access."

TRANSIT PROGRAM GOALS AND OBJECTIVES

Some of the following goals and objectives were developed during the 2009 Transit Development Plan. These goals and objectives were reviewed with Danville Transit to determine if they are still consistent with the current needs of the system. While some of the goals and objectives are still consistent with current needs and issues, others were added and modified to better reflect the current operating environment and needs.

Goal 1: Provide Reliable Fixed Route and Demand Responsive Service that Meets the Transportation Needs for Danville Residents

Objectives:

- Provide transit service that connects city residents to employment, education, shopping and medical services.
- Explore potential need to expand transit service to employment destinations/areas outside of city limits.
- Provide more direct routing for riders on the fixed route service.

Goal 2: Market Existing Transit Services

Objectives:

- Actively market the fixed route service as a travel option within the city of Danville.
- Explore private/public partnership opportunities with local business, employers, educational institutions and other community stakeholders.

Goal 3: Deliver Fixed Route and Demand Response Services in a Cost-Effective Manner

Objectives:

- Evaluate and monitor system-wide performance measures.
- Consider changing or eliminating service that does not meet established performance standards.
- Develop policies to further encourage the use of the fixed route service.
- Ensure demand response services are not competing with the fixed route service.
- Maintain a system-wide farebox recovery ratio that meets or exceeds standards.
- Maintain administrative costs to approximately 20% of total operating budget.
- Achieve system-wide fixed route ridership levels that meet or exceed standards.

Goal 4: Deliver Reliable Fixed Route and Demand Response Services in a Safe Manner

Objectives:

- Ensure that the vehicle operator accident rate is less than the standard.
- Ensure vehicles are repaired in a timely manner.
- Ensure that an adequate fleet of vehicles is readily available for fixed route and demand response services.
- Ensure adequate maintenance and operating staff levels.

Goal 5: Provide Transit Services that are Accessible to Citizens

Objectives:

- Ensure that transit services are accessible to all population groups within the city of Danville.
- Ensure that all stops are properly signed.
- Develop a policy for the provision of passenger amenities such as benches, shelters, schedule information and bicycle racks.
- Install appropriate passenger amenities based on an established policy.
- Comply with the applicable requirements of the Americans with Disabilities Act (ADA).

SERVICE STANDARDS

The goals, objectives and service standards were developed for Danville Transit as a component of the TDP process. Service standards are benchmarks by which service performance is evaluated. The service standards that were developed in the previous TDP have been incorporated in the current standards with additional benchmarks. The most effective service standards are straightforward and relatively easy to calculate and understand.

Following the TDP process, it is recommended that an annual review of goals, objectives and service standards occur as part of the grant preparation cycle. Any changes for these measurement tools can be included in the annual TDP update.

Table 2-1: Service Standards

Category	Standard
<p>Availability</p> <p><i>Service availability is a direct reflection of the level of financial resources available for the transit program.</i></p>	<p>Service Coverage:</p> <p>Fixed Route: Residential areas with population densities of at least 2,000 people per square mile. Major activity centers including employment, health/medical centers, high schools, shopping centers, social service agencies, and government centers.</p> <p>Frequency: Reduce headways wherever feasible. Current frequency is 40/80 minutes.</p> <p>ADA Paratransit: At least ¼ mile from fixed routes.</p> <p>Demand response: City-wide.</p>
<p>Productivity</p> <p><i>(one-way trip/revenue hour)</i></p>	<p>Fixed route: Review routes and consider modifications if productivity falls below system average of 80% of 12.6 one-way trips per revenue hour.</p> <p>Demand response: Review service and consider modifications, if productivity falls below system average of 80% of 5.54 one-way trips per revenue hour.</p>
<p>Cost Efficiency</p> <p><i>(costs/revenue hour)</i></p>	<p>Fixed route: Review routes and consider modifications if operating costs exceed an average of \$43.86 (FY13) per vehicle revenue hour.</p> <p>Demand response: Review routes and consider modifications if operating costs exceed an average of \$55.02 (FY13) per vehicle revenue hour.</p>
<p>Cost Effectiveness</p> <p><i>(costs/one-way trip)</i></p>	<p>Fixed route: Review routes and consider modifications if operating costs exceed an average of \$3.02 (FY13) per one-way trip.</p> <p>Demand response: Review service and consider modification if operating costs exceed and average of \$21.05 (FY13) per one-way trip.</p>
<p>Dependability</p>	<p>On-time Performance: 90 percent or greater (a vehicle leaving a scheduled time point no more than 1 minute early or 5 minutes late is considered on-time).</p>
<p>Public Information</p>	<p>Timetable, maps, and website maintained and updated as needed to be accurate.</p>
<p>Farebox Recovery</p> <p><i>(farebox revenue as a percentage of operating expense)</i></p>	<p>Fixed route: Farebox recovery ratio for the fixed route service should be at least 20 percent.</p> <p>Reserve-A-Ride: Farebox recovery ratio for the Reserve-A-Ride service should be at least 15 percent.</p>
<p>Passenger Comfort</p>	<p>Passenger Shelters: 25 boardings/day; Priority to hospitals, senior communities and schools.</p> <p>Benches: 20 boardings/day; Priority to hospitals, senior communities and schools</p> <p>Ride Time: Average ride times on the demand response service should not exceed 50 minutes.</p>

Chapter 3

Service and System Evaluation and Transit Needs Analysis

INTRODUCTION

This chapter of the TDP focuses on two primary analyses. The first focus is a description and analysis of the recent performance of Danville Transit including analyses of trends, peers, recent ridership and a passenger survey. The second area of focus provides an analysis of transit needs including a review of relevant studies and plans, and a demographic and land use analysis.

This chapter has ten major components which are presented in the order shown below:

1. System performance and trend data
2. Peer analysis of similar transit systems
3. Financial analysis
4. Recent compliance results
5. Rider surveys
6. Bus stop level boarding and alighting analysis
7. Stakeholder opinions
8. Demographic and land uses
9. Title VI analysis
10. Review of other planning documents

A detailed analysis of the Rider Surveys can be found in Appendix A.

SYSTEM EVALUATION

Trend Data

System Wide

Table 3-1 provides the operating statistics for Danville Transit for fiscal years 2012 to 2015, as reported by Danville Transit. Overall ridership for the system has risen 4% or by 16,712 trips from 2012 to 2014. In FY2015, it is estimated that ridership will reach 437,996 one-way trips, an increase of 6% over FY2014. The efficiency measure of cost per hour has improved over time by dropping from \$48.90 in 2012 to \$40.31 in 2015; representing over a 17% drop. The cost per trip has marginally risen over the same period of time from \$3.51 in 2012 to \$3.74 in 2015; representing a six% increase. The varying efficiency measures

are most likely due to the introduction of the senior transportation Service and the increased popularity of the Reserve-A-Ride service which have increased the number of revenue miles in greater proportion than ridership.

Table 3-1: Danville Transit System-Wide Performance and Trend Data

System Wide	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	396,126	406,145	412,838	218,998
Revenue Miles	464,142	526,005	586,486	317,631
Revenue Hours	28,400	33,506	37,577	20,553
Trips/Hour	13.95	12.12	10.99	10.77
Trips/Mile	0.85	0.77	0.70	0.70
MPH	16.34	15.70	15.61	15.45
Operating Costs	\$1,388,621	\$1,429,244	\$1,533,665	\$844,554
Cost/Trip	\$3.51	\$3.52	\$3.72	\$3.74
Cost/Hour	\$48.90	\$42.66	\$40.82	\$40.31

*FY2015 data only includes the first half of the fiscal year

Fixed Route Service

Table 3-2 provides an overview of Danville Transit's fixed route performance trend from fiscal years 2012 to 2015. Annual ridership from 2012 to 2014 decreased slightly from 370,179 to 367,586; or less than one 1%. However, in FY2015 it is estimated that ridership will exceed 380,000, representing an increase of approximately 5%. With operating costs declining and ridership increasing, the cost per trip of fixed route services has improved over time from \$2.43 in 2012 to \$2.13 in 2015; representing over a 14% drop in cost.

Table 3-2: Danville Transit Fixed Route Performance and Trend Data

Fixed Route	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	370,179	370,481	367,586	194,459
Revenue Miles	286,601	295,879	304,118	151,852
Revenue Hours	18,732	19,657	20,479	10,240
Trips/Hour	19.76	18.85	17.95	18.99
Trips/Mile	1.29	1.25	1.21	1.28
MPH	15.30	15.05	14.85	14.83
Operating Costs	\$901,215	\$734,631	\$780,635	\$413,831
Cost/Trip	\$2.43	\$1.98	\$2.12	\$2.13
Cost/Hour	\$48.11	\$37.37	\$38.12	\$40.41

*FY2015 data only includes the first half of the fiscal year

Table 3-3 provides a breakout of the fixed route performance by route for FY2014. The North Main Routes (#1 and #4) had the greatest ridership, accounting for almost 25% of the total fixed route ridership. Other routes with the high ridership include #5 Riverside followed by #1 Kemper Road. In terms of productivity, the #2 Riverside and #5 Riverside Routes were the most productive with 23.23 and 22.76 one-way trips per hour respectively. The route that had the lowest ridership and productivity was the #6 Glenwood Route.

Table 3-3: FY 2014 Fixed Route Trend Data

Route	One Way Passenger Trips	Revenue Service Miles	Revenue Service Hours	Trips per Mile	Trips per Hour	Average MPH
#1 North Main	47,877	31,906	2,147	1.50	22.30	14.86
#1 Kemper Road - DCC	42,189	27,543	1,854	1.53	22.76	14.86
#2 Riverside	35,934	21,816	1,468	1.65	24.48	14.86
#2 Third Ave - NorDan	23,053	27,270	1,835	0.85	12.56	14.86
#3 Danville Estates	28,839	32,100	2,165	0.90	13.32	14.83
#3 Edgewood	27,366	28,993	1,950	0.94	14.03	14.87
#4 Health Center	40,168	29,724	2,000	1.35	20.08	14.86
#4 North Main	43,606	32,724	2,202	1.33	19.80	14.86
#5 Edgewood	33,431	29,997	2,019	1.11	16.56	14.86
#5 Riverside	42,294	27,036	1,821	1.56	23.23	14.85
#6 Glenwood	143	2,836	195	0.05	0.73	14.55
Backup - Riverside Routes	2,683	12,172	822	0.22	3.26	14.80
Total Fixed Route System	367,586	304,118	20,479	1.21	17.95	14.85

Route Profiles

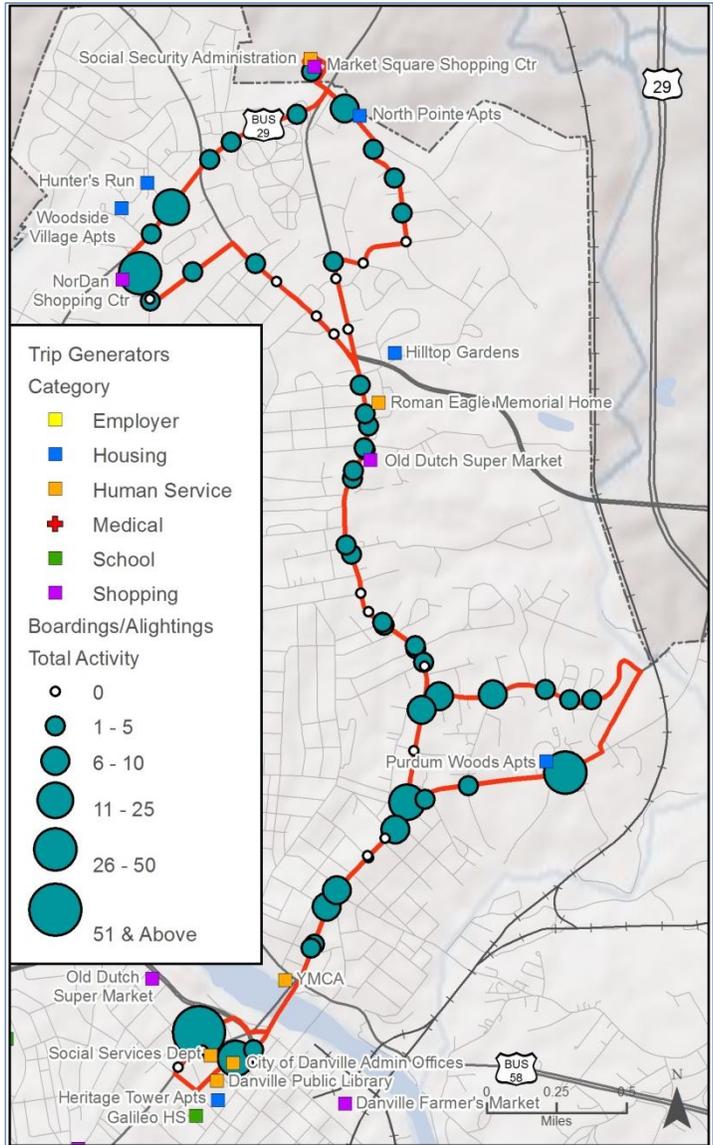
The following subsection includes detailed data for each of Danville Transit's fixed routes. Each profile includes a brief service description followed by brief narrative covering major destinations and land uses served. Passenger boarding and alighting data, collected during the passenger count effort, is presented specific to each route in a map that also depicts the major destinations along the route. In addition, performance data from fiscal year 2012 to 2015 is presented in each profile.

Route Profile – Route #1 North Main

Route #1 North Main connects the downtown HUB to the NorDan Shopping Center via N. Main Street, Franklin Turnpike, Piney Forest Road and Springfield Road. Transfers are available to all routes at the downtown HUB and transfers at the Nor Dan Shopping Center are available to Route #3 Danville Estates – NorDan. This route is interlined with Route #1 Kemper Road – Danville Community College. The route runs Monday through Saturday from approximately 6:07 a.m. to 5:30 p.m. with 80 minute headways. Route #4 North Main provides service along this route bringing headways for stops along this route to 40 minutes.

The North Main Route serves a number of land uses including downtown destinations, residential neighborhoods and lower intensity commercial developments. Some major destinations along the route include the YMCA, Purdum Woods Apartments, Roman Eagle Memorial Home, Hilltop Gardens, North Pointe Apartments, Market Square Shopping Center and NorDan Shopping Center.

Ridership along this route is very dispersed. Beyond the downtown HUB, the most frequently used stop during the ridership counts was the Purdum Woods Apartments stop. The next most frequently used stops were the NorDan Shopping Center, Hunter’s Run Apartments and the stop at Danville Public Library.



Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	47,704	48,058	47,877	24,419
Revenue Miles	32,116	32,222	31,906	16,111
Revenue Hours	2,099	2,147	2,147	1,074
Trips/Hour	22.73	22.38	22.3	22.74
Trips/Mile	1.49	1.49	1.5	1.52
MPH	15.3	15.01	14.86	15.00
Operating Costs	\$100,987	\$80,241	\$81,841	\$43,395
Cost/Trip	\$2.11	\$1.67	\$1.71	\$1.78
Cost/Hour	\$48.11	\$37.37	\$38.12	\$39.65

*FY2015 data only includes the first half of the fiscal year

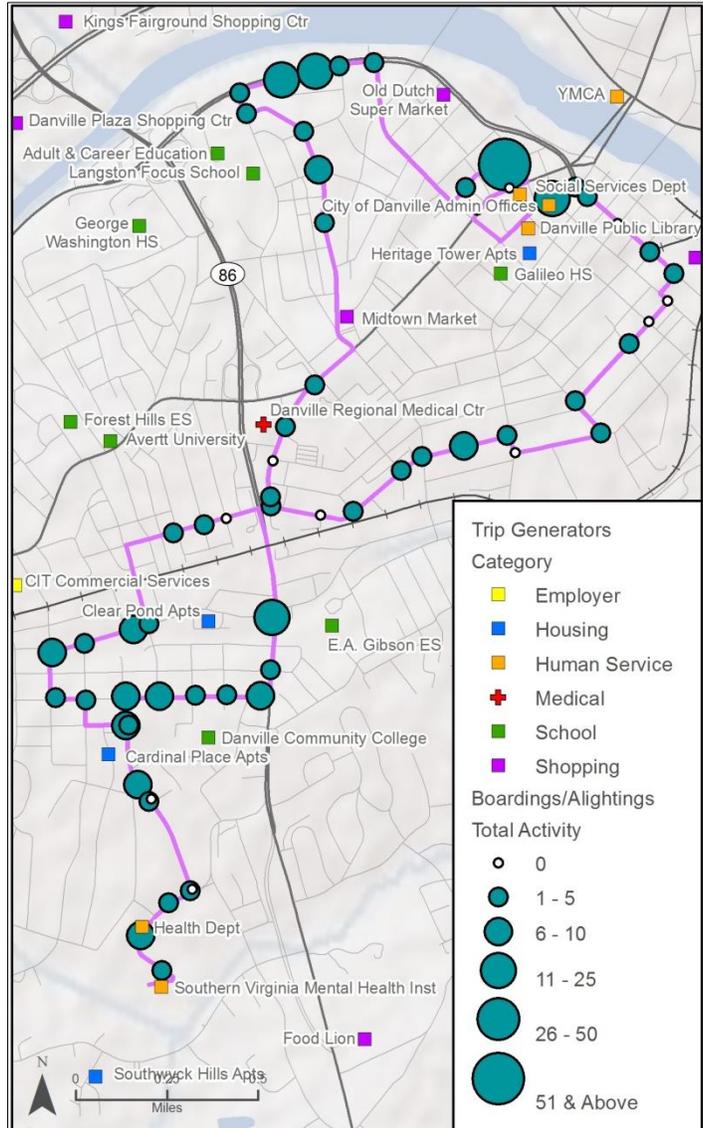
Route #1 North Main

Route Profile – Route #1 Kemper Road – DCC

Route #1 Kemper Road – Danville Community College (DCC) connects the HUB to the Health Department via primarily Main Street, Kemper Road, Watson Street, Franklin Turnpike, Piney Forest Road and Springfield Road. Transfers are available to all routes at the HUB. This route is interlined with Route #1 North Main. The route runs Monday through Saturday from approximately 6:40 a.m. to 5:55 p.m. with 80 minute headways. Route #4 Health Center provides service along a majority of this route bringing headways for most stops along this route to 40 minutes.

The Kemper Road – DCC Route serves a number of land uses including downtown destinations, residential neighborhoods, commercial developments and institutional uses. Some major destinations along the route include the Clear Pond Apartments, Cardinal Place Apartments, Danville Community College, Health Department, the Southern Virginia Mental Health Institute and Danville Regional Medical Center.

Ridership along this route is heavy along Memorial Drive and Kemper Road. Beyond the downtown HUB, the most frequented stop during the ridership counts was the stop along Memorial Drive near the intersection of Cedar Place. This location is in close proximity to God’s Storehouse and some low density multifamily dwellings. Other popular stops include the stop at the Clear Pond Apartments and the stop at Danville Public Library.



Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	42,000	41,632	42,189	22,939
Revenue Miles	27,725	27,815	27,543	13,908
Revenue Hours	1,812	1,854	1,854	927
Trips/Hour	23.18	22.46	22.76	24.75
Trips/Mile	1.51	1.50	1.53	1.65
MPH	15.30	15.00	14.85	15.00
Operating Costs	\$87,179	\$69,291	\$70,672	\$37,455
Cost/Trip	\$2.08	\$1.66	\$1.68	\$1.63
Cost/Hour	\$48.11	\$37.37	\$38.12	\$40.40

*FY2015 data only includes the first half of the fiscal year

Route #1 Kemper Road - DCC

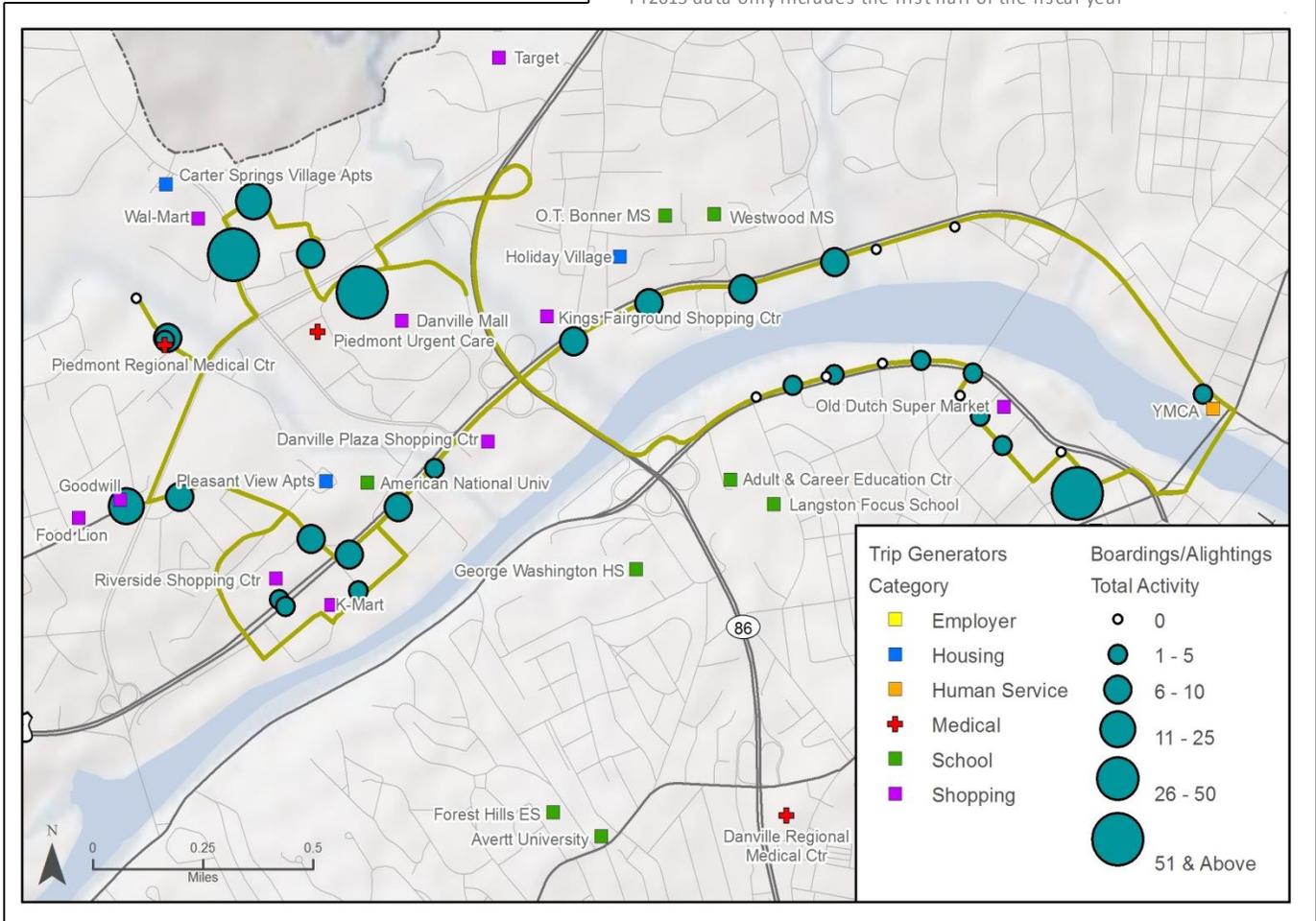
Route Profile – Route #2 Riverside

Route #2 Riverside connects the downtown HUB to Walmart, Danville Mall and other retail stores via Memorial Drive, Central Boulevard, Piedmont Drive and Riverside Drive. Transfers are available to all routes at the downtown HUB. This route is interlined with Route #2 Third Avenue – NorDan. The route runs Monday through Saturday from approximately 6:15 a.m. to 5:32 p.m. with 80 minute headways. Route #5 Riverside also provides service along a majority of this route bringing headways for most stops along this route to 40 minutes.

The Riverside Route primarily serves high intensity commercial developments and institutional land uses. Some major destinations along the route include Danville Mall, Walmart, Piedmont Regional Medical Center, Goodwill, K-Mart, National American University and the YMCA.

Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	40,307	38,128	37,275	19,037
Revenue Miles	21,960	22,536	27,902	14,853
Revenue Hours	1,435	1,502	1,879	940
Trips/Hour	28.09	25.92	24.50	24.84
Trips/Mile	1.83	1.73	1.65	1.56
MPH	15.30	15.00	14.86	15.94
Operating Costs	\$69,041	\$54,864	\$55,958	\$29,657
Cost/Trip	\$1.71	\$1.44	\$1.56	\$1.63
Cost/Hour	\$48.11	\$37.37	\$38.12	\$40.40

*FY2015 data only includes the first half of the fiscal year



Route #2 Riverside

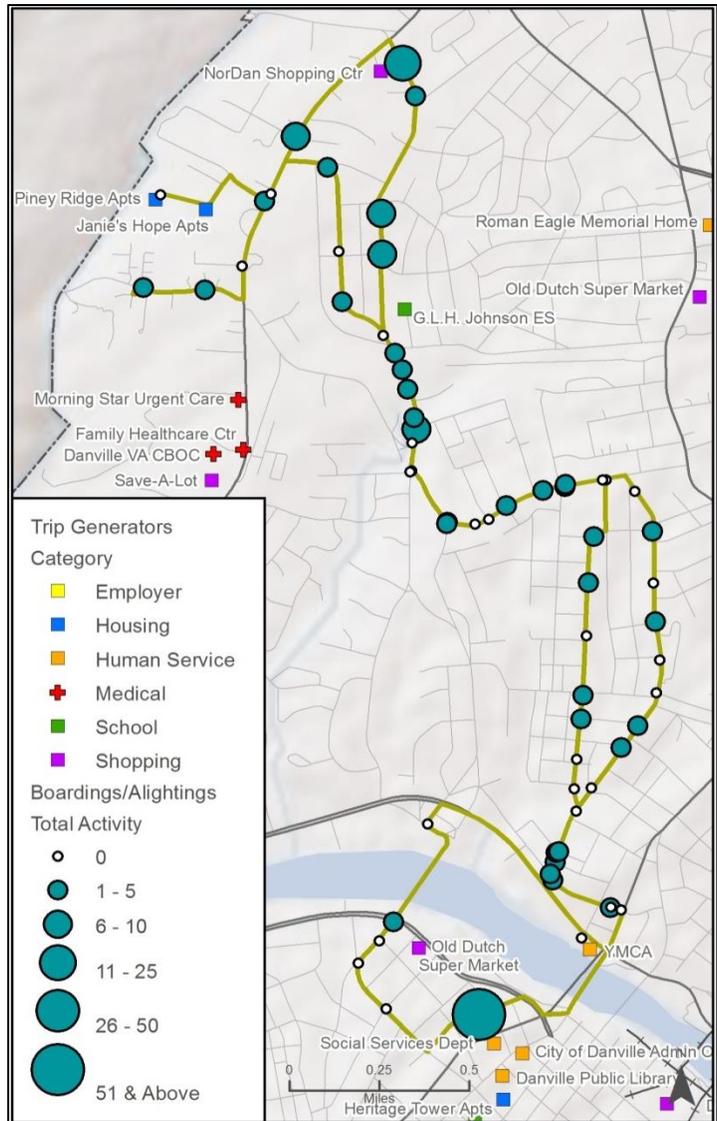
Ridership along this route is heaviest in the commercial and retail areas. The most frequented stop during the ridership counts was Wal-Mart, followed by Danville Mall, and the Dollar Tree stop.

Route Profile – Route #2 Third Ave – NorDan

Route #2 Third Avenue – NorDan connects the downtown HUB to the NorDan Shopping Center via Washington Street, Third Avenue, Arnett Boulevard, Melrose Avenue and Claiborne Street. Transfers are available to all routes at the downtown HUB and transfers are available at the NorDan Shopping Center for Route #4 North Main. This route is interlined with Route #2 Riverside. The route runs Monday through Saturday from approximately 6:40 a.m. to 5:56 p.m. with 80 minute headways. Route #3 Danville Estates – NorDan also provides service along a majority of this route bringing headways for most stops along this route to 40 minutes.

The Third Ave – NorDan Route serves a number of land uses including downtown destinations, residential neighborhoods and low intensity commercial developments. Some major destinations along the route include the YMCA, G.L.H. Johnson Elementary, the NorDan Shopping Center, Piney Ridge Apartments and Jaine’s Hope Apartments.

Ridership along this route is dispersed throughout the residential areas. Beyond the downtown HUB, the most frequented stop during the ridership counts was the NorDan Shopping Center. Other popular stops are located along Melrose Avenue and Arnett Boulevard.



Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	26,251	24,003	23,053	12,298
Revenue Miles	27,450	27,540	27,270	15,138
Revenue Hours	1,794	1,835	1,835	918
Trips/Hour	14.63	13.08	12.56	13.40
Trips/Mile	0.96	0.87	0.85	0.81
MPH	15.30	15.01	14.86	16.49
Operating Costs	\$86,313	\$68,581	\$69,948	\$37,092
Cost/Trip	\$3.29	\$2.86	\$3.03	\$3.02
Cost/Hour	\$48.11	\$37.37	\$38.12	\$39.65

*FY2015 data only includes the first half of the fiscal year

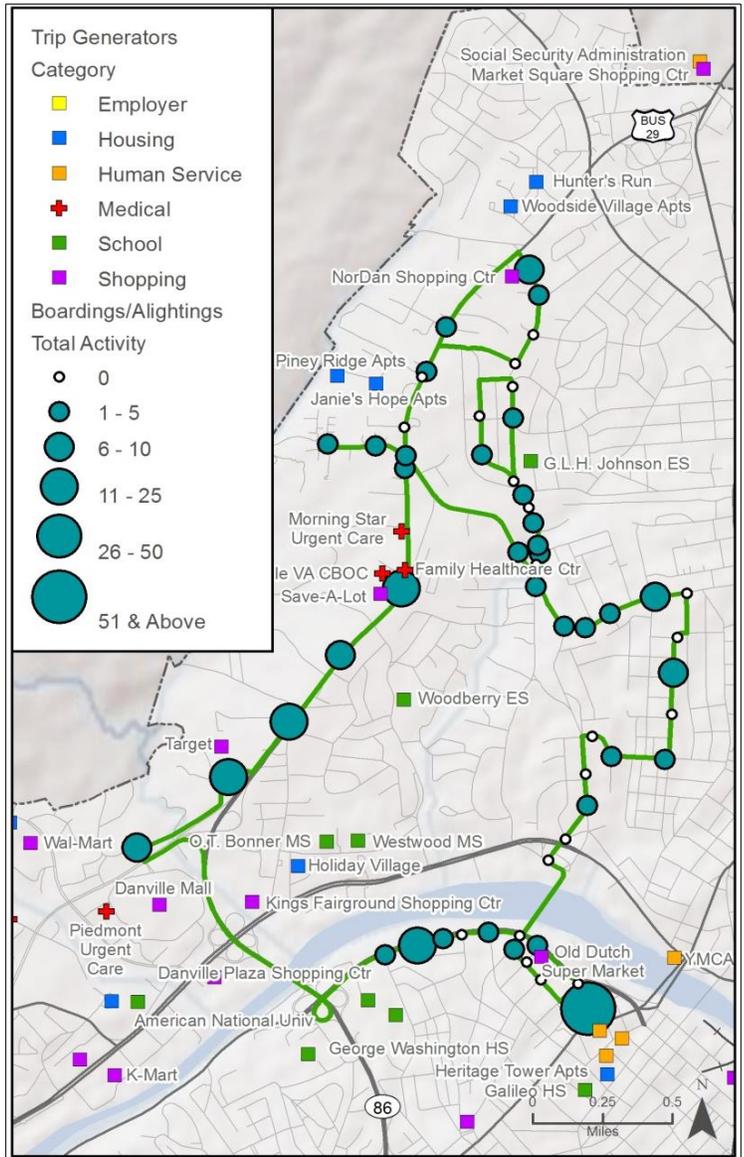
Route #2 Third Ave-NorDan

Route Profile – Route #3 Danville Estates – NorDan

Route #3 Danville Estates – NorDan connects the downtown HUB to the NorDan Shopping Center via, primarily, Washington Street, Third Avenue, Arnett Boulevard, Piney Forest Road, Central Boulevard and Memorial Drive. Transfers are available to all routes at the downtown HUB and transfers are available at the NorDan Shopping Center for Route #1 North Main. This route is interlined with Route #3 Edgewood – Stokesland. The route runs Monday through Saturday from approximately 6:07 a.m. to 5:28 p.m. with 80 minute headways. Route #2 Third Avenue – NorDan also provides service along a majority of this route bringing headways for most stops along this route to 40 minutes.

The Danville Estates – NorDan Route serves a large number of land uses including downtown destinations, residential neighborhoods, high intensity commercial developments and institutional land uses. Some major destinations along the route include the NorDan Shopping Center, Target and various medical clinics along Piney Forest Road.

Ridership along this route is heavily dispersed. Beyond the downtown HUB, the most frequented stop during the ridership counts was the bus stop along Memorial Drive near the intersection of Cedar Place. Other popular stops included Target, the stop on Piney Forest Road at Parker Road and the stop at the shopping center with Save-A-Lot and the VA Clinic.



Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	26,627	28,669	28,839	16,422
Revenue Miles	32,316	32,436	32,100	16,212
Revenue Hours	2,112	2,165	2,165	1,082
Trips/Hour	12.61	13.24	13.32	15.18
Trips/Mile	0.82	0.88	0.90	1.01
MPH	15.30	14.98	14.83	14.98
Operating Costs	\$101,613	\$80,915	\$82,532	\$42,896
Cost/Trip	\$3.82	\$2.82	\$2.86	\$2.61
Cost/Hour	\$48.11	\$37.37	\$38.12	\$39.65

*FY2015 data only includes the first half of the fiscal year

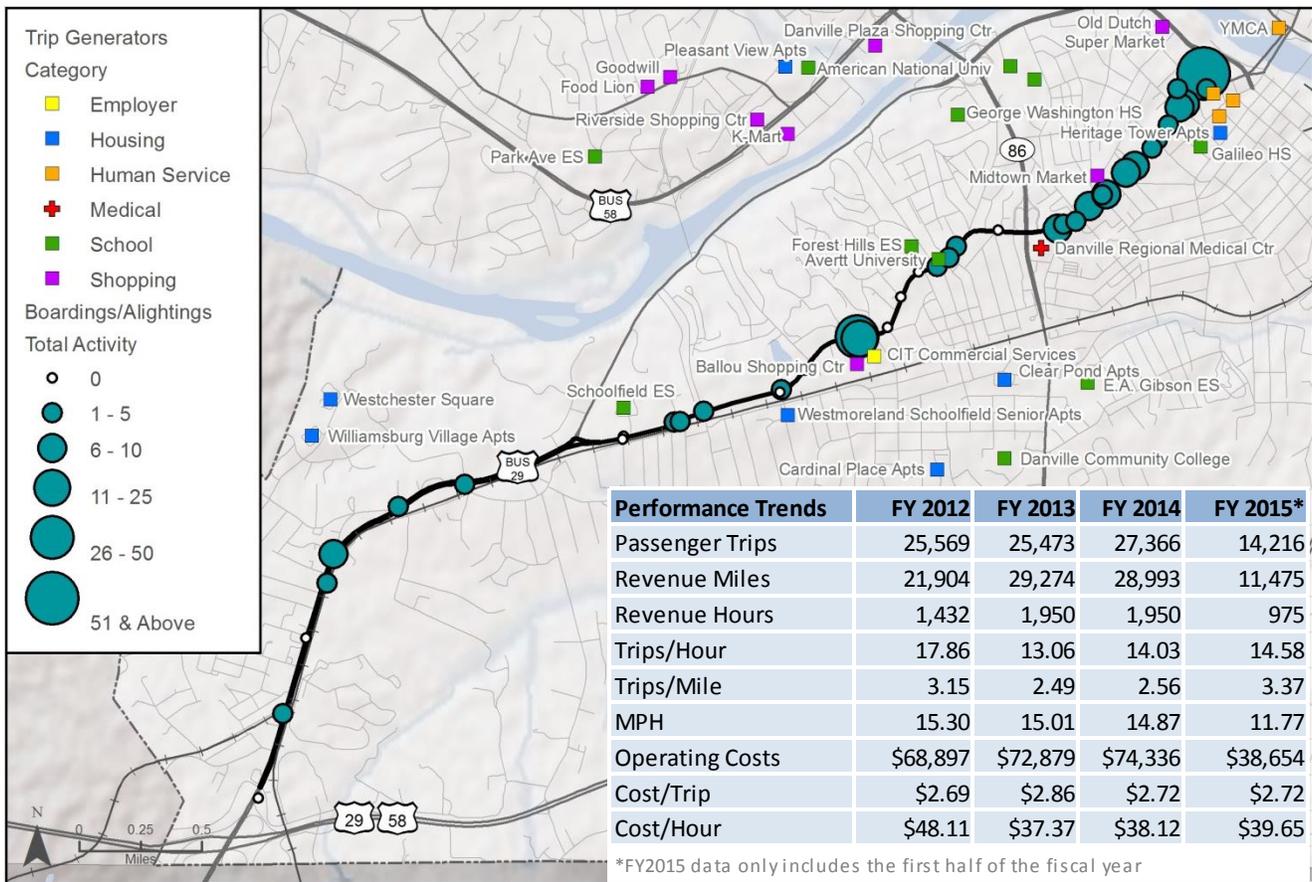
Route #3 Danville Estates-NorDan

Route Profile – Route #3 Edgewood – Stokesland

Route #3 Edgewood – Stokesland connects the downtown HUB to Carter’s Store via Main Street and W. Main Street. Transfers are available to all routes at the downtown HUB. This route is interlined with Route #3 Danville Estates – NorDan. The route runs Monday through Saturday from approximately 6:40 a.m. to 6:00 p.m. with 80 minute headways. Route #5 Edgewood – Stokesland Riverside also provides service along this route bringing headways for stops along this route to 40 minutes.

The Edgewood – Stokesland Route serves a number of land uses including downtown destinations, residential neighborhoods, commercial developments and institutional land uses. Some major destinations along the route include Danville Regional Medical Center, Avertt University and the Ballou Shopping Center.

Ridership along this route is heaviest close to the downtown area and lightest at the southern end of the route. Beyond the downtown HUB, the most frequented stop during the ridership counts was the south bound bus stop at the Ballou Shopping Center. The second most popular stop was the north bound stop at the Ballou Shopping Center and the third most popular was a bus stop along Main Street close to the Midtown Market.



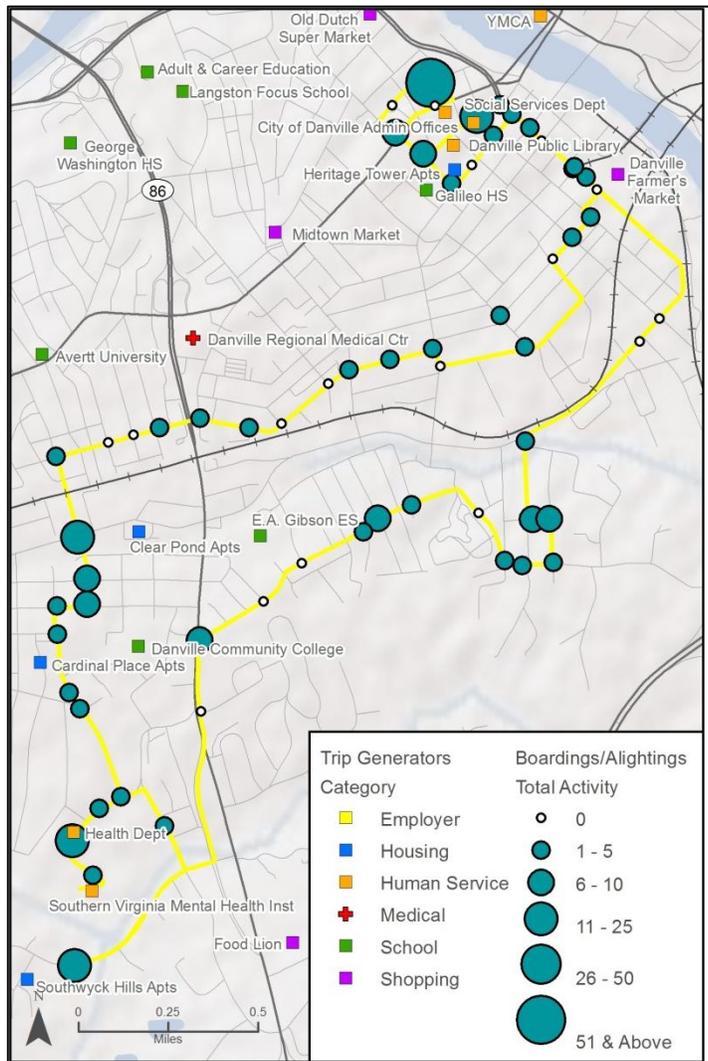
Route #3 Edgewood-Stokesland

Route Profile – Route #4 Health Center

Route #4 Health Center connects the downtown HUB to the Health Department via, primarily, Stokes Street, Watson Street, Donner Avenue, S. Main Street, Broadnax Street, Industrial Avenue and Craghead Street. Transfers are available to all routes at the downtown HUB. This route is interlined with Route #4 North Main. The route runs Monday through Saturday from approximately 6:05 a.m. to 5:28 p.m. with 80 minute headways. Route #1 Kemper Road – DCC also provides service along a majority of this route bringing headways for most stops along this route to 40 minutes.

The Health Center Route serves a number of land uses including downtown destinations, residential neighborhoods, commercial developments and institutional uses. Some major destinations along the route include the Clear Pond Apartments, Cardinal Place Apartments, Danville Community College, Health Department, the Southern Virginia Mental Health Institute, the Southwyck Hills Apartments and Danville Farmer’s Market.

Ridership along this route is heavily dispersed and some portions of the route have no ridership. Beyond the downtown HUB, the most frequented stop during the ridership counts was the stop at Lockett Circle, which is in close proximity to the Southwyck Hills Apartments. The second most popular stop was the Health Department followed by the stop near the Department of Social Services.



Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	40,244	40,922	40,163	21,658
Revenue Miles	29,921	30,019	29,724	15,009
Revenue Hours	1,956	2,000	2,000	1,000
Trips/Hour	20.57	20.46	20.08	21.66
Trips/Mile	1.35	1.36	1.35	1.44
MPH	15.30	15.01	14.86	15.01
Operating Costs	\$94,108	\$74,748	\$76,242	\$39,646
Cost/Trip	\$2.34	\$1.83	\$1.90	\$1.83
Cost/Hour	\$48.11	\$37.37	\$38.12	\$39.65

*FY2015 data only includes the first half of the fiscal year

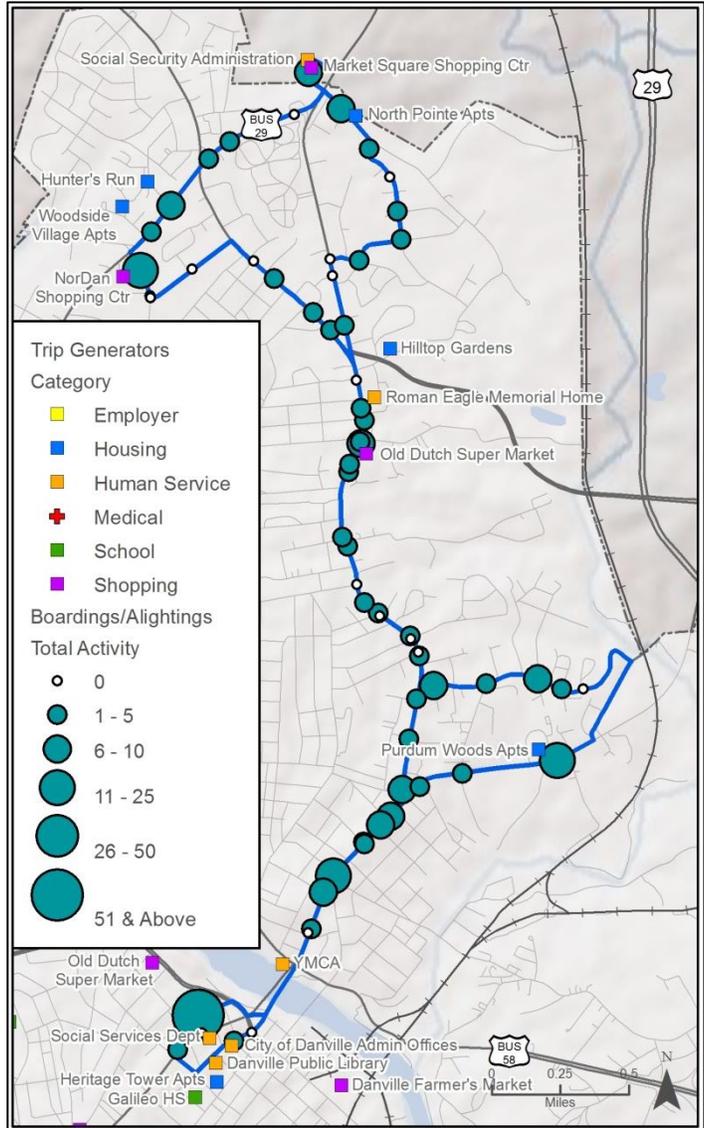
Route #4 Health Center

Route Profile – Route #4 North Main

Route #4 North Main connects the downtown HUB to the NorDan Shopping Center via N. Main Street, Franklin Turnpike, Piney Forest Road, and Springfield Road. Transfers are available to all routes at the Downtown HUB and transfers at the Nor Dan Shopping Center are available to Route #2 Third Avenue – NorDan. This route is interlined with Route #4 Health Center. The route runs Monday through Saturday from approximately 6:40 a.m. to 6:00 p.m. with 80 minute headways. Route #1 North Main also provides service along this route bringing headways for stops along this route to 40 minutes.

The North Main Route serves a number of land uses including downtown destinations, residential neighborhoods and lower intensity commercial developments. Some major destinations along the route include the YMCA, Purdum Woods Apartments, Roman Eagle Memorial Home, Hilltop Gardens, North Pointe Apartments, Market Square Shopping Center and NorDan Shopping Center.

Ridership along this route was very dispersed. Beyond the downtown HUB, the most frequently used stop during the ridership counts was the Purdum Woods Apartments stop. The next most frequently used stops were the NorDan Shopping Center and the stop on N. Main Street near the intersection with Baugh Street.



Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	43,687	47,260	43,606	22,933
Revenue Miles	32,940	33,048	32,724	16,524
Revenue Hours	2,153	2,202	2,202	1,101
Trips/Hour	20.29	21.46	19.80	20.83
Trips/Mile	1.33	1.43	1.33	1.39
MPH	15.30	15.01	14.86	15.01
Operating Costs	\$103,586	\$82,297	\$83,942	\$43,650
Cost/Trip	\$2.37	\$1.74	\$1.93	\$1.90
Cost/Hour	\$48.11	\$37.37	\$38.12	\$39.65

*FY2015 data only includes the first half of the fiscal year

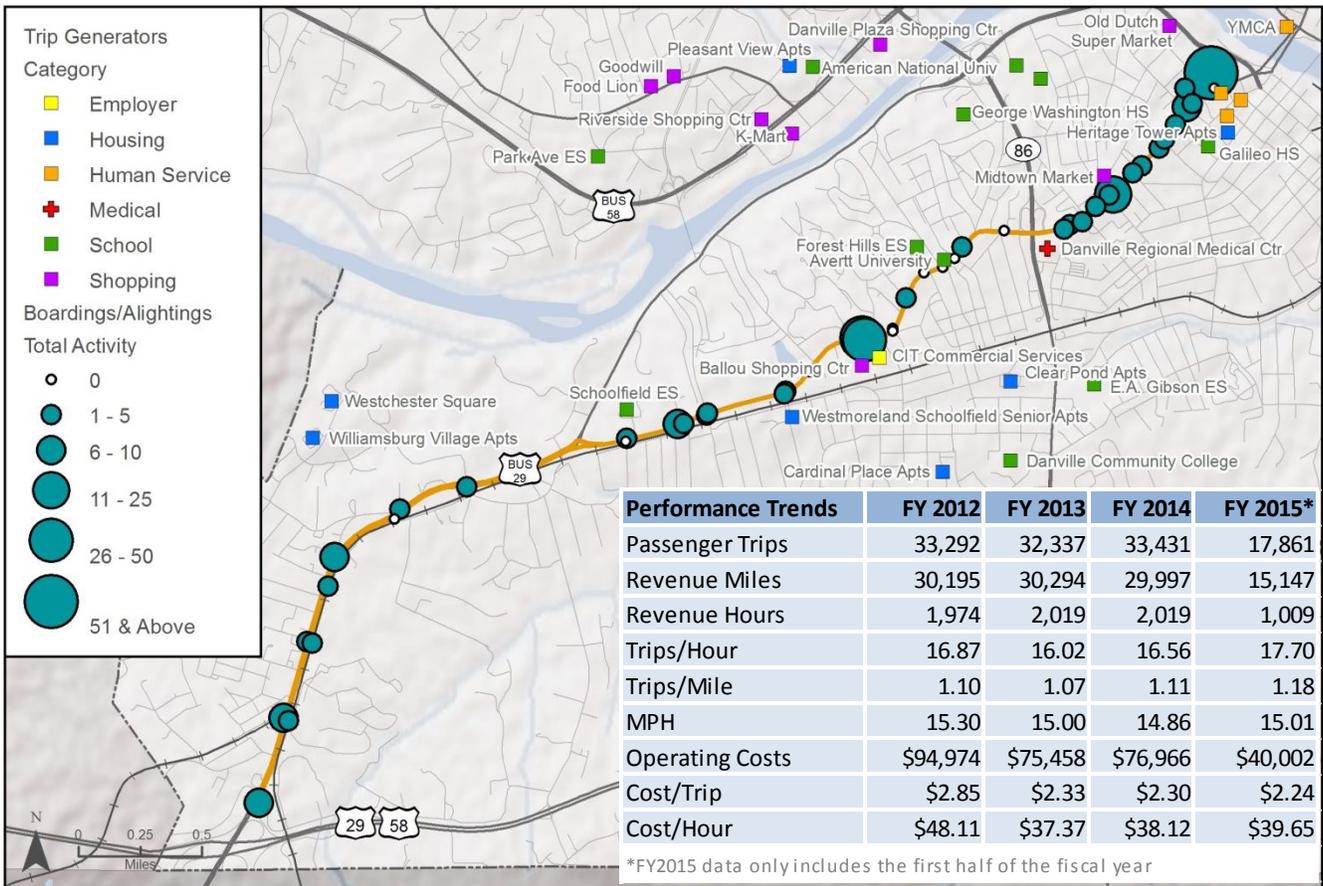
Route #4 North Main

Route Profile – Route #5 Edgewood – Stokesland

Route #5 Edgewood – Stokesland connects the downtown HUB to Carter’s Store via Main Street and W. Main Street. Transfers are available to all routes at the downtown HUB. This route is interlined with Route #5 Riverside. The route runs Monday through Saturday from approximately 6:08 a.m. to 5:30 p.m. with 80 minute headways. Route #3 Edgewood – Stokesland Riverside also provides service along this route bringing headways for stops along this route to 40 minutes.

The Edgewood – Stokesland Route serves a number of land uses including downtown destinations, residential neighborhoods, commercial developments, and institutional land uses. Some major destinations along the route include Danville Regional Medical Center, Avertt University, and the Ballou Shopping Center.

Ridership along this route is relatively dispersed. Beyond the Downtown HUB, the most frequented stop during the ridership counts was the south bound bus stop at the Ballou Shopping Center. The second most popular stop was the north bound stop at the Ballou Shopping Center and the third most popular was a bus stop along Main Street close to the Midtown Market.



Route #5 Edgewood-Stokesland

Route Profile – Route #5 Riverside

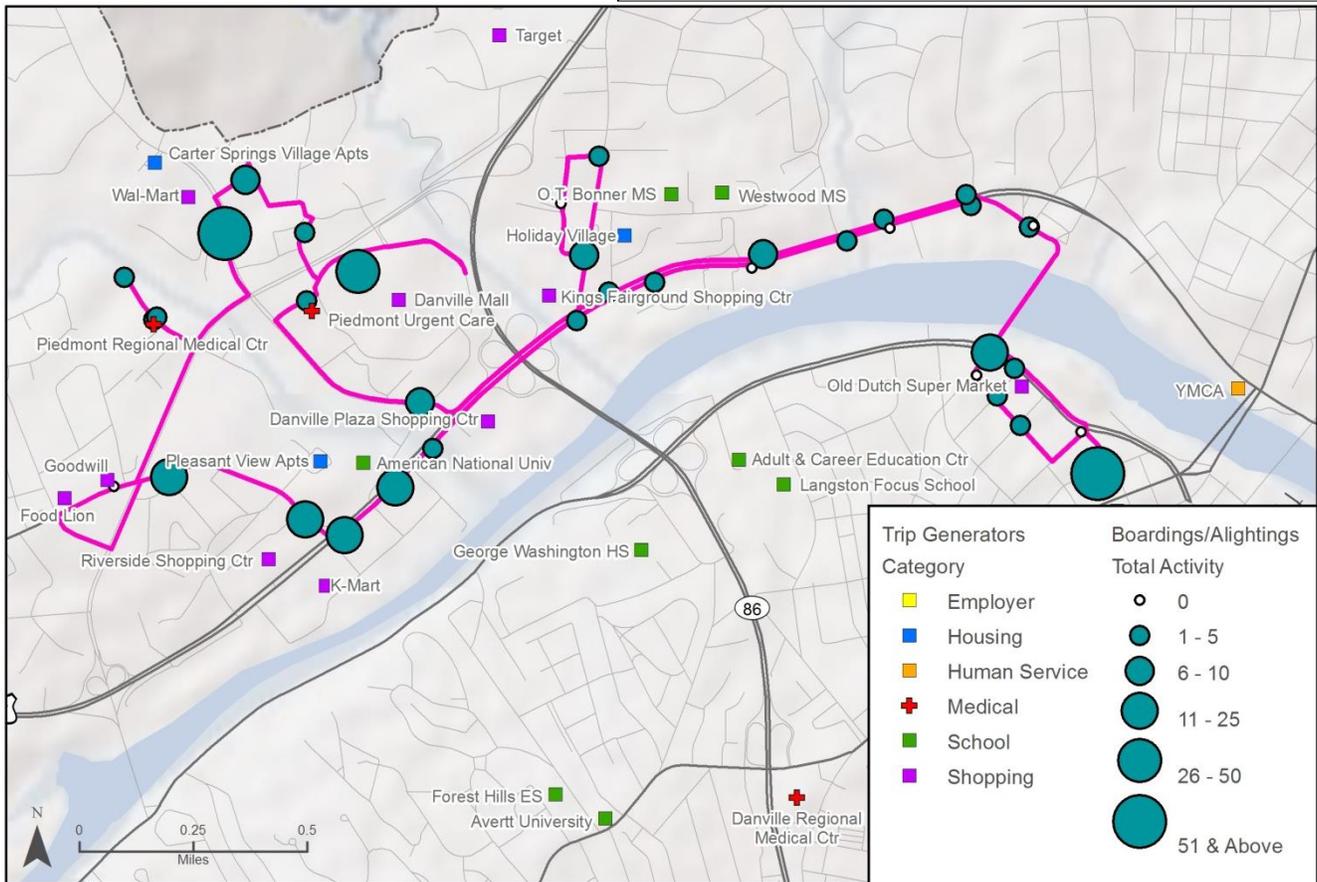
Route #5 Riverside connects the downtown HUB to Walmart, Danville Mall and other retail stores via Riverside Drive, Piedmont Drive and Westover Drive. Transfers are available to all routes at the Downtown HUB. This route is interlined with Route #2 Third Aveune – NorDan. The route runs Monday through Saturday from approximately 6:40 a.m. to 5:57 p.m. with 80 minute headways. Route #2 Riverside also provides service along a majority of this route bringing headways for most stops along this route to 40 minutes.

The Riverside Route primarily serves high intensity commercial developments and institutional land uses. Some major destinations along the route include Danville Mall, Walmart, Piedmont Regional Medical Center, Goodwill and American National University.

Ridership along this route is heaviest in the commercial and retail areas. The most frequented stop during the ridership counts was Walmart, followed by Danville Mall and Goodwill.

Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	43,904	43,671	43,636	22,648
Revenue Miles	27,216	27,814	33,122	16,039
Revenue Hours	1,779	1,855	2,232	1,116
Trips/Hour	24.68	23.54	19.55	20.29
Trips/Mile	1.61	1.57	1.32	1.41
MPH	15.30	14.99	14.84	14.37
Operating Costs	\$85,592	\$69,329	\$85,086	\$44,244
Cost/Trip	\$1.95	\$1.59	\$1.95	\$1.95
Cost/Hour	\$48.11	\$37.37	\$38.12	\$39.65

*FY2015 data only includes the first half of the fiscal year



Route #5 Riverside

Route Profile – Route #6 Glenwood

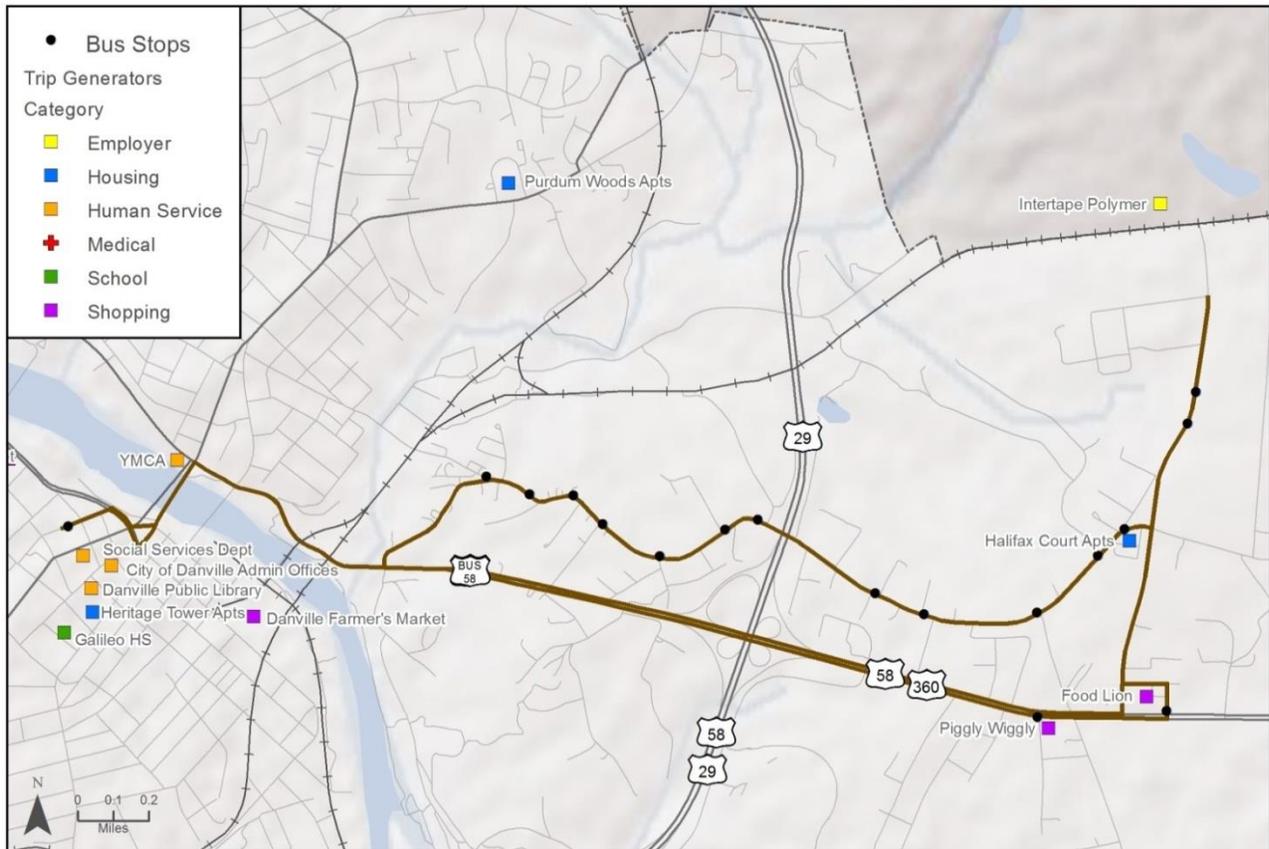
Route #6 Glenwood connects the downtown HUB to destinations along U.S. Route 58 East and Halifax Road. Transfers are available to all routes at the downtown HUB. The route runs Monday through Friday operating similar to a commuter service. The morning trip leaves the downtown HUB at 6:40 a.m. and the afternoon trip leaves the HUB at 3:40 p.m. Service on a majority of this route is by request only.

The Glenwood Route serves a number of different land uses including residential, retail, and industrial. Some major destinations along this route include the YMCA, Piggly Wiggly, Food Lion, and the Halifax Court Apartments. Additionally, this route’s terminus on U.S. Route 58 is a mile short of two of the region’s largest employers TelVista and Swedewood.

Ridership counts were not conducted on this route due to very low ridership. According to Danville Transit staff this route typically has no ridership and at the most one or two riders per day.

Performance Trends	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	588	323	143	22
Revenue Miles	2,859	2,881	2,836	1,435
Revenue Hours	187	195	195	97
Trips/Hour	3.14	1.66	0.73	0.23
Trips/Mile	0.21	0.11	0.05	0.02
MPH	15.29	14.77	14.54	14.79
Operating Costs	\$8,997	\$7,288	\$7,434	\$3,846
Cost/Trip	\$15.30	\$22.56	\$51.98	\$174.80
Cost/Hour	\$48.11	\$37.37	\$38.12	\$39.65

*FY2015 data only includes the first half of the fiscal year



Route #6 Glenwood

On-Time Performance

As part of the passenger counts that were conducted, December 20 (Saturday) and December 22 (Monday), time checks were also performed. The time checks involved documenting the time of departure of the bus at the time points and comparing it to the published times in the schedule. Over the course of the two days, a total of 729 time checks were performed. Table 3-4 presents the results of the time checks by route. For each route the table provides the number of time checks that were conducted and the percentage of the time checks where the bus arrived early, on-time, and late.

- Early – Systems should always avoid departing stops early as this can have a major negative impact on the riders’ trip particularly on routes with long headways. From a rider’s perspective, a bus leaving early would mean they would have to wait one headway for the next vehicle. Although there were a few instances of a bus leaving a particular time point early, it does not appear that this is a chronic issue.
- On-time – Buses that depart zero to five minutes within the schedule time are considered on-time. While the window of on-time can vary from agency to agency, the most common definition is zero minutes early to five minutes late¹. Approximately 71% of the time checks conducted over the survey period were considered on-time. It should be noted that there were a couple factors that might have impacted the timeliness of the buses during the survey period. The backup bus that is sometimes used to assist with the routes was not operated during the survey period to minimize any confusion. Additionally, a bus was involved in an accident during one of the days and had to miss a run. Routes that had the best on-time percentage were the #1 North Main and #1 Kemper Road routes with 88% and 82% respectively. Conversely, the routes with the worst on-time percentages were the #4 Health Center Route (62%) and #5 Riverside Route (49%).
- Late – Buses departing more than five minutes after the schedule time are considered late. Approximately 21% of the time checks conducted over the survey period were considered late. The #5 Riverside Route had 21% of its time checks leaving the scheduled stop 10 minutes or more late followed by the #3 Danville Estates Route with 15%. It should be noted that Danville Transit’s routes are interlined (except for #6 Glenwood) and operate based on a timed transfer at the downtown HUB. If one or more route is running behind it can impact the entire system if there are transfers that need to be made.

No time checks or passenger counts were conducted on the Glenwood Route because the route only operates twice a day and generally has low ridership.

¹ TCRP Report 98, A Guidebook for Developing a Transit Performance-Measurement System.

Table 3-4: On-Time Performance by Route

Route	Number of Time Checks	Early				On-Time	Late	
		10+ Min	5 to 9 Min	3 to 4 Min	1 to 2 Min	0 to 5 Min After Schedule	6 to 9 Min	10+ Min
#1 North Main	66	0%	0%	0%	2%	88%	6%	5%
#1 Kemper Rd	76	0%	0%	1%	7%	82%	9%	1%
#2 Riverside	85	0%	0%	1%	5%	73%	12%	9%
#2 Third Ave	72	0%	0%	0%	4%	75%	17%	4%
#3 Danville Estates	80	0%	0%	1%	1%	68%	15%	15%
#3 Edgewood	72	0%	3%	3%	7%	71%	7%	10%
#4 Health Center	61	0%	0%	3%	3%	62%	21%	10%
#4 North Main	67	0%	0%	1%	6%	76%	12%	4%
#5 Edgewood	70	0%	3%	6%	13%	74%	4%	0%
#5 Riverside	80	0%	0%	3%	3%	49%	25%	21%
#6 Glenwood	0	-	-	-	-	-	-	-
System	729	0%	1%	2%	5%	71%	13%	8%

Demand Response Service

Danville Transit operates three types of demand response service throughout the city. The three types of demand response service are:

- Reserve-a-Ride – Service is for the general public and is open to all Danville residents.
- Handivan – Service is for Danville residents that are eligible for ADA service.
- Senior Transportation – Service is for Danville seniors over the age of 60.

Figure 3-1 shows origins and destinations for all demand response one-way trips from July through October 2014. There were 20,569 one-way trips made during this time period, 19,968 of which had origins and destinations within the City of Danville. While most trips occur within Danville, there were three trips to Gretna, approximately 30 miles north and 225 trips to Altavista, which is over 40 miles from Danville. It appears from this sample of demand response data, the highest concentration of trips are around the city core with lesser concentrations on the eastern and western areas of the city.

Figure 3-1: Sample of Demand response Trips

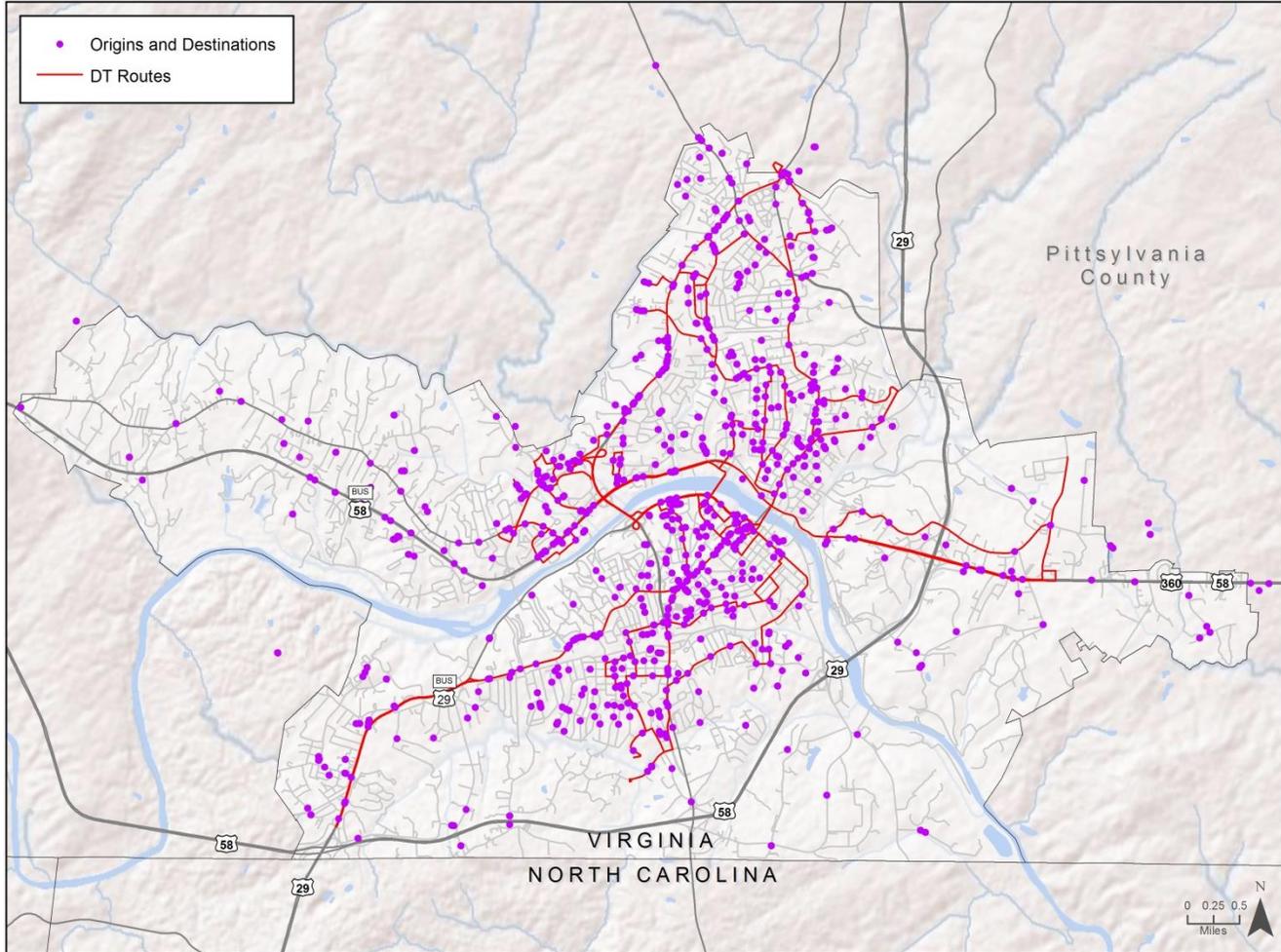


Table 3-5 provides the performance trend of the demand response service. The number of trips that have been provided by the demand response service has significantly increased since Danville Transit began providing the senior transportation for Danville Parks and Recreation in 2013. It is projected that in FY2015 the total demand response trips will reach 49,000 one-way trips. The year over year increase in the number of one-way trips has significantly increased the number of miles and hours expended in providing the service. The total operating cost is on pace to hit \$860,000 by the end of FY2015, an increase of 12% over last fiscal year's operating cost of \$753,052.

Table 3-5: Demand response Service Trend Data

Demand Response	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	25,947	35,664	45,252	24,539
Revenue Miles	177,542	255,994	282,368	165,779
Revenue Hours	9,669	13,848	17,097	10,313
Trips/Hour	2.68	2.58	2.65	2.40
Trips/Mile	0.15	0.14	0.16	0.15
MPH	18.36	18.49	16.52	16.07
Operating Costs	\$487,406	\$694,612	\$753,029	\$430,722
Cost/Trip	\$18.78	\$19.48	\$16.64	\$17.55
Cost/Hour	\$50.41	\$50.16	\$44.04	\$41.77

*FY2015 data only includes the first half of the fiscal year

Reserve-A-Ride

Table 3-6 provides the performance trend for the Reserve-a-Ride service. Reserve-a-Ride has contributed to some of the increases in the overall ridership for the demand response service. It is projected to reach 25,000 one-way trips by the end of FY2015 which is approximately a 7% increase over the previous fiscal year. Based on the total revenue hours and the cost per hour for the overall demand response service, it is estimated that in FY2015 the Reserve-a-Ride service would cost approximately \$375,530, an increase of 5.3% from the previous fiscal year.

Table 3-6: Reserve-A-Ride Trend Data

Reserve-A-Ride	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	21,676	20,915	23,188	12,680
Revenue Miles	145,868	161,877	170,112	96,279
Revenue Hours	7,313	8,634	8,716	5,072
Trips/Hour	2.96	2.42	2.66	2.50
Trips/Mile	0.15	0.13	0.14	0.13
MPH	19.95	18.75	19.52	18.98
Operating Costs	\$357,580	\$368,309	\$355,753	\$211,806
Cost/Trip	\$16.50	\$17.61	\$15.34	\$16.70

*FY2015 data only includes the first half of the fiscal year

Using the demand response trip data from July through October 2014, a further analysis was conducted to look at the Reserve-a-Ride trip pairs that are both within a quarter-mile and half-mile of a transit route. Not included in this analysis are the Handivan and Senior demand response trips. Additionally, if a Reserve-a-Ride trip origin or trip destination fell outside this transit shed, it was excluded from the analysis.

Figure 3-2 provides a map depicting the Reserve-a-Ride origin and destination pairs that are within the half-mile and quarter-mile transit shed. The origin and destination pairs are symbolized based on the time of day the trip occurred.

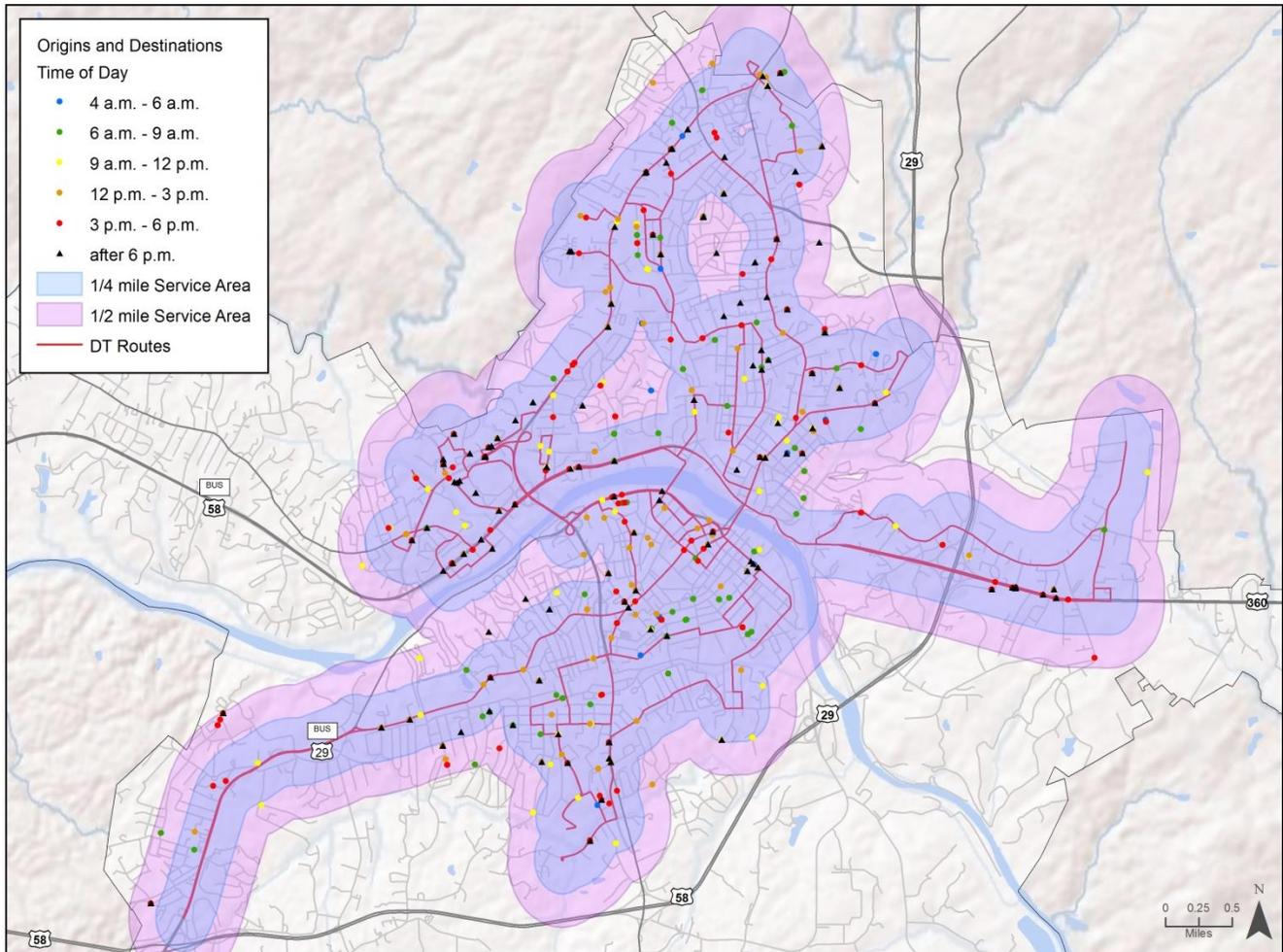
Table 3-7 provides a tabulation of the Reserve-a-Ride trips during the sample period, and the number and percentage of origins and destinations that begin and end within a quarter and half mile of a Danville Transit fixed route. Of the 9,992 one-way Reserve-a-Ride trips made during this period, 5,680 (56.8%) occurred during the fixed route hours of 6:00 a.m. and 6:00 p.m. A significant percentage (34%) of Reserve-a-Ride trips are provided after 6:00 p.m.

For the 5,680 Reserve-a-Ride one-way trips that occurred between 6:00 a.m. and 6:00 p.m., approximately 55% are within the half-mile fixed route transit shed and 40% are within the quarter-mile fixed route transit shed.

Table 3-7: Reserve-A-Ride trips within the Danville Transit Fixed Route Service Area (July – October 2014)

Time of Day	Reserve-A-Ride One-Way Trips				
	Within 1/4 Mile of Fixed Routes		Within 1/2 Mile of Fixed Routes		Total One-way Trips
4 a.m. to 6 a.m.	363	39.9%	492	54.1%	909
6 a.m. to 9 a.m.	1,011	42.0%	1,335	55.4%	2,408
9 a.m. to 12 p.m.	231	33.0%	298	42.6%	699
12 p.m. to 3 p.m.	448	29.4%	722	47.4%	1,522
3 p.m. to 6 p.m.	580	55.2%	781	74.3%	1,051
After 6 p.m.	1,559	45.8%	1,890	55.5%	3,403
Total	4,192	42.0%	5,518	55.2%	9,992

Figure 3-2: Reserve-A-Ride Trips within the Danville Transit Fixed Route Service Area (July – October 2014)



Handivan Service

The Handivan service provides transportation for Danville residents that are ADA eligible. Figure 3-8 provides the performance trend for the Handivan service. The demand for Handivan has remained fairly level with slight fluctuations from year to year. In FY2014, Handivan provided the most number of one-way trips with 4,450. In FY2015, it is projected that ridership will decrease slightly to just over 4,000 one-way trips.

Table 3-8: Danville Transit Handivan Trend Data

Handivan	FY 2012	FY 2013	FY 2014	FY 2015*
Passenger Trips	4,271	4,081	4,450	2,076
Revenue Miles	31,673	25,667	30,620	14,261
Revenue Hours	2,355	1,753	2,040	990
Trips/Hour	1.81	2.33	2.18	2.10
Trips/Mile	0.13	0.16	0.15	0.15
MPH	13.45	14.64	15.01	14.55
Operating Costs	\$115,151	\$74,779	\$83,265	\$41,342
Cost/Trip	\$26.96	\$18.32	\$18.71	\$19.91

*FY2015 data only includes the first half of the fiscal year

Senior Transportation Service

In the second quarter of FY2013, Danville Transit began operating the city's senior transportation service. The service previously was operated out of the city's Department of Parks and Recreation. Seniors enrolled in the program are not required to pay a fare. Danville Transit invoices the Parks and Recreation for the \$2/\$4 fare. Table 3-9 below provides the performance trend for the senior transportation service. Between FY2013 to FY2014, ridership increased 39%, from 10,668 to 17,614. It is projected that by the end of FY2015, ridership will exceed 18,000, a 7% increase from FY2014. The increase in ridership has led to increases in operating costs for the service to meet the growing demand and is estimated to exceed \$340,000 in FY2015.

Table 3-9: Danville Transit Senior Transportation Service Trend Data

Senior Transportation	2012†	2013†	2014	2015*
Passenger Trips	0	10,668	17,614	9,435
Revenue Miles	0	42,582	81,636	55,239
Revenue Hours	0	3,462	6,342	4,250
Trips/Hour	0	3.08	2.78	2.58
Trips/Mile	0	0.25	0.22	0.20
MPH	0	12.30	12.87	12.99
Operating Costs	\$0	\$147,682	\$258,855	\$177,480
Cost/Trip	\$0	\$13.84	\$14.70	\$18.81

†Danville Transit began providing the Senior Transportation Service in October 2012 – three months into FY2013

*FY2015 data only includes the first half of the fiscal year

PEER ANALYSIS

While it is most relevant for a transit agency to examine its own performance over time, it is valuable to know the operating statistics for transit programs that could be considered “peers,” either by virtue of location, service area characteristics or size, to see if local transit data is “in the ballpark” of typical peer operating data.

The following programs were used as peers:

- Allegany County Transit, serving Cumberland, Maryland
- Virginia Regional Transit (VRT), Culpeper, Virginia
- Virginia Regional Transit (VRT), Staunton, Virginia
- Wilson Transit, serving City of Wilson, North Carolina
- WinTran, Winchester, Virginia

The data compiled for the peer analysis was based on FY2013 with the exception of VRT Staunton in which FY2014 data was used. The reason FY2014 data was used for VRT Staunton was because prior to FY2014 the transit system did not charge a fare and therefore it would not provide an equal comparison. The data was obtained through the National Transit Database (NTD), Danville Transit, and Wilson Transit. The peer data compiled show the following:

- Danville Transit is more productive (12.12 trips/hour) than all of the peers and far above the mean productivity of the peer group of 8.39 passenger trips per revenue hour. Contributing to this higher productivity is the increased demand for the Reserve-a-Ride service particularly for the senior transportation program.
- The operating cost per revenue hour, which is a measure of efficiency, is lower than all of the peers at \$42.66. This is well below the peer mean of \$57.77 per revenue hour.
- The operating cost per trip is lower than all of the peers a \$4.53 due to the relatively high ridership. This measure is well below the peer mean of \$7.89 per trip.

Transit systems with low efficiency measures generally mean that the system is effectively using their resources and that there is a good balance between the level of services that are provided and the amount of resources that are used to provide those services.

A system with efficiency measures that is significantly lower than their peers, like in Danville Transit’s case, may indicate that the level of resources used to provide the service is out of balance with the services that are provide. This means that existing resources such as the administrative and operating staff may be over stretched.

The complete peer data is presented in Table 3-10.

Table 3-10: Selected Peer Comparison

System	UZA	# of vehicles in Peak Service	Approx. Service Area Population	Annual Passenger Trips	Total Operating Expenses	Vehicle Revenue Hours	Vehicle Revenue Miles
Allegany Co. Transit (MD)	Yes	12	68,780	210,601	\$1,947,512	29,082	376,307
Danville Transit (VA)	No	11	48,411	406,145	\$1,429,299	33,504	526,005
VRT Culpeper (VA)	No	14	46,562	130,275	\$1,678,397	25,910	651,375
VRT Staunton (VA) (1)	Yes	16	72,614	291,217	\$1,525,807	26,126	374,516
Wilson Transit (NC)	No	9	49,167	145,360	\$1,202,676	19,712	305,101
WinTran (VA)	Yes	6	69,449	130,190	\$928,944	17,589	198,778
Mean	-	11	59,164	218,965	\$1,452,106	25,321	405,347
System	Trips per Hour		Trips per Mile	Cost per Trip	Cost per Hour	Cost Per Mile	
Allegany Co. Transit (MD)	7.24		0.56	\$9.25	\$66.97	\$5.18	
Danville Transit (VA)	12.12		0.77	\$4.53	\$42.66	\$2.72	
VRT Culpeper (VA)	5.03		0.20	\$12.88	\$64.78	\$2.58	
VRT Staunton (VA) (1)	11.15		0.78	\$5.24	\$58.40	\$4.07	
Wilson Transit (NC)	7.37		0.48	\$8.27	\$61.01	\$3.94	
WinTran (VA)	7.40		0.65	\$7.14	\$52.81	\$4.67	
Mean	8.39		0.57	\$7.89	\$57.77	\$3.86	

Sources: 2013 National Transit Database, Wilson Transit System and Danville Transit Data

(1) Stanton data based on FY14 because prior fiscal years the system was fare free and in FY14 a fare was implemented.

FINANCIAL ANALYSIS

Operating Budget

The FY2015 operating budget for Danville Transit is \$1.6 million. The largest single source of assistance for Danville Transit comes from the federal S.5311 non-urbanized area program which covers up to 50% of the operating costs for transit service provided in non-urbanized areas. The other 50% is provided by the state and local sources.

Table 3-11 provides an individual line item expenses for FY2012 – FY2015. The expenses shown for FY2015 reflect the first half of FY2015 (July 1, 2014 – December 31, 2014).

Table 3-11: FY2012 – FY2015 Operating Budget

Expenses	FY2012 Expenses	FY2013 Expenses	FY2014 Expenses	FY2015 Expenses
Salaries and Wages	\$555,454	\$566,229	\$679,852	\$789,341
Fringe Benefits	\$94,259	\$109,951	\$99,457	\$157,582
Repairs & Maintenance-Radio	\$8,832	\$8,085	\$10,385	\$11,394
Maintenance Service Contract	\$10,503	\$10,666	\$13,684	\$18,406
Advertising	\$150	\$69	-	-
Outside Service Miscellaneous	\$2,303	\$10,629	\$19,917	\$17,287
Print Shop	\$4,567	\$3,786	\$4,022	\$3,417
Print Shop - Off Supp.	-	\$714	\$755	\$1,086
IT Tech Supplies	-	-	\$3,940	\$4,894
Utility Services	-	-	-	\$1,200
Heat-Light-Air	\$28,953	\$33,784	\$36,535	\$35,773
Postal Service	\$461	\$458	\$288	\$730
Telephone/Internet	\$3,765	\$3,881	\$3,967	\$4,850
Telephone - Cell	\$1,322	\$956	\$809	\$938
General Liability Insurance	\$23,600	\$22,382	\$26,016	\$36,928
Administration Expense	\$262,670	\$275,800	\$231,360	\$225,670
Office Supplies	\$726	\$1,043	\$1,187	\$1,855
Clean Supplies	\$3,307	\$3,035	\$3,303	\$3,196
Materials & Supplies	\$11,178	\$11,092	\$10,206	\$26,800
Uniforms/Apparel	\$2,392	\$1,120	\$2,840	\$2,187
Dues/Memberships	-	-	-	\$700
Vehicle Maintenance	\$371,682	\$361,029	\$377,484	\$361,820
Building Maintenance	\$2,500	\$4,537	\$7,660	\$4,710
Total Operating Expenses	\$1,388,622	\$1,429,244	\$1,533,665	\$1,710,764
Passenger Revenues	\$305,774	\$354,159	\$376,104	\$336,963
Advertising Revenues	\$9,000	\$7,950	\$4,800	\$4,800
Rental Income	\$24,983	\$26,552	\$25,774	\$0
TDP Survey Recovery	-	-	-	\$1,009
Insurance Fund Recovery	-	-	-	\$19,615
Net Deficit	\$1,073,848	\$1,067,136	\$1,152,762	\$1,348,378
Funding Assistance				
Federal S.5307 Operating	\$524,433	\$541,548	-	-
Federal S. 5311 Operating	-	-	\$610,582	\$674,189
New Freedom Federal	-	\$44,167	\$51,015	\$58,930
New Freedom State	-	\$31,862	\$40,812	\$47,144
State Funding	\$200,604	\$198,210	\$330,965	\$296,304
Local Funding	\$323,828	\$344,828	\$254,048	\$0

Capital Budget

Federal grant programs fund up to 80% of transit capital projects. Danville Transit is accessing the federal Section 5307 program. The other 20% is made up of state and local contributions. In Virginia, there is currently no prescribed state allocation and the percent/amount of capital funding may vary from year to year depending on the availability of state funds. Table 3-12 provides the capital budget for FY2015. For this year, Danville Transit applied for automated scheduling software modules that will allow vehicle tracking and interactive voice response, computers and hardware, 3 medium duty 20-passenger vehicles, 2 medium duty 28-passenger vehicles, 5 fareboxes for the 5 new vehicles, 5 replacement maintenance bay doors and machinery equipment.

Table 3-12: FY15 Danville Transit Capital Budget

Description	Item Cost	Federal	State/Local
Scheduling Software Modules (AVL & IVR)	\$66,000	-	-
Computers/Hardware	\$19,760	-	-
5 Medium Duty Buses (3 – 20 passenger; 2 – 28 passenger) w/ fareboxes	570,600	-	-
5 Maintenance Bay Doors	\$35,000	-	-
Machinery/Equip	\$23,400	-	-
Total	\$714,760	\$571,808	\$142,952

RECENT COMPLIANCE RESULTS

In FY2014, a Federal Transit Administration (FTA) Triennial Review of Danville Transit was conducted. A Triennial Review is required every three years for recipients of Section 5307 Urbanized Area Formula Grants. Though Danville currently receives a Section 5311 Non-Urbanized Formula Grant, it was using Section 5307 funds up until FY2014 and therefore subject to an FTA Triennial Review. The review focused on Danville Transit System's compliance in 17 compliance areas. These areas included:

- Financial Management and Financial Capacity
- Technical Capacity
- Maintenance
- Americans with Disability Act (ADA)
- Title VI
- Procurement
- Disadvantaged Business Enterprise (DBE)
- Legal
- Satisfactory Continuing Control
- Planning/Program of Projects
- Public Comment on Fare Increases and Major Service Reductions
- Half Fare
- Charter Bus

- School Bus
- Security
- Drug Free Workplace and Drug and Alcohol Program
- Equal Employment Opportunities (EEO)

The review focused on procedures and practices in place for the past three years.

The Triennial Review found Danville Transit to be compliant in 16 of the 17 compliance areas. The area in which there was a deficiency was procurement. The deficiency stemmed from the contract for development and expansion of the property at the Transit Hub in downtown. Although the required lobbying clauses were included in the solicitation and contract, Danville Transit was cited for not having the lobbying certifications signed by the contractors. The city was instructed to develop a process to ensure that it follow its procurement policies and procedures and to include that lobbying certifications are signed by contractors.

In October 2014, Danville updated their procurement checklist to include obtaining signed lobbying certifications. The updated checklist was submitted and accepted by FTA and the finding closed.

ON-BOARD RIDER SURVEYS

One component of this transportation development plan was conducting on-board rider surveys. Rider surveys assess current riders' trip characteristics, satisfaction with the service provided and areas for improvements. Two separate surveys were created for Danville Transit. One is a survey for fixed routes and the other is a survey for demand response services (Handivan, Reserve-A-Ride and senior transportation). Both surveys were developed by KFH Group with input and review provided by Danville Transit Employees, Danville Transit's Transit Advisory Board, and the Virginia Department of Rail and Public Transportation.

The surveys were handed out on Saturday, December 20, 2014 and Monday, December 22, 2014. The survey effort was conducted in conjunction with a fixed route ridership assessment where off-duty Danville Transit Drivers documented boardings and alightings by location and handed out surveys to riders. Aboard the demand response vehicles, drivers handed out surveys to riders as they boarded. Additionally, Danville Department of Social Services assisted in the survey effort by providing surveys to their subscription riders.

The following section provides some highlights from the surveys. A detailed analysis of each question can be found in Appendix A. Surveys were handed out on all Danville Transit fixed routes with the exception of Route #6 Glenwood. A total of 209 fixed route on-board surveys were collected. Survey responses were equitably spread across the routes.

According to the survey responses, 64% of riders must transfer buses to reach their destinations. Through an analysis of separate questions, it was determined that the majority of transfers occur between the North Main Routes and the Riverside Routes. When asked about trip purpose, over two-thirds of respondents indicated that their trip was for work or shopping/errands. Only 8% of riders had a vehicle available for their trip, and only 34% had a valid driver's license. When asked if they were not riding the bus how they would make their trip, the number one response was to ride with family or friends.

The survey asked riders if they thought bicycle racks should be added to the fixed route network. Thirty-two percent indicated that they should be added. When asked where in the fixed Rnetwork, the top rider responses were on the front of the bus, city wide and at the downtown HUB. Another question asked if riders would like bus service in the county. Thirty-three percent of riders indicated that they would like county service. When asked where, the top responses were along U.S. Route 58, Blairs and county wide.

Riders were asked to write down what they like the most about Danville Transit. And on the opposite hand, riders were asked what they liked least at Danville Transit. The top five responses for each category are below.

Like the Most about Danville Transit:

1. Availability/Increased Mobility
2. Courteous/Friendly Drivers
3. Affordable/Inexpensive Fares
4. Convenient
5. Ease of Use/Dependability

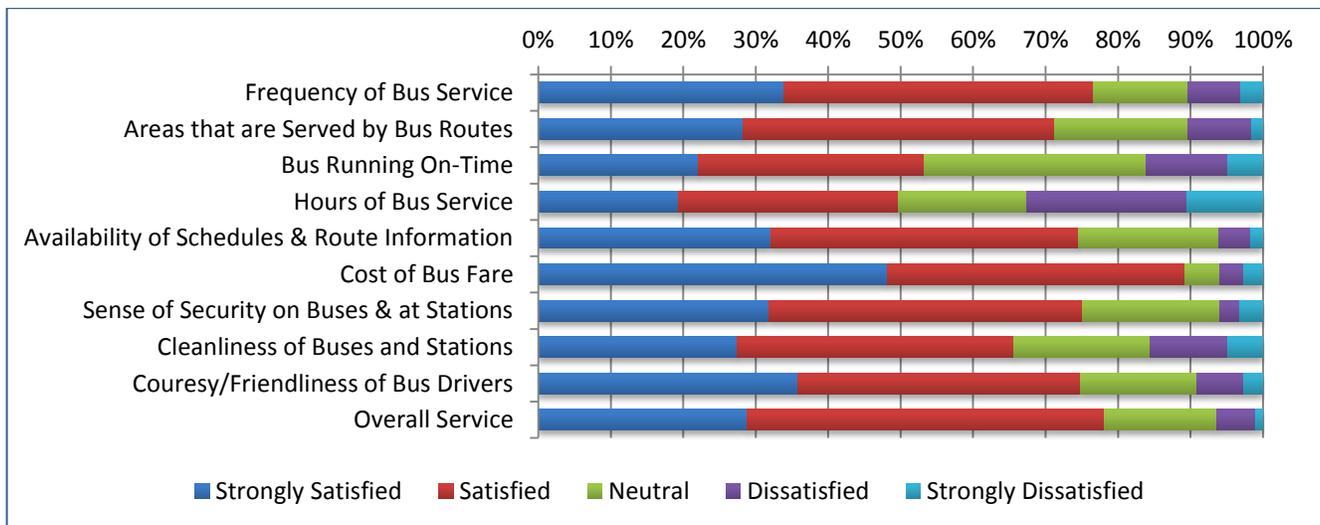
Like the Least about Danville Transit:

1. Runs Late
2. Not Frequent Enough
3. Rough Ride
4. Limited Service Hours
5. No Night Service

Riders were given the opportunity to identify three service improvements that they would like to see implemented at Danville Transit. The top three suggestions were evening/night service, Sunday service and on-time service. Other improvements included bigger buses, increased frequency and polite drivers.

Finally, riders were asked to rate their satisfaction level with Danville Transit’s Fixed Route System. The results are shown in Figure 3-3. The category with the lowest satisfaction level was hours of service. Riders were the most satisfied with the cost of fares. Seventy-eight percent of respondents were satisfied or strongly satisfied with the overall service.

Figure 3-3: Fixed Route Riders Satisfaction Level Percentage



Demand Response On-Board Rider Surveys

On-Board surveys were distributed on all Danville Transit demand response vehicles. A total of 46 surveys were collected. Respondents included riders from all three demand response services; however, the Reserve-A-Ride riders make up 73% of all survey responses. The senior transportation service makes up 18% and the Handivan service makes up the remaining 9% of the surveys.

