Danville Transit
Transit Development Plan

Final Report – February 2023

KFH GROUP

KFH Group, Inc.
Bethesda, MD | Austin, TX

REIMAGINE THAT DANVILLE VIRGINIA

DRPT
VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION

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Chapter 1:
Overview of Danville Transit System

Introduction

A transit development plan (TDP) is a multi-year planning document that is intended to provide direction for a transit system and its community partners. The planning process identifies transit needs, develops potential improvements to meet the needs, prioritizes these potential improvements, and identifies the resources needed to implement the chosen improvements.

The planning process for a TDP is typically guided by transit program staff, with input from an advisory committee made up of transit program stakeholders and community partners. Public and rider input is also sought during the process to ensure the plan reflects the needs of the community.

In Virginia, the Virginia Department of Rail and Public Transportation (DRPT) requires that each local transit program complete a TDP once every six years. DRPT uses the information compiled within the TDPs for programming, planning, and budget activities. DRPT provides financial resources so that local transit programs can access consultant assistance to complete the plans. Once completed, the Danville Transit TDP will provide a basis for inclusion of Danville Transit's operating and capital program in the commonwealth's Six Year Improvement Plan (SYIP) and Statewide Transportation Improvement Program (STIP). The TDP planning process follows a set of requirements and a report format outlined by DRPT. The current planning horizon for TDPs in Virginia is ten years.

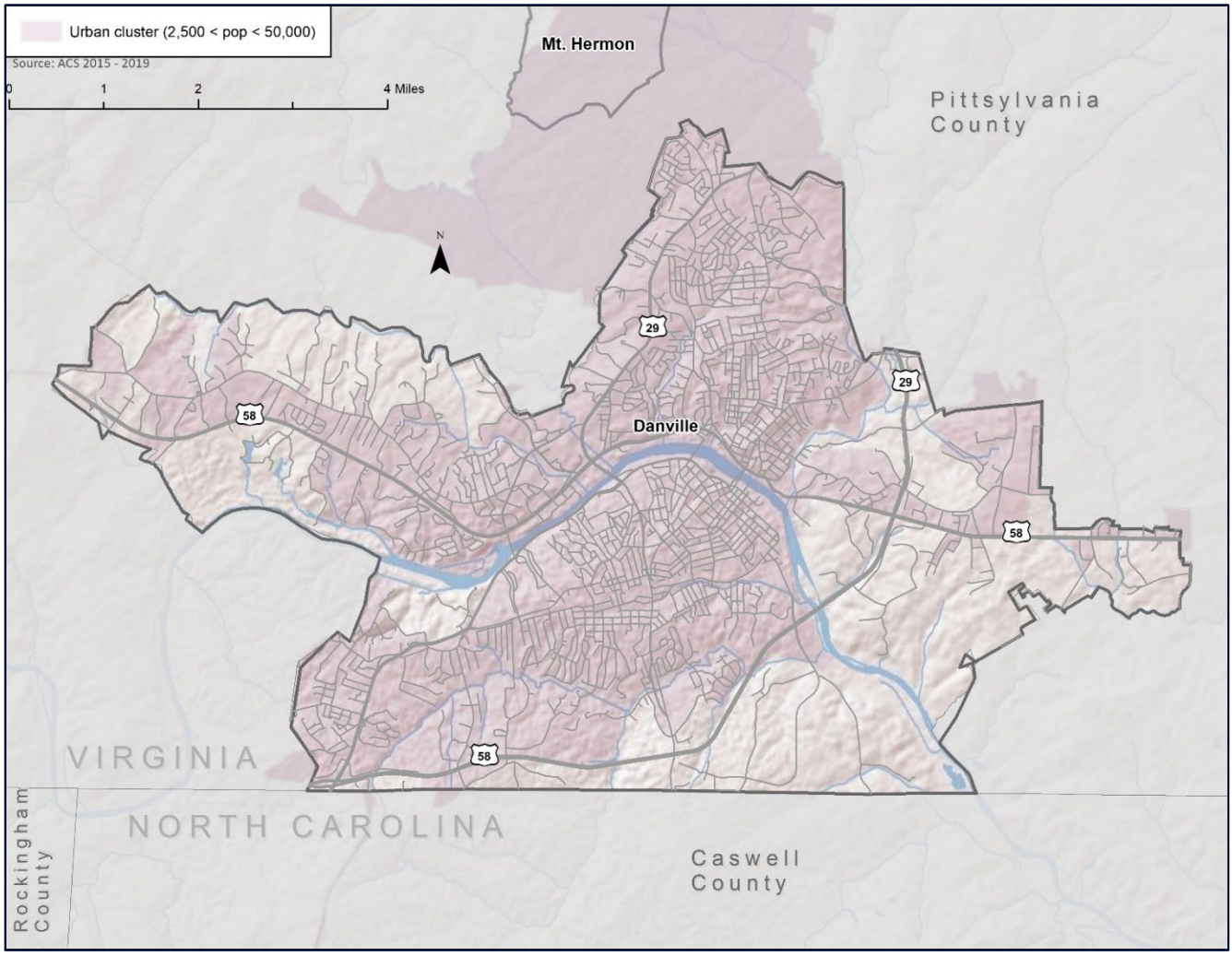
This Danville Transit (DT) TDP was prepared for the City of Danville. The previous TDP for DT was completed in 2015. The current TDP planning process was initiated in December 2021, at the December 8th meeting of Danville's Transit Advisory Committee.

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

Background

The City of Danville is located in the south-central portion of Virginia; sharing its southern border with the State of 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, U.S. 360, and the Norfolk Southern Rail corridor. The Dan River flows though the city from west to east. A map of the city and the surrounding areas is provided as Figure 1-1.

Figure 1-1: The City of Danville and Surrounding Areas



According to the 2020 Census, the population of Danville was 42,590. This represents a population decline of 1.1% from the 2010 population of 43,055. The previous decline in population between the 2000 Census and the 2010 Census resulted in the re-classification of the Danville Urbanized Area (UZA, which have populations greater than 50,000 persons) to the Danville, VA-NC Urban Cluster (between 2,500 to 50,000 persons). This geographical re-classification of the urbanized area to an urban cluster meant that Danville Transit was no longer eligible for the Federal Transit Administration's (FTA) Section 5307 urbanized area funding program, but rather the FTA Section 5311 non-urbanized program. These funds are administered through DRPT, with the City of Danville as a subrecipient.

History

Danville Transit was established in 1977 as a municipal fixed-route 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 a recipient of the FTA's Section 5307 urbanized area funding program. As discussed above, FTA assistance for 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 the Danville Transfer Center, 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. Greyhound also used the hub, both as a passenger stop and a ticket agency, until it discontinued intercity bus service to the City of Danville in 2016. The city has plans to renovate the interior of the HUB to re-purpose the space previously used by Greyhound to create employee restrooms.

Intercity bus service has since returned to the City of Danville via the DRPT sponsored Virginia Breeze Service. The city is now served by two Virginia Breeze routes: the Capital Connector and the Piedmont Express. VA Breeze riders can access the HUB for the restroom, vending machines, and indoor waiting area, but they are required to purchase tickets online for the Virginia Breeze.

Since the 2015 TDP, the following additional changes have occurred:

- The Averett Cougar Express has been implemented. This service provides mobility for students and staff of Averett University with a blended model of fixed stops and door-to-door service. The Averett Cougar Express also provides two round trips per day in between the main campus and the Averett Flight Center building at the Danville Regional Airport.

- Danville Transit has purchased additional revenue service vehicles. There were 18 vehicles available for revenue service during 2015 and the fleet has grown to include 27 revenue service vehicles. The additional vehicles are used to accommodate the growth in Reserve-A-Ride demand and the Averett University service.

- The transit administrative facility was significantly expanded (2017-2018) to better accommodate the transit program. This facility is shared with the City's School Bus Transportation office. The renovation also included the installation of access control units and a camera system.

- Organizational changes have occurred, including adding a Transportation Grant Specialist, adding a new category of clerk/dispatcher (7 positions) instead of administrative specialist (prior 4 positions), and switching the operations supervisor positions (2) to a transportation supervisor position (1). Two evening dispatch positions have also been added.

- The pandemic has significantly reduced fixed route ridership, while at the same time driving up Reserve-A-Ride ridership. The pandemic-related labor shortage has also impacted DT's ability to remain fully staffed.

Current Developments

Over the last several years a number of re-development projects have moved forward within the city, including significant building renovations in the City's River District. Several tobacco storage warehouses have been re-developed for housing, retail, and office uses. Some examples are provided below in Figures 1-2 and 1-3.

Figure 1-2: Old Belt Tobacco Storage Building

Figure 1-3: Danville River District Buildings Under Renovation

Caesars Virginia

The city is also preparing for the opening of Caesars Virginia, a major casino project that will include 500 hotel rooms, a casino floor, "Caesars Sportsbook," restaurants, live entertainment, and a World Series of Poker. The project will also include 40,000 square feet of meeting and convention space.[1] Caesars Virginia will be located at the Schoolfield Mill Complex of the former Dan River Mills industrial complex, which is located on West Main Street between Wood Avenue and Bishop Road. The development is expected to provide 1,300 jobs once open, in addition to 900 construction jobs. Demolition has started on the site. The casino is expected to open in 2024.

For Danville Transit, this project will likely generate significant additional transit demand. West Main Street is within the current fixed route service area, with approximately 40-minute headways provided by DT's Edgewood-Stokesland route (Buses #3 and #5).

A rendering of Caesars Virginia, as provided to the City by Caesars is provided as Exhibit 1.

Exhibit 1: Caesars Virginia

[1] WTOP News, website, viewed May 2022.

Southern Virginia Mega Site at Berry Hill

A major publicly owned industrial park is planned for development in Berry Hill, which is about 15 miles (via roadways) west of Danville. The property is located along U.S. 311 at Oak Hill Road and includes 3,528 acres. The Southern Virginia Regional Alliance is leading the development of the site. Significant infrastructure investments have already been completed for this project and major tenants are being sought.

The eventual development of this site may necessitate the implementation of a regional transit system for Southern Virginia, as it is likely that a large number of jobs will be available and attractive to residents throughout the region.

Institute for Advanced Learning and Research

The Institute for Advanced Learning and Research (IALR) is a political subdivision of the Commonwealth of Virginia. The goal of the agency is to "diversify, transform and grow the economy of Southern Virginia."[2] Partners include Virginia Tech, Danville Community College, and Averett University. One of IALR programs, located at Danville Community College, is the Gene Haas Center for Integrated Machining. Students enrolled in this program earn an associate degree as well as 69 industrial credits, which allow them to be ready for the workforce. The program also includes housing and transportation to Danville Community College. Danville Transit has been providing the transportation service for between 10 and 12 students of the program. The program's housing is located in two downtown locations that are within a block of each other, making it relatively easy for DT to provide the service. IALR's plan is to grow this program over time, which will lead to additional demand for transit between downtown and Danville Community College. Recent information provided for the TDP indicated that the program may be expanding as soon as January, 2023.

Recent Transit Data

In the last full year prior to the pandemic (FY2019) Danville Transit operated 35,977 revenue hours and provided 338,614 annual passenger trips. In FY2021, Danville Transit operated 38,330 revenue hours and provided 234,610 passenger trips. The increase in revenue hours is due to an increase in Reserve-A-Ride demand, which has grown each year (with the exception of FY2020). Ridership on the fixed routes declined by about 35% between FY2019 and FY2021, while Reserve-A-Ride ridership grew by about 5.3%. The FY2022 operating budget is $3,266,640.

[2] IALR website, viewed 12/20/21

Governance

Danville Transit is a service of the City of Danville, which has a council-manager form of government. The City Council is comprised of nine members elected at large. The Council is the decision-making body with fiduciary responsibility for city services, including Danville Transit.

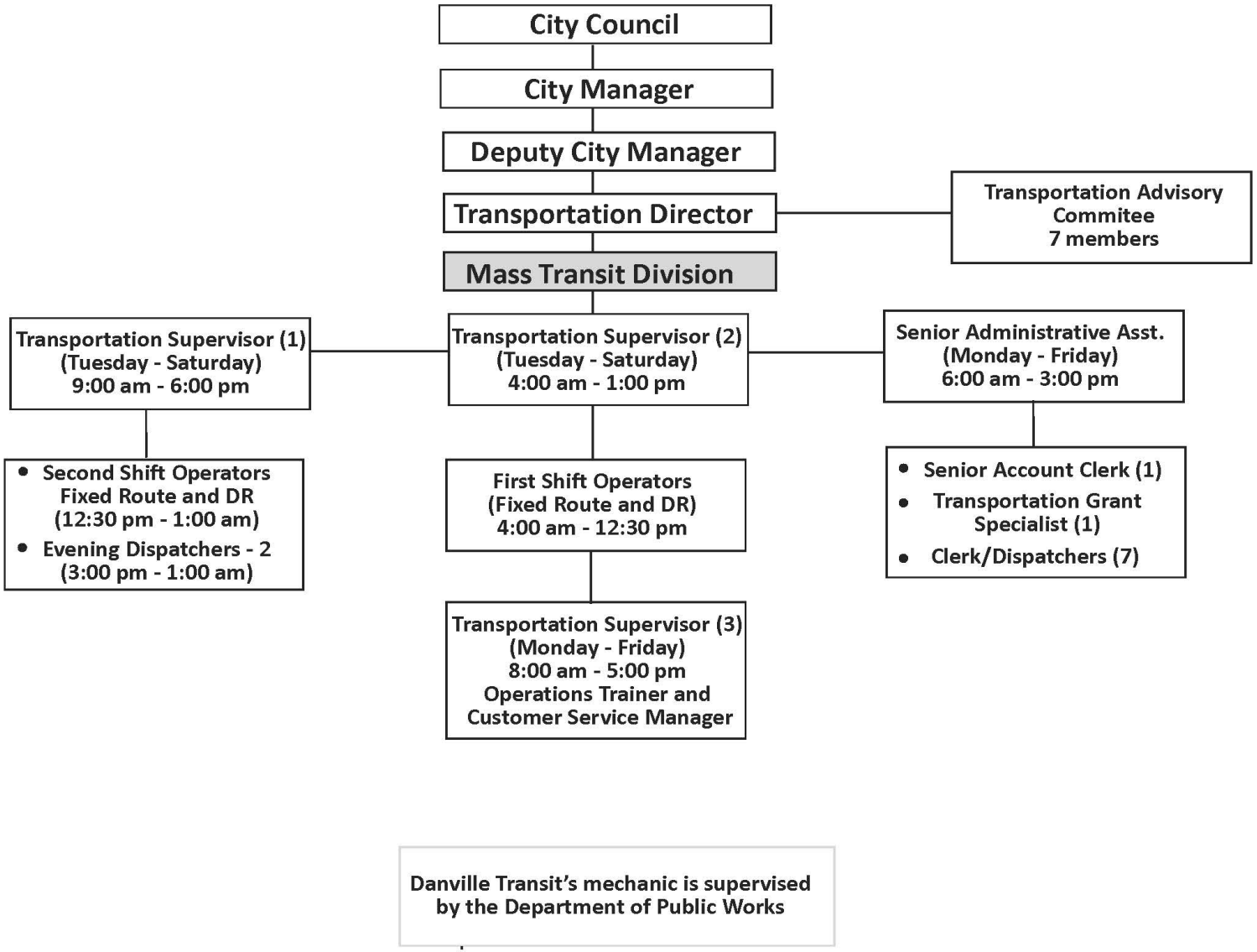
There is also a Transit Advisory Committee (TAC) that provides stakeholder input for the transit program. The TAC meets periodically throughout the year. The TAC reviews all grant applications, planning documents, proposed service changes and fare adjustments. Current members of the TAC include:

- James Buckner
- Anna Kautzman
- Judy P. Keesee
- John Moody
- Tyrell Payne
- Ralph C. Price
- City Manager or designee

Organizational Structure

Danville Transit is a division under the City of Danville's Transportation Services Department. The Department also oversees the Danville Regional Airport. The department reports to the City Manager and Council. The organizational chart for the Mass Transit Division of the city's Transportation Department is provided in Figure 1-4.

Figure 1-4: Danville Transit Organizational Chart



Transit Services Provided and Areas Served

Danville Transit operates the following services:

- 11 fixed routes,
- Averett Cougar Express
- ADA complementary paratransit (Handivan)
- Reserve-A-Ride service
- Senior Transportation service

Transit services are provided throughout the City of Danville, and the Reserve-A-Ride service also provides limited service to the Cane Creek Industrial Park in Pittsylvania County. Services are operated Monday through Saturday.

Fixed Route Service

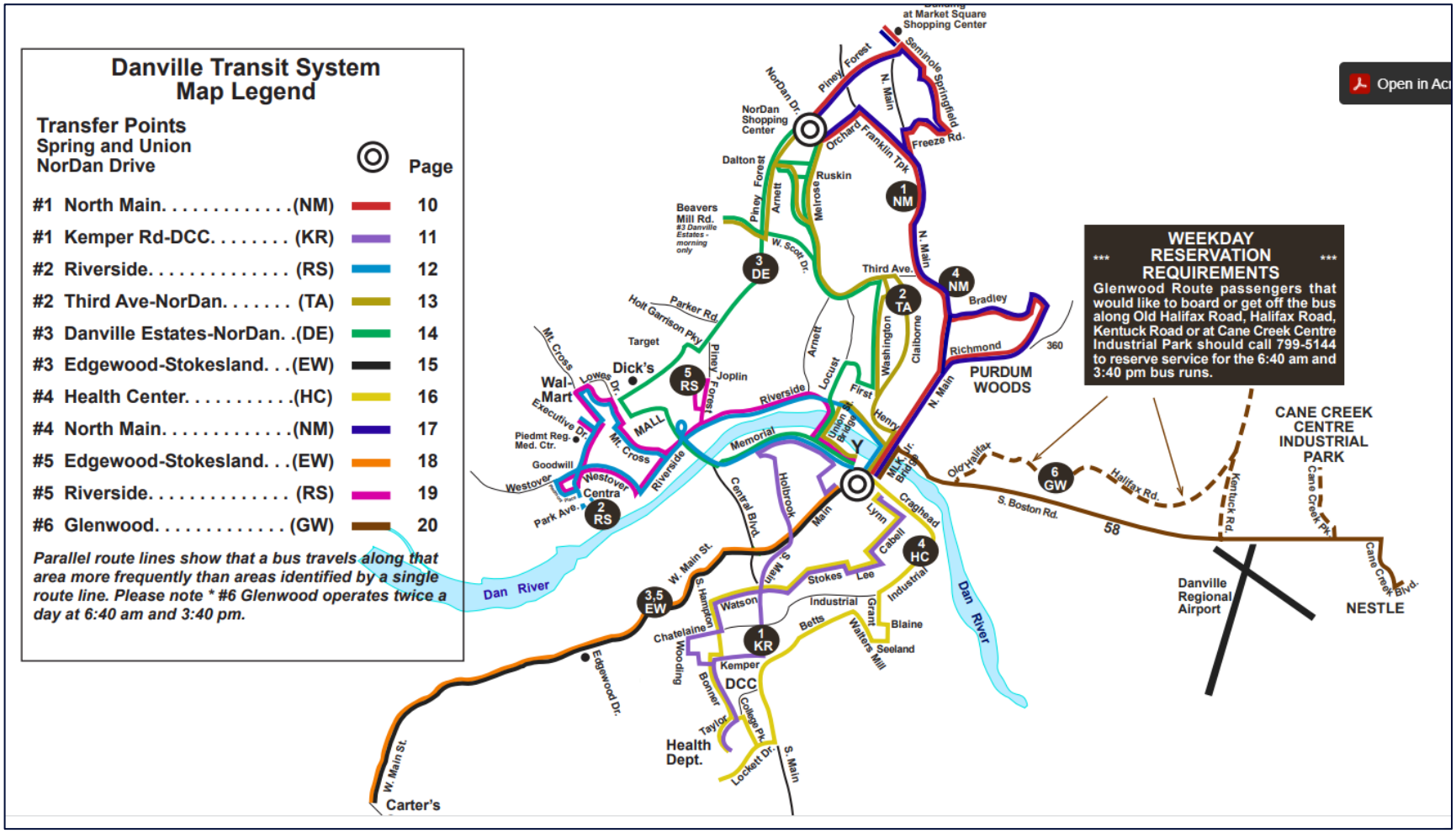
Exhibit 2 provides a system-wide map illustrating the coverage of the fixed routes service. Since the last TDP in 2015, changes include an extension of the #6 Glenwood route to the eastern part of Danville and the new Averett Cougar Express.

Danville Transit operates the following fixed route services, Monday through Saturday from approximately 6:00 a.m. to 6:00 p.m., with the exception of Route #6 Glenwood, which provides weekday commute service (one morning trip and one afternoon trip).

- #1 North Main
- #1 Kemper Road – 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
- #6 Glenwood

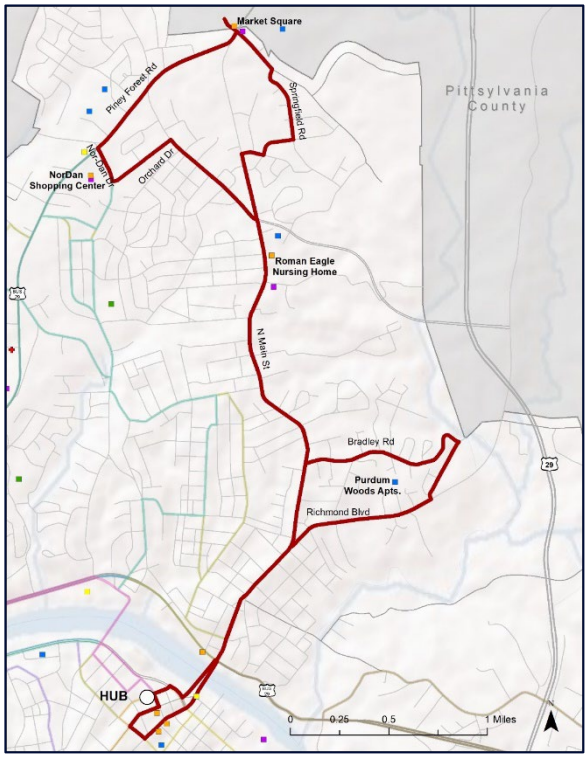
Six vehicles are used to provide this service. The number of the route corresponds to the physical vehicle, while the route title indicates the service area for the route. High demand routes are served with the same routing using different vehicles. For example, the #1 North Main uses the same path of travel as the #4 North Main, to offer 40-minute headways along the route. The routes that are paired together using the same vehicles help reduce the need for passengers to physically transfer from one vehicle to another at the HUB. Each of the routes are described, starting on page 1-12.

Exhibit 2: Danville Transit Fixed Route Service Map



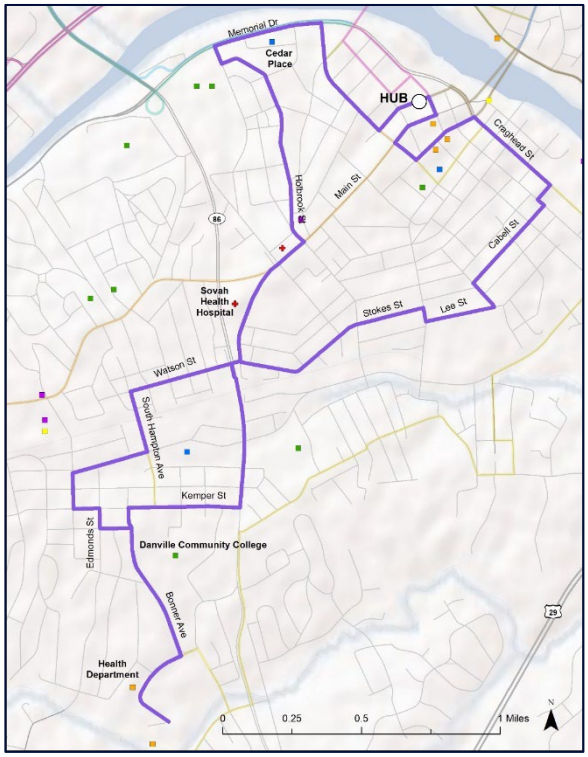
Route #1 North Main

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 also travels along Richmond Boulevard and Bradley Road, and the inbound route makes a loop 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.



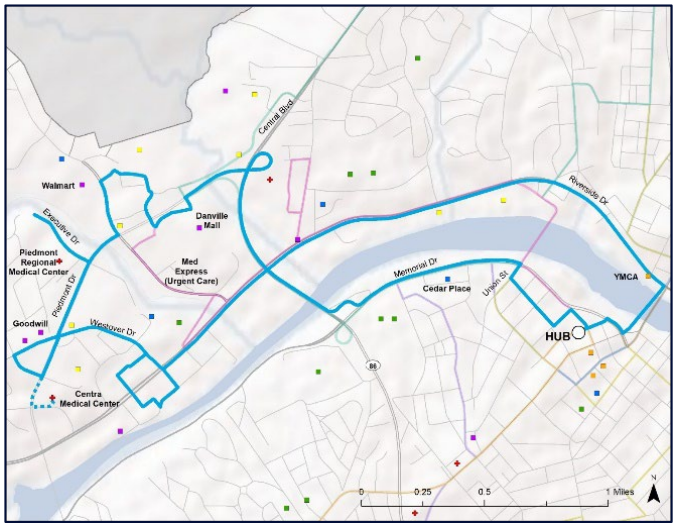
Route #1 Kemper Road – DCC

The #1 Kemper Road – DCC Route connects the downtown HUB to Danville Community College and the Health Department. This route is aligned in the shape of a figure eight with service along several 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, Sovah Health (hospital), True Holiness Church, Cardinal Village Apartments, Danville Health Department, and Danville Community College.



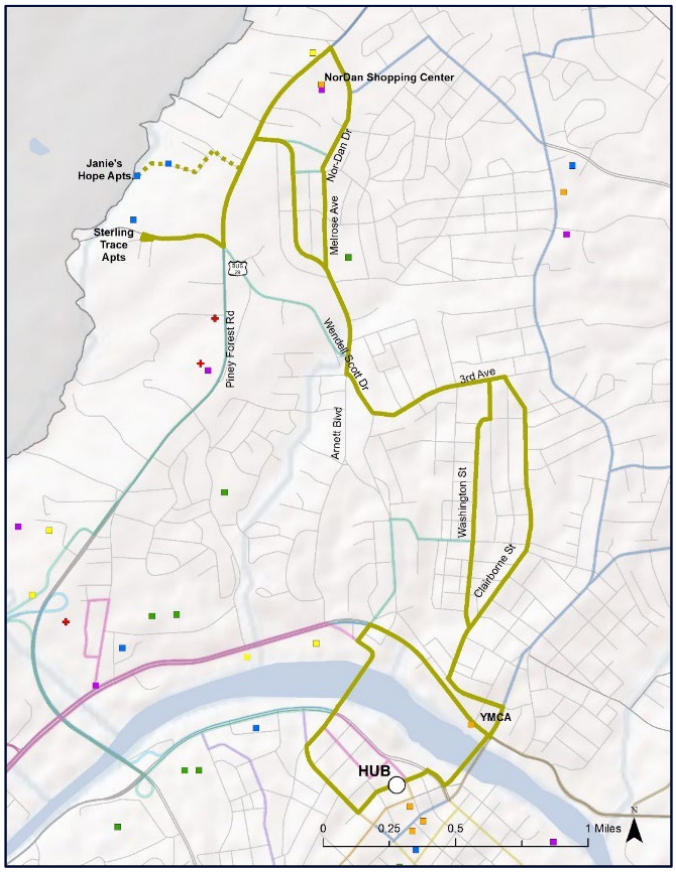
Route #2 Riverside

The #2 Riverside Route connects the downtown HUB to Walmart and Goodwill Industries. 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 Place, Danville Mall, Walmart, Piedmont Regional Medical Center, and Goodwill Industries. There is limited service to Centra Medical Center by request only.



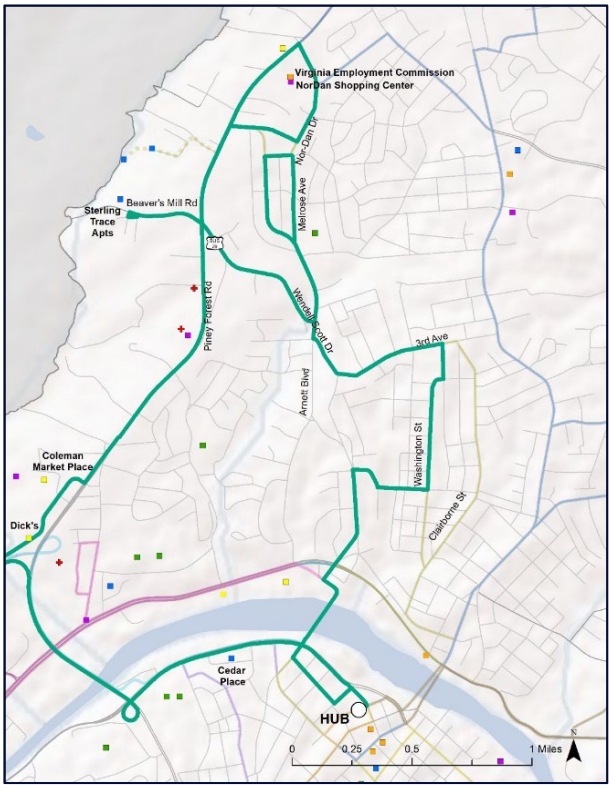
Route #2 Third Avenue – NorDan

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.



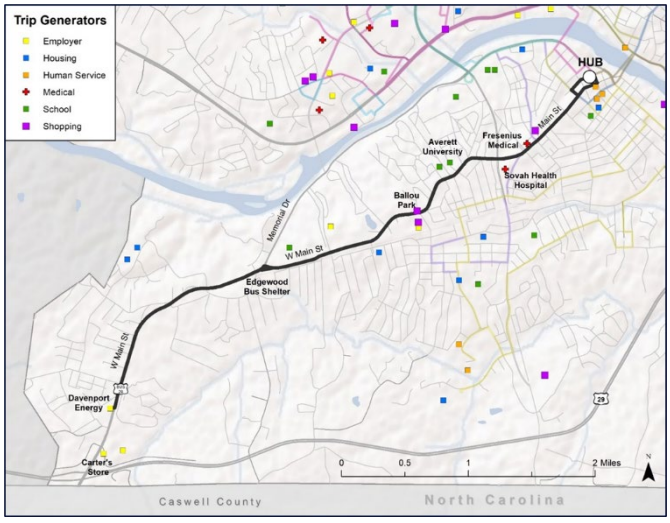
Route #3 Danville Estates – NorDan

The #3 Danville Estates – NorDan Route connects the downtown HUB to the NorDan Shopping Center. The route is aligned as a loop that serves several 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.



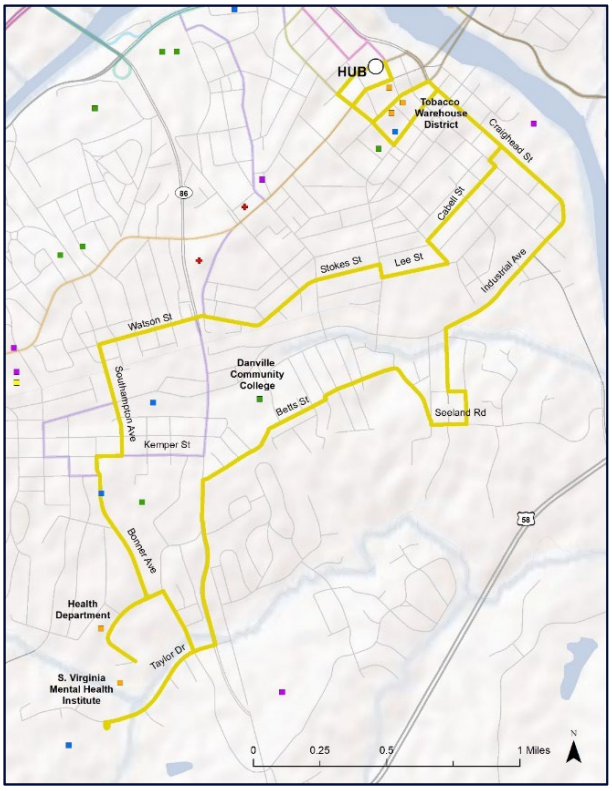
Route #3 Edgewood – Stokesland

The #3 Edgewood – Stokesland Route connects the downtown HUB to near Davenport Energy via Main Street and W. Main Street. Major stops along the route include Sovah Health Hospital (Danville Regional Medical Center), Averett University, Ballou Park, and Ballou Park Shopping Center. The future Caesars Virginia project will be located along this route.



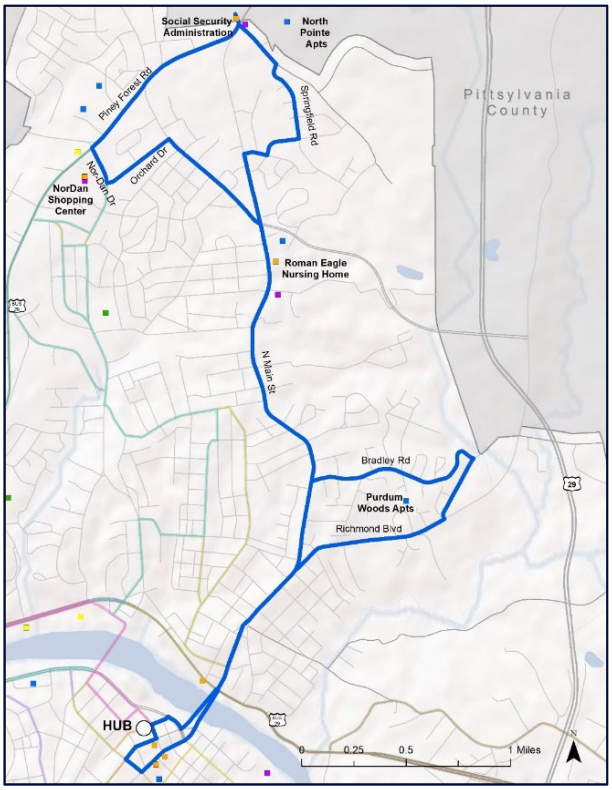
Route #4 Health Center – DCC

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, serving various 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.



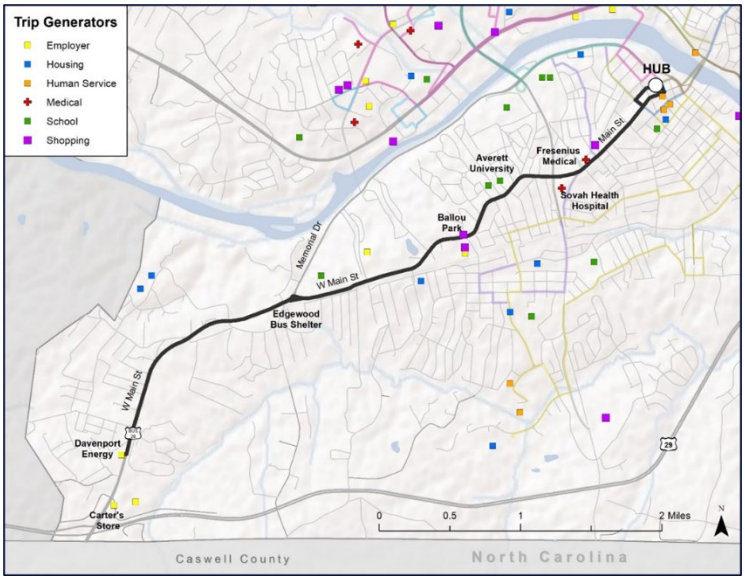
Route #4 North Main

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.



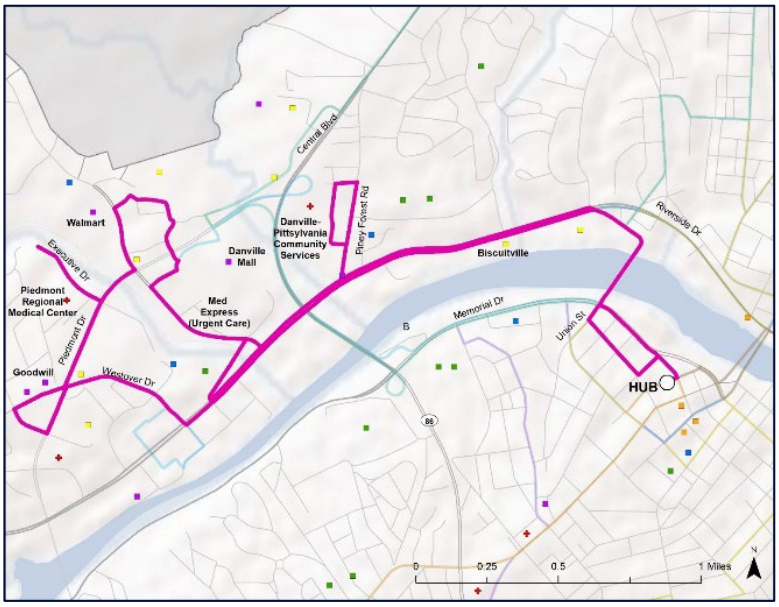
Route #5 Edgewood – Stokesland

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



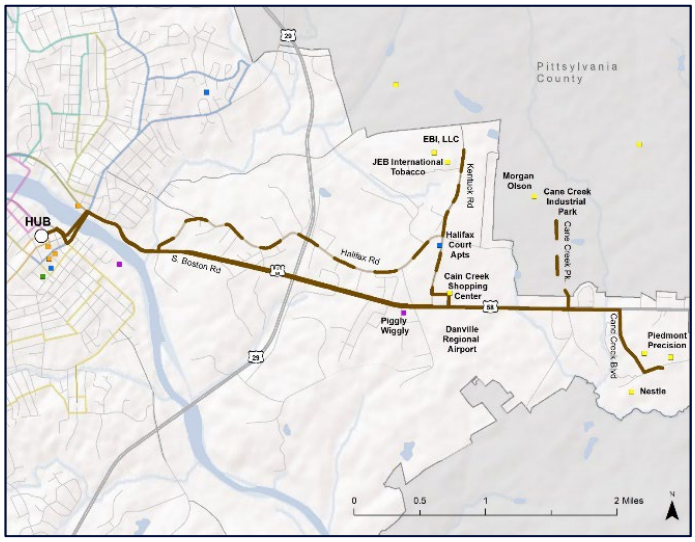
Route #5 Riverside

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



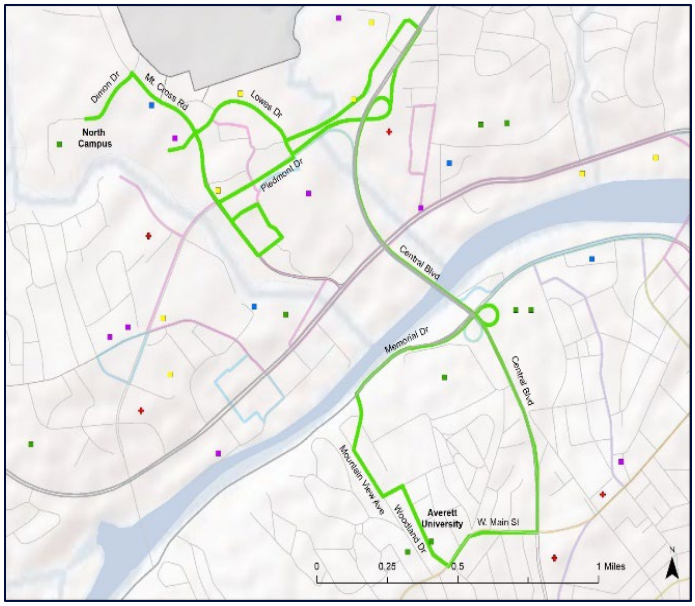
Route #6 Glenwood

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 Kentuck Rd., and Cane Creek Parkway to Cane Creek Centre. This is Danville Transit's only fixed commuter route. It has one outbound run in the morning and one inbound run in the late afternoon. Major stops along the route include the Cain Creek Shopping Center, Cain Creek Industrial Park and EBI, LLC. Danville Transit uses one of the Reserve-A-Ride vehicles to operate this service.



Averett Cougar Express

The Averett Cougar Express service connects Averett University's Main and North Campuses. This service started in Fall 2017 and was a response to Virginia's House Bill 2 (HB2) grant which has infused the state with funding for multi-modal transportation projects. The service allows passengers to receive express, door to door service at certain times at Jut's / Woodland, North Campus, and the Main Campus. There are also airport shuttles to and from the Raleigh-Durham (RDU) and Greensboro (PTI/GSO) airport on selected days, and two morning shuttles that take students from the Main Campus to the Averett Flight Center Building at the Danville Regional Airport.