When demand response riders were asked about the purpose of their trip, the overwhelming response was for work (54%) and the second largest was medical (22%). When riders were asked how often they use demand response services, 78% indicated they use the service multiple times a week, 42% indicated they use the service four or more times per week, and 36% indicated they use the service 2 to 3 times per week. Only 9% of riders had a vehicle available for their trip and 52% indicated that they possess a valid driver's license. When asked if the bus was not available how they would make their trip, 38% indicated they would not make the trip and 38% indicated they would ride with family or friends.

Riders were asked if they believed bicycle racks should be added to the demand response route network. Only 23% thought bicycle racks should be added and the suggested locations were on vehicles and "everywhere". Another question asked riders if there were places in the county where they would like bus service. Forty-six percent indicated that they would like bus service in the county. When asked to which locations, the only areas with more than one response were Blairs and county wide.

Riders were asked to write down what they like the most about Danville Transit. On the opposite hand, riders were asked to write down what they liked least about Danville Transit. The top five responses for each category are below.

Like the Most about Danville Transit:

1. Courteous/Friendly Drivers
2. Availability/Increased Mobility
3. Convenient
4. Ease of Use/Dependability
5. On-Time Reliability

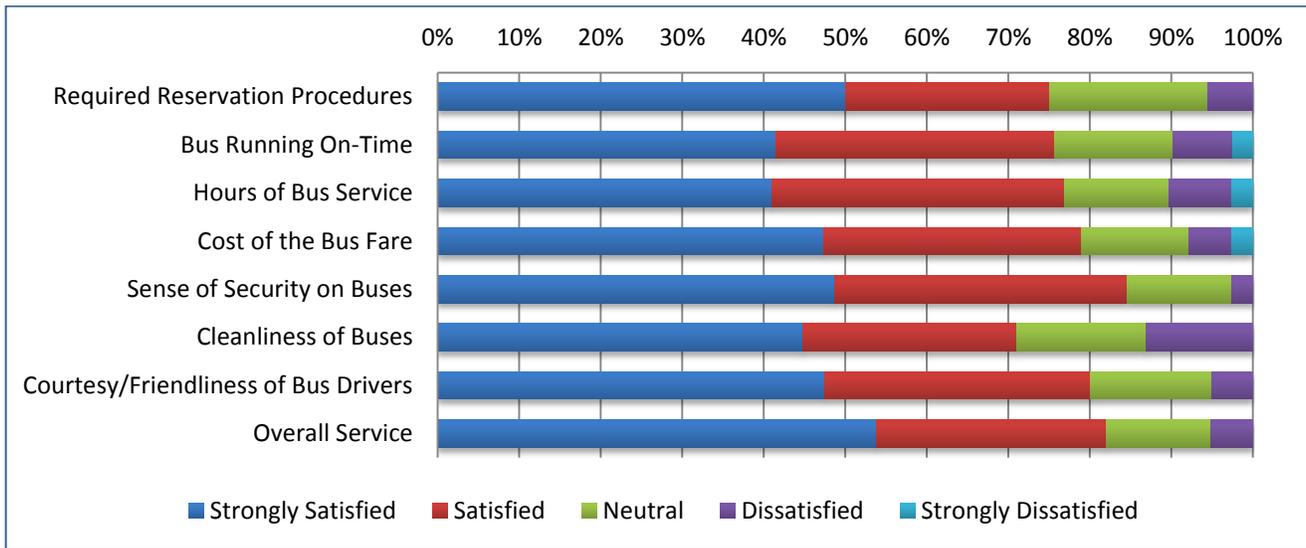
Like the Least about Danville Transit:

1. Runs late
2. Rude Passengers
3. Crowded Buses
4. Dirty Buses
5. Limited Service Hours

Riders were given the opportunity to identify three service improvements that they would like to see implemented at Danville Transit. The top three were improved on-time performance, Sunday service and expanded service into the county. Other improvements suggested included evening/night service, more respectful drivers and decreased fares.

Finally, riders were asked to rate their satisfaction level with Danville Transit's demand response System. The results are shown in Figure 3-4. The category with the lowest satisfaction level was hours of service while riders were the most satisfied with the sense of security on buses. Only three categories earned a strongly dissatisfied classification; bus running on time, hours of bus service and cost of the bus fare. Eighty-two percent of respondents were satisfied or strongly satisfied with the overall service.

Figure 3-4: Demand Response Riders Satisfaction Level Percentage



STAKEHOLDER OPINION

During November 2014, in-person interviews were conducted with local stakeholders to gain an understanding of transportation needs, challenges and opportunities in the region. The stakeholders represented civic, educational, housing and human service agencies. Danville Transit drivers and an operations manager were also interviewed to solicit input on methods to improve transit. The stakeholder agencies that were interviewed are listed below.

- City of Danville
- Danville Community College
- Danville Department of Social Services
- Danville Transit
- Department of Housing and Urban Development
- Goodwill
- Holiday Village
- Middle Border Forward

This section is organized to highlight the overarching themes that emerged from the in-person interviews.

System Strengths

- New tablets and modems will soon be installed in vehicles which will allow for greater efficiency.
- Danville Transit is extremely responsive with complaints and issues.
- Danville Transit is exploring partnerships with employers in the industrial areas to the east of the city.

Service Expansion Opportunities

- Service expansion is not possible without additional drivers and mechanics.
- Willingness for additional local match for senior transportation exists but there are not enough drivers or vehicles for expanded service.
- Extend service in the evenings for retail employees who work until 9 or 10 p.m.
- There is no fixed route service to the Institute or DCC Training Center.
- The industrial area on US 58, to the east of the city, generates a high demand for transit with TelVista and Swedewood as major employment destinations.
- The community of Blairs, to the north of the city, is emerging as a transit needy destination.
- Extend the hours of service for students taking night classes which usually end at 9 p.m.
- Add bike racks to buses.

Fixed Route Challenges

- Riders can be easily confused by the current schedule and route alignments.
- Current route names and numbers are confusing to riders.
- Fixed route schedules are so tight that the bus is usually running behind schedule.
- There are issues with one-way routing where some trips take overly-excessive amounts of time to complete.
- Poor routing causes unnecessarily long trips and buses do not always wait for transfers.

Demand Response Challenges

- Tremendous growth in demand response service ridership.
- Staff shortages and employee retention.
- Five minute pick-up window for demand response trips cuts into driver's schedule.
- Time is wasted trying to locate houses with no address posted.
- Door-to-door service was a standard for the senior transportation service under the Parks and Recreation Department. This has now been adopted by Danville Transit and currently applies to their Handivan Service. Reserve-A-Ride is still curb-to-curb.
- Danville Transit's will-call service is causing a ripple-effect of delays for other demand response trips.
- Danville Transit phone lines are consistently busy.
- The 24-hour reservation period for Reserve-A-Ride is harmful for shift employees working in the industrial park as they do not always know their shift 24 hours in advance.

Vehicle Maintenance Challenges

- It is difficult to maintain the minimum number of vehicles to provide daily service.
- Environmental requirements make diesel vehicles unreliable due to contaminant build up.
- Vehicles must be taken to Roanoke, Lynchburg, or Greensboro, NC for warranty repairs.

- Driver pay scales are not competitive with other regional employers.
- Motor pool staff turnover is an issue compounded by the lack of a qualified labor pool.
- DEF systems (Diesel Exhaust Fluid) frequently cause breakdowns and the closest diesel particulate filter cleaner is more than 50 miles away, requiring vehicles to be removed from service for a week or more.

Bus Stop Challenges

- Bus stop maintenance is poor with tall grass, trash and few amenities at each stop.
- There is no consistency as to where fixed route drivers stop the bus at the stop.
- Personal vehicles park in no-parking zones at bus stops and there is no enforcement by the police department.
- There is a need to improve and add bus stop amenities.
- There is a need for additional bus stop amenities around the DCC Campus.

DEMOGRAPHICS AND LAND USE

This section provides a thorough examination of future population trends, demographics, transit dependent populations and limited English proficiency. The section then develops a land-use profile based on the area’s major trip generators and commuting patterns.

Population Trends

As of 2010, the United States Census Bureau reported that Danville had a population of 43,055 and the surrounding county of Pittsylvania had a population of 63,506. While the population of Pittsylvania County has gradually increased from the censuses conducted in 1990 and 2000, Danville has experienced a drop in population. As seen in Table 3-13, Danville experienced an 11% population decrease from 2000 to 2010 and a 19% decrease from 1990 to 2010.

Table 3-13: Historical Populations

Jurisdiction	1990 Population	2000 Population	2010 Population	1990-2000 % Change	2000-2010 % Change	1990-2010 % Change
Danville city	53,056	48,411	43,055	-9%	-11%	-19%
Pittsylvania Co.	55,655	61,745	63,506	11%	3%	14%

Source: United States Census Bureau

Future population projections developed by the Weldon Cooper Center for Public Service estimate that the City of Danville will grow by approximately 2% and Pittsylvania County will grow by approximately 0.2% over the next 30 years. Table 3-14 shows the projected population for the area by age group. Danville’s 65 and older population is expected to increase from 19% to 25% of the total population and in Pittsylvania County it is expected to grow from 17% to 27% of the total population.

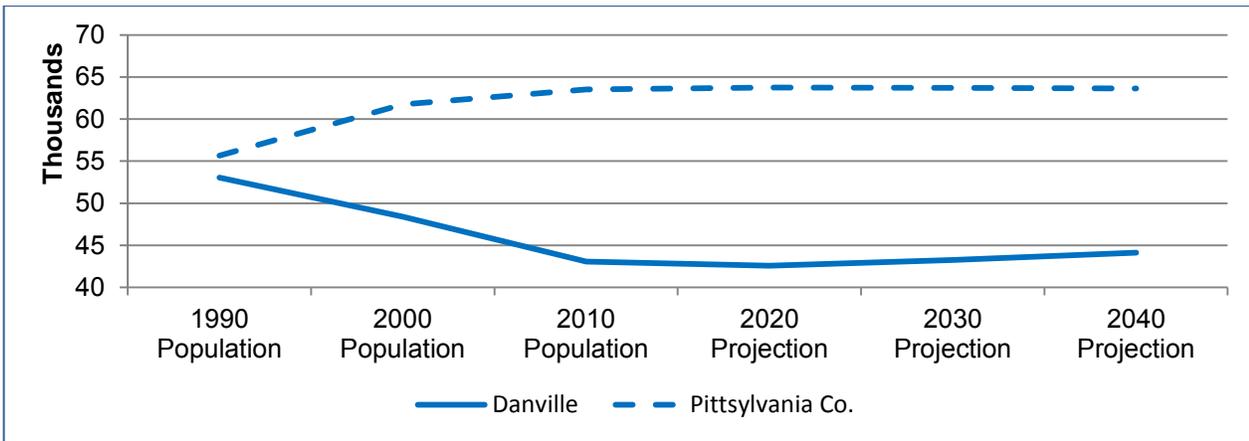
Table 3-14: Future Population Projections

	2010		2020		2030		2040	
	Pop.	%	Projection	%	Projection	%	Projection	%
Danville	43,055	-	42,555	-	43,249	-	44,105	-
0-19 years	10,477	24%	10,155	24%	10,131	23%	10,476	24%
20-64 years	24,363	57%	22,813	54%	22,048	51%	22,811	52%
65+ years	8,215	19%	9,587	23%	11,070	26%	10,818	25%
Pittsylvania County	63,506	-	63,752	-	63,720	-	63,648	-
0-19 years	14,883	23%	13,893	22%	13,209	21%	13,390	21%
20-64 years	37,707	59%	35,781	56%	33,261	52%	32,876	52%
65+ years	10,916	17%	14,078	22%	17,250	27%	17,382	27%

Source: United States Census Bureau and the Weldon Cooper Center for Public Service

Figure 3-5 provides a visual illustration of the historical populations and future projections for Danville and Pittsylvania County.

Figure 3-5: Overview of Population Trends



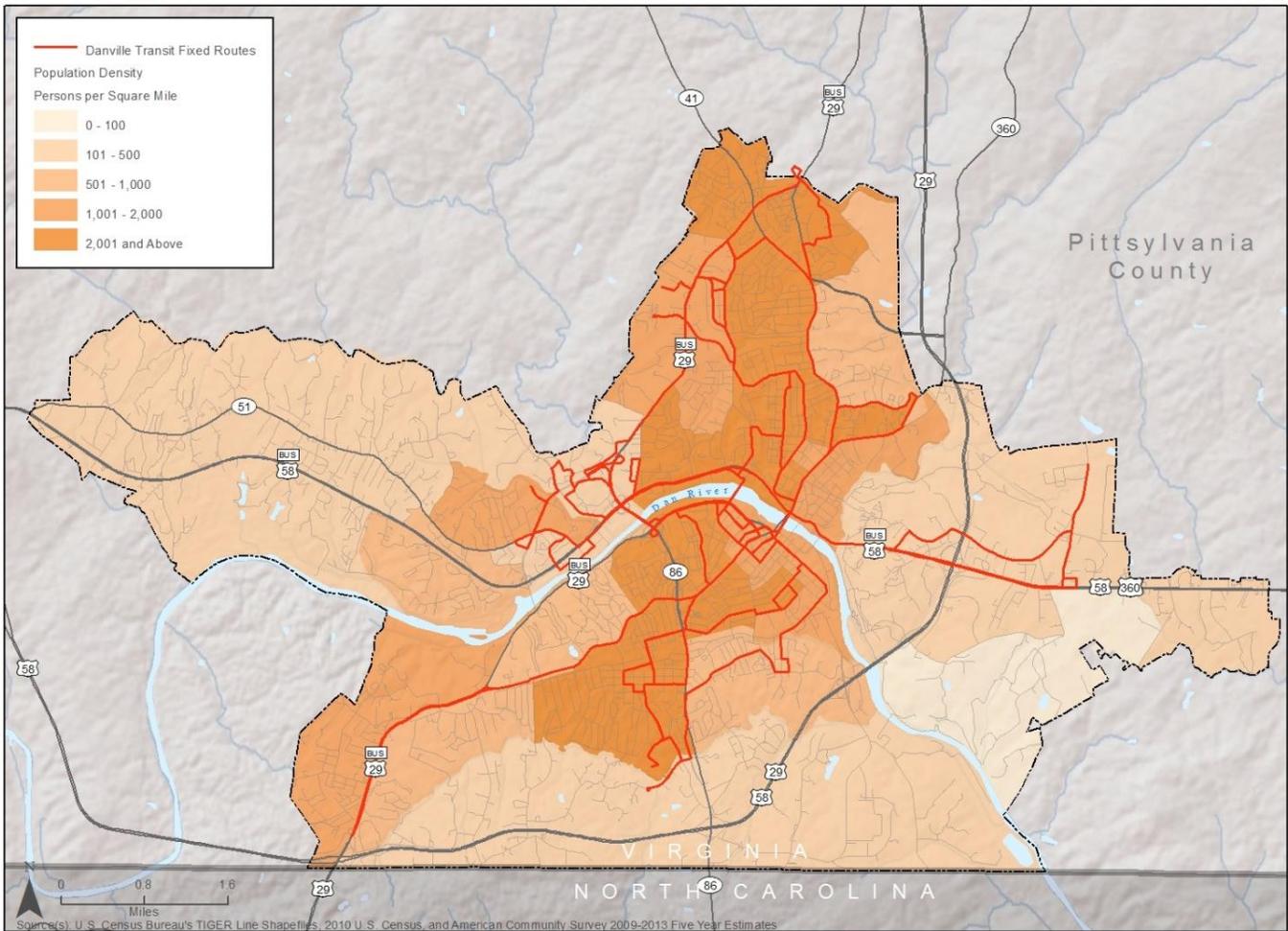
Population Density

Population density is a key factor in determining how rural or urban an area is, which in turn affects the type of public transportation that may be most viable. For instance, while exceptions will always exist, an area with a density above 2,000 persons per square mile will generally be able to sustain a frequent, daily fixed route bus service. Conversely, an area with a population density below 2,000 persons per square mile may be better suited for a deviated fixed route, flex schedule or dial-a-ride service.

Of the 39 census block groups that make up the City of Danville, there are 17 block groups that meet the 2,000 persons per square mile minimum threshold for fixed route service. These block groups are located in the central portion of the city along the Main Street corridor. The average population density

of Danville is approximately 1,889 persons per square mile. The population density can be seen in Figure 3-6.

Figure 3-6: 2010 Population Density of Danville



Transit Dependent Populations

Public transportation needs are defined in part by identifying the relative size and location of those segments within the general population that are most likely to depend on transit services. These transit dependent populations include individuals who may not have access to a personal vehicle or are unable to drive themselves due to age or income status. Determining the location of transit dependent populations assisted the evaluation of current transit services and the extent to which they meet community needs.

For the purpose of developing a transit dependence index, block groups are classified relative to the study area as a whole using a five-tiered scale of “very low” to “very high.” A block group classified as “very low” can still have a significant number of potentially transit dependent persons; as “very low” means below the study area’s average. At the other end of the spectrum, “very high” means greater than

twice the study area’s average. The exact specifications for each score are summarized in the Table 3-15 below.

Table 3-15: Transit Dependent Scoring

Number/Percentage of Vulnerable Persons or Households	Score Based on Potential Transit Dependence
<= the study area average	1 (Very Low)
> average and <= 1.33 times the average	2 (Low)
> 1.33 times the average and <= 1.67 times the average	3 (Moderate)
> 1.67 times the average and <=2 times the average	4 (High)
> 2 times the study area average	5 (Very High)

Transit Dependent Index

The Transit Dependence Index (TDI) is an aggregate measure that utilizes recent data from the American Community Survey (ACS) five-year estimates and the United States Decennial Census to display relative concentrations of transit dependent populations. Five factors make up the TDI calculation, as shown in the following formula:

$$TDI = PD \times (AVNV + AVE + AVY + AVBP)$$

Where:

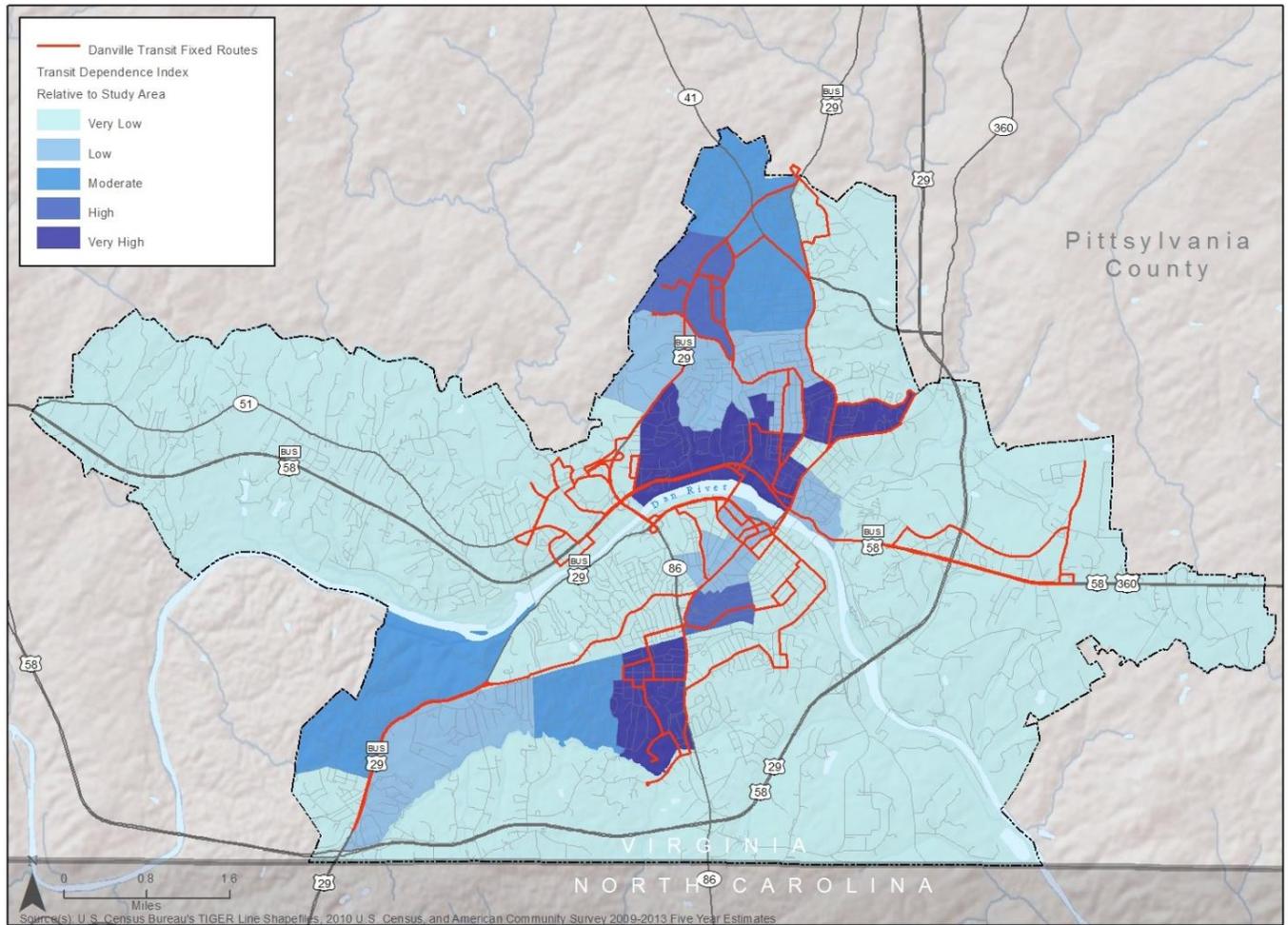
- PD = population density per square mile
- AVNV = amount of vulnerability based on no vehicle households
- AVE = amount of vulnerability based on elderly populations
- AVY = amount of vulnerability based on youth populations
- AVBP = amount of vulnerability based on below poverty populations

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

From a transit perspective, the TDI illustrates the areas of greatest overall need. While some of the block groups show low need, they may actually include major destinations that should be served by transit.

Figure 3-7 provides the results of the TDI analysis. As seen in the map, areas with very high transit needs are located in the central southern portion of the city around Danville Community College and the Cardinal Place Apartments; along Riverside Drive between Piney Forest Road and N. Main Street; and the area located between N. Main Street, Bradley Road and Richmond Boulevard.

Figure 3-7: Transit Dependence Index



Transit Dependence Index Percentage

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

$$TDIP = DVNV + DVE + DVY + DVBP$$

Where:

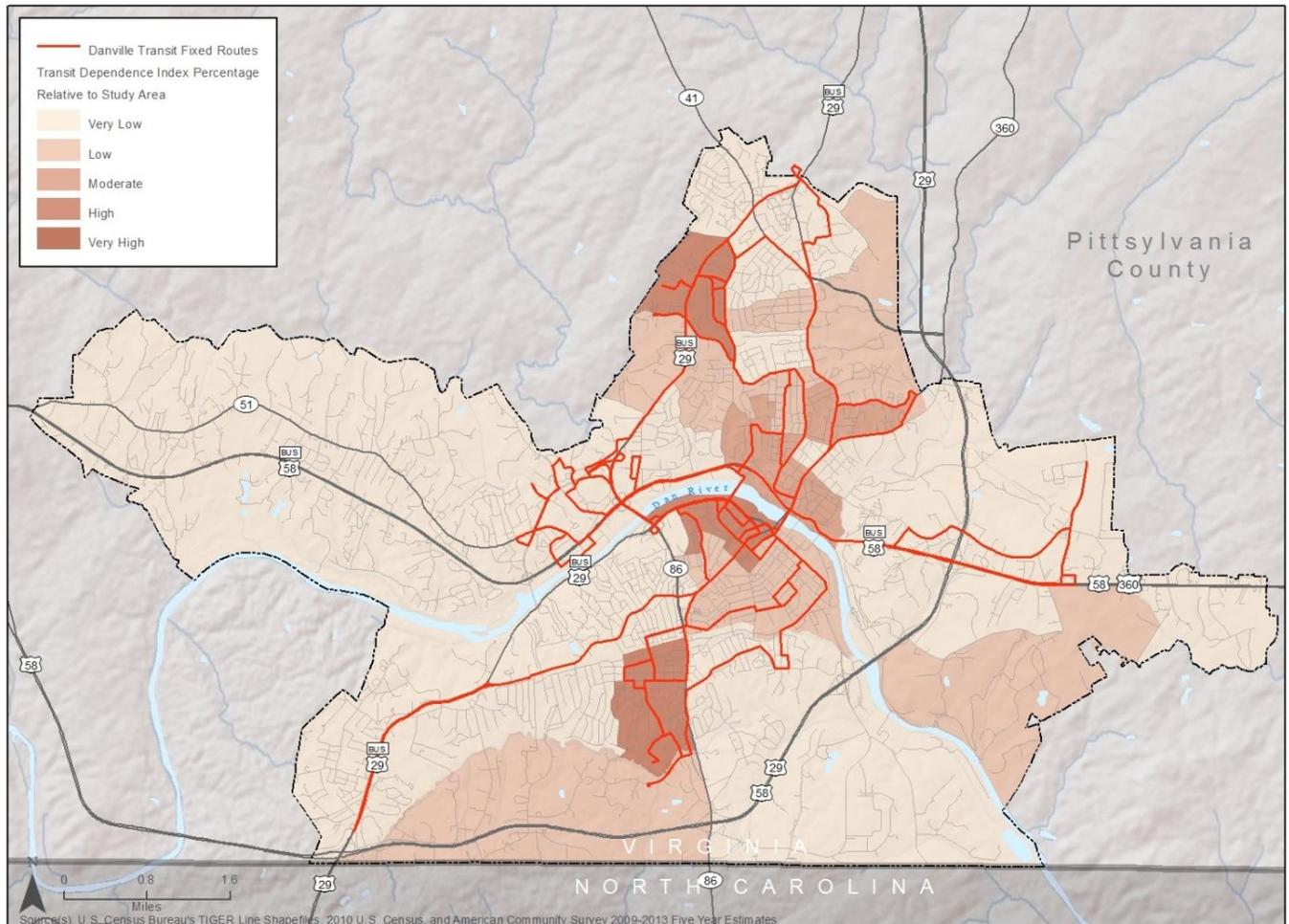
- DVNV = degree of vulnerability based on autoless households
- DVE = degree of vulnerability based on elderly populations
- DVY = degree of vulnerability based on youth populations
- DVBP = degree of vulnerability based on below poverty populations

By removing the population per square mile factor the TDIP measures the degree rather than the amount of vulnerability. The TDIP represents the percentage of the population within the block group with the above socioeconomic characteristics, and it follows the TDI's five-tiered categorization of very

low to very high. It differs in that it does not highlight the block groups that are likely to have higher concentrations of vulnerable populations only because of their population density.

As seen in Figure 3-8, without the population density metric, the level of need shifts to areas along Memorial Drive between Central Boulevard and Patton Street; and the area along Piney Forest Road just south of the NorDan Shopping Center. While some needs shifted in this analysis, the area around Danville Community College remains a high need area.

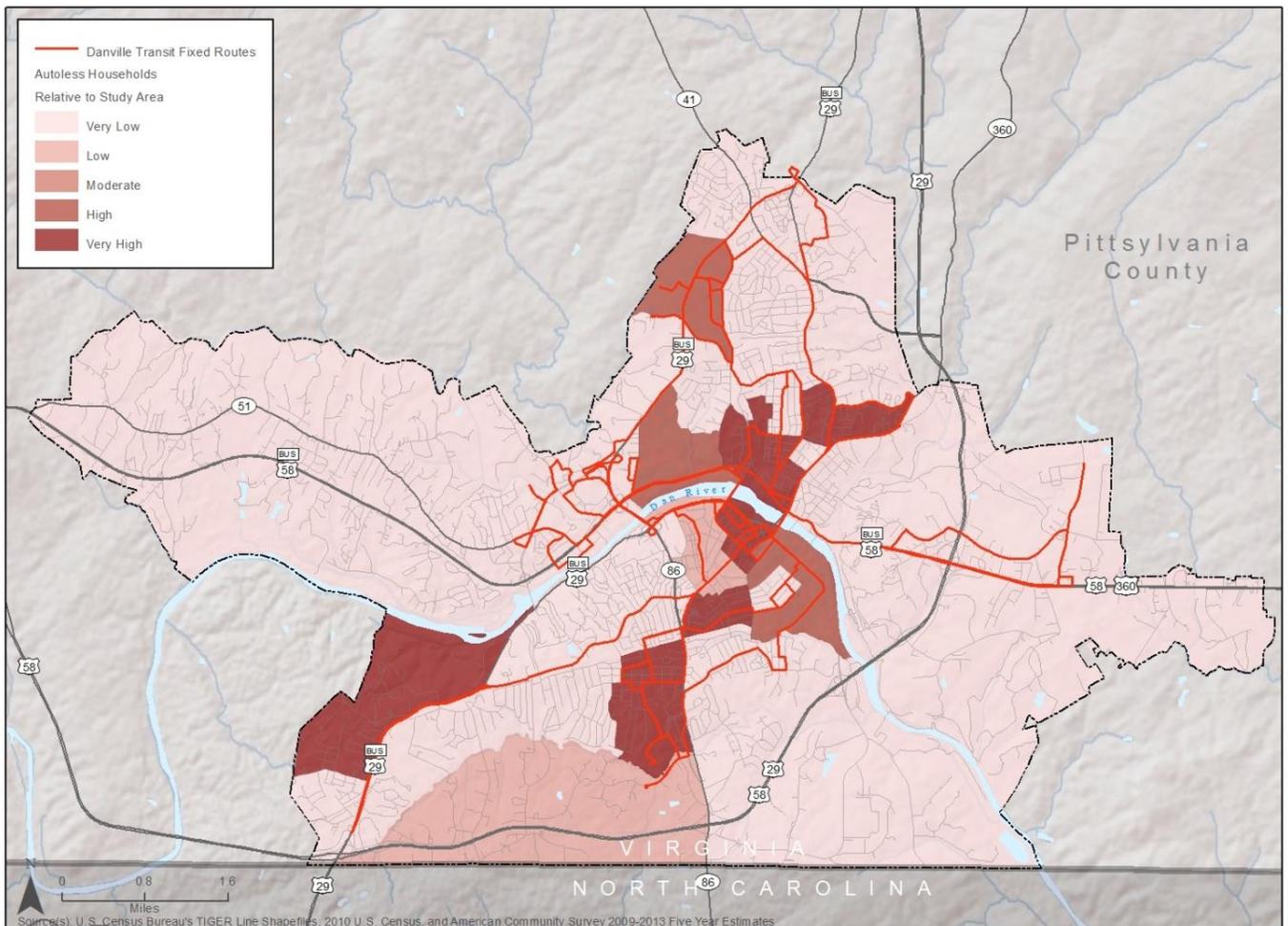
Figure 3-8: Transit Dependence Index Percentage



Autoless Households

Households without at least one personal vehicle are more likely to depend upon the mobility offered by public transit than those households with access to a car. Displaying this segment of the population is important because many land uses in the region are at distances too far for non-motorized travel. As seen in Figure 3-9, the block groups with the greatest density of autoless households are predominately found in a band stretching through the central portion of the city. There is also a concentration of autoless households in the southwestern end of the city just to the north of W. Main Street between Withers Road and Memorial Drive.

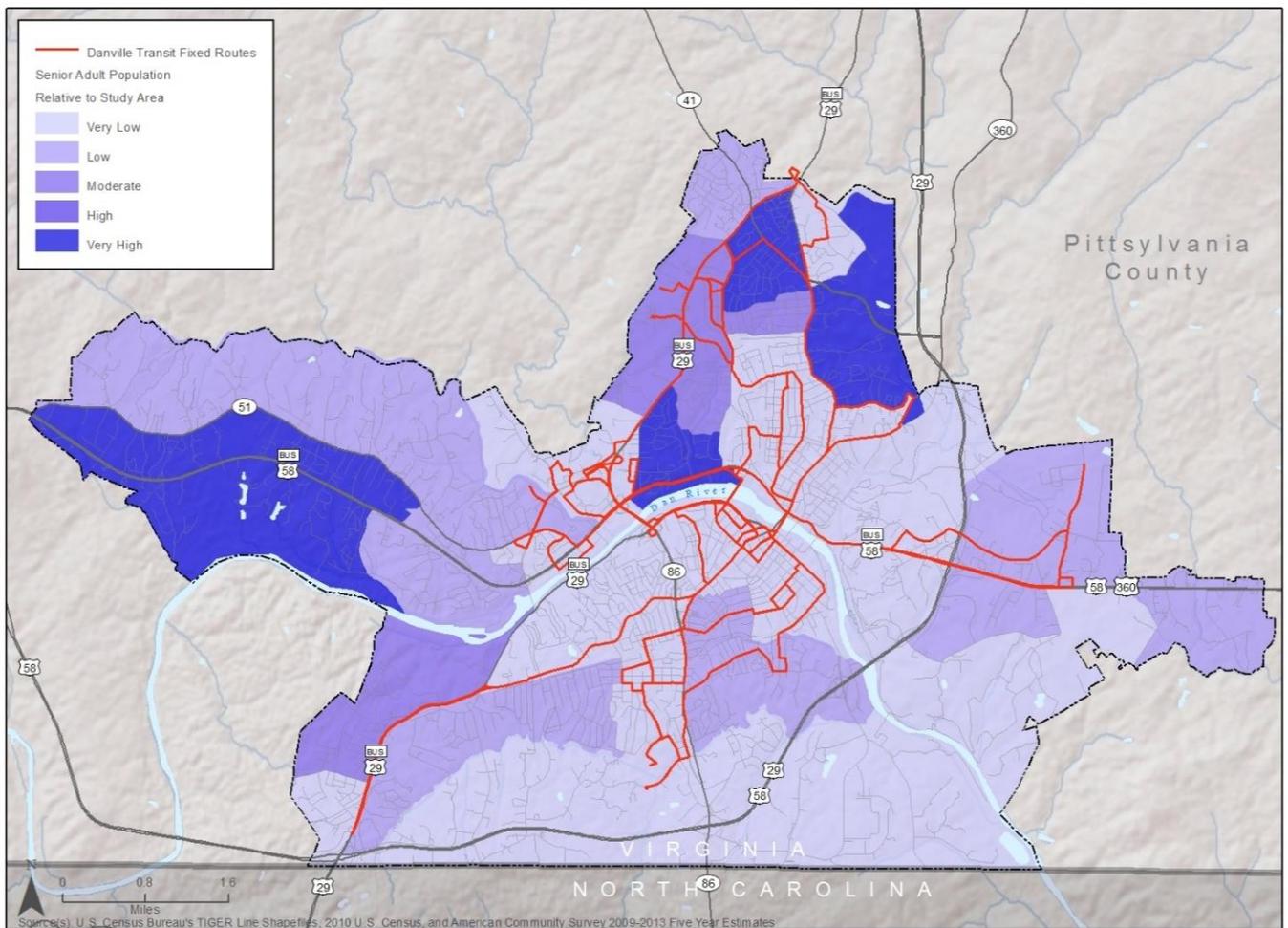
Figure 3-9: Autoless Households



Senior Adult Population

Individuals 65 years and older may scale back their use of personal vehicles as they age, leading to a greater reliance on public transportation compared to those in other age brackets. Illustrated in Figure 3-10, the block groups with the greatest densities of older adults occur in the northern portion of the city. Specifically, the northwestern portion of the city along Riverside Drive; the area bound by the Dan River to the south and Piney Forest Road to the north, which includes the Holiday Village Retirement Community; and areas in the northern extreme of the city which include the Roman Eagle Memorial Home.

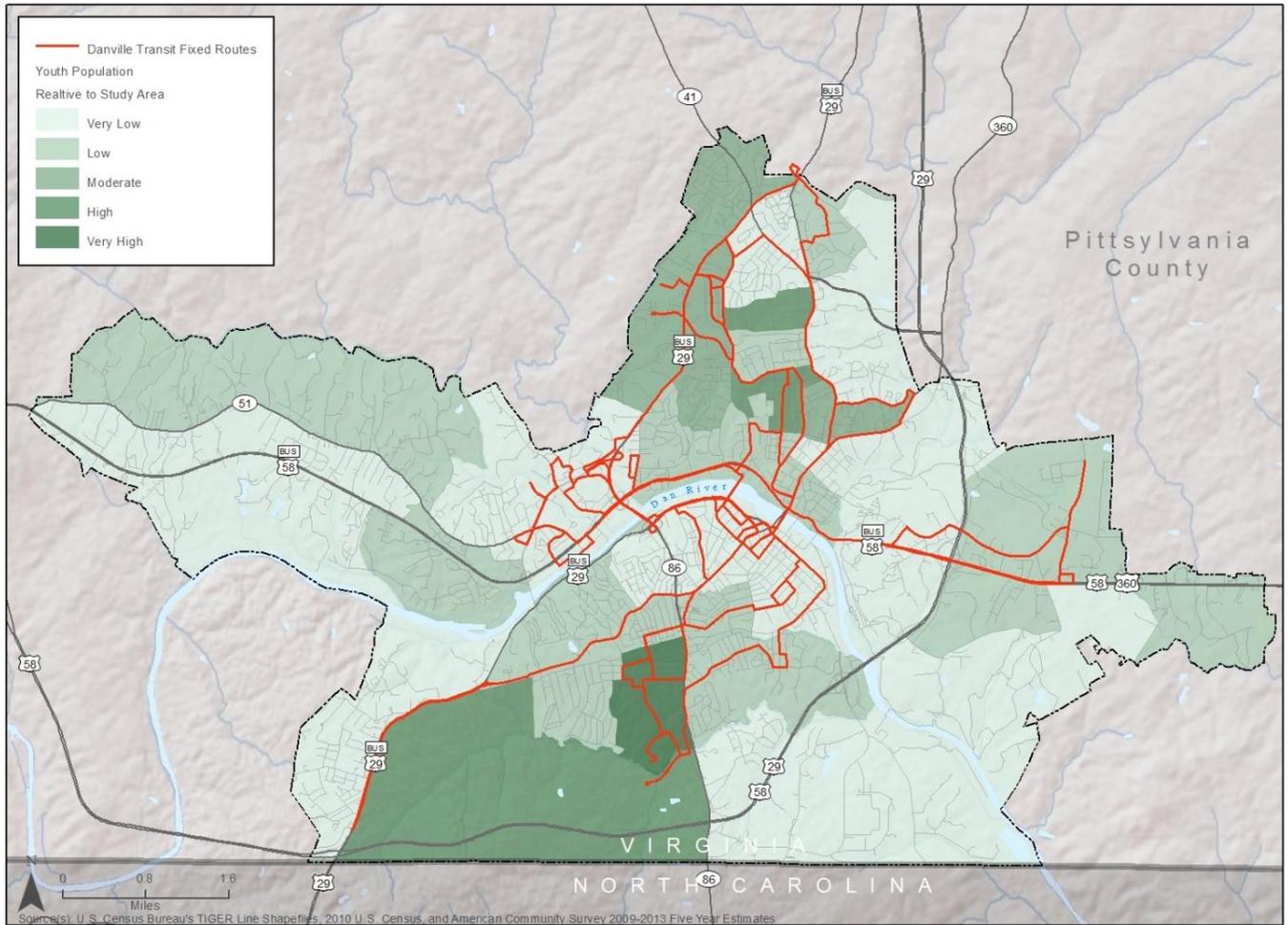
Figure 3-10: Senior Adult Population



Youth Population

Youths and teenagers, age 10 to 17 years, who cannot drive or are just starting to drive but do not have an automobile available, appreciate the continued mobility from public transportation. As Figure 3-11 shows, only one block group in the city has a very high relative population of youth. This block group is located in the south central portion of the city and includes Danville Community College, Cardinal Place Apartments and the Health Department. Areas with a high classification include residential areas in the northern and southern sections of the city.

Figure 3-11: Youth Population



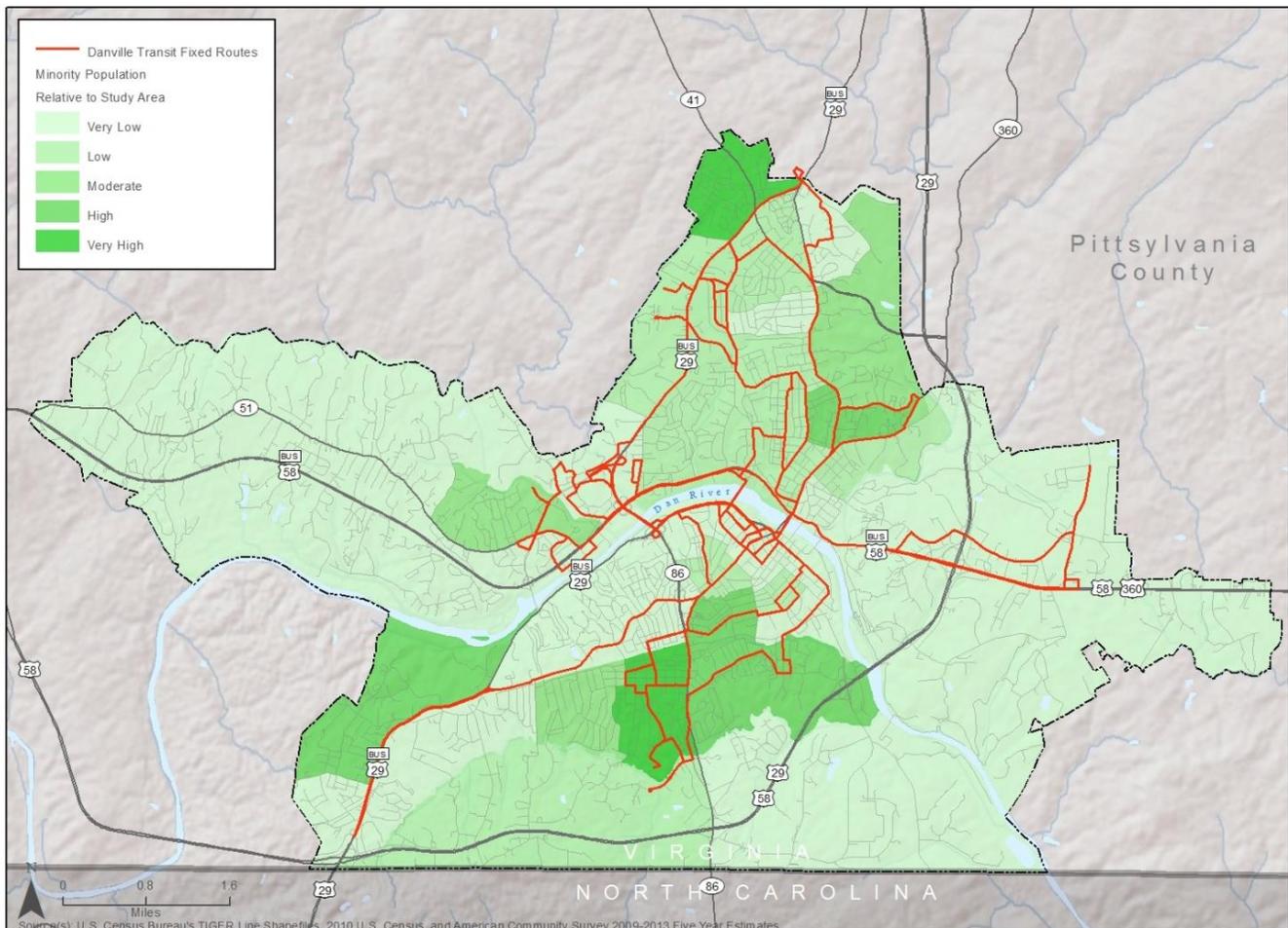
Title VI Analysis

As part of the Civil Rights Act of 1964, Title VI prohibits discrimination on the basis of race, color or national origin in programs and activities receiving federal subsidies. This includes agencies providing federally funding public transportation. In accordance with Title VI, the following section examines the minority and below poverty populations in the service area. This section also summarizes the prevalence of residents with Limited-English Proficiency (LEP) in the service area.

Minority Population

In accordance with Title VI of the Civil Rights Act of 1964, it is important to ensure that areas in the service area with a relative concentration of racial and/or ethnic minorities are not negatively impacted by any proposed alterations to existing public transportation services. To determine whether an alteration would have an adverse impact upon Danville’s minority population, it is necessary to first understand where these relative concentrations of individuals reside. Figure 3-12 provides a geographical representation of the minority composition. Relative concentrations of minorities reside in the neighborhoods around Danville Community College and to the north of Piney Forest Road near the intersection of State Route 41.

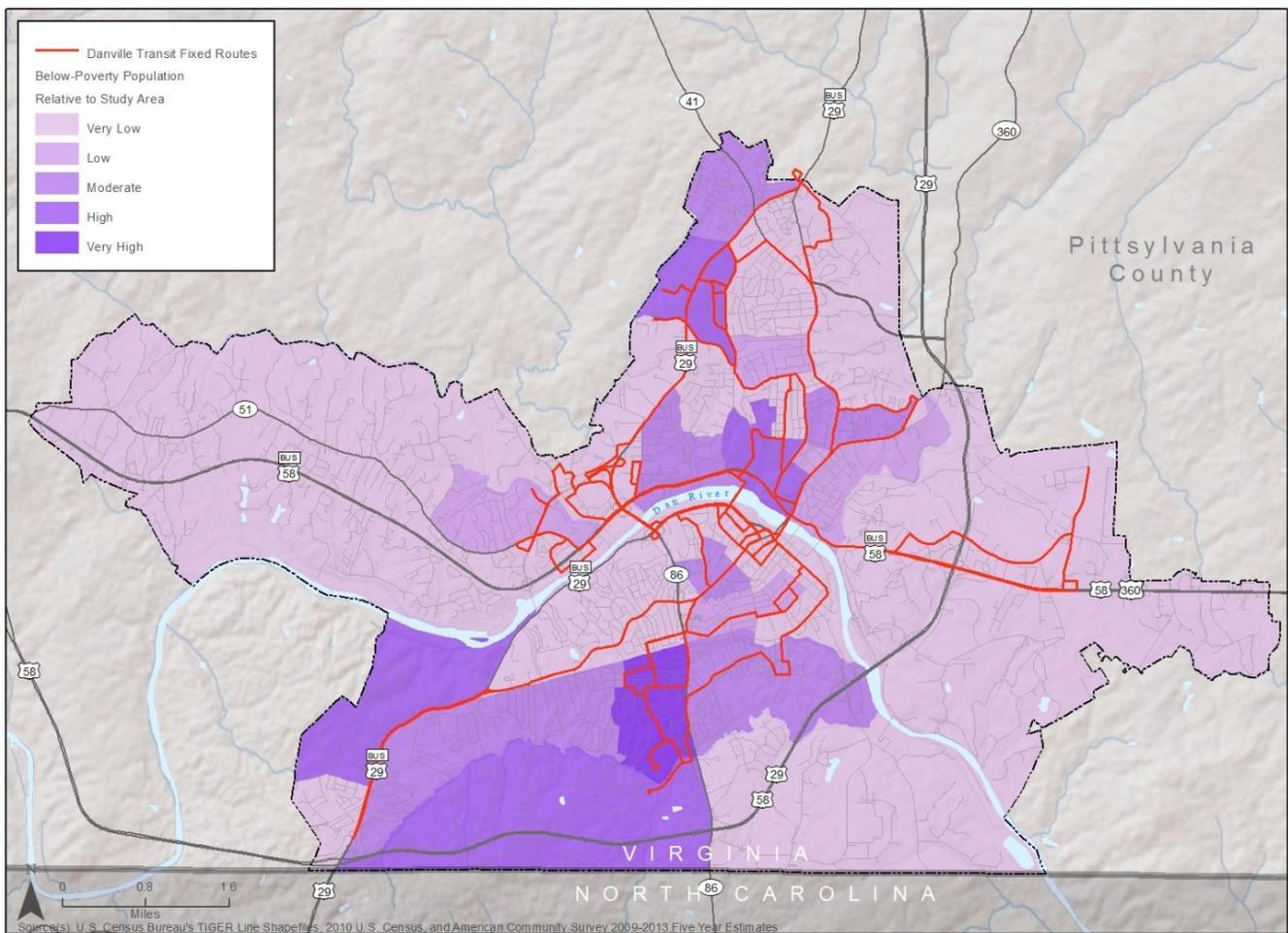
Figure 3-12: Minority Population



Low-Income Population

This socioeconomic group represents those individuals who earn less than the federal poverty level. These individuals face financial hardships that make the ownership and maintenance of a personal vehicle difficult, and thus they may be more inclined to depend upon public transportation. As seen in Figure 3-13, the block groups with large concentrations of below poverty populations are scattered through the central city area. The only block group with a very high proportion of below poverty individuals is located around Danville Community College and just to the west of S. Main Street. Other areas with notable concentrations include the southwestern areas of the city and neighborhoods along Piney Forest Road and Riverside Drive.

Figure 3-13: Below Poverty Population



Limited-English Proficiency (LEP)

In addition to equitably providing public transportation to individuals of diverse socioeconomic backgrounds, it is also important to realize the variety of languages spoken by area residents. According to the American Community Survey's five-year estimates for 2008-2012, English is the most predominately spoken language among Danville residents (94.9%). As seen in Table 3-16, among the other languages spoken by residents, only Spanish has a percent share greater than two percent (3.5%).

Table 3-16: Limited-English Proficiency

Place of Residence	Danville		Pittsylvania Co.	
Population 5 years and older	40,456		60,159	
Language Spoken at Home:				
English	38,407	95%	58,397	97%
Spanish	1,410	3%	1,251	2%
Other Indo-European languages	414	1%	241	0%
Asian/Pacific Island languages	147	0%	197	0%
Other languages	78	0%	73	0%
Speak non-English at Home	2,049	5%	1,762	3%
Ability to Speak English:				
"Very Well" or "Well"	1,656	81%	1,254	71%
"Not Well" or "Not at All"	393	19%	508	29%

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

Land-Use Profile

Major land-uses are identified as origins from which a concentrated transit demand is generated and destinations to which both transit dependent persons and choice riders are attracted. They include educational facilities, major employers, human service agencies, high-density housing complexes, major shopping destinations and medical facilities. Major trip generators across the city are shown in Figure 3-14.

Educational Facilities

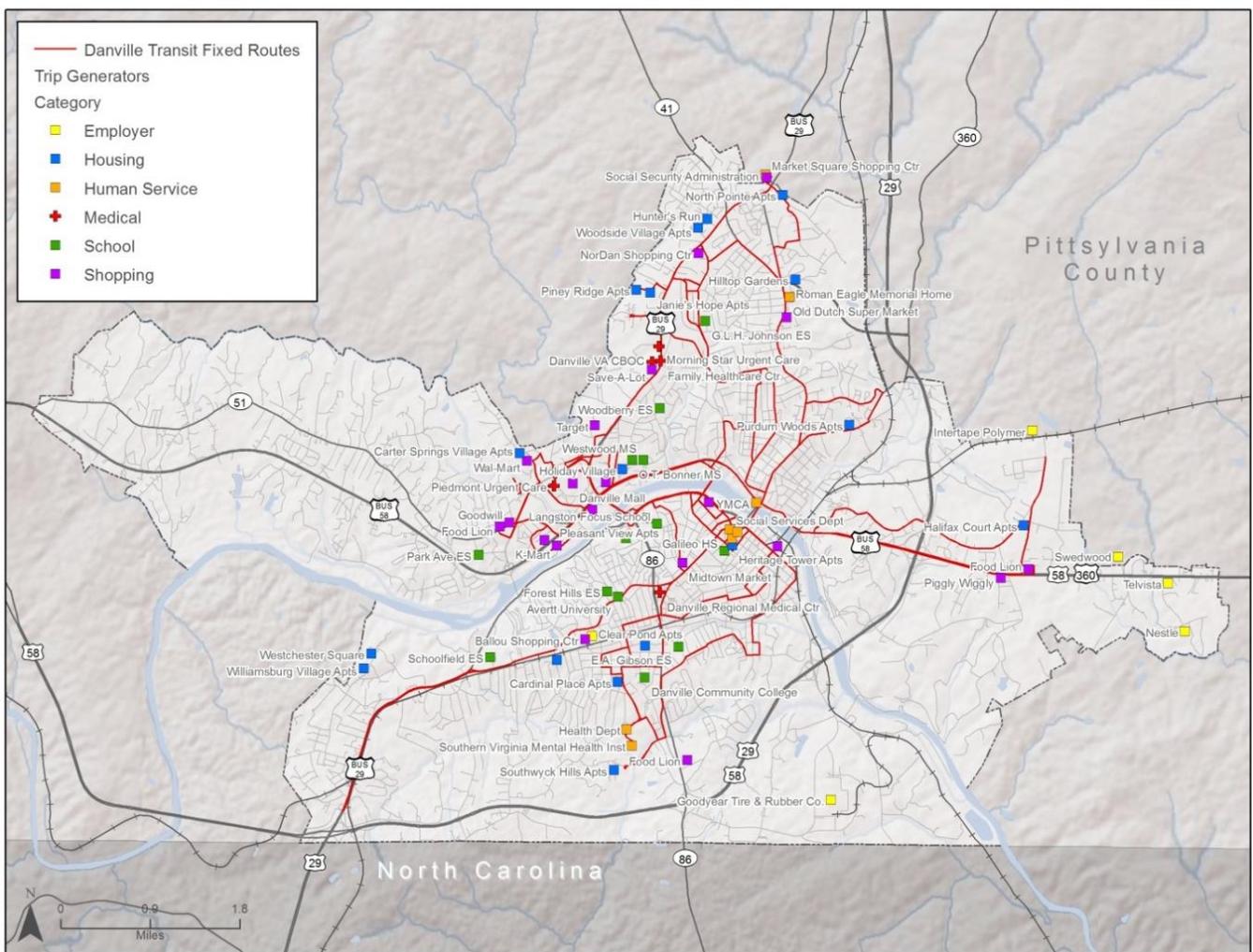
Many of the individuals that comprise the school age population are unable to legally operate their own personal vehicle, therefore, it may be assumed that this segment of the population is one that is reliant upon public transportation. Furthermore, the vast majority of the school aged population is enrolled in educational facilities and many adults are associated with these institutions as a place of employment or advanced education. Danville features a number of schools, colleges and universities including Averett

University and American National University. All educational facilities in Danville are within a short walk of a bus route.

Major Employers

Providing transit services to major employment locations is advantageous to both the employee, as the individual is provided with direct access to their occupation and subsequent source of income, and the employer, as this entity will have assurance that their current or potential workforce will have diverse options of accessing the destination. Table 3-17 provides a listing of the ten largest employers in Danville. While many of these employers are within walking distance to a bus route, a number are not accessible via transit. Employers without a transit link include Goodyear, Telvista, Nestle and Swedewood.

Figure 3-14: City of Danville Major Trip Generators



Human Service Agencies

Human service agencies provide assistance and resources to residents seeking support in a spectrum of issues including, but not limited to, senior health care, childhood development, recreation and nutrition. The range of services offered by these agencies makes them a critical component to any community and in turn they become locations where public transportation will serve as a vital travel option. Human service agencies in Danville are mostly located throughout the central portion of the city and are well served by transit.

Table 3-17: Top 10 Largest Employers in Danville

Employer	Number of Employees	Industry
Goodyear Tire & Rubber	2,000	Manufacturer/Processor
Danville Regional Medical Center	1,235	General Medical Hospital
Telvista	780	Communications
Nestle	575	Manufacturer/Processor
Wal-Mart †	474	Discount Stores
Food Lion †	376	Grocery Stores
Roman Eagle Memorial Home	363	Senior Living Facility
Swedewood	292	Manufacturer/Processor
CIT Commercial Services	280	Professional Services
Intertape Polymer	275	Manufacturer/Processor

Source: City of Danville Comprehensive Plan (2010)

† Multiple locations

High Density Housing

As a complement to the prior analysis of population density, an inventory of high density housing was conducted. This provides another method for determining where concentrations of the population reside. For the purposes of this study, high density housing includes apartments, condominiums, senior and affordable housing. High density housing is largely dispersed throughout the city. Many of the bus routes allow for special deviations to reach housing complexes off the beaten path leading to the overwhelming majority of housing complexes covered by transit.

Major Shopping Destinations

Shopping centers are trip destinations in which residents may purchase essential items such as groceries or general merchandise. These centers are an attractive trip end for many residents since they also serve some as a place of employment. For the purposes of this study, a shopping destinations are defined as a concentration of stores such as a mall or retail outlet, large retail establishments and major supermarkets. It is important that the selected shopping destinations do not simply represent

recreational shopping locations, but general merchandise and food outlets, as transit dependent persons are more likely to rely on transit services for essential needs. Some of the major shopping destinations in Danville are Danville Mall, Walmart, Target and a variety of other big-box stores and shopping centers. The largest concentration of shopping destinations is located along Piedmont Drive which is served by the Riverside Routes.

Medical Facilities

Medical facilities, classified as general hospitals and their immediate network of outpatient services, represent a significant destination for users of public transportation. Older adults and persons with disabilities often rely more heavily upon the services offered by medical facilities than other population segments. Since older adults and persons with disabilities represent a large fraction of the transit dependent population, it is imperative that these facilities are made accessible through public transit services. The major medical facilities in Danville are Danville Regional Medical Center and the Piedmont Regional Medical Center. Other clinics and urgent care facilities are primarily located along Piney Forest Road.

Travel Patterns

In addition to considering the region’s major employers, it is also important to take into account the community patterns of residents and workers. According to the American Community Survey’s five-year estimates for 2008-2012, approximately 71% of Danville residents work in Danville. As Table 3-18 illustrates, approximately 20% of residents work in other cities and counties in Virginia and approximately 9% of residents work out of the state.

Table 3-18: Employee Commuting Patterns

Place of Residence	Danville		Pittsylvania Co.	
Workers 16 Years and Over	16,332		27,488	
Location of Workplace				
In County of Residence	11,608	71%	10,763	39%
Outside County of Residence	3,225	20%	15,175	55%
Outside State of Residence	1,499	9%	1,550	6%
Means of Transportation to Work				
Car, Truck, or Van - drove alone	12,889	79%	22,883	83%
Car, Truck, or Van - carpooled	2,121	13%	3,060	11%
Public Transportation	281	2%	185	1%
Walked	533	3%	210	1%
Taxicab, motorcycle, bicycle, other	231	1%	360	1%
Worked at Home	277	2%	790	3%

Source: American Community Survey, Five Year Estimates (2008-2012), Table B08130

Another source of data that provides an understanding of employee travel patterns is the United States Census Bureau’s Longitudinal Employer-Household Dynamics (LEHD) 2011 dataset. LEHD draws on federal and state administrative data from the Census, surveys, and administrative records. Table 3-19 shows that Danville, Lynchburg and Richmond are the common top employment destinations for residents of Danville. Residents of Pittsylvania County have relatively similar commuting patterns with most workers going to Danville.

Table 3-19: Top 5 Work Destinations by Percentage of Resident Workers

Danville Residents		Pittsylvania Co. Residents	
Destination	Percentage	Destination	Percentage
Danville	43%	Danville	34%
Lynchburg	3%	Altavista	5%
Richmond	2%	Lynchburg	4%
Martinsville	2%	Chatham	3%
Roanoke	2%	Martinsville	2%

Source: United States Census Bureau, OnTheMap Application and LEHD Origin-Destination Data, 2011

Demographic Summary

Danville’s population decline is expected to stabilize and moderate growth is forecasted for the next 30 years. Transit needy populations within the city are well covered by transit. There should be some consideration given to extending the fixed route network to provide service for the major employers located along U.S. Route 58 east of the city.

REVIEW OF PREVIOUS PLANS AND STUDIES

This section provides a review of relevant plans and studies that have been conducted in the Danville region. Each review provides a summary of the plan’s contents and specific information pertinent to Danville Transit and the TDP process. This section provides a review of the following plans:

- 2010 Danville Transit TDP
- City of Danville’s 2030 Comprehensive Plan
- Danville-Pittsylvania Area Long Range Transportation Plan
- Pittsylvania County’s Comprehensive Plan
- West Piedmont Coordinated Human Service Mobility Plan

2010 Danville Transit TDP

The previous TDP completed in 2010, covered the same topics that this plan revisits. Those topics include an overview of the system, goals and objectives, service evaluation, needs assessment, recommendations, a capital improvement program, financial plan and plan monitoring.

The study identified several service improvements but conceded that “financial constraints are unlikely to support service expansion in the near future.” The TDP recommended the following service improvements for Danville Transit:

- Limited evening fixed route service
- All-day fixed route service to the city’s east side
- Expansion of Reserve-a-Ride service
- Downtown Trolley Circulator
- Restructured route system with more frequent service
- Potential service outside of the city and into unincorporated Pittsylvania County

While funding limitations have stifled a number of these recommendations, Danville Transit has expanded the Reserve-A-Ride service to cover Monday through Friday from 4:00 a.m. to 1:00 a.m.

City of Danville 2030 Comprehensive Plan

Danville’s 2030 Comprehensive Plan adopted in 2010, provides a future land use plan, transportation plan, corridor and gateway plan, neighborhood revitalization plan, historic revitalization plan and economic revitalization plan.

The future land use plan promotes seven policies based in support of the plan’s goal for sustainable growth and land use. Policies that are pertinent to this TDP include:

- Encourage and direct residential, commercial, and high tech and light industrial development closer to the center of Danville where existing infrastructure is in place and to avoid the “donut hole” development pattern that can come about in older cities.



Danville 2030 Comprehensive Plan – Cover Page

- Encourage and direct medium and large-scaled industrial development to vacant parcels in established industrial parks or appropriately situated larger parcels near support services, public utilities, major transportation facilities and other needed infrastructure.

- Encourage and support mixed use development in Danville’s older commercial areas through the redevelopment of upper floor residential and ground floor retail space and the development of appropriate infill structures.

The transportation plan touts how “Reserve-A-Ride services are playing an increasingly important role in connecting Danville’s workforce with employers in the east end of the city.” The plan continues with “potential job growth through industrial parks west of the city could lead to increased demand for the Reserve-A-Ride service in the metro Danville area necessitating an expansion of the program.”

The Bicycle and Pedestrian Access component of the plan specifically calls for “including bicycle racks on public buses and at key locations downtown.”

Danville-Pittsylvania Area Long Range Transportation Plan

The Danville-Pittsylvania Area Long Range Transportation Plan was completed in 2010. The plan covers transportation alternatives, future transportation needs, recommended transportation improvements, an environmental overview and federal planning factors. The plan includes an extensive summary of Danville Transit’s services and future needs.

The primary identified need for Danville Transit is a lack of funding. The plan notes that “Danville Transit has been successful in containing operating costs since 1995 with the integration of light and medium duty buses in the fleet and the diversification of revenue streams with the start-up of the Reserve-A-Ride operation in 2001.”

In light of on the lack of funding issues, the Long Range Transportation Plan recommends expanding the Reserve-A-Ride service to cover 9:00 a.m. to 3:00 p.m. as this improvement addresses the most outstanding service gap. The plan goes on to elaborate that if additional funding becomes available, service improvements should be prioritized in the following order:

- Further expansion of Reserve-A-Ride service, with an extra bus running in the peak periods
- All-day fixed route service to the city’s eastside
- Limited evening fixed route service to key transit market destinations within the city until 9:00 p.m.

The Reserve-A-Ride service has been expanded in the years since the Long Range Transportation Plan but the last two priorities have yet to be addressed.

Pittsylvania County Comprehensive Plan

The Pittsylvania County Comprehensive Plan was completed in 2010. The plan covers a broad range of topics including: the natural and cultural environment, community demographics, community facilities and services, housing, economic development and transportation. The plan encourages the development of transit for county residents.

The transportation section of the plan provides a brief summary of Danville Transit’s operations and notes that “there have been attempts to expand Danville’s service into the county but the funding has

not been available and there is not significant and consistent ridership in place necessary for a successful transit operation.” The plan also suggests that the county’s Board of Supervisors “pass a resolution to request DRPT to conduct a feasibility study to provide the county guidance on what alternative directions it could take in the development of services and provide more information on the cost benefit and effectiveness of a system.” Transit related strategies from the comprehensive plan include:

- Work with Danville Transit to identify cost-effective route extensions within the county.
- Promote residential development at densities sufficient to support transit in the southern growth areas of the county.
- Support and promote van pooling opportunities in the county.

The land use section of the plan identifies ten future growth areas. The majority of the future growth areas are located around Danville, with others along the U.S. 29 corridor and the lake region in the northwest of the county. The growth areas around Danville encourage a mix of industrial and residential uses to the east and west of the city. To the north, along the U.S. 29 corridor, the plan calls for business districts and a variety of residential densities.

West Piedmont Coordinated Human Service Mobility Plan

This Coordinated Human Service Mobility (CHSM) Plan covers the West Piedmont Planning District which includes Franklin, Henry, Patrick and Pittsylvania Counties as well as the cities of Danville and Martinsville. The plan provides a demographic analysis, a listing of the region’s transportation providers, current needs and gaps and corresponding strategies to improve mobility. Perhaps most pertinent to this plan are the needs and gaps which are included below. They highlight many of the comments received in the rider surveys, detailed in a previous section, including expanding access to job locations, limited capacity for social activity trips, and providing transportation that meets late night shift hours for people with low incomes and/or disabilities.

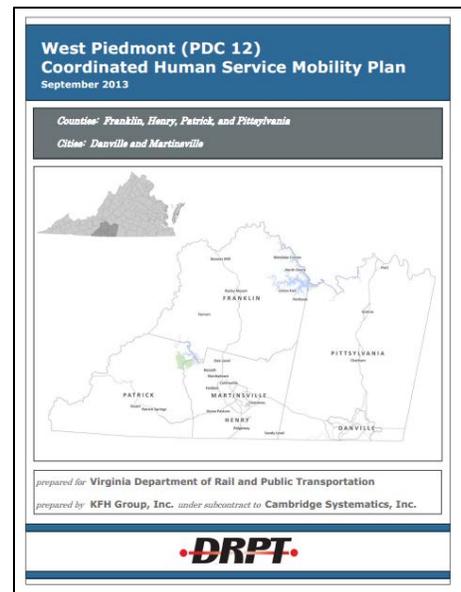
Needs and Gaps

Funding

- Limited local funding to serve as required match for funding new services
- Funding to sustain services after project implementation
- Need funding for human service agencies to offset costs beyond what clients can afford

Trip Purpose

- Expanded transportation services for dialysis treatments
- Expanded access to job locations



West Piedmont CHSM Plan

- Priority is given to medical trips, therefore limited capacity or opportunity for social activity trips
- Limited funding for trips not funded through the Medicaid brokerage
- Transportation options for youth to after school activities
- Need veteran's transportation, especially in rural areas (e.g. trips to the Salem VA Medical Center and Danville CBOC)

Time

- Weekend and evening services.
- Transportation that meets late night shift hours for people with low incomes and people with disabilities.
- More flexibility for scheduling transportation for medical trips.

Place/Destination

- Expanded transportation services to dialysis center
- Expanded transportation options for social activities
- Limited access to medical facilities outside the region
- Lack of public transportation in rural areas of the PDC

Information/Outreach

- Public relations campaign to improve image of public transit
- Increased education for local officials who are not aware that there is a transportation need or who do not make transit a budget priority
- For those with limited incomes, lack of awareness of programs for transportation assistance

Travel Training/Orientation

- Expanded training for people who are not aware of all the transportation opportunities that are available and how to use them

CHAPTER SUMMARY

The system evaluation and needs analysis involved collecting and reviewing data and input from many different sources:

- performance data
- boarding/alighting counts
- passenger surveys
- community surveys
- stakeholder interviews
- demographics
- land use and transportation plans

It is clear from the data that there is a huge need and demand for transit within the city to get to employment, medical appointments and shopping. This is evident in the input that was received from riders and stakeholders and the ridership on both the fixed route and demand response service. With success also comes challenges with keeping up the growing demand and diminishing budgets. With this growth in demand, Danville Transit has not increased its staff which can have negative impacts on quality of service, moral and employee retention. The results of the system evaluation and the priorities identified in this needs analysis will inform the service alternatives and improvements discussed in the next chapter of the TDP.

Chapter 4

Alternatives

INTRODUCTION

The fourth chapter of the Danville Transit Development Plan provides a range of alternatives for Danville Transit to consider when planning for the six-year horizon that this plan covers. Some of the concepts presented in this chapter were generated through this planning process while others were generated through Danville Transit's ongoing strategic planning efforts.

The previous chapter provided an evaluation of current Danville Transit services, as well as an analysis of transit needs based on quantitative data, surveys, information gained from rider outreach and input from key stakeholders. Through the service review and needs assessment, there are specific service improvements that should be considered for implementation. These alternatives broadly focus on:

- Improving on-time performance
- Mitigating growth on demand response service
- Improving productivity
- Introducing scheduled evening service
- Increasing bus stop amenities
- Improving schedule information
- Extending the reach of the fixed routes
- Improving vehicle maintenance

SERVICE ALTERNATIVES

Each service alternative is detailed in this section and includes a summary of the alternative, potential advantages, potential disadvantages and an estimate of the potential operating and capital costs.

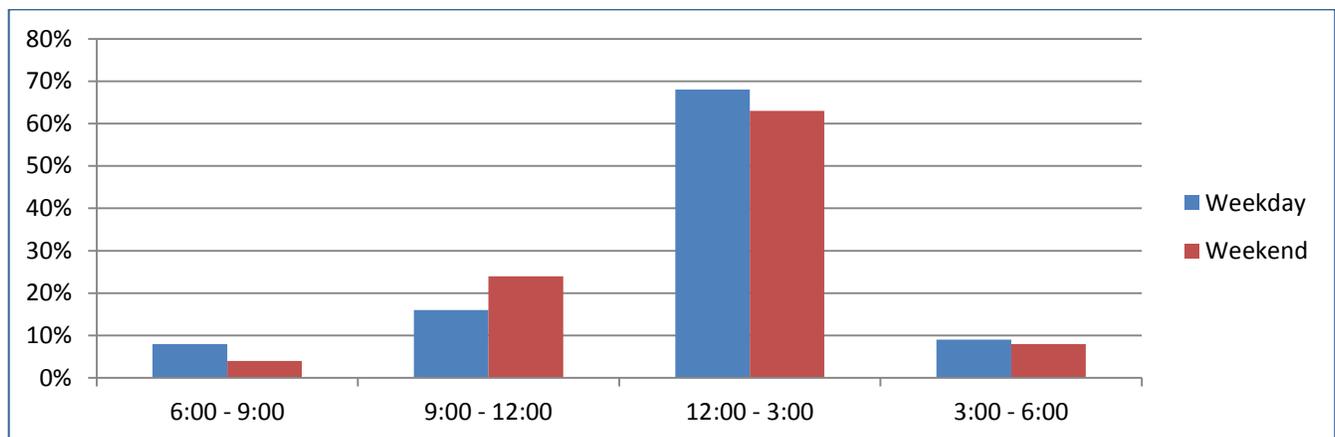
Alternative 1: Adjust Fixed Route Schedules

On-time performance statistics were gathered and analyzed in conjunction with the passenger count and survey effort on Saturday, December 20 and Monday, December 22, 2014. The analysis, detailed in Chapter 3 with results presented in Table 3-4, revealed that system-wide 13% of the fixed route buses were arriving over six minutes late to time checks and 8% were arriving over 10 minutes late. This was reinforced anecdotally through the fixed route rider surveys where “runs late” was the top response when riders were asked what they liked least about Danville Transit. Additionally, when riders were asked what service improvements they would recommend, “on-time service” was the third most frequent response following evening and Sunday service.

In order for buses to run on time the headways must be adequate enough to allow for the actual running time and recovery time. Generally running times are affected by the length of the route and the local operating environment such as congestion, travel time between stops and dwell time for passenger boarding and alighting. When running times are either equal to or greater than scheduled headways it then becomes a challenge to stay on schedule and on time. Running times can vary depending on how busy certain times of the days are.

Currently, the headway for the downtown Transit Hub is 40 minutes but the running time during the busiest times of the day exceeds 40 minutes, which is contributing to the buses running late. For Danville Transit the busiest period of the day is between 9:00 a.m. and 3:00 p.m. This is reflected in the on-time performance as shown below in Figure 4-1. The figure provides an illustration of when buses are arriving six or more minutes late. Another consideration for the need to increase the current running time and review the timing of the scheduled stops along the route is the planned opening of a Walmart Neighborhood Market store at the Nor-Dan Shopping Center in the former Piggly Wiggly location. The Walmart Neighborhood Market stores are a smaller version of the Walmart Supercenters. This development is likely to have an impact on the fixed routes and the Nor-Dan transfer point.

Figure 4-1: Distribution of Late Arrivals



The headways for the fixed routes should be increased to more accurately reflect the demand patterns throughout the day. Table 4-1 provides two possible schedules changes for consideration.

- Option 1** - The first three runs in the morning and the last two runs of the day, when it is not as busy, the headways will continue to remain at 40 minutes. The headways would increase to 45 minutes during the mid-morning and mid-afternoon. During the middle of the day between 10:30 a.m. and 2:30 p.m. the headways would increase to 50 minutes. Under this option no route modifications are proposed. This option would result in a loss of two runs.
- Option 2** - This option proposes a combination of adjusting the headways (primarily in the late morning and afternoon) and reducing the route length on #1 North Main Route and #2 Riverside Route. The first eight runs of the day would remain at 40 minutes. The headway for the 11:30 a.m. and 12:15 p.m. runs would increase to 45 minutes. The headway in the middle of the day between 1:00 p.m. and 3:40 p.m. would increase to 50 minutes. The headway for runs 3:40 p.m.

and 4:25 p.m. would be 45 minutes. The last two runs of the day (5:05 p.m. and 5:45 p.m.) would be 40 minutes.

The route modifications would consist of the following:

- On the #1 North Main Route as seen in Figure 4-2, the route segment along Seminole Drive and Springfield Drive would be eliminated on the 11:30 a.m. and 12:50 p.m. runs.
- On the #2 Riverside Route as seen in Figure 4-3, the route segment serving in the morning would be eliminated. Ridership to K-Mart is minimal and by eliminating would improve the running time by up to 4 minutes.

Table 4-1: Option 1 and Option 2 Headway Changes

Option 1			Option 2		
Run	Headway	Change	Run	Headway	Change
6:00 a.m.	40	None	6:00 a.m.	40	None
6:40 a.m.	40	None	6:40 a.m.	40	None
7:20 a.m.	40	None	7:20 a.m.	40	None
8:00 a.m.	45	5 minutes	8:00 a.m.	40	None
8:45 a.m.	45	5 minutes	8:40 a.m.	40	None
9:30 a.m.	45 (plus 10 minute break)	5 minutes	9:30 a.m.	40	None
10:25 a.m.	50	10 minutes	10:10 a.m.	40 (plus 10 minute break)	None
11:15 a.m.	50	10 minutes	10:50 a.m.	40	None
12:05 p.m.	50	10 minutes	11:30 a.m.	45	5 minutes
12:55 p.m.	50	10 minutes	12:15 p.m.	45	5 minutes
1:50 p.m.	50	10 minutes	1:00 p.m.	50	10 minutes
2:35 p.m.	50 (plus 10 minute break)	10 minutes	1:50 p.m.	50	10 minutes
3:35 p.m.	45	5 minutes	2:40 p.m.	50 (plus 10 minute break)	10 minutes
4:20 p.m.	45	5 minutes	3:40 p.m.	45	10 minutes
5:05 p.m.	40	5 minutes	4:25 p.m.	45	5 minutes
5:45 p.m.	40	5 minutes	5:05 p.m.	40	None
-	-	-	5:45 p.m.	40	None

Figure 4-2: #1 Route North Main Route Change

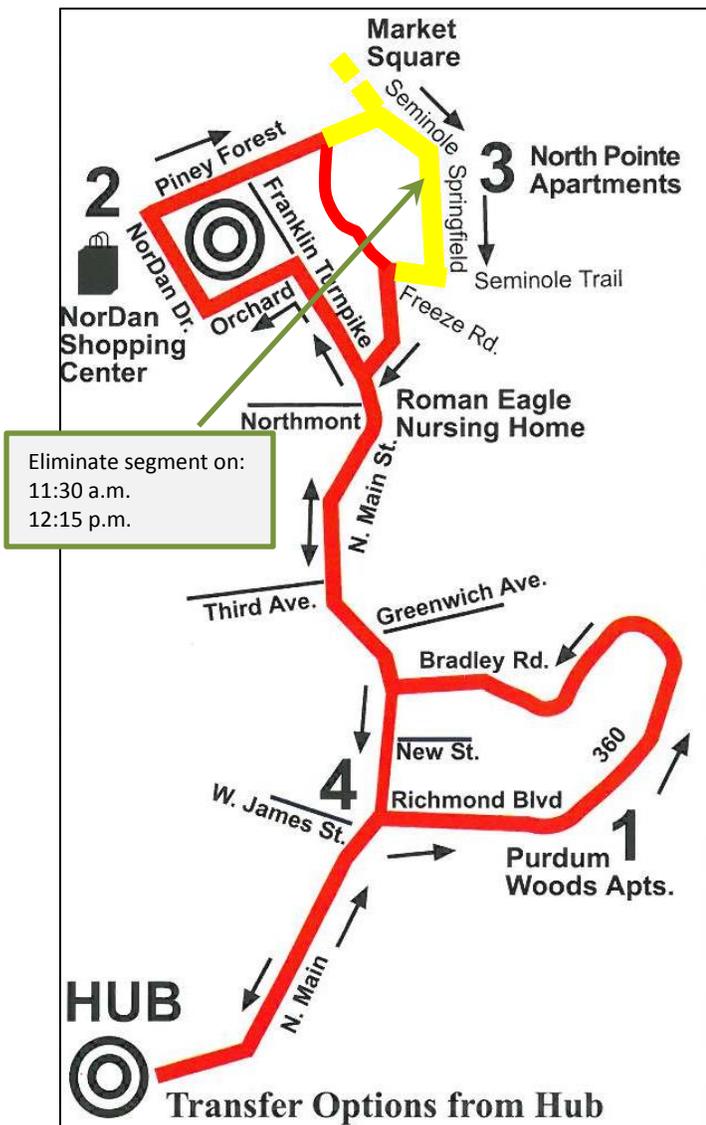
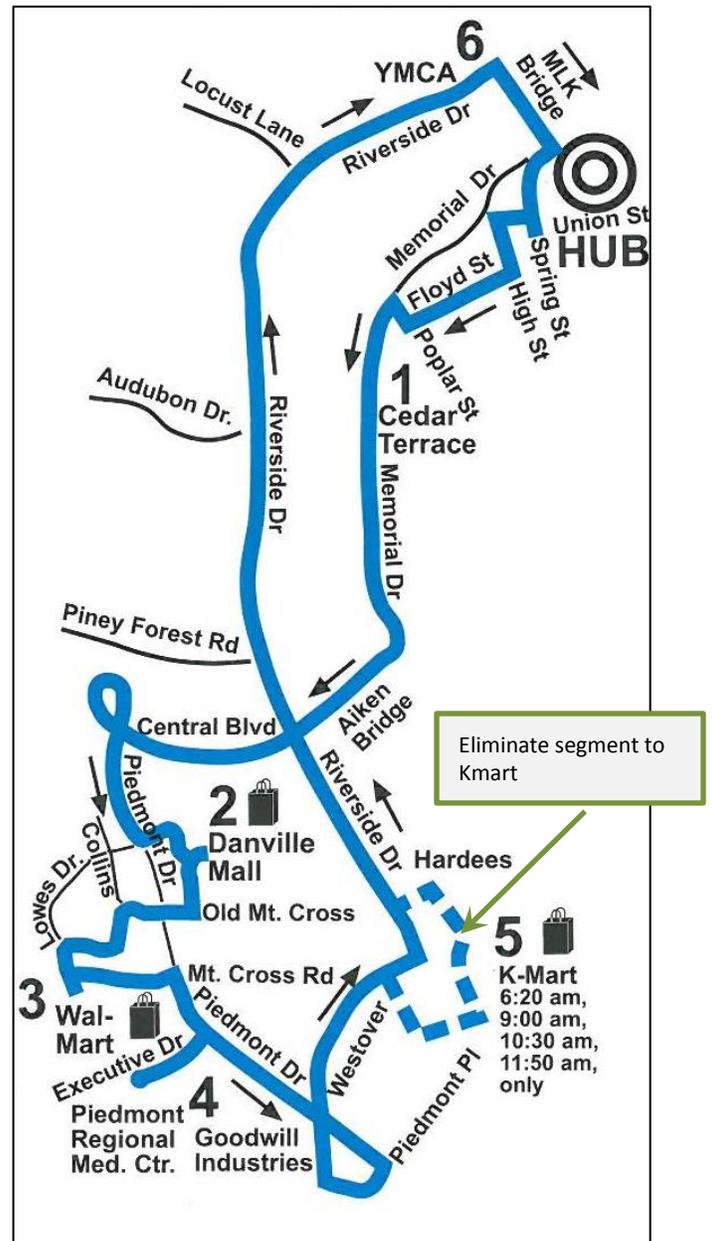


Figure 4-3: #2 Route Riverside Route Change



In addition to increasing the headways and adjusting some of the routes to better reflect the running times throughout the day, the published bus stop arrival times need to be further reviewed in detail to determine if the timing points need to be modified so that there is adequate time for buses' travel between the published stops.

Advantages

- Provides more accurate bus stop times for riders
- Allows drivers to meet time points

- Reduces pressure on drivers to rush to stay on schedule
- Reduces the need to hold vehicles at the downtown HUB when one bus is running late
- Increases the reliability of the fixed routes
- Improves the quality of service and ride for passengers

Disadvantages

- Could impact some morning commute times for riders (Option 1)
- May need to adjust headways in the morning in the future (Option 2)
- Reduces the number of runs per day
- Reduces frequency of service
- Requires re-printing of brochure

Cost

This service alternative would not have an impact on operating cost. The cost implication of this service alternative is limited to republishing the brochure which is estimated to be approximately \$5,000.

In some situations increasing the headways may have a negative impact on ridership and farebox revenue. However, this would not be the case in Danville. Adjusting the timing and increasing the headway by five and ten minutes will more accurately reflect the current travel time throughout the day and make the service more reliable for riders.

Alternative 2: Sell Bus Tokens from the Downtown Transit HUB

Danville Transit provides an option to purchase a role of 10 tokens which would give the rider a 10% cost savings over paying cash. Currently, riders can only purchase the role of tokens from the drivers as they board the bus.

This alternative recommends selling the bus tokens out of the downtown Transit HUB facility. The selling of tokens on the buses will be phased out and discontinued. The tokens will be available to purchase between 10:00 a.m. and 3:00 p.m. at the downtown HUB Monday through Saturday.

The downtown HUB facility features 6 bus bays, outdoor shelters, an indoor waiting area, restrooms, vending machines and an information office. Greyhound Lines, Inc. operates a ticket and package office in the facility. The information office has a locked door and glass window that allow interaction with customers. The two operations supervisors are generally stationed in the information office and monitor the operations of the buses during the fixed route service span.



HUB Information Office and Waiting Area

Discontinuing the selling of tokens on the buses will allow passengers to board the vehicles more efficiently and reduce the dwelling time at stops.

Advantages

- Boarding process will be faster
- Reduced dwelling time at stops
- Reduced running time for buses

Disadvantages

- Riders will have only one location where tokens are sold
- May need to hire a person to staff the window

Cost

It may be feasible for the operations supervisor at the downtown HUB to facilitate the purchase of the bus tokens. If a person is needed to sell the tokens at the downtown HUB from 10:00 a.m. to 3:00 p.m., the cost is approximately \$15,600 annually.

Alternative 3: Transition Reserve-a-Ride Riders to Fixed-Routes

Demand response transportation service is one of the most resource intensive and expensive modes to operate. This mode of transportation helps to provide service in areas and during times of the day when there are few to no options. As described in the Chapter 3, there has been significant growth for the demand response service. Although much of this growth has been with the demand response senior transportation, it is anticipated that the Reserve-a-Ride service will experience an 8.5% growth in FY2015. The goal of this alternative (Alternative 3) and Alternative 11 (mentioned later in this chapter) is to mitigate this growth and make the demand response service more manageable and sustainable.

The general public demand response analysis in Chapter 3 determined that on approximately 40% of the one-way trips that occurred between 6:00 a.m. and 6:00 p.m., the origin and destination of those one-way trips were within a quarter mile of a fixed route. Transitioning these demand response riders to the fixed route service will help to reduce pressure on the demand response service. Reserve-a-Ride trips outside the quarter mile transit shed would not be affected.

This alternative consists of two phases:

- Phase I - The first phase is for Danville Transit to actively market their fixed route service to the Reserve-a-Ride riders. This marketing should be targeted specifically to riders where their trip origin and destination is along a fixed route. As riders call to request a ride, the reservationist would inform the caller about the fixed route option and encourage the caller to use the fixed route. Additional marketing could include targeted mailing of fixed route information to these individuals.
- Phase II – Develop a policy that requires Reserve-a-Ride trips that are within a quarter mile of a fixed route during the fixed route service hours to use the fixed route service. After 6:00 p.m. when the fixed routes are not in service, there will be no restrictions on Reserve-a-Ride trips.

Reserve-a-Ride riders who cannot access the fixed route due to a mobility limitation and are certified as ADA can continue to ride the demand response service by using the Handivan Service, Danville Transit's complementary ADA paratransit service.

Advantages

- Alleviates some pressure on demand response service
- Increases productivity on fixed route service
- Eliminates competing services

Disadvantages

- The reservation process may take a little longer initially.
- Riders with trip origins and destinations along the fixed route will need to be identified.
- Will result in overall net farebox revenue since the fare for the Reserve-a-Ride is higher than the fixed route fare.
- Policy may encounter resistance from Reserve-a-Ride riders.

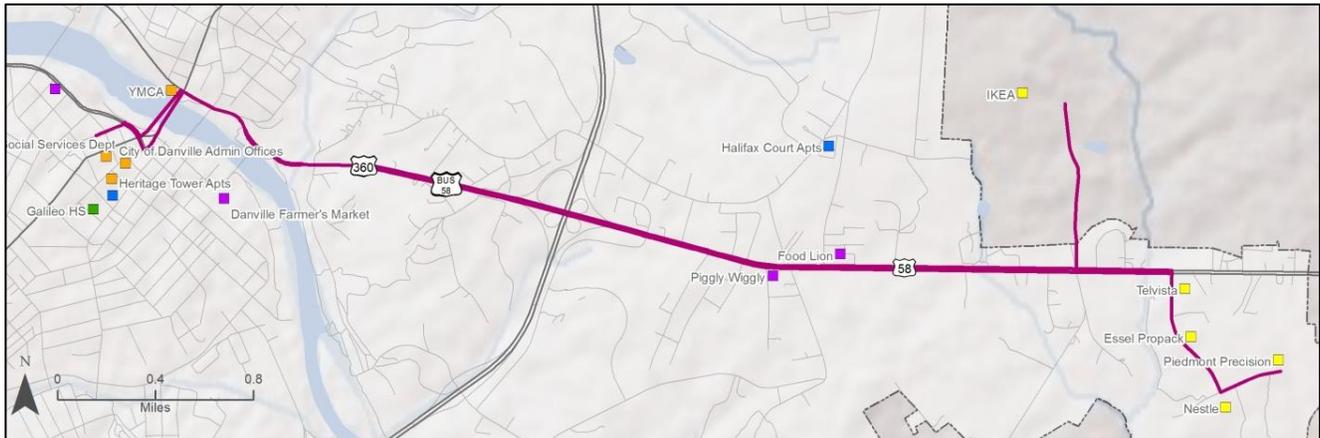
Cost

There will be no direct expenses associated with this alternative, however, there could be some farebox revenue implications. For every one-way trip that is transitioned from the Reserve-a-Ride to the fixed route, there would be a net decrease of \$3 in farebox revenue. Thus if 10% of the Reserve-a-Ride trips that are currently within the fixed route quarter mile transit shed were to be provided on the fixed route, there would be an overall net decrease in farebox revenue of approximately \$2,000 annually. If a policy was implemented and more Reserve-a-Ride trips (90%) are transitioned to the fixed route, there would be an overall net farebox revenue decrease of approximately \$18,000 annually.

Alternative 4: Expand Service on Route #6 Glenwood

The Glenwood Route currently operates along U.S. Route 58 East with service to Cain Creek Shopping Center and locations along Halifax Road upon request. There are two roundtrips per day, a trip in the morning at 6:40 a.m. and a trip in the afternoon at 3:40 p.m. The total number of revenue hours operated annually is approximately 197 hours. As illustrated in Chapter 3, the Glenwood Route has the lowest ridership with 143 one-way trips in FY14, averaging less than a trip per hour.

The goal of this alternative is to support economic development on the east side of the city and improve the productivity of the Glenwood Route. This alternative proposes to extend the Glenwood Route to the Airside Industrial Park and Cane Creek Center, as illustrated in Figure 4-4. In addition, the route will operate three roundtrips per day. The proposed schedule for the expanded Glenwood Route is based on Alternative 1's revised schedule. Runs will be at 6:40 a.m., 10:25 a.m., and 2:35 p.m. and would connect with the other routes at the downtown HUB.

Figure 4-4: Proposed #6 Route Glenwood

Advantages

- Provides connections to some of the major employers on the east side of the city
- May help increase ridership and productivity on the Glenwood Route

Disadvantages

- Does not meet all the different employer shift times
- Increase in operating cost on the Glenwood Route

Expenses and Funding Sources

Increasing the number of revenue hours will result in an increase in the overall operating cost of the route. Operating three roundtrips per day during the weekdays will cost approximately \$16,900 annually to operate. This estimate reflects the operation (driver, maintenance, fuel) of the service and does not include any fixed costs such as administration.

Alternative 5: Implement Scheduled Evening Service

One of the top three suggested service improvements that fixed route riders cited on the rider survey was to provide evening service. In addition, input from some of the stakeholders noted that evening service is needed to provide a way for workers to get home. Many 2nd and 3rd shift employees can get to work but have a difficult time finding transportation to get home in the evening.

Providing scheduled service in the evening allows workers to get home at the end of their shift without having to make a reservation. Scheduled service means that a bus will be at a specific location at a specific time to pick up riders and transport them to their final destination. Unlike a fixed route service, a scheduled service would have no prescribed route. This gives the transit system flexibility in how to utilize the vehicles that are already out in service in the evenings. The scheduled service would be

operated using the Reserve-a-Ride vehicles which are already in service during the evenings. Fares would be consistent with the current Reserve-a-Ride fare.

This alternative proposes establishing scheduled evening service at Telvista, Walmart, Danville Mall, and Danville Community College. Telvista anticipates increasing the number of employees to 600 by August 2015. Providing at least two scheduled pick-up times in the evening would help to meet some of the company's employee transportation needs at the end of their shifts.

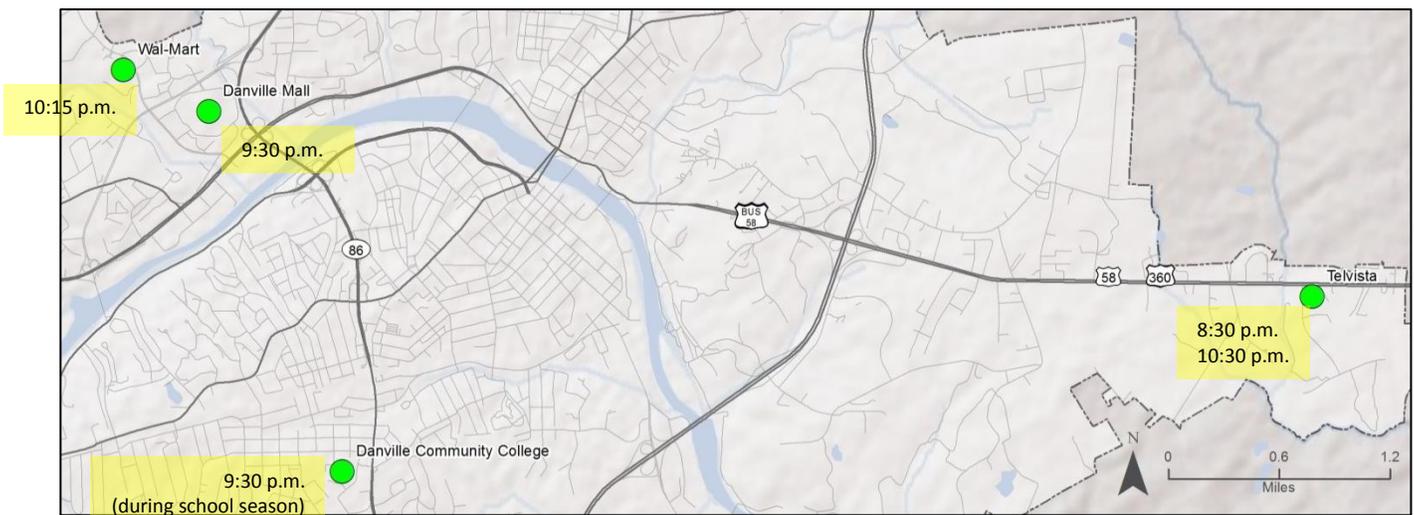
One of Walmart's largest shifts is from 1:00 p.m. to 10:00 p.m. Establishing a scheduled pick-up at Walmart at the end of the shift will give employees a transportation option to get home.

Danville Mall closes at 9:00 p.m. Monday through Saturday. During the day there are two routes that serve the mall but in the evening there are no transit options other than the Reserve-a-Ride. Just like the scheduled stop at Walmart, a scheduled pick-up after the mall closes will provide workers in the mall working the evening shift with a transportation option.

Danville Community College (DCC) expressed a need for transportation service for students attending their evening classes. According to DCC these evening classes end at 9:00 p.m.

Figure 4-5 provides an illustration the proposed scheduled times at these locations.

Figure 4-5: Proposed Scheduled Service



Advantages

- Does not require advance reservation
- Promotes economic development
- Provides scheduled service for evening students and 2nd and 3rd shift employees needing transportation after work
- Does not require additional resources

Disadvantages

- Will not meet the needs of other shift times
- Will require educating students and workers of the service
- Employers and DCC will need to market the service
- Scheduled stops will need to be incorporated into the driver manifest

Cost

The scheduled evening service will be incorporated into the Reserve-a-Ride service in the evenings and is not anticipated to incur any additional operating expense.

Alternative 6: Improved Bus Stop Amenities

Some of Danville Transit's busiest bus stops currently have passenger amenities that make it more comfortable for riders while waiting for the bus. Passenger shelters, providing cover from the weather, are available at 12 locations within the city:

- Downtown HUB
- NorDan
- Goodwill
- God's Storehouse
- Danville Pittsylvania Community Services
- Ballou Park Shopping Center
- Social Security Office
- Piedmont Regional Medical Center
- Piney Forest Shopping Center
- W Main @ Edgewood Dr
- Blaine St @ New Hope Way
- The Crossing

This alternative recommends that Danville Transit provide bus stop amenities such as passenger shelters, benches, bicycle racks and trash receptacles at other busy stops. Bus stops that do not currently have any passenger amenities but should be considered for amenities are:

- Walmart
- Danville Mall
- Richmond Blvd @ Wrenn Dr
- 769 Memorial Dr (across from God's Storehouse)
- Riverside Dr @ Taco Bell
- N. Main St @ W James St
- Riverside Dr @ Hardees
- Health Department
- Westside Dr @ Riverview Ave
- Lockett Circle

- Piney Forest Rd @ Maplewood Ave
- North Pointe Apartments
- Bradley Rd @ Carver Dr
- N. Main St @ Church St
- Southampton Ave @ Chatelaine Ln
- Main St @ Chambers St

The development of the list of bus stop locations to be considered for passenger amenity was based on the level of activity at the stop. It does not reflect whether or not it is physically feasible to install the different types of passenger amenities at the location. The implementation of passenger amenities at the stop should take into consideration if there is enough right-of-way and adequate sidewalk and curb ramp connections.