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 that are not served by fixed routes. 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 12:30 a.m. and Saturdays from 4:00 a.m. to 6:00 a.m. and 5:00 p.m. to 12:30 a.m. Historically riders have been asked to make a reservation by 11:00 a.m. on the day prior to the trip. Within the last year, Danville Transit has implemented same day reservations, as capacity allows, using a Microsoft OS265 online booking app. While the app is not currently linked with DT's scheduling app, a consolidated app will be included when the new scheduling and dispatch software is implemented (see page 24 – Technology section). 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.

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.

Handivan Service

Danville Transit's Handivan is the ADA complementary paratransit service for the fixed route system, provided to Danville residents who are determined to be unable to use the fixed route service due to a physical or cognitive ability. Riders must be pre-qualified for 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

Danville Transit also provides demand-response transportation for senior citizens to access medical appointments, grocery shopping, and other errands. Senior Transportation riders must be at least 60 years of age and a resident of Danville. Senior Transportation is available Monday through Saturday from 8:00 a.m. to 5:00 p.m. 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 ages 60 and above, Medicare cardholders, and disabled passengers. Children ages twelve and younger may ride free with a fare paying adult; one child per fare paying adult. Transfers are free.

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 ages twelve 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. Token usage has increased by about seven percent between FY2021 and FY2022. About 38% of the fixed route trips were paid for via tokens and about 69% of the reservation-based trips were paid for via tokens for the first nine months of FY2022 (through March 2022). Table 1-1 provides an overview of the current fare structure.

Table 1-1: Danville Transit Fare Structure

Service	Cash Fare	Tokens
Fixed Routes:		
Base Fare	$1.00	2
Half-Fare Discount (seniors, disabled, Medicare) *Available 6:00 a.m. to Noon*	$0.50	1
Children Aged 12 or Younger *Only 1 Child per Paying Customer*	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	Free	Free

Fleet

Danville Transit operates a fleet of 27 revenue and six non-revenue vehicles. The fleet consists of a mix of 14-to 28-passenger vehicles and the average vehicle age is 4.4 years. Two DT transit vehicles at the HUB are pictured in Figure 1-5. The vehicle inventory is shown in Table 1-2.

Figure 1-5: Danville Transit Vehicles at the HUB

Table 1-2: Danville Transit Vehicle Inventory

Vehicle #	Service Type	Make	Model	Fuel Type	Year	Passenger Capacity	Mileage (Nov/Dec 2022)
721	Revenue	Chevrolet/ARBOC	Express G450	Gas	2018	14	54,634
722	Revenue	Chevrolet/ARBOC	Express G450	Gas	2018	14	51,072
723	Revenue	Chevrolet/ARBOC	Express G450	Gas	2018	14	45,959
726	Revenue	Ford	Starcraft Allstar	Gas/Propane	2018	14	151,121
727	Revenue	Ford	Starcraft Allstar	Gas	2020	14	90,589
729	Revenue	Ford	Allstar	Gas/Propane	2018	20	118,186
730	Revenue	Ford	Starcraft Allstar	Gas	2020	14	84,161
731	Revenue	Ford	550 Starcraft Allstar	Gas/Propane	2019	28	128,758
733	Revenue	Ford	Starcraft Allstar XL	Gas	2020	20	48,863
734	Revenue	Ford	Starcraft Allstart	Gas	2020	14	23,380
735	Revenue	Ford	550 Starcraft Allstar	Gas/Propane	2019	28	120,588
736	Revenue	Ford	Starcraft Allstar	Gas/Propane	2018	14	145,315
737	Revenue	Chevrolet	Senator II	Gas	2014	20	220,308
738	Revenue	Ford	550 Starcraft Allstar	Gas/Propane	2019	28	144,568
740	Revenue	Ford	550 Starcraft Allstar	Gas/Propane	2019	28	138,194
742	Revenue	Ford	Starcraft Allstar	Gas	2020	14	42,566
743	Revenue	Ford	Starcraft Allstar XL	Gas	2020	20	36,883
744	Revenue	Ford	Starcraft Allstar XL	Gas/Propane	2022	28	14,570
745	Revenue	Trolley Ent.	Freightliner	Diesel	2005	26	37,229
746	Revenue	Trolley Ent.	Freightliner	Diesel	2005	26	23,830
749	Revenue	Ford	Starcraft Allstar	Propane	2017	18	109,146
750	Revenue	Ford	Starcraft Allstar	Propane	2017	18	113,030
751	Revenue	Ford	Starcraft Allstar	Gas/Propane	2021	28	46,738
752	Revenue	Ford	Starcraft Allstar	Gas/Propane	2021	28	47,019
753	Revenue	Ford	Starcraft Allstar	Gas	2020	14	90,162
755	Revenue	Ford	Starcraft Allstar	Gas/Propane	2018	14	147,831
756	Revenue	Ford	Starcraft Allstar	Gas/Propane	2018	14	111,909
720	Non-Revenue	Chevrolet	Silverado 4WD	Gas	2021	4	2,553
739	Non-Revenue	Dodge	Caravan	Gas	2017	6	44,718
747	Non-Revenue	Ford	F250	Gas	2012	4	91,174
748	Non-Revenue	Ford	Transit 350	Gas	2018	7	57,656
754	Non-Revenue	Ford	F750	Diesel	2017	2	2,039

Existing Facilities

Danville Transit's Administrative and Maintenance facility is located in Danville's Public Works Complex at 1002 South Boston Road, Danville, VA 24540. The facility includes management offices and a maintenance shop where all of Danville Transit's vehicles are stored, fueled, and maintained. Danville also utilizes this location to store school buses. Photos of the facility are provided in Figure 1-6.

Figure 1-6: City of Danville Administrative and Maintenance Facility

Danville Transit's fixed routes meet for timed connections at the Danville Transfer Center (HUB). The HUB features six bus bays, parking, bike racks, outdoor shelters, an indoor waiting area, restrooms, vending machines, and an information office. The HUB also serves as a passenger stop for the Virginia Breeze. Danville Transit has plans to renovate the HUB to remove the ticket office previously used by Greyhound for ticket sales and replace it with driver restrooms.

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.

A photo of the HUB is provided in Figure 1-7.

Figure 1-7: Danville Transit HUB

Bus Shelters and Signage

There are 360 bus stops, 18 passenger waiting shelters, and 41 benches offered throughout the DT fixed route service area. Shelters and benches are generally provided at the stops with the highest usage. At the request of the City Council, DT staff are currently working on identifying additional locations that could support shelters and benches. This project will be incorporated into DT's update of the system's bus stop inventory. The updated inventory is required as part of the bus stop sign replacement project so that the stops can be identified with unique numbers in order of the transit vehicle's path of travel along the route. The new bus stop signs will allow DT to implement real-time passenger information and will also refresh and modernize system signage.

The local Kiwanis Club is interested in helping to raise the local matching funds required to support an additional three new bus shelters. DT plans to apply for federal and state funding for these shelters during the next application cycle (February 2023).

A photo of DT's shelters at the HUB is provided in Figure 1-8.

Figure 1-8: Danville Transit Bus Shelters at the HUB

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.

The elements of Danville Transit's security program include the use of a camera surveillance system for buses and facilities including the Transfer Center and the Propane Refueling station, staff supervision located at the Transfer Center, use of panic buttons in vehicles, exterior facility lighting, regular monitoring of suspicious activities and items located in buses and facilities, and the installation of control access units for the new operations facility.

The Transportation Services Director reviews operating policies and procedures with all new staff, which includes documentation concerning the use of panic buttons and references the need to monitor vehicles and the Transfer Center for suspicious materials. In addition, the Police Department is requested to examine the facilities to determine security issues when needed. A camera system was also installed at the operations facility that enables staff to monitor people who are seeking to enter the building. The system includes a release unit so staff can let people in once they have been identified.

Danville Transit is also planning to contract with the Danville Police Department to provide additional police presence at the HUB, beginning in FY2024. The details of this planned arrangement are outlined in Chapter 4 of the TDP.

Intelligent Transportation Systems (ITS) Program

Danville Transit's ITS program includes an automated scheduling software system that is integrated with a mobile dispatch module and a notification module that informs passengers the day before of their scheduled pick-up time. In addition, in FY2022, a Microsoft OS265 online booking app was made available to the public so passengers can submit prior day and same day reservation requests. This booking app was not integrated with the system's RouteMatch system (which is currently in the process of being replaced). Transit staff are notified of requests via related Microsoft calendar applications. An online trip cancellation form is also available via the transit system's webpage, which assists in the prevention of no-shows. All buses are equipped with automatic vehicle location (AVL) units so they can be tracked by passengers via www.dtbuslocator.com.

In addition, automatic voice annunciation units for the fixed route fleet were recently purchased and installed in FY2022. DT also recently conducted a procurement process to upgrade the transit system's existing automated scheduling software and dispatch system, so all of the trip scheduling and notification applications will be integrated. This solicitation also asked for a downloadable app for microtransit and a web portal so demand response passengers can purchase demand response trips. The successful bidder for the procurement was Ecolane. Danville Transit is in the process of implementing the new system.

Public Outreach

The Transit Advisory Committee (TAC) serves as a primary public outreach mechanism, as the members represent a diverse group of Danville constituencies. Other public outreach activities include mailings to demand response passengers. As a city service, DT's budget and other important issues are discussed via the City's regularly scheduled council meetings, which are held twice a month.

Chapter 2:
Goals, Objectives, and Standards

Introduction

This chapter of the TDP presents the mission and goals for Danville Transit; documents current issues and initiatives for Danville Transit, as discussed by Transit Advisory Committee (TAC) members and Danville Transit staff; and updates service standards for the system.

Danville Transit's Mission, Goals, and Objectives

Mission Statements

The overall mission statement for the Transportation Services 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** and facilitates **cost effective** transportation access."

Transit Program Goals and Objectives

The following goals and objectives were developed during the 2009 and 2015 TDP Updates.

Goal 1: Provide Reliable Fixed Route and Demand Responsive Services that Meet 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 lower 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).

Current Issues and Initiatives for Danville Transit

In addition to the development occurring in the city and the region that will likely necessitate increased transit services (discussed in Chapter 1), there are a number of issues currently facing the system and initiatives that are in the process of being implemented. These are outlined below.

Driver Availability

Similar to many transit agencies in Virginia and across the country, Danville Transit is having a tough time hiring and retaining drivers, which will make it difficult to expand transit services to meet future demand. This driver shortage affects all aspects of service planning decisions for both current and future services. The system is budgeted for 30 full-time equivalents and currently employs 25 full-time equivalents.

The previously planned regional route between Danville and South Boston could not be implemented due to this shortage. Danville Transit has raised wages and offered hazard pay during the height of the pandemic from its CARES Act funding. The hazard pay was discontinued in July 2022.

Transit Demand – Fixed Route versus Reserve-A-Ride

Danville Transit has seen a significant decrease in its fixed route ridership while experiencing growth in demand-response ridership. DT management reported that lower unemployment usually results in lower fixed route ridership and higher reserve a ride ridership. About 90% of the reserve-a-ride trips are work trips. It was also reported that there are few other mobility options for door-to-door trips, with most of the local private taxi companies focusing on non-emergency Medicaid trips and few if any Uber and Lyft options.

Maximizing the use of the fixed route network is an effective way to optimize the use of drivers, vehicles, and operating expenses for DT. While DT management was interested in exploring a fare increase for Reserve-A-Ride, there was no support among City leaders to implement a fare increase at this time.

Turnaround Location – West Main Street

For many years Danville Transit's Edgewood-Stokesland route, which serves West Main Street, turned around at Carter's Store, located at the intersection of West Main Street and Corning Drive just prior to the interchange of U.S. 58 and U.S. 29. Carter's Store no longer allows this turnaround, and the route now turns around at Davenport Energy (2930 West Main), which is between one-third and one-half a mile closer to downtown. Danville Transit would like to have a safe turnaround location closer to the U.S.58/U.S. 29 interchange. There are riders who used the Carter's Store stop and now have longer walks to reach the closest bus stop.

Local Match Requirement to Support Future Operations

Danville Transit is currently in a good financial position, with a $1,700,000 unreserved fund balance. This financial position was made possible due to the financial assistance received through the federally funded CARES and ARPA programs, which funded transit operations at 100% rather than the historic 50% match. Transit operating expenses have increased significantly over the last two years, and it is expected that once the CARES and ARPA funds are depleted the City's local match contribution for operations will revert back to the pre-pandemic rate of 50%. This amount will likely be about $600,000 annually, about double the local match provided prior to the pandemic. The fund balance will be available to help fund this in the near term, but longer-term local match will likely need to be increased.

Succession Planning

The Transportation Services Director has announced his plans to retire in 2023. With the recent departure of the Danville Transit Division Director, there is not an immediate candidate for the position. It should be noted that Transportation Services Department staff who are based at the city's airport also support the transit program in the areas of state compliance reviews, invoicing, payroll, and building and grounds maintenance for transit facilities. City leaders will need to determine the most suitable organizational arrangement moving forward.

Replacement and Upgrade for Automated Scheduling Software

Danville Transit recently completed a procurement process and has chosen a vendor to replace its scheduling software program and add options for credit card payments and potentially fare card options. The software will also support real-time transit information. The new system is in the process of being implemented.

New Bus Stop Signs

Danville Transit will be replacing all of its bus stop signs in the coming year. The sign replacement project was precipitated by the software upgrade, which will provide real-time schedule information that can be accessed via text or QR code. A sample of the new signs is shown in Figure 2-1. This project was supported with federal and state funds through DRPT.

Figure 2-1: Prototype of New Bus Stop Sign

Additional Shelters and Benches

Danville Transit is also working to determine the best location for additional shelters and benches for passengers to be more comfortable when they are waiting for the bus. DT staff conducted boarding/alighting counts at selected locations within the fixed route network where shelter/seating is not currently available. The count data was used to prioritize which stops warrant additional amenities. It should be noted that there may be some locations where it is not possible to install shelters or benches, depending upon the amount of right of way available.

Service and Performance Standards

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

Service standards are also used as a measure of compliance with Title VI of the Civil Rights Actof 1964, to ensure that services are provided equitably to all persons in the service area, regardless of race, color, or national origin. Danville Transit's Title VI Plan details the system-wide service standards meant to ensure this equity, including standards on vehicle load, vehicle headways, on-time performance, and service availability.

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

- **Vehicle load** – Vehicle load is expressed as the ratio of passengers to the total number of seats on a vehicle at its maximum load point. Danville Transit's standard for maximum vehicle load is 20 to 28 passengers.

- **Vehicle headway** – Vehicle headway is the amount of time between two vehicles traveling in the same direction on a given route. A shorter headway corresponds to more frequent service. Danville Transit's standard for vehicle headways is 40 - 80 minutes.

- **On-time performance** – On-time performance is a measure of runs completed as scheduled. This criterion first must define what is considered to be "on time." Danville's standard for on-time performance is that 95% of all fixed route runs leave time check points including the main Transfer point per the scheduled departure times.

- **Service availability** – Service availability is a general measure of the distribution of routes within a transit provider's service area or the span of service. The standard for service availability is to equally provide comparable level of fixed route and demand response operations to areas of the city which maintain minority and low-income populations.

DRPT Performance-Based Allocation Metrics

In FY2020, DRPT implemented a new performance-based methodology for allocating operating assistance funding pursuant to the Code of Virginia and Commonwealth Transportation Board (CTB) policy. The methodology was developed through coordination with Virginia's Transit Service Delivery Advisory Committee (TSDAC) and the CTB, which resulted from a 2018 legislative mandate to base grant amounts on agency performance.[1] The methodology developed considers sizing and performance metrics.

The sizing metrics are intended to base allocations on the size of the agency so that grant funding is proportionate to the level of service operated. The sizing metrics and weights for FY2021 and beyond are:

Operating cost	50%
Ridership	30%
Revenue vehicle hours	10%
Revenue vehicle miles	10%

The five performance metrics and weights are:

1. Passengers per revenue vehicle hour (20%)
2. Passengers per revenue vehicle mile (20%)
3. Operating cost per revenue vehicle hour (20%)
4. Operating cost per revenue vehicle mile (20%)
5. Operating cost per passenger trip (20%)

Danville Transit Performance Metrics

Table 2-1 provides the Danville Transit overall operating data and the values for the performance metrics for fiscal years 2018 through 2022. The effect of the Covid-19 pandemic can be seen starting with the FY2020 metrics, as the pandemic disrupted ridership starting in March of 2020.

Table 2-1: Danville Transit Data and Performance Metrics, FY2018 – FY2022

Metric	FY2018	FY2019	FY2020 (1)	FY2021 (2)	FY2022 (3)
Passenger Trips	342,492	338,614	289,631	234,610	240,926
Revenue Hours	36,042	35,977	33,467	38,329	35,282
Revenue Miles	559,197	539,625	482,298	561,833	531,720
Total Operating Costs	$2,259,037	$2,644,622	$2,555,911	$3,144,183	$3,266,640
Passenger Trips per Revenue Hour	9.50	9.41	8.65	6.12	6.83
Passenger Trips per Revenue Mile	0.61	0.63	0.60	0.42	0.45
Operating Cost per Revenue Hour	$62.68	$73.51	$ 76.37	$ 82.03	$ 92.59
Operating Cost per Revenue Mile	$4.04	$ 4.90	$ 5.30	$ 5.60	$ 6.14
Operating Cost per Passenger Trip	$ 6.60	$ 7.81	$ 8.82	$ 13.40	$ 13.56

(1) Covid-19 effects for the last quarter of the year
(2) Covid-19 effects for the entire year
(3) Budgeted expenses were used for FY2022

Given that these five metrics are being used by DRPT to allocate funding, it is recommended that Danville Transit adopt these metrics internally when reviewing performance.

Process for Updating Goals, Objectives, andStandards

The goals, objectives, and service standards that are currently in place were developed for the system during prior TDP processes and for the Title VI Plan. This current TDP process gave the agency and its community partners an opportunity to refresh and update these metrics. If additional goals are envisioned, or if specific goals, objectives, or standards are no longer appropriate, represent under-achievement, or cannot reasonably be attained, Danville Transit can update the measures to reflect current circumstances.

Since the 2015 TDP, DRPT has also implemented performance-based funding, using the five metrics previously described. It is important that Danville Transit track these to see how the services perform as measured by these metrics. If performance goes down, Danville Transit should look to see if there are ways to improve efficiency and/or boost ridership.

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

Chapter 3:
Service and System Evaluation

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 (DT), including analyses of trends, peers, recent ridership, a passenger survey, and a community survey. The second area of focus provides an analysis of transit needs, including a demographic and land use analysis and a review of relevant studies and plans.

Overall, this chapter includes ten major components that are presented in the following order:

1. System Evaluation
2. Financial Information
3. Peer Analysis
4. Passenger Surveys
5. Public Survey
6. Population Profile
7. Title VI Demographic Analysis
8. Land Use Profile
9. Travel Patterns
10. Review of Previous Plans and Studies

System Evaluation

Systemwide Trend Data

DT's ridership trend data as a whole look very similar to other transit agencies in Virginia and across the country, with ridership declining a bit each year since 2015, and then dropping precipitously with the Covid-19 pandemic. For comparison, DT's total ridership in FY2015 was 442,630. The last full year prior to the pandemic (FY2019), DT's total ridership was 338,614, down about 23% from its peak in FY2015. Ridership in FY2022 was up slightly from FY2021, but down about 29% from pre-pandemic levels (i.e., FY2019). It should be noted that in FY2015, DT provided about 5,000 more revenue hours than it does currently.

In terms of productivity, the trend is similar, with systemwide productivity declining from 9.5 trips per revenue hour in FY2018 to a low of 6.12 trips per revenue hour in FY2021. Productivity has started to improve in FY2022, with higher ridership and fewer revenue service hours.

Table 3-1: Transit Program Trend Data

Metric	FY2018	FY2019	FY2020 (1)	FY2021 (2)	FY2022 (3)
Passenger Trips	342,492	338,614	289,631	234,610	240,926
Revenue Hours	36,042	35,977	33,467	38,329	35,282
Revenue Miles	559,197	539,625	482,298	561,833	531,720
Total Operating Costs	$2,259,037	$2,644,622	$2,555,911	$3,144,183	$3,266,640
Passenger Trips per Revenue Hour	9.50	9.41	8.65	6.12	6.83
Passenger Trips per Revenue Mile	0.61	0.63	0.60	0.42	0.45
Operating Cost per Revenue Hour	$62.68	$73.51	$76.37	$82.03	$92.59
Operating Cost per Revenue Mile	$4.04	$4.90	$5.30	$5.60	$6.14
Operating Cost per Passenger Trip	$6.60	$7.81	$8.82	$13.40	$13.56
Miles Per Hour	15.5	15.0	14.4	14.7	15.1

(1) Pandemic effects begin during the end of the third quarter (March 2020)
(2) Pandemic effects for the entire year
(3) Total operating costs are budgeted amount; Covid still active in community.

Route and Service Level Trend Data

DT provides both fixed route and paratransit services and tracks data in the following categories:

- Fixed Routes
- Reserve-A-Ride
- Human Service
- ADA Paratransit

The trend data for each of these services is analyzed in the following section.

Fixed Routes

DT uses six vehicles to operate eight fixed routes within the City of Danville and through the Cane Creek Centre Industrial Park in Pittsylvania County. The following routes are served with 40-minute headways:

- North Main
- Edgewood-Stokesland

The following routes are served with 80-minute headways:

- Riverside
- Kemper Road – DCC
- Third Avenue – NorDan
- Danville Estates-NorDan
- Health Center -DCC

The Glenwood route, which travels to the Cane Creek Center Industrial Park, is served with two trips per weekday. The naming conventions for the fixed routes start with the vehicle number, followed by the route that the vehicle is operating. For example, the North Main route is served by the #1 North Main and the #4 North Main. Five-year trend data and route profiles for each of the fixed routes are provided in the following section, starting with the two routes that offer 40-minute headways.

North Main- #1 North Main and #4 North Main

The North Main route is served by two vehicles – the #1 and the #4. The route alignment is the same, so we have combined the discussion of the route and the trend data to gain a complete understanding of the route. The North Main route connects the downtown HUB to the NorDan Shopping Center via N. Main Street and the Franklin Turnpike. The outbound route also travels along Richmond Boulevard and Bradley Road, and the inbound route makes a loop 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. Forty-minute headways are offered on the route.

The five-year trend data shown in Table 3-2 shows that ridership had been slowly declining prior to the pandemic and the Calendar Year 2021 ridership was 44% lower than the 2019 pre-pandemic level. Operating costs have increased incrementally over the five-year period, with the largest annual increase seen between 2018 and 2019. The annual revenue hours and miles have remained stable over the time period, with minor fluctuations that likely reflect holidays or inclement weather. Productivity on the route was the highest in 2017, at 13 passenger trips per revenue hour. The 2021 productivity was 6.5 trips per revenue hour.

Table 3-2: Five Year Trend Data for the North Main Route

Metric	2017	2018	2019	2020	2021
Passenger Trips	46,933	43,715	42,549	30,625	23,973
Revenue Hours	3,606	3,608	3,701	3,613	3,717
Revenue Miles	54,108	54,119	55,526	54,200	55,752
Total Operating Costs	$137,505	$166,577	$201,562	$215,643	$245,346
Passenger Trips per Revenue Hour	13.02	12.12	11.50	8.48	6.45
Passenger Trips per Revenue Mile	0.87	0.81	0.77	0.57	0.43
Cost per Revenue Hour	$38.13	$46.17	$54.46	$59.69	$66.01
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$2.93	$3.81	$4.74	$7.04	$10.23
Miles per Hour	15.0	15.0	15.0	15.0	15.0

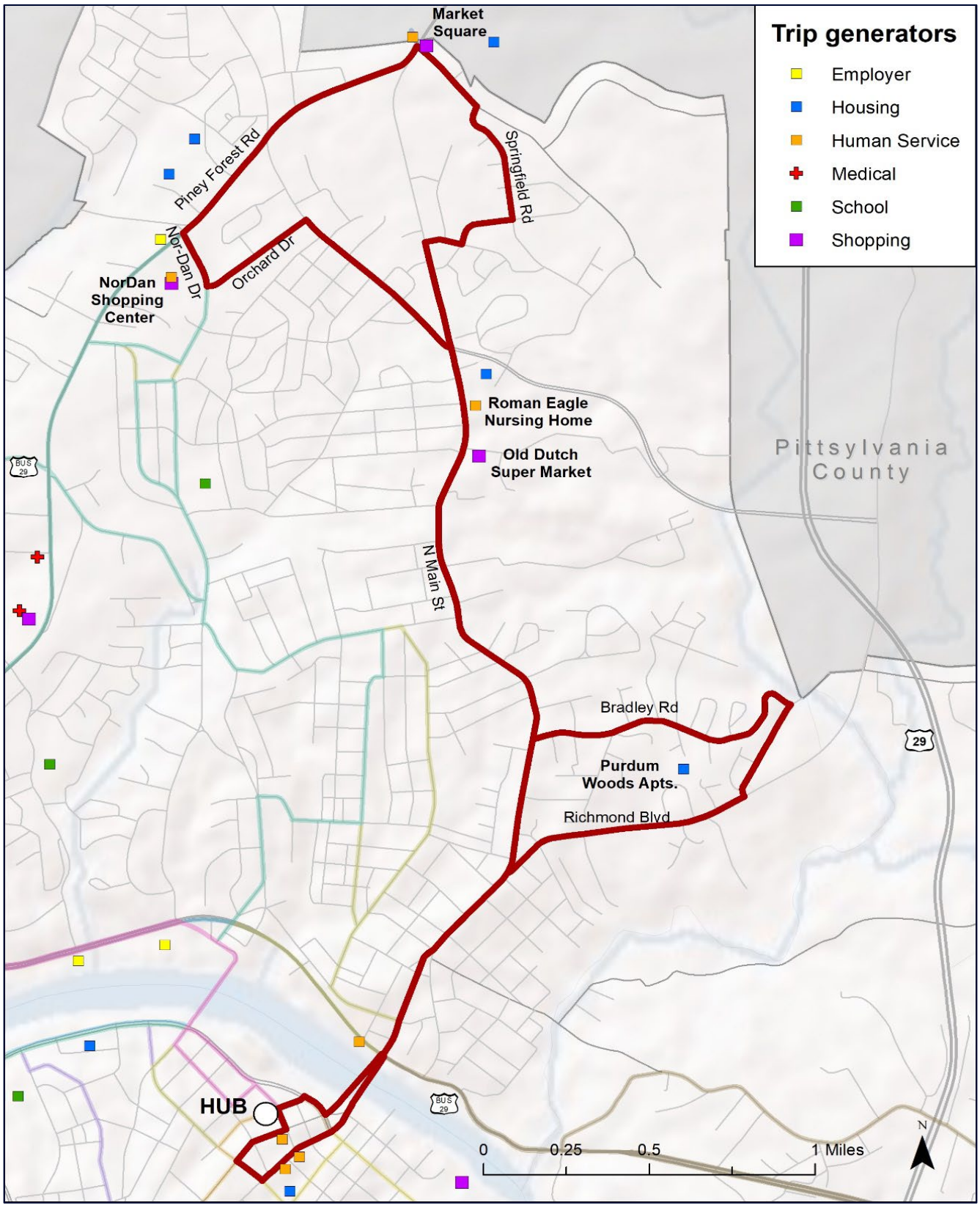
The trend for weekday and Saturday ridership and productivity for the North Main route is provided in Table 3-3. These data show that Saturday ridership has been growing as a proportion of weekday ridership, with the most recent data indicated that Saturday ridership is about 84% of weekday ridership.

Table 3-3: North Main Route – Weekday and Saturday Ridership and Productivity

Metric	2017	2018	2019	2020	2021
Weekday					
Passenger Trips	40,553	37,779	36,670	26,284	20,471
Average Daily	159	148	144	103	80
Revenue Hours	3,010	2,986	3,064	2,975	3,079
Passenger Trips per Revenue Hour	13.5	12.7	12.0	8.8	6.6
Saturday					
Passenger Trips	6,380	5,936	5,879	4,341	3,502
Average Daily	123	114	113	83	67
Revenue Hours	596	622	637	638	638
Passenger Trips per Revenue Hour	10.7	9.5	9.2	6.8	5.5
Saturday Ridership/ Wkday Ridership	77%	77%	79%	81%	84%

A map of the route with the major trip generators identified is provided in Figure 3-1.

Figure 3-1: North Main Route with Trip Generators



Edgewood-Stokesland - #3 and #5

The #3 and the #5 Edgewood – Stokesland Route connect the downtown HUB to near Davenport Energy via Main Street and W. Main Street. Major stops along the route include Sovah Health Hospital (Danville Regional Medical Center), Averett University, Ballou Park, and Ballou Park Shopping Center. The future Caesars Virginia project will be located along this route. The current route requires that drivers make a U-Turn on W. Main Street, as the prior turnaround location at Carter's Store is no longer available for use by the transit system.

The five-year trend data for the route is provided in Table 3-4. These data shown that while 2017 exhibited the highest ridership and productivity, these measures were only down by about 3.2% prior to the pandemic. Ridership on the route was down about 33% between 2019 and 2021. Operating costs have increased incrementally over the five-year period, with the largest annual increase seen between 2018 and 2019. The annual revenue hours and miles have remained stable over the time period, with minor fluctuations that likely reflect holidays or inclement weather. Productivity on the route was the highest in 2017, at 10 passenger trips per revenue hour. The 2021 productivity was 6.6 trips per revenue hour. The route map is provided in Figure 3-2.

Table 3-4: Five Year Trend Data for the Edgewood-Stokesland Route

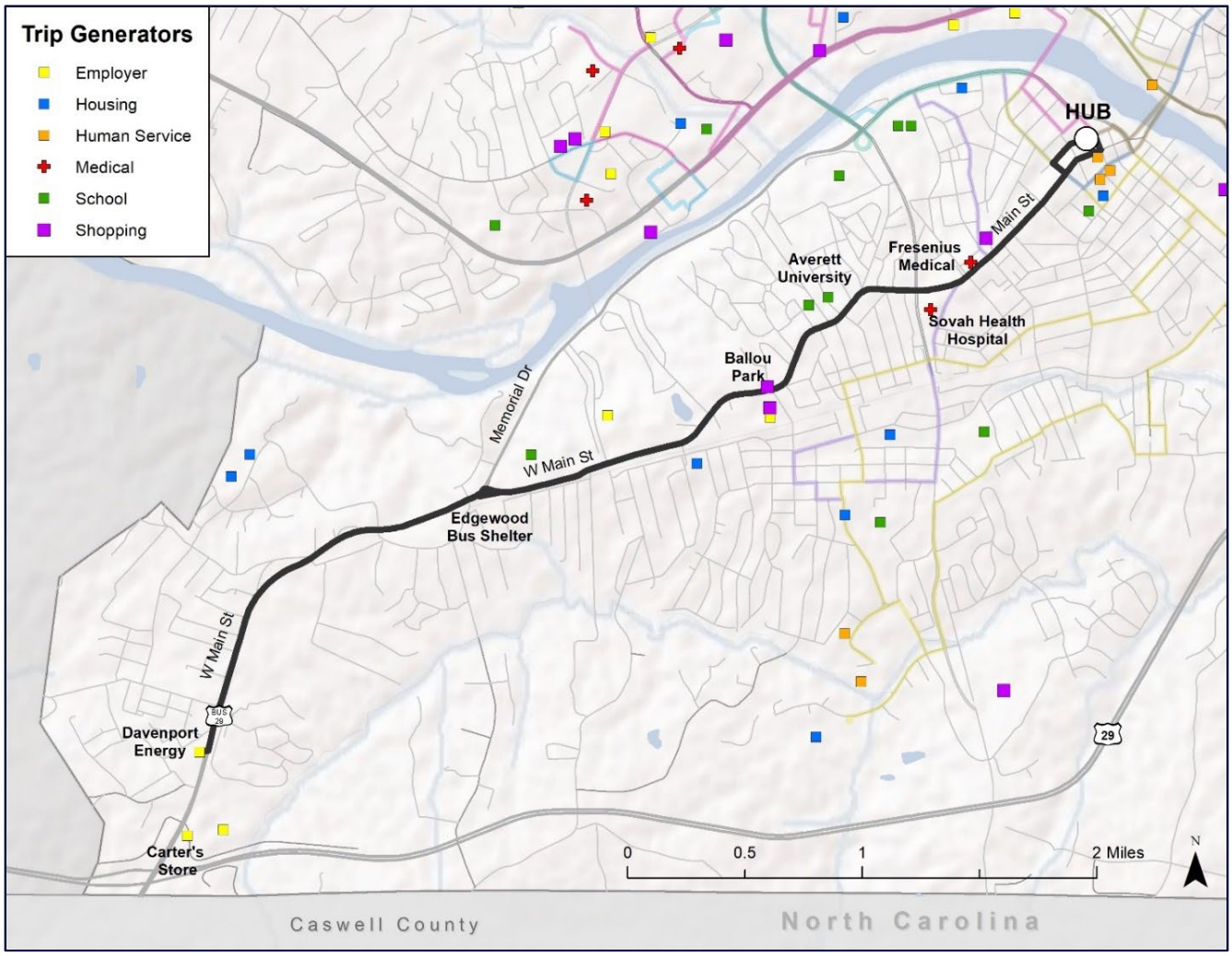
Metric	2017	2018	2019	2020	2021
Passenger Trips	36,582	35,092	35,391	26,933	23,599
Revenue Hours	3,639	3,640	3,625	3,578	3,556
Revenue Miles	54,591	54,602	54,383	53,680	53,328
Total Operating Costs	$138,733	$168,063	$197,411	$213,574	$234,678
Passenger Trips per Revenue Hour	10.05	9.64	9.76	7.53	6.64
Passenger Trips per Revenue Mile	0.67	0.64	0.65	0.50	0.44
Cost per Revenue Hour	$38.12	$46.17	$54.46	$59.69	$65.99
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$3.79	$4.79	$5.58	$7.93	$9.94
Miles per Hour	15.0	15.0	15.0	15.0	15.0

A comparison of the weekday and Saturday ridership and productivity trends are shown in Table 3-5. These data show that for the past three years ridership and productivity on the route has been very similar for both weekdays and Saturdays

Table 3-5: Edgewood-Stokesland – Weekday and Saturday Ridership and Productivity

Metric	2017	2018	2019	2020	2021
Weekday					
Passenger Trips	31,066	28,440	29,378	22,249	20,783
Average Daily	122	112	115	87	82
Revenue Hours	3,037	3,013	2,999	2,968	2,946
Passenger Trips per Revenue Hour	10.2	9.4	9.8	7.5	7.1
Saturday					
Passenger Trips	5,516	5,463	6,007	4,684	4,229
Average Daily	106	105	116	90	81
Revenue Hours	602	627	626	610	610
Passenger Trips per Revenue Hour	9.2	8.7	9.6	7.7	6.9
Saturday Ridership/ Wkday Ridership	87%	94%	100.3%	103.2%	99.8%

Figure 3-2: #3 and #5 Edgewood-Stokesland with Trip Generators



Riverside - #2 Riverside and #5 Riverside

The Riverside route connects the downtown HUB to Walmart and Goodwill Industries. The route is served by vehicles #2 and #5, with slightly different alignments. This route is 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 Place, Danville Mall, Walmart, Piedmont Regional Medical Center, and Goodwill Industries. There is limited service to Centra Medical Center by request only. The alignments between the two versions of the route are different, with only the Route #5 serving the Danville Pittsylvania Community Services and only the Route #2 serving Memorial Drive. Forty-minute headways are offered for the segments of the two routes that are the same, with 80 minute headways for portions of the route that are different.

The five-year trend data for the route is provided in Table 3-6. These data shown that while 2017 exhibited the highest ridership and productivity, these measures were only down by about 3.5% prior to the pandemic. Ridership on the route was down about 31% between 2019 and 2021. Operating costs have increased incrementally over the five-year period, with the largest annual increase seen between 2017 and 2018. The annual revenue hours and miles have remained stable over the time period, with minor fluctuations that likely reflect holidays or inclement weather. Productivity on the route was the highest in 2017, at 14.5 passenger trips per revenue hour. The 2021 productivity was 9.9 trips per revenue hour.

Table 3-6: Five Year Trend Data for the Riverside Route

Metric	2017	2018	2019	2020	2021
Passenger Trips	42,958	40,626	41,475	30,302	28,701
Revenue Hours	2,961	2,962	2,944	2,928	2,910
Revenue Miles	44,415	44,424	44,151	43,920	43,632
Total Operating Costs	$112,874	$136,738	$160,270	$174,744	$192,010
Passenger Trips per Revenue Hour	14.51	13.72	14.09	10.35	9.86
Passenger Trips per Revenue Mile	0.97	0.91	0.94	0.69	0.66
Cost per Revenue Hour	$38.12	$46.16	$54.44	$59.68	$65.98
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$2.63	$3.37	$3.86	$5.77	$6.69
Miles per Hour	15.0	15.0	15.0	15.0	15.0

A comparison of weekday versus Saturday ridership and productivity shows Saturday ridership has ranged from 85% to most recently (2021) 94% of weekday ridership. These data are shown in Table 3-7.

Table 3-7: Riverside Route - Weekday and Saturday Ridership and Productivity

Metric	2017	2018	2019	2020	2021
Weekday					
Passenger Trips	36,622	34,470	35,363	25,639	24,102
Average Daily	144	135	139	101	95
Revenue Hours	2,471	2,452	2,441	2,428	2,410
Passenger Trips per Revenue Hour	14.8	14.1	14.5	10.6	10.0
Saturday					
Passenger Trips	6,336	6,156	6,112	4,663	4,599
Average Daily	122	118	118	90	88
Revenue Hours	490	510	503	500	500
Passenger Trips per Revenue Hour	12.9	12.1	12.2	9.3	9.2
Saturday Ridership/Wkday Ridership	85%	88%	85%	89%	94%

The two route maps are provided in Figures 3-3 and 3-4.