Example of Bus Stop with Passenger Amenities

It should be noted under ADA that if bus stops are improved they must meet the Americans with Disabilities Act Accessibility Guidelines (ADAAG). Section 10 – Transportation Facilities of the ADAAG provides the requirements to ensure ADA compliance. The ADA shelters must allow a wheelchair user to enter and have a minimum clear floor area of 30 inches by 48 inches, entirely within the perimeter of the shelter. A bus stop pad (landing pad) with a minimum clear length of 96 inches (measured perpendicular to the edge of the roadway/curb) and a minimum clear width of 60 inches (measured parallel to the roadway) must be installed to allow safe deployment of a wheelchair lift and boarding of a wheelchair rider.

Advantages

- Provides comfort and convenience for riders waiting at the stop for the bus
- Improves overall image of the transit system

Disadvantages

- Requires capital cost for the purchase and installation of amenities
- Requires some level of maintenance over time
- Some stops may not have enough space or right-of-way for a passenger shelter

Cost

Costs to improve bus stops with passenger amenities can range from \$200 to \$15,000 depending on the level and type of improvements. In some instances it can exceed \$15,000 if extensive engineering is required to install the amenities and comply with the ADA. Table 4-2 below provides cost estimates for potential stop improvements:

Table 4-2: Estimated Improvement Cost

Improvement	Unit Cost
Shelter (installed)	\$5,000 - \$10,000
Bench (installed)	\$1,500 - \$2,500
4' Wide Sidewalk	\$17.50 - \$25.00 per linear feet
Bicycle Racks	\$200 - \$500
Curb Ramps	\$2,000 - \$2,500

Alternative 7: Consolidate #1 Route North Main and #4 Route North Main Schedules

Essentially the two routes are the same. The two routes currently provide 40 minute headways. Examining the individual schedules for the two routes, it appears that they are on 80 minute headways. By combining the two schedules into one schedule it will make it easier for riders to determine the various times without needing to refer to different schedule. Figure 4-6 provides an example of the consolidated schedule.

Advantages

- Makes the route schedules easier to read and understand
- Better illustrates the frequency of the routes

Disadvantages

- Need to revise existing brochures

Cost

No operational cost is associated with this alternative. The only cost is the direct cost for re-producing the route and schedule brochure.

Figure 4-6: #1 and #4 North Main Consolidated Schedule

#1 North Main					#4 North Main				
HUB	Purdum Woods	NorDan	North Pointe	N Main & W James	HUB	Purdum Woods	NorDan	North Pointe	N Main & W James
-	6:07	6:18	6:23	6:30	6:40	6:47	6:58	7:03	7:10
7:20	7:27	7:38	7:43	7:50	8:00	8:07	8:18	8:23	8:30
8:40	8:47	8:58	9:03	9:10	9:20	9:27	9:38	9:43	9:50
10:10	10:17	10:28	10:33	10:40	10:50	10:57	11:08	11:13	11:20
11:30	11:37	11:48	11:53	12:00	12:10	12:17	12:28	12:33	12:40
12:50	12:57	1:08	1:13	1:20	1:30	1:37	1:48	1:53	2:00
2:10	2:17	2:28	2:33	2:40	3:00	3:07	3:18	3:23	3:30
3:40	3:47	3:58	4:03	4:10	4:20	4:27	4:38	4:43	4:50
5:00	5:07	5:18	5:23	5:30	5:40	5:47	5:53	6:00	-

North Main (consolidated)				
HUB	Purdum Woods	NorDan	North Pointe	N Main & W James
-	6:07	6:18	6:23	6:30
6:40	6:47	6:58	7:03	7:10
7:20	7:27	7:38	7:43	7:50
8:00	8:07	8:18	8:23	8:30
8:40	8:47	8:58	9:03	9:10
9:20	9:27	9:38	9:43	9:50
10:10	10:17	10:28	10:33	10:40
10:50	10:57	11:08	11:13	11:20
11:30	11:37	11:48	11:53	12:00
12:10	12:17	12:28	12:33	12:40
12:50	12:57	1:08	1:13	1:20
1:30	1:37	1:48	1:53	2:00
2:10	2:17	2:28	2:33	2:40
3:00	3:07	3:18	3:23	3:30
3:40	3:47	3:58	4:03	4:10
4:20	4:27	4:38	4:43	4:50
5:00	5:07	5:18	5:23	5:30
5:40	5:47	5:53	6:00	-

Alternative 8: Consolidate Schedules for #3 Route Edgewood-Stokesland and #5 Route Edgewood Stokesland

As with #1 Route North Main and #4 Route North Main these two routes are the same. The two routes currently provide 40 minute headways but this may not be clear on the individual schedules. Combining the two schedules into one schedule will make it easier for riders to determine the various times without needing to refer to different schedule. Figure 4-7 provides an example of the consolidated schedule.

Figure 4-7: #3 and #5 Edgewood-Stokesland Schedule

#3 Edgewood-Stokesland					#5 Edgewood-Stokesland				
HUB	Ballou Park	Carter's Store	Edge-wood	Hospital	HUB	Ballou Park	Carter's Store	Edge-wood	Hospital
6:40	6:48	7:00	7:03	7:10	-	6:08	6:20	6:23	6:30
8:00	8:08	8:20	8:23	8:30	7:20	7:28	7:40	7:43	7:50
9:20	9:28	9:40	9:43	9:50	8:40	8:48	9:00	9:03	9:10
10:50	10:58	11:10	11:13	11:20	10:10	10:18	10:30	10:33	10:40
12:10	12:18	-	12:33	12:40	11:30	11:38	11:50	11:53	12:00
1:30	1:38	1:50	1:53	2:00	12:50	12:58	1:10	1:13	1:20
3:00	3:08	3:20	3:23	3:30	2:10	2:18	2:30	2:33	2:40
4:20	4:28	4:40	4:43	4:50	3:40	3:48	4:00	4:03	4:10
5:40	5:48	6:00	-	-	5:00	5:08	5:20	5:23	5:30

Edgewood-Stokesland (consolidated)				
HUB	Ballou Park	Carter's Store	Edge-wood	Hospital
-	6:08	6:20	6:23	6:30
6:40	6:48	7:00	7:03	7:10
7:20	7:28	7:40	7:43	7:50
8:00	8:08	8:20	8:23	8:30
8:40	8:48	9:00	9:03	9:10
9:20	9:28	9:40	9:43	9:50
10:10	10:18	10:30	10:33	10:40
10:50	10:58	11:10	11:13	11:20
11:30	11:38	11:50	11:53	12:00
12:10	12:18	-	12:33	12:40
12:50	12:58	1:10	1:13	1:20
1:30	1:38	1:50	1:53	2:00
2:10	2:18	2:30	2:33	2:40
3:00	3:08	3:20	3:23	3:30
3:40	3:48	4:00	4:03	4:10
4:20	4:28	4:40	4:43	4:50
5:00	5:08	5:20	5:23	5:30
5:40	5:48	6:00	-	-

Advantages

- Makes the route schedules easier to read and understand
- Better illustrates the frequency of the routes

Disadvantages

- Need to revise existing brochures

Cost

No operational cost is associated with this alternative. The only cost is the direct cost of re-producing the route and schedule brochure.

Alternative 9: Eliminate Duplicate Route Numbers

To identify which routes are interlined together, some of the routes are assigned the same route numbers. It is proposed that each route would get its own route number to make it easier to understand and communicate. The list of the routes with the same route numbers are:

- #1 North Main
- #1 Kemper Rd-DCC
- #2 Riverside
- #2 Third Ave – NorDan
- #3 Danville Estates – NorDan
- #3 Edgewood-Stokesland
- #4 Health Center
- #4 North Main
- #5 Edgewood-Stokesland
- #5 Riverside

If the schedules for routes #1 North Main, #4 North Main, #3 Edgewood-Stokesland, and #5 Edgewood-Stokesland are consolidated as proposed the routes could be numbered as follows:

- #1 North Main
- #2 Riverside
- #3 Edgewood-Stokesland
- #4 Health Center
- #5 Riverside
- #6 Glenwood
- #7 Kemper Rd-DCC
- #8 Third Ave – NorDan
- #9 Danville Estates – NorDan

Advantages

- Makes the route schedules easier to read and understand

Disadvantages

- Need to revise existing brochures

Cost

No operational cost is associated with this alternative. The only cost is the direct cost for re-producing the route and schedule brochure.

Alternative 10: Install Bicycle Racks on Buses

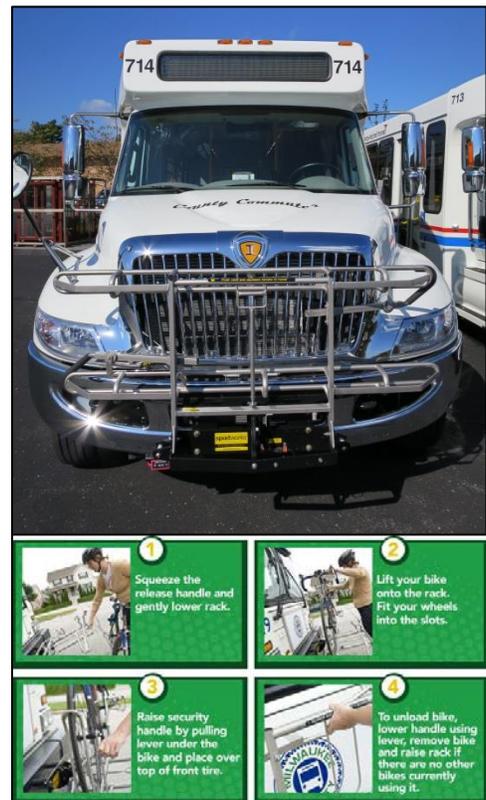
Bicycle racks on transit buses help to extend the reach of the fixed route service because a person's destination may be up to or over a mile from their stop. In transit, this is often referred to as the last mile problem. By providing bicycle racks on buses, a person can still utilize the fixed route service even if their final destination is at a great distance. According to the Return on Investment Analysis of Bikes-on-Bus Programs by the National Center for Transit Research, approximately 60% of those surveyed that used bicycle on buses to commute to work biked over a mile to access transit. According to this report, bicycle on bus users are generally males earning less than \$30,000 a year.

This alternative proposes that bicycle racks be installed on all fixed route buses. Bicycle racks are available in different sizes. The most common size is a bicycle rack that can accommodate two bicycles at a time. There are larger bicycle racks that can accommodate up to three bicycles. For Danville Transit, the two bicycle rack configuration will be adequate.

One consideration in implementing bicycle racks on the fixed route buses is the time it will take to load and unload the bicycles. Generally it can take a person up to half minute to load or unload a bicycle. With a two bicycle rack configuration the time impact will not be as great and through increasing the headways and schedule in Alternative 1 it will make using bicycle racks more feasible.

Advantages

- Makes it more convenient for riders
- Increases the overall usability of the system
- Provides access to destinations that are not in proximity to a bus stop
- Increased mobility



Example of Bicycle Rack on Front of Bus

- Improved transit agency image

Disadvantages

- Training will be needed bus operators
- Need to develop how-to-use guide for users
- Possible route delay and increased dwell time
- Need to market the availability of bicycle racks on buses
- If bike rack is full rider must wait for the next bus

Cost

The direct cost for purchasing bicycle racks to be installed on buses general will cost between \$500 and \$800 per rack. Other direct cost will include approximately \$4,000 to market the program and “how to” materials.

Alternative 11: Establish Schedule for Senior Transportation Trips

As described in Chapter 3, Danville Transit operates the senior transportation service for the city’s Parks and Recreation Department. The transportation program is funded by the Southern Area Agency on Aging. Since Danville Transit started operating the service in FY2013 the ridership has increased approximately 75%. As a result the mobility for seniors has improved significantly and so has the cost to operate the service.

This growth in demand is not sustainable and measures need to be instituted to make the service more manageable and sustainable. The service is currently available Monday through Saturday from 4:00 a.m. to 5:00 p.m.

It is proposed that the senior transportation service be re-structured so that medical and shopping/recreational trips are provided on scheduled days. For example, medical trips would be available on three out of the six days per week preferably on days when the Reserve-a-Ride service has the greatest capacity. This will allow the demand response trips to be more evenly distributed and manageable. On the other three days shopping/recreation trips will be provided.

If a medical trip or shopping/recreation trip is needed on a day that is not a scheduled, seniors have the option to use the Reserve-a-Ride service. The fare on the Reserve-a-Ride is \$4.00 for a one-way trip. So a roundtrip would cost a total of \$8.

Advantages

- Improves the manageability of the overall demand response service redistributing the Senior Transportation trips throughout the week.
- Makes Senior Transportation trips easier to group.
- Improves the sustainability of the Senior Transportation service.

Disadvantages

- Seniors may perceive it as a reduction in service.
- Potential political resistance.

Cost

There are no operational costs associated with this alternative. Outreach activities will have to be undertaken to notify the seniors and senior community of the change.

Alternative 12: Pave School Bus Parking Lot's Access Area

Danville Transit's garage is shared with the Danville City Public School's school buses. The school buses are stored in a side lot which in recent years has fallen into a state of disrepair. To improve access to the maintenance facility for both transit and school buses this alternative proposes paving the access area of the school bus parking. As seen in the aerial image the area to be paved extends from the entrance of the school bus parking lot to the rear of the maintenance facility.



Bus Access to Maintenance Garage

Advantages

- Improves access for transit vehicles to the maintenance facility.
- Mutually benefits school bus operations.

Disadvantages

- Construction could interfere with transit operations on the short term.

Cost

The estimated cost for paving the access area is \$158,000. Danville Transit must solicit competitive estimates for performing the work. This capital project will be eligible for funding under the Federal Section 5311 Capital Funding and will require the prescribed state and local match.

INSTITUTIONAL ALTERNATIVES

Alternative 13: Procure Alternative Fuel Vehicles



Specifically propane or liquefied petroleum gas (LPG). LPG is considered an alternative fuel under the Energy Policy Act of 1992 and 2005. LPG vehicles are commonly used in fleet applications and perform comparably to conventionally fueled vehicles in power, acceleration, speed, and range. Propane features a high octane rating (104 to 112 compared with 87 to 92 for gasoline) which combined with low carbon and oil contamination may result in longer engine life and potentially lower maintenance costs.¹ The popularity of LPG vehicles is growing,

with a large number of school bus fleets opting for the fuel and various transit systems transitioning to the fuel.

One of the top reasons for transitioning to propane fueled buses is lower maintenance costs. However, mechanics must be trained to understand the fuel and the procedures required to safely work on propane buses. It is highly recommended that maintenance facilities are equipped with ventilation systems that are capable of removing propane gas from ground level and flammable gas detectors that can detect concentrations of propane before the vapors reach flammable levels.² However, these risks can be minimized by performing routine maintenance activities outdoors.

On April 21st, 2015, the Danville City Council approved the procurement of a propane fueling station through the City's Public Works Department. The station is projected to cost the City approximately \$35,000. Furthermore, Danville Transit has requested and been granted permission to procure LPG fueled vehicles from DRPT.

By converting to LPG technology, Danville Transit could potentially see above average savings in maintenance costs and improvements in vehicle downtime. This is largely due to the federal environmental regulations that have led to the introduction of diesel particulate filters on medium and heavy duty diesel engines. The diesel contaminates collected in the filter are typically cleared when the vehicle reaches high speeds in excess of 50-60 miles per hour, but due to the nature of transit service in Danville, vehicles rarely reach 40 miles per hour. This issue results in extended periods of downtime when vehicles must be serviced by diesel particulate matter cleaners which are located in Lynchburg, Roanoke, and Greensboro, NC.

Advantages

- Reduced maintenance costs and longer engine life.
- LPG fuel is available domestically.
- Long proven history in transit vehicles, school buses, and other fleet applications.

¹ U.S. Department of Energy, Energy Efficiency and Renewable Energy, Alternative Fuels Data Center. www.afdc.energy.gov/vehicles/propane.html

² Transportation Research Board, TCRP Report 146 – Guidebook for Evaluating Fuel Choices for Post-2010 Transit Bus Procurements, www.tcrponline.org/PDFDocuments/TCRP_RPT_146.pdf

- Lower emissions.

Disadvantages

- LPG fuel prices are subject to variability.
- Specialized safety, maintenance, and disposal measures.

Cost

Danville Transit has solicited price quotes for LPG fueled vehicles from a local vendor which also currently supplies vehicles for Danville Transit. The approximate cost for a 20 passenger vehicle is \$100,000 and 28 passenger vehicles have been quoted at \$130,000. While these initial capital costs are slightly higher than diesel fueled vehicles, savings should be realized in maintenance costs and reduced downtime. The LPG vehicles will be eligible for Federal Section 5311 Capital Funds and will require the prescribed state and local funding match.

Alternative 14: Increase Administrative Staffing

Currently the reservation, scheduling, and dispatching is handled through a patch work of administrative specialists, transit supervisors, and an account clerk at either the garage of the HUB depending on the time of the day. Two separate phone lines, one at the garage and one at the HUB, are used to take reservations and provide customer service throughout the day. These phone lines are capable of being directly transferred to each other if one location does not have a staff member to answer the phone. Table 4-3 provides the current administrative staff levels at both the garage and the HUB throughout the typical weekday.

During the stakeholder interviews, one of the chief complaints was receiving a busy signal when calling to arrange transportation. As seen in Table 4-3 there are multiple periods during the day when only one staff member is answering telephone calls at either the garage or the HUB. This leads to the issue of busy phone lines. According to Danville Transit the call volume for reserving and scheduling demand response trips is highest from approximately 8:30 a.m. to 5:30 p.m.

It is recommended that Danville Transit adds an additional administrative staff person to assist with reservations, scheduling, and dispatching. An additional staff member will fill in the current staffing gaps. For example, a new staff person could be stationed at the HUB from 9:30 a.m. to 12:30 p.m. to assist the morning supervisor and provide a back-up for incoming phone calls. After 12:30 p.m. this staff member could transition from the HUB to the garage to assist the Senior Account Clerk who is solely responsible for answering questions and taking trip requests from 12:30 p.m. to 4:30 p.m.

Table 3: Typical Administrative Staffing Levels

Time Period	Administrative Staff	
	Garage	HUB
3:40 a.m. to 8:30 a.m.	1	0
8:30 a.m. to 9:30 a.m.	3	0
9:30 a.m. to 12:30 p.m.	2	1
12:30 p.m. to 4:30 p.m.	1	2
4:30 p.m. to 5:30 p.m.	0	2
5:30 p.m. to 7:30 p.m.	1	0

Advantages

- Improves reservations, scheduling, and dispatching.

Disadvantages

- Extra administrative expense.

Cost

Hiring another administrative staff person would require approximately \$25,000 annually while hiring a full-time employee would cost between \$30,000 and \$35,000 annually.

Alternative 15: Add Additional Phone Line

As described in Alternative 13 there is currently one phone line at the garage and one phone line at the Transit Hub. During the busiest times of the day when there are increased phone volume, callers are finding it difficult to reach a reservationist.

This alternative proposes adding an additional phone line at the garage to handle the increased call volume and make it easier for callers to reach a reservationist. Installing this phone line will have to be coordinated with Alternative 13, the hiring of another administrative staff person. Otherwise, there would not be adequate resources to handle the incoming calls.

Advantages

- Reduces the number of busy signals for callers.
- Improves overall customer service.

Disadvantages

- Requires additional administrative staff to handle the additional calls.

Cost

The cost for the additional phone line is nominal. The cost would be the incurred through the hiring of an administrative person as described in Alternative 13.

Alternative 16: Improve Maintenance Operations

One of the major overarching issues is not having an adequate number of vehicles each day to sustain and support service operations. On a typical service day the number of vehicles required during peak service is 13. Danville Transit has had up to seven vehicles at a single time that were out of service and had to borrow vehicles from other agencies and organizations to ensure no disruption in service. Table 4 provides a four month sample in FY14 that documents vehicles that were out of service.

Generally for transit systems with fewer than 25 buses the ratio of vehicle mechanics per 1,000 vehicle revenue hours range from .03 to .19 with an average of .10³. Applying this metric to Danville Transit's vehicle revenue hours of 37,577 in FY14 the transit system should have at least 1 mechanic. Currently the motor pool does provide one mechanic to help with the maintenance of the buses. However, the schedule of the motor pool mechanic does not always provide the flexibility a transit agency typically needs in maintaining their fleet. The majority of transit vehicles are in service during the day leaving the evenings and weekends when maintenance can occur.

Below are some possible considerations to address this maintenance issue:

- Danville Transit hires a part-time/full time mechanic that is under mass transit. This may prove to be a challenge institutionally because currently there are mechanic vacancies in the motor pool. In addition, the financial impact of a full-time mechanic would be an additional \$40,000 annually. The shortage in Motor Pool mechanics may prove difficult for Danville Transit to obtain additional maintenance labor.
- Public works provides more flexibility in the mechanic's schedule and allow Danville Transit to adjust the mechanic's schedule to be more in line with the systems maintenance needs. Current schedules may be agreed upon between the mechanic and the motor pool and therefore modify the mechanic schedule may not be viable.
- Outsource some of the maintenance needs to local vendors. Recently Motor Pool has allowed preventive maintenance inspections to be conducted by a local vendor. Outsourcing additional maintenance needs to local vendors may help with the Motor Pool shortage in staff and alleviate some of the burden on the Motor Pool maintenance provided to the transit system. The financial impact will depend on how much of the maintenance is needs are outsourced. The

³ National Center for Transit

combination of completing some of the maintenance repairs internally as well as to local private vendors it is estimated to cost \$20,000.

Figure 4-8: Vehicle Down Time

Vehicle No	Vehicle Down Time (2014)			
	July	August	September	October
729	0%	0%	0%	0%
730*	0%	55%	100%	100%
731	0%	0%	3%	0%
732	0%	0%	0%	10%
733	0%	45%	0%	0%
734	0%	39%	100%	26%
735	0%	0%	13%	0%
736	77%	6%	3%	0%
737	0%	0%	0%	0%
738	42%	0%	7%	26%
739	55%	26%	53%	74%
740	0%	0%	13%	0%
741	0%	42%	0%	13%
742	48%	90%	57%	58%
743	0%	77%	90%	52%
744	29%	0%	0%	0%
745	3%	0%	10%	0%
746	0%	0%	20%	3%
748	0%	0%	0%	0%
749	3%	0%	0%	16%
750	39%	0%	0%	19%
Total	12%	18%	22%	19%
# of Vehicles out of Service	7	8	12	11
# of Vehicles out of Service at Same Time	4	7	8	8

* Vehicle 730 was totaled in an accident in August
Source: Danville Transit

Advantages

- Allows Danville Transit greater control over their maintenance needs.
- Vehicle maintenance needs can be addressed more timely.
- Reduced possibility for service interruptions.

Disadvantages

- Requires approval from Motor Pool.
- May result in increased maintenance budget.

Cost

Obtaining additional maintenance labor can cost up to \$20,000 for part-time mechanic and \$40,000 for full-time mechanic. Outsourcing some maintenance repairs will also impact the budget by about \$20,000.

CHAPTER SUMMARY

Table 4-9 provides a summary of the service alternatives that have been proposed.

Table 4-9: Alternative Summary

Project	Purpose/Description	Annual Operating Hours	Estimated Annual Operating Cost	Capital Needed	Capital Cost
Service Alternatives					
Alternative #1: Adjust Fixed-Route Schedule	Improvement route and system on-time performance.	-	None	Re-printing of brochures	\$5,000
Alternative #2: Sell Bus Tokens at Transit Hub	Eliminate the need to sell tokens on the buses to reduce dwell time at stops.	1,560	\$15,600	-	-
Alternative #3: Transition Reserve-a-Ride Trips in Transit Shed to Fixed-Route	Reduce duplication in service; Mitigate growth in demand response service.	-	Reduction in overall farebox revenue	None	-
Alternative #4: Expand Service on #6 Route Glenwood	Improve productivity on Glenwood; Connect with employment sites on the east side of the city.	936	\$20,592	None	-
Alternative #5: Evening Scheduled Service	Provide transportation for 2 nd and 3 rd shift workers.	Incorporate within DR service	None	None	-
Alternative #6: Bus Stop Amenities	Improve customer comfort and convenience at the stop.	-	None	Shelters Benches Bike Racks	Depend on what is installed

Project	Purpose/Description	Annual Operating Hours	Estimated Annual Operating Cost	Capital Needed	Capital Cost
Alternative #7: Consolidate Schedule for # 1 and #4 Route North Main	Make schedules easier to read and understand.	-	-	None	-
Alternative #8: Consolidate Schedule for # 3 and # 5 Edgewood-Stokesland	Make schedules easier to read and understand.	-	-	None	-
Alternative #9: Eliminate Duplicate Route Numbers	Make schedules easier to read and understand.	-	-	None	-
Alternative #10: Bicycle Rack on Buses	Extend reach of the fixed routes.	-	-	6 racks	\$ 3,000 - \$4,800
Alternative #11: Establish Schedule for Senior Transportation Trips	Improve management of service and mitigate demand.	-	-	None	-
Alternative #12: Pave Bus Parking Access Area	Improve access to the maintenance facility.	-	-	28,080 sq. ft.	\$158,000
Institutional Alternatives					
Alternative 13: Procure Alternative Fuel Vehicles	Improve on vehicle reliable and reduce maintenance costs.	-	-	Will be part of vehicle replacement plan	\$100,000 - \$130,000 per vehicle
Alternative #14: Increase Administrative Staffing	Assist with reservations, scheduling, and dispatching; fill current staffing gaps.	2,080	\$25,000	None	-
Alternative #15: Add Additional Phone	To accommodate current call volume.	-	-	1 line	\$200
Alternative #16: Improve Maintenance Operations	Ensure vehicles maintenance and repairs are completed in a timely manner and there are adequate number of working vehicles available for service.	-	\$20,000 - \$40,000	None	-

Chapter 5: Operations Plan

INTRODUCTION

The Operations Plan describes the service improvements and expansions that have been recommended for implementation over the TDP's six-year timeframe. These service recommendations address the operating issues and transportation needs identified in Chapter 3. This Operations Plan focuses on service recommendations for which Danville Transit (DT) reasonably anticipates local funding to be available. The operational improvements and service characteristics of expansion projects are described below, while Chapter 6 outlines the capital needs associated with these projects.

SERVICE PROJECTS

This section will detail the specific service projects that DT has chosen to implement, broken down into short, mid and vision projects. While short-term projects are intended to follow a one to two-year timeline and mid-term projects are intended to follow a three to six-year timeline, the vision projects are presented in sequential phases as the implementation year is unknown.

This Operations Plan presents the following projects organized by the timeline of implementation:

Short-Term Projects

The following projects are recommended for implementation in the first two years of the TDP. These projects were identified as short-term to address the more immediate needs of the system.

Adjusting Fixed-Route Schedule Times

This recommendation involves re-timing Danville's fixed route system to improve on-time performance and perceived reliability within the community. Current headways are structured so that each route has service every 40 or 80 minute, while each vehicle is scheduled to "pulse" into the downtown HUB every 40 minutes. The current headways are sustainable in the morning but due to heavy ridership the buses begin to fall behind schedule in the late morning hours and into the afternoon. To avoid excessive dwelling time in the early morning and late afternoon it was decided that headways should be variable based on periods of heavy ridership.

The schedules for all of the fixed routes (except for the Glenwood Route which has two roundtrips per day) should be adjusted based on the new running times in Table 5-1.

Table 5-1: New Route Running Times

Downtown HUB Departure Time	Run Time
6:00 AM	40
6:40 AM	40
7:20 AM	40
8:00 AM	40
8:40 AM	40 (+10 min break)
9:30 AM	40
10:10 AM	40
10:50 AM	40
11:30 AM	45
12:15 PM	45
1:00 PM	50
1:50 PM	50
2:40 PM	50 (+10 min break)
3:40 PM	50
4:25 PM	45
5:05 PM	40
5:45 PM	40

Implementation Activities

Following the presentation of this alternative to the TAC, the members were very supportive. Danville Transit's administration has made this project a top priority and it is expected to implement the schedule change on August 1, 2015. Implementation of the new schedule will require:

- Conduct public outreach activities to notify the riding public of the changes in the fixed route schedule
- Re-design and re-printing the current Route and Schedule Guide
- Market the service changes through posters at the downtown HUB and on-board buses
- Educate the vehicle operators of the new times and instruct operators to inform passengers of the service change

Revise North Main and Riverside Routes

The North Main and Riverside Routes are the two busiest routes in the system. In conjunction with the schedule modification, a small portion of the North Main Route (Seminole Drive and Springfield Drive) will not be served during the 11:30 a.m. run. Additionally, in an effort to improve on-time performance, service on the Riverside Route will not enter the K-Mart parking lot but rather stop at the entrance to the shopping center. There would be little impact on ridership since currently there is little ridership activity at the K-Mart.

Implementation Activities

- Conduct public outreach activities to notify the riding public of the changes in the fixed route schedule
- Re-design and re-printing the current Route and Schedule Guide
- Market the service changes through posters at the downtown HUB and on-board buses
- Educate vehicle operators of the new times and instruct operators to inform passengers of the service change

Expanding Service on Route #6 Glenwood

This recommendation calls for extending the #6 Glenwood Route to the eastside industrial parks' fixed route service to Telvista, Essel Propack, Nestle, Piedmont Precision and IKEA. Figure 5-1 portrays the adjustments to the existing #6 Glenwood Route that aim to improve service coverage between downtown Danville and the eastside industrial parks. The proposed routing, without the deviation, will be 12.1 miles roundtrip and should take approximately 30 minutes to complete. Completing the route with the full deviation will total 14.5 miles roundtrip and should take approximately 35-40 minutes of travel time.

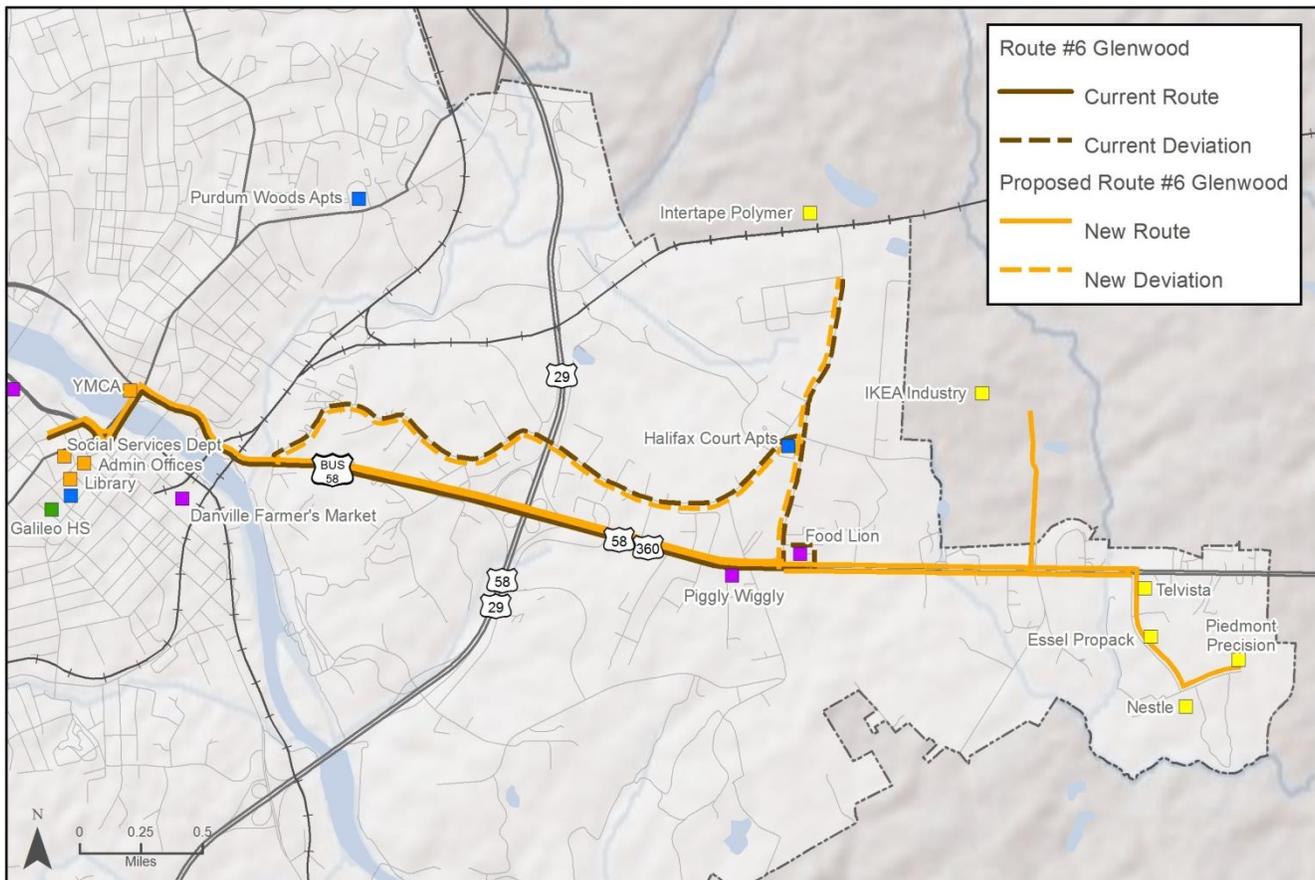
Future considerations for expanding service along the Glenwood Route should take into account additional destinations in close proximity to the current route alignment. Potential future stops may include Danville Community College's Institute for Advanced Learning and Research, Danville Regional Airport, and other future developments.

Implementation Activities

- Re-design and re-print the current Route and Schedule Guide
- Market the new route through posters at the downtown HUB and on-board buses
- Market the new route to the newly served major employers in the eastside industrial parks; including Essel Propeck, IKEA Industry (Swedewood), Nestle, Piedmont Precision and Telvista. Marketing activities may include flyers, posters or in-house announcements.

- Develop relationships with human resource departments or managers of major employers to monitor shift times and changes in transit needs
- Monitor ridership activity and intermittently survey passengers to determine if additional frequency is required

Figure 5-1: #6 Route Glenwood Route



Implement Scheduled Evening Service

Providing evening scheduled service will allow shift workers and night students an opportunity to use transit for their trip home. Rather than extending fixed route service into the evening, which would require significant additional operating funds, this recommendation suggests designating pick-up locations in strategic areas, as shown in Table 5-2, which would be served at strategic times by Reserve-A-Ride vehicles already providing service. The advantage of this schedule service by Reserve-a-Ride is that no reservations would be required. Once the riders are on-board the vehicle, they would be transported to their destination through the most effective routing possible given the destinations of other passengers already on the vehicle. Possible pick-up times and locations are presented in Chapter 4 under Alternative 5.

Table 5-2: Scheduled Service Locations and Times

Pick-Up Location	Pick-up Time	Service Needs
Telvista	8:30 p.m. 10:30 p.m.	24 hour facility with shifts throughout the day and evening.
Danville Mall	9:30 p.m.	Mall closes at 9:00 p.m.
Wal-Mart	10:15 p.m.	One of the largest shift change occurs at 10:00 p.m.
Danville College	9:30 p.m.	Evening classes generally ends at 9:00 p.m.

Implementation Activities

- Re-design and re-print the current Route and Schedule Guide
- Develop a marketing campaign that promotes the new evening service to employees and/or students of the specific pick-up locations and schedules
- Encourage employers and the college to market the service
- Develop a method of incorporating the additional un-scheduled stops into the driver's daily manifest

Establish a Schedule for Senior Transportation Trips

This recommendation calls for establishing a schedule for the senior transportation service that designates specific days for specific trip purposes. Since DT began operating the service in FY 2013, the ridership has increased by approximately 75%. In order to properly manage future growth in the service, DT should implement a set schedule for Senior Transportation trips. The schedule should not be excessively restrictive and should allow multiple days per week for each trip purpose. For example, medical trips (the most frequent trip purpose) could be offered three days per week when the demand response services have the most available capacity.

Implementation Activities

- Meet with the Southern Area Agency on Aging and the Parks and Recreation Department to discuss the changes
- Conduct open houses at senior centers/communities regarding proposed changes and allowing the senior population an opportunity to voice their opinions for desired days for each trip purpose
- Establish written policy for what day specific types of trips are provided

- Provide notices of service modifications on board senior transportation vehicles and notify seniors when they schedule a trip on the service. The notices should be timed to give seniors at least 30 days to prepare for the modified schedule.

Transition Reserve-A-Ride Riders to Fixed-Routes

This recommendation is intended to mitigate the growth in the Reserve-A-Ride service by transitioning ambulatory individuals who live within a quarter mile of a bus route to begin using the fixed route service. This project was conceived when an analysis uncovered that approximately 40% of general public Reserve-A-Ride trips occurring between 6:00 a.m. and 6:00 p.m., had both their origin and destination within a ¼ mile of a fixed route.

This project requires a phased approach. In the first phase, Danville Transit should actively market their fixed route service to Reserve-A-Ride riders whose trip origin and destination are along a fixed route. For example, when a rider calls to request a trip that could be accomplished on the fixed route system, the reservationist should inform the caller about the fixed route service and encourage its use.

With Reserve-A-Ride ridership expected to grow by over 8% from FY 2014 to FY 2015, the second phase of this recommendation will be for DT to institute a policy in the future to mitigate the increasing demand. The policy would require Reserve-a-Ride trips with origins and destinations located within a ¼ mile of a fixed route during the fixed route service hours to use the fixed route service. Reserve-a-Ride riders who cannot access the fixed route due to a mobility limitation and are certified as ADA can continue to ride the demand response service by using the Handivan Service, Danville Transit's complementary ADA paratransit service.

Implementation Activities

- Develop a process to identify Reserve-A-Ride trips where both the origin and destination are within ¼ mile of a fixed route
- Identify trip origins (client residences) that are within ¼ mile of a fixed route
- Identify trip destinations that are within ¼ mile of a fixed route
- During Phase I Danville Transit, should inform riders that are requesting a Reserve-a-Ride trip where their origin and destination are within a ¼ mile of a fixed route (excluding the #6 Glenwood Route) about the fixed route option. Also, providing an incentive may prove to be effective (e.g. free trial pass for a round trip on the fixed routes)
- Develop eligibility policy for the Reserve-a-Ride service, specifically for trips that occur within the ¼ mile of a fixed route (Second year of the TDP)
- Provide 90 days advanced noticed before implementing Reserve-a-Ride eligibility policy

Implement a Reduced Fare for Students Riding Reserve-A-Ride

As the TDP was being finalized, Danville Transit received a request from Danville Community College (DCC) to provide fixed route service to the Regional Center for Advanced Technology and Training (RCATT) facility which is located at 121 Slayton Avenue on the east side of the city. DCC indicated that the college has moved some of their programs to that facility.

While a fixed route to the facility may not be feasible at this time, the facility is currently served by the Reserve-a-Ride service. To make the service more attractive for students, DT has proposed reducing the one-way trip fare for all local high school and college students with valid identification. The fare reduction would reduce the current fare of \$4.00 for a one-way trip to \$2.00 for students.

This fare reduction will be dependent on final approval from the Transportation Advisory Committee and the City Council.

Initiate a Shuttle Service Linking Averett University's Main Campus and North Campus

Another effort that was initiated at the end of the TDP process was the possibility of providing shuttle service between Averett University's Main and North Campuses. This initiative was a response to Virginia's House Bill 2 (HB2) grant which has infused the state with funding for multi-modal transportation projects. In Danville, an HB2 grant has been applied for widening Mt. Cross Road which serves Averett University's North Campus, and to provide transit service along this corridor, thereby connecting Averett's Main and North Campuses. Danville Transit anticipates the service to begin during the fall of 2017 pending grant approval.

Mid-Term Projects

The following projects are recommended for implementation in year three through six of the TDP's timeframe. These projects were identified as mid-term because they require additional resources and/or comprehensive system-wide modifications.

Pave School Bus Parking Lot's Access Lane

Danville Transit should re-pave the school bus parking lot's access lane to allow for improved access to the maintenance facility for transit vehicles. DT shares its operations and vehicle storage facility with Danville City Public Schools Transportation Division. The parking lot where the school buses are stored has fallen into a state of disrepair and could potentially cause damage to transit vehicles driving through the lot to gain access to the rear of the maintenance facility, Figure 5-2. It is estimated that the project will cost approximately \$150,000.

Figure 5-2: School Bus Parking Lot Access Lane



Implementation Activities

- Complete all requirements under the Virginia Section 5311 State Management Plan and the FTA Section 5311 capital procurement requirements (found in FTA Circular 4220.1F)
- Complete the required competitive bidding process

Installation of Bicycle Racks on Buses

It is recommended that DT begin installing bicycle racks on buses on select routes to extend the reach of its fixed route service. Commonly referred to as the first mile – last mile in the transit world, providing bicycle racks on buses can extend the range of a transit trip by a mile or more.

Implementation Activities

- Determine which routes would be best suited for the installation of bicycle racks on the buses
- Apply for capital funding in FY2019 grant application
- Develop promotional materials on using the bicycle racks and the benefits
- Monitor and track the usage of the bicycle racks

Consolidate the Schedules of Duplicative Routes

Danville Transit operates two North Main Routes (No. 1 and No.4) and two Edgewood-Stokesland Routes (No. 3 and No. 5); where each pair is essentially the same, see Figure 5-3. The North Main and the Edgewood-Stokesland Routes both provide 40 minute headways. When referencing the schedule for Route #1 North Main, it appears that the route is on 80 minute headways. There is only a small note referencing Route #4 North Main on a later page. The same holds true for the Edgewood-Stokesland Routes. Combining the two North Main and the two Edgewood-Stokesland Routes would better illustrate the frequency of the routes and prevent the necessity of flipping between two different schedules for service along the same route.

Figure 5-3: Danville Transit Route Numbering and Naming Conventions

#1 North Main.(NM)	
#1 Kemper Rd-DCC. (KR)	
#2 Riverside. (RS)	
#2 Third Ave-NorDan. (TA)	
#3 Danville Estates.(DE)	
#3 Edgewood-Stokesland. . .(EW)	
#4 Health Center.(HC)	
#4 North Main.(NM)	
#5 Edgewood-Stokesland. . .(EW)	
#5 Riverside. (RS)	
#6 Glenwood. (GW)	

Implementation Activities

- Revise and re-print the Route and Schedule Guide
- Adjust the head signs on the buses to reflect the changes

- Provide notices at the hub and on buses of the changes

Eliminate Duplicative Route Numbers

This recommendation should be implemented in conjunction with consolidating the schedules of the #1 and #4 North Main and #3 and #5 Edgewood-Stokesland Routes. In this recommendation, DT will renumber the route numbers so that each route will have its own unique number. As seen in Figure 5-3, routes currently share numbers to indicate which routes are interlined.

Implementation Activities

- A comprehensive re-design of the Route and Schedule Guide. The new guides would have to be printed and distributed.
- Market the service changes through posters at the downtown HUB and on-board all vehicles

Vision Projects

The following proposals describe longer term vision projects that may not fall within the implementation timeframe of this TDP, but which address the needs identified during the public outreach effort. DT should consider implementing these projects when warranted by emerging needs.

Install New and Improve Existing Bus Stop Amenities

Danville Transit's bus stop amenities program currently maintains bus stop signs, shelters, benches and trash receptacles at dozens of high activity stops. This project focuses on installing new amenities throughout the system and improving those that currently exist as funds become available.

Implementation Activities

- Creating and maintain a detailed inventory of bus stop amenities that includes location, characteristics, and condition
- Existing bus stop amenities should be brought into compliance with the requirements of the American's with Disabilities Act (ADA) Accessibility Guidelines. All future bus stop amenities should also meet ADA Accessibility Guidelines.
- Maintaining current bus stop amenities should take priority over the installation of new amenities. New amenities should be installed based on the level of activity at each stop.

Conduct a Comprehensive Operational Analysis

Danville Transit should consider conducting a Comprehensive Operational Analysis (COA) to evaluate each route. During the course of the TDP, some issues came to light with specific routes, ranging from

duplicative routes to tweaking specific route alignments. This plan's scope does not allow for an in-depth, turn-by-turn, analysis of each route which a COA would offer.

Implementation Activities

- Apply for DRPT technical assistance in completing a COA
- Work with project team to provide guidance for completing the COA

Implement Cost and Time Saving Practices to Improve Maintenance Operation

This recommendation suggests implementing new measures to improve vehicle reliability through the use of outsourcing low-cost preliminary maintenance activities, striking a deal with Danville's Motor Pool to provide more flexibility in mechanics' shift hours and, if the need arises, hiring a full-time mechanic that would answer directly to Danville Transit.

Implementation Activities

- Identify cost-effective preliminary maintenance procedures that can outsource to local repair shops. Under the current agreement, the Motor Pool must agree to have the work outsourced.
- Monitor down-time of vehicles to ensure that vehicles are repaired and maintained in a timely manner.
- If maintenance begins to hinder transit operations, DT should explore methods that will give the transit system more control over their mechanic and direction as to when preliminary maintenance is completed.

Re-Evaluate Feasibility for Fixed Route Service to the Institute for Advanced Learning and Research

This recommendation is a component of the previous short-term effort to reduce the Reserve-A-Ride fare for all high school and college students. As previously mentioned, this recommendation specifically targets students needing transportation to the Regional Center for Applied Technology and Training and the Institute for Advanced Learning and Research. This fare reduction will be used as a pilot program to determine the feasibility of establishing regular fixed route service to these locations.

After a few years following the implementation of the reduced fare for students, Danville should evaluate the viability of providing fixed route service to these facilities. If there is adequate demand for fixed route service, modifying the #6 Glenwood Route schedule and route may be an option.

ORGANIZATIONAL PROJECTS

The following organizational projects include recommended changes that affect the way that transit is guided, administered and/or managed in Danville. These projects will address personnel, needs and

operational issues that will improve DT's service. It is recommended that DT implement these organizational projects in the short-term.

Additional Staffing for Danville Transit

Currently the reservation, scheduling and dispatching is handled through a patch work of administrative specialists, transit supervisors, and an account clerk at either the garage of the HUB depending on the time of the day. It is recommended that Danville Transit add an additional administrative staff person to assist with reservations, scheduling and dispatching. An additional staff member will fill in the current staffing gaps. This staff member may begin as part-time if funds are limited and then transition into a full-time position. Overall roles of this position would include:

- Assist the transit supervisors and account clerk
- Provide back-up for incoming phone calls
- Take trip reservations
- Schedule and modify demand response trips
- Provide back-up for dispatching
- Assist with preparation of appropriate reports

Implementation Activities

- Develop a job description that includes required qualifications, responsibilities, duties and salary package.
- Advertise the new position in local newspapers, state-wide transit publications and online employment websites.

Begin Selling Bus Tokens from the Transit HUB

It is recommended that Danville Transit begin to transition the sale of bus tokens from on-board the buses to the information office located in the downtown HUB to improve safety and reduce dwelling time at stops when bus drivers sell tokens to passengers as they board the bus. The information office is currently occupied from 9:30 a.m. to 5:30 p.m. with two administrative staff members stationed there between 12:30 p.m. and 5:30 p.m. The information office features a locked door and glass information window which would provide a higher level of security when compared to storing bank bags on each vehicle. This policy should be slowly phased in to determine if the sale of tokens will require additional staffing in the information office.

Implementation Activities

- Install a locked box or safe in the downtown HUB's information office to store tokens and fares
- Train administrative staff, who are regularly stationed at the downtown HUB, to handle token purchases

- Launch a marketing effort to introduce the new service and set a schedule to begin phasing out token purchases on-board vehicles
- Explore potential partnerships with local grocery stores and human service agencies to sell the tokens

Installing an Additional Phone Line

This recommendation calls for installing a new phone line to assist with large call volumes. During the stakeholder interviews, one of the main complaints was receiving a busy signal when calling to arrange transportation. According to Danville Transit the call volume for reserving and scheduling demand response trips is highest from 8:30 a.m. to 5:30 p.m. Adding an additional phone line at the operations facility to handle the increased call volume will make it easier for callers to reach a reservationist. Installing this phone line will have to be coordinated with the previous recommendation, the hiring of another administrative staff person to ensure there are adequate resources to handle the incoming calls.

Implementation Activities

- Evaluate existing phone service and compare to competitors pricing to ensure the best plan is chosen
- Consider implementing a touch-tone system for incoming calls to potentially mitigate call volumes

PLANNED SERVICE LEVELS

Table 5-3 summarizes the levels of service planned for the recommendations included in this chapter. The TDP identifies an implementation year for each project for planning purposes, but actual implementation may be impacted by the availability of funding, partnerships with organizations and other changes that may arise.

Table 5-3: Existing Service Levels and Proposed Service Implications

Years of Planned Deployment	Service Project	Annual Revenue Hours	Annual Revenue Miles
Existing	Current DT Services (FY 2014 Levels)	37,577	586,486
Short-Term Projects			
FY2016	Adjusting Fixed-Route Schedule Times	No Change	-16,000
FY2016	Expanding Route #6 Glenwood	200	1,700
FY2016-2017	Scheduled Evening Service	May Vary	May Vary
FY2016-2017	Schedule for Senior Transportation	May Vary	May Vary
FY2016-2021	Reduced Reserve-A-Ride Fare for Students	No Change	No Change
FY2017-2021	Averett Shuttle Service	TBD	TBD
Mid-Term Projects			
FY2018-2021	Pave School Bus Parking Lot Access Lane	No Change	No Change
FY2018-2021	Transition Reserve-A-Ride Riders to Fixed-Routes	May Vary	May Vary
FY2018-2021	Bicycle Racks on Buses	No Change	No Change
FY2018-2021	Consolidate Duplicative Routes	No Change	No Change
FY2018-2021	Eliminate Duplicative Route Numbers	No Change	No Change
Vision Projects			
FY2016-2021	Install New and Improve Existing Bus Stop Amenities	No Change	No Change
FY2016-2021	Comprehensive Operational Analysis	No Change	No Change
FY2016-2021	Improve Maintenance Operations	No Change	No Change
Organizational Projects			
FY2016-2021	Sell Bus Tokens from Transit HUB	No Change	No Change
FY2016-2021	Additional Staffing for Danville Transit	No Change	No Change
FY2016-2017	New Phone Line	No Change	No Change
FY2017-2021	Service to the Institute for Advanced Learning and Research	TBD	TBD

Chapter 6

Capital Improvement Program

INTRODUCTION

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

VEHICLE REPLACEMENT AND EXPANSION PLAN

This section presents the details of the vehicle replacement and expansion plan, including vehicle useful life standards and estimated costs. A vehicle replacement and expansion plan is necessary to maintain a high quality fleet and to dispose of vehicles that have reached their useful life. The capital program for vehicles was developed by applying FTA/DRPT vehicle replacement standards to the current vehicle fleet, which was presented in Chapter 1.

Useful Life Standards

The useful life standards used by DRPT are developed based on the manufacturer's designated vehicle life-cycle and the results of independent FTA testing. If vehicles are allowed to exceed their pre-scripted useful life they become much more susceptible to break-downs which may increase operating costs and decrease the reliability of scheduled service. DRPT's vehicle useful life policy, shown in Table 6-1, is provided in the State's Section 5311 State Management Plan.

Table 6-1: DRPT's Vehicle Useful Life Policy

Vehicle Type	Useful Life
Service Vehicle	Minimum of 4 Years or 100,000 Miles
Vans	Minimum of 4 Years or 100,000 Miles
Body on Chassis Vehicles	Minimum of 4 Years or 100,000 Miles
Light Duty Bus (25'-35')	Minimum of 5 Years or 150,000 Miles
Medium Duty Bus (25'-35')	Minimum of 7 Years or 200,000 Miles
Heavy Duty Bus (~30')	Minimum of 10 Years or 350,000 Miles
Heavy Duty Bus (35' – 40')	Minimum of 12 Years or 500,000 Miles

Source: DRPT's Section 5311 State Management Plan (January 2015)

Vehicle Plan – Baseline Estimate

Danville Transit operates a variety of vehicles including Trolley Buses, Medium-Duty Buses, Light-Duty Buses and service vehicles. DRPT's useful life policy was applied to the existing fleet, by vehicle type, to develop an estimate of DT's capital needs to maintain current service levels for the next six years. Table 6-2 provides DT's existing fleet inventory with the estimated fiscal years that each vehicle should be programmed for replacement. Danville Transit has made the decision not to replace Vehicle No. 729, in favor of an expansion vehicle with a larger passenger capacity. While vehicles 745 and 746 were eligible for replacement, and in lieu of replacing the vehicles, two trolley buses have been rebuilt.

Table 6-2: Danville Transit's Vehicle Inventory with Replacement Years Baseline Estimate

Vehicle No.	Service Type	Make	Model	Year	Passenger Capacity	Mileage 5/1/15	Year Eligible for Replacement
729	Spare	Chevrolet	Supreme 3500	2009	9	149,700	-
732	Revenue	Ford	Supreme	2011	12	101,994	2016
739	Revenue	Chevrolet	5500 Supreme	2010	28	147,338	2016
745	Revenue	Freightliner	Trolleybus	2005	26	17,263	2016
746	Revenue	Freightliner	Trolleybus	2005	26	14,188	2016
749	Revenue	Chevrolet	Supreme	2012	20	117,456	2016
750	Revenue	Chevrolet	Supreme	2012	20	133,870	2016
725	Non-Revenue	Chevrolet	ECAB	2006	N/A	35,668	2018
726	Non-Revenue	Chevrolet	Lumina	2008	4	70,856	2018
736	Revenue	Chevrolet	Supreme	2014	20	53,716	2018
738	Revenue	Chevrolet	Supreme	2013	28	103,362	2018
740	Revenue	Chevrolet	Supreme	2013	28	100,350	2018
730	Revenue	Chevrolet	Supreme	2014	20	21,075	2019
731	Revenue	Chevrolet	Supreme	2013	28	21,298	2019
735	Revenue	Chevrolet	Supreme	2013	28	90,472	2019
737	Revenue	Chevrolet	Supreme	2014	20	18,366	2019
748	Non-Revenue	Chevrolet	"Mini-van"	2009	8	51,327	2019
727	Revenue	Ford	Eldorado	2015	20	6,473	2020
734	Revenue	Ford	Eldorado	2015	20	5,926	2020
751	Revenue	Ford	Eldorado	2015	20	6,378	2021
752	Revenue	Ford	Eldorado	2015	20	1,370	2021
747	Non-Revenue	Ford	"Pickup Truck"	2012	N/A	16,520	2023

Vehicle Plan

The annual schedule for vehicle replacement and expansion is shown in Table 6-3. While this plan has not recommended an expansion of the revenue vehicle fleet for its six-year horizon, DT has previously programed a medium-duty expansion vehicle for FY 2016 in addition to two engine rebuilds and three replacement vehicles.

The schedule included in Table 6-3 is based on estimates; actual vehicle needs may vary depending upon service changes and unexpected economic or societal shifts. Table 6-3 follows the recommended replacement years for vehicles shown in Table 6-2 and includes an additional service vehicle for FY 2017, a dump truck which will be used for facility maintenance.

Table 6-3: Vehicle Replacement and Expansion Schedule

Type of Vehicle	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Replacement	3	0	3	4	3	5
<30 ft. Bus	2	0	1	2	3	3
30 ft. Bus	1	0	2	2	0	0
35 ft. Bus	0	0	0	0	0	2
Expansion	1	0	0	0	0	0
<30 ft. Bus	1	0	0	0	0	0
30 ft. Bus	0	0	0	0	0	0
35 ft. Bus	0	0	0	0	0	0
Support Vehicle	0	1	2	1	0	0
Pick-up Truck	0	0	1	0	0	0
Minivan	0	0	0	1	0	0
Sedan	0	0	1	0	0	0
Dump Truck w/Plow	0	1	0	0	0	0
Trolley Rebuild	2	0	0	0	0	0
Total Vehicles	6	1	5	5	3	5

When removing vehicles from service, Danville Transit will follow DRTP guidelines as described in the S. 5311 State Management Plan. Though some of the vehicles in the fleet were purchased with S. 5307 funds when Danville was categorized as small urban and qualified for the S. 5307 program, the disposition these vehicles will follow the S. 5311 disposition guidelines in terms of meeting its useful cycle. Danville Transit must send its disposition requirements to DRTP, which will grant approval or disapproval for disposition. DRPT may offer the vehicles to other S. 5311 recipients that are in need. Otherwise, Danville Transit may dispose of the vehicles and use the proceeds to support transportation services.

Estimated Vehicle Costs

The replacement or expansion vehicle costs are presented in Table 6-4. These costs are based on the FY 2016 Six Year Improvement Program (SYIP). For fiscal years 2017 to 2021, a 2% inflationary factor was applied. These cost estimates will be used to develop the capital budget, which is included with the Financial Plan in the next chapter. Danville Transit is in the process of procuring propane fueled vehicles which are typically priced higher than diesel fueled vehicles.

Table 6-4: Estimated Costs of New Vehicles

Fiscal Year	< 30 ft.	30 ft.	Rebuild (Trolleys)	Service Vehicles
2016	\$100,000	\$150,000	\$200,000	\$30,000
2017	\$100,000	\$150,000	\$200,000	\$30,000
2018	\$102,000	\$155,000	\$200,000	\$30,000
2019	\$102,000	\$155,000	\$200,000	\$30,000
2020	\$102,000	\$155,000	\$200,000	\$30,000
2021	\$102,000	\$155,000	\$200,000	\$30,000

Danville Transit is in need of a dump truck with a snow plow attachment to perform grounds maintenance and snow removal of their bus lot. Currently DRTP does not have this type of vehicle as part of their bids list and the procurement of this vehicle will likely need to go through the city's own procurement process. Through research on a number of dump truck retailers, this type of vehicle with a snow plow attachment is estimated to cost between \$80,000 and \$150,000 depending on the size and type of the truck.

Potential funding sources for the replacement and expansion vehicles include FTA S. 5311 funds, DRPT's Mass Transit Trust Fund, Mass Transit Capital Fund and local funds. The Commonwealth has recently implemented a tiered capital allocation policy. Figure 6-1 provides the current tiered capital allocation formula.

Figure 6-1: DRPT Tiered Capital Allocation

	Actual FY 2015 State Match	Prior Method State Match	Δ
Replacement Vehicles (Tier 1)			
80 Percent Federal Funding	16%	16%	(-)
No Federal Funding	68%	35%	(+33)
Expansion Vehicles (Tier 1)			
80 Percent Federal Funding	16%	7%	(+9)
No Federal Funding	68%	35%	(+33)
Infrastructure/Facilities (Tier 2)			
80 Percent Federal Funding	16%	7%	(+9)
No Federal Funding	34%	35%	(-1)
Other (Tier 3)			
80 Percent Federal Funding	16%	7%	(+9)
No Federal Funding	17%	35%	(-18)

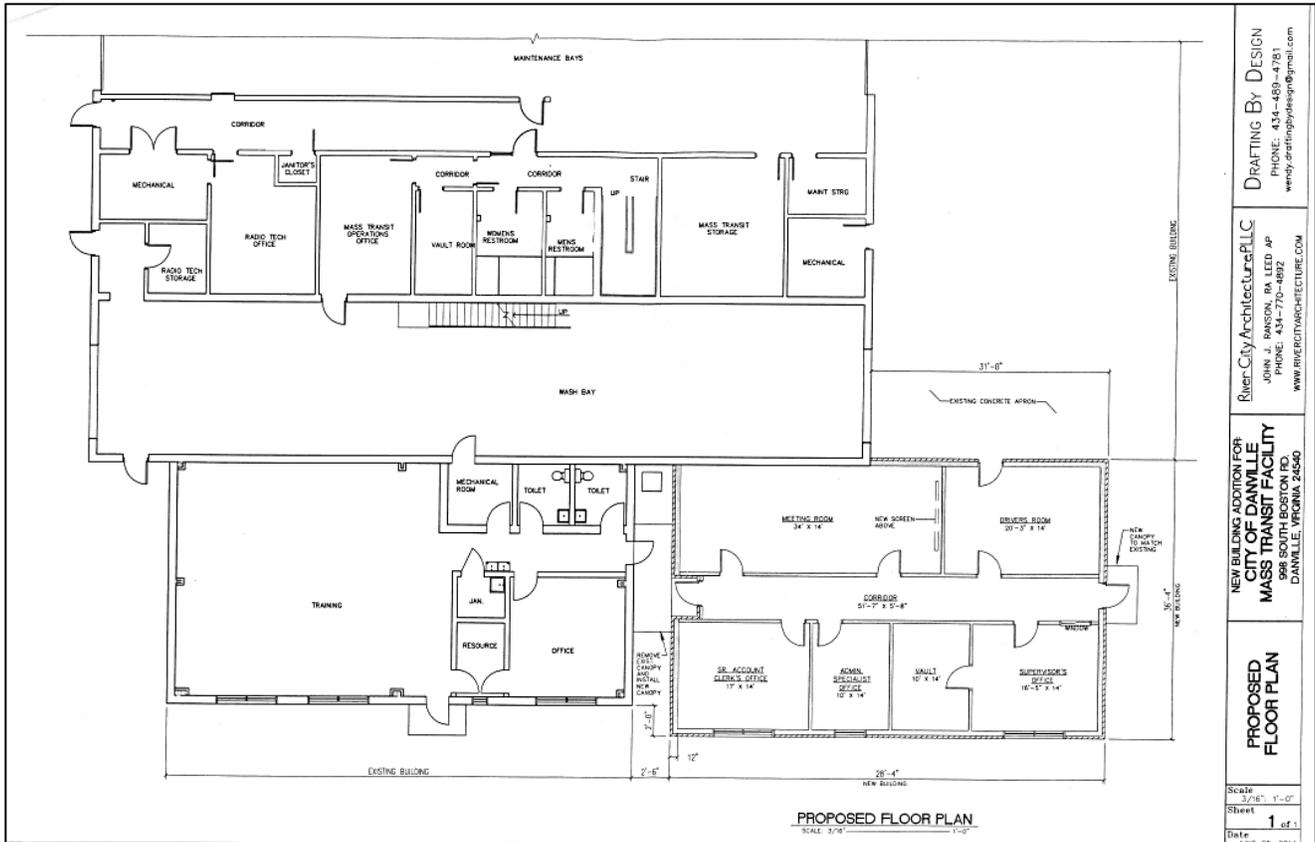
Note: Impact of 80 percent federal funding is illustrated because it is the maximum federal match rate for which most projects are eligible, and is therefore the most common match rate for projects receiving federal funds; some projects receive a lower federal match.

FACILITIES

Danville Transit shares its administrative facility with the City of Danville’s School Bus Transportation Office. The facility is currently limited on office space with only two offices for DT staff. Prior to this TDP, DT has programmed \$30,000 in FY 2016 capital assistance for engineering and designing an expansion wing for the administrative facility. The new expansion wing will also include a backup generator as it is not uncommon for office staff to contend with the loss of power multiple times during the year which leaves dispatchers and supervisors unable to communicate with drivers via radio. According to the SYIP, DT has also budgeted for \$470,000 in FY 2017 for construction of the administrative facilities expansion.

The TDP has identified the need to pave an access area shared by Danville’s school buses linking the access road to the rear of the vehicle storage facility. The estimated cost for paving the access area is above \$150,000. Following a competitive procurement process, the project is estimated to be completed for FY 2016. Figure 6-2 provides the proposed floor plan of the build-out of the mass transit facility.

Figure 6-2: Proposed Floor Plan of Mass Transit Facility



PASSENGER AMENITIES

Another capital project recommended in the TDP is the installation of ADA accessible bus shelters and benches at the highest use bus stops, identified in Chapter 4. Bus stop amenities support the growth of the system and should be considered for installation when funds become available. In addition, the TDP has recommended installing bicycle racks on DT's vehicles, which was identified as a need by stakeholders and riders.

Prior to the TDP planning process, DT has planned for two bike lockers and six bike racks in the FY 2016 budget. Bicycle storage will be located at the busiest bus stops in the system. The addition of bicycle racks is part of a city-wide effort to encourage and promote bicycling in Danville.

EQUIPMENT

There are few recommendations for equipment within the TDP timeframe, although needs may change in future years. The TDP recommends the addition of a new phone line to accommodate call volume. This need was identified through stakeholder and community outreach where individuals calling the operations center were unable to get through to DT staff due to busy telephone lines.

It is also recommended in the TDP that Danville Transit install bicycle racks on select buses/routes to assess the usability and impact it may have on the overall rider experience and operations.

DT is planning to acquire new fareboxes in conjunction with vehicle procurements. Currently, the SYIP has programmed four fareboxes in FY 2016, two fareboxes in FY 2018, five fareboxes in FY 2019, and three fareboxes in 2020. These numbers mirror planned vehicle procurements for each fiscal year.

TECHNOLOGY

The procurement of new technology has not been recommended in the TDP and is not currently programmed in the SYIP. DT uses Route Match Software which will likely require updates over the course of this TDP. Additionally, DT recently installed portable tablets for trip confirmations and AVL capability on demand-response revenue vehicles.

Chapter 7

Financial Plan

INTRODUCTION

This chapter provides a financial plan for funding existing and proposed Danville Transit services for the TDP's six-year planning period. The financial plan addresses both operations and capital budgets, focusing on financially constrained project recommendations. It should be noted that there are currently a number of unknown factors that will likely affect transit finance over the course of this planning period, including the future economic condition of the region and the Commonwealth of Virginia, the availability of funding from the federal Section 5311 program, the Commonwealth Transportation Fund, and local sources.

OPERATING EXPENSES AND FUNDING SOURCES

Table 7-1 provides a financial plan for the operation of Danville Transit's services under the financially constrained six-year plan. As discussed in the Operations Plan (Chapter 5), the financially constrained plan projects are moderate in scope, reflecting the current economic climate and the anticipated availability of local match. The top half of the table summarizes the annual revenue hours of service for the existing transit program as well as the service projects that are recommended. The bottom half of the table provides operating cost estimates and funding sources associated with these service projects. A number of assumptions used in developing the operating cost estimates are described below.

It is anticipated that the level of service in terms of revenue service hours will remain level during the TDP period. The recommended projects will not affect the number of revenue service hours. The scheduled evening service will utilize existing Reserve-a-Ride vehicles in service in the evenings.

In Table 7-1 the Base Year represents actual expenses and revenue incurred in FY2015 provided by Danville Transit. For FY2016 the expenses and revenues are based on the FY2016 SYIP. The projected cost per revenue hour and operating costs to maintain the current level of service between FY2017 and FY2021 is based on a 4% annual inflation rate.

Based on the recommended projects, beginning in FY2017, the total operating expense could potentially increase by \$35,000. This proposed increase is to hire an additional full time staff person to assist with daily administrative activities, answering the phones, and selling of bus tokens at the downtown HUB in Danville.

Under the anticipated funding sources, the FY2015 Base and FY2016 amounts for federal funding and farebox revenue are from the FY2015 and FY2016 SYIP respectively. The federal and state formula assistance in FY2016 and beyond assumes 50% federal funding, 21% state funding, and a local match of 29%. These allocations are based on allocations in the FY2015 and FY2016 SYIP. It is understood that

DRPT is not committing to those funding levels. Specific funding amounts are determined during the annual SYIP adoption and budget cycle. In years 2017 to 2021 of the financial plan, the total projected operating expenses account for 4% inflation associated with maintaining the current level of service and service expansions.

The federal, state and local funding source amounts are based on the net operating deficit. The net operating deficit is calculated by subtracting the farebox and advertising revenues from the total operating expenses. For FY2015 and FY2016 the farebox revenue is derived from the FY2015 and FY2016 SYIP. For FY2017 and beyond, the farebox revenue is based on a recovery rate of 20%. For FY2018 to FY2021, the farebox revenue assumes a reduction of approximately \$18,000 that stems from the proposed implementation of a policy that will transition all ambulatory Reserve-a-Ride trips that are within the fixed-route quarter mile transit shed.

Under the anticipated funding section of Table 7-1, it is assumed that in FY2017 the transportation service that has been funded by the New Freedom grant will be absorbed into the Section 5311 program. Based on the FY2015 and FY2016 SYIP the transportation service funded by the New Freedom grant costs \$153,860. The federal, state, and local shares in FY2016 are 50%, 40% and 10% respectively. Being absorbed in the Section 5311, the federal share would remain the same at 50%, the state's share would reduce to 21% and the local share would increase to 29%

Table 7-1: Danville Transit TDP Financial Plan for Operations

Projects ¹	FY2015 Base	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Projected Incremental Annual Revenue Hours							
<i>Current Level of Service¹</i>	41,106	41,106	41,106	41,106	41,106	41,106	41,106
Adjusting Fixed-Route Schedule Times	-	-	-	-	-	-	-
Revise North Main and Riverside Routes	-	-	-	-	-	-	-
Extend Route on #6 Glenwood Route	-	-	-	-	-	-	-
Implement Scheduled Evening Service	-	-	-	-	-	-	-
Establish a Schedule for Senior Transportation	-	-	-	-	-	-	-
Transition Res.-A-Ride Riders to Fixed-Route	-	-	-	-	-	-	-
Consolidate Schedules of Duplicative Routes	-	-	-	-	-	-	-
Eliminate Duplicative Route Numbers	-	-	-	-	-	-	-
Additional Staffing for Danville Transit	-	-	-	-	-	-	-
Begin Selling Tokens from the Transit HUB	-	-	-	-	-	-	-
Install Additional Phone Line	-	-	-	-	-	-	-
Total Transit Revenue Hours	41,106						

¹ Implementation years are estimated – subject to funding availability. Base revenue hours estimated from FY 2015 data.

Table 7-1: Danville Transit TDP Financial Plan for Operations (cont.)

Projects	FY2015 Base	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Projected Operating Expenses							
<i>Cost Per Revenue Hour¹</i>	\$45.36	\$47.03	\$48.91	\$50.86	\$52.90	\$55.01	\$57.21
<i>Current Level of Service</i>	\$1,864,625	\$1,933,056	\$2,004,223	\$2,078,238	\$2,155,213	\$2,235,267	\$2,318,523
Adjusting Fixed-Route Schedule Times	-	-	-	-	-	-	-
Revise North Main and Riverside Routes	-	-	-	-	-	-	-
Extend Route on #6 Glenwood Route	-	-	-	-	-	-	-
Implement Scheduled Evening Service	-	-	-	-	-	-	-
Establish Schedule for Senior Transportation	-	-	-	-	-	-	-
Transition Reserve-A-Ride Riders to Fixed-Routes	-	-	-	-	-	-	-
Consolidate the Schedules of Duplicative Routes	-	-	-	-	-	-	-
Eliminate Duplicative Route Numbers	-	-	-	-	-	-	-
Additional Staffing for Danville Transit	-	-	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
Begin Selling Tokens from the Transit HUB	-	-	-	-	-	-	-
Install Additional Phone Line	-	-	-	-	-	-	-
Total Projected Operating Expenses	\$1,864,625	\$1,933,056	\$2,039,223	\$2,118,838	\$2,190,213	\$2,270,267	\$2,353,523

¹ The hourly rates for subsequent years were increased by a 4% annual inflation rate.

Table 7-1: Danville Transit TDP Financial Plan for Operations (cont.)

Anticipated Funding Sources	FY2015 Base	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Federal	\$727,360	\$757,540	\$822,289	\$851,895	\$882,685	\$914,707	\$948,009
Section 5311	\$668,430	\$699,860	\$822,289	\$851,895	\$882,685	\$914,707	\$948,009
New Freedom ¹	\$58,930	\$57,680	-	-	-	-	-
State	\$343,448	\$341,387	\$345,362	\$357,796	\$370,728	\$384,177	\$398,164
Formula Assistance	\$296,304	\$295,244	\$345,362	\$357,796	\$370,728	\$384,177	\$398,164
New Freedom ¹	\$47,144	\$46,143	-	-	-	-	-
Local	\$739,912	\$799,652	\$871,573	\$903,547	\$936,800	\$971,383	\$1,007,350
Local Contribution (Section 5311)	\$367,326	\$399,816	\$476,928	\$494,099	\$511,957	\$530,530	\$549,845
Local Contribution (New Freedom) ¹	\$11,786	\$11,536	-	-	-	-	-
Revenues – Farebox ²	\$320,000	\$345,000	\$389,845	\$404,648	\$420,043	\$436,053	\$452,705
Revenues – Farebox ³ (New Freedom)	\$36,000	\$38,500	-	-	-	-	-
Revenues - Advertising	\$4,800	\$4,800	\$4,800	\$4,800	\$4,800	\$4,800	\$4,800
Total Projected Operating Revenues	\$1,810,720	\$1,898,579	\$2,039,223	\$2,113,238	\$2,190,213	\$2,270,267	\$2,353,523

Source: FY2016 Six Year Improvement Plan

¹ Danville Transit's New Freedom funding will be expended by the end of FY2016. Service provided by New Freedom funds will be transitioned into the Section 5311 funding otherwise the services supported by New Freedom funds will need to be reduced to reflect the reduction in funding.

² Farebox recovery rates estimated at 20%.

³ New Freedom farebox box recovery rate estimated at 25%.

Vision projects are projects that may not fall within the implementation timeframe of this TDP, but which address needs identified during the public outreach effort. There are two potential projects listed in the vision plan:

- A Comprehensive Operations Analysis (COA)
- An improvement to the maintenance operations

The COA would provide a detailed review of the fixed route and demand response operations and processes, the institutional/organizational structure, route structure by segment and staffing. It is estimated that conducting a COA for a transit system of Danville Transit's size and structure would cost approximately \$60,000.

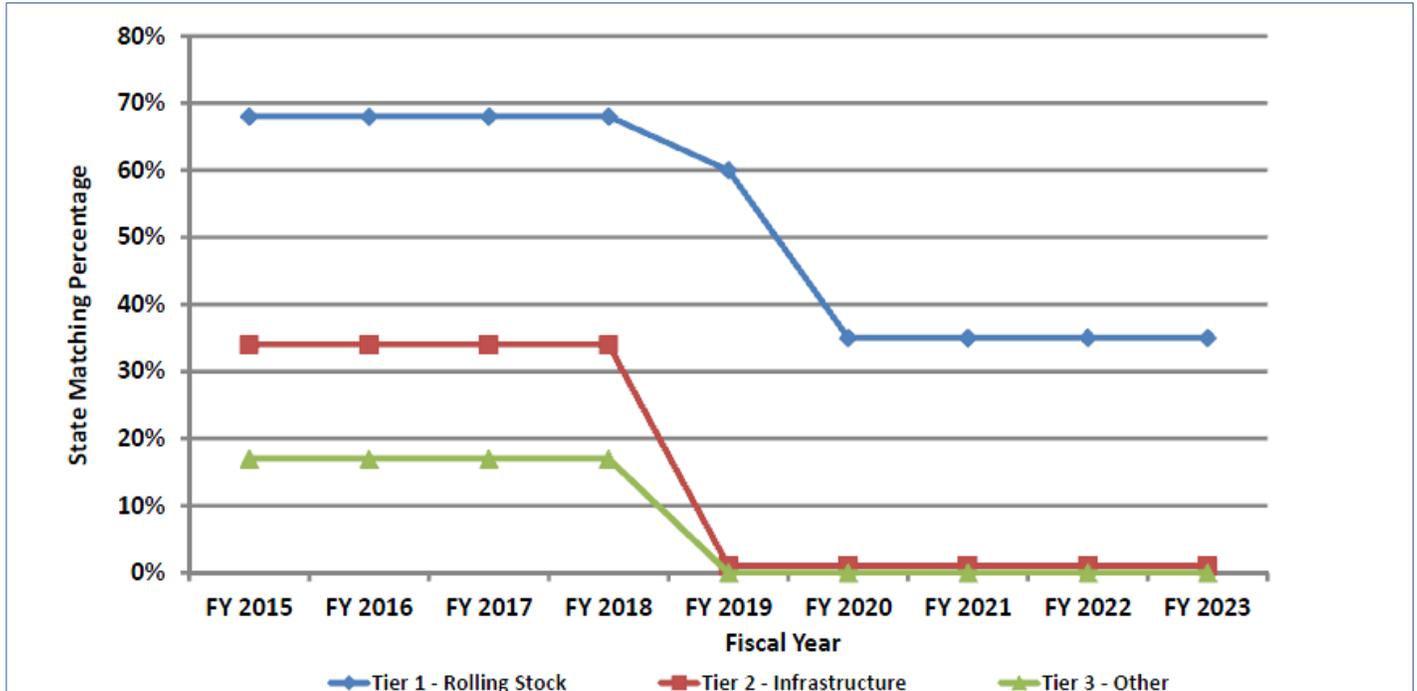
Improved maintenance operations are needed to ensure the reliability of the service. Implementing measures to improve maintenance operations is complex given the current institutional and economic circumstance. Danville is currently experiencing difficulty in filling all of their mechanic positions. With a shortage of mechanics in the city, there are fewer resources available and Danville has less flexibility in assisting Danville Transit with their maintenance needs in a timely manner. Contracting out some of the vehicle maintenance needs may be part of the solution however local private garages are also experiencing similar challenges with the hiring and retention of mechanics.

CAPITAL EXPENSES AND FUNDING SOURCES

During FY 2018, state capital funding levels are projected to permanently decline by approximately 62%.¹ Commonly referred to as the “fiscal cliff,” this reduction in capital funding will have wide sweeping effects for all transit systems in the Commonwealth. For Danville Transit, this reduction will require an increase in local funding to secure federal funding for the capital projects included in this plan.

While federal funding is expected to remain at 80% of the project cost, the amount of state funding will vary depending upon the type of capital project. As seen in Figure 7-1, beginning in FY 2019, the state’s match for vehicle replacement and expansion (Tier 1 – Rolling Stock) will decrease over a two year period. During the same period, the state’s match for infrastructure and facilities (Tier 2 – Infrastructure) will drop to minimal levels and other capital equipment (Tier 3 – Other) will lose state funding.

Figure 7-1: DRPT’s Transit Capital Projected State Match Percentage



Source: Transit Capital Funding Issues, DRPT Presentation to the Commonwealth Transportation Board, January 13, 2015.

¹ Transit Capital Funding Issues, DRPT Presentation to the Commonwealth Transportation Board, January 13, 2015.

Replacement & Expansion Vehicle Expenses and Funding

Table 7-2 offers the financial plan for Tier 1 projects including vehicle expansion and replacement over the six-year period. Eligible activities for funding under Tier 1 include²:

- Replacement and expansion vehicles
- Assembly line inspection
- Fare collection equipment
- Automated passenger counters
- On-vehicle radios and communication equipment
- Surveillance cameras
- Aftermarket installation of farebox, radios, and surveillance cameras
- Vehicle tracking hardware and software
- Rebuilds and mid-life repower of rolling stock

Over this plan's six-year timeline a total of one expansion and eighteen replacement vehicles/vehicle rebuilds are recommended in addition to funding for the associated fare collection equipment.

Table 7-2: Tier 1 Projected Capital Expenses and Funding

Tier 1 Capital Needs	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Vehicle Costs						
Replacement	\$350,000	-	\$412,000	\$514,000	\$306,000	\$626,000
Expansion	\$100,000	-	-	-	-	-
Trolley Rebuild	\$400,000	-	-	-	-	-
Sub-Total Vehicle Costs	\$850,000	\$0	\$412,000	\$514,000	\$306,000	\$626,000
Equipment Costs						
Fareboxes	\$15,000	-	\$7,000	\$12,000	\$5,000	\$15,000
Sub-Total Equipment Costs	\$15,000	\$0	\$7,000	\$12,000	\$5,000	\$15,000
Total Costs	\$865,000	\$0	\$419,000	\$526,000	\$311,000	\$641,000
Anticipated Funding Sources						
Federal	\$692,000	-	\$335,200	\$420,800	\$248,800	\$512,800
State	\$117,640	-	\$56,984	\$63,120	\$21,770	\$44,870
Local	\$55,360	-	\$26,816	\$42,080	\$40,430	\$83,330
Total Funding	\$865,000	\$0	\$419,000	\$526,000	\$311,000	\$641,000

Federal Section 5311 funding will continue to provide 80% of capital funding, however, the pending fiscal cliff will directly impact the percentage of required state and local matches. The funding split is based on recommendations from the Commonwealth Transportation Board in response to the fiscal cliff. Beginning in FY2019, state funding for Tier 1 projects will decrease from approximately 68% to 60% and to approximately 35% in FY2020 and the projected future.

² DRPT FY2015 Revised Budget. <http://www.drpt.virginia.gov/media/1293/fy15-drpt-agency-budget-revised.pdf>

Infrastructure Facilities Expenses and Funding

Table 7-3 provides the financial plan for infrastructure facilities, considered Tier 2 capital projects. Eligible activities under this funding tier include³:

- Construction of infrastructure or facilities for transit purposes
- Real estate used for a transit purpose
- Signage
- Surveillance/security equipment for facilities
- Rehabilitation or renovation of infrastructure and facilities
- Major capital projects

Projects identified as infrastructure facilities include the engineering, design and construction of an extension to the mass transit facility, resurfacing the access lane leading to the mass transit facility, bus stop amenities and bicycle racks for bus stops and select buses.

Projected expenses for bus stop amenities are not included in Table 7-3. This was purposely done to illustrate that bus stop amenities should be purchased and installed as the need emerges. Danville Transit should proactively track the condition of amenities at individual bus stops and collect passenger opinions on where bus stop amenities should be considered. Estimated unit costs for bus stop improvements (e.g. shelters and benches) are shown in Table 7-4.

Table 7-3: Tier 2 Projected Capital Expenses and Funding

Tier 2 Capital Needs	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Transit Infrastructure Facilities						
Bicycle Racks	\$10,000	-	-	-	-	-
Bus Mounted Bicycle Racks ¹	-	-	\$5,600	-	-	-
Engineering and Design	\$30,000	\$20,000	-	-	-	-
Construction	\$150,000	\$470,000	-	-	-	-
Total Costs	\$190,000	\$490,000	\$5,600	\$0	\$0	\$0
Anticipated Funding Sources						
Federal	\$152,000	\$392,000	\$4,480	-	-	-
State	\$12,920	\$33,320	\$381	-	-	-
Local	\$25,080	\$64,680	\$739	-	-	-
Total Funding	\$190,000	\$490,000	\$5,600	\$0	\$0	\$0

¹ Price based on the purchase and installation of two two-bicycle racks.

Capital federal funding for infrastructure facilities will remain at 80% while state funds will provide 34% of the required remaining 20% match until FY 2019 when state funding will drop to minimal levels.

³ DRPT FY2015 Revised Budget. <http://www.drpt.virginia.gov/media/1293/fy15-drpt-agency-budget-revised.pdf>

Table 7-4: Bus Stop Improvement Costs

Improvement	Unit Cost
Shelter (installed)	\$5,000 - \$10,000
Bench (installed)	\$1,500 - \$2,500
4' Wide Sidewalk	\$17.50 - \$25.00 per linear foot
Bicycle Racks	\$200 - \$500
Curb Ramps	\$2,000 - \$2,500

Other Capital Expenses and Funding Sources

Other capital expenses, considered Tier 3 capital projects, are presented in Table 7-5. Capital projects eligible for funding under this tier include³:

- All support vehicles
- Shop equipment
- Spare parts
- Hardware and software not installed on a vehicle
- Project development expenses for capital projects
- Office furniture and other equipment
- Handheld radios
- Landscaping
- Other transit-related capital items

The majority of Danville Transit's other capital expenses consist of acquiring expansion and replacement support vehicles in addition to a routine computer upgrade.

Table 7-5: Tier 3 Projected Capital Expenses and Funding

Tier 3 Capital Needs	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Other Capital Costs						
Support Vehicle	-	\$80,000	\$60,000	\$30,000	-	-
Computer Hardware	\$1,100	-	-	-	-	-
Total Costs	\$1,100	\$80,000	\$60,000	\$30,000	\$0	\$0
Anticipated Funding Sources						
Federal	\$880	\$64,000	\$48,000	\$24,000	-	-
State	\$37	\$2,720	\$2,040	-	-	-
Local	\$183	\$13,280	\$9,960	\$6,000	-	-
Total Funding	\$1,100	\$80,000	\$60,000	\$30,000	\$0	\$0

Funding for other capital projects will consist of 80% federal funding with a variable mix of state and local funding match. Of the required 20% match, the state will currently provide 17% of the total leaving Danville Transit the responsibility of acquiring the remaining 83%. Following the impending fiscal cliff in FY2018, state funding is anticipated to be eliminated leaving Danville responsible for providing the full required local match.

Total Capital Expenses over TDP Timeframe

Table 7-6 presents a summary of the total capital program categorized by tier. Under each tier, the projects are listed by fiscal year. Projects are determined every year based on statewide need. Total projected capital expenses and funding are displayed covering the TDP timeframe.

Table 7-6: Danville Transit Capital Budget

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Tier 1 Costs						
Replacement	\$350,000	-	\$412,000	\$514,000	\$306,000	\$626,000
Expansion	\$100,000	-	-	-	-	-
Trolley Rebuild	\$400,000	-	-	-	-	-
Fareboxes	\$15,000	-	\$7,000	\$12,000	\$5,000	\$15,000
Sub-Total Cost	\$865,000	\$0	\$419,000	\$526,000	\$311,000	\$641,000
Tier 2 Costs						
Bicycle Racks	\$10,000	-	-	-	-	-
Bus Mounted Bicycle Racks	-	-	\$5,600	-	-	-
Engineering and Design	\$30,000	\$20,000	-	-	-	-
Construction	\$150,000	\$470,000	-	-	-	-
Sub-Total Cost	\$190,000	\$490,000	\$5,600	\$0	\$0	\$0
Tier 3 Costs						
Support Vehicle	-	\$80,000	\$60,000	\$30,000	-	-
Computer Hardware	\$1,100	-	-	-	-	-
Sub-Total Cost	\$1,100	\$80,000	\$60,000	\$30,000	\$0	\$0
Total Capital Cost	\$1,056,100	\$570,000	\$484,600	\$556,000	\$311,000	\$641,000
Anticipated Funding Sources						
Federal	\$844,880	\$456,000	\$387,680	\$444,800	\$248,800	\$512,800
State	\$130,597	\$36,040	\$59,405	\$63,120	\$21,770	\$44,870
Local	\$80,623	\$77,960	\$37,515	\$48,080	\$40,430	\$83,330
Total Funding	\$1,056,100	\$570,000	\$484,600	\$556,000	\$311,000	\$641,000

Chapter 8

Monitoring and Evaluation

INTRODUCTION

As described in the introduction of Chapter 1, this TDP is a guiding document that should be reviewed and updated to reflect any changes in community priorities, funding availability or other factors that may impact Danville Transit's services. Several analyses regarding operations, service performance, community transportation needs and service alternatives have been completed as part of the TDP process. Chapters 5 and 6 detailed the recommended operations and capital projects, respectively, and Chapter 7 provided the financial plan for these recommendations. It is important to remember that the TDP is a planning document. As such, when it comes time to develop grant applications and implement projects, Danville Transit (DT) staff together with the TAC should revisit the TDP to ensure that the recommendations are appropriate and feasible given community needs and fiscal realities.

This chapter describes the processes that are recommended to periodically monitor and evaluate the progress that Danville Transit has made in implementing the TDP. Such processes include integrating TDP projects with relevant planning documents, monitoring service performance and submitting an annual update to DRPT. Monitoring and evaluation efforts are particularly important to ensure that Danville Transit is meeting the goals, objectives and standards that were described in Chapter 2.

COORDINATION WITH OTHER PLANS AND PROGRAMS

Chapter 3 included the review of various transportation and land use plans developed by a number of agencies and municipalities around the Danville region. The purpose of this review was to ensure that the TDP is consistent with local and regional transportation goals and efforts. If relevant plans are updated in the coming years, Danville Transit staff or TAC representatives should seek to participate in efforts to ensure that projects recommended in this TDP are included in these area plans and studies where fitting. Many of the TAC members are involved as advisors or participants with other community groups. This involvement is a good way for TAC members to promote Danville Transit service expansions and modifications that may impact new or updated transportation and land use plans in the region. Another benefit of such coordination efforts is increased awareness of Danville Transit services, which serves the system's goal to better market existing transit services.

At the state level, DTPT should ensure that the recommended projects from this TDP are incorporated into the public transportation element of the DRPT State Transportation Improvement Program (STIP) and Six-Year Improvement Plan (SYIP).

SERVICE PERFORMANCE MONITORING

Chapter 2 included several proposed performance standards for Danville Transit, the purpose of which was to develop some objective measurements that DT can use to monitor transit service performance in the future and make performance-based service planning decisions.

Should any services fail to meet the performance standards for two consecutive quarters, Danville Transit should review the specific route or service and identify strategies to improve performance or update the performance standards as warranted by changes in circumstance.

The results of this regular monitoring should be shared with the TAC and with DRPT through the annual TDP update.

ANNUAL TDP MONITORING

It is recommended that Danville Transit engage in several different monitoring activities on an annual basis which will be reported to DRPT in an annual TDP update. The service performance monitoring described above helps to determine whether goals are being met to deliver service that is cost-effective and safe. It is important to evaluate the extent to which DT is meeting its goals to provide service that is reliable and user-friendly and enables area residents to be independent and engaged in the community. Effective approaches to collect data for such monitoring efforts include conducting public meetings and surveys on an annual basis.

DRPT guidance currently requires that grantees submit an annual TDP update letter that describes the progress that has been made toward implementing the adopted TDP. While the TDP has planned for the implementation of service improvements in particular years, the actual implementation may be delayed to future years if the proposed funding arrangements do not come to fruition or community priorities change. In this case, the TDP may need to be updated during the six-year planning period to reflect such changes. Danville Transit's annual update to DRPT should document the results of the activities described above and include the following elements:

- Operating statistics for the twelve-month period, including the ridership attributed to any new proposals implemented as a result of the TDP.
- Any changes to system goals, objectives or service standards.
- A description of any service or facility improvements that have been implemented during the twelve-month period.
- An update to the TDP recommendations to identify additional projects, deferment of projects to later years, or elimination of projects.
- Updates to the financial plan to more accurately reflect current funding scenarios.

Appendix A

On-Board Rider Survey Analysis

METHODOLOGY

A major component of Danville Transit's Transit Development Plan was conducting on-board rider surveys. Rider surveys assess current riders' trip characteristics, satisfaction with the service provided, and areas for improvements. Two separate surveys were created for Danville Transit; a survey for fixed-routes and a survey for demand response services (Handivan, Reserve-A-Ride, and Senior Transportation). Both surveys were developed by KFH Group with input and review provided by Danville Transit Employees, Danville Transit's Transit Advisory Board, and the Virginia Department of Rail and Public Transportation.

The surveys were handed out on Saturday, December 20, 2014 and Monday, December 22, 2014. The survey effort was conducted in conjunction with a fixed-route ridership assessment where off-duty Danville Transit Drivers documented boardings and alightings by location and handed out surveys to riders. Aboard the demand response vehicles, drivers handed out surveys to riders as they boarded. Additionally, the Danville Department of Social Services assisted in the survey effort by providing surveys to their subscription riders.

FIXED ROUTE ON-BOARD RIDER SURVEY

This section offers a detailed analysis of the results of the Fixed Route On-Board Rider Surveys. A total of 209 fixed-route surveys were collected. Each of the 15 questions and comment section are detailed in order. A copy of the Fixed Route On-Board Rider Survey can be seen on the following page in Figure A-1.

Figure A-1: Fixed Route On-Board Rider Survey



FIXED ROUTE ON-BOARD RIDER SURVEY

Danville Transit is currently developing a Transit Development Plan that will serve as a future guide for public transportation services in the region. As part of our planning process, it is important for us to understand the needs of our customers and to solicit input concerning our services. Please take a minute to fill out the following survey.

<p>1. What route are you currently riding? <input type="checkbox"/> #1 North Main <input type="checkbox"/> #4 Health Center-DCC <input type="checkbox"/> #1 Kemper Road-DCC <input type="checkbox"/> #4 North Main <input type="checkbox"/> #2 Riverside <input type="checkbox"/> #5 Edgewood-Stokesland <input type="checkbox"/> #2 Third Ave-NorDan <input type="checkbox"/> #5 Riverside <input type="checkbox"/> #3 Danville Estates-NorDan <input type="checkbox"/> #6 Glenwood <input type="checkbox"/> #3 Edgewood-Stokesland</p> <p>2. Where did you get on the bus? <i>Please indicate an address, intersection, or landmark.</i> _____ _____</p> <p>3. Where are you getting off the bus? <i>Please indicate an address, intersection, or landmark.</i> _____ _____</p> <p>4. Did you or will you have to transfer buses to reach your destination? <input type="checkbox"/> Yes <input type="checkbox"/> No (<i>If No, skip question #5</i>)</p> <p>5. What route will you transfer to or did you transfer from? <input type="checkbox"/> #1 North Main <input type="checkbox"/> #4 Health Center-DCC <input type="checkbox"/> #1 Kemper Road-DCC <input type="checkbox"/> #4 North Main <input type="checkbox"/> #2 Riverside <input type="checkbox"/> #5 Edgewood-Stokesland <input type="checkbox"/> #2 Third Ave-NorDan <input type="checkbox"/> #5 Riverside <input type="checkbox"/> #3 Danville Estates-NorDan <input type="checkbox"/> #6 Glenwood <input type="checkbox"/> #3 Edgewood-Stokesland</p> <p>6. What is the purpose of your trip today? <i>You may check more than one.</i> <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Social/Recreation <input type="checkbox"/> Government Agency <input type="checkbox"/> Shopping/Errands <input type="checkbox"/> Medical <input type="checkbox"/> Other: _____</p>	<p>7. Was a car available for this trip? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>8. Do you have a driver's license? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>9. If you were not riding the bus, how would you make this trip? <input type="checkbox"/> Drive myself <input type="checkbox"/> Ride with family/friends <input type="checkbox"/> Walk <input type="checkbox"/> Bike <input type="checkbox"/> Taxi <input type="checkbox"/> Wouldn't make the trip</p> <p>10. Do you think bicycle racks should be added to the fixed route network? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, where: _____</p> <p>11. Are there places or areas in the county where you would like bus service? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, where: _____</p> <p>12. What do you like <u>most</u> about Danville Transit? _____ _____</p> <p>13. What do you like <u>least</u> about Danville Transit? _____ _____</p> <p>14. If Danville Transit was to make service improvements, what would be your top three choices? (1) _____ (2) _____ (3) _____</p>
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15. Please rate Danville Transit in the following areas:

	Strongly Satisfied	Satisfied	Neutral	Dis-satisfied	Strongly Dis-satisfied
a. Frequency of Bus Service	<input type="checkbox"/>				
b. Areas that are Served by Bus Routes	<input type="checkbox"/>				
c. Bus Running On-Time	<input type="checkbox"/>				
d. Hours of Bus Service	<input type="checkbox"/>				
e. Availability of Schedules & Route Information	<input type="checkbox"/>				
f. Cost of the Bus Fare	<input type="checkbox"/>				
g. Sense of Security on Buses & at Stations	<input type="checkbox"/>				
h. Cleanliness of Buses and Stations	<input type="checkbox"/>				
i. Courtesy/Friendliness of Bus Drivers	<input type="checkbox"/>				
j. Overall Service	<input type="checkbox"/>				

Thank You!