Figure 3-3: #2 Riverside Route with Trip Generators

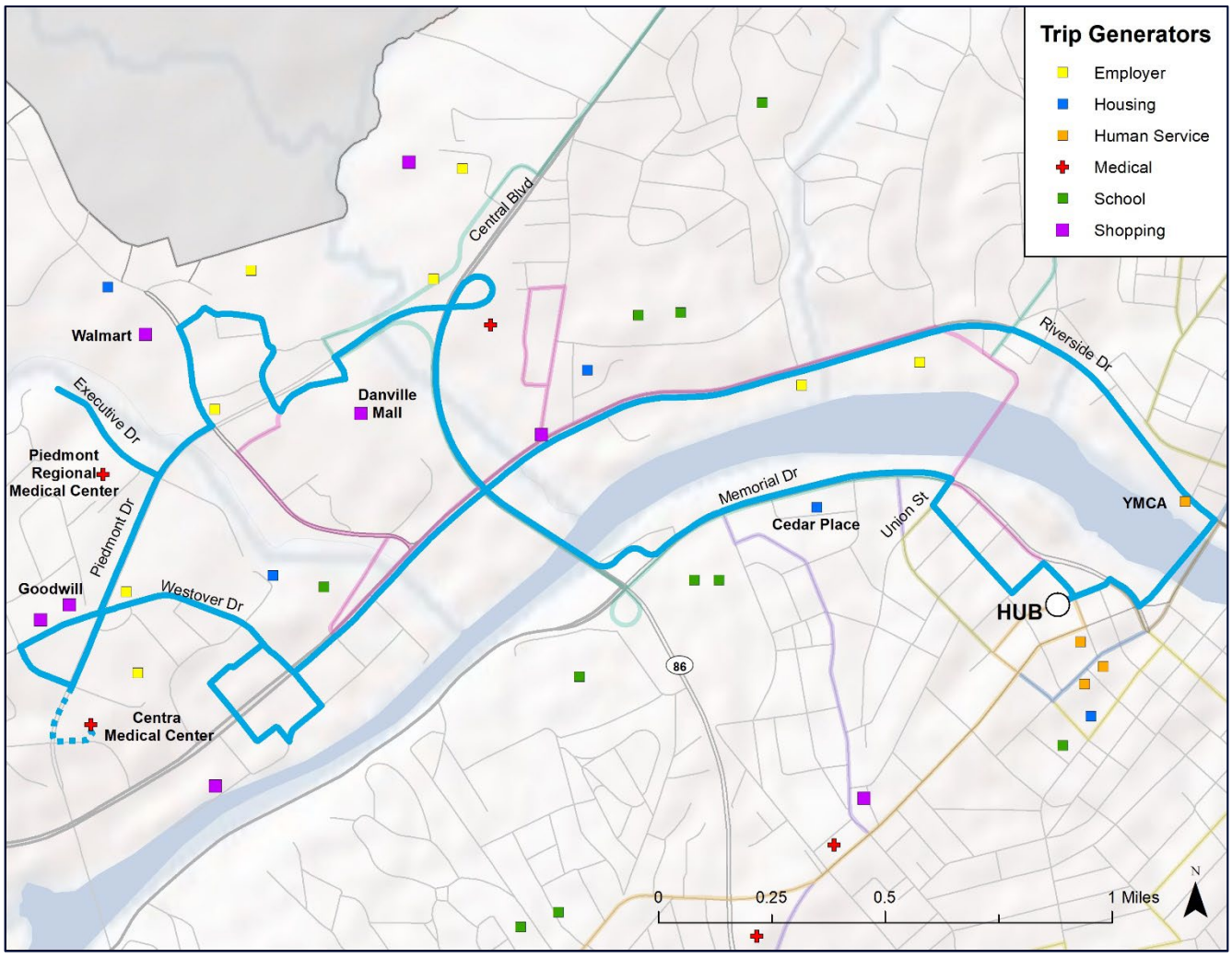
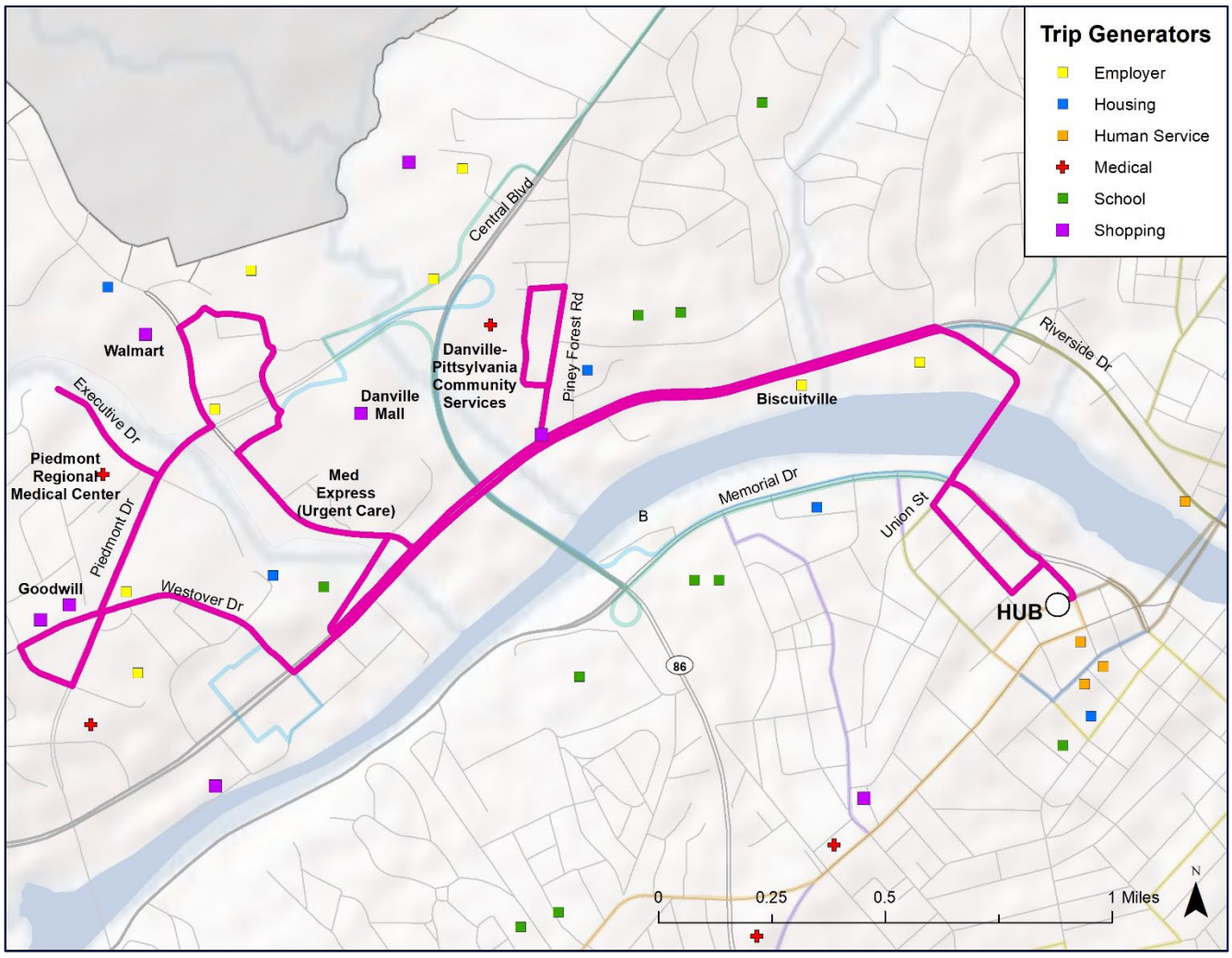


Figure 3-4: #5 Riverside with Trip Generators



#1 Kemper Road – DCC

The #1 Kemper Road – DCC Route connects the downtown HUB to Danville Community College and the Health Department. This route is aligned in the shape of a figure eight with service along several 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, Sovah Health (hospital), True Holiness Church, Cardinal Village Apartments, Danville Health Department, and Danville Community College.

Similar to the systemwide trends, the highest ridership and productivity on the route was seen in 2017. For this route, ridership declined about 8.6% between 2017 and 2019 and another 36.6% between 2019 and 2021. Operating costs have increased incrementally over the five-year period, with the largest annual increase seen between 2018 and 2019. The annual revenue hours and miles have remained stable over the time period, with minor fluctuations that likely reflect holidays or inclement weather. Productivity on the route in FY2021 was 9.28 trips per revenue hour. These data are shown in Table 3-8. The route map is provided in Figure 3-5.

Table 3-8: Five Year Trend Data for the Kemper Road – DCC Route

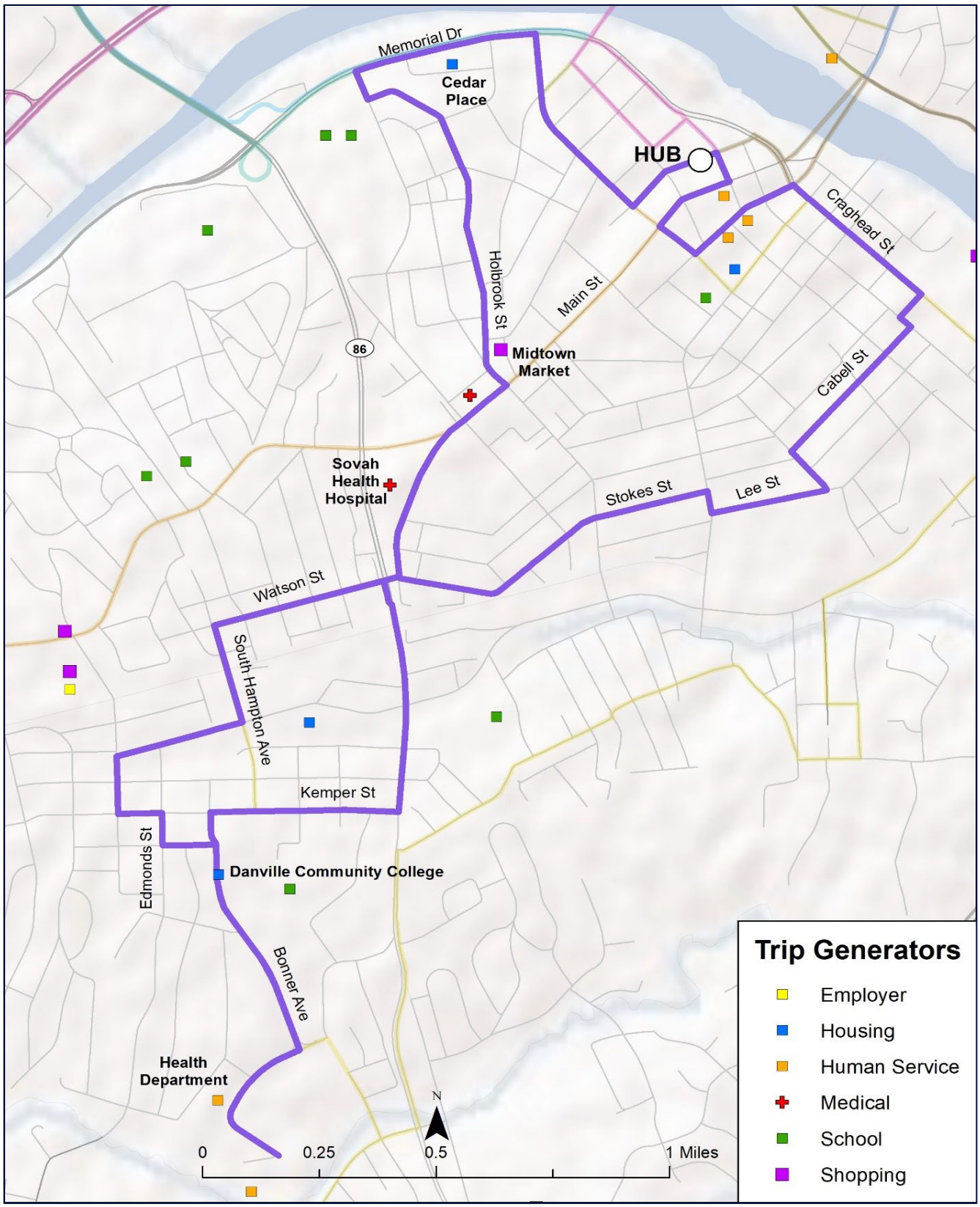
Metric	2017	2018	2019	2020	2021
Passenger Trips	20,717	19,520	18,928	14,231	12,001
Revenue Hours	1,229	1,230	1,278	1,263	1,293
Revenue Miles	18,448	18,452	19,175	18,944	19,392
Total Operating Costs	$46,884	$56,796	$69,607	$75,372	$85,338
Passenger Trips per Revenue Hour	16.86	15.87	14.81	11.27	9.28
Passenger Trips per Revenue Mile	1.12	1.06	0.99	0.75	0.62
Cost per Revenue Hour	$38.15	$46.18	$54.47	$59.68	$66.00
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$2.26	$2.91	$3.68	$5.30	$7.11
Miles per Hour	15.0	15.0	15.0	15.0	15.0

A review of the weekday versus Saturday ridership and productivity is provided in Table 3-9. These data show a similar trend as the other routes, with Saturday ridership increasing relative to weekday ridership. In FY2021, Saturday ridership was 87% of weekday ridership, as compared to FY2017 when Saturday ridership was 73% of weekday ridership.

Table 3-9: Kemper Road – DCC – Weekday and Saturday Ridership and Productivity

Metric	2017	2018	2019	2020	2021
Weekday					
Passenger Trips	18,027	16,680	16,191	12,084	10,190
Average Daily	71	65	63	47	40
Revenue Hours	1,026	1,018	1,058	1,041	1,071
Passenger Trips per Revenue Hour	17.6	16.4	15.3	11.6	9.5
Saturday					
Passenger Trips	2,690	2,840	2,737	2,147	1,811
Average Daily	52	55	53	41	35
Revenue Hours	203	212	220	222	222
Passenger Trips per Revenue Hour	13.3	13.4	12.4	9.7	8.2
Saturday Ridership/ Wkday Ridership	73%	83%	83%	87%	87%

Figure 3-5: Route #1 Kemper Road – DCC with Trip Generators



#2 Third Avenue-NorDan

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.

Ridership on the Third Avenue -NorDan route declined by about 11.7% between 2017 and 2019 and another 31% between 2019 and 2021. Similar to several other routes, the expenses have increased over the five-year period, with the largest increase seen between FY2018 and FY2019. The FY2021 productivity on the route was 7.5 passenger trips per revenue hour. The trend data for the route is shown in Table 3-10. A map of the route is shown in Figure 3-6.

Table 3-10: Five Year Trend Data for the #2 Third Avenue NorDan Route

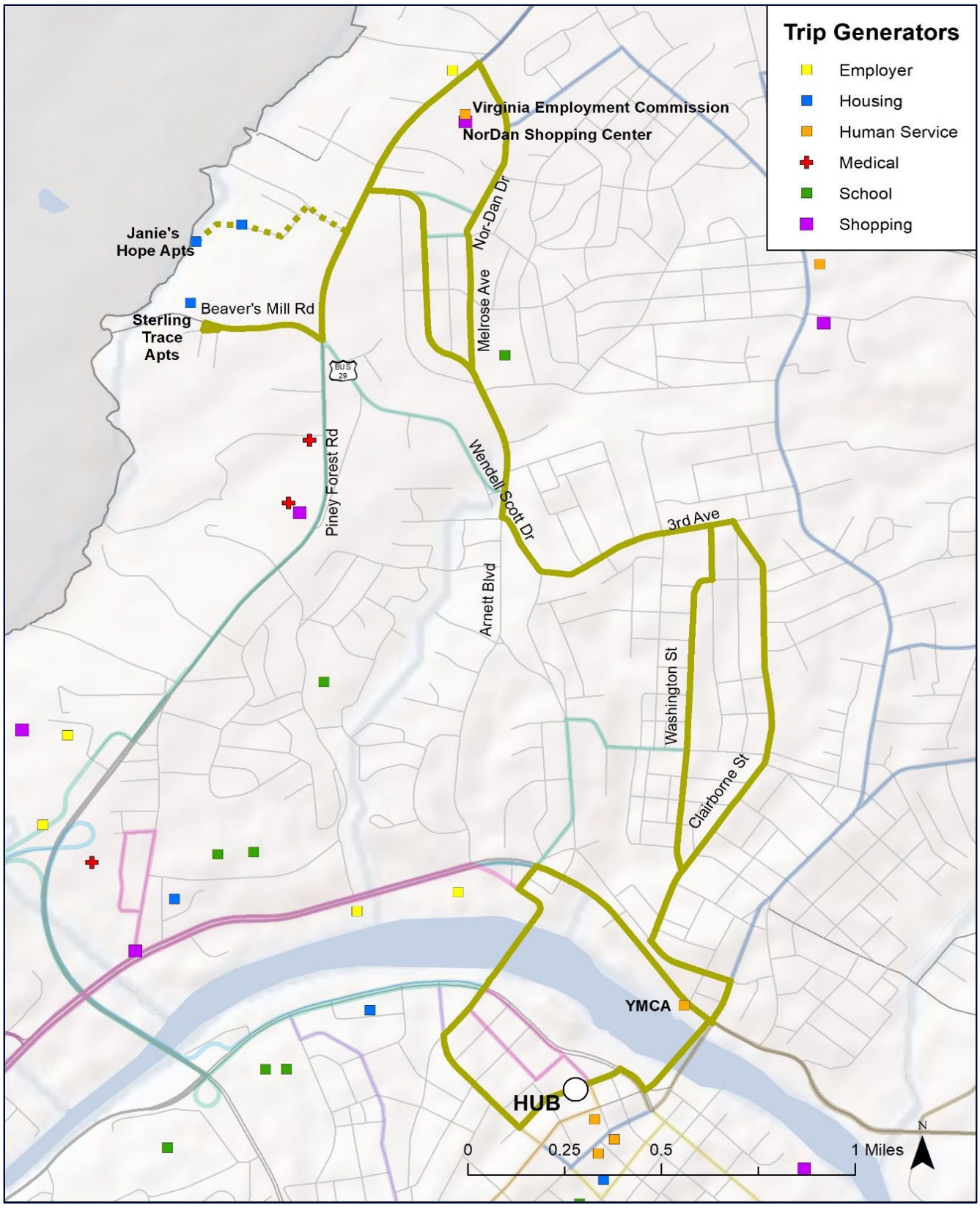
Metric	2017	2018	2019	2020	2021
Passenger Trips	19,851	17,251	17,530	13,331	12,129
Revenue Hours	1,652	1,653	1,652	1,578	1,616
Revenue Miles	24,789	24,794	24,787	23,680	24,240
Total Operating Costs	$62,998	$76,317	$89,978	$94,215	$106,672
Passenger Trips per Revenue Hour	12.02	10.44	10.61	8.45	7.51
Passenger Trips per Revenue Mile	0.80	0.70	0.71	0.56	0.50
Cost per Revenue Hour	$38.13	$46.17	$54.47	$59.71	$66.01
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$3.17	$4.42	$5.13	$7.07	$8.79
Miles per Hour	15.0	15.0	15.0	15.0	15.0

For the Third Avenue/NorDan route, the trend data with regard to weekday versus Saturday ridership shows that the relationship has remained about the same throughout the trend review period, with Saturday ridership at about 83% of weekday ridership. These data are shown in Table 3-11.

Table 3-11: Third Avenue - NorDan Weekday and Saturday Ridership and Productivity

Metric	2017	2018	2019	2020	2021
Weekday					
Passenger Trips	16,949	14,634	14,976	11,418	10,379
Average Daily	66	57	59	45	41
Revenue Hours	1,379	1,368	1,367	1,301	1,339
Passenger Trips per Revenue Hour	12.3	10.7	11.0	8.8	7.8
Saturday					
Passenger Trips	2,902	2,617	2,554	1,913	1,750
Average Daily	56	50	49	37	34
Revenue Hours	273	285	285	277	277
Passenger Trips per Revenue Hour	10.6	9.2	9.0	6.9	6.3
Saturday Ridership/ Wkday Ridership	84%	88%	84%	82%	83%

Figure 3-6: #2 Third Avenue-NorDan with Trip Generators



#3 Danville Estates- NorDan

The #3 Danville Estates – NorDan Route connects the downtown HUB to the NorDan Shopping Center. The route is aligned as a loop with that serves several 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.

The pandemic-related ridership drop in this route was more significant than on the other routes, with a 40% drop in ridership between 2019 and 2021. Productivity is currently the lowest among the fixed routes at just under five passenger trips per revenue hours and the cost per trip is among the highest at $13.24 per passenger trip. The trend data are shown in Table 3-12 and a map of the route is shown in Figure 3-7.

Table 3-12: Five-Year Trend Data - #3 Danville Estates- NorDan

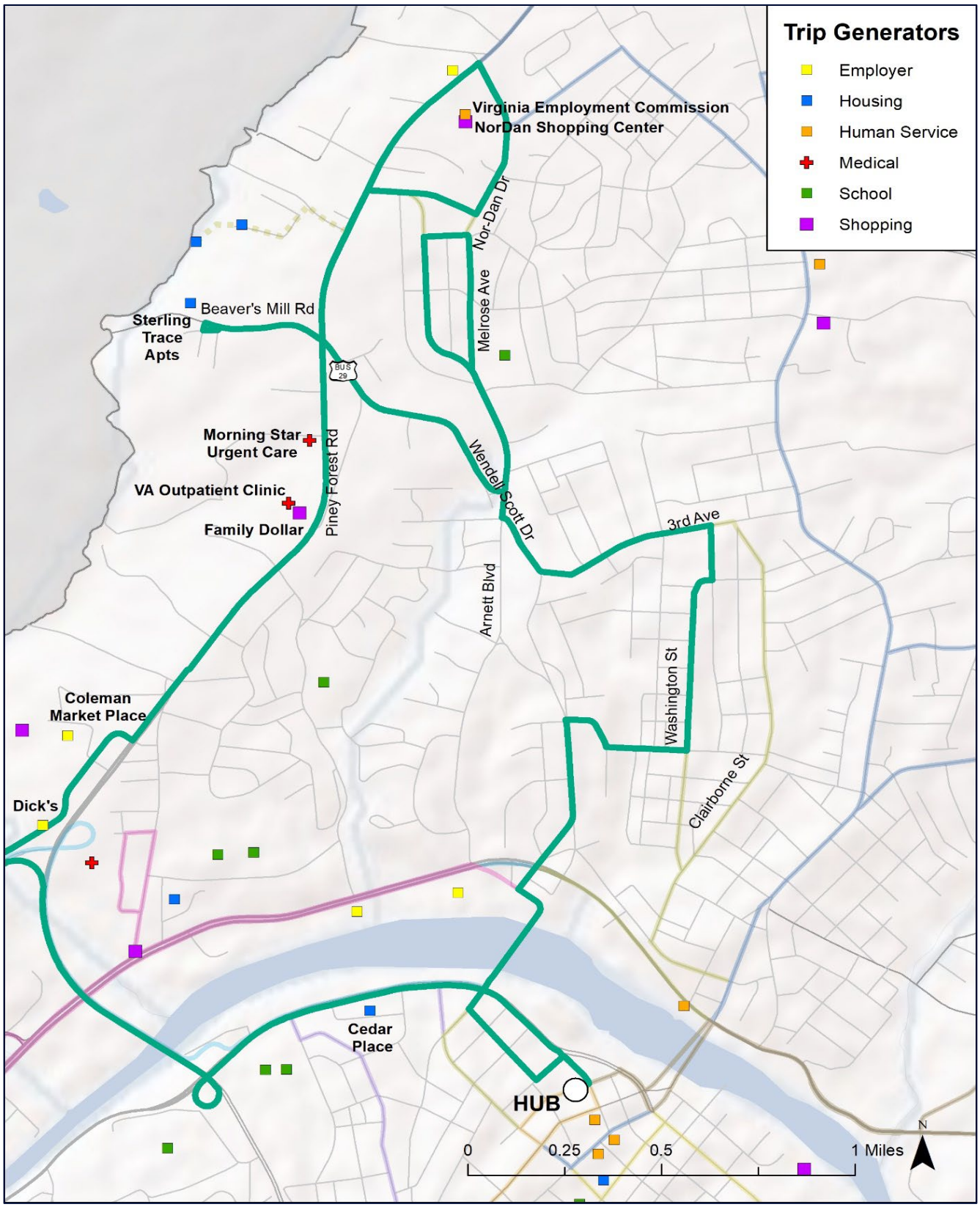
Metric	2017	2018	2019	2020	2021
Passenger Trips	17,484	16,271	16,188	10,925	9,665
Revenue Hours	1,942	1,943	2,005	1,952	1,939
Revenue Miles	29,137	29,143	30,076	29,280	29,088
Total Operating Costs	$74,047	$89,702	$109,172	$116,495	$128,007
Passenger Trips per Revenue Hour	9.00	8.37	8.07	5.60	4.98
Passenger Trips per Revenue Mile	0.60	0.56	0.54	0.37	0.33
Cost per Revenue Hour	$38.13	$46.17	$54.45	$59.68	$66.02
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$4.24	$5.51	$6.74	$10.66	$13.24
Miles per Hour	15.0	15.0	15.0	15.0	15.0

A comparison of the weekday and Saturday ridership and productivity for the route shows a significant change in the relationship between weekday ridership and Saturday ridership over the five-year period. In FY2017, Saturday ridership was 67% of the weekday average and in FY2021 Saturday ridership was 85% of the weekday average. These data are shown in Table 3-13.

Table 3-13: Danville Estates – NorDan Weekday and Saturday Ridership and Productivity

Metric	2017	2018	2019	2020	2021
Weekday					
Passenger Trips	15,387	14,202	14,054	9,438	8,238
Average Daily	60	56	55	37	32
Revenue Hours	1,621	1,608	1,660	1,619	1,606
Passenger Trips per Revenue Hour	9.5	8.8	8.5	5.8	5.1
Saturday					
Passenger Trips	2,097	2,069	2,134	1,487	1,427
Average Daily	40	40	41	29	27
Revenue Hours	321	335	345	333	333
Passenger Trips per Revenue Hour	6.5	6.2	6.2	4.5	4.3
Saturday Ridership/ Wkday Ridership	67%	71%	74%	77%	85%

Figure 3-7: #3 Danville Estates-NorDan with Trip Generators



#4 Health Center – DCC

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, serving various 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.

The trend data for this route shows a fairly substantial loss in ridership between 2017 and 2019 (16.2%), followed by a pandemic-related loss of 35.5%. Operating costs for the route rose the most significantly between 2017 and 2018. The FY2021 productivity was 6.9 passenger trips per revenue hour and the cost per passenger trip was $9.56. The five-year trend data are shown in Table 3-14 and the route map and major trip generators are shown in Figure 3-8.

Table 3-14: Five-Year Trend Data - #4 Health Center-DCC

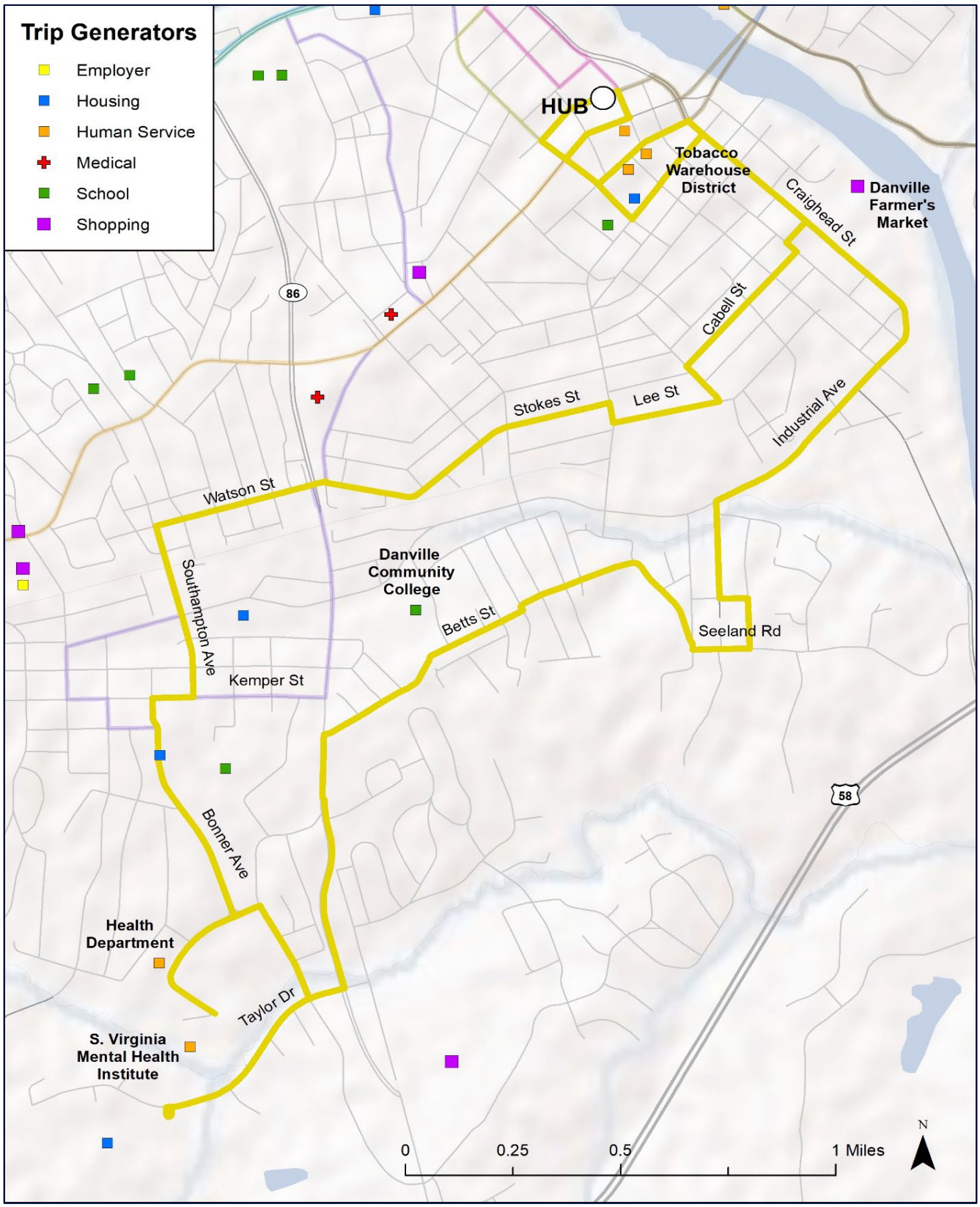
Metric	2017	2018	2019	2020	2021
Passenger Trips	20,663	17,657	17,306	12,504	11,158
Revenue Hours	1,972	1,973	1,880	1,626	1,616
Revenue Miles	29,590	29,596	28,200	24,400	24,240
Total Operating Costs	$75,198	$91,096	$102,366	$97,079	$106,672
Passenger Trips per Revenue Hour	10.48	8.95	9.21	7.69	6.90
Passenger Trips per Revenue Mile	0.70	0.60	0.61	0.51	0.46
Cost per Revenue Hour	$38.13	$46.17	$54.45	$59.70	$66.01
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$3.64	$5.16	$5.92	$7.76	$9.56
Miles per Hour	15.0	15.0	15.0	15.0	15.0

The comparison of weekday and Saturday trend data shows a significant difference between the proportion of Saturday ridership in FY2017 and in FY2021, with Saturday average daily ridership currently being about equal to weekday average daily ridership. These data are shown in Table 3-15.

Table 3-15: Health Center – DCC Weekday and Saturday Ridership and Productivity Data

Metric	2017	2018	2019	2020	2021
Weekday					
Passenger Trips	17,903	15,011	14,633	10,451	9,248
Average Daily	70	59	57	41	36
Revenue Hours	1,646	1,633	1,555	1,349	1,339
Passenger Trips per Revenue Hour	10.9	9.2	9.4	7.7	6.9
Saturday					
Passenger Trips	2,760	2,646	2,673	2,053	1,910
Average Daily	53	51	51	39	37
Revenue Hours	326	340	325	277	277
Passenger Trips per Revenue Hour	8.5	7.8	8.2	7.4	6.9
Saturday Ridership/ Wkday Ridership	76%	86%	90%	96%	101%

Figure 3-8: #4 Health Center- DCC with Trip Generators



Fixed Route Summary – 2021 Data

The FY2021 route statistics for each of the fixed routes that operate full-day service is provided in Table 3-16. These data show that the Riverside route is the most productive, providing 9.86 passenger trips per revenue hour, with a cost per passenger trip of $6.69. The second highest performing route is the Kemper-DCC route, providing 9.28 trips per hour, with a cost per trip of $7.11. Note that the service level on the Kemper-DCC route is the lowest among the fixed routes at 1,293 annual revenue hours. The lowest performing route among the fixed routes is the Danville Estates-NorDan route, with a productivity of just under five trips per revenue hour and a cost per trip of $13.24. It should be noted that all of the fixed routes currently exhibit a higher level of productivity than what could be achieved through demand response service.

Table 3-16: Fixed Route Data Summary – FY2021

Route	Passenger Trips	Revenue Hours	Revenue Miles	Operating Costs	Trips/ Hour	Cost/Trip
North Main	23,973	3,717	55,752	$245,346	6.45	$10.23
Riverside	28,701	2,910	43,632	$192,010	9.86	$6.69
Edgewood - Stokesland	23,599	3,556	53,328	$234,678	6.64	$9.94
Kemper- DCC	12,001	1,293	19,392	$85,338	9.28	$7.11
Third Ave - NorDan	12,129	1,616	24,240	$106,672	7.51	$8.79
Danville Estates - NorDan	9,665	1,939	29,088	$128,007	4.98	$13.24
Health Center- DCC	11,158	1,616	24,240	$106,672	6.90	$9.56
Totals	**121,226**	**16,647**	**249,672**	**$1,098,723**	**7.28**	**$9.06**

Other Fixed Routes

In addition to the traditional fixed routes that operate Monday through Saturday year-round, DT operates two additional routes that have different service parameters. These are the Glenwood Route and the Cougar Express.

#6 Glenwood Route

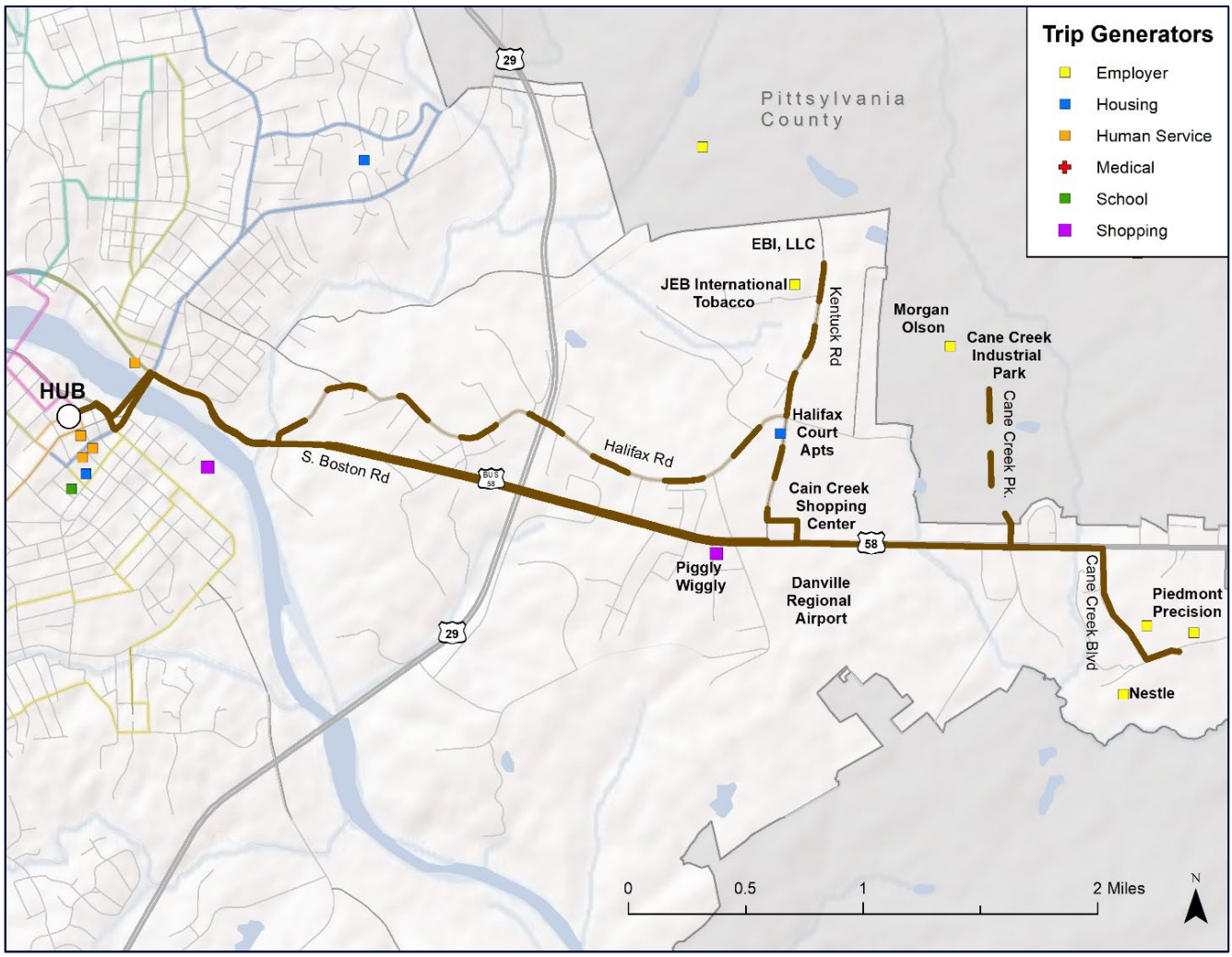
The #6 Glenwood Route connects the downtown HUB to the Cain Creek Shopping Center via River Street and U.S. Route 58. Route deviations are allowed by advanced request along Halifax Road and Kentuck Rd., and Cane Creek Parkway to Cane Creek Centre. This is Danville Transit's only fixed commuter route. It has one outbound run in the morning and one inbound run in the late afternoon. Major stops along the route include the Cain Creek Shopping Center, Cain Creek Industrial Park and EBI, LLC. Danville Transit uses one of the Reserve-A-Ride vehicles to operate this service.

The trend data for the Glenwood Route are shown in Table 3-17. The productivity on the route is quite low as compared to the DT fixed routes, even prior to the pandemic. The FY2021 productivity on the route was less than one passenger per revenue hour and the cost per trip was quite high at $73.64. A map of the route with major trip generators is provided in Figure 3-9.

Table 3-17: #6 Glenwood Trend Data

Metric	2017	2018	2019	2020	2021
Passenger Trips	741	645	515	234	420
Revenue Hours	433	250	201	472	469
Revenue Miles	6,500	3,744	3,012	7,084	7,028
Total Operating Costs	$16,519	$11,524	$10,934	$28,185	$30,928
Passenger Trips per Revenue Hour	1.71	2.58	2.56	0.50	0.90
Passenger Trips per Revenue Mile	0.11	0.17	0.17	0.03	0.06
Cost per Revenue Hour	$38.15	$46.10	$54.40	$59.71	$65.94
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$22.29	$17.87	$21.23	$120.45	$73.64
Miles per Hour	15.0	15.0	15.0	15.0	15.0

Figure 3-9: #6 Glenwood Route with Major Trip Generators



Averett University Cougar Express

The Averett Cougar Express connects Averett University's Main and North Campuses. This service started in Fall 2017 and operates only when Averett University is in session. It is operated under contract to the University. The service allows passengers to receive express, door to door service at certain times at Jut's/ Woodland, North Campus, and the Main Campus. There are also airport shuttles to and from the Raleigh-Durham (RDU) and Greensboro (PTI/GSO) airport on selected days, and two morning shuttles that take students from the Main Campus to the Averett Flight Center Building at the Danville Regional Airport.

The trend data for the campus route shows that ridership on the route was building through 2019, with 3,253 passenger trips provided, and then dropped in 2020 and 2021 in response to the pandemic. These data are shown in Table 3-18.

Table 3-18: Averett University Campus Routes – Trend Data

Campus Route	2017	2018	2019	2020	2021
Passenger Trips	1,036	2,793	3,253	1,878	1,710
Revenue Hours	218	495	510	413	533
Revenue Miles	3,270	7,424	7,652	6,200	8,000
Total Operating Costs	$8,310	$22,851	$27,776	$24,668	$35,206
Passenger Trips per Revenue Hour	4.75	5.64	6.38	4.55	3.21
Passenger Trips per Revenue Mile	0.32	0.38	0.43	0.30	0.21
Cost per Revenue Hour	$38.12	$46.16	$54.46	$59.73	$66.05
Cost per Revenue Mile	$2.54	$3.08	$3.63	$3.98	$4.40
Cost per Passenger Trip	$8.02	$8.18	$8.54	$13.14	$20.59
Miles per Hour	15.0	15.0	15.0	15.0	15.0

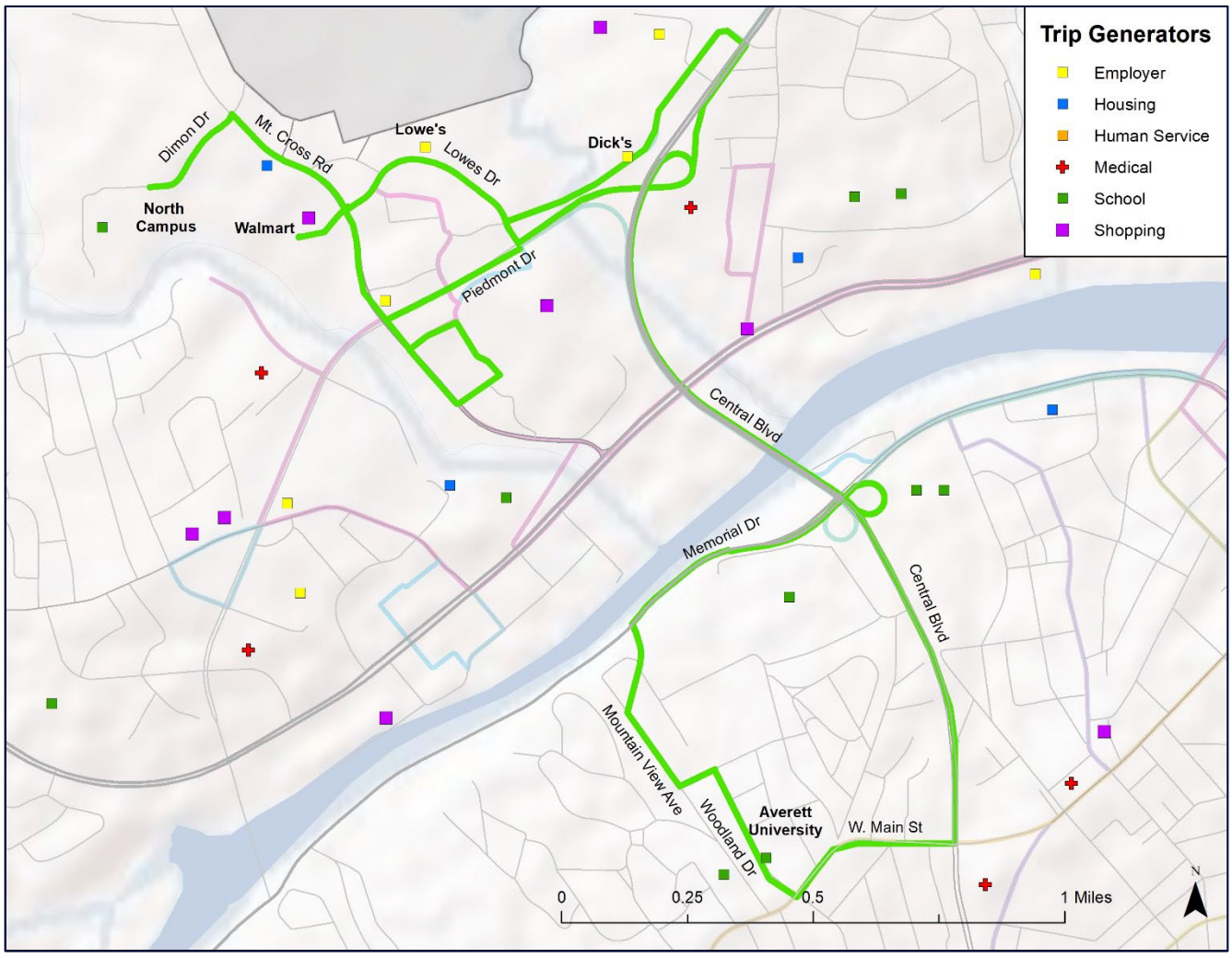
The Averett Express airport route was implemented in 2019 and provided 367 passenger trips during its first year in operation. Ridership in FY2021 surpassed this level with 441 passenger trips, though the revenue service hours also increased from 99 hours in 2019 to 216 hours in FY2021. These data are shown in Table 3-19.

Table 3-19: Averett University Airport Route – Trend Data

Airport Route	2019	2020	2021
Passenger Trips	367	214	441
Revenue Hours	99	165	216
Revenue Miles	1,484	2,478	3,234
Total Operating Costs	$5,378	$9,859	$14,232
Passenger Trips per Revenue Hour	3.71	1.30	2.04
Passenger Trips per Revenue Mile	0.25	0.09	0.14
Cost per Revenue Hour	$54.32	$59.75	$65.89
Cost per Revenue Mile	$3.62	$3.98	$4.40
Cost per Passenger Trip	$14.65	$46.07	$32.27
Miles per Hour	15.0	15.0	15.0

A map of the Averett Express Campus route and major trip generators is shown in Figure 3-10.

Figure 3-10: Averett Express Airport Route and Major Trip Generators



Demand-Response Services

Danville Transit operates three types of demand response services: Handivan (ADA complementary paratransit); Reserve-A-Ride; and human service transportation. The basic service descriptions were provided in Chapter 1, with the trend data and analyses for these services presented below.

Handivan - ADA Complementary Paratransit

Danville Transit provides ADA complementary paratransit services through the Handivan program. This service provides curb to curb service throughout the City of Danville for people who are unable to use the fixed route system due to a physical or cognitive disability. The service is provided during the same days and hours as the fixed route services, as required by the Americans with Disabilities Act (ADA). The trend data for the program is provided in Table 3-20.

These data show that the ADA ridership grew steadily from 2017 through 2020 and dipped by about 11% in 2021. Productivity was the highest in FY2017 at 1.94 passenger trips per revenue hour and was most recently (2021) 1.8 trips per revenue hour. The cost per trip has increased from $21.78 to $39.01 over the five-year period.

Table 3-20: Handivan Trend Data – FY2017-FY2021

Handivan	2017	2018	2019	2020	2021
Passenger Trips	4,994	5,431	6,077	6,082	5,416
Revenue Hours	2,569	2,858	3,360	3,465	3,005
Revenue Miles	29,976	35,950	40,716	39,524	35,721
Total Operating Costs	$108,771	$143,957	$197,131	$224,705	$211,282
Passenger Trips per Revenue Hour	1.94	1.90	1.81	1.76	1.80
Passenger Trips per Revenue Mile	0.17	0.15	0.15	0.15	0.15
Cost per Revenue Hour	$42.34	$50.37	$58.67	$64.85	$70.31
Cost per Revenue Mile	$3.63	$4.00	$4.84	$5.69	$5.91
Cost per Passenger Trip	$21.78	$26.51	$32.44	$36.95	$39.01
Miles per Hour	11.7	12.6	12.1	11.4	11.9

Reserve-A-Ride

The Reserve-A-Ride program is open to the general public and provides demand response transportation throughout the city and the Cane Creek Industrial Park. The service is geared to supplementing the fixed route program by operating earlier in the morning, later in the evening, and to areas not served through the fixed routes. Demand for the program has increased significantly, with the FY2021 program operating more revenue service hours than the fixed route program. Managing the demand for this program is one of the goals for this TDP process.

The program is much larger than the Handivan program, operating 17,501 revenue service hours in FY2021, as compared to 3005 revenue service hours for the Handivan program. The productivity measures are similar, with the Reserve-A-Ride providing 1.84 trips per revenue hour as compared to 1.8 trips per revenue hour for the Handivan Program (FY2021). As the program has grown, the costs have grown as well, with the FY2021 operating expenses totaling $1,236,823. The cost per trip has grown to $38.25, slightly less than the Handivan cost per trip of $39.01. These data are shown in Table 3-21.

DT staff reported that the Reserve-A-Ride service that is used by participants of the Institute for Advanced Learning and Research (IALAR) serves to greatly improve the productivity of the service, given that the trips are grouped. The revenue derived from these trips is also important for the system.

Table 3-21: Reserve-A-Ride Trend Data – FY2017- FY2021

Reserve-A-Ride	2017	2018	2019	2020	2021
Passenger Trips	31,702	31,676	30,714	23,003	32,336
Revenue Hours	15,527	14,827	16,065	12,067	17,591
Revenue Miles	253,956	242,481	235,441	173,742	260,105
Total Operating Costs	$657,724	$746,836	$942,534	$782,545	$1,236,823
Passenger Trips per Revenue Hour	2.04	2.14	1.91	1.91	1.84
Passenger Trips per Revenue Mile	0.12	0.13	0.13	0.13	0.12
Cost per Revenue Hour	$42.36	$50.37	$58.67	$64.85	$70.31
Cost per Revenue Mile	$2.59	$3.08	$4.00	$4.50	$4.76
Cost per Passenger Trip	$20.75	$23.58	$30.69	$34.02	$38.25
Miles per Hour	16.4	16.4	14.7	14.4	14.8

Analysis of RAR Trips – Could Some be Diverted to Fixed Routes?

One of the areas of analysis for the study team was to look at whether some of the RAR trips could be diverted to the fixed routes. Diverting even just a small percentage of RAR trips would save operating resources and improve the productivity of the fixed routes. An in-depth analysis of the RAR program conducted for the month of October 2022 by the study team is provided in Appendix A. This analysis showed that based on the trip origins and destinations about 35.5% of the trips taken on the Reserve-A-Ride service could have been taken on the fixed route services (685 trips). The sample size was 1,929 trips. This analysis considered the hours of service for the fixed routes but did not consider travel time or specific circumstances regarding each trip.

Danville Transit staff followed up with an internal analysis of a sample of 95 RAR trips that were completed during the week of December 20th, 2022. This analysis showed that 17% of the sampled RAR trips could be completed via fixed routes. This analysis involved a much smaller sample but had the

benefit of staff knowledge of the specific origin and destination and fixed route operating nuances that the larger sample study did not include. These data are shown in Appendix B.

Senior Transportation

The senior demand response transportation program operated by DT focuses on providing transportation for senior citizens to access medical appointments, grocery shopping, and errands. During the five-year trend period, demand for the program peaked in 2018, with ridership dropping by about 26% between FY2018 and FY2021. Productivity on the service is similar to the other two demand response programs at 1.86 trips per revenue hour. These data may need to be reviewed, as the some of the productivity values are identical for each year, which would be unusual. The trend data is provided in Table 3-22.

Table 3-22: Senior Transportation Trend Data – FY2017-FY2021

Senior Transportation	2017	2018	2019	2020	2021
Passenger Trips	19,168	20,258	18,678	14,307	13,679
Revenue Hours	10,305	10,891	10,042	7,692	7,354
Revenue Miles	119,538	126,336	116,487	89,227	85,306
Total Operating Costs	$436,520	$548,580	$589,164	$498,826	$517,060
Passenger Trips per Revenue Hour	1.86	1.86	1.86	1.86	1.86
Passenger Trips per Revenue Mile	0.16	0.16	0.16	0.16	0.16
Cost per Revenue Hour	$42.36	$50.37	$58.67	$64.85	$70.31
Cost per Revenue Mile	$3.65	$4.34	$5.06	$5.59	$6.06
Cost per Passenger Trip	$22.77	$27.08	$31.54	$34.87	$37.80
Miles per Hour	11.6	11.6	11.6	11.6	11.6

Financial Information

The FY2023 transit budget for Danville Transit is $3,635,960. The largest single line item is personnel, at almost $1.87 million. The line item budget for FY2023 is provided in Table 3-23. The operating costs have increased significantly over the TDP period for the following primary reasons: 1) there has been a significant increase in driver wages over the past several years; 2) DT has added administrative and supervisory positions to support Reserve-A-Ride's long service day; and 3) the City added a Division Director's position.

Table 3-23: Danville Transit Operating Budget, FY2023

Expense Category	Amount
Personnel Services	$1,868,830
Employee Benefits	$214,050
Purchased Services	$318,960
Internal Service	$157,980
Other Operating Expenses	$541,530
Administration	$534,610
Total	**$3,635,960**

The largest single source of funding assistance for the program is derived from the Federal Transit Administration's (FTA) Section 5311 (formula grants for rural public transit), which is administered through the DRPT. This program generally provides up to 50% match to fund the net operating deficit for rural transit programs. During the pandemic, federal funding was available to fund 100% of the net deficit for transit programs through the CARES Act, and the City still has some carryover funds from this assistance. For FY2023, the operating expenses will be funded through the sources listed in Table 3-24.

Table 3-24: Danville Transit Operating Revenues and Funding Assistance, FY2023 Budget

Source	Amount
Fares	$300,000
Advertising	$4,800
Net Deficit	**$3,331,160**
Federal Assistance	$1,727,560
State Assistance	$839,402
Federal Carry-over from CARES	$451,898
City General Fund	$312,600

The FY2023 capital program will include the following:

- Replacement vehicles
- Replacement of the automated scheduling software system
- Replacement of all bus stop signage
- Bathroom modifications at the Hub

Changes to the cost and availability of vehicles have resulted in changes to the FY2023 capital program.

The capital budget for FY2023 is $1,148,906. Funding for the FY2023 capital budget is as follows:

- Federal: $919,125
- State: $183,825
- Local: $45,956

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. In light of the ongoing pandemic, we have included peer data from the National Transit Database for FY2019 and FY2020. This allows a comparison of pre-pandemic as well as more current data. The FY2021 National Transit Database information is not yet available.

The following programs were used as peers:

- Allegany County Transit, serving Cumberland, Maryland
- Bluefield Area Transit, serving Bluefield and Princeton, West Virginia
- BRITE, serving the Central Shenandoah areas that include Staunton, Waynesboro, and parts of Augusta County
- Central West Virginia Transit Authority, serving Clarksburg, West Virginia
- Radford Transit, Radford, Virginia
- Virginia Regional Transit, Culpeper

The peer data compiled show the following:

- Danville Transit's productivity, in terms of passenger trips per revenue hour, was the highest among the peers, both in FY2019 and FY2020.

- Danville Transit's cost per trip was lower than the mean, both in FY2019 and FY2020.

- Danville Transit's cost per hour was higher than the mean, both in FY2019 and FY2020.

- The overall program operated fewer hours and miles than the mean but provided more passenger trips. These data reflect the relatively high productivity of the program.

- The program's overall operating expenses were higher than the mean, both in FY2019 and in FY2020.

- Danville Transit operates a longer service day than the other programs, with Reserve-A-Ride available 20.5 hours per day, Monday through Saturday.

The complete peer data are presented in Tables 3-25 and 3-26.

Table 3-25: Selected Peer Comparison – FY2019 National Transit Database

System	UZA?	Vehicles Operated in Max. Service	Approx. Service Area Population	Annual Passenger Trips	Total Operating Expenses	Vehicle Revenue Hours	Vehicle Revenue Miles
Allegany County Transit (MD)	Yes	13	68,780	199,851	$ 1,795,841	24,949	352,003
Bluefield Transit (WV)	No	25	15,530	211,247	$ 1,684,383	38,265	704,578
BRITE	Yes	11	50,075	275,059	$ 2,076,366	30,657	575,810
Central West VA Transit Authority (Clarksburg, WV)	No	18	16,061	279,959	$ 2,655,117	42,429	613,140
Danville Transit	No	17	42,590	338,614	$ 2,625,960	35,977	539,625
Radford Transit	Yes	20	18,368	268,727	$ 1,512,791	31,215	342,655
Virginia Regional Transit	No	32	46,562	241,234	$ 3,146,640	52,365	932,589
Mean		**19**	**36,852**	**259,242**	**$ 2,213,871**	**36,551**	**580,057**

System	Trips Per Hour	Trips Per Mile	Cost Per Trip	Cost Per Hour	Cost Per Mile	MPH
Allegany County Transit (MD)	8.01	0.57	$ 8.99	$ 71.98	$ 5.10	14.1
Bluefield Transit (WV)	5.52	0.30	$ 7.97	$ 44.02	$ 2.39	18.4
BRITE	8.97	0.48	$ 7.55	$ 67.73	$ 3.61	18.8
Central West VA Transit Authority (Clarksburg, WV)	6.60	0.46	$ 9.48	$ 62.58	$ 4.33	14.5
Danville Transit	9.41	0.63	$ 7.76	$ 72.99	$ 4.87	15.0
Radford Transit	8.61	0.78	$ 5.63	$ 48.46	$ 4.41	11.0
Virginia Regional Transit	4.61	0.26	$ 13.04	$ 60.09	$ 3.37	17.8
Mean	**7.39**	**0.50**	**$ 8.63**	**$ 61.12**	**$ 4.01**	**15.6**

SOURCE: 2019 NATIONAL TRANSIT DATABASE

Table 3-26: Selected Peer Comparison – FY2020 National Transit Database

System	UZA	Vehicles in Max. Service	Approx. Service Area Population	Annual Passenger Trips	Total Operating Expenses	Vehicle Revenue Hours	Vehicle Revenue Miles
Allegany County Transit (MD)	Yes	16	68,780	140,357	$ 2,015,511	24,104	313,439
Bluefield Transit (WV)	No	20	15,530	181,108	$ 1,908,538	37,157	664,920
BRITE	Yes	11	50,075	233,930	$ 2,285,647	32,885	606,434
Central West VA Transit Authority (Clarksburg, WV)	No	20	16,061	193,050	$ 2,568,304	34,959	466,770
Danville Transit	No	18	42,590	289,631	$ 2,576,382	33,467	482,298
Radford Transit	Yes	20	18,368	185,459	$ 1,532,184	27,797	302,634
Virginia Regional Transit	No	34	46,562	192,058	$ 3,269,913	53,477	852,978
Mean		**20**	**36,852**	**202,228**	**$ 2,308,068**	**34,835**	**527,068**

System	Trips Per Hour	Trips Per Mile	Cost Per Trip	Cost Per Hour	Cost Per Mile	MPH
Allegany County Transit (MD)	5.82	0.45	$ 14.36	$ 83.62	$ 6.43	13.0
Bluefield Transit (WV)	4.87	0.27	$ 10.54	$ 51.36	$ 2.87	17.9
BRITE	7.11	0.39	$ 9.77	$ 69.50	$ 3.77	18.4
Central West VA Transit Authority (Clarksburg, WV)	5.52	0.41	$ 13.30	$ 73.47	$ 5.50	13.4
Danville Transit	8.65	0.60	$ 8.90	$ 76.98	$ 5.34	14.4
Radford Transit	6.67	0.61	$ 8.26	$ 55.12	$ 5.06	10.9
Virginia Regional Transit	3.59	0.23	$ 17.03	$ 61.15	$ 3.83	16.0
Mean	**6.04**	**0.42**	**$ 11.74**	**$ 67.31**	**$ 4.69**	**14.8**

SOURCE: 2020 NATIONAL TRANSIT DATABASE

Passenger Surveys

With input from DT staff and the TAC, passenger surveys were developed for both the fixed routes and the paratransit service. The study team handed out and collected the fixed route surveys in person between May 16 and 18, 2022. The paratransit service was administered electronically, with a postcard including a link to the survey sent to riders whose data were included within the DT demand response database. Copies of the surveys are provided in Appendix C.

Fixed Route Survey Results

The survey effort on the fixed route vehicles resulted in 97 completed surveys. With an average daily ridership of about 400 passenger trips, which likely represents about 200 individual riders, the number of surveys should provide a fairly good representation of riders' opinions. The results for each of the survey questions are presented below.

Primary Mode of Transportation and Access

When asked about their primary mode of transportation, most of the riders responded that public transit was their primary mode (84%), followed by walking (10%). The majority of riders indicated that they walked to their bus stop (85%), with seven percent indicating they had gotten a ride to the stop and two percent indicating they had ridden their bicycle to the stop. One survey participant indicated they used a skateboard to get to the bus stop.

Routes and Transfers

Surveys were collected from each of the fixed routes over the two-day survey period. The number of surveys collected from each route is shown in Table 3-27. These data show that the number of surveys collected by route generally corresponds to the average daily ridership on the route, with the greatest number of surveys collected on the Riverside route (#2 and #5 combined – 55 surveys), followed by the North Main route (#1 and #4 combined – 38), and the Edgewood-Stokesland route (#3 and #5 combined – 27).

Table 3-27: Surveys Completed by Route

Route	Percent	Number
1 - North Main	25.53%	24
1 - Kemper Road - DCC	12.77%	12
2 - Riverside	40.43%	38
2 - Third Ave- NorDan	9.57%	9
3 - Edgewood-Stokesland	21.28%	20
3 - Danville - Estates	10.64%	10
4 - Health Center - DCC	13.83%	13
4 - North Main	14.89%	14
5 - Riverside	18.09%	17
5 - Edgewood - Stokesland	7.45%	7
6 - Glenwood	1.06%	1
	Answered	**94**
	Skipped	**3**

About 62% of riders indicated they transferred from one bus to another to complete their travel.

Trip Purposes and Frequency of Use

A little more than half of the people who responded to the survey indicated they were travelling to work, followed by shopping/errands, and social/recreational trips. These data are shown in Table 3-28. Respondents who indicated a response to the open-ended "other," wrote in volunteer, library, court, home, and visiting sick relative.

Table 3-28: Trip Purposes

Trip Purpose	Percent	Number
Work	50.52%	49
Shopping/Errands	37.11%	36
Other:	9.28%	9
Social/Recreation	6.19%	6
School	5.15%	5
Medical	5.15%	5
Government/Social Service	1.03%	1
	Answered	**97**
	Skipped	**0**

The riders surveyed are frequent system users, with nearly half of the respondents riding public transit 5-6 days a week (47%), and another 29% using the service 3-4 days a week. These data are shown in Table 3-29.

Table 3-29: Frequency of Use

Answer Choices	Percent	Number
5-6 days a week	46.81%	44
3-4 days a week	28.72%	27
1-2 days a week	12.77%	12
Less than once a week	8.51%	8
Less than once a month	3.19%	3
	Answered	**94**
	Skipped	**3**

Mobility Alternatives

Question #7 on the survey asked riders to indicate how they would make the trip they were currently taking if the bus was not available. The most popular responses were that they would walk or get a ride with family or friends. Over 13% indicated they would not make the trip. These responses are provided in Table 3-30.

Table 3-30: Mobility Alternatives

Answer Choices	Percent	Number
Walk	32.29%	31
Family/Friends	29.17%	28
Would not make the trip	13.54%	13
Drive	10.42%	10
Taxi	9.38%	9
Other (please specify)	3.13%	3
Uber/Lyft	1.04%	1
Carpool/Vanpool	1.04%	1
Bicycle	0.00%	0
	Answered	**96**
	Skipped	**1**

Potential Fixed Route Service Improvements

When asked about potential service improvements, a majority of respondents indicated they would like to have bus services on Sundays. The next most frequently requested improvement was bus service later in the evenings, more frequent service, and bus shelters and benches at stops. Write-in responses included service to Lynchburg and Greensboro; the Tuntstall School, Cain Creek Shopping Center, Banner Street, and Xfinity. Respondents were instructed that they could choose up to three responses so the total number of responses is higher than the number of survey respondents. These results are shown in Table 3-31.

Table 3-31 Potential Fixed Route Service Improvements

Answer Choices	Percent	Number
Service on Sundays	60.44%	55
Service later in the evenings	43.96%	40
More frequent service	36.26%	33
Bus shelters and benches at stops	27.47%	25
Additional Saturday service	15.38%	14
Better timeliness	15.38%	14
Service earlier in the mornings	13.19%	12
Faster, more direct routes	10.99%	10
Service to additional locations (where?):	8.79%	8
On demand service using by smartphone	7.69%	7
Improved bus stop accessibility	4.40%	4
	Answered	**91**
	Skipped	**6**

Non-Cash Fare Payment Preferences

As transit programs modernize fare payments and the cost of purchasing tokens has increased, DT is interested in looking at a number of potential fare payment options for the future. Riders were asked to indicate which of several non-cash fare payment options would be the most convenient for them. Tokens were listed first, followed by pre-paid fare cards, credit/debit cards, and smart phone application. These data are shown in Table 3-32.

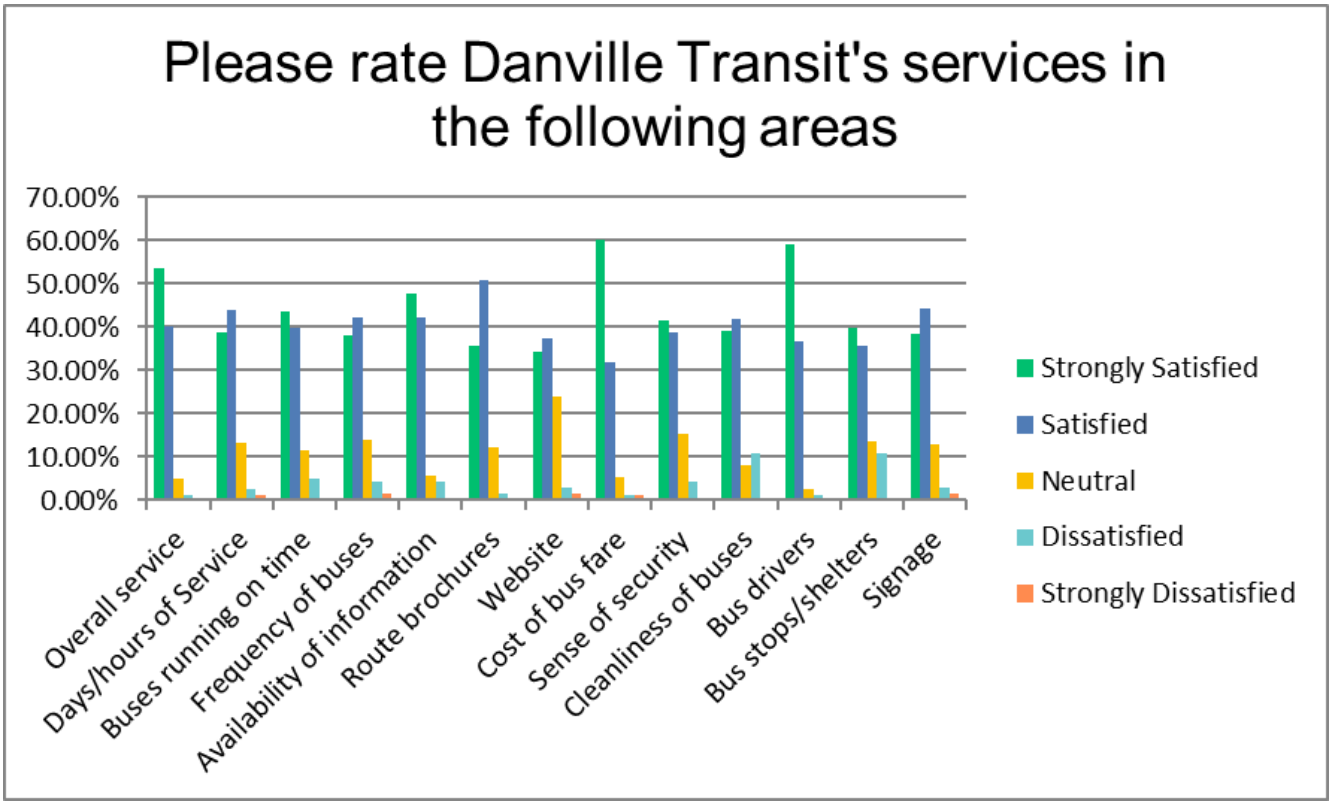
Table 3-32: Non-Cash Fare Payment Preferences

Answer Choices	Percent	Number
Tokens	55.00%	44
Pre-paid fare card	20.00%	16
Use of credit/debit card	17.50%	14
Smart phone payment application	7.50%	6
	Answered	**80**
	Skipped	**17**

Satisfaction Ratings

Riders were asked to rate DT's services in a number of categories. These results showed high satisfaction ratings, particularly with the bus drivers and the cost of the bus fare. The most dissatisfaction was noted for the bus stops/shelters and the cleanliness of the buses, though these levels were both just 10%. These results are shown in Figure 3-11.

Figure 3-11: Fixed Route Survey - Rider Satisfaction Ratings



Open Ended Comments

The open-ended comments received via the fixed route passenger survey are provided in Table 3-33.

Table 3-33: Open Ended Comments – Fixed Route Passenger Survey

Responses
Everything is good!
Do what we write for bus
Please help them set up a better system, the casino needs it, like other popular cities
All bus stops should have benches with covers
At, humbly, I can compare it with 12 years of riding Pittsylvania County School bus
Transit hub needs to be cleaned, one of the bus drivers is rude
Need 24/7 Service
More strict prohibition of foul language and loud music.

Rider Demographics

The fixed route rider demographics are provided in Table 3-34.

Table 3-34: Fixed Route Survey - Rider Demographics

Age	Percent	Number
Under 18	0.00%	0
18-24	6.82%	6
25-34	18.18%	16
35-54	34.09%	30
55-64	25.00%	22
65+	15.91%	14
	Answered	**88**
	Skipped	**9**

Smart Phone	Percent	Number
Yes	68.24%	58
No	31.76%	27
	Answered	**85**
	Skipped	**12**

Driver's License	Percent	Number
Yes	29.07%	25
No	70.93%	61
	Answered	**86**
	Skipped	**11**

Access to Vehicle	Percent	Number
Yes	20.48%	17
No	79.52%	66
	Answered	**83**
	Skipped	**14**

Household Income	Percent	Number
$14,999 or less	50.00%	34
$15,000 - $29,999	39.71%	27
$30,000 - $44,999	1.47%	1
$45,000 - $59,999	5.88%	4
$60,000 - $74,999	1.47%	1
$75,000 or higher	1.47%	1
	Answered	**68**
	Skipped	**29**

Employment Status	Percent	Number
Employed (Full-time)	41.57%	37
Retired	20.22%	18
Employed (Part-time)	14.61%	13
Unemployed	14.61%	13
Other	12.36%	11
Student (part-time)	2.25%	2
Student (Full-time)	1.12%	1
Homemaker	1.12%	1
	Answered	**89**
	Skipped	**8**

Race/Ethnicity	Number	Percent
African American/Black	67.05%	59
Caucasian/White	26.14%	23
Prefer not to answer	6.82%	6
Asian	3.41%	3
American Indian/Alaska Native	3.41%	3
Hispanic/Latino	3.41%	3
Native Hawaiian/Other Pacific Islander	1.14%	1
	Answered	**88**
	Skipped	**9**

Demand Response Rider Survey Results

The demand response survey results were somewhat disappointing, given that links to the survey were mailed to over 1,000 paratransit customers. It is likely that an electronic survey is not the most effective method of surveying this customer base. Seventeen responses were received from the survey effort. The survey asked slightly different questions than the fixed route survey, in light of the different service characteristics. Note that these results should be considered anecdotal, as the survey size is not statistically significant.

Use of DT Fixed Routes

The survey asked respondents to indicate whether or not they also used DT's fixed routes. These results show that 13 of the 17 respondents also use the fixed routes on occasion.

Type of Demand Response Service

Respondents were asked to indicate which of three services they used. The responses are provided in Table 3-35.

Table 3-35: Services Used

Service	Percent	Number
Handivan	11.76%	2
Reserve-A-Ride	52.94%	9
Senior Transportation	35.29%	6
	Answered	**17**
	Skipped	**0**

Trip Purpose and Frequency of Use

The most common trip purpose among the demand response riders is shopping/errands, followed by work and medical. These data are shown in Table 3-36.

The demand response riders that were surveyed do not ride as frequently as the fixed route riders, with 35% indicated that they ride less than once per week. Another 29% indicated that they ride 1-2 days per week. Just three respondents (17.7%) indicated that they ride 5-6 days per week.

Table 3-36: Demand Response Trip Purpose

Trip Purpose	Percent	Number
Shopping/Errands	47.06%	8
Work	29.41%	5
Medical	29.41%	5
Social/Recreation	5.88%	1
Government/Social Service	5.88%	1
Other:	5.88%	1
School	0.00%	0
	Answered	**17**
	Skipped	**0**

Mobility Alternatives

When asked how they would get around if DT was not available, the respondents indicated the following: asking family/friends for a ride (7); not making the trip (6); driving (2); taxis (1) and walk/bike.

Potential Service Improvements

When asked what potential transit service improvements would be most helpful, a majority of the survey participants asked for service on Sundays, followed by additional bus shelters and benches at stop, more convenient trip scheduling, and service later in the evenings. These results reflect that the demand response riders also use the fixed route services, given that bus stop improvements were highly desired. There was a write-in request for service to the Ingram Heights/Westover Drive area. The full results are shown in Table 3-37.

Table 3-37: Demand Response Survey - Potential Service Improvements

Answer Choices	Percent	Number
Service on Sundays	52.94%	9
Additional bus shelters and benches at stops	52.94%	9
More convenient trip scheduling	41.18%	7
Service later in the evenings	41.18%	7
On demand service using by smartphone	29.41%	5
Service earlier in the mornings	23.53%	4
Better timeliness	23.53%	4
Improved bus stop accessibility	17.65%	3
Service to additional locations (where?):	5.88%	1
	Answered	**17**

Non-Cash Payment Options

The demand response survey also asked participants to indicate their preferences for non-cash fare payment. The results among the demand response group show a preference for credit/debit cards. These data are shown in Table 3-38.

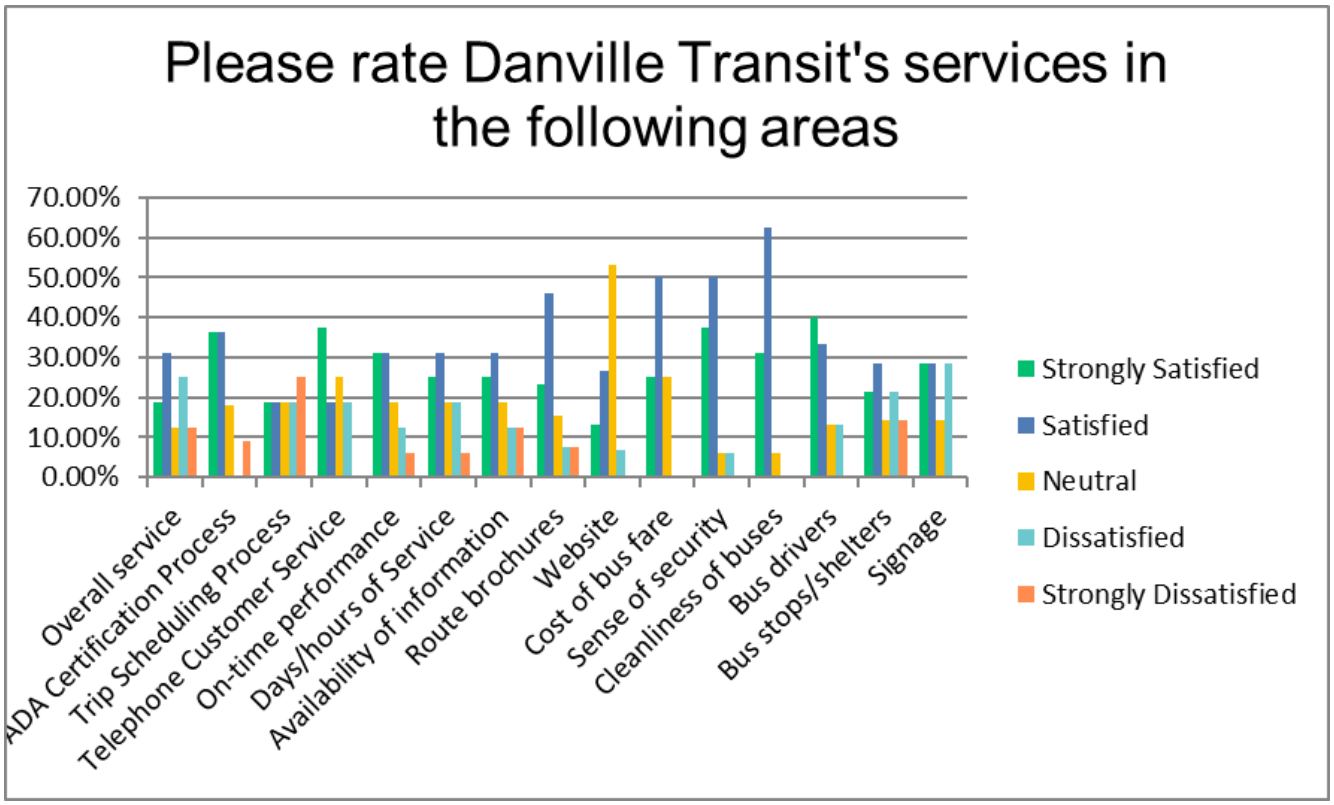
Table 3-38: Demand Response Customers – Payment Options

Payment Options	Percent	Number
Use of credit/debit card	37.50%	6
Pre-paid fare card	18.75%	3
Tokens	25.00%	4
Smart phone payment application	18.75%	3
	Answered	**16**
	Skipped	**1**

Satisfaction Ratings

Riders were asked to rate DT's services in a number of categories. These results showed lower satisfaction ratings than the fixed route survey results. Riders were the most satisfied with the cleanliness of the buses, the sense of security, the cost of the fare, and the drivers. Areas where there was significant dissatisfaction included: the trip scheduling process; overall service; and bus stops/shelters These results are shown in Figure 3-12.

Figure 3-12: Demand Response - Rider Satisfaction Ratings



Open Ended Comments

The open-ended comments from the survey respondents are provided in Table 3-39. Many of the comments indicate a preference for improvements to the scheduling and availability of the service.

Table 3-39: Demand-Response Survey – Open-Ended Comments

Comments
Much better SCHEDULING of Senior pick-ups and returns.
Thanks for the senior bus service. It is a big help for seniors who do not drive.
We are blessed to have this service.
Some of your drivers were rude.
I've been living in Ingram Heights for over 6years and there's no bus service except the reservation for reserve a ride the few times I did get a trip they were either late or didn't show up it was hard to get scheduled trips because they was always full. But other than those few incidents the bus drivers was nice came on time to pick me up and take me and was always nice and courteous.
Drivers need to know the quickest route to area shopping. When seniors are going somewhere and are scheduled a certain time, they should not be penalized when the driver is late getting them to their destination.
I know I have a ride to work.
There are times that I needed service and the service was so full that I couldn't get service for the times that was necessary for me. Most of all, because I just Moved from California and I Don't have transportation as of yet and I'm a Veteran.
Buses need bicycle racks! like Asheville NC.
I don’t have an issue with regular route. It’s reserve a ride that I have a problem with. My girlfriend uses them faithfully every week and each week there’s either a problem with her pick up time or her drop off time. Every week we are having to call and complain because of the lack of communication or the lack of respect from the drivers and from the people in the office. It’s ridiculous.
Can’t get a bus when I need one nor one for a family member.
I think it's a wonderful service.
I been having problems getting transportation in the last month as I have booked online several times for same day service and did not receive a phone call at all. When I get transportation I have to stay 2 hours at these places and one time I had to catch a cab back home as I did not want to stay a hour longer.

Demand Response Rider Demographics

The demand response survey demographics are provided in Table 3-40.

Table 3-40: Demand Response Survey Rider Demographics

Age	Percent	Number
Under 18	0.00%	0
18-24	0.00%	0
25-34	17.65%	3
35-54	17.65%	3
55-64	11.76%	2
65+	52.94%	9
	Answered	**17**
	Skipped	**0**

Smart Phone	Percent	Number
Yes	87.50%	14
No	12.50%	2
	Answered	**16**
	Skipped	**1**

Driver's License	Percent	Number
Yes	18.75%	3
No	81.25%	13
	Answered	**16**
	Skipped	**1**

Access to a Vehicle	Percent	Number
Yes	25.00%	4
No	75.00%	12
	Answered	**16**
	Skipped	**1**

Household Income	Percent	Number
$14,999 or less	40.00%	6
$15,000 - $29,999	40.00%	6
$30,000 - $44,999	6.67%	1
$45,000 - $59,999	13.33%	2
$60,000 - $74,999	0.00%	0
$75,000 or higher	0.00%	0
	Answered	**15**
	Skipped	**2**

Race	Percent	Number
African American/Black	56.25%	9
Caucasian/White	25.00%	4
Prefer not to answer	18.75%	3
Asian	0.00%	0
American Indian/Alaska Native	0.00%	0
Native Hawaiian/Other Pacific Islander	0.00%	0
Hispanic/Latino	0.00%	0
	Answered	**16**
	Skipped	1

Employment Status	Percent	Number
Employed (Full-time)	18.75%	3
Employed (Part-time)	12.50%	2
Student (Full-time)	0.00%	0
Student (part-time)	0.00%	0
Retired	50.00%	8
Homemaker	0.00%	0
Unemployed	6.25%	1
Other	12.50%	2
	Answered	**16**
	Skipped	**1**

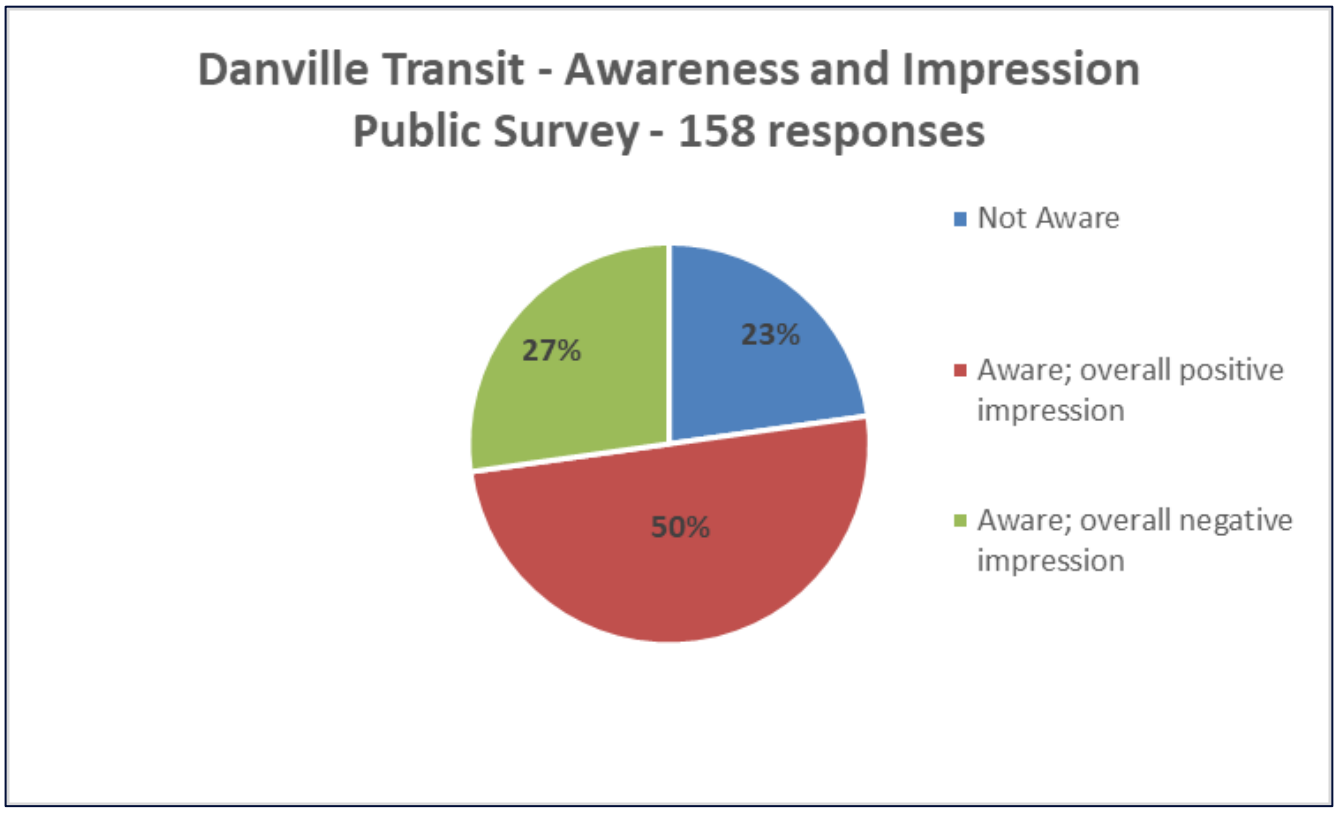
Public Survey

In order to gather opinions concerning public transportation from the broader community, a public survey was also developed. Once finalized, the survey was entered into Survey Monkey and the link was publicized via a media release. In addition to the electronic survey option, paper copies were available at the Danville Transit HUB for people who do not have access to the Internet. The survey effort occurred during May and June 2022. A copy of the survey is provided within Appendix D.