Please provide any comments you may have concerning public transit in the Danville area on the back of this survey.

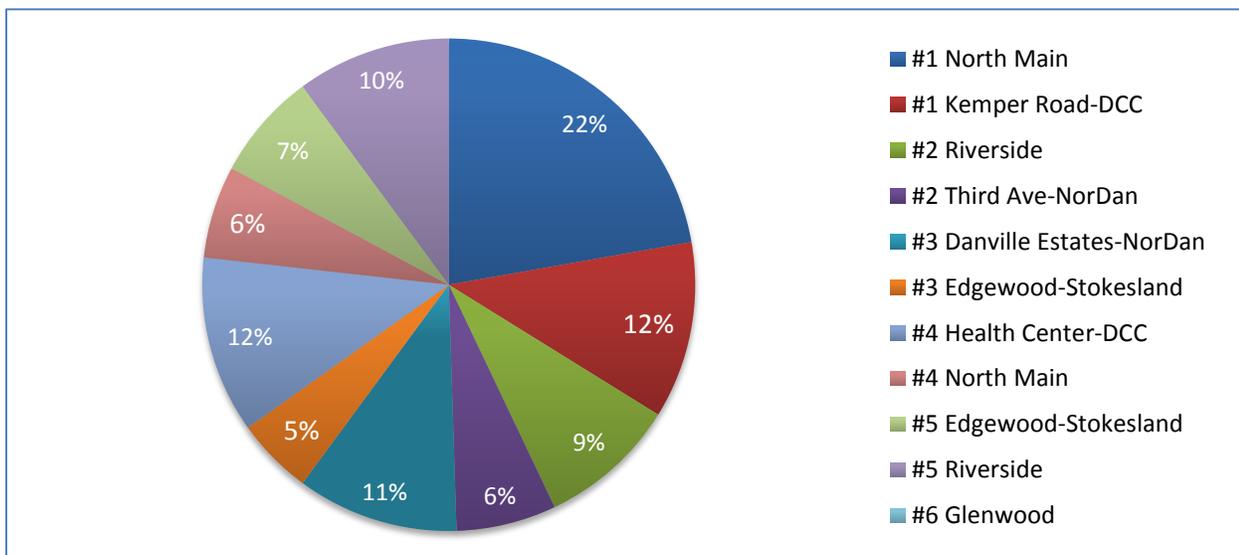
Question #1: What route are you currently riding?

Fixed route riders were asked what route they were currently riding to gain a breakdown of the response rate per route and to determine which routes have a high number of transfers or connections – further detailed under Question #4. As seen in Table A-1, Route 1 North Main had the highest survey response rate with 22%. Figure A-2 provides a visual depiction of the response rate. Routes 1 – North Main, 1 – Kemper Road, and 4 – Health Center-DCC make up 46% or roughly half of all fixed-route responses.

Table A-1: Fixed Route Survey Responses by Route

What route are you currently riding?	Count	Percentage
#1 North Main	44	22.2%
#1 Kemper Road-DCC	23	11.6%
#2 Riverside	18	9.1%
#2 Third Ave-NorDan	13	6.6%
#3 Danville Estates-NorDan	21	10.6%
#3 Edgewood-Stokesland	10	5.1%
#4 Health Center-DCC	23	11.6%
#4 North Main	12	6.1%
#5 Edgewood-Stokesland	14	7.1%
#5 Riverside	20	10.1%
#6 Glenwood	0	0%

Figure A-2: Fixed Route Response Rate by Route



Question #2: Where did you get on the bus?

Riders were asked to indicate an address, cross street, or landmark for the location where they boarded the bus. Rider's origins are illustrated and detailed in Chapter 3. The results in this section were moderately adjusted to aid in summarization. For example, the response "Spring Street – HUB" was shortened to be included in the "HUB" summary. The summarized results are shown in Table A-2.

Table A-2: Fixed Route Passenger Origins

Order	Origin	Total Passengers
1	HUB	27
2	N Main St	11
3	Piney Forest Rd	6
4	Kemper Rd	5
5	Ballou Park	4
6	Hardee's W Main	4
7	Blaine St	3
8	Chatelaine Ave	3
9	Claiborne St	3
10	Lockett Dr	3
11	NorDan Shopping Center	3
12	North Point	3
13	Third Ave	3
14	295 Grant St/ALMAGRO	2
15	Bradley Rd	2
16	Claiborne and Harrison	2
17	Craghead St	2
18	Family Dollar	2
19	Health Center	2
20	Health Dept	2
21	Lee St	2
22	Memorial Dr	2
23	Southampton Ave	2
24	Taylor Dr	2
25	Walmart	2
26	Washington St	2
27	Watson Street	2
28	1575 Richmond Blvd	1

Order	Origin	Total Passengers
29	1700 N Main	1
30	1st Washington	1
31	302 Taylor Dr	1
32	306 Seeland Rd	1
33	628 Main St	1
34	Advance Auto	1
35	Arnett	1
36	Arnett and Glendale Ave	1
37	Augusta	1
38	Avondale and Southhampton	1
39	Beaver Rd	1
40	Behind DCC	1
41	Belmende Court	1
42	Berryman Ave	1
43	Betts and Grace	1
44	Betts St	1
45	Between Health Dept and Lockett Dr	1
46	Bibleway Church	1
47	Big Daddy's	1
48	Biscuitville (Riverside)	1
49	Biscuitville Piney Forest	1
50	Blue Park	1
51	Bradley Rd and Purdum Rd	1
52	Burger King Piney Forest	1
53	Cabin Lake	1
54	Cardinal Place DCC	1
55	Cedar Terrace Apts	1
56	Cheryl and Franklin Tpke	1
57	Court	1
58	Danville House	1
59	Danville Mall	1
60	Daytona Gas Station	1
61	DCC / Memorial Dr	1
62	Edgewood	1
63	Edgewood Exxon	1

Order	Origin	Total Passengers
64	Epps St	1
65	Family morning star	1
66	Fastmart	1
67	Girard and Richmond Blvd	1
68	Hardee's on Riverside	1
69	Jefferson	1
70	Jefferson and Lee	1
71	Kemper Rd and Bonner	1
72	Kimberly Rd (Stokeland)	1
73	Lockett Cir	1
74	Mabin Street	1
75	Main and Chestnut Place	1
76	Main St	1
77	Main St and Chestnut	1
78	Main St front of Art Building	1
79	Mall	1
80	Melrose at Verne intersection	1
81	Melrose Ave	1
82	Moffett St	1
83	Motley Car dealer	1
84	Mt Verne	1
85	N Main and Fickler	1
86	N Main and North Ave	1
87	N Main and Worsham St	1
88	N Main St and Church	1
89	N Pointe	1
90	Near GCH Johnson	1
91	North Side	1
92	Old Memorial Dr	1
93	Papa John's	1
94	Pepsi Plant	1
95	Piney Ridge McDonald's	1
96	Post Office	1
97	Purdum Wood Store	1
98	Richmond Blvd	1

Order	Origin	Total Passengers
99	Ridge St	1
100	S Hall Church	1
101	S Main Family Dollar	1
102	Schoolfield	1
103	Seeland and Garfield	1
104	Seeland Rd	1
105	Southhampton and Hushes	1
106	Southhampton/Chatelaine Ave	1
107	Sterling Trace Apts	1
108	Stokes and Holbrook Ave	1
109	Stokes St	1
110	Texas Steakhouse	1
111	Tiny Town	1
112	Toys R Us	1
113	W Main Fastmart	1
114	W Main Hardee's	1
115	W Main Old Dutch	1
116	Washington St and Hauson	1
117	West Stokes St	1
118	Withers Rd	1
119	Woodrow Wilson	1

Question #3: Where are you getting off the bus?

Riders were also asked to indicate an address, cross street, or landmark for their destination. Rider's destinations are illustrated and detailed in Chapter 3. The results in this section were moderately adjusted to aid in summarization. For example, the response "Spring Street – HUB" was shortened to be included in the "HUB" summary. The summarized results are shown in Table A-3.

Table A-3: Fixed Route Passenger Destinations

Order	Destinations	Total Passengers
1	HUB	34
2	Walmart	15
3	Danville Mall	11
4	NorDan Shopping Center	8
5	Ballou Park	7
6	Coleman Marketplace	5
7	Downtown	5
8	Main St	5
9	N Main St	5
10	Piney Forest Rd	4
11	Biscuitville	3
12	DCC	3
13	Hospital	3
14	Memorial Dr	3
15	Purdum Woods	3
16	Riverside Dr	3
17	Arnett	2
18	Beavers Mill Rd	2
19	Burger King Piney Forest	2
20	Edgewood	2
21	Executive Dr	2
22	IHOP	2
23	Old Dutch (W Main)	2
24	Southhampton	2
25	W Main St	2
26	1700 N Main	1
27	510 Patton St; Pleasantville Apt	1
28	Toys R Us	1

Order	Destinations	Total Passengers
29	ANU	1
30	Bradley Rd	1
31	Broad St	1
32	Canterbury Rd	1
33	Cardinal Village	1
34	Carrington Pavilion	1
35	Chestnut and Main	1
36	Crown Drive	1
37	Dicks	1
38	Franklin Tpke	1
39	Freeze Rd	1
40	God's Storehouse	1
41	Hairston St	1
42	Health Center	1
43	Keeper Road	1
44	Kemper Dr	1
45	Library	1
46	Lockett Dr	1
47	Lowe's Drive	1
48	Main St and Chestnut St	1
49	Main St Doctor Building	1
50	Mall - Walmart	1
51	Monroe St	1
52	N Main and W James	1
53	Papa John's	1
54	Parker Rd	1
55	Pepsi Company	1
56	Piney Forest Rd Golden Corral	1
57	Post Office Westover Dr	1
58	Riverside Taco Bell	1
59	S Main	1
60	Salvation Army	1
61	Southampton Family Dollar	1
62	Southampton/Chatelaine Ave	1
63	Spring Street	1

Order	Destinations	Total Passengers
64	Stokeland	1
65	Sunrise Poplar	1
66	Third Ave	1
67	to the doctor	1
68	transfer	1
69	W Main at Fitzgerald Apts	1
70	W Main St and Mains at Doc offices	1
71	Walker St	1
72	Walmart, Biscuitville Main St	1
73	Walmart, Olive Garden	1
74	Wendy's	1
75	Westover Dr by Food Lion	1
76	Wooding Ave	1

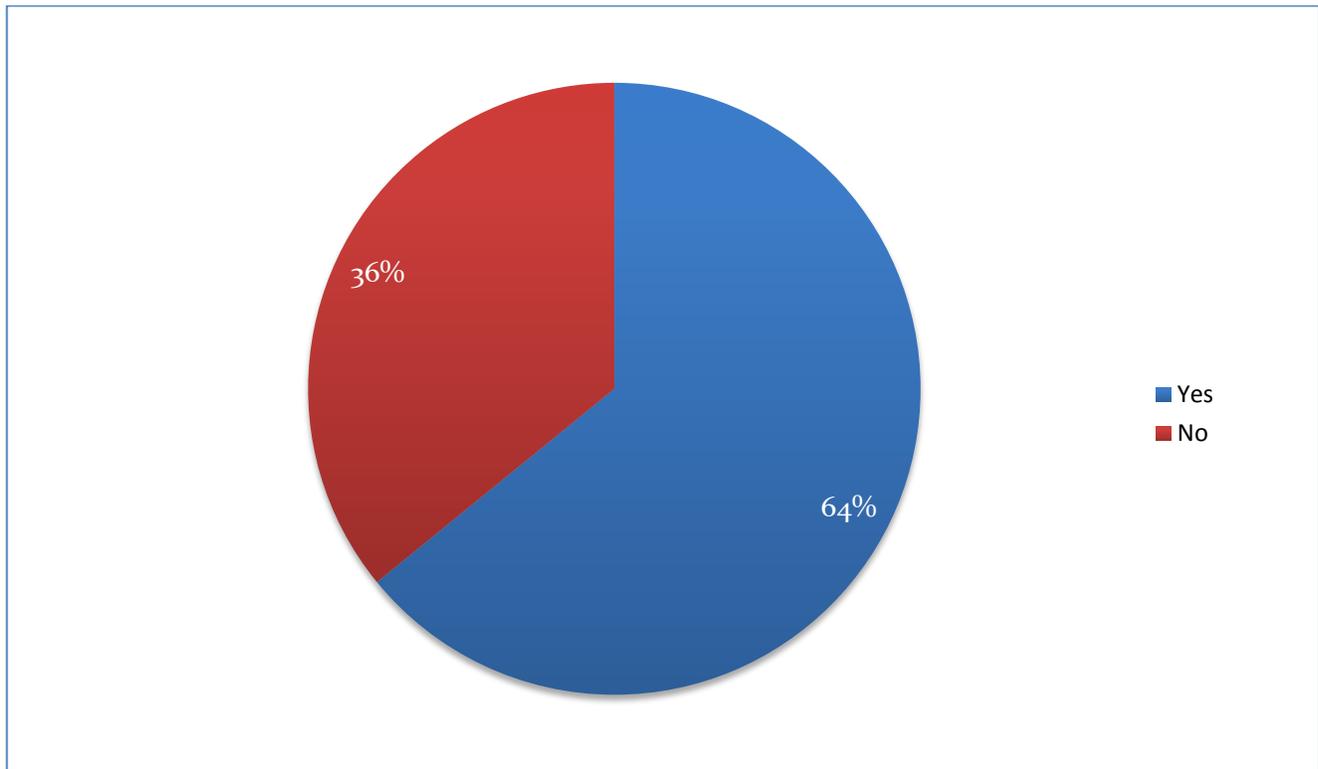
Question #4: Did you or will you have to transfer buses to reach your destination?

Riders were asked if they were required to make a transfer to complete their trip. Nearly two-thirds, approximately 64%, of the riders must make a transfer to complete their trip. The detailed results are shown in Table A-4 and the results are illustrated in Figure A-3.

Table A-4: Riders Who Must Transfer to Reach Their Destination

Did you or will you have to transfer buses to reach your destination?	Count	Percentage
Yes	134	64.1%
No	75	35.9%

Figure A-3: Percentage of Riders Who Must Transfer to Reach Their Destination



Question #5: What route will you transfer to or did you transfer from?

If riders indicated that they would need to make a transfer to complete their trip they were asked which route they will transfer to or had transferred from. Using the data collected in the first question of the survey – which route are you currently riding an analysis was conducted to determine rider’s transfers.

Table A-5: Fixed Route Passenger Transfers

	#1 North Main	#1 Kemper Road-DCC	#2 Riverside	#2 Third Ave-NorDan	#3 Danville Estates-NorDan	#3 Edgewood-Stokesland	#4 Health Center-DCC	#4 North Main	#5 Edgewood-Stokesland	#5 Riverside	#6 Glenwood
#1 North Main	-	1	7	1	1	3	2	1	1	7	-
#1 Kemper Road-DCC	1	-	4	-	1	1	4	1	-	2	-
#2 Riverside	3	2	-	1	2	1	2	-	1	2	-
#2 Third Ave-NorDan	2	-	-	-	2	2	-	-	-	1	-
#3 Danville Estates-NorDan	-	4	1	2	-	1	1	1	1	3	-
#3 Edgewood-Stokesland	3	1	1	1	-	-	-	-	-	1	-
#4 Health Center-DCC	1	3	4	2	1	2	-	-	1	6	-
#4 North Main	2	-	2	-	-	-	-	-	-	1	-
#5 Edgewood-Stokesland	-	-	1	-	-	4	-	-	-	-	-
#5 Riverside	2	-	3	-	2	2	1	-	-	-	-
#6 Glenwood	-	-	-	-	-	-	-	-	-	-	-

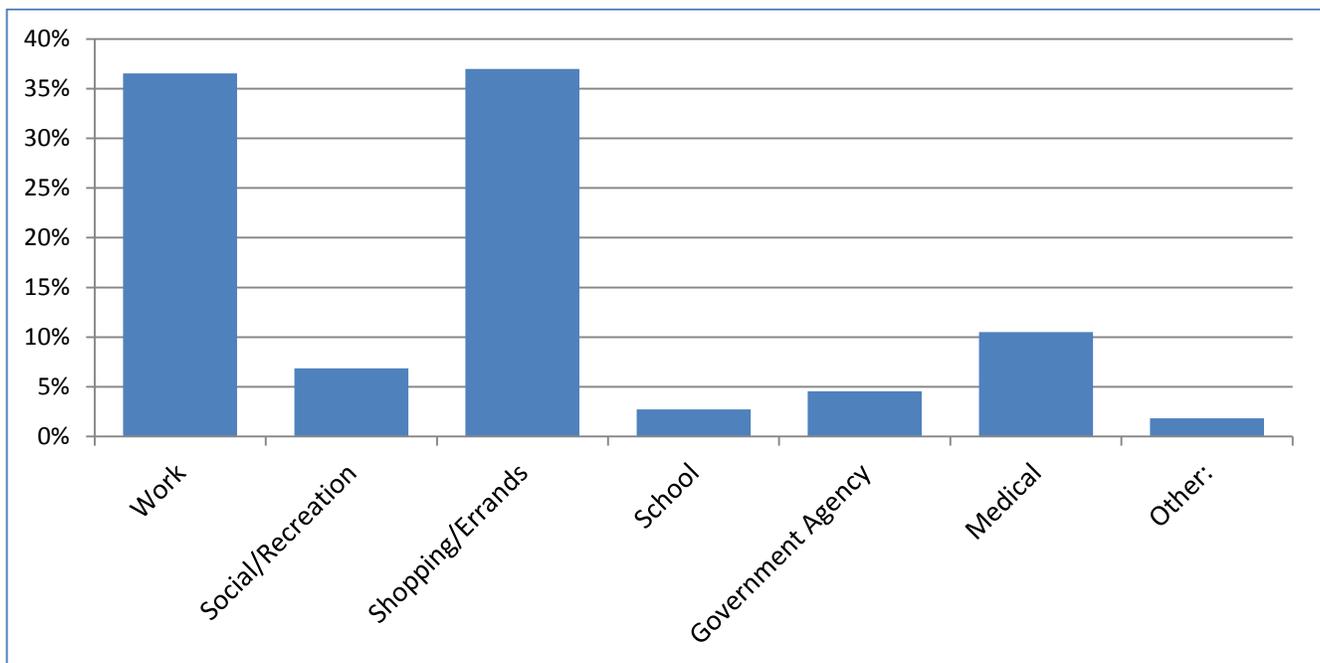
Question #6: What is the purpose of your trip today?

Riders were asked the purpose of their trip. The most frequent answer was “Shopping/Errands” with 37%. The second most frequent answer was “Work” with 36.5% and the third was “Medical” with 10.5%. The detailed results are shown in Table A-6 and the results are illustrated in Figure A-4.

Table A-6: Fixed Route Trip Purpose

6. What is the purpose of your trip today?	Count	Percentage
Work	80	36.5%
Social/Recreation	15	6.8%
Shopping/Errands	81	37.0%
School	6	2.7%
Government Agency	10	4.6%
Medical	23	10.5%
Other:	4	1.8%
<i>Home</i>	2	50%
<i>Personal</i>	1	25%
<i>Salvation Army</i>	1	25%

Figure A-4: Fixed Route Percentage of Trip Purpose



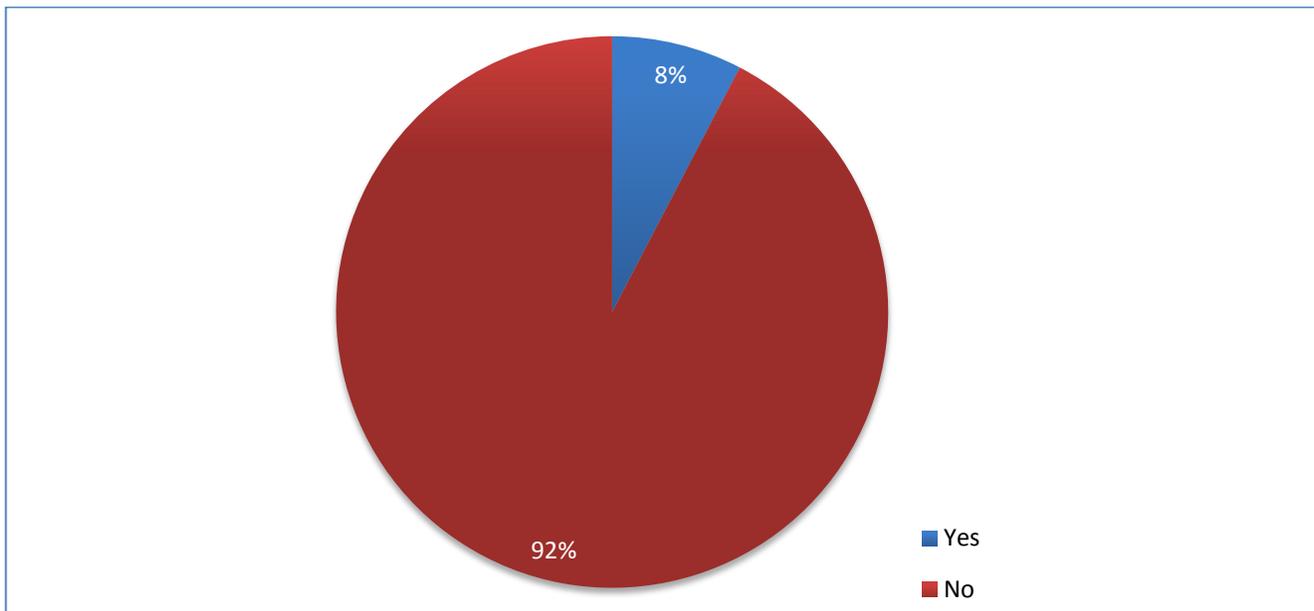
Question #7: Was a car available for this trip?

Riders were asked if a car was available for the trip they were taking on public transportation. Ninety-two percent of respondents indicated that a car was not available for the trip. The detailed results are shown in Table A-7 and the results are illustrated in Figure A-5.

Table A-7: Fixed Route Rider's Vehicle Availability

7. Was a car available for this trip	Count	Percentage
Yes	16	7.7%
No	193	92.3%

Figure A-5: Fixed Route Rider's Vehicle Availability Percentage



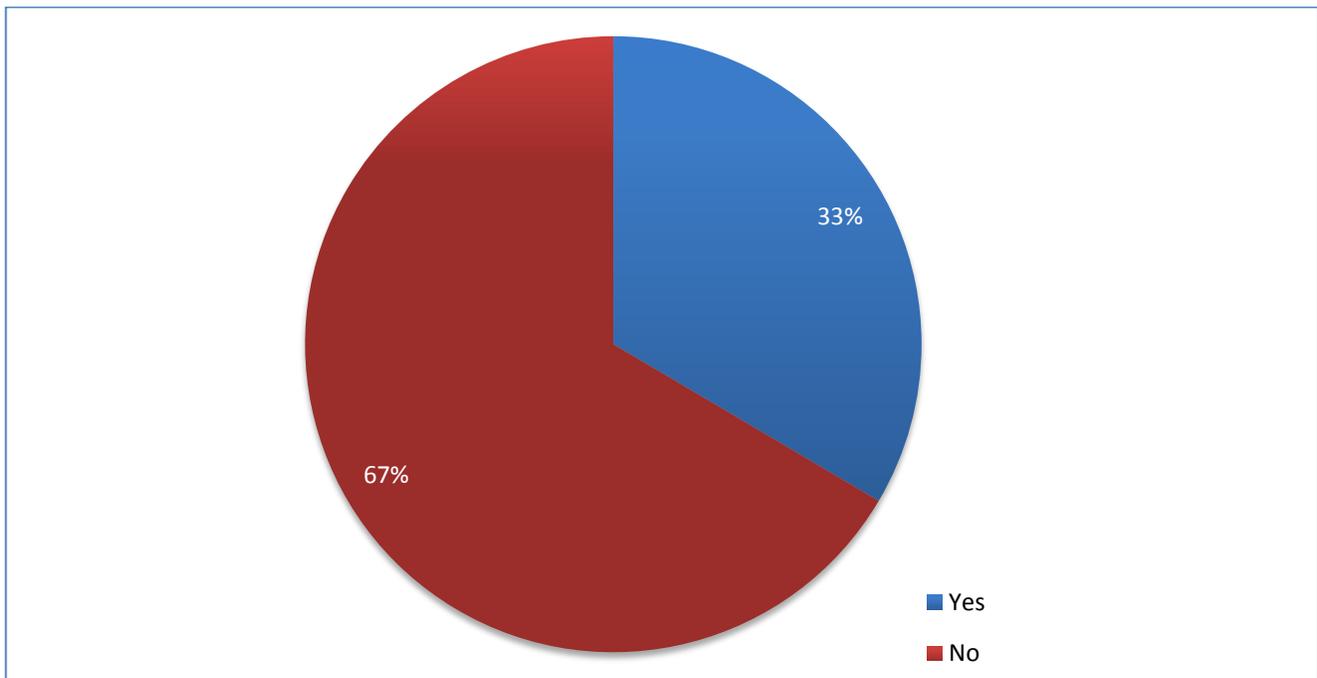
Question #8: Do you have a driver's license?

Riders were also asked if they possess a valid driver's license. Nearly two-thirds, or 66.5% indicated that they did not have a valid driver's license. The detailed results are shown in Table A-8 and the results are illustrated in Figure A-6.

Table A-8: Fixed Route Riders' with a Valid Driver's License

8. Do you have a driver's license?	Count	Percentage
Yes	70	33.5%
No	139	66.5%

Figure A-6: Percentage of Fixed Route Riders' with a Valid Driver's License



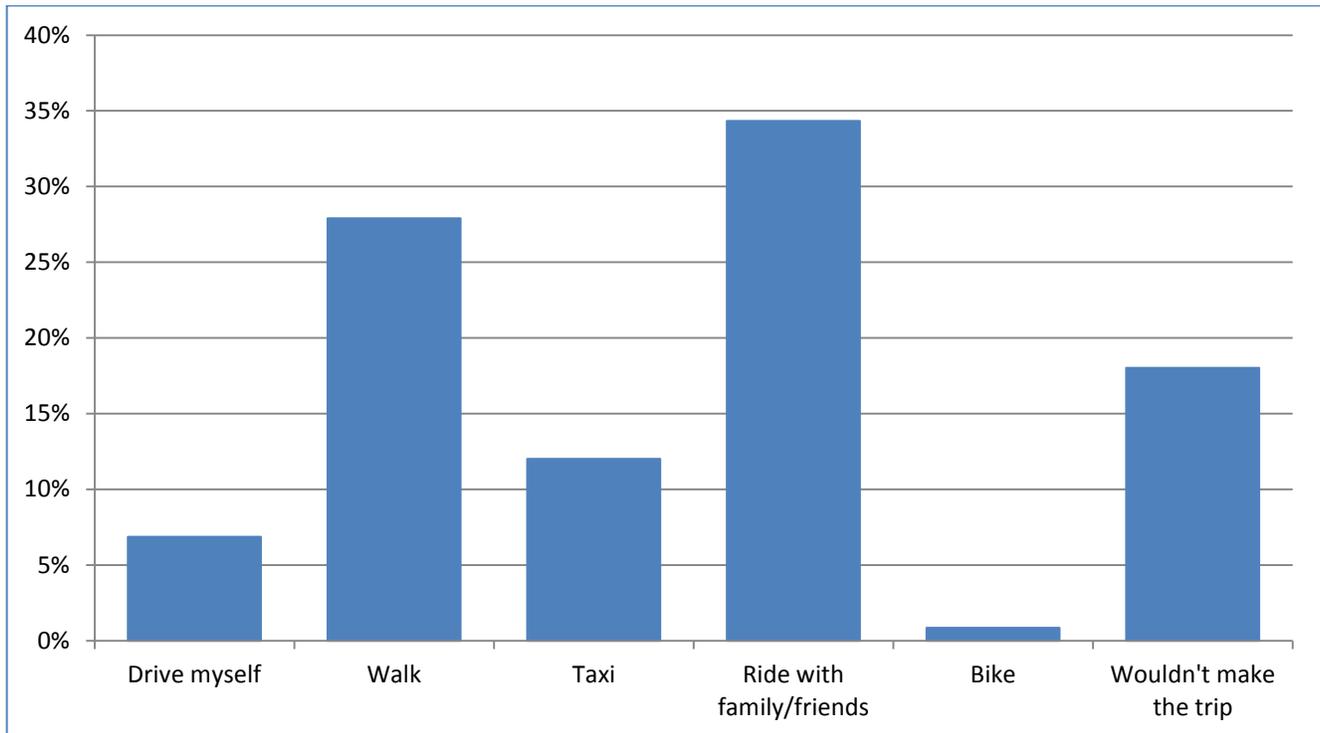
Question #9: If you were not riding the bus, how would you make this trip?

Riders were asked if they were not riding the bus what other method would they use to make their trip. The most frequent answer was to “Ride with family/friends” which garnered 34.3% of the responses. The next most frequent answers were to “Walk” with 27.9% and the rider “Wouldn’t make the trip” with 18%. The detailed results are shown in Table A-9 and the results are illustrated in Figure A-7.

Table A-9: Fixed Route Rider’s Alternative Transportation Modes

9. If you were not riding the bus, how would you make this trip?	Count	Percentage
Drive myself	16	6.9%
Walk	65	27.9%
Taxi	28	12.0%
Ride with family/friends	80	34.3%
Bike	2	0.9%
Wouldn't make the trip	42	18.0%

Figure A-7: Fixed Route Rider’s Alternative Transportation Modes by Percentage



Question #10: Do you think bicycle racks should be added to the fixed route network?

Riders were asked if they think that bicycle racks should be added to the fixed route network. Of the respondents, 32.1% thought that bicycle racks should be added. The question went on to ask the specific locations where bicycle racks should be added. The most frequent response was to add bicycle racks to the front of the buses which garnered 28.6%. The following most frequent responses were to add bike racks “City-wide” which captured 17.9% and the “HUB” with 14.3%. The detailed results are shown in Table A-10A and Table A-10B; the results are illustrated in Figure A-8.

Table A-10A: Fixed Route Riders Who Think Bicycle Racks Should Be Added

10. Do you think bicycle racks should be added to the fixed route network?	Count	Percentage
Yes	67	32.1%
No	142	67.9%

Figure A-8: Percentage of Fixed Route Riders Who Think Bicycle Racks Should Be Added

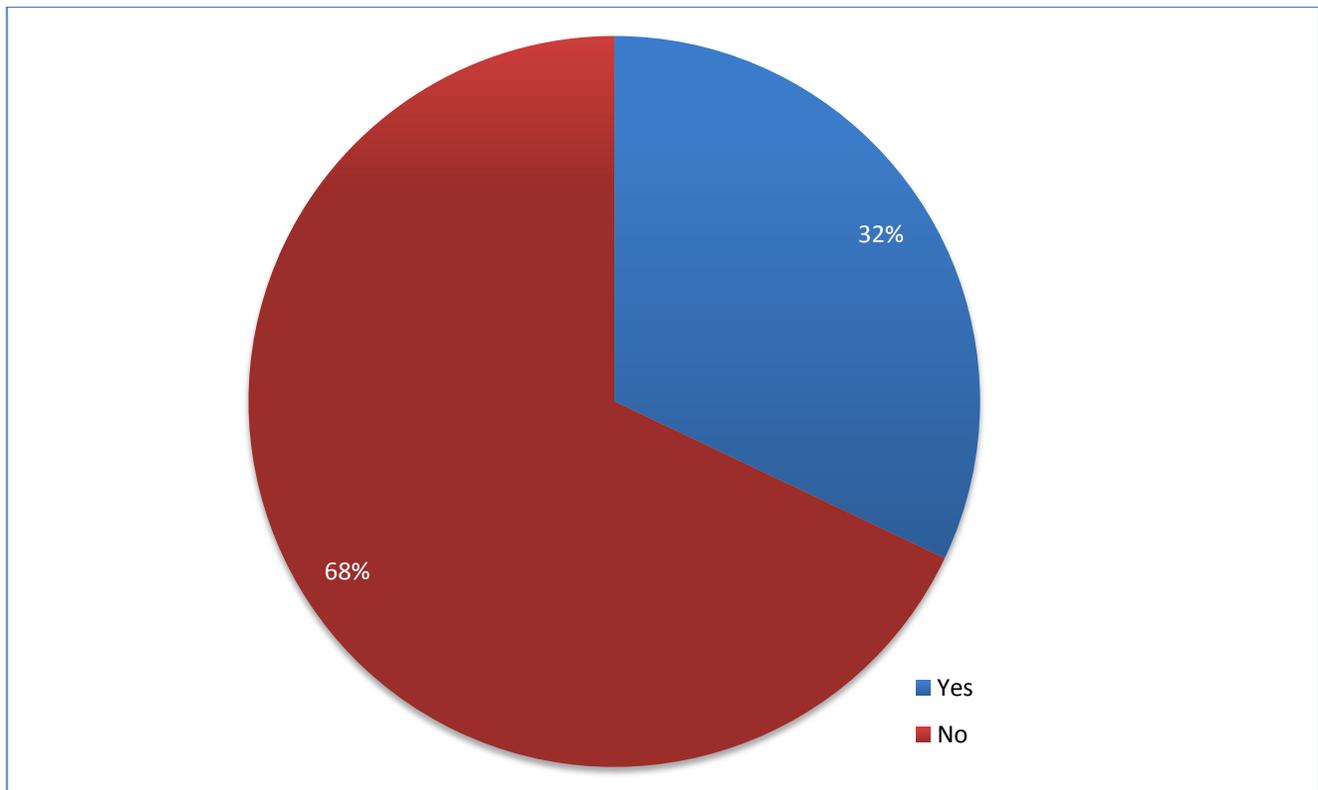


Table A-10B: Where Should Bicycle Racks Be Added to the Fixed Route Network?

Where?	Count	Percentage
Front of the bus	8	28.6%
City-wide	5	17.9%
HUB	4	14.3%
Biked areas	2	7.1%
Riverwalk Trail	2	7.1%
Ballou Park	1	3.6%
Depends on destination	1	3.6%
Edgewood route	1	3.6%
New YMCA	1	3.6%
Riverside route	1	3.6%
U.S. 29 Area	1	3.6%
U.S. 58 West	1	3.6%

Question #11: Are there places or areas in the county where you would like bus service?

Riders were asked if there were any places outside the city limits of Danville where they would like to have bus service. Just under a third of the respondents, 32.5%, indicated that there were places in the county where they would like to have bus service. This question also asked respondents to indicate where in the county they would like to have service. The top response was along U.S. Route 58 with just over 10%; it is prudent to mention that two other responses mentioned service along U.S. Route 58 West and near the intersection of 58 West and Halifax Road. The second and third most frequent responses were Blairs and County-wide, respectfully. The detailed results are shown in Table A-11A and Table A-11B; the results are illustrated in Figure A-9.

Table A-11A: Fixed Route Riders Who Would Like Bus Service in the County

11. Are there places or areas in the county where you would like bus service?	Count	Percentage
Yes	68	32.5%
No	141	67.5%

Figure A-9: Percentage of Fixed Route Riders Who Would Like Bus Service in the County

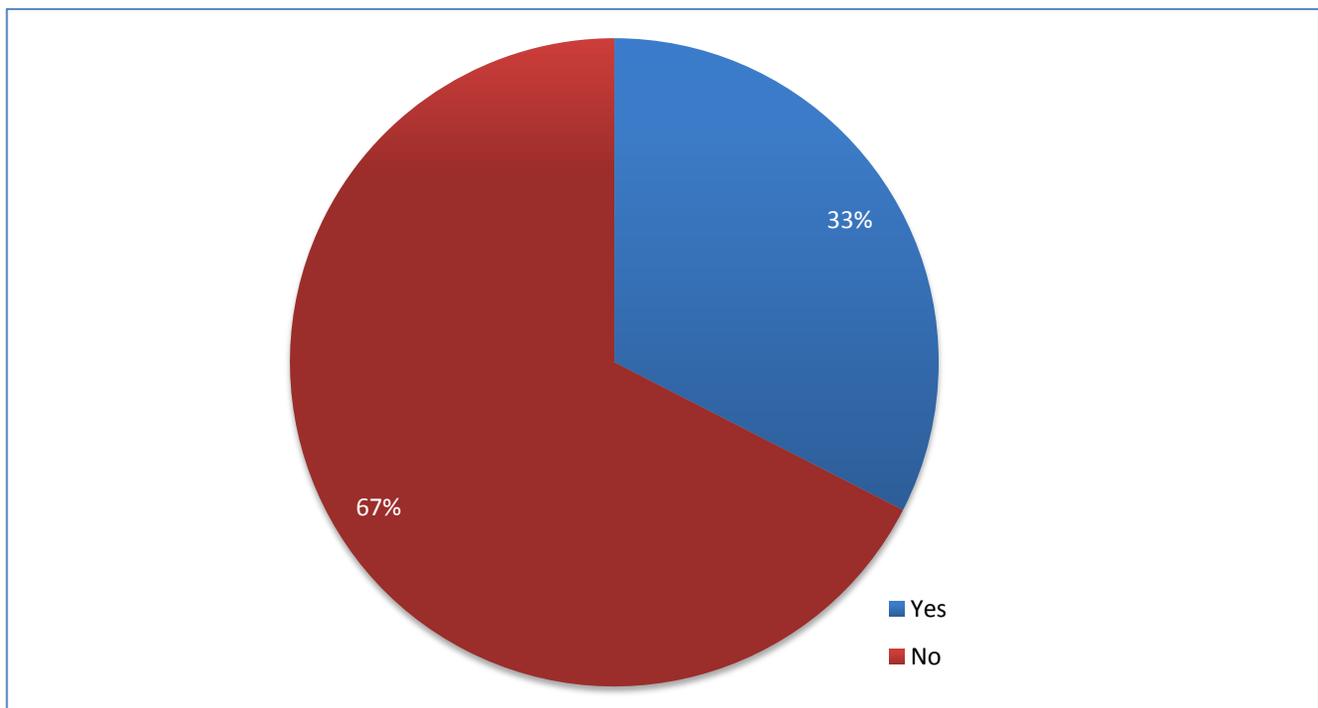


Table A-11B: Where Fixed Route Riders Would Like Bus Service in the County

Where?	Count	Percentage
U.S. 58	6	10.5%
Blairs	4	7.0%
County-wide	4	7.0%
More routes in Danville	3	5.3%
Televista	3	5.3%
Airport	2	3.5%
Chatham	2	3.5%
More stops on Piney Forest	2	3.5%
South Boston Road	2	3.5%
U.S. 29	2	3.5%
Unique	2	3.5%
VA 41	2	3.5%
Westover Drive	2	3.5%
Additional trips along Route #6 Glenwood	1	1.8%
Along Franklin Turnpike	1	1.8%
Anywhere needed	1	1.8%
Brosville	1	1.8%
Cane Creek	1	1.8%
Dan's Hill	1	1.8%
Ingram Heights	1	1.8%
Martinsville	1	1.8%
More bus stops in Danville	1	1.8%
More stops around K-Mart and Wells Fargo	1	1.8%
More stops on North Main Street	1	1.8%
Mount Cross Road	1	1.8%
Nestle	1	1.8%
Outskirts of Danville	1	1.8%
Piggly Wiggly	1	1.8%
Ringgold	1	1.8%
Sam's Club Westover	1	1.8%
SC	1	1.8%
Six day service to Danville Institute and Cyberpark	1	1.8%
U.S. 58 @ Halifax Road	1	1.8%
U.S. 58 West	1	1.8%

Question #12: What do you like most about Danville Transit?

Riders were asked, in a fill-in the blank format, what they liked the most about Danville Transit. The results for this question were moderately adjusted to aid in summarization. For example, the response “it’s on-time” was combined with “Reliability” to make the “On-time reliability” summary. The most common response to this question was “Available/Increased Mobility” with 28% of the responses. The next most frequent responses were “Courteous/Friendly Drivers” and “Affordable/Inexpensive Fares” which garnered 21.4 and 19.6% respectfully. The detailed results are shown in Table A-12.

Table A-12: What Fixed Route Riders Like Most About Danville Transit

12. What do you like most about Danville Transit?	Count	Percentage
Available/Increased mobility	47	28.0%
Courteous/Friendly Drivers	36	21.4%
Affordable/Inexpensive Fares	33	19.6%
Convenient	10	6.0%
Ease of use/Dependability	7	4.2%
On-time reliability	6	3.6%
Trip to work	4	2.4%
Everything	3	1.8%
Comfortable Seats	2	1.2%
Nothing	2	1.2%
Reserve-A-Ride	2	1.2%
Safety	2	1.2%
Save gas	2	1.2%
Serves a need for many	2	1.2%
Able to ride the same day	1	0.6%
Assistance for seniors	1	0.6%
Efficient	1	0.6%
Fast transportation	1	0.6%
It's okay	1	0.6%
Pending lawsuit	1	0.6%
Socializing with passengers	1	0.6%
The Buses	1	0.6%
Trip to school	1	0.6%
Yes	1	0.6%

Question #13: What do you like least about Danville Transit?

Riders were also asked, in a fill-in the blank format, what they liked the least about Danville Transit. The results for this question were moderately adjusted to aid in summarization. For example, the response “always late” was combined with “not on time” to make the “Runs late” summary. The most common response to this question was “Runs late” with 13.5% of the responses. The next most frequent responses were “Not frequent enough” and “Rough ride” which both garnered an 11.9percent response rate. The detailed results are shown in Table A-13.

Table A-13: What Fixed Route Riders Like Least About Danville Transit

13. What do you like least about Danville Transit?	Count	Percentage
Runs late	17	13.5%
Not frequent enough	15	11.9%
Rough ride	15	11.9%
Limited service hours	11	8.7%
No night service	9	7.1%
Rude/Disrespectful drivers	9	7.1%
Long ride times	7	5.6%
No Sunday service	7	5.6%
Crowded	6	4.8%
Limited routes	3	2.4%
Passengers smell	3	2.4%
Runs too early	3	2.4%
A/C or Heat broken	2	1.6%
Reserve-A-Ride	2	1.6%
Wheelchairs take too long	2	1.6%
Being forced to move seats for wheelchairs	1	0.8%
Dangerous Driving	1	0.8%
Dirty buses	1	0.8%
High-floor buses	1	0.8%
No early service	1	0.8%
No job	1	0.8%
No seat belts	1	0.8%
Noisy buses	1	0.8%
Nothing	1	0.8%
Other passengers	1	0.8%
Paying fare	1	0.8%

13. What do you like least about Danville Transit?	Count	Percentage
Paying full fare after 12	1	0.8%
Ride	1	0.8%
Speeding drivers	1	0.8%
Waiting	1	0.8%

Question #14: If Danville Transit was to make service improvements, what would be your top three choices?

Riders were asked the hypothetical question: if Danville Transit was to make service improvements what would be there top three choices? This question was open-ended with three fill in the blank fields provided on the survey. Each field was clearly marked as number one, two, and three. Due to the prioritization, or ranking, of each improvement on the survey, the analysis of this question involved weighing the responses in each field. For example, an improvement that was written in the field marked number one was scored with three points, an improvement in field number two was scored with two points, and improvements in field number three were scored with one point. To provide a full picture of the results, the score as well as the absolute number of responses is included in Table A-14. From this analysis the top three desired service improvements were “Evening/Night Service” with a score of 150, “Sunday Service” with 58, and “On-Time Service” with 48.

Table A-14: Top Three Desired Service Improvements

14. If Danville Transit was to make service improvements, what would be your top three choices?	Count	Score
Evening/Night Service	59	150
Sunday Service	24	58
On-Time Service	20	48
Bigger Buses	18	38
Increase Frequency	15	35
Polite and Understanding Drivers	18	32
Clean Buses	9	20
Expand Service Area	9	19
Eliminate Wheelchairs from Fixed Route	7	18
Improve Driving	7	17
Additional Routes	7	14
Same Day Reserve-A-Ride Service	6	13
Comfortable Seats	4	11
Improve Passenger Behavior	6	11
New Buses	5	11
Working Heater/AC	6	10
All Day Reduced Senior Fare	5	9
More Buses	3	9
Monthly or Weekly Bus Passes	4	8
More Bus Stops	3	7
Seatbelts	3	6

14. If Danville Transit was to make service improvements, what would be your top three choices?	Count	Score
Service to Televista	2	6
Clean Bus Stops	2	5
Fare Free	2	5
Improve Safety	2	5
24 Hour Service	2	4
Improve Bus Stops with Shelters and Benches	4	4
Bicycle Racks on Buses	1	3
Clean Bathrooms at the HUB	1	3
Fare Free for Children	2	3
Direct Routes	1	3
More Drivers	1	3
No-Smoking Policy at the HUB	1	3
Quieter Buses	1	3
Service to Blairs	1	3
Service to Chatham	1	3
Service to Danville Institute/Cyberpark	1	3
No Offensive Smelling Passengers	1	3
Additional Vending Machines at the HUB	1	2
Service to Ringgold	1	2
Air Fresheners on Buses	1	1
Early Morning Service	1	1
Hire Veterans	1	1
Implement Holiday Service	1	1
Improve Dispatching	1	1
More Information on Service	1	1

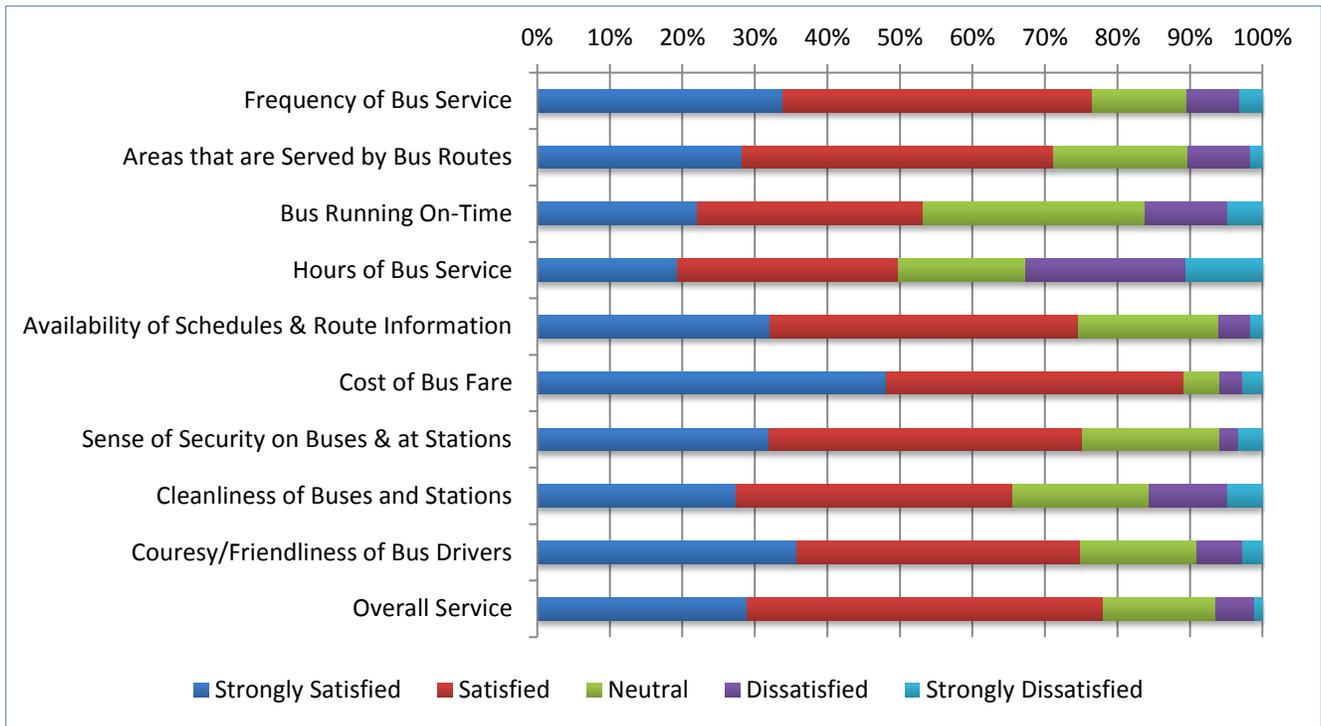
Question #15: Please rate Danville Transit in the following areas:

Finally, riders were asked to rate Danville Transit's Fixed Route service in a number of areas including frequency, cost, cleanliness, and courtesy. Riders were provided answer options based on levels of satisfaction. The detailed results from this question can be seen in Table A-15 and are visually displayed in Figure A-10.