Public Survey Results

A total of 158 people took the public survey. The first question on the survey asked participants to indicate if they were aware of the public transportation services provided by Danville Transit, and if so to indicate their impression of the services – either positive or negative. About 77% were aware of these services, with 65% of these respondents having an overall positive impression. Twenty-three percent of respondents were not aware of the service. The full results are shown in Figure 3-13.

Figure 3-13: Danville Transit Awareness and Impression



Travel Characteristics

Respondents were asked to indicate their primary mode of transportation. About 58% of respondents use their car as their primary mode of transportation, while 24% use public transportation. The full results to this question are provided in Table 3-41.

Table 3-41: Primary Mode of Transportation

Modes	Percent	Number
I drive	57.86%	92
I use public transportation	23.90%	38
Friends/family drive me	8.18%	13
Other (please specify)	6.92%	11
I walk	1.89%	3
I ride a bicycle	0.63%	1
Carpool/vanpool	0.63%	1
I take a taxi	0.00%	0
I take an Uber/Lyft	0.00%	0
	Answered	**159**
	Skipped	**0**

Respondents were also asked to indicate if they used any of a number of different transportation services. The results show that while over half indicated that they do not, the other half use a variety of services, including DT. These results are shown in Table 3-42.

Table 3-42: Transportation Modes Used

Modes	Percent	Number
I do not currently use public transportation	53.25%	82
Danville Transit's Fixed Routes	26.62%	41
Danville Transit's Reserve-A-Ride	22.73%	35
Other (please specify)	9.09%	14
Uber/Lyft	8.44%	13
Taxis	7.79%	12
Danville Transit's Senior Transportation	6.49%	10
Virginia Breeze	3.90%	6
Danville Transit's Handivan	3.25%	5
Vanpools or carpools	0.65%	1
	Answered	**154**
	Skipped	**5**

"Other" responses were varied and primarily duplicated the modes choices listed.

Reasons for Using Public Transportation

When asked their primary reasons for choosing public transportation (checking all that applied), 44 respondents (31%) indicated that they do not have access to a vehicle. The next most common responses were an inability to drive (16%), not having a license (16%), and saving money (14.8%). Write-in comments included using public transportation when their cars are broken down.

Why Not Public Transit?

Those that do not use public transportation on a regular basis currently were asked to identify what types of service improvements would be needed for them to choose to ride public transit more frequently. The top responses were: "bus stop/shelter improvements" (44%); "more frequent buses" (43%): and "service to areas outside the region" (43%). These top here were closely followed by "Sunday service (42%), "improved access to transit information (40%), and "service later in the evening" (40%). These responses are presented in Table 3-43. Eighty-six percent of the respondents indicated that they would use public transportation if there was a service that met their needs.

Table 3-43: Improvements Needed for Non-Users of Public Transportation to Ride

Improvement	Percent	Number
Bus stop/shelter improvements	44.37%	67
More frequent buses	43.05%	65
Service to areas outside the region	43.05%	65
Sunday service	41.72%	63
Improved access to transit information	40.40%	61
Service later in the evening	39.74%	60
On-demand service using my smart phone	29.14%	44
Improved reliability	28.48%	43
Service earlier in the morning	27.81%	42
Better service availability near my home/work/school- (please specify location)	21.19%	32
Lower fares	17.22%	26
I would not ride, I prefer to drive	15.23%	23
Better security on board the vehicles	13.25%	20
Less crowded vehicles	11.92%	18
Shorter travel time	11.26%	17
	Answered	**151**
	Skipped	**8**

Several respondents included comments for the open-ended portion of the question that asked to indicate if they would ride if there was service closer to where they live, work, or attend school. These comments are shown in Table 3-44.

Table 3-44: Suggested Locations for Additional Public Transportation Services

Locations Mentioned
Pittsylvania County
Chatham
Westover Hills
Blairs
College Ave

Need for Additional or Improved Public Transportation

The vast majority of respondents (84.5%) said they do believe there is need for either additional or improved public transportation in the City of Danville.

Additional Service Areas

While the survey touched on the need to serve additional areas within the question regarding why people do not use public transportation, there was also a specific open-ended question asking respondents to indicate geographic areas that are not currently served but should be served by public transportation in the future. These responses are provided in Table 3-45.

Table 3-45: Areas to Consider for Future Public Transportation Services

Areas Listed
58 by the airport.
All local factories need services to their particular shift times.
Arnett Blvd.
Better advertising, more frequent, earlier and later busses in the day Actual shelters for roadside stops.
Blairs, Pittsylvania County
Blairs VA
Danville is small, the bus should access all of these areas including a further distance.
Definitely need transportation to Unique Industries in Blairs, VA

Areas Listed
Downtown and Schoolfield.
Expand transit services to Pittsylvania County and other counties for those with jobs or services outside of Danville.
Factories on the outskirts of town are underserved and need fixed routes for shift change.
Holland Road state line area, a lot of people walk the Highway to get to stores such as carters juniors or old Dutch. A bus stop to service the state line community would help tremendously.
Holt Garrison Parkway 58 Fairgrounds, and Sunday service please.
I know this survey is specific to Danville, but I live in the County and work in the City. If there was reliable transportation that was timely, and could get me downtown where I work, I would take it. Also, I work downtown, and if I could take a bus shopping during my lunch break and be back in a timely manner I would probably do it.
I live up Westover Drive and having to walk 30 min just to get to the bus stop especially when it rains or dark out.
I work with clients that have issues getting to work sites up 58 east.
If public transportation was more accessible i.e., frequent bus stops in high traffic areas, and the times were extended, it would help more people.
If there was a more extensive greenway, like in Raleigh over the sewer lines, more folks could bike
I'm not up to date with which regions are served. As many neighborhoods and communities as possible should have public transportation.
Inside more of the neighborhoods (Northmont) area. Not sure of any bus stops closer than edge of Johnson school on Arnett Blvd.
It seems that the buses run in poverty or low level income areas, which is great; however, there are people (elderly, young and anything in between). There are areas are overlooked.
It's not so much region as times of the buses.
Martinsville, South Boston, Pittsylvania area.
More access on the side streets and more frequent buses.
Need a stop on West Main near the Economy Inn.
Need bus service out 58 Ringgold for people that also work on weekends near Cane Creek area.
Night shift people need public transportation to get to work.
Outside the region.
People living outside City limits. It would be nice to see a partnership with Pittsylvania County in providing people with access to public transportation.
Piney Forest needs more options.

Areas Listed
Pitt. Country
Pittsylvania County and Caswell County towns
Pittsylvania County- Dry Fork area down 41
Pittsylvania County needs public transportation
Pittsylvania County, areas farther outside the city.
Pittsylvania County Expanding to 41, 29.58
Public transit to/from larger neighboring cities (Greensboro, Raleigh, etc.)
Service to Chatham would be nice and back would be nice. I love the trolly and think we should have more of those.
Shopping centers? Main Street?
The 58 area, where the jobs are
Towards Southwyck Plaza
Transportation on us Highway 29
Unique - Blairs
Unique and Blairs in different places along 29 in certain places on 58 like out by the Cane Creek
Uniques in Blairs
Westover
Westover
Westover Drive
Yes 58 west. And 29 out towards Unique Ind.
Yes utilizing public transportation and it does not service communities on the North Side. Persons are required to walk several blocks to access the public transit
Yes, I would take public transit if they stopped by my home. I live in the city on Mountain Hill Rd but the busses do not come here.
Yes, transportation to and from Chatham, VA maybe go through neighborhoods in Chatham some parts then head to tight squeeze shopping center. Maybe have a certain location in Greensboro Transportation hub location in Greensboro stop there then head on back to Danville. Maybe consider a Danville express certain hour only for a while to see how that goes.

Open-Ended Comments

Survey participants were afforded an opportunity to provide open-ended comments regarding public transportation in the City of Danville. A variety of comments were received – positive, negative, as well as specific improvement requests. Some themes among the improvement requests were:

- Improved Reserve-A-Ride scheduling
- Additional and clearer advertising so people know how to use the system
- Regional service
- Longer hours of service
- Additional shelters
- More frequent service

The list of comments is provided in Appendix E.

Demographics

The demographics of the survey participants are provided in Table 3-46.

Table 3-46: Public Survey Respondent Demographics

Ages	Percent	Number
Under 18	0.70%	1
18-24	2.10%	3
25-34	13.99%	20
35-54	50.35%	72
55-64	18.18%	26
65+	14.69%	21
	Answered	**143**
	Skipped	**16**

Race/Ethnicity	Percent	Number
Caucasian/White	44.76%	64
African American/Black	37.06%	53
Asian	0.70%	1
American Indian/Alaska Native	2.10%	3
Native Hawaiian/Other Pacific Islander	0.00%	0
Hispanic/Latino	2.10%	3
Prefer not to answer	15.38%	22
	Answered	**143**
	Skipped	**16**

Smart Phone	Percent	Number
Yes	94.41%	135
No	5.59%	8
	Answered	**143**
	Skipped	**16**

Employment Status	Percent	Number
Employed (Full-time)	51.05%	73
Employed (Part-time)	8.39%	12
Student (Full-time)	2.80%	4
Student (part-time)	0.70%	1
Retired	23.08%	33
Homemaker	1.40%	2
Unemployed	9.09%	13
Other	6.99%	10
	Answered	**143**
	Skipped	**16**

Driver's License	Percent	Number
Yes	76.76%	109
No	23.24%	33
	Answered	**142**
	Skipped	**17**

Vehicle	Percent	Number
Yes	66.43%	95
No	33.57%	48
	Answered	**143**
	Skipped	**16**

Income	Percent	Number
$14,999 or less	22.06%	30
$15,000 - $29,999	24.26%	33
$30,000 - $44,999	18.38%	25
$45,000 - $59,999	9.56%	13
$60,000 - $74,999	11.03%	15
$75,000 or higher	14.71%	20
	Answered	**136**
	Skipped	**23**

Population Profile

The following section provides a general population profile for Danville and Pittsylvania County. The profile identifies and evaluates underserved population subgroups and reviews the demographic characteristics pertinent to a Title VI analysis.

Historical and Recent Population Trends

As of the 2020 Decennial Census, the total population of Danville was 42,590, a decrease of about 1% since 2010, and approximately a 14% decrease since 2000. The surrounding county of Pittsylvania has a population of 60,501 and has decreased in population by 5% since 2010, and now has a lower population total than before 2000. These data are shown in Table 3-47.

Table 3-47: Historical Populations for Danville Service Area

County / Area	2000	2010	2020	Percent Change 2010 - 2020	Percent Change 2000 - 2020
City of Danville	48,411	43,055	42,590	-1.1%	-13.6%
Pittsylvania County	61,745	63,506	60,501	-5%	-2%
Virginia	7,078,515	8,001,024	8,590,563	7%	21.4%

Future Population Projections

Projections developed by the *University of Virginia Weldon Cooper Center*, shown in Table 3-48, estimate that the population of the Danville Transit region will continue to decrease over the next twenty-five years, decreasing by about 36% between 2025 and 2045. It will be interesting to see if this estimate changes once the effects of the new casino are realized. The population of Pittsylvania County is projected to decline by about five percent. Meanwhile, the Commonwealth of Virginia is projected to grow by 13%.

Table 3-48: Future Population Projections for Danville Service Area

County / Area	2025	2035	2045	Percent Change 2025 - 2045
City of Danville	37,764	32,796	27,672	-36.5%
Pittsylvania County	60,951	59,735	58,158	-4.8%
Virginia	8,993,343	9,604,197	10,149,260	12.8%

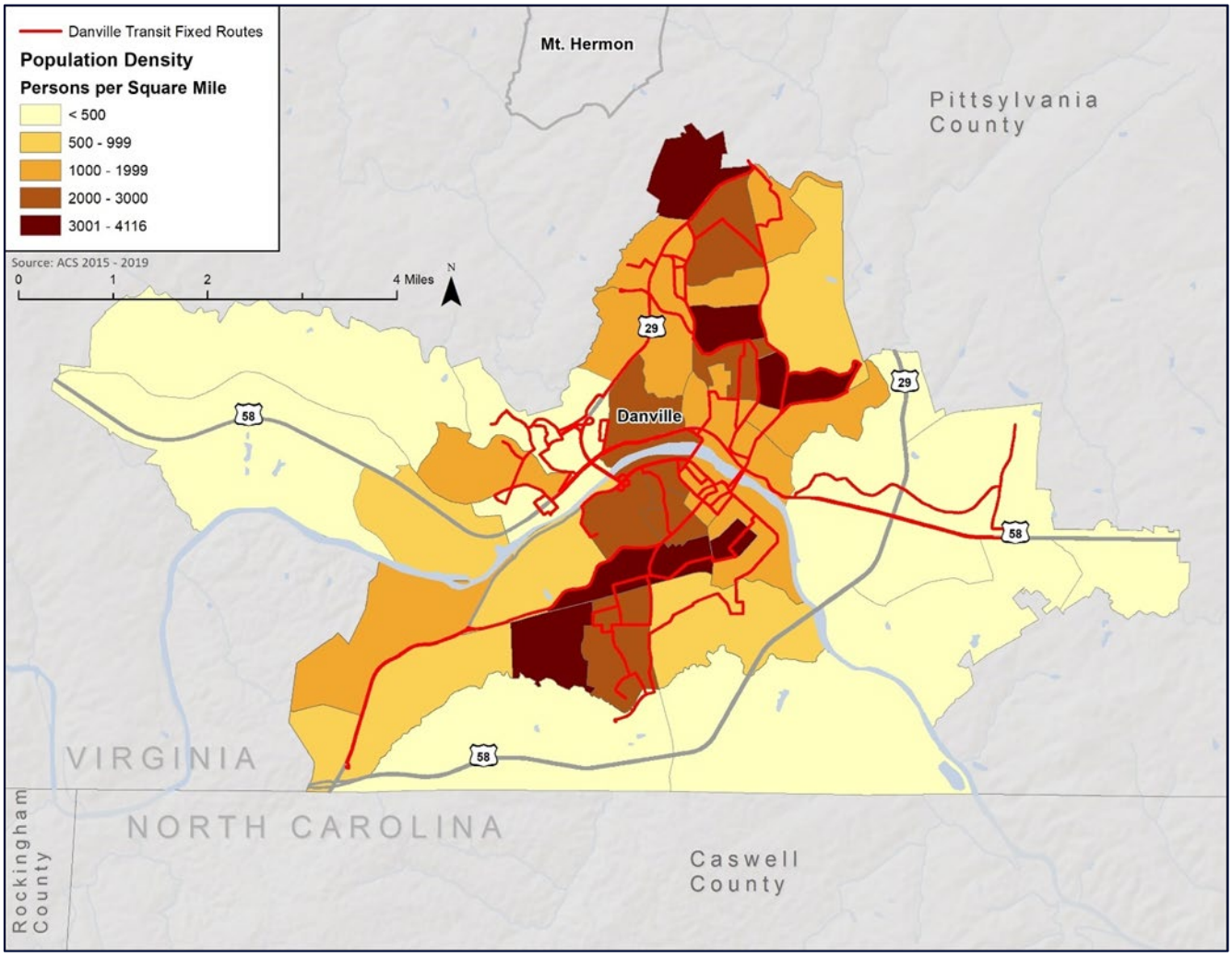
SOURCE: UNIVERSITY OF VIRGINIA WELDON COOPER CENTER, POPULATION PROJECTIONS FOR VIRGINIA AND ITS LOCALITIES, 2025, 2035, 2045, INTERPOLATED FROM THE 2020-2040 PROJECTIONS

Population Density

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

Of the 39 block groups comprising of Danville, there are 14 block groups that exhibit densities of over 2,000 persons per square mile. They include block groups in northern Danville near Franklin Turnpike north of Piney Forest Road, central Danville adjacent to West Main Street and to North Main Street. Seven of these block groups have densities of more than 3,000 persons per square mile. Meanwhile, the western, eastern, and southern border have population densities of less than 500 persons per square mile. This information is shown graphically in Figure 3-14.

Figure 3-14: Population Density of the City of Danville



Senior Population Projections

The absolute numbers of senior citizens are expected to increase between 2020 and 2030 and then decrease significantly by 2040. The percentage of the population ages 65 and older is expected to increase to 24.4% in the city by 2030 and then decrease to 23.8% in 2040. In Pittsylvania County, both the absolute numbers and the percentage of the population ages 65 and older is expected to increase over the next 20 years, with about 26.4% of the population expected to be ages 65 or older in 2040. These trends are shown in Table 3-49.

Table 3-49: Senior Citizen Population Projection

Jurisdiction	2020		2030		2040		Change 2020 - 2040	
Danville	**Pop.**	**Percent of Total**	**Projection**	**Percent**	**Projection**	**Percent**	**Projection**	**Percent**
All	40,169	100%	35,358	100%	30,234	100%	-9,935	-32.8%
65-69 years	2,616	6.5%	2,281	6.5%	1,628	5.4%	-988	-60.1%
70-74 years	2,182	5.4%	2,464	7%	1,732	5.4%	-450	-26%
75-79 years	1,398	3.5%	1,708	4.8%	1,473	4.9%	+75	5.4%
80-84 years	972	2.4%	1,201	3.4%	1,347	4.5%	+375	38.6%
85 and over	1,213	3%	966	2.7%	1,018	3.4%	-195	-19.2%
Total	8,381	20.1%	8,621	24.4%	7,198	23.8%	-1,183	-16.4%
Pittsylvania County	**Pop.**	**Percent of Total**	**Projection**	**Percent**	**Projection**	**Percent**	**Projection**	**Percent**
All	61,379	100%	60,523	100%	58,946	100%	+2,433	-4.1%
65-69 years	4,832	7.90%	4,973	8.20%	4,018	6.80%	+814	-20.3%
70-74 years	3,819	6.20%	4,337	7.20%	3,738	6.30%	+81	-2.2%
75-79 years	2,619	4.30%	3,372	5.60%	3,432	5.80%	-813	3.1%
80-84 years	1,549	2.50%	2,148	3.50%	2,422	4.10%	-873	56.4%
85 and over	1,302	2.10%	1,535	2.50%	1,930	3.30%	-628	48.2%
Total	14,120	23%	16,364	27%	15,540	26.40%	1,420	10.1%

SOURCE: UNIVERSITY OF VIRGINIA WELDON COOPER CENTER, 2020 POPULATION BY AGE AND SEX

Transit Dependent Populations

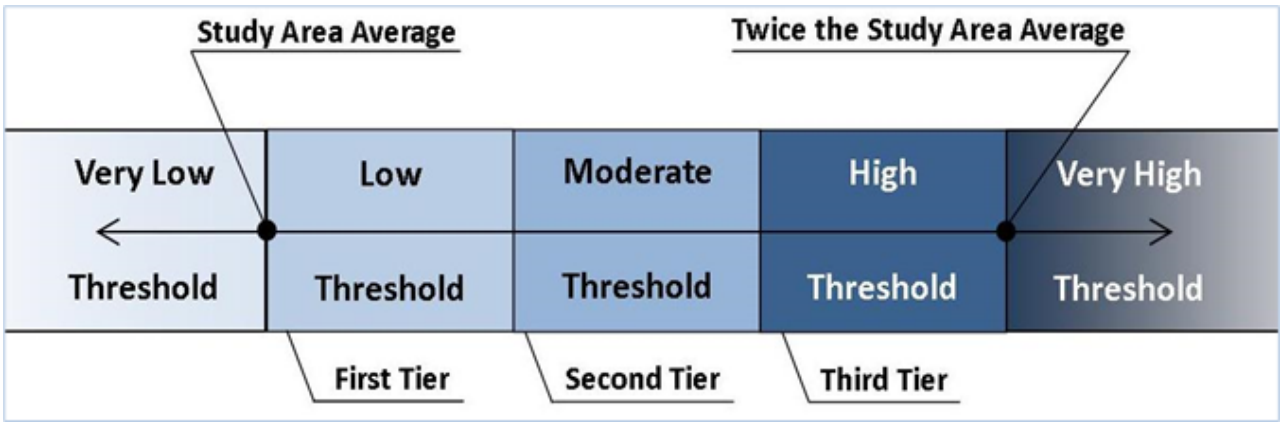
Public transportation needs are defined in part by identifying the relative size and location of those segments within the general population that are most likely to use transit services. These transit dependent populations include individuals who may not have access to a personal vehicle or are unable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

The Transit Dependence Index (TDI) is an aggregate measure displaying relative concentrations of transit dependent populations. Five factors make up the TDI calculation: population density, autoless households, elderly populations (ages 65 and over), youth populations (ages 10-17), and below poverty populations.

The factors above represent specific socioeconomic characteristics of area residents. For each factor, individual block groups were classified according to the prevalence of the vulnerable population relative to each county's average, as well as to the regional average. The factors were then put into the TDI equation to determine the relative transit dependence of each block group.

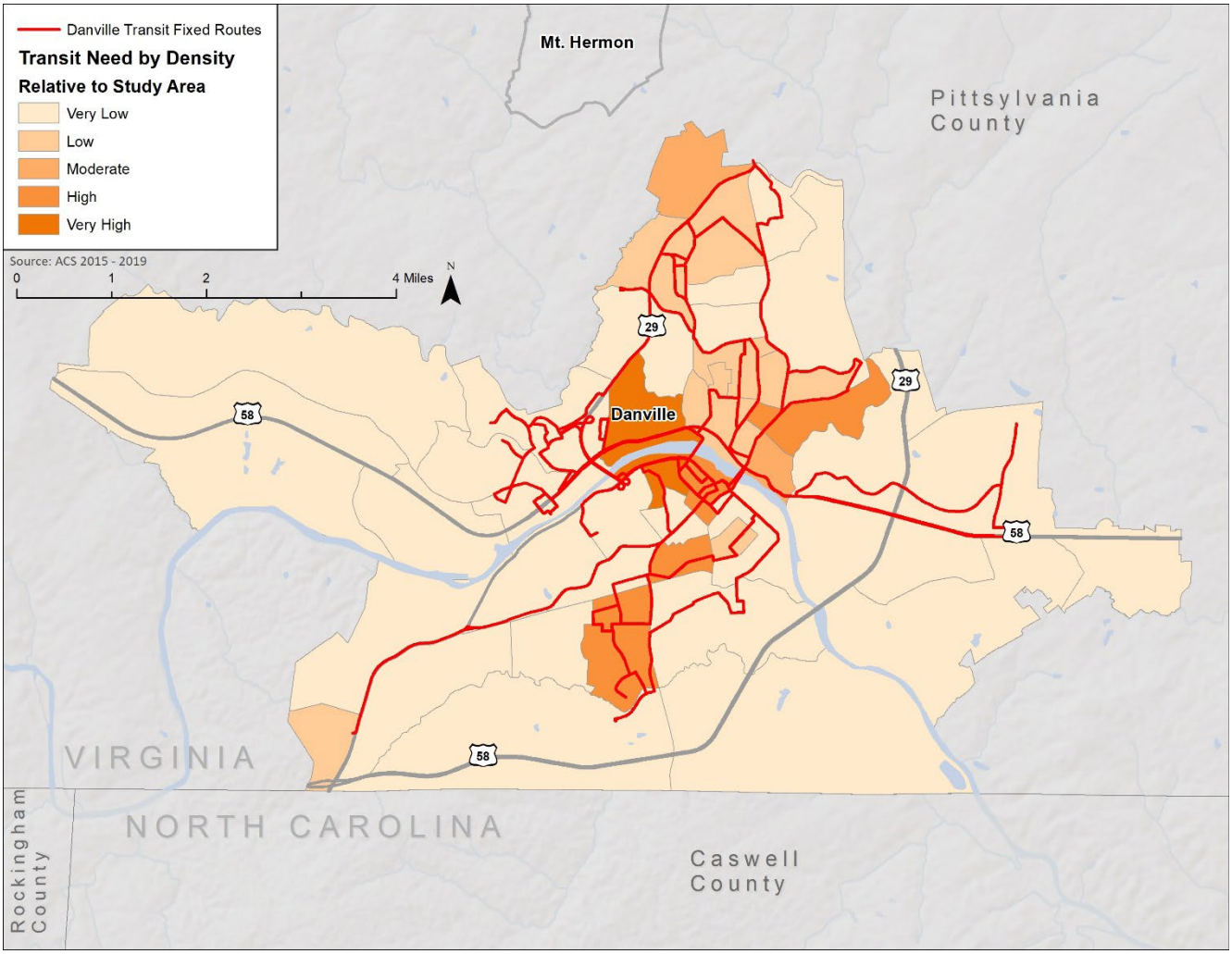
As illustrated in Figure 3-15, the relative classification system utilizes averages in ranking populations. For example, areas with less than the average transit dependent population fall into the "very low" classification, where areas that are more than twice the average will be classified as "very high." The classifications "low, moderate, and high" all fall between the average and twice the average; these classifications are divided into thirds.

Figure 3-15: Transit Dependent Populations Classification System



TDI rankings for Danville Transit are represented in Figure 3-16. Those block groups with very high TDI scores are along Riverside Drive (following the Dan River) between Central Boulevard and North Main Street, and in the central southern portion of the City around Danville Community College.

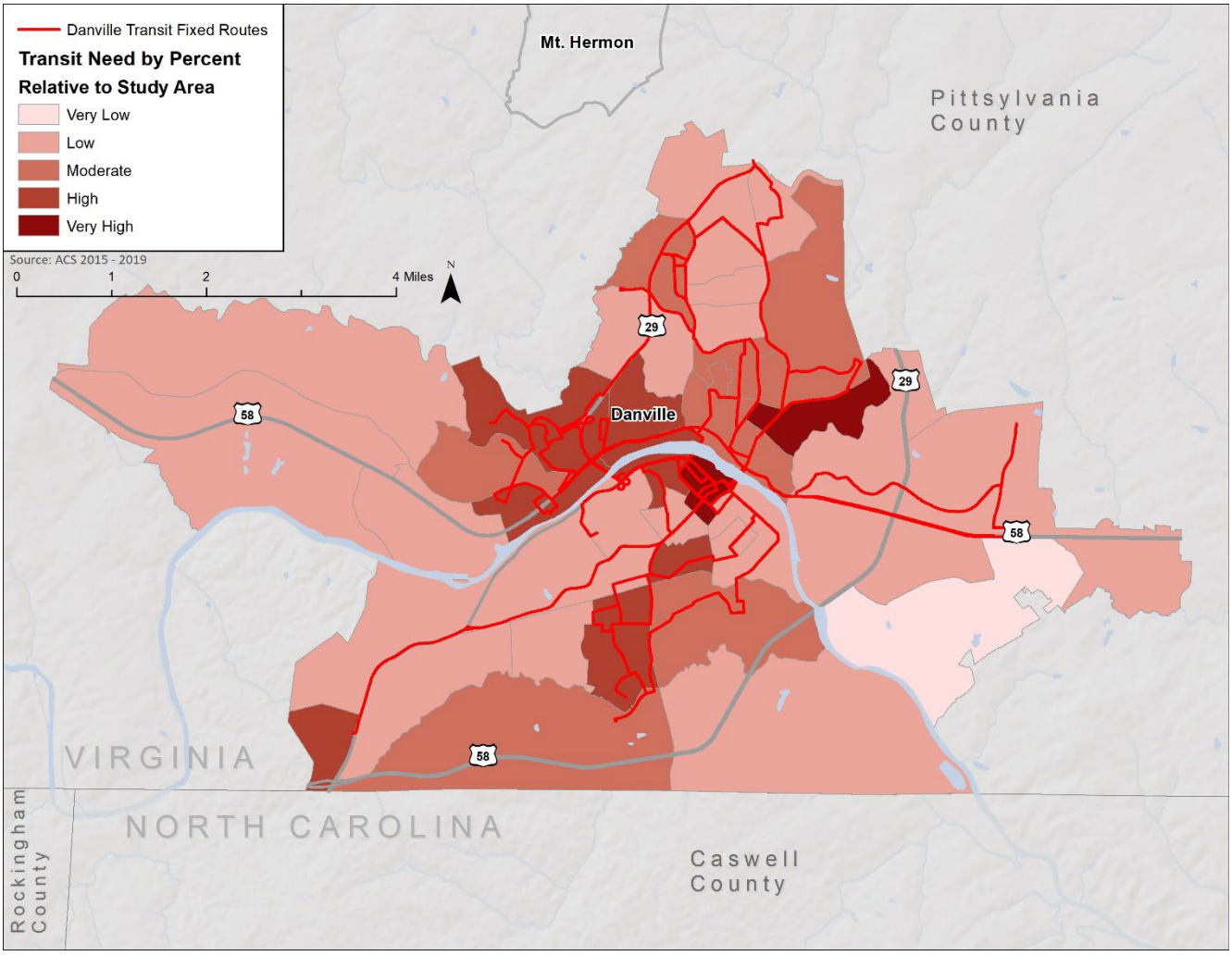
Figure 3-16: Transit Dependence Index for the City of Danville



Transit Dependence Index Percentage

The Transit Dependence Index Percent (TDIP) provides a complementary analysis to the TDI measure. It is nearly identical to the TDI measure except for the exclusion of population density. Block groups with very high TDIP scores are found near the Danville Transit System Hub, near Memorial Drive and Main Street, as well as in the northeastern portion of Danville south of N Main Street and Richmond Boulevard. Areas with high TDIP scores include block groups in central Danville near Averett University's North Campus and Westwood Middle School, and along Riverside Drive. The area around Danville Community College remains a high need area, as well as a block group northeast of the college and in the southwest at the intersection of U.S. 58 and U.S. 29 (business). TDIP rankings for Danville are represented in Figure 3-17.

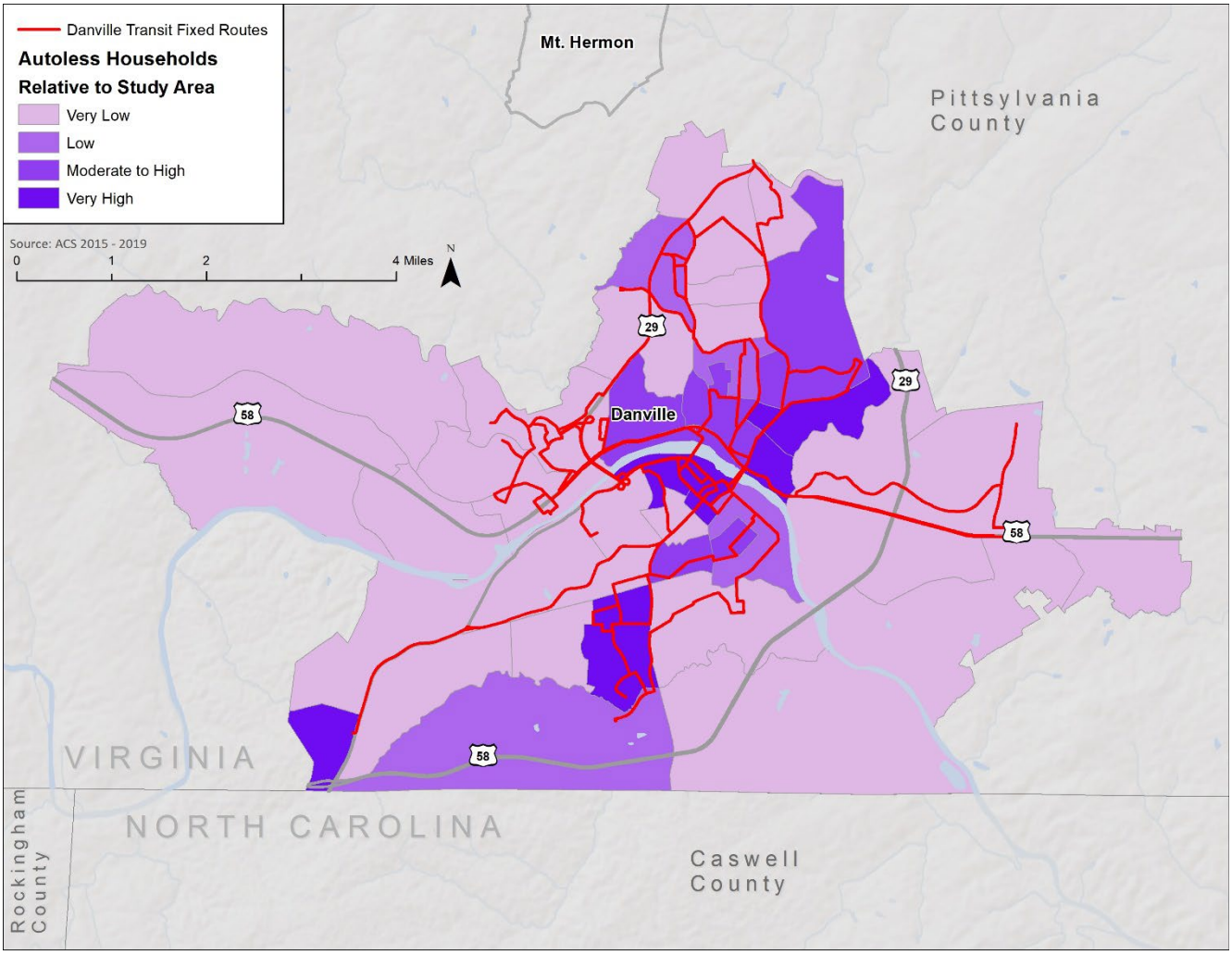
Figure 3-17: Transit Dependence Index Percentage for the City of Danville



Autoless Households

Households without at least one personal vehicle are more likely to depend on the mobility offered by public transit than those households with access to a car. Figure 3-18 displays the relative number of autoless households for the City of Danville. Block groups with higher concentration of autoless households are in central Danville, including south of Riverside Drive, the south-central part of the City near Danville Community College, east of North Main Street and Richmond Boulevard, and the southwestern portion at the North Carolina border near the intersection of U.S. 58 and U.S. 29 (business).

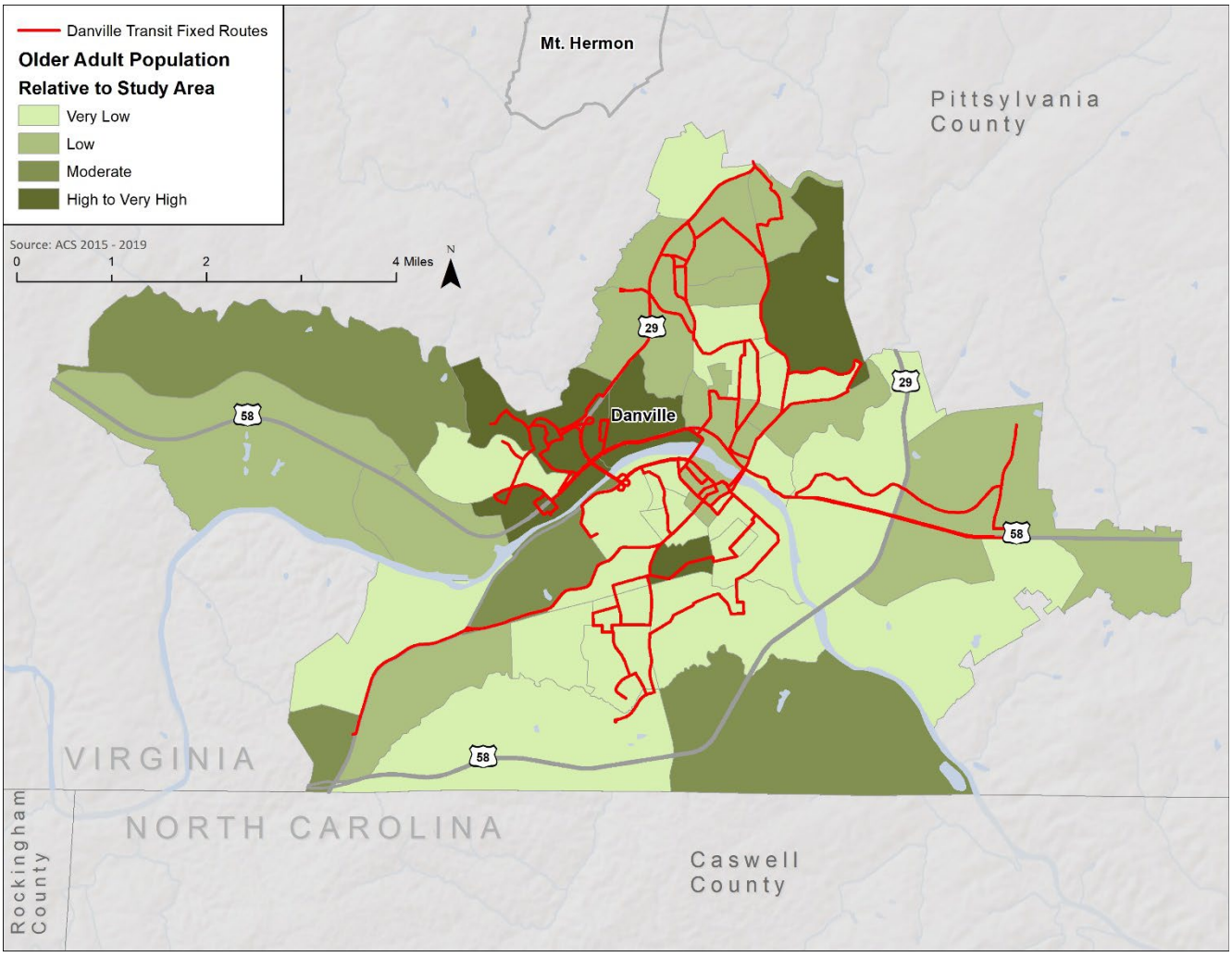
Figure 3-18: Autoless Households in the City of Danville



Older Adult Population

Individuals ages 65 and older may scale back their use of personal vehicles as they age, leading to greater reliance on public transportation compared to those in other age brackets. Block groups with a higher concentration of older adults are located in different parts of the city, including the northeast border, west-central Danville along Riverside Drive., and near the Averett University North Campus. These data are shown graphically in Figure 3-19.

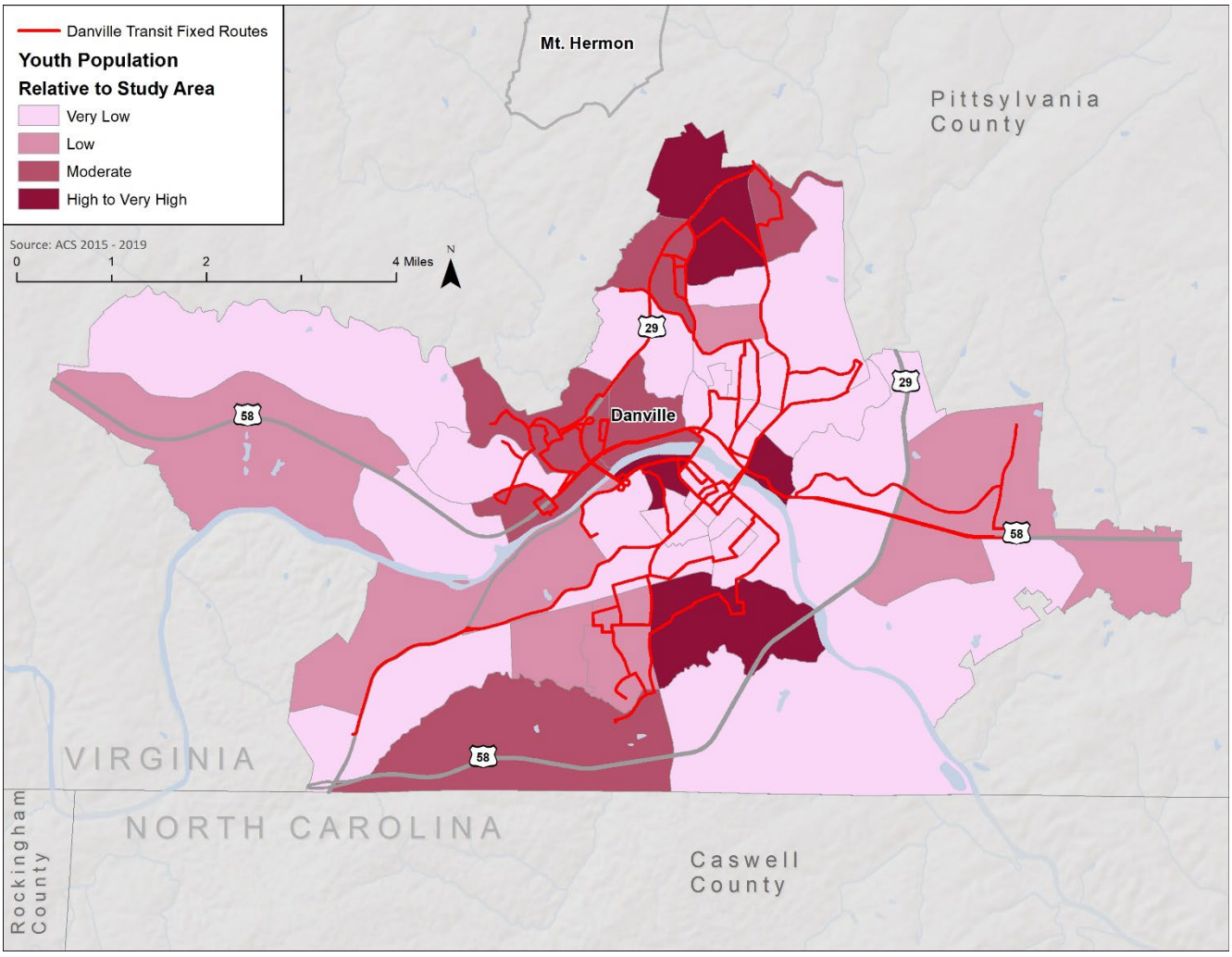
Figure 3-19: Older Adult Population in the City of Danville



Youth Population

Youths and teenagers, ages 10 to 17 years, who cannot drive or are just beginning to drive but do not have an automobile available, appreciate the mobility offered through public transportation. Block groups with high levels of the youth population are located in the northern portion of the city, two block groups in central Danville with one south and one north of the Dan River, and the area east of Danville Community College. These data are shown graphically in Figure 3-20.

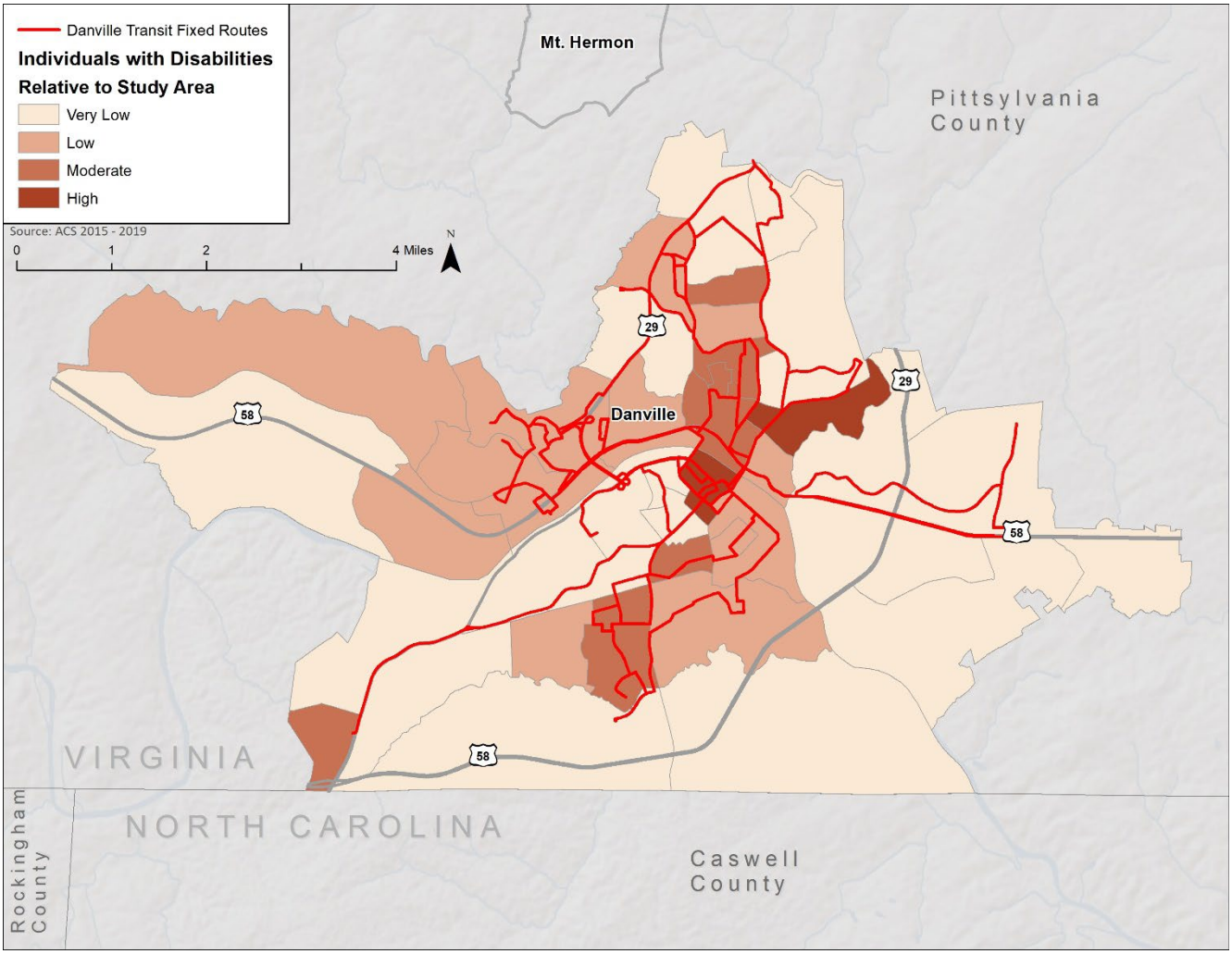
Figure 3-20: Youth Population in the City of Danville



Individuals with Disabilities

Individuals with disabilities may be unable to operate a personal vehicle and consequently more likely to rely on public transportation. As shown in Figure 3-21, block groups with high concentrations of individuals with disabilities are located in the central portion near the Danville Transit System Hub and in northeastern Danville.

Figure 3-21: Individuals with Disabilities in the City of Danville



Title VI Demographic Analysis

As part of the Civil Rights Act of 1964, Title VI prohibits discrimination based on race, color, or national origin in programs and activities receiving federal subsidies. This includes agencies providing federally funded public transportation. The following section examines the minority and below poverty populations within the City of Danville. It then summarizes the prevalence of residents with Limited-English Proficiency (LEP). The City of Danville is not required to evaluate its service and fare changes under Title VI because it does not meet the FTA thresholds regarding urbanized area (UZA) population and the number of vehicles operated in peak service. However, based on DRPT guidance, it should still consider the following analysis before implementing any changes as a part of this TDP.

Minority Population

It is important to ensure that areas with an above average percentage of racial and/or ethnic minorities are not disproportionately impacted by any proposed alterations to existing public transportation services. The average percentage of minority persons within the city is 55.6% Of the 21 block groups in the city that have an above average percentage of minority persons, most are adjacent to South Main Street, North Main Street, or Richmond Road. The southwest portion of the city also exhibits a higher than average percentage of minority residents. These data are shown in Figure 3-22.

Low-Income Population

The second socioeconomic group included in the Title VI analysis represents those individuals who earn less than the federal poverty level. These individuals face financial hardships that may make the ownership and maintenance of a personal vehicle difficult. In such cases, they may be more likely to depend on public transportation. The average percentage of persons living below the poverty line per block group is 21%. Of the 16 block groups in the county with an above average percentage of individuals living below the poverty level, two are in the northern section of Danville, nine are in central Danville, mostly north of the Dan River, and five are in the southern portion of the city. These data are shown in Figure 3-23.

Figure 3-22: Minority Population in the City of Danville

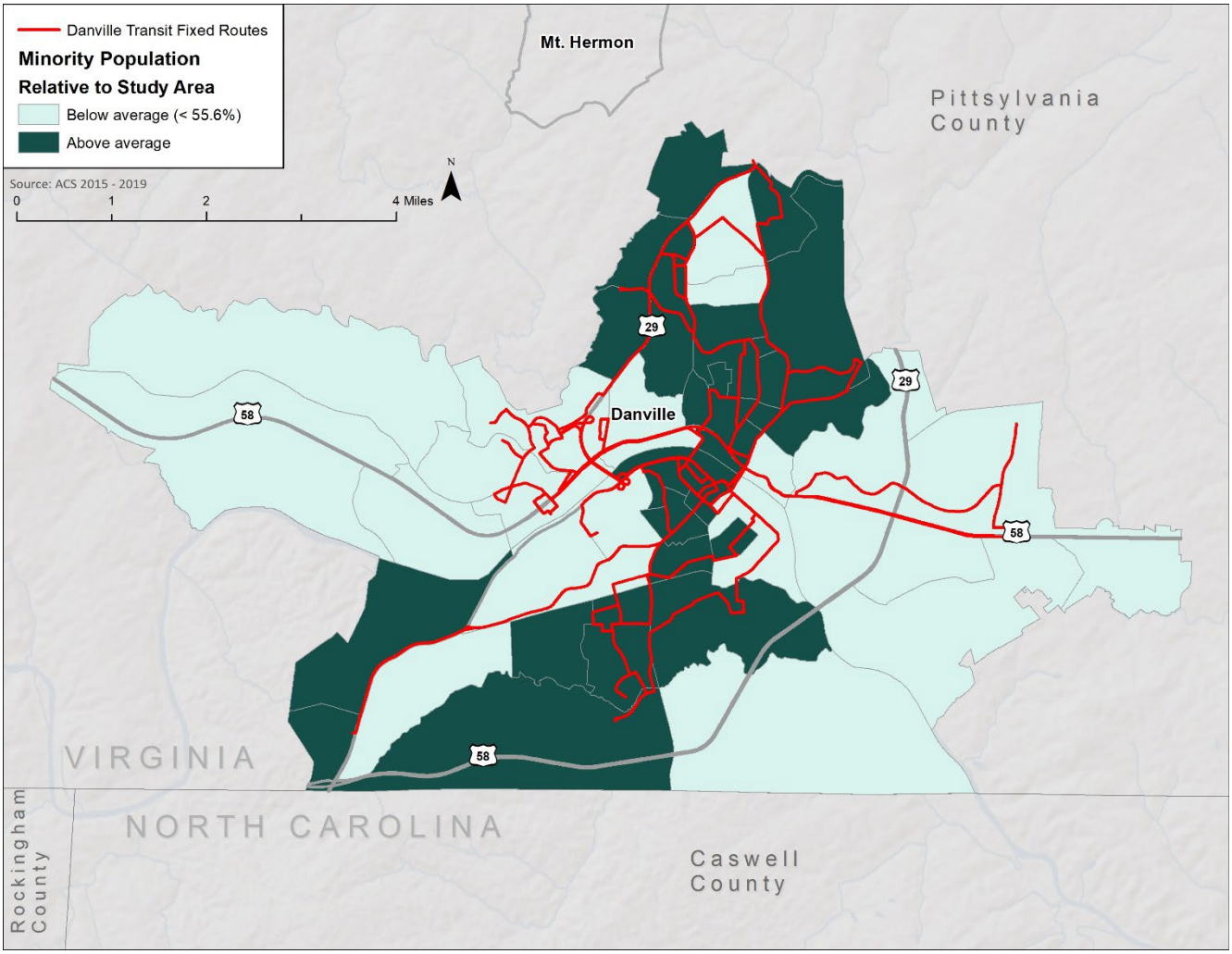
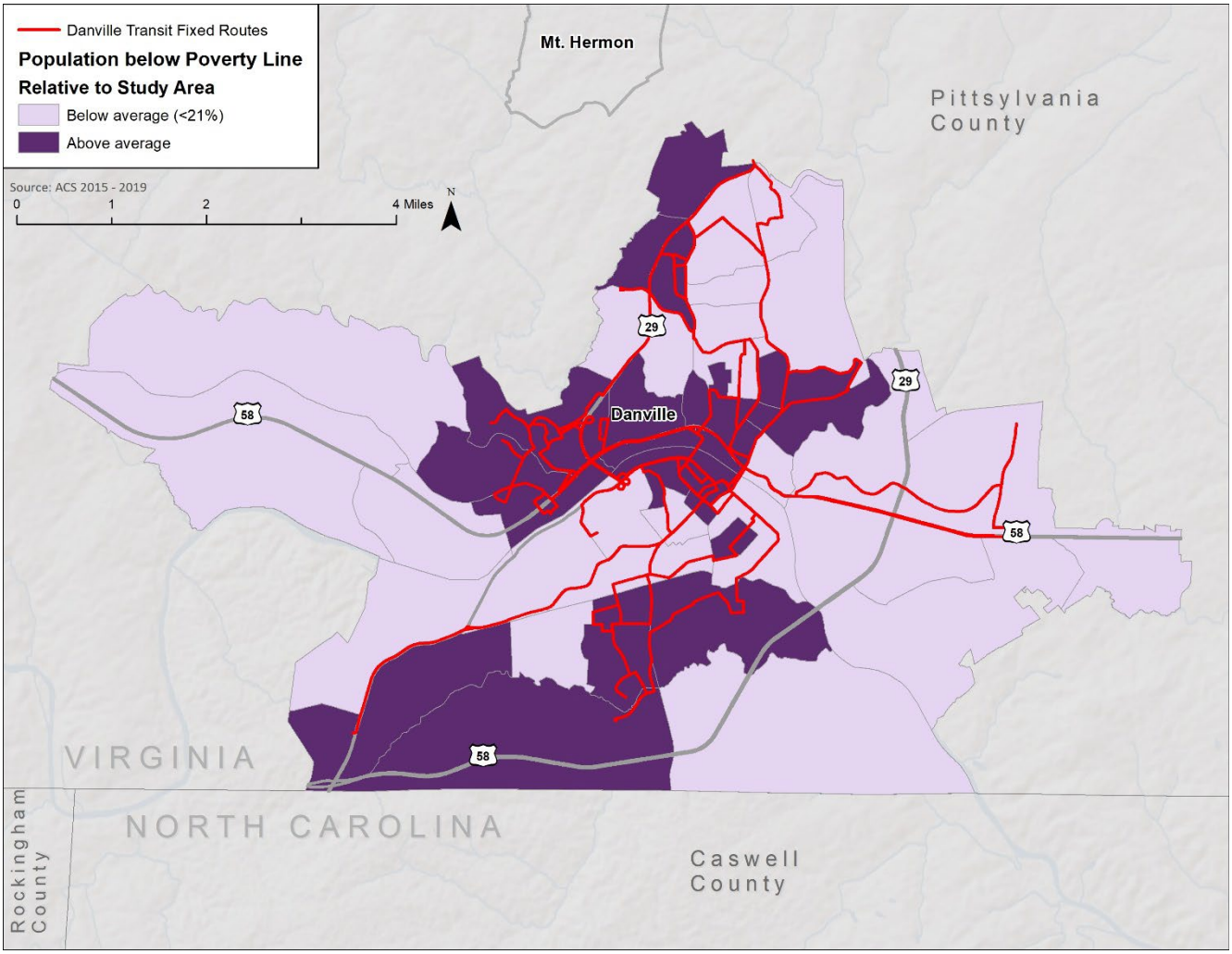


Figure 3-23: Low-Income Population in the City of Danville



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 2020, English is the most predominately spoken language among Danville residents (95%). As seen in Table 3-50, among the other languages spoken by residents, Spanish represents the largest segment of non-English speakers, with 3.2% of residents speaking Spanish at home. The number and percent of the population that speak English less than very well is below the threshold required for the translation of vital documents (5% of the eligible population or 1,000 people, whichever is higher).

Table 3-50: Limited English Proficiency in the City of Danville

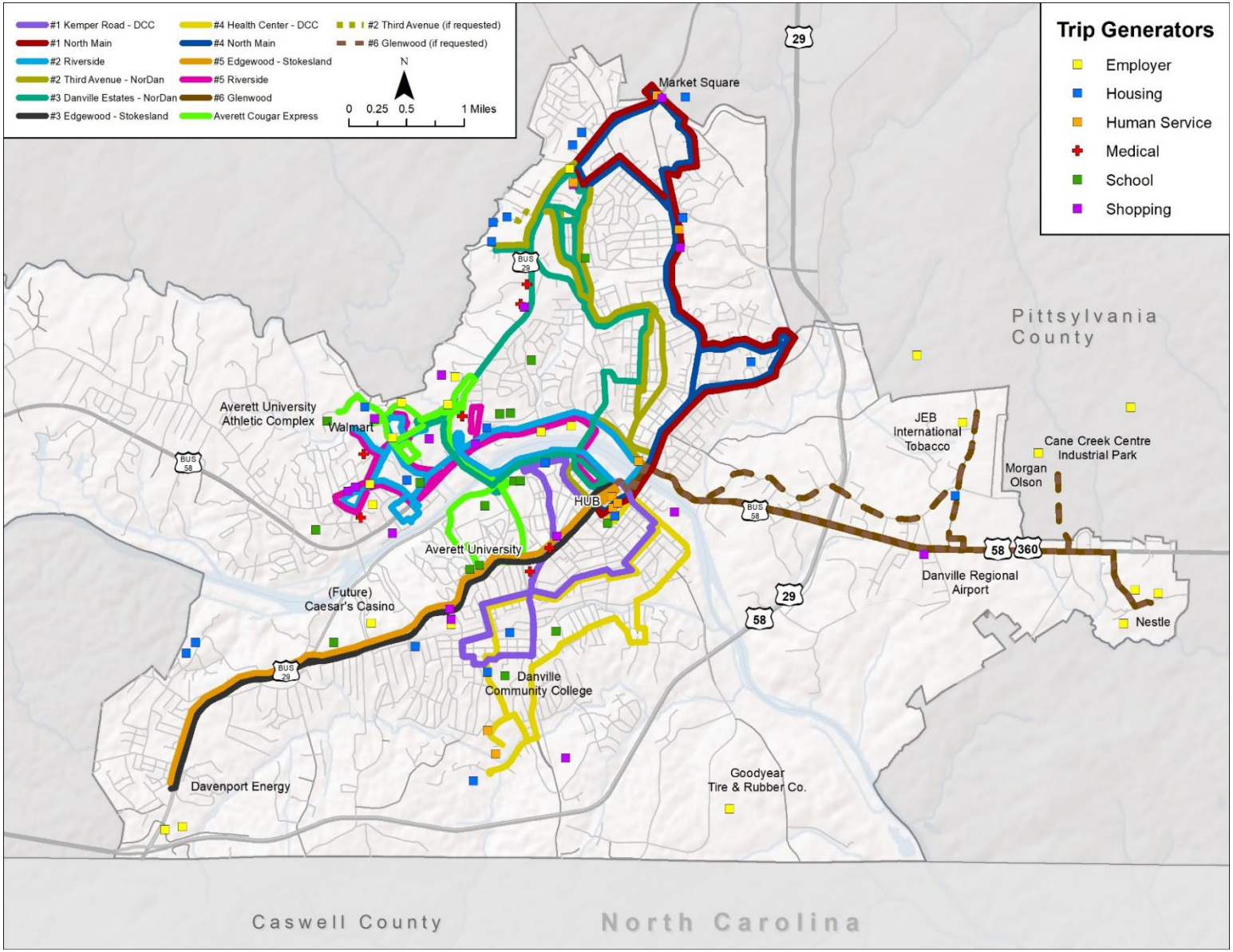
City of Danville		
	Percent	**Number**
Population 5 years and older	38,298	
Language Spoken at Home		
English only	36,417	95.1%
Language other than English	1,881	5.2%
Speak English less than "very well"	827	2.2%
Spanish	1,229	3.2%
Speak English less than "very well"	584	1.5%
Other Indo-European languages	430	1.1%
Speak English less than "very well"	122	0.3%
Asian and Pacific Islander languages	176	0.5%
Speak English less than "very well"	81	0.2%
Other languages	46	0.1%
Speak English less than "very well"	40	0.1%

Source: American Community Survey, 2020 Five Year Estimates

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-24.

Figure 3-24: Danville City Trip Generators



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 Danville Community College. The Averett University North Campus (Athletic Complex) built in 2014 is now served by the Averett Cougar Express. 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 3-51 provides a listing of the ten largest employers in Danville. Of these ten, seven are served by DT fixed routes.

Note the future Caesar's Casino will also be a major employer once it opens in 2024. Danville Transit has been working with the casino to site a casino bus stop for the Edgewood-Stokesland route, which currently travels close to the site.

Table 3-51: Major Employers in the City of Danville

Company	Served by DT Fixed Routes
Goodyear Tire and Rubber	No
City of Danville	Yes
Danville City Public Schools	Yes
Danville Regional Medical Center	Yes
Walmart	Yes
Buitoni Food Company	No
Averett University	Yes
Food Lion	Yes
EBI	No
Roman Eagle Rehabilitation and Health Care	Yes

Employment Density

An employment density map for the City of Danville was downloaded from the Census Bureau's OnTheMap program. It is provided as Exhibit 3-1. This map shows that there is a high concentration of jobs in central Danville, on both sides of the Dan River. The Goodyear plant in southeast Danville stands out, as does the employment center on the easternmost point of the city in the U.S. 58 Corridor. The limitation of this dataset is that it shows all of the jobs for a particular employer at the same location when they may be spread out (such as for the Danville City Public Schools).

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 near the Danville Transit System Hub and are well served by transit.

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 majority of housing complexes covered by transit.

Major Shopping Destinations

Shopping centers are trip destinations where 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, 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 Walmart, Target and a variety of other big-box stores and shopping centers that are also large employers. The largest concentration of shopping destinations is located along Piedmont Drive which is served by the Riverside Route.

Exhibit 3-1: Employment Density in the City of Danville

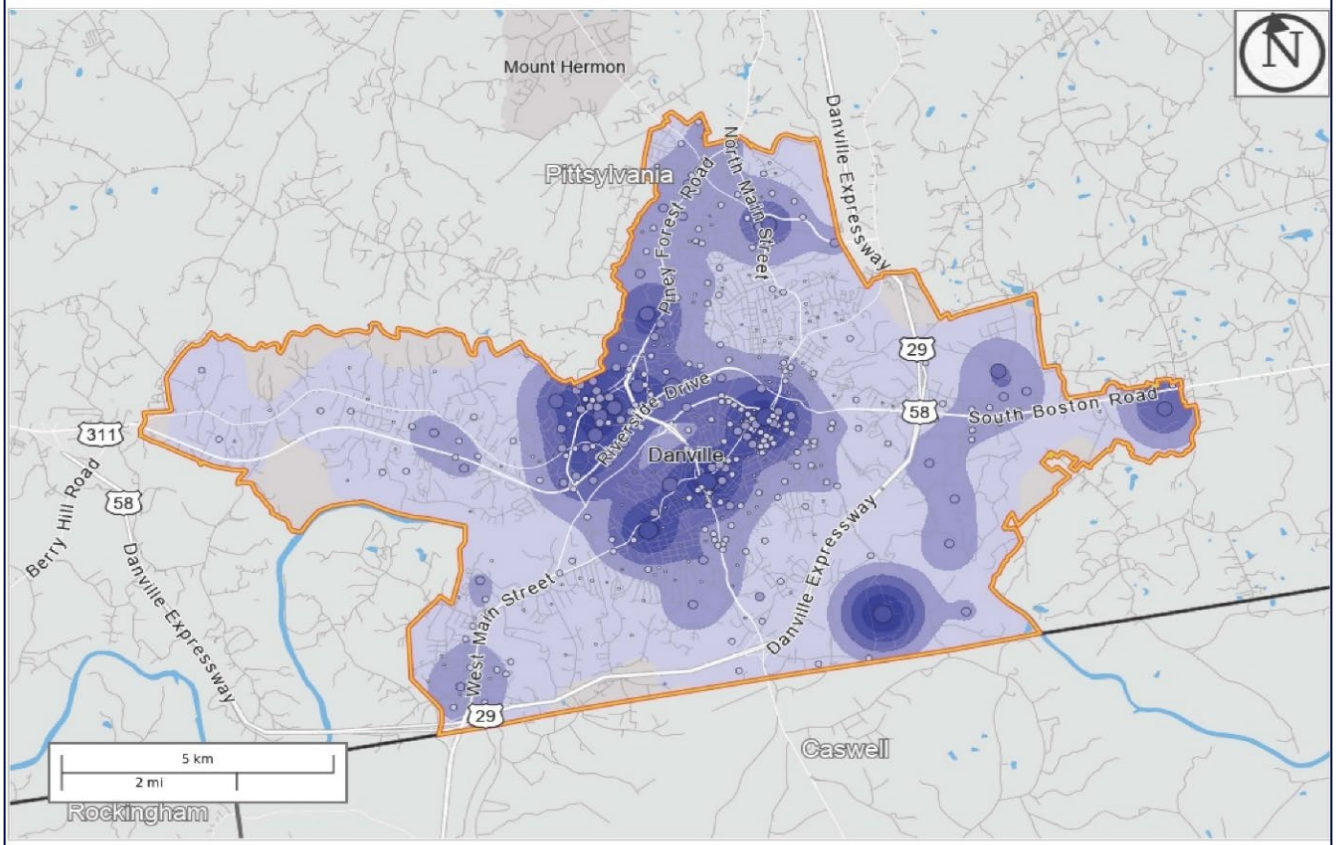
United States Census Bureau **OnTheMap**

Work Area Profile Report
City of Danville

Created by the U.S. Census Bureau's OnTheMap https://onthemap.ces.census.gov on 09/09/2022

Counts and Density of All Jobs in Work Selection Area in 2019

All Workers



Map Legend

Job Density [Jobs/Sq. Mile]
- 5 - 265
- 266 - 1,046
- 1,047 - 2,348
- 2,349 - 4,172
- 4,173 - 6,516

Job Count [Jobs/Census Block]
- 1 - 5
- 6 - 66
- 67 - 332
- 333 - 1,049
- 1,050 - 2,561

Selection Areas
- Analysis Selection

United States Census Bureau

Page 1 of 4

Travel Patterns

In addition to considering the city's major employers and job centers, it is also important to consider the commuting patterns of residents and workers. According to ACS five-year estimates for 2015-2019, almost half of Danville's workforce stays within the city to work. The second highest workplace destination for Danville residents is Lynchburg (3%), followed by Chatham (2.2%) and Martinsville (2.2%). These data are shown in Table 3-52.

Table 3-52: Work Locations for Danville Residents

Work Locations for Danville Residents	Count	Share
All Places (Cities, CDPs, etc.)	17,035	100.00%
Danville city, VA	8,475	49.80%
Lynchburg city, VA	505	3.00%
Chatham town, VA	378	2.20%
Martinsville city, VA	369	2.20%
Roanoke city, VA	303	1.80%
Greensboro city, NC	199	1.20%
Richmond city, VA	144	0.80%
Eden city, NC	139	0.80%
Mount Hermon CDP, VA	123	0.70%
Reidsville city, NC	110	0.60%
All Other Locations	6,290	36.90%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

The City of Danville is a net importer of workers, meaning that there are more jobs in the City than there are people in the workforce. Of the estimated 26,064 jobs in the city, about 32.5% are filled by Danville residents. The top ten home locations for people who work in Danville are shown in Table 3-53.

Table 3-53: Home Locations for Danville Workers

Home Locations for Danville Workers	Count	Share
All Places (Cities, CDPs, etc.)	26,064	100.00%
Danville city, VA	8,475	32.50%
Mount Hermon CDP, VA	869	3.30%
Martinsville city, VA	353	1.40%
Roanoke city, VA	223	0.90%
Lynchburg city, VA	216	0.80%
Greensboro city, NC	177	0.70%
South Boston town, VA	170	0.70%
Blairs CDP, VA	165	0.60%
Eden city, NC	163	0.60%
Collinsville CDP, VA	125	0.50%
All Other Locations	15,128	58.00%

As shown in Table 3-54, most residents drive alone to work (79%). About 10.3% carpool to work and about 3.2% use public transportation. About 2.9% of workers don't travel anywhere and work from home, a percentage which is likely higher now due to the rise of telecommuting after the COVID-19 pandemic. The mean travel time to work in 18.6 minutes, which is ten minutes less than the Virginia statewide mean travel time to work of 28.6 minutes.

Table 3-54: Journey to Work Travel Patterns

	Number	Percent
Workers 16 years and over	15,692	
Car, truck, or van -- drove alone	12,397	79.0%
Car, truck, or van -- carpooled	1,619	10.3%
Public transportation (excluding taxicab)	503	3.2%
Walked	430	2.7%
Other means	293	1.9%
Worked from home	450	2.9%
Mean travel time to work (minutes)	18.6	

SOURCE: 2020 ACS 5-YEAR ESTIMATES, COMMUTING CHARACTERISTICS

Review of Previous Plans and Studies

This section reviews plans and studies that are relevant either to Danville Transit or to the provision of public transportation in the city and have been completed since the 2015 TDP.

Danville 2030 Comprehensive Plan

The most recent version of the city's Comprehensive Plan was adopted in 2015. The Plan is intended to serve as a guide for the physical development of the city through the year 2030. The goals for the city, as outlined in the Comprehensive Plan are grouped into the following categories:

- Sustainable Growth and Land Use
- Transportation
- Corridors and Gateways
- Housing and Neighborhoods
- Historic and Cultural Resources
- Economic Development

Three themes for improving the community were identified during the public input process for the plan. These are:

- Rebuilding and expanding the city's economic base.
- Redeveloping the older parts of the city and taking advantage of the historic character and natural resources of the city.
- Providing public safety and maintaining quality of life.

The Plan includes specific land use recommendations for the 12 planning areas of the city.

The Transportation Section of the Plan does not mention public transportation, pedestrian or bicycle infrastructure within the overall transportation goal, but does discuss these modes within the policies and objectives including the following:

- "**Access Industrial/Commercial Parks** – Roadway and mass transit improvements need to accompany the growth of business and industrial parks located at the east and west ends of the U.S. Route 58/29 Bypass."

- **"Bicycle and Pedestrian Elements** – To enhance the city's viability as an inviting center for tourism and to better integrate its existing and planned neighborhoods, the city should develop a master planned bicycle and pedestrian system in order to properly integrate these facilities into the existing Transportation Plan."

Public transportation is also discussed at the end of the Transportation Section, along with train service, air transportation, and bicycle/pedestrian access. The Plan states: "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 MPO Long Range Transportation Plan - 2045

The Danville-Pittsylvania Metropolitan Planning Organization completed a Long Range Transportation Plan (LRTP) in 2020. The Plan is intended to serve as a blueprint for transportation projects in the region over the next 25 years. LRTPs are required to be prepared in urbanized areas as a condition of funding through the Federal Highway Administration. Plans must be updated every five years. All modes of transportation are considered within the Plan.

The 2045 LRTP includes the following five goals:

- Economy: Retain and increase business and employment opportunities.
- Safety: Provide a safe and secure transportation system.
- Mobility and Accessibility: Provide a transportation system that facilitates the efficient movement of people and goods.
- Community and Nature: Improve the quality of life and protect the environment.
- Operational Efficiency: Preserve the existing transportation system and promote efficient system management.

The planning process included public and stakeholder involvement via a series of meetings, a project website, newsletters, press releases, surveys, stakeholder interviews, and public intercepts. The results of the public outreach efforts indicated that there is public interest in additional bicycle and pedestrian features, as well as multi-modal inter-regional accessibility.

The 2045 Project Lists are included within Chapter IX of the Plan and include both constrained and vision projects. Road improvements are discussed separately from bicycle and pedestrian projects and from transit projects.

Public transportation projects were drawn from the prior TDP and included the following:

- Installation of bicycle racks on buses
- The consolidation of the schedules of duplicative routes
- Eliminate duplicative route numbers
- Install new and improve existing bus stop amenities
- Re-evaluate the feasibility of fixed route service to the Institute for Advanced Learning and Research (IALR).

The first three of these projects have not been addressed. DT has been actively improving bus stop amenities and currently uses the Relax and Ride service for the IALR students.

Southern Virginia Transit Feasibility Study

Recognizing that there may be a need for a regional public transportation system, the Southern Virginia Higher Education Center (SVHEC), with support from the Southern Virginia Higher Education Foundation (SVHEF), and regional stakeholders partnered with the Virginia Department of Rail and Public Transportation (DRPT) to conduct a Southern Virginia Transit Feasibility Study (Study). The Study was completed in May 2017 by KFH Group. The impetus was to address the lack of mobility options as a chief barrier to education and employment in this rural, low-density region. Adding to the mobility challenges for the region was Greyhound's abandonment of services from South Hill to Danville - an important travel corridor (this linkage has since been re-instated thought the Virginia Breeze program).

A Transportation Stakeholder Team was formed to offer guidance in the development of new/enhanced transit service to provide localities with a plan to implement an efficient and effective service to connect residents with employment, education, healthcare, essential governmental services, shopping, and recreation. The team members recognized through their work with citizens and customers that the lack of transportation is a barrier to access numerous essential services and places of employment.

The Southern Virginia Transit Feasibility Plan examined existing and future land use patterns, population densities, and trip generators that typically support public transportation services. Local stakeholders were contacted to solicit qualitative information concerning the need for transit in the region. An inventory of existing transportation services in the region was developed and examples from peer transit programs were documented. Based on the data and information collected for the needs analysis and inventory, a series of service alternatives were developed for implementation.

After the conclusion of the study, the first linkage of the proposed route network (Danville – South Boston) was awarded demonstration funding from DRPT. Danville Transit was the lead operating agency for the route. Danville Transit was on track to implement the service in 2019 but was hampered by a driver shortage. The Covid-19 pandemic, beginning in 2020 exacerbated the driver shortage, eliminated demand for the route, and forced the project to be halted before it had a chance to begin. There are no imminent plans to restart this effort, though it is likely that demand will return at the culmination of the pandemic.

Coordinated Human Service Transportation Plan Update – December 2019

The most recent Coordinated Human Service Transportation Plan prepared for DRPT was completed in 2019. The Federal Transit Administration (FTA) requires that projects funded through the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities be supported within a coordinated transportation plan. The planning effort assesses the current services and transportation needs of seniors and people with disabilities, identifies strategies to address the service gaps, and sets implementation priorities.

The plan includes a statewide section, as well as regional plans. The City of Danville was included within the Western Region, which includes the following Counties: Albemarle; Amherst; Appomattox; Augusta; Buckingham; Campbell; Charlotte; Fluvanna; Greene; Halifax; Louisa; Madison; Orange; Pittsylvania; and Rockingham. Cities within the region include Charlottesville, Danville, Harrisonburg; Lynchburg; Staunton, and Waynesboro.

Potential action items were developed for the region to address gaps in the following areas:

- Education and Opportunities
- Trip Eligibility
- Funding
- Service Alternatives

The following service alternative discussed as an action item is already in place in the City of Danville.

- WS-4.A – Provide transportation to seniors and individuals with disabilities who cannot use public transportation or who live in an area where public transportation is not provided. Danville Transit's Reserve-A-Ride and Senior Transportation services address this action item.

Chapter 4
Service and Capital Improvement Proposals

Introduction

The purpose of this chapter is to present the service and capital improvements that have been developed for the ten-year planning horizon covered by the Transit Development Plan (TDP). These planned improvements were developed based on the data compiled and analyzed in Chapters 1-3, together with input from the public, Danville Transit staff, and the Transit Advisory Committee (TAC). These concepts were presented to the TAC on December 8, 2022.

The projects included within these proposals are focused on the needs of the City of Danville. It should be noted that regional transit needs are recognized but are considered to be beyond the scope of what the City of Danville can provide.

Service, Security, Technology, and Capital Proposals

The proposed service improvement projects are presented first, followed by a security project, and the capital projects, which include technology investments and passenger amenities. The projects discussed in this chapter include a summary of each, as well as the potential advantages, disadvantages, and estimates of costs and ridership, where appropriate.

Service

The following projects are discussed within the category of service. These are:

- Encourage the City to Increase Driver Pay
- Changes to the Glenwood Route
- Encourage Usage of Fixed Routes over Reserve-A-Ride (RAR)
- Service Adjustments to Accommodate Caesar's Virginia
- Improved Turnaround for Edgewood-Stokesland Route
- Sunday Service
- New Westover Drive Route
- New Route to Support the Southern Virginia Megasite at Berry Hill

Encourage the City to Increase Driver Pay

The concept of increasing driver pay is presented first within the range of TDP proposals, as without a fully staffed program it will not be possible for Danville Transit to implement any potential increases in service. The initial concept was to fund a pay increase for Danville Transit's drivers to help with recruitment and retention. A temporary wage increase was possible during the pandemic using Federal CARES Act funding. The temporary increase ended in July 2022.

Danville Transit staff indicated that the Division cannot unilaterally increase wages, outside of the temporary pandemic funding that was specifically intended to support front-line workers. Going forward, all wage increases for transit staff are prescribed by the City of Danville's wage rate structure, which is examined periodically. It is not possible for the wages of one division of the city to be considered separately. The TDP project focuses on advocacy for higher transit driver rates by the Division during the next wage rate evaluation process. Danville Transit staff reported that an updated compensation study is due to be completed in the spring of 2023. The results of the study may not be ready for inclusion within the FY2024 budget for Danville Transit

The potential impacts of a wage increase are listed in Table 4-1. These impacts should be considered by the City during the next wage structure evaluation.

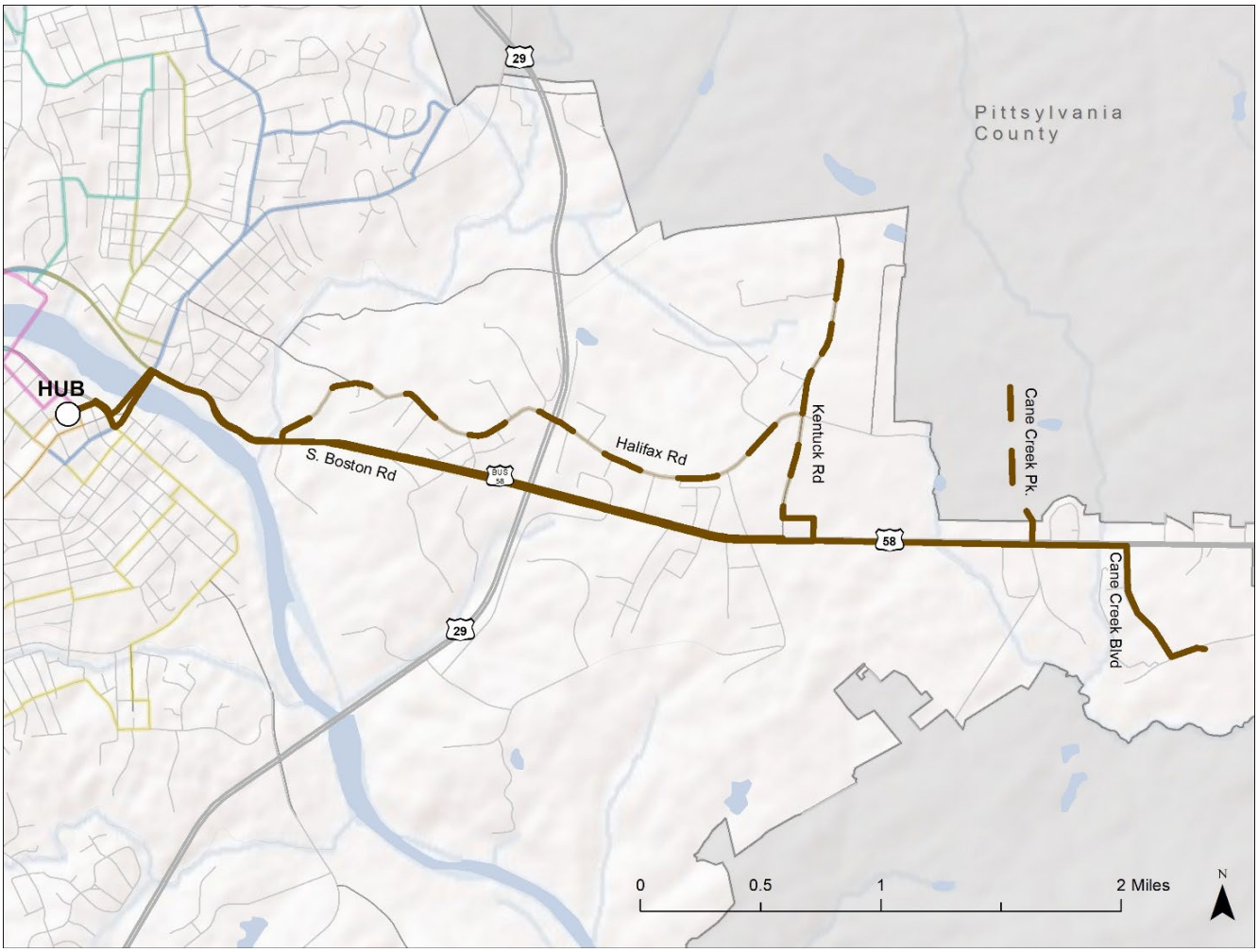
Table 4-1: Potential Impacts of a Driver Wage Increase

Advantages	Disadvantages
• Improves the ability of Danville Transit to fully staff the program. • Gives Danville Transit the ability to attract employees that may already have experience. • Improves driver morale. • Reduces turnover and the associated training costs.	• The only disadvantage for the program is cost.
Cost Estimate	**Ridership Impacts**
• Danville Transit's budget includes 30 full-time equivalent (FTE) driving positions and currently employs 25 FTEs. If a $3.00 wage increase per hour were to be implemented, it would cost between $153,000 and $183,600, depending upon the exact number of FTEs.	• Improving driver pay will help preserve transit ridership and allow the system to respond to future service needs within the City.