Table A-15: Fixed Route Riders Satisfaction Level

Areas of Service	Strongly Satisfied		Satisfied		Neutral		Dissatisfied		Strongly Dissatisfied	
	#	%	#	%	#	%	#	%	#	%
Frequency of Bus Service	65	33.9%	82	42.7%	25	13.0%	14	7.3%	6	3.1%
Areas that are Served by Bus Routes	52	28.3%	79	42.9%	34	18.5%	16	8.7%	3	1.6%
Bus Running On-Time	41	22.0%	58	31.2%	57	30.6%	21	11.3%	9	4.8%
Hours of Bus Service	35	19.3%	55	30.4%	32	17.7%	40	22.1%	19	10.5%
Availability of Schedules & Route Info	58	32.0%	77	42.5%	35	19.3%	8	4.4%	3	1.7%
Cost of Bus Fare	89	48.1%	76	41.1%	9	4.9%	6	3.2%	5	2.7%
Sense of Security on Buses & at Stations	59	31.9%	80	43.2%	35	18.9%	5	2.7%	6	3.2%
Cleanliness of Buses and Stations	51	27.4%	71	38.2%	35	18.8%	20	10.8%	9	4.8%
Courtesy/Friendliness of Bus Drivers	67	35.8%	73	39.0%	30	16.0%	12	6.4%	5	2.7%
Overall Service	54	28.9%	92	49.2%	29	15.5%	10	5.3%	2	1.1%

Figure A-10: Fixed Route Riders Satisfaction Level Percentage



Question #16: Fixed Route Survey Comments

Comment #1:

Some drivers will see you coming to catch the bus and you are waving to stop them, and they leave you on purpose.

Comment #2:

Babies should not count on the buses.

Comment #3:

Bobby is always late when he has a transfer at NorDan.

Comment #4:

Bus over all good service.

Comment #5:

Bus run after 6.

Comment #6:

Census Bureau 37-38% poverty rate. Both DCC and Averett and City Library have 6 day service. Danville's Institute would greatly benefit from city library-like 40 minute service. City bus has been a day and night difference from county public high school bus.

Comment #7:

Good

Comment #8:

I enjoy the bus very much and will continue to use it.

Comment #9:

I enjoyed riding the bus. People that drive are nice.

Comment #10:

I get car sick so I sit in front and when one of those scooters gets on I have to move so I feel sick. Sometimes I will get off and not go the place I was going to because I feel sick so somebody can ride in my spot.

Comment #11:

I love the public transit because it gets you to and from the location that you have to go when you do not have other ways of getting around you can always rely on public transit to get you to your location and back. I rate public transit Number 1.

Comment #12:

I think service is very good. I would like to see Danville Transit have shelters at some bus stops where you do not stand out in the weather.

Comment #13:

I work at Comfort Inn near the mall. The closest stop is at the intersection of Piedmont and Mt. Cross. I have to walk up the hill to the motel. Need a stop closer to the motel. Thank you.

Comment #14:

Improve quickly.

Comment #15:

It would be nice to see the city buses go to South Boston Road more than they do. Since Dan River closed and a lot of people work at Televista and Nestle and don't have a way to work more than just Reserve-A-Ride or the buses going out that way twice.

Comment #16:

I've rode Danville Transit for years. I've seen and heard the drivers put up with rude talk, profanity, etc. They do a great job! Give them a raise, they deserve it!

Comment #17:

Many of the stops are dark and dirty. The handicapped take a lot of time and can make you late for work. Some people smell bad it cannot be good to be near them.

Comment #18:

More shelters are needed. More routes to shopping areas. Extend bus runs during the holiday seasons. Fire some drivers.

Comment #19:

Need services at night up until 11pm.

Comment #20:

Needs to put a time schedule where there no schedule at.

Comment #21:

Overall - Thank You.

Comment #22:

Overall I enjoy the buses but just a few concerns and suggestions maybe a little longer hours. Maybe more cleanliness of buses. Thanks for Transit.

Comment #23:

Please make the buses run on Sundays because a lot of people have to struggle to find a ride on Sundays and end up wasting money on cabs. When rather ride the bus on Sundays. That would make me and the rest of the people very happy. I am going to pray very hard.

Comment #24:

She ride and driver work with everyone. Start on Sundays please.

Comment #25:

Some drivers have nasty attitudes. Bobby should be fired, especially when he didn't protect and call in earlier when the woman was assaulted on his bus. Some drivers give incorrect information. Buses should be on the streets as long as shopping areas are open.

Comment #26:

Some of the long time drivers go out of their way to be helpful!

Comment #27:

Some of the people have too much stuff. It slows everything down. Some people smell and it can make you ill.

Comment #28:

Stop picking up chairs cause they made the buses late.

Comment #29:

Thanks for your services.

Comment #30:

That the reserve a ride bus could reserve on that day then have to call a day before.

Comment #31:

They should have a weekly bus pass, pay once a week

Comment #32:

We need a bench at Colemarket bus stop

Comment #33:

Well the bus drivers could be more friendly speak.

DEMAND RESPONSE ON-BOARD RIDER SURVEY

This section offers a detailed analysis of the results of the Demand Response On-Board Rider Surveys. A total of 46 demand response surveys were collected. Each of the 14 questions and comment section are detailed in order. A copy of the Demand Response On-Board Rider Survey can be seen in Figure A-11.

Figure A-11: Demand Response On-Board Rider Survey



HANDIVAN, RESERVE-A-RIDE, AND SENIOR ON-BOARD RIDER SURVEY

Danville Transit is currently developing a Transit Development Plan that will serve as a future guide for public transportation services in the region. As part of our planning process, it is important for us to understand the needs of our customers and to solicit input concerning our services. Please take a minute to fill out the following survey.

1. Which service are you currently on?
 Handivan
 Reserve-A-Ride
 Senior Transportation

2. Where did you get on the bus?
Please indicate an address, intersection, or landmark.

3. Where are you getting off the bus?
Please indicate an address, intersection, or landmark.

4. What is the purpose of your trip today?
You may check more than one.
 Work School
 Social/Recreation Government Agency
 Shopping/Errands Medical
 Other: _____

5. How often do you ride the Handivan, Reserve-A-Ride, or Senior Transportation service?
 4 times per week or more 2-3 times per month
 2-3 times per week Once a month
 Once a week Less than once a month

6. Was a car available for this trip?
 Yes No

7. Do you have a driver's license?
 Yes No

8. If you were not riding the bus, how would you make this trip?
 Drive myself Ride with family/friends
 Walk Bike
 Taxi Wouldn't make the trip

9. Do you think bicycle racks should be added to the fixed route network? Yes No
 If yes, where: _____

10. Are there places or areas in the county where you would like bus service? Yes No
 If yes, where: _____

11. What do you like most about Danville Transit?

12. What do you like least about Danville Transit?

13. If Danville Transit was to make service improvements, what would be your top three choices?
 (1) _____
 (2) _____
 (3) _____

14. Please rate Danville Transit in the following areas:

	<u>Strongly Satisfied</u>	<u>Satisfied</u>	<u>Neutral</u>	<u>Dis-satisfied</u>	<u>Strongly Dis-satisfied</u>
a. Required Reservation Procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Bus Running On-Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Hours of Bus Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Cost of the Bus Fare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Sense of Security on Buses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Cleanliness of Buses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Courtesy/Friendliness of Bus Drivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Overall Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank You!

Please provide any comments you may have concerning public transit in the Danville area on the back of this survey.

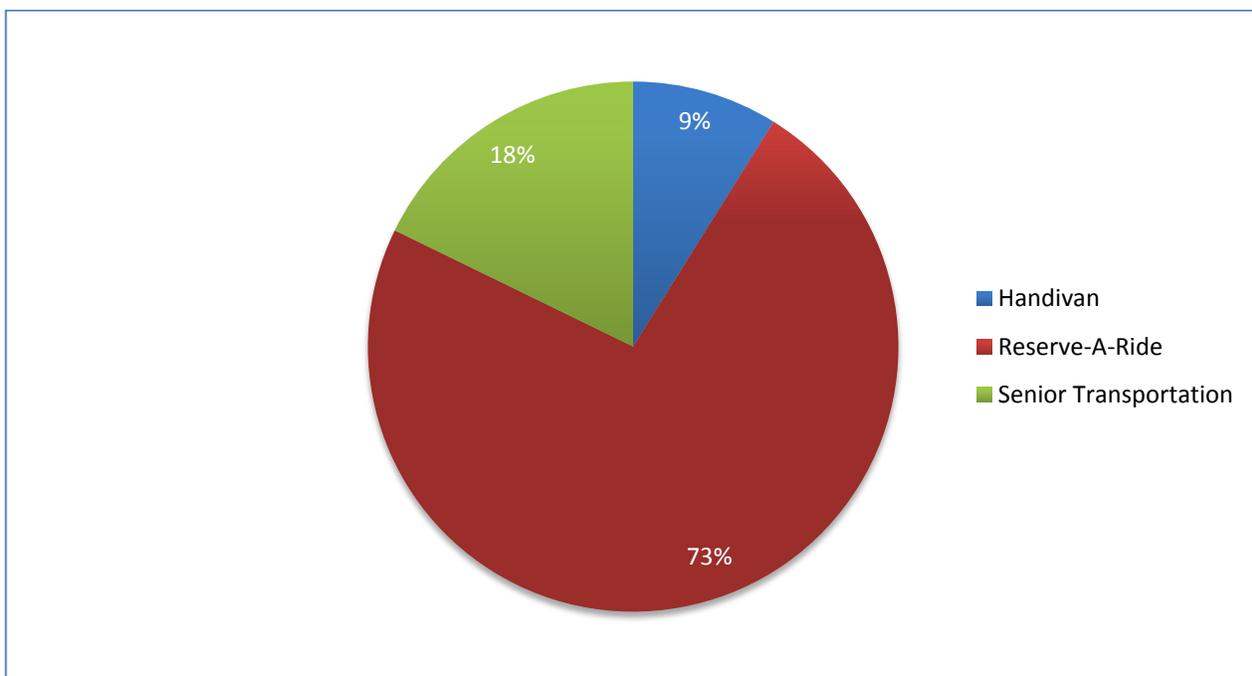
Question #1: Which service are you currently on?

Demand response riders were first asked which of Danville Transit’s three demand response service they were using when they filled out the survey. Riders from the Reserve-A-Ride service make up the overwhelming majority of survey respondents with 73% of the surveys. As seen in Table A-16 riders from the Senior Transportation service make up 18% and Handivan riders represent 9% of the survey responses. Figure A-12 provides a visual depiction of the response rate.

Table A-16: Demand Response Survey Responses by Service

1. Which service are you currently on?	Count	Percentage
Handivan	4	8.9%
Reserve-A-Ride	33	73.3%
Senior Transportation	8	17.8%

Figure A-12: Demand Response Rate by Service



Question #2: Where did you get on the bus?

Riders were asked to indicate an address, cross street, or landmark for the location where they boarded the bus. The results in this section were moderately adjusted to aid in summarization. For example, the response “409 Moffett” was included in the “409 Moffett St” summary. The summarized results are shown in Table A-17.

Table A-17: Demand Response Passenger Origins

Order	Origin	Total Passengers
1	402 N Ridge Rd	2
2	409 Moffett St	2
3	Janie's Hope Apts	2
4	1020 Washington St	1
5	1113 Lanier Ave	1
6	112 Alington Place	1
7	119 Cedar Place	1
8	1202 Wayles St	1
9	123 Hamilton Street	1
10	125 Industrial Ave	1
11	125 Schoolfield Dr	1
12	128 Carver Drive	1
13	133 Hamilton St	1
14	1575 Richmond Blvd	1
15	191 Chatelaine Ave	1
16	200 N Pointe Lane	1
17	204A Thunderbird Circle	1
18	205 Bell Dr	1
19	231 S Ridge St	1
20	2449 Moorefield Bridge Rd	1
21	310 Gray St	1
22	34 Milton Ave	1
23	516 Brooke Drive	1
24	530 Heather St	1
25	609 Cardinal Pl	1
26	703 Arnett Blvd	1
27	717 Holbrook St	1
28	769 Memorial Drive	1

Order	Origin	Total Passengers
29	823 Springfield Road	1
30	866 Franklin Turnpike	1
31	889 Pine Street	1
32	Audun Apt	1
33	Broad St	1
34	Cedar Place	1
35	Heritage Towers	1
36	"Home"	1
37	Schoolfield area Danville	1
38	Sedgefield	1
39	Virginia Ave	1

Question #3: Where are you getting off the bus?

Riders were also asked to indicate an address, cross street, or landmark for their destination. The results in this section were moderately adjusted to aid in summarization. For example, the response “Mall” was included in the “Danville Mall” summary. The summarized results are shown in Table A-18.

Table A-18: Demand Response Passenger Destinations

Order	Origin	Total Passengers
1	Dialysis	4
2	Walmart	4
3	Danville Mall	3
4	Danville Shopping Plaza	2
5	Doctor's Office	2
6	Target	2
7	110 Riverpointe Dr	1
8	113 Cane Creek Blvd	1
9	115 Cane Creek Blvd	1
10	119 Cedar Place	1
11	121 Martha St	1
12	135 Brook Circle	1
13	201 Union St	1
14	222 Brentwood Dr	1
15	239 Rocky Lane	1
16	512 Westover Dr	1
17	516 Brooke	1
18	58 East Danville	1
19	Belk	1
20	Bojangles	1
21	Cardinal Place	1
22	Golden Corral	1
23	Goodwill	1
24	Hardee's on US-58	1
25	IHOP	1
26	Ikea	1
27	McDonald's on US-58	1
28	Mt Crane Rd	1
29	Nestle	1

Order	Origin	Total Passengers
30	Southland Dr	1
31	YMCA	1

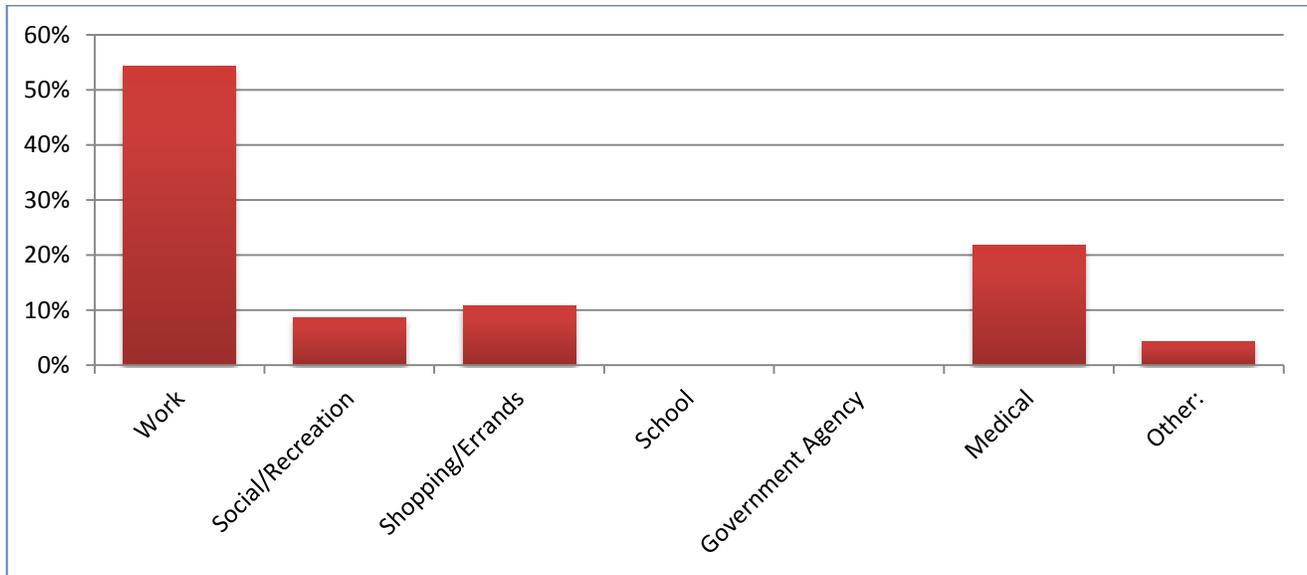
Question #4: What is the purpose of your trip today?

Riders were asked the purpose of their trip. The most frequent answer was “Shopping/Errands” with 37%. The second most frequent answer was “Work” with 36.5% and the third was “Medical” with 10.5%. The detailed results are shown in Table A-19 and the results are illustrated in Figure A-13.

Table A-19: Demand Response Trip Purpose

4. What is the purpose of your trip today?	Count	Percentage
Work	25	54.3%
Social/Recreation	4	8.7%
Shopping/Errands	5	10.9%
School	0	0.0%
Government Agency	0	0.0%
Medical	10	21.7%
Other:	2	4.3%
<i>Bank</i>	1	2.2%
<i>Personal</i>	1	2.2%

Figure A-13: Fixed Route Percentage of Trip Purpose



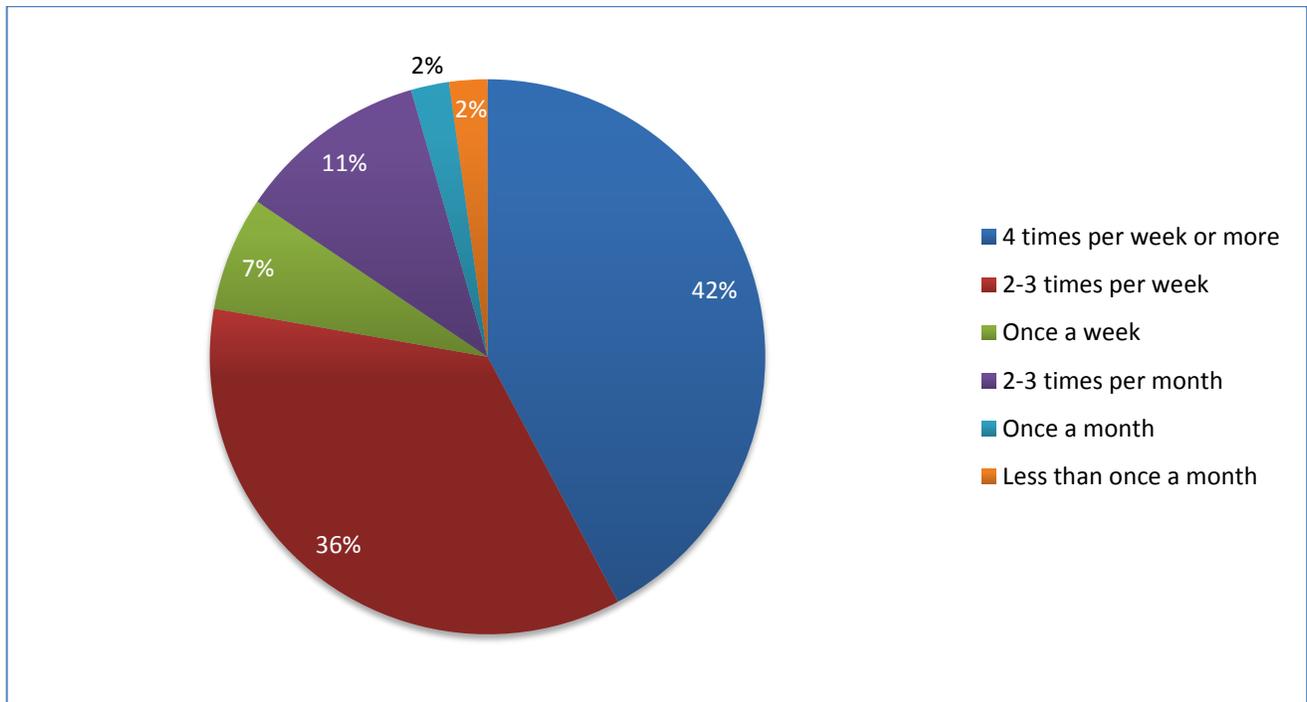
Question #5: How often do you ride the Handivan, Reserve-A-Ride, or Senior Transportation service?

Riders were asked how often they rode Danville Transit’s Demand Response services. Respondents were offered six answer options ranging from less than once a month to four times per week or more. The most frequent response was four times per week or more with 42%. The complete results can be viewed in Table A-20. Figure A-14 provides a visual illustration of the results.

Table A-20: Demand Response Frequency of Use

5. How often do you ride the Handivan, Reserve-A-Ride, or Senior Transportation service?	Count	Percentage
4 times per week or more	19	42.2%
2-3 times per week	16	35.6%
Once a week	3	6.7%
2-3 times per month	5	11.1%
Once a month	1	2.2%
Less than once a month	1	2.2%

Figure A-14: Demand Response Frequency of Use Percentage



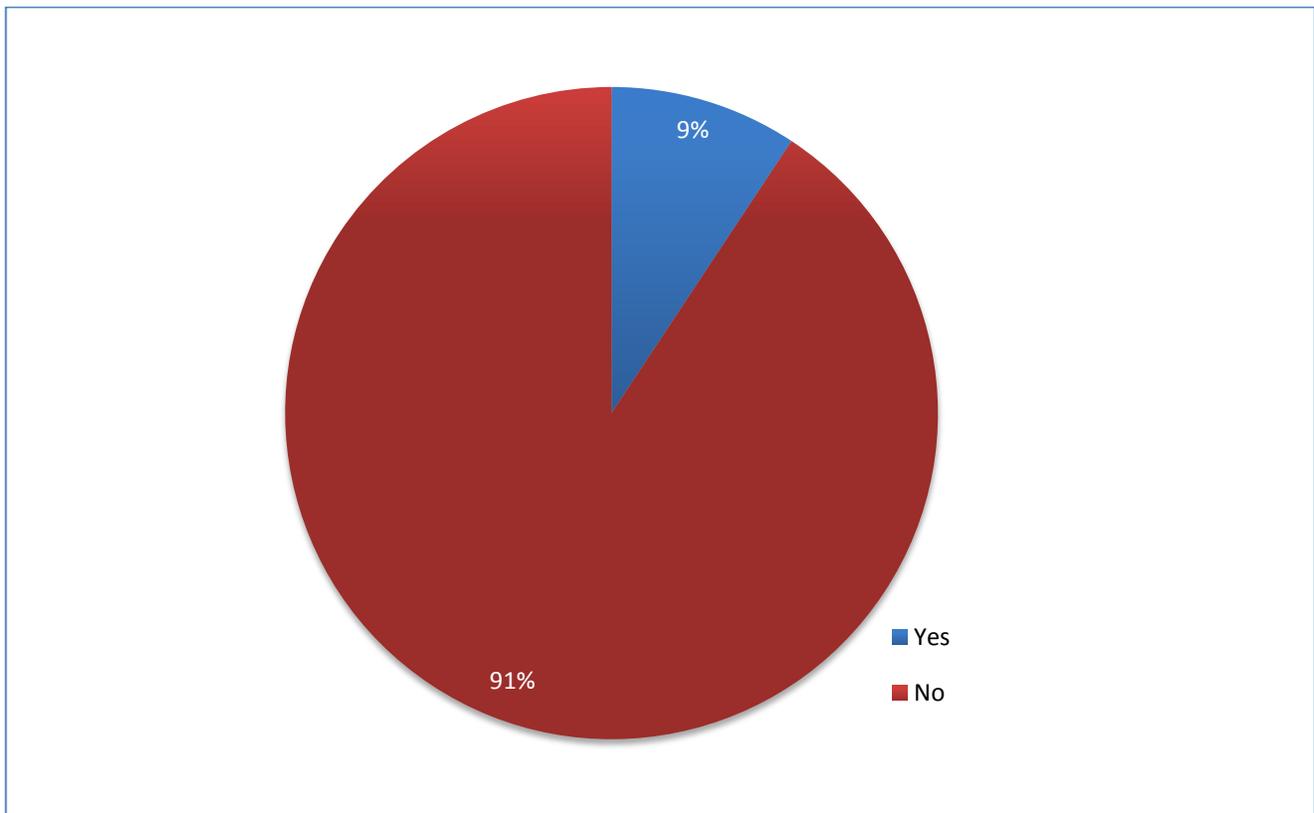
Question #6: Was a car available for this trip?

Riders were asked if a car was available for the trip they were taking on public transportation. Ninety-one percent of respondents indicated that a car was not available for the trip. The detailed results are shown in Table A-21 and the results are illustrated in Figure A-15.

Table A-21: Demand Response Rider's Vehicle Availability

6. Was a car available for this trip?	Count	Percentage
Yes	4	9.3%
No	39	90.7%

Figure A-15: Demand Response Rider's Vehicle Availability Percentage



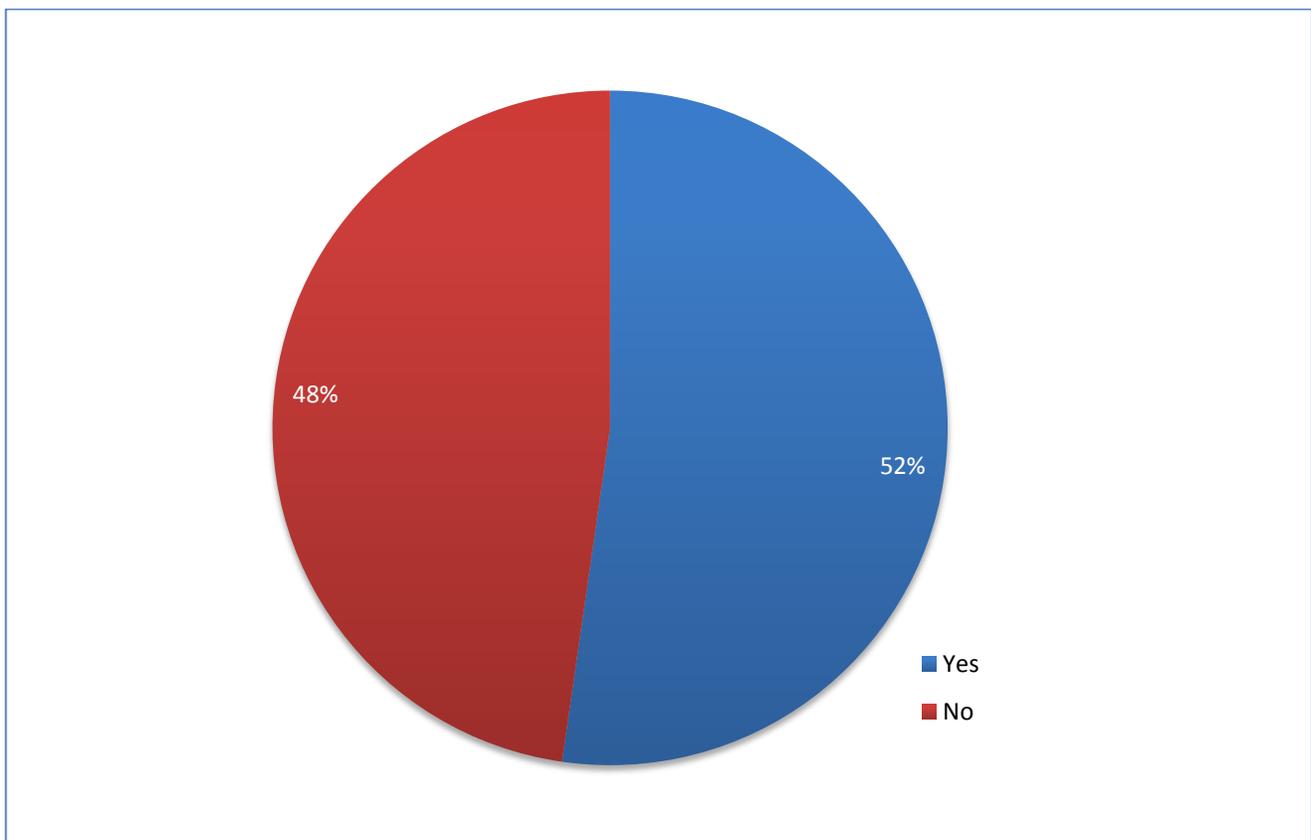
Question #7: Do you have a driver's license?

Riders were also asked if they possess a valid driver's license. Just over half, or 52.3% indicated that they do have a valid driver's license. The detailed results are shown in Table A-22 and the results are illustrated in Figure A-16.

Table A-22: Demand Response Riders' with a Valid Driver's License

7. Do you have a driver's license?	Count	Percentage
Yes	23	52.3%
No	21	47.7%

Figure A-16: Percentage of Demand Response Riders' with a Valid Driver's License



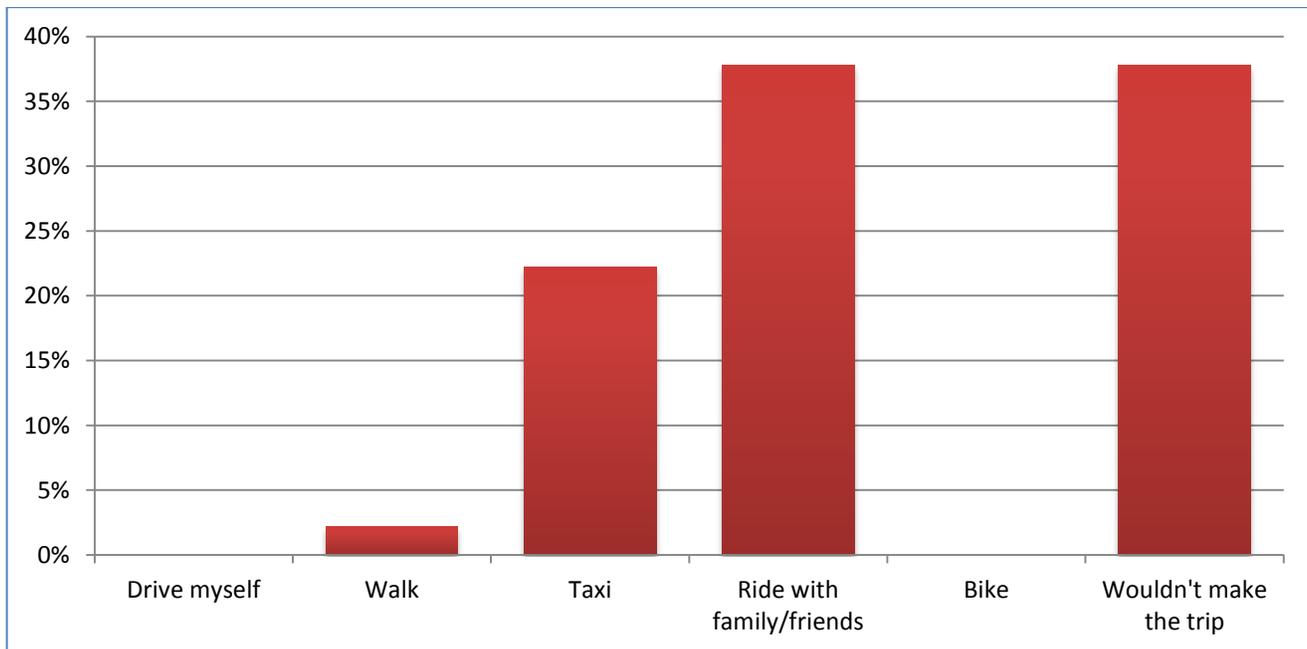
Question #8: If you were not riding the bus, how would you make this trip?

Riders were asked if they were not riding the bus what other method would they use to make their trip. The most frequent answers were to “Ride with family/friends” and “Wouldn’t make the trip” which both garnered 37.8% of the responses. The next most frequent answers were to “Walk” with 27.9% and the rider “Wouldn’t make the trip” with 18%. The detailed results are shown in Table A-23 and the results are illustrated in Figure A-17.

Table A-23: Demand Response Rider’s Alternate Transportation Modes

8. If you were not riding the bus, how would you make this trip?	Count	Percentage
Drive myself	0	0.0%
Walk	1	2.2%
Taxi	10	22.2%
Ride with family/friends	17	37.8%
Bike	0	0.0%
Wouldn't make the trip	17	37.8%

Figure A-17: Demand Response Rider’s Alternate Transportation Modes by Percentage



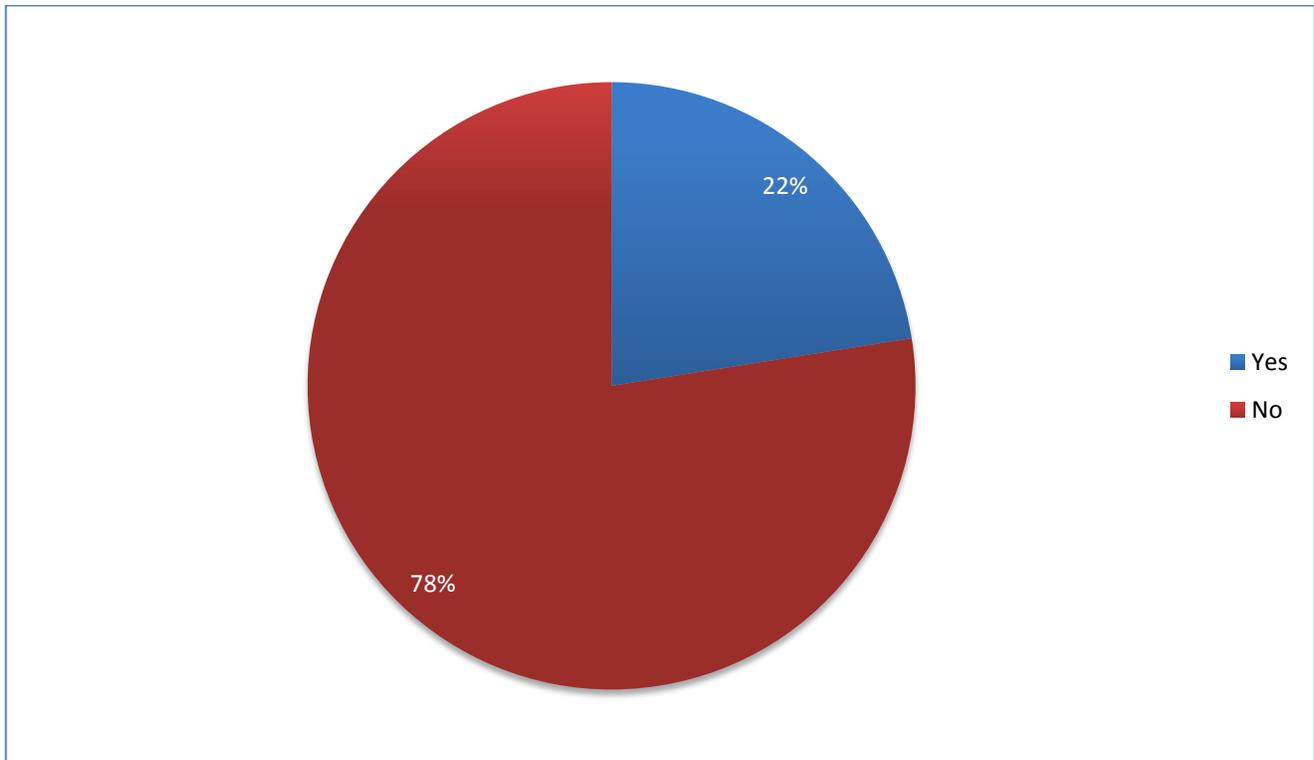
Question #9: Do you think bicycle racks should be added to the fixed route network?

Riders were asked if they think that bicycle racks should be added to the fixed route network. Of the respondents, 22.5% thought that bicycle racks should be added. The question went on to ask the specific locations where bicycle racks should be added. Two responses were gathered for this question which were “everywhere” and “on vehicles.” The detailed results are shown in Table A-24; the results are illustrated in Figure A-18.

Table A-24: Demand Response Riders Who Think Bicycle Racks Should Be Added

9. Do you think bicycle racks should be added to the fixed route network?	Count	Percentage
Yes	9	22.5%
No	31	77.5%
Where?		
Everywhere	1	50.0%
On vehicles	1	50.0%

Figure A-18: Percentage of Demand Response Riders Who Think Bicycle Racks Should Be Added



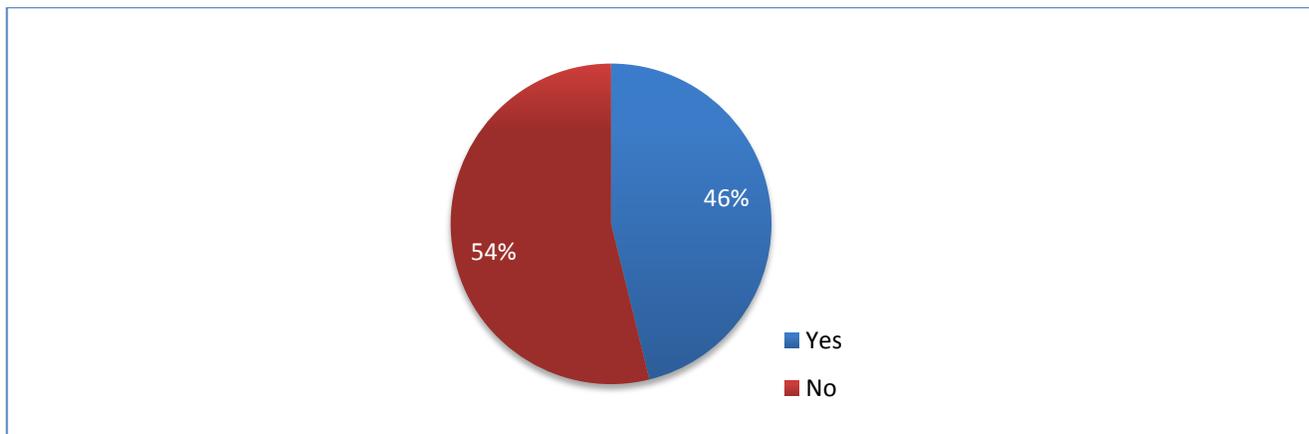
Question #10: Are there places or areas in the county where you would like bus service?

Riders were asked if there were any places outside the city limits of Danville where they would like to have bus service. Almost half of the respondents, 46.2%, indicated that there were places in the county where they would like to have bus service. This question also asked respondents to indicate where in the county they would like to have service. The only responses with more than one response were “Blairs” and “County wide.” The detailed results are shown in Table A-25; the results are illustrated in Figure A-19.

Table A-25: Demand Response Riders Who Would Like Bus Service in the County

10. Are there places or areas in the county where you would like bus service?	Count	Percentage
Yes	18	46.2%
No	21	53.8%
Where?		
883 Ridge Crest Road	1	9.1%
Blairs	2	18.2%
Chatham	1	9.1%
County-wide	2	18.2%
Dan Hill	1	9.1%
Westover Drive	1	9.1%
Holbrook Street	1	9.1%
Noble Avenue	1	9.1%
Barret and Riverside	1	9.1%

Figure A-19: Percentage of Fixed Route Riders Who Would Like Bus Service in the County



Question #11: What do you like most about Danville Transit?

Riders were asked, in a fill-in the blank format, what they liked the most about Danville Transit. The results for this question were moderately adjusted to aid in summarization. For example, the response “It’s on-time” was combined with “Reliability” to make the “On-time reliability” summary. The most common response to this question was “Available/Increased Mobility” with 28% of the responses. The next most frequent responses were “Courteous/Friendly Drivers” and “Affordable/Inexpensive Fares” which garnered 21.4% and 19.6% respectfully. The detailed results are shown in Table A-26.

Table A-26: What Demand Response Riders Like Most About Danville Transit

11. What do you like most about Danville Transit?	Count	Percentage
Courteous/Friendly Drivers	11	28.9%
Availability/Increased Mobility	9	23.7%
Convenient	5	13.2%
Ease of use/Dependability	4	10.5%
On-time reliability	3	7.9%
Affordable/Inexpensive Fares	2	5.3%
Trip to work	2	5.3%
Service type options	1	2.6%
Trip to work	1	2.6%

Question #12: What do you like least about Danville Transit?

Riders were also asked, in a fill-in the blank format, what they liked the least about Danville Transit. The results for this question were moderately adjusted to aid in summarization. For example, the response “always late” was combined with “not on time” to make the “Runs late” summary. The most common response to this question was “Runs late” with 13.5% of the responses. The next most frequent responses were “Not frequent enough” and “Rough ride” which both garnered an 11.9percent response rate. The detailed results are shown in Table A-27.

Table A-27: What Demand Response Riders Like Least About Danville Transit

12. What do you like least about Danville Transit?	Count	Percentage
Runs late	8	40.0%
Rude passengers	2	10.0%
Crowded buses	1	5.0%
Dirty buses	1	5.0%
Limited service hours	1	5.0%
Modifying pickup times	1	5.0%
No Sunday service	1	5.0%
Nothing	1	5.0%
Phone is always busy	1	5.0%
Ride restrictions	1	5.0%
Runs too early	1	5.0%
Speeding drivers	1	5.0%

Question #13: If Danville Transit was to make service improvements, what would be your top three choices?

Riders were asked the hypothetical question: if Danville Transit was to make service improvements what would be there top three choices? This question was open-ended with three fill in the blank fields provided on the survey. Each field was clearly marked as number one, two, and three. Due to the prioritization, or ranking, of each improvement on the survey, the analysis of this question involved weighing the responses in each field. For example, an improvement that was written in the field marked number one was scored with three points, an improvement in field number two was scored with two points, and improvements in field number three were scored with one point. To provide a full picture of the results, the score as well as the absolute number of responses is included in Table A-28. From this analysis the top three desired service improvements were “Improve On-Time Performance” with a score of 24, “Sunday Service” with 21, and “Expand Service into the County” with 12.

Table A-28: Top Desired Demand Response Service Improvements

13. If Danville Transit was to make service improvements, what would be your top three choices?	Count	Score
Improve On-Time Performance	10	24
Sunday Service	7	21
Expand Service into the County	4	12
Evening/Night Service	4	11
More Respectful/Safer Drivers	3	7
Decrease Fares	2	6
Direct Routing	1	3
Eliminate Trip Modifications	1	3
End Trip Restrictions	1	3
Additional Phone Lines	1	2
Back-Up Buses	1	2
Courtesy Call Upon Arrival	2	2
Increase Fixed-Route Frequency	1	2
Larger Buses	1	2
Allow Churches and Schools as Destinations	1	2
More Bus Stops	1	1
Clean Buses	1	1

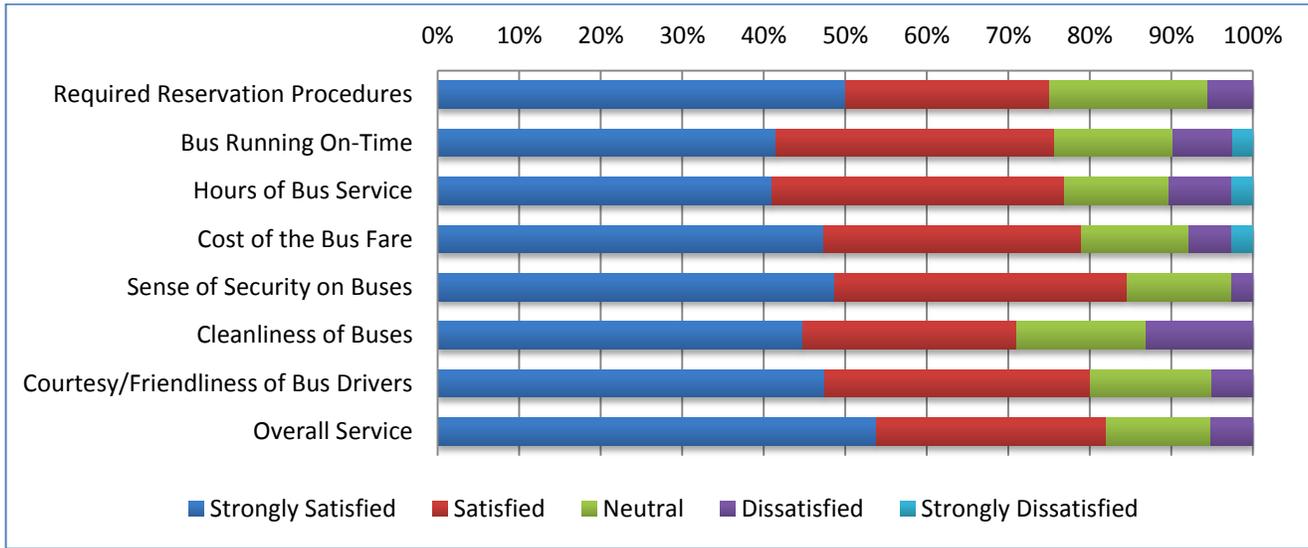
Question #14: Please rate Danville Transit in the following areas:

Finally, riders were asked to rate Danville Transit's Demand Response service in a number of areas including frequency, cost, cleanliness, and courtesy. Riders were provided answer options based on levels of satisfaction. The detailed results from this question can be seen in Table A-29 and are visually displayed in Figure A-20.

Table A-29: Demand Response Riders Satisfaction Level

Areas of Service	Strongly Satisfied		Satisfied		Neutral		Dissatisfied		Strongly Dissatisfied	
	#	%	#	%	#	%	#	%	#	%
Required Reservation Procedures	18	50.0%	9	25.0%	7	19.4%	2	5.6%	0	0.0%
Bus Running On-Time	17	41.5%	14	34.1%	6	14.6%	3	7.3%	1	2.4%
Hours of Bus Service	16	41.0%	14	35.9%	5	12.8%	3	7.7%	1	2.6%
Cost of the Bus Fare	18	47.4%	12	31.6%	5	13.2%	2	5.3%	1	2.6%
Sense of Security on Buses	19	48.7%	14	35.9%	5	12.8%	1	2.6%	0	0.0%
Cleanliness of Buses	17	44.7%	10	26.3%	6	15.8%	5	13.2%	0	0.0%
Courtesy/Friendliness of Bus Drivers	19	47.5%	13	32.5%	6	15.0%	2	5.0%	0	0.0%
Overall Service	21	53.8%	11	28.2%	5	12.8%	2	5.1%	0	0.0%

Figure A-20: Demand Response Riders Satisfaction Level Percentage



Question #16: Demand Response Survey Comments

Comment #1:

I enjoy riding the bus, warm in the winter, cool in the summer.

Comment #2:

Persons recording reserve a ride schedule need to be more accurate and pay attention to what's being said.

Comment #3:

Please consider bringing buses to Barrett or Ingram Heights and special school, thank you for this opportunity.

Comment #4:

Should run on Sunday!! Some people have to work on Sunday! Thank you!

Comment #5:

Sometimes drivers make customers wait 1 hour or more for service. I think tardiness should be stressed a lot more.

Comment #6:

They really should run on Sundays if not past 6pm. So many people trying to work but with bus only running until 6pm it makes it hard for people. To make it worse some buses stop passing by @ 5 p.m. Like #3 where I live, last one comes @ 5:04 p.m. That's insane.