Adjust the Glenwood Route

The Glenwood Route is a fixed route that operates two runs per weekday. It serves the employment areas on the eastern side of Danville, including the U.S. 58 Corridor and the Cane Creek Centre industrial park. A portion of the route (shown as a dashed line on the route map) is currently an on-demand service, which requires that riders call ahead to request a trip. A map of the route is provided in Figure 4-1.

Figure 4-1: Glenwood Route



Ridership on the route is low, typically averaging between 0 and 2 riders per vehicle trip. Productivity on the route is also very low averaging less than one trip per revenue hour in FY2021. The FY2021 ridership on the route was 420 trips.

The proposed change for this route is to transition the entire route to a request-only service. A RAR vehicle would be dispatched to stops along the route if there were requests for service during the times that the current route operates (approximately 6:40 to 7:30 a.m. and 3:40 to 4:30 p.m.). The rider would be transported to/from the HUB and would be charged the fixed route fare ($1.00) rather than the RAR fare ($4.00). It should be noted that this area of the City has a relatively high concentration of Reserve-A-Ride usage, which reflects the varied shift times and low density development.

The potential impacts to shifting the two fixed route trips to on-demand trips are highlighted in Table 4-2.

Table 4-2: Potential Impacts of Shifting Glenwood Service to Demand-Response

Advantages	Disadvantages
• Adjusts the service provided to reflect the demand. • Eliminates the need to run the route if there are no riders. • Will likely improve productivity, as the route will not operate without a request. • Reduces expenses.	• Requires that riders call ahead for service.
Cost Implications	**Ridership Impacts**
• This change will save about $43,000 in annual operating expenses on the fixed route side and will likely add about $17,000 in costs on the RAR side, for a net benefit of about $26,000 annually.	• This change is likely to be neutral in terms of ridership.

Encourage the Use of Fixed Route Service Over RAR Service

Danville Transit's RAR service is very convenient and popular with riders, so much so that it is difficult to sustain the level of service currently offered, given the system's ongoing staffing challenges. RAR is also much more expensive to provide on a per-trip basis, as productivity is limited to how many trips can be accomplished using a demand response model. Depending upon the service area and ability to group trips, it is difficult for any demand response service to achieve over three passenger trips per revenue hour. In FY2021, the RAR service averaged about 1.84 passenger trips per revenue hour. The new software that Danville Transit will be implementing in 2023 will likely help improve productivity, but there is a limit as to how quickly riders can be picked up and dropped off throughout the city using a demand-response service.

Fixed route services can offer much higher levels of productivity, as passengers board and alight along the "fixed" path of travel, in areas with sufficient residential and employment densities to support such a service. In FY2021, Danville Transit's fixed routes averaged 7.28 passenger trips per revenue hour. Prior to the pandemic, Danville Transit was averaging between 8 and 15 passenger trips per revenue hour, depending upon the route.

An analysis of the RAR trips taken the month of October 2022 revealed that about 73% of the trip origins and 81% of the trip destinations during the hours of service for the fixed route network were within 1/4 mile of the fixed route network. This is not to say that all of these trips could have been conveniently accomplished via the fixed routes, but it is likely that some of them could have been. Further analysis was conducted in December, 2022 by Danville Transit staff using a sample of RAR trips. This analysis showed that about 17% of the trips taken on RAR during the sample week could have been accommodated using the fixed routes. This analysis was more detailed, with staff looking at the trips with more knowledge of how long each trip would potentially take. As noted in Chapter 3, the RAR analyses are presented in Appendices A and B.

In order to shift riders whose trips could be accomplished via the fixed routes, Danville Transit could require that riders use the fixed routes if the trip origin and destination are both within ¼ mile of a fixed route bus stop and the trip can be completed during the fixed route service hours. This policy would not apply to riders who are eligible for ADA complementary paratransit service. Parameters could be set to screen the trips so that riders whose trip times would be significantly longer using the fixed routes could use the RAR service. Danville Transit has reached out to its new demand-response software vendor (Ecolane) to see if there is way that their new software system could help streamline this process.

The potential impacts of shifting trips from RAR to fixed routes are highlighted in Table 4-3.

Table 4-3: Potential Impacts of Shifting RAR Trips to Fixed Routes

Advantages	Disadvantages
• Reduces the number of RAR service hours, and the associated expenses. • Maximizes the use of the services that are already scheduled to operate. • Improves the ridership and productivity of the fixed routes. • Reduces duplicative service.	• Reduces rider convenience, as some riders who are currently using curb to curb demand response service will be shifted to having to walk to and from bus stops. • May increase travel time for riders. • There may be some resistance from riders.
Cost Implications	**Ridership Impacts**
• If 15% of the demand for RAR trips were eliminated, it would save about 2,635 annual service hours, or $243,975. This represents about 4,850 trips. • The farebox revenue for these trips will be reduced from $19,400 to $4,850, a difference of $14,550. • The net financial benefit of this modest shift would be $229,425. • There will be a cost associated with a software add-on to help staff quickly analyze if a requested RAR trip can readily be taken using the fixed routes. The upfront cost estimate is $17,196 for Year One. Years two through five are estimated to cost $4,299 annually.	• Ridership on the RAR service will go down and ridership on the fixed routes will go up. • Productivity on the fixed routes will go up.

Transit Stop at Caesar's Virginia

Caesar's Virginia is a major casino project that is currently under construction on the property that was formerly the Dan River Mill site on West Main Street. The casino is expected to open in 2024 and will be a major employer within the City of Danville. Danville Transit's Edgewood-Stokesland route, which currently offers 40-minute headways through the West Main Street corridor, already serves this location but there is not a designated stop at that location.

Danville Transit staff have examined a few different concepts for serving the site. The location with the least disruption for the current route would be on either Community Way or Bishop Road, just off of West Main Street. This location is shown in Figure 4-2. None of the current stops along West Main Street would be affected. The impacts of adding a stop, with a concrete pad, shelter and bench are outlined in Table 4-4.

Figure 4-2: Proposed Location for Caesar's Virginia Transit Stop and Shelter

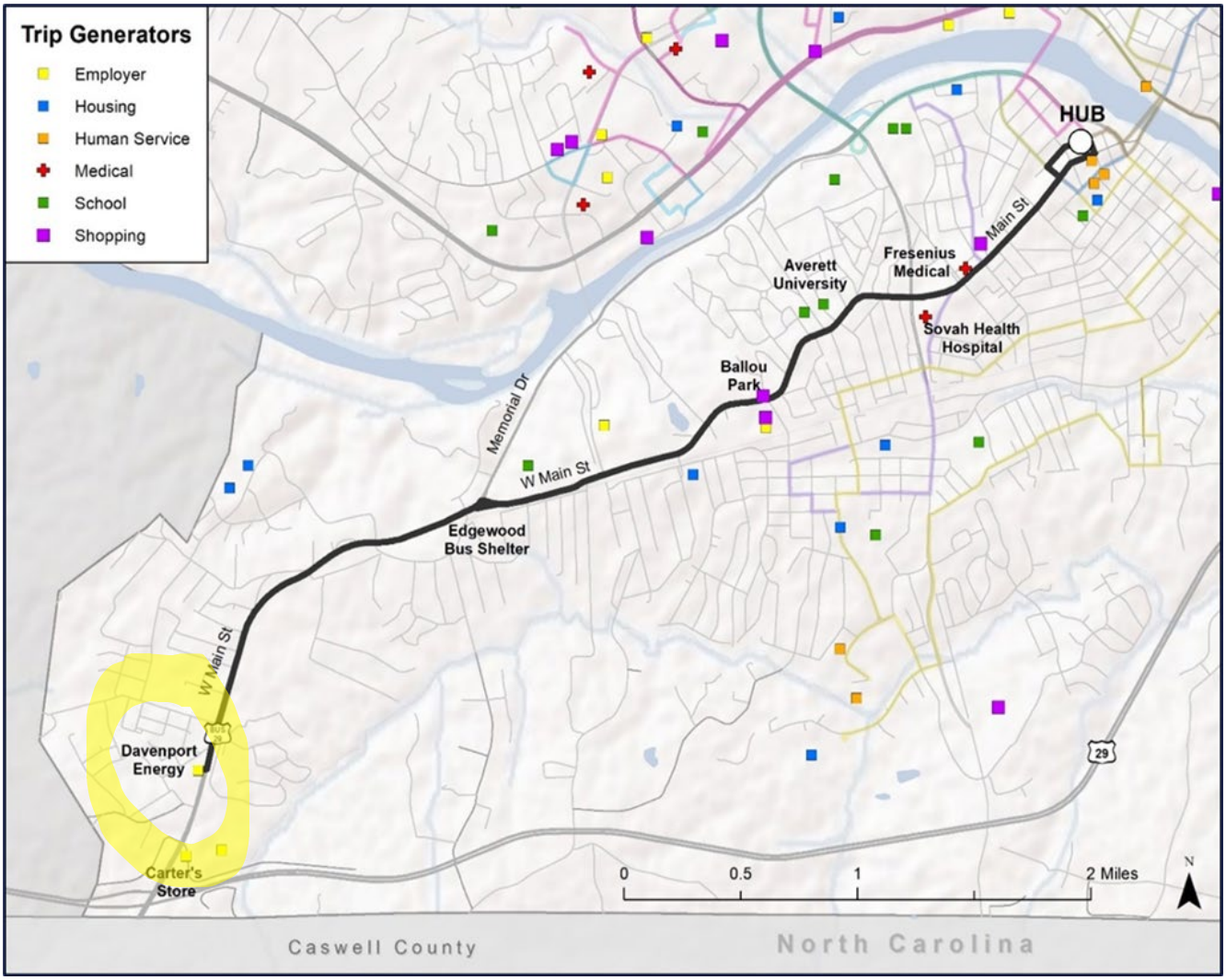
Table 4-4: Impacts of Adding a Stop at Caesar's Virginia

Advantages	Disadvantages
• Provides safe access to the Casino for transit riders. • Provides safe access to Downtown Danville for visitors who may wish to visit as part of their stay at the casino. • Provides access to jobs. • Will add ridership to the fixed route system.	• Will add some minor travel time to the route.
Cost Estimate	**Ridership Impacts**
• Costs will include the capital expenses associated with the stop and shelter. These expenses are estimated to be $45,000.	• The ridership impacts of Caesar's Virginia could be significant, as the casino is expected to employ about 1,300 people. Assuming about half will be from the City of Danville, and three percent of those employees will use the bus, additional ridership could be over 10,000 passenger trips per year.

Improved Turnaround for the Edgewood-Stokesland Route

The Edgewood-Stokesland route travels the West Main Street corridor. It previously turned around at the Carter's Store, near the interchange of West Main Street, U.S. 58, and U.S. 29. Carter's Store ended this opportunity and now the route makes a U-turn near Davenport Energy. There are riders who used the segment that was eliminated. The route and the eliminated area are shown in Figure 4-3.

Figure 4-3: Edgewood-Stokesland Route and Eliminated Segment



The concept for this route is to develop a turnaround location closer to the interchange of West Main, U.S. 58, and U.S. 29. The City of Danville owns a parcel adjacent to the Carter's Store and that area could be an option. There is also the possibility of turning around at Mayfield Street, which is about halfway between the current and former turnaround locations. The potential impacts of changing the turnaround location are listed in Table 4-5.

Table 4-5: Potential Impacts of Changing the Turnaround Location for the Edgewood-Stokesland Route

Advantages	Disadvantages
• Reinstates service for the riders who previously used the affected segment of West Main Street. These riders are now typically walking farther to get to and from the last stop on West Main Street. • Changes the turn from a U-turn to a controlled access turn, which is considered to be a safer traffic movement.	• Adds time to the route, which will also be affected by the additional casino stop. • May adversely impact transfer connections and service reliability, particularly during the morning shift when the headways are 40 minutes, rather than the 45–50-minute headways offered in the afternoon.
Cost Estimates	**Ridership Impacts**
• If the turnaround is implemented using Mayfield Drive, the cost would be minimal. • Significant costs would be associated with the development a parcel of land, though there could be other uses also, such as a park and ride lot.	• The ridership impacts are likely to be minimal.

Service on Sundays

The most requested improvement listed by transit riders via the TDP surveys was for Sunday transit service. Currently there are no public transit services that operate in the City of Danville on Sundays. For this alternative, the proposal would include initiating service using a demand-response mode to gauge demand for Sunday service. Two vehicles are suggested for the initial service period, with each providing an eight-hour service day. The potential impacts of providing Sunday service are summarized in Table 4-6.

Table 4-6: Potential Impacts of Sunday Service

Advantages	Disadvantages
• Responds to the needs of current riders, addressing the most requested improvement. • Provides mobility for riders on Sundays.	• Eliminates the only day off for Danville Transit, which may be an issue given the current employment environment. • Adds service on a day that typically has lower ridership levels.
Operating Hours and Cost Estimates	**Ridership Impacts**
• Assuming an eight-hour service day for the two RAR vehicles, the total annual additional services hours would be 832. Using the FY2022 fully allocated operating expenses, the total annual cost would be about $77,000. • No additional capital would be needed.	• Assuming a slightly lower productivity than the current RAR service, the total additional ridership is expected to be 1,414 passenger trips. Note that ridership would be higher using a fixed route mode, but the expenses would also be higher.

Westover Drive Route

The Westover Drive corridor within the City of Danville parallels the U.S. 58 West Business corridor to the north, extending from the commercial areas of Piedmont Drive to re-join U.S. 58 on the west end of the city. The corridor includes residences and businesses and is served by the Westover Hills Community Center. There currently is no fixed route service through the corridor, though Reserve A Ride service is an option. Several comments received through the survey effort indicated a desire for transit service along Westover Drive. The area is shown in Figure 4-4.

If a route were to travel from the Danville Transit Hub to the end of Westover Drive and back, the round trip mileage would be about 19 miles, which would mean the route would fit in with the 80-minute cycle time. The corridor may be able to support a route, however it should be noted that during the October RAR data sample collection time period there were no RAR trips along the corridor, with the exception of the area that is relatively close to Piedmont Drive. The need for transit services through the corridor would likely be exhibited via RAR trip requests, assuming people know of the service. The potential impacts of providing a Westover Drive route are summarized in Table 4-7.

Figure 4-4: Westover Drive

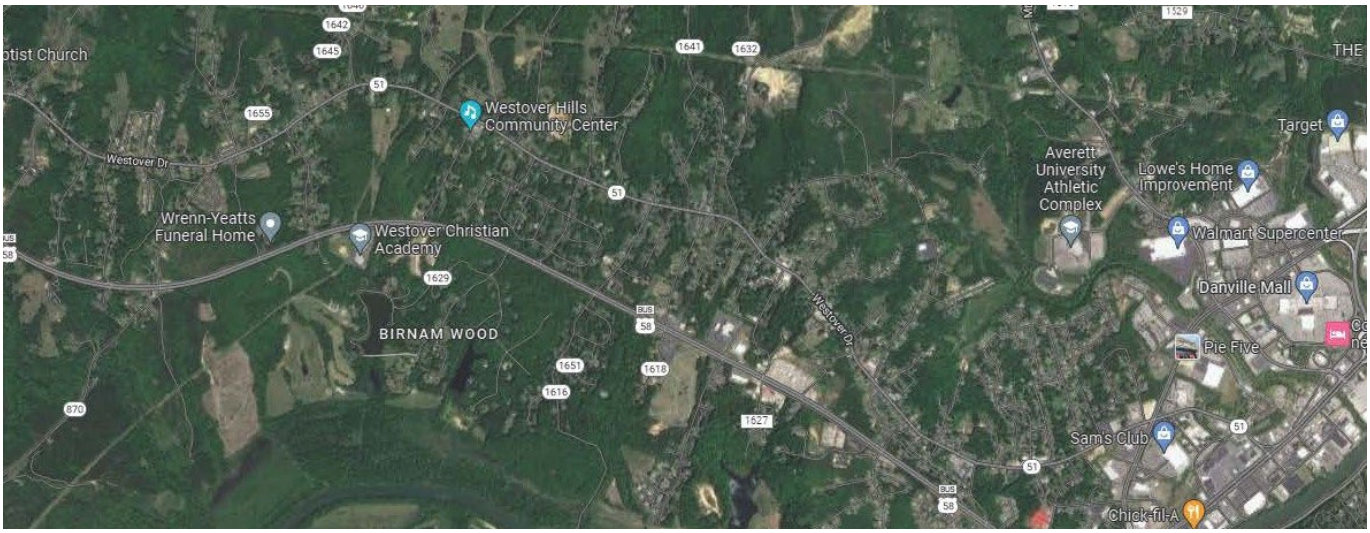


Table 4-7: Potential Impacts of a Westover Drive Route

Advantages	Disadvantages
• Responds to service requests received via the TDP survey effort. • Provides fixed route service through another corridor within the City of Danville. • Provides service to the Westover Hills Community Center. • Provides additional service to the shopping areas and Goodwill in the Piedmont Drive area.	• Provides service through a corridor that has lower residential and employment densities than other areas served via Danville Transit's fixed routes. This will likely affect ridership. • Adds service in an area that has not exhibited demand for RAR service, which may indicate the need for service is relatively low. • The route length is significantly longer than the other routes, which would make schedule synchronization with the other routes difficult. This could lead to long wait times for passengers transferring to and from a potential Westover Drive route.
Operating Hours and Cost Estimates	**Ridership Impacts**
• Assuming a similar schedule to Danville Transit's other fixed routes, the total annual operating hours would be about 3,500 and the fully allocated costs would be about $324,000. • An additional vehicle would be needed at a cost of about $174,000.	• The route productivity is likely to be on the lower side as compared to the fixed route network. This level of service would likely result in about 17,500 annual trips.

New Route to Support the Southern Virginia Megasite at Berry Hill

The Southern Virginia Megasite is located along U.S. Route 311 near Berry Hill, VA. It is a 3,528 acre publicly owned megasite that is being developed for industrial use. The site could be occupied by one very large manufacturer or could be subdivided. Development of the site is being led by the Southern Virginia Regional Alliance.

Once the site is occupied there will likely be a need to provide a public transportation link to Danville so that employment opportunities can be fully available to Danville City residents. The proposed route would operate from the Danville Transit Hub to the megasite at Berry Hill, a distance of about 15 miles. This proposal is included within the TDP proposals, as the megasite is expected to be operational within the next several years. The potential impacts of developing a route to serve the site are described within Table 4-8.

Table 4-8: Potential Impacts of a Route to the Southern VA Megasite at Berry Hill

Advantages	Disadvantages
• Provides Danville residents with a transportation link to manufacturing jobs. • Helps support megasite employer(s) by assisting with workforce recruitment and retention.	• May be difficult to effectively group trips. This will not be known until employers locate to the site and reveal their shift times.
Operating Hours and Cost Estimates	**Ridership Impacts**
• If the route provided four roundtrips per weekday using one vehicle, the total annual operating hours would be about 2,040 and the fully allocated costs would be about $189,000. • An additional vehicle would be needed at a cost of about $174,000.	• Until more information is known about the employment opportunities and shift times, it is difficult to provide a ridership estimate.

Security at the Transit Hub

The Danville Transit Hub serves as the system's transfer center, the Danville stop for the Virginia Breeze, as well as providing an indoor waiting area, a staffed office, a driver's area, and restrooms. Staff have reported that there have been a number of issues of concern with regard to people misusing the center and at times harassing staff and customers. The focus of this proposal is to increase the level of security at the HUB by hiring off-duty officers to be based at the facility for up to about 40 hours per week. This level of staffing will provide coverage for between six and seven hours per day, six days per week. It is proposed that the hours of coverage change from day to day so that people will not know whether or not there will be police presence at the facility at any given time. The potential impacts of improving security at the HUB are described within Table 4-9.

Table 4-9: Potential Impacts of Increasing Security at the Hub

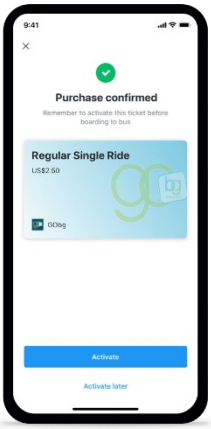
Advantages	Disadvantages
• Helps customers and staff feel safer while using the Transit Hub. • Potentially deters vandalism, theft, and panhandling at the Transit Hub.	• Adds costs to the system without adding transit services.
Cost Estimate	**Ridership Impacts**
• The cost estimate for about 40 hours per week of coverage is $74,000 per year.	• There may be a modest increase in ridership if people feel safer using the system.

Technology

Electronic Payment

Transit systems throughout Virginia and the country have increasingly been moving toward accepting electronic payment for fares. Danville Transit's demand response customers will have this option starting in January 2023 when the new scheduling system is fully implemented. This alternative focuses on implementing a mobile ticketing system for the fixed routes.

A mobile ticketing system allows riders to pay for their trip using an application on their mobile devices and then showing the proof of payment upon boarding. Agencies can have the drivers visually identify the mobile application proof of payment or there can be a scanner in place.



Options for mobile ticket applications include those that are used for multiple transit agencies, with no upfront costs (such as Token Transit) to those that develop an application specific to the transit agency.

Token Transit recoups its investment through a ten percent fee for each mobile ticket transaction. Other programs may have different payment scenarios.

The impacts of implementing a mobile ticket application are described in Table 4-10.

Table 4-10: Potential Impacts of Mobile Ticketing

Advantages	Disadvantages
• Allows fixed route passengers to purchase bus trips electronically. • Could potentially reduce or eliminate the need for costly tokens. • Reduces the amount of cash that needs to be counted, deposited, etc. • Can be implemented with no upfront cost if a service such as Token Transit is used.	• Reduces fare revenue for the system.

Cost Estimate	Ridership Impacts
• If a proprietary application is used, the development costs are likely to be between $25,000 and $30,000. There are also ongoing monthly fees. • If Token Transit is used and the drivers visually validate the mobile tickets, there are no upfront costs and the fees are 10% of the value of the mobile tickets purchased. So if for example 30% of the fares are purchased in this manner ($90,000 annually), the annual cost would be $9,000. • If ticket validators are used, these can be purchased for between $600 and $2,000 each, depending upon the complexity of the unit. • For the higher end units, there are also installation expenses of $1,500 per unit, and ongoing data fees. The higher end units are more sophisticated and can handle other types of fare media also.	• Mobile ticketing is not likely to make a major impact on ridership, though increasingly people are relying more on electronic payments rather than cash.

Capital Projects

Additional Mobile Column Lift

The lead mechanic for Danville Transit has indicated that most of the current Danville Transit revenue service vehicles do not fit properly on the stationary lift that is installed at the maintenance garage. The garage is equipped with one mobile column lift, and it is used regularly to accomplish maintenance tasks. The lead mechanic indicated that he could work much more efficiently if a second mobile column lift were to be available so that more than one vehicle could be lifted at a time. This would be particularly helpful in situations where a vehicle needs a major repair that will take more than a day. It is time consuming to put the vehicles on the lift and take them back off continuously.

The current stationary lift that is no longer useful for Danville Transit could be moved to the City's Public Works Department and used for other city vehicles, pending discussions with DRPT regarding useful life and equipment disposition. The potential impacts of adding a second mobile lift are shown in Table 4-11.

Table 4-11: Potential Impacts of an Additional Mobile Column Lift

Advantages	Disadvantages
• Improves the safety and efficiency of the maintenance shop.	• The only disadvantage is cost.
Cost Estimates	**Ridership Impacts**
• The quote provided to Danville Transit was $44,000.	• This project will not affect ridership.

Automatic Bus Wash

Danville Transit has a bus wash bay that at one time housed an automatic bus wash. The bus wash did not function well and was taken out of service and ultimately taken out the wash bay. Since that time Danville Transit has hired a bus cleaner, whose job it is to wash buses. The city has had a difficult time keeping this position staffed, and now works with an employee of a temporary labor agency to wash the buses.

Danville Transit management would like to purchase a new automatic bus wash to install in the existing wash bay so that it will be easier and more efficient to keep the fleet clean. The potential impacts of adding an automatic bus wash are shown in Table 4-12.

Table 4-12: Potential Impacts of an Automatic Bus Wash

Advantages	Disadvantages
• Improves the efficiency of the bus washing function. • Potentially increases the cleanliness of the fleet, which reflects a positive image for the program. • Reduces the need for temporary labor.	• There are no disadvantages to improving the bus wash function, particularly since the cost of the bus wash is a capital item, which generally requires only a 4% local match.
Cost Estimates	**Ridership Impacts**
• The quotes provided for planning estimates range from $170,000 to $210,000, including installation.	• This project will not affect ridership.

Additional Shelters and Benches

Shelters and benches increase the safety and comfort of riders while they are waiting for a bus. The transit experience would be improved for the system's riders with additional shelters or benches. In addition, installing more bus stop amenities can serve as a marketing tool for the system by increasing the visibility of Danville Transit services. The passenger and public surveys conducted for the TDP also indicated a desire for additional shelters.

There are currently 18 shelters and 41 benches offered throughout the fixed route service area. At the request of City Council, Danville Transit staff has been working over the last several months to identify additional bus stops where shelters would be the most useful. Staff conducted boarding counts to identify high use stops that do not currently have shelters.

The boarding counts identified a number of bus stop locations that could support a bench or shelter. The highest activity stop among those tracked was the Hardees on Riverside Drive. A shelter with a pad and bench has been designed for this stop for implementation in FY2024. Given the size of the pad that was designed, this shelter project is likely to be more expensive than most, with the estimate coming in around $60,000. The next highest activity stops that do not already have shelters are:

- The intersection of N Main and Worsham
- Executive Drive – Big Lots
- The Riverside Drive Taco Bell
- Davenport Energy – 2930 W. Main

There will also need to be shelter, pad, and bench installed at the Caesar's Virginia stop when it becomes active. The potential impacts of improving bus stops are shown in Table 4-13.

Table 4-13: Potential Impacts of Providing Additional Shelters and Benches

Advantages	Disadvantages
• Improves service for transit dependent riders, particularly seniors and people with disabilities. • Encourages ridership by improving rider amenities at key bus stop locations. • Improves visibility of the transit system and offers marketing and partnership opportunities.	• Staff time is needed to assess locations and coordinate shelter/bench installation. • Capital costs are needed to purchase additional shelters and benches.
Cost Estimates	**Ridership Impacts**
• Cost estimates for a shelter vary considerably by the type of shelter and location, but typically range from about $15,000 to $60,000.	• Ridership may improve somewhat with new shelters/benches, particularly as they serve a marketing role for the transit service. But such increases from new passenger amenities at stops are not likely to be significant.

Automatic Door Openers for Hub

Several comments received via the survey effort requested that Danville Transit install an automatic door opener for the Hub so that people with mobility limitations would have an easier time accessing the building and the restrooms. This is a timely request, as a construction project is planned for the Hub in the coming months to re-purpose the former Greyhound ticket area into a driver's restroom.

The project will involve purchasing and installing three door mechanisms and three push buttons (one exterior door to the Hub and two restroom doors). The potential impacts of installing automatic door openers are listed in Table 4-14.

Table 4-14: Potential Impacts of an Automatic Door Opener for the Hub

Advantages	Disadvantages
• Improves access to the Hub building and restrooms for people with disabilities. • Responds to requests that were received via the passenger survey.	• The only disadvantage is cost.
Cost Estimates	**Ridership Impacts**
• The cost to install an automatic door opener for the Hub and the restrooms will involve purchasing and installing three door mechanisms and three push buttons (facility entrance door, men's restroom, and women's restroom. These are estimated to cost between $1,500 and $3,500 each.	• This project will not affect ridership.

Summary of Proposed TDP Projects

A summary of the proposed TDP projects is provided in Table 4-15.

Table 4-15: Summary of Proposed TDP Projects

Service and Capital Improvement Proposals	Total Annual Costs - FY23 Dollars	Capital Costs
Operating:		
Driver Wage Increase	$168,300	$0
Glenwood Route Adjustment	-$26,000	$0
Encourage RAR Usage - 15% change in trips	-$229,425	$0
Service on Sundays	$77,000	$0
Westover Drive Route	$324,000	$174,000
Southern VA Megasite at Berry Hill Route	$189,000	$174,000
Security at the Transit Hub	$74,000	$0
Subtotal Operating	**$576,875**	**$348,000**
Capital/Infrastructure/Technology:	**Total Annual**	**Total Capital Cost**
Software Upgrade to Support RAR-Fixed Route Project	$4,299	$17,196
Transit Stop at Caesar's Virginia		$45,000
Mobile Ticketing (1)	$9,000	$87,500
Mobile Column Lift		$44,000
Automatic Bus Wash		$200,000
Additional Shelters and Benches (2)		$140,000
Automatic Door Openers		$10,500
Subtotal Capital/Infrastructure/Technology	**$13,299**	**$544,196**
Total Cost of All Potential TDP Proposals	**$590,174**	**$892,196**

(1) Operating fees. Capital includes the cost of the higher end scanners.

(2) The Hardee's shelter and four additional shelters

Chapter 5
Implementation Plan

Introduction

The Implementation Plan for the TDP provides a general outline of the steps required to implement the Service and Capital Improvement Plan described in Chapter 4. This first section includes a discussion of the major activities for each year of the plan, followed by a capital replacement plan for vehicles, passenger amenities, technology, and equipment.

Transit Development Plan Initiatives by Year

Each planning year covered by the Danville 2023 TDP is listed below (FY2023 – FY2032), followed by the list of improvements scheduled for the year, along with some general implementation steps. Greater detail is provided for the short-term projects than for the longer-term projects. It should be noted that this schedule has been constructed using currently available information with regard to service priorities and funding constraints. Additional resources or shifting priorities may change this schedule and Danville Transit can address these changes through the annual TDP update process.

FY2023 – Remainder of the Year

- Complete implementation of the Ecolane software.
- Encourage the City to increase driver pay, as part of the City's wage study, to be completed by the spring of 2023.
- Transition the Glenwood Route to request-only service.
- Begin to encourage the use of fixed route services over RAR, where appropriate.
- Seek an alternate turnaround for Edgewood-Stokesland, if deemed viable from a timing perspective.
- Begin construction project at the HUB to add the driver restroom and the automatic door openers.
- Begin shelter project at the Hardees on Riverside Drive.

FY2024

- Increase the police presence at the Transit Hub by paying for about 40 hours per week of dedicated police coverage.
- Purchase mobile column lift.
- Complete the shelter project for the Hardees on Riverside Drive.

- Purchase the software and hardware needed to assist with the RAR to fixed route diversion project.
- Monitor operational and financial impact of diverting trips from RAR to fixed route.
- Monitor local economic development projects concerning the need for a route to the Southern VA Megasite.

FY2025

- Purchase and install automatic bus wash.
- Install a pad, shelter, and bus stop to serve the new Caesar's Virginia.
- Adjust the Edgewood-Stokesland route to serve Caesar's Virginia.
- Implement mobile ticketing to replace tokens, if deemed viable.
- Continue to monitor the efforts to divert trips from RAR to the fixed routes.
- Monitor local economic development projects concerning the need for a route to the Southern VA Megasite.

FY2026

- Implement Sunday service.
- Install a pad and shelter at one of the identified high usage stops.
- Monitor usage of the Caesar's Virginia stop – will additional capacity be required?
- Monitor local economic development projects concerning the need for a route to the Southern VA Megasite.

FY2027

- Evaluate performance of the Sunday service.
- Install a pad and shelter at one of the identified high usage stops.
- Monitor local economic development projects concerning the need for a route to the Southern VA Megasite.
- Evaluate demand for a route to serve the Westover Drive corridor.

FY2028

- Install a pad and shelter at one of the identified high usage stops.
- Monitor local economic development projects concerning the need for a route to the Southern VA Megasite.
- Implement Westover Drive route, if deemed feasible.
- Prepare for a full TDP Update.

FY2029

- Conduct a full TDP Update.

FY2030 – FY2032

- Begin implementing projects recommended within the FY2029 TDP.

Capital Needs

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 the FTA were developed based on the manufacturer's designated vehicle life cycle and the results of independent FTA testing. The standards indicate the expected lifespans for different vehicle types. If vehicles are allowed to exceed their useful life, they become much more susceptible to break-downs, which may increase operating costs and decrease the reliability of scheduled service. With some exceptions for defective vehicles, DRPT/FTA funds are not typically available to replace vehicles that have not yet met the useful life criteria. The FTA's vehicle useful life policy for a number of different vehicle types is shown in Table 5-1. DRPT's useful life policy mirrors the FTA's useful life policy.

Table 5-1: FTA's Rolling Stock Useful Life Policy

Vehicle Type	Useful Life
Light Duty Vans, Sedans, Light Duty Buses and All Bus Models Exempt from Testing Under 49 CFR, part 665	Minimum of 4 Years or 100,000 Miles
Medium, Light Duty Transit Bus	Minimum of 5 Years or 150,000 Miles
Medium, Medium Duty Bus	Minimum of 7 Years or 200,000 Miles
Small, Heavy Duty Transit Bus	Minimum of 10 Years or 350,000 Miles
Large, Heavy Duty Transit Bus, including over the road coaches	Minimum of 12 Years or 500,000 Miles

SOURCE: FTA CIRCULAR 5100.1: BUS AND BUS FACILITIES FORMULA PROGRAM GUIDANCE

Vehicle Replacement Plan – Baseline Estimate

Danville Transit operates a mix of light and medium-duty revenue service vehicles, with a minimum useful life of four to seven years. With the exception of the two trolleys, which are not in revenue service currently, the vehicles are fueled by either gasoline or propane. Table 5-2 provides the existing fleet inventory with the estimated calendar year that each vehicle is eligible for replacement. The operating condition of the vehicles and the availability of funding will dictate the actual replacement year.

In addition to helping Danville Transit and DRPT plan future fleet needs, this vehicle replacement plan will also feed DRPT's transit asset management plan (TAM), which is an FTA-required plan that must include an asset inventory; condition assessments of inventoried assets; and a prioritized list of investments to improve the state of good repair of its capital assets.[1] The TAM requirements establish state of good repair standards and four state of good repair performance measures. Transit programs can develop their own TAM plans, or participate in a group plan, as is the case for transit systems that are DRPT subrecipients.

[1] Federal Register, Volume 81, No. 143, Tuesday July 26, 2016, Rules and Regulations, DOT, FTA, 49 CFR Parts 625 and 630, Transit Asset Management; National Transit Database.

Table 5-2: Danville Transit Vehicle Inventory and Replacement Schedule

Vehicle #	Model	Fuel Type	Year	Passenger Capacity	Mileage (Nov/Dec 2022)	Estimated Replacement Year
721	Express G450	Gas	2018	14	54,634	2026
722	Express G450	Gas	2018	14	51,072	2026
723	Express G450	Gas	2018	14	45,959	2026
726	Starcraft Allstar	Gas/Propane	2018	14	151,121	2024
727	Starcraft Allstar	Gas	2020	14	90,589	2025
729	Allstar	Gas/Propane	2018	20	118,186	2024
730	Starcraft Allstar	Gas	2020	14	84,161	2025
731	550 Starcraft Allstar	Gas/Propane	2019	28	128,758	2026
733	Starcraft Allstar XL	Gas	2020	20	48,863	2026
734	Starcraft Allstar	Gas	2020	14	23,380	2028
735	550 Starcraft Allstar	Gas/Propane	2019	28	120,588	2026
736	Starcraft Allstar	Gas/Propane	2018	14	145,315	2024
737	Senator II	Gas	2014	20	220,308	2023
738	550 Starcraft Allstar	Gas/Propane	2019	28	144,568	2026
740	550 Starcraft Allstar	Gas/Propane	2019	28	138,194	2026
742	Starcraft Allstar	Gas	2020	14	42,566	2026
743	Starcraft Allstar XL	Gas	2020	20	36,883	2027
744	Starcraft Allstar XL	Gas/Propane	2022	28	14,570	2029
745	Freightliner	Diesel	2005	26	37,229	TBD
746	Freightliner	Diesel	2005	26	23,830	TBD
749	Starcraft Allstar	Propane	2017	18	109,146	2025
750	Starcraft Allstar	Propane	2017	18	113,030	2024
751	Starcraft Allstar	Gas/Propane	2021	28	46,738	2028
752	Starcraft Allstar	Gas/Propane	2021	28	47,019	2028
753	Starcraft Allstar	Gas	2020	14	90,162	2025
755	Starcraft Allstar	Gas/Propane	2018	14	147,831	2024
756	Starcraft Allstar	Gas/Propane	2018	14	111,909	2025
720	Silverado 4WD	Gas	2021	4	2,553	TBD
739	Caravan	Gas	2017	6	44,718	2029
747	F250	Gas	2012	4	91,174	2024
748	Transit 350	Gas	2018	7	57,656	2025
754	F750	Diesel	2017	2	2,039	TBD

Vehicle Replacement and Expansion Plan

The annual schedule for vehicle replacement, based on the implementation schedule provided in this chapter and the FTA's vehicle useful life standards, is shown in Table 5-3. Expansion vehicles will be required if the service to the Southern Virginia Megasite comes to fruition or if the city chooses to expand the fixed route network to include Westover Drive. It should also be noted that if demand for RAR service is reduced over time, some of the current RAR vehicles may not need to be replaced.

This vehicle replacement and expansion schedule is based on estimates; actual vehicle purchases may vary depending upon service changes, funding availability, and unexpected economic shifts. There may also need to be adjustments to even out the annual expenditures. For example, there are nine vehicles scheduled for replacement in FY2026, and just one in FY2027. The FY2026 vehicle purchases may need to be spread over the two-year period. Changes to this vehicle replacement schedule can be made by Danville Transit within its annual TDP update letter to DRPT, if needed. Note that the vehicles replaced in FY2023 through FY2026 will likely be eligible for replacement again during the FY2028-FY2032 time period.

Table 5-3: Danville Transit Vehicle Replacement Schedule

Number of Vehicles	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
Replacement - Revenue Vehicles	1	5	5	9	1	3	1	4	4	6
Replacement - Service Vehicles		1	1				1		1	
Expansion - TBD										
Total Vehicles	**1**	**6**	**6**	**9**	**1**	**3**	**2**	**4**	**5**	**6**

Estimated Vehicle Costs

The estimated vehicle replacement costs are presented in Table 5-4. These costs are based on the FY2022-FY2023 DRPT vehicle contract with Sonny Merryman (amended), with an estimate of 30% for vehicle options added. Vehicle costs have risen significantly over the past year. For future years, a 4% inflationary factor was applied each year. These cost estimates were used to develop the capital budget, which is included in the Financial Plan in Chapter 6. Potential funding programs for the replacement vehicles include DRPT's Capital Assistance Program, which is a mix of federal and state funds, and local funds. All service vehicles purchased will be lift- or ramp-equipped.

Table 5-4: Estimated Costs of New Vehicles

Fiscal Year	14 Passenger Cutaway	27 Passenger Cutaway	Support Vehicles
2023	$136,062	$180,613	$50,000
2024	$141,504	$187,837	$52,000
2025	$147,165	$195,351	$54,080
2026	$153,051	$203,165	$56,243
2027	$159,173	$211,292	$58,493
2028	$165,540	$219,743	$60,833
2029	$172,162	$228,533	$63,266
2030	$179,048	$237,674	$65,797
2031	$186,210	$247,181	$68,428
2032	$193,659	$257,068	$71,166

The prices for the revenue vehicles are based on the FY2023 contract with Sonny Merryman. The costs include the base cost, plus 30% for options. The costs for the support vehicles will vary by type of vehicle.

Passenger Amenities

Passenger Shelters

The City of Danville is making an effort to increase the number of passenger shelters available for transit riders to be more comfortable as they wait for a bus. In FY2023 the system will be installing a large pad, shelter and bench at the Hardees stop on Riverside Drive. The TDP includes four additional shelters, including one for the expected stop at Caesar's Virginia.

Other Amenities

As part of the HUB renovation, automatic door openers to assist people with disabilities will be installed (FY2023).

Technology

Technology projects planned for the TDP period include a software upgrade to support the project to transition trips from RAR to fixed route and possibly a mobile ticketing program.

Equipment

Danville transit plans to install a second mobile column lift in FY2024 and an automatic bus wash in FY2025. In addition, given the increasing fleet age that is expected as vehicle prices rise, funds will be programmed for engines and transmissions in the capital budget (Chapter 6).

Chapter 6
Financial Plan

Introduction

This chapter provides a financial plan for funding existing and proposed Danville Transit services for the TDP's ten-year planning period. The projects indicated in Years 1-3 should be considered short-term, those in Years 4-7 are considered mid-term, and those planned for years 8 through 10 should be considered long-term projects. The financial plan addresses both operations and capital budgets, focusing on the project and capital recommendations that were highlighted in Chapter 4 and the implementation schedule and capital needs highlighted in Chapter 5.

The budgets assume that the transit program will continue to focus on the City of Danville and areas that have an economic relationship to the City. It should be noted that over the course of the ten-year period there are a number of unknown factors that could affect transit finance, including: the future economic condition of the City; the availability of funding from the Federal Transit Administration; and the availability of funding from the Commonwealth Transportation Fund.

Operating Expenses and Funding Sources

Tables 6-1 and 6-2 provide a financial plan for the operation of Danville Transit's services under the ten-year plan. Table 6-1 provides operating cost estimates, and Table 6-2 identifies the funding sources associated with these service projects. A number of assumptions used in developing the operating cost estimates are described below.

For FY2023, the current year, the expenses and revenues are based on Danville Transit's adopted budget for the fiscal year. The FY2024 budget is based on the projects that are scheduled for implementation in the first full year of the updated TDP. The projected cost per revenue hour and the operating costs to maintain the current level of service between FY2025 and FY2032 assume a 3% annual inflation rate. Note that the current inflation rate is higher than this, so this factor may need adjustment depending upon how the economy continues its recovery from the pandemic.

For the revenue and funding portion of the budget, it is understood that the City of Danville is not committing to these operating funding levels, but that they are planning estimates. The funding side of the budget was constructed by first deducting the passenger fares and advertising revenue from the total annual operating expenses to arrive at the net deficit. The current funding split to cover the net deficit (between federal, state, and local funding) is assumed to remain the same throughout the TDP period. This ratio is as follows:

- 50% federal; 25% state; and 25% local

The budgets prepared for the ten-year period covered through the TDP are planning estimates. Specific funding amounts for each year will be determined during the annual budget process and informed by the level of federal and state funds that are available.

Table 6-1: Danville Transit - TDP Annual Operating Cost Estimates

Projects	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
Projected Operating Expenses										
Current Level of Service	$3,635,960	$3,745,039	$3,857,390	$3,973,112	$4,092,305	$4,215,074	$4,341,526	$4,471,772	$4,605,925	$4,744,103
TDP Improvements										
Increased Security at HUB		$74,000	$76,220	$78,507	$80,862	$83,288	$85,786	$88,360	$91,011	$93,741
Glenwood Route Adjustment		-$26,000	-$26,000	-$26,000	-$26,000	-$26,000	-$26,000	-$26,000	-$26,000	-$26,000
RAR to Fixed Route Project (1)		-$24,836	-$45,244	-$69,947	-$94,646	-$119,365	-$144,072	-$168,779	-$168,650	-$168,521
Driver Wage Increase		$168,000	$173,040	$178,231	$183,578	$189,085	$194,758	$200,601	$206,619	$212,817
Mobile Ticketing			$9,830	$10,300	$10,555	$10,820	$11,095	$11,380	$11,736	$12,103
Sunday Service				$83,930	$86,448	$89,041	$91,713	$94,464	$97,298	$100,217
Service to Southern VA Megasite - TBD										
Westover Drive Route - TBD										
Total Projected Operating Expenses	**$3,635,960**	**$3,936,203**	**$4,045,236**	**$4,228,132**	**$4,333,102**	**$4,441,944**	**$4,554,806**	**$4,671,798**	**$4,817,938**	**$4,968,460**
% Change Year by Year		**8%**	**3%**	**5%**	**2%**	**3%**	**3%**	**3%**	**3%**	**3%**

(1) Assumes 2% reduction in RAR trips per year, up to 14%. Includes software fees for years two and beyond. Upfront software and first year fees included in technology budget.

Table 6-2: Danville Transit TDP – Operating Revenue and Funding Source Estimates

Anticipated Revenue and Subsidies	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
Fares	$300,000	$319,620	$328,473	$343,324	$351,848	$360,686	$369,850	$379,350	$391,217	$403,439
Advertising	$4,800	$4,944	$5,092	$5,245	$5,402	$5,565	$5,731	$5,903	$6,080	$6,263
Subtotal, Revenue	$304,800	$324,564	$333,565	$348,569	$357,250	$366,250	$375,582	$385,253	$397,297	$409,702
Net Deficit	$3,331,160	$3,611,639	$3,711,671	$3,879,563	$3,975,852	$4,075,693	$4,179,224	$4,286,544	$4,420,641	$4,558,758
Federal Funds	$2,179,458	$1,805,820	$1,855,835	$1,939,781	$1,987,926	$2,037,847	$2,089,612	$2,143,272	$2,210,321	$2,279,379
State Funds	$839,402	$902,910	$927,918	$969,891	$993,963	$1,018,923	$1,044,806	$1,071,636	$1,105,160	$1,139,689
Local Funds	$312,300	$902,910	$927,918	$969,891	$993,963	$1,018,923	$1,044,806	$1,071,636	$1,105,160	$1,139,689
Subtotal, Subsidies	**$3,331,160**	**$3,611,639**	**$3,711,671**	**$3,879,563**	**$3,975,852**	**$4,075,693**	**$4,179,224**	**$4,286,544**	**$4,420,641**	**$4,558,758**
Total Projected Operating Revenue and Subsidies	**$3,635,960**	**$3,936,203**	**$4,045,236**	**$4,228,132**	**$4,333,102**	**$4,441,944**	**$4,554,806**	**$4,671,798**	**$4,817,938**	**$4,968,460**

Capital Expenses and Funding Sources

DRPT has implemented a capital assistance prioritization process that allows the agency to allocate and assign limited resources for projects that are deemed the most critical.[1] DRPT's capital program now classifies, scores, and prioritizes projects into the following categories:

- **State of Good Repair (SGR)**. This category includes projects and programs that replace or rehabilitate existing assets. For Danville Transit, this category is focused on vehicle replacements. The renovation of the HUB also falls under this category and was funded through the City's FY2023 budget. The capital budgets do not show FY2023, as capital for this year has already been ordered and documented via the City's FY2023 capital budget.

- **Minor Enhancement (MIN).** This category includes projects and programs to add capacity, new technology, or a customer facility, and meet the following criteria:
  - Total project cost of less than $2 million; or
  - Vehicle expansion of not more than 5 vehicles or 5% of the existing fleet size, whichever is greater.

  For Danville Transit, this category includes the expansion vehicles, as well as bus shelters/benches, and mobile ticketing.

- **Major Expansion (MAJ)**. This category includes projects or programs that add, expand, or improve service with a cost exceeding $2 million or, for expansion vehicles, and increase of greater than five vehicles or 5% of fleet size, whichever is greater. This category does not apply to Danville Transit at this time.

The following three types of projects are exempt from the prioritization scoring process:

- Capital projects that do not receive any state transit capital funding contribution.
- Debt service agreements approved in previous fiscal years.
- Track lease payments and capital cost of contracting requests.

State of Good Repair

Eligible activities for funding under State of Good Repair Include[2]:

Replacement/Rehabilitation of:

- Vehicles/rolling stock (buses, vans, rail cars, support vehicles, etc.)

[1] DRPT, Making Efficient Responsible Investments in Transit (MERIT), Capital Assistance – Program Prioritization, FY 23 Technical Documentation.
[2] Ibid

- Administrative/maintenance facilities
- Customer amenities (parking facilities, bus shelters, benches, signage)
- Any other specific existing pieces of equipment and/or technology that **do not** fall into the Special Asset Categories**

**** Special Asset Categories:**

- Tools: all tools needed to provide maintenance services (i.e., new/replacement tools, tool cabinets, etc.).
- Maintenance Equipment: all equipment needs to maintain vehicles, infrastructure, and/ or other assets (i.e., bus lift, tire mounting device, forklifts, etc.).
- Spare Vehicle/Rail Parts: all spare vehicle and rail parts that will be used to maintain assets in working order that are not part of a larger rehabilitation project (i.e. alternators, transmissions, engines, seats, windows, gas tanks, etc.).
- Building/Facility Items and Fixtures: all individual, small facility parts and fixtures that are being replaced outside of a larger rehabilitation project (i.e., concrete floors, stairs, escalators, hand dryers, fans, lighting systems, etc.).
- Grouped Assets/Programs of Projects (less than $2 million): includes large groups of assets that cannot be broken down into subcomponents (i.e., general SGR purchase of parks or track). Does not include grouped or program of projects for vehicle rehab or replacement.
- Other Financial Tools: includes funds for needed capital investments that cannot be scored as a replacement/rehabilitation (i.e., capital cost of contracting, track lease payments, debt service on previously approved projects).

Federal and state matching ratios for SGR projects are currently as follows: federal – 80%; state – 16%. Technical assistance grants are 50% state and 50% local.

Minor Enhancements

Eligible investments under the Minor Enhancement (MIN) category include:

- Fleet expansion (fewer than 5 vehicles or 5% of fleet)
- New customer amenities (parking facilities, bus shelters, benches, accessibility improvements, signage)
- New equipment and technology
- New small real estate acquisition
- Capital project development less than $2 million (engineering and design, construction management)
- All assets that fall in the Special Assets Categories (listed above)

Table 6-3 provides the ten-year TDP financial plan for SGR and Table 6-4 provides the ten-year budget for MIN. Table 6-5 combines SGR and MIN for the complete ten-year capital plan.

Table 6-3: Danville Transit TDP Capital Budget – State of Good Repair – Vehicle Replacement

	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
Vehicle Replacements									
Body-on-Chassis, Medium Light Duty - 14 passenger	$424,512	$588,660	$612,204	$0	$165,540	$0	$716,192	$744,840	$774,636
Body-on-Chassis, Medium Duty - 20 to 27 passenger	$375,674	$195,351	$1,015,825	$211,292	$439,486	$228,533	$0	$0	$514,136
Support Vehicles	$52,000	$54,080	$0	$0	$0	$60,833	$65,797	$68,428	$0
Sub-Total Replacement Vehicles	**$852,186**	**$838,091**	**$1,628,029**	**$211,292**	**$605,026**	**$289,366**	**$781,989**	**$813,268**	**$1,288,772**
Total SGR Expenses	**$852,186**	**$838,091**	**$1,628,029**	**$211,292**	**$605,026**	**$289,366**	**$781,989**	**$813,268**	**$1,288,772**
Anticipated Funding Sources - Current Federal/State/Local Matching Ratios									
Federal	$681,749	$670,473	$1,302,423	$169,034	$484,021	$231,493	$625,591	$650,614	$1,031,018
State	$136,350	$134,095	$260,485	$33,807	$96,804	$46,299	$125,118	$130,123	$206,204
Local	$34,087	$33,524	$65,121	$8,452	$24,201	$11,575	$31,280	$32,531	$51,551
Total Funding	**$852,186**	**$838,091**	**$1,628,029**	**$211,292**	**$605,026**	**$289,366**	**$781,989**	**$813,268**	**$1,288,772**

Notes:

1) Future vehicle replacement purchases are assumed to be funded ad follows: 80% federal; 16% state; 4% local.
2) Vehicle prices include inflation and are based on the vehicles described in Chapter 5.

Table 6-4: Danville Transit TDP Capital Budget – Minor Enhancements

Capital Need	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
Expansion Vehicles- TBD									
Software for RAR Project	$17,196								
Mobile Column Lift	$44,000								
Transit Stop - Caesars		$45,000							
Automatic Bus Wash		$200,000							
Passenger Shelters			$46,350	$47,741	$49,173				
Mobile Ticketing		$90,125							
Total MIN Expenses	**$61,196**	**$335,125**	**$46,350**	**$47,741**	**$49,173**	**$0**	**$0**	**$0**	**$0**
Anticipated Funding Sources- Current Federal/State/Local Matching Ratios									
Federal	$48,957	$268,100	$37,080	$38,192	$39,338	$0	$0	$0	$0
State	$9,791	$53,620	$7,416	$7,638	$7,868	$0	$0	$0	$0
Local	$2,448	$13,405	$1,854	$1,910	$1,967	$0	$0	$0	$0
Total Funding	**$61,196**	**$335,125**	**$46,350**	**$47,741**	**$49,173**	**$0**	**$0**	**$0**	**$0**

Table 6-5: Danville Transit Combined Capital Budget- FY2024-FY2032

Capital Need	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
SGR -Replacement Vehicles	$852,186	$838,091	$1,628,029	$211,292	$605,026	$289,366	$781,989	$813,268	$1,288,772
Total SGR Expenses	**$852,186**	**$838,091**	**$1,628,029**	**$211,292**	**$605,026**	**$289,366**	**$781,989**	**$813,268**	**$1,288,772**
MIN									
Expansion Vehicles -TBD									
Software for RAR Project	$17,196								
Mobile Column Lift	$44,000								
Transit Stop - Caesars		$45,000							
Automatic Bus Wash		$200,000							
Passenger Shelters			$46,350	$47,741	$49,173				
Mobile Ticketing		$90,125							
Total MIN Expenses	**$61,196**	**$335,125**	**$46,350**	**$47,741**	**$49,173**	**$0**	**$0**	**$0**	**$0**
TOTAL CAPITAL EXPENSES	**$913,382**	**$1,173,216**	**$1,674,379**	**$259,033**	**$654,199**	**$289,366**	**$781,989**	**$813,268**	**$1,288,772**
Anticipated Funding Sources- Current Federal/State/Local Matching Ratios (1)									
Federal	$730,706	$938,573	$1,339,503	$207,226	$523,359	$231,493	$625,591	$650,614	$1,031,018
State	$146,141	$187,715	$267,901	$41,445	$104,672	$46,299	$125,118	$130,123	$206,204
Local	$36,535	$46,929	$66,975	$10,361	$26,168	$11,575	$31,280	$32,531	$51,551
Total Funding	**$913,382**	**$1,173,216**	**$1,674,379**	**$259,033**	**$654,199**	**$289,366**	**$781,989**	**$813,268**	**$1,288,772**

Note: Capital expenses assume to be funded as follows: 80% federal, 16% state, 4% local.

Appendix A
Reserve-A-Ride Analysis
October 2022 Sample

Reserve-A-Ride Analysis

Introduction

The Reserve-A-Ride (RAR) program is open to the general public and provides demand response transportation throughout Danville and the Cane Creek Industrial Park. The service is geared to supplementing the fixed route program by operating earlier in the morning, later in the evening, and to areas not served through the fixed routes. Demand for the program has increased significantly, with the FY2021 program operating more revenue service hours than the fixed route program. Managing the demand for this program is one of the goals for this TDP process.

The program is much larger than the Handivan program, operating 17,501 revenue service hours in FY2021, as compared to 3,005 revenue service hours for the Handivan program. The productivity measures are similar, with the RAR providing 1.84 trips per revenue hour as compared to 1.8 trips per revenue hour for the Handivan Program (FY2021). As the program has grown, the costs have grown as well, with the FY2021 operating expenses totaling $1,236,823. The cost per trip has grown to $38.25, slightly less than the Handivan cost per trip of $39.01. These data are shown in Table 1.

Danville Transit staff reported that the RAR service that is used by participants of the Institute for Advanced Learning and Research (IALAR) serves to greatly improve the productivity of the service, given that the trips are grouped. The revenue derived from these trips is also important for the system.

Table 1: Reserve-A-Ride Trend Data – FY2017-FY2021

Reserve-A-Ride	2017	2018	2019	2020	2021
Passenger Trips	31,702	31,676	30,714	23,003	32,336
Revenue Hours	15,527	14,827	16,065	12,067	17,591
Revenue Miles	253,956	242,481	235,441	173,742	260,105
Total Operating Costs	$657,724	$746,836	$942,534	$782,545	$1,236,823
Passenger Trips per Revenue Hour	2.04	2.14	1.91	1.91	1.84
Passenger Trips per Revenue Mile	0.12	0.13	0.13	0.13	0.12
Cost per Revenue Hour	$42.36	$50.37	$58.67	$64.85	$70.31
Cost per Revenue Mile	$2.59	$3.08	$4.00	$4.50	$4.76
Cost per Passenger Trip	$20.75	$23.58	$30.69	$34.02	$38.25
Miles per Hour	16.4	16.4	14.7	14.4	14.8

The fare for the RAR program is $4.00 per trip, which is substantially higher than the fixed route fare of $1.00 per trip.

Analysis of RAR Ridership Patterns

Given the ridership growth on the service and the acknowledgement that a significant number of the RAR trips are being taken within the fixed route service network, the study team was asked to perform an analysis of a sample of RAR trips to estimate about how many of the trips could be accomplished using the fixed route network. This exercise was also completed for the 2015 TDP.

The analysis includes the following information:

- RAR Stop Proximity to Danville Transit Fixed Route Stops
- All RAR Stop Locations
- Stop Locations During Fixed Route Hours
- Stop Locations Outside of Fixed Route Hours

RAR Stop Proximity to Danville Transit Fixed Route Stops

Using the RAR trip data from October 1 through October 31, 2022, an analysis was conducted to look at RAR trip origins or destinations that were within a ¼ mile and a ½ mile of a transit route. Table 2 displays the frequency and percentage of RAR trips that were made within ¼ and ½ mile of a fixed route bus stop, and beyond ½ mile of a fixed route bus stop during this period.

Of the 1,929 one-way RAR trips made during October, 901 (47%) occurred during the approximate fixed route hours of 6:30 a.m. and 5:30 p.m. Within ¼ of a mile of the fixed route network, 73% of the RAR stops were origins, while 81% were destinations. Within ½ of a mile of the fixed route network, 86% were origins, while 90% were destinations. About 14% of the RAR stops began more than ½ of a mile from a bus stop, while 10% ended beyond ½ of a mile of a fixed route bus stop.

Further examination of the data show that of the 901 RAR trips taken ***during the fixed route service hours,*** 685 (76%) of them could have been accomplished using the fixed routes. This was calculated by subtracting the trips with either origins (129) or destinations (87) beyond ½ mile from the total. The analysis for the 2015 TDP showed that about 55% of the trips during the fixed route service hours could have been accomplished using the fixed routes. This comparison highlights the rise in popularity of the RAR program.

Fifty-four percent (1,033 trips) of the sample trips occurred outside of the fixed-route hours. Just 5% of the trips taken outside of the fixed route service hours began more than ½ of a mile from a fixed route bus stop, while 26% ended beyond ½ of a mile of a fixed route bus stop, most of which were for JTI Leaf Services or Unarco Industries.

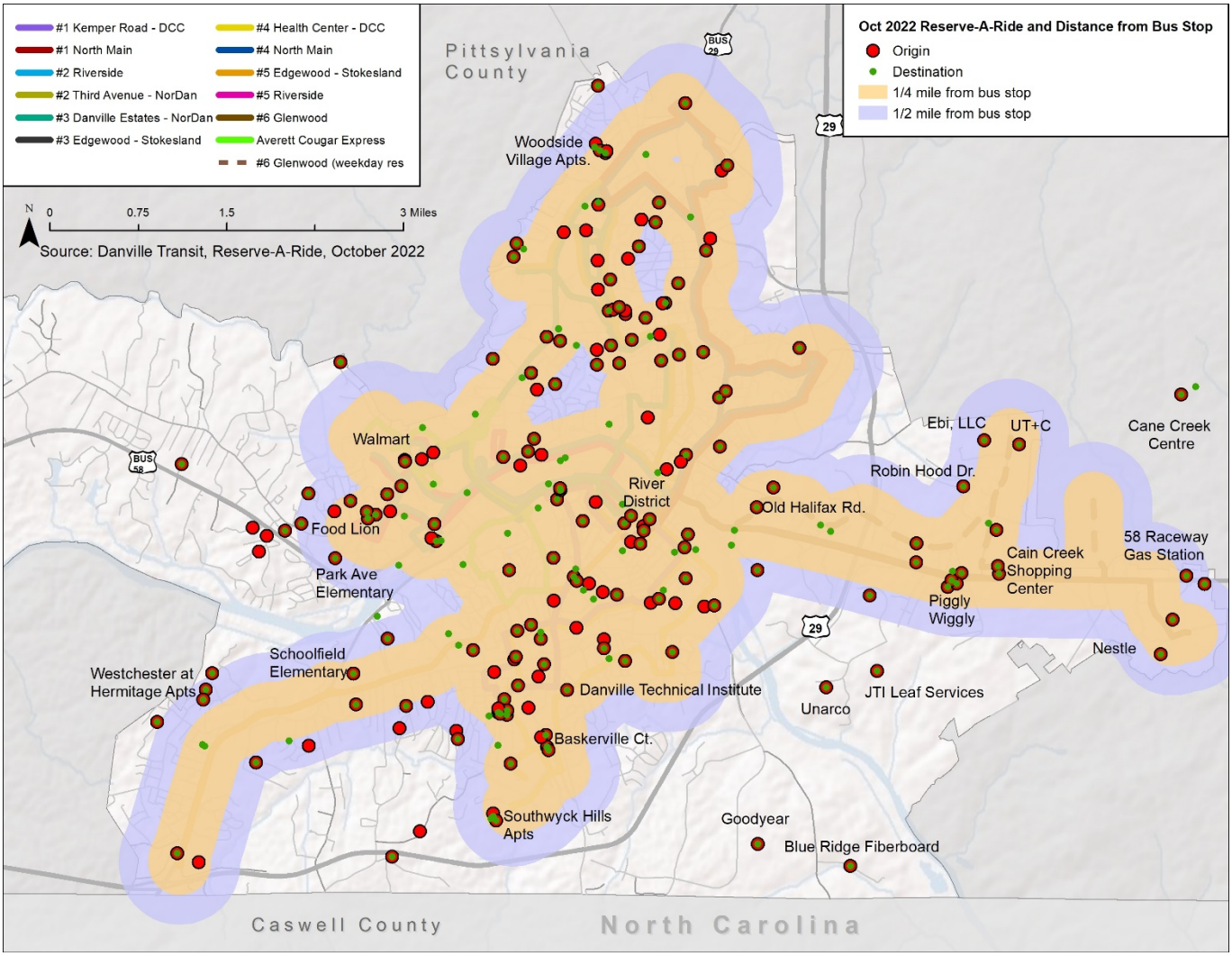
The sample data show that overall, using the current fixed route service hours, 35.5% of all RAR trips could be accomplished via fixed routes.

Table 2: RAR Stop Distances from Fixed Route Bus Stops

	Distance from Bus Stop						
	¼ mile	%	½ mile	%	Beyond ½ mile	%	Total
All RAR Trips							
Origin Stops	1,539	80%	1,758	91%	171	9%	1,929
Destination Stops	1,401	73%	1,576	82%	353	18%	1,929
RAR Trips During Fixed-Route Hours (6:30 a.m. - 5:30 p.m.)							
Origin Stops	661	73%	772	86%	129	14%	901
Destination Stops	729	81%	814	90%	87	10%	901
RAR Trips Outside of Fixed-Route Hours (before 6:30 a.m., after 5:30 p.m.)							
Origin Stops	878	85%	986	95%	47	5%	1,033
Destination Stops	672	65%	762	74%	271	26%	1,033

Figure 1 displays all RAR origins and destinations along with a ¼ mile and ½ mile buffers from the fixed-route service network. Parts of the #6 Glenwood route, which are served by request only (including Halifax Rd., Kentuck Rd., and Cane Creek Parkway) are included on this map. Trips that begin or end more than ½ mile from a bus stop are generally in Eastern Danville near JTI Leaf Services, Blue Ridge Fiberboard, and west of the Food Lion (residential stops).

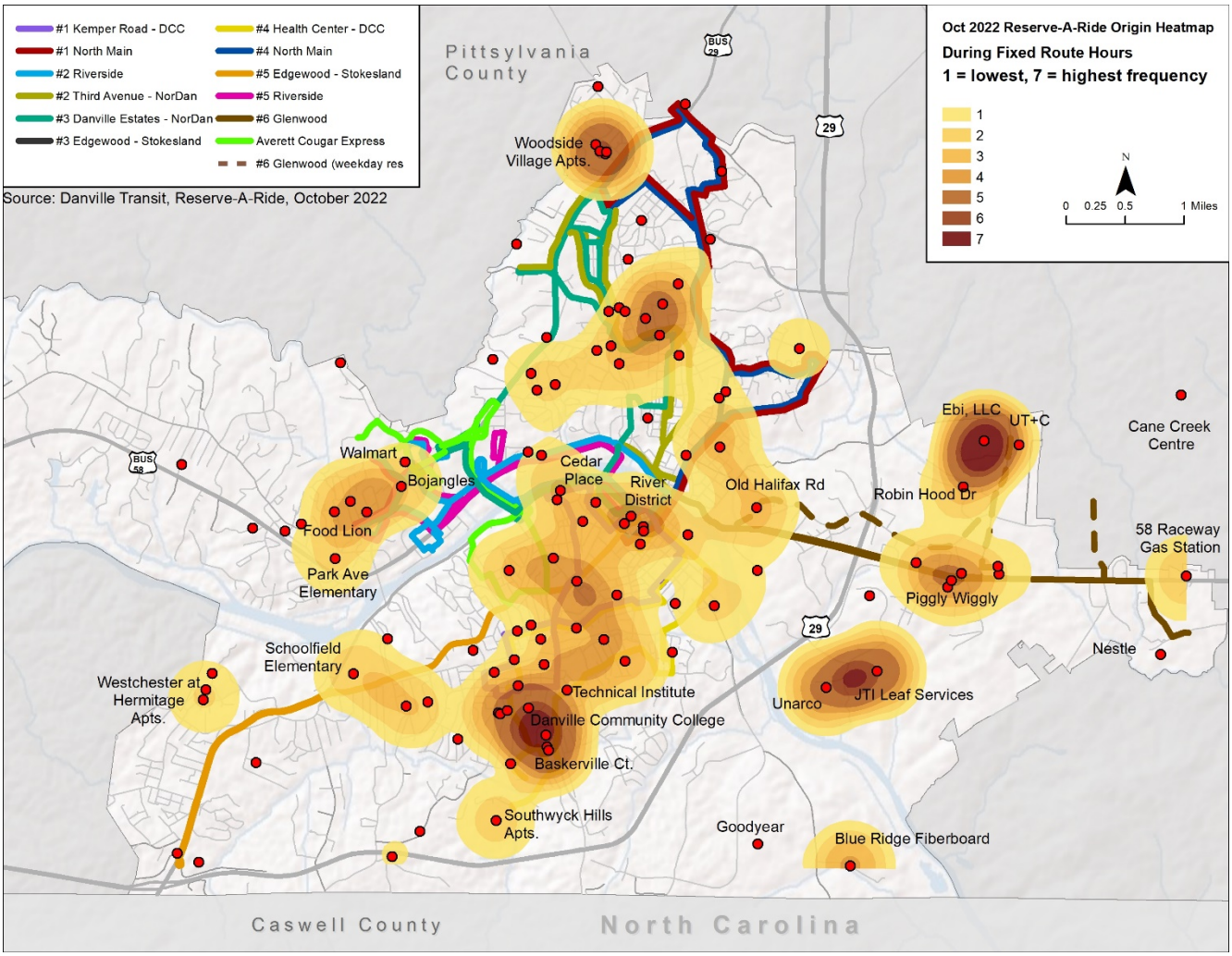
Figure 1: RAR Stops and ¼, ½ mile from Fixed-Route Service- All Hours



RAR Stop Frequency During Fixed Route Hours

Figure 2 displays a heatmap of the RAR trip origins during fixed-route hours and Figure 3 displays a heatmap of the RAR trip destinations during fixed route service hours.

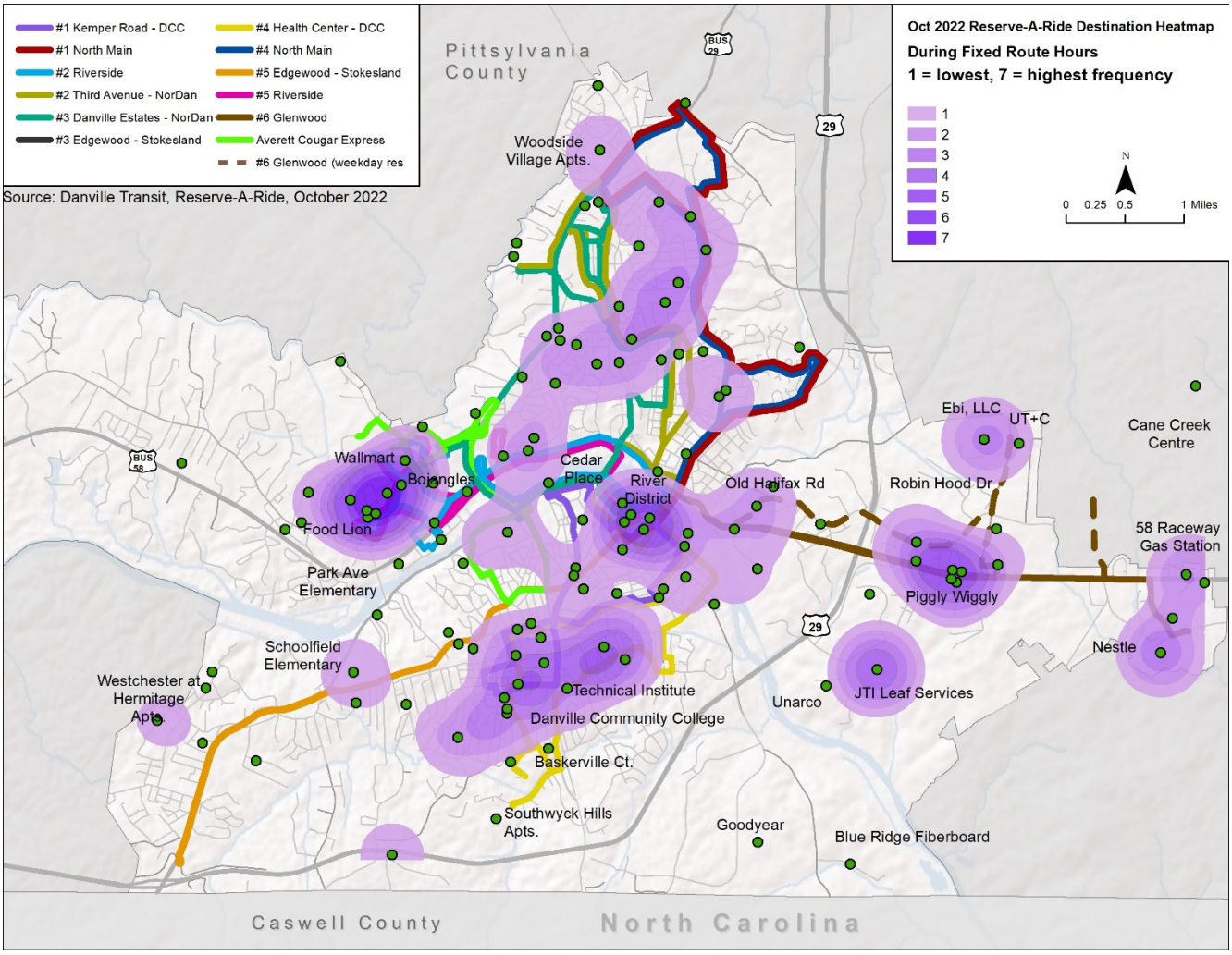
Figure 2: Heatmap of RAR Origins During Fixed-Route Hours (October 2022)



RAR origins during fixed-route hours were concentrated in the following areas:

- Near the Ebi and UT+C furniture makers
- JTI Leaf Services
- Piggly Wiggly
- The area around Danville Community College
- Woodside Village Apartments

Figure 3: Heatmap of RAR Destinations During Fixed-Route Hours (October 2022)



RAR destinations during fixed-route hours are concentrated in the following areas:

- The vicinity of the Food Lion and Goodwill on Westover Drive
- Piggly Wiggly market/Hardees
- River District

Table 3 displays common RAR trip origins during fixed-route hours, along with the number of stops, nearby fixed-routes, and the general departure or arrival time of most trips. Trip origins were grouped together if they were in proximity to one another. Table 4 is similar but displays the common RAR trip destinations.

Table 3: Frequency of RAR Trips During Fixed-Route Hours- Trip Origins

Origin Area	# Origin Stops	% of Trips During Fixed-Route Hours	Stop Type	Closest Fixed Route(s)	Most Common Trip Times
JTI Leaf Service or Unarco	73	8%	Employer	#6 Glenwood	3:00 – 5:00 p.m.
Ebi or UT+C (Furniture Makers)	57	6%	Employer	#6 Glenwood	1:30 – 3:30 p.m.
Hardees, Piggly Wiggly, Dollar Tree, McDonalds	48	5%	Employer, Commercial	#6 Glenwood	7:00 - 5:00 p.m.
Woodside Village Apts.	44	5%	Residential	#1 & #4 North Main	7:00 – 7:30 a.m. 2:00 – 4:00 p.m.
Baskerville Ct.	44	5%	Residential	#4 Health Center - DCC	9:00 a.m. – 12 p.m.
Area near Food Lion on Westover Dr	41	5%	Employer, Medical, Residential	#2 and #5 Riverside	7:00 – 8:00 a.m. 2:00 – 5:00 p.m.
River District	26	3%	Residential, Civic	Several Routes	3:00 – 8:00 p.m.
Blue Ridge Fiberboard (250 Knights Celotex Wy)	25	3%	Employer	n/a	4:00 - 5:00 p.m.
Danville Technical Institute	19	2%	Employer, Education	#4 Health Center - DCC	~2:00 p.m.
58 Raceway Gas Station (2203 S Boston)	18	2%	Commercial	#6 Glenwood	5:00 - 5:30 p.m.
Riverside Health & Rehabilitation Center (2344 Riverside Dr) or Mayflower Seafood Restaurant	5	1%	Employer, Medical	#2 & #5 Riverside	2:00 - 3:00 p.m.

About 130 (or 14%) of RAR trips (during fixed-route hours), originate at the manufacturing companies or warehouses in the eastern part of Danville. When the stops near the Piggly Wiggly market, Hardees and 58 Raceway Gas Station (all on South Boston Rd) are included, 196 trips (or 22% of RAR trips during fixed-route hours) were made in this area. These areas are served twice a day by the Glenwood route. Increasing service on the Glenwood route could allow for some trips to be transitioned, however, the cost of increasing the level of service may be higher than the cost of providing these trips via RAR. Additional analysis will be performed within the alternatives discussion for the TDP.

Table 4: Frequency of RAR Trips During Fixed-Route Hours – Trip Destinations

Destination Area	Destination Stops	% of Trips During Fixed-Route Hours	Type	Closest Fixed Route(s)	Most Common Trip Times
Area near Food Lion on Westover Dr. and Walmart	109	12%	Employer, Residential	#2 & #5 Riverside	7:30 a.m. – 5:00 p.m.
River District	54	6%	Residential, Civic	Several Routes	6:30 a.m. – 5:30p.m.
Hardees, Piggly Wiggly, Dollar Tree, McDonalds	42	4%	Employer, Commercial	#6 Glenwood	9:00 a.m. – 5:00 p.m.
JTI Leaf Services	40	4%	Employer	#6 Glenwood	3:00 – 5:00 p.m.
Ebi or UT+C (Furniture Maker)	29	3%	Employer	#6 Glenwood	1:00 - 5pm
Nestle (201 Airside Dr)	29	3%	Employer	#6 Glenwood	11:30 a.m. – 1:00 p.m.
Cardinal Place	22	2%	Residential	#4 Health Center - DCC	7:00 – 8:00 a.m.
Danville Technical Institute	21	2%	Employer, Education	#4 Health Center - DCC	8:00 – 9:00 a.m.
Riverside Health & Rehabilitation Center (2344 Riverside Dr)	19	2%	Employer, Medical	#2 & #5 Riverside	2:00 – 3:00 p.m.
Woodside Village Apts.	15	2%	Residential	#1 & #4 North Main	9:00 – 10:00 a.m.
Unarco Industries (255 Stinson)	1	0%	Employer	#6 Glenwood	7:00 a.m.

About 109 (or 12%) of RAR trips (during fixed-route hours) end in the half-mile wide zone between Food Lion on Westover Drive and Walmart, an area that has various small employers including fast food establishments, Goodwill, small offices, and an assisted living facility. This area is served by the #2 and #5 Riverside.

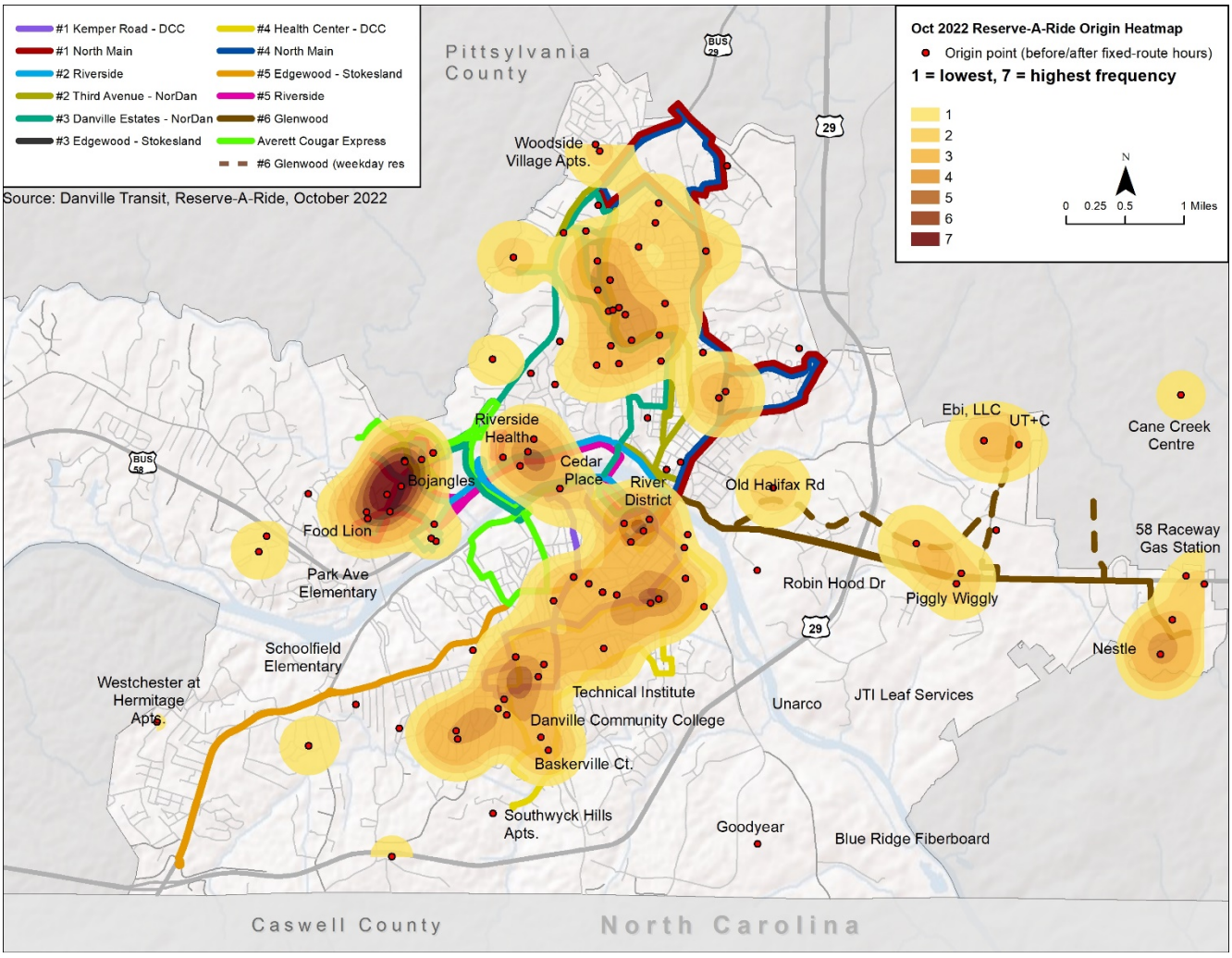
About 54 (or 6%) of RAR trips (during fixed route hours) end in the next-most frequent destination hotspot, the River District, which is served by multiple fixed route stops. The district's stops serve residences such as Danville House and civic buildings. Some of these trips are likely those taken by the IALAR students.

Reserve-A-Ride Stop Frequency Outside of Fixed Route Hours

Trip Origins

RAR origins outside of fixed-route hours were the most concentrated between the Walmart and Food Lion in the western part of Danville. While these RAR origins resemble those that took place during fixed route hours, a noticeable difference was higher stop activity at the Walmart and Riverside Health and Rehabilitation Center, and lower stop activity at the Ebi and UT+C furniture manufacturers and at residential areas including Woodside Village Apartments, the River District, and the apartments near Danville Community College. No stops originated at JTI Leaf Services during this time period. Figure 4 displays a heatmap of the RAR trip origins outside of the fixed route service hours.

Figure 4: Heatmap of RAR Origins Outside of Fixed-Route Hours (October 2022)



Trip Destinations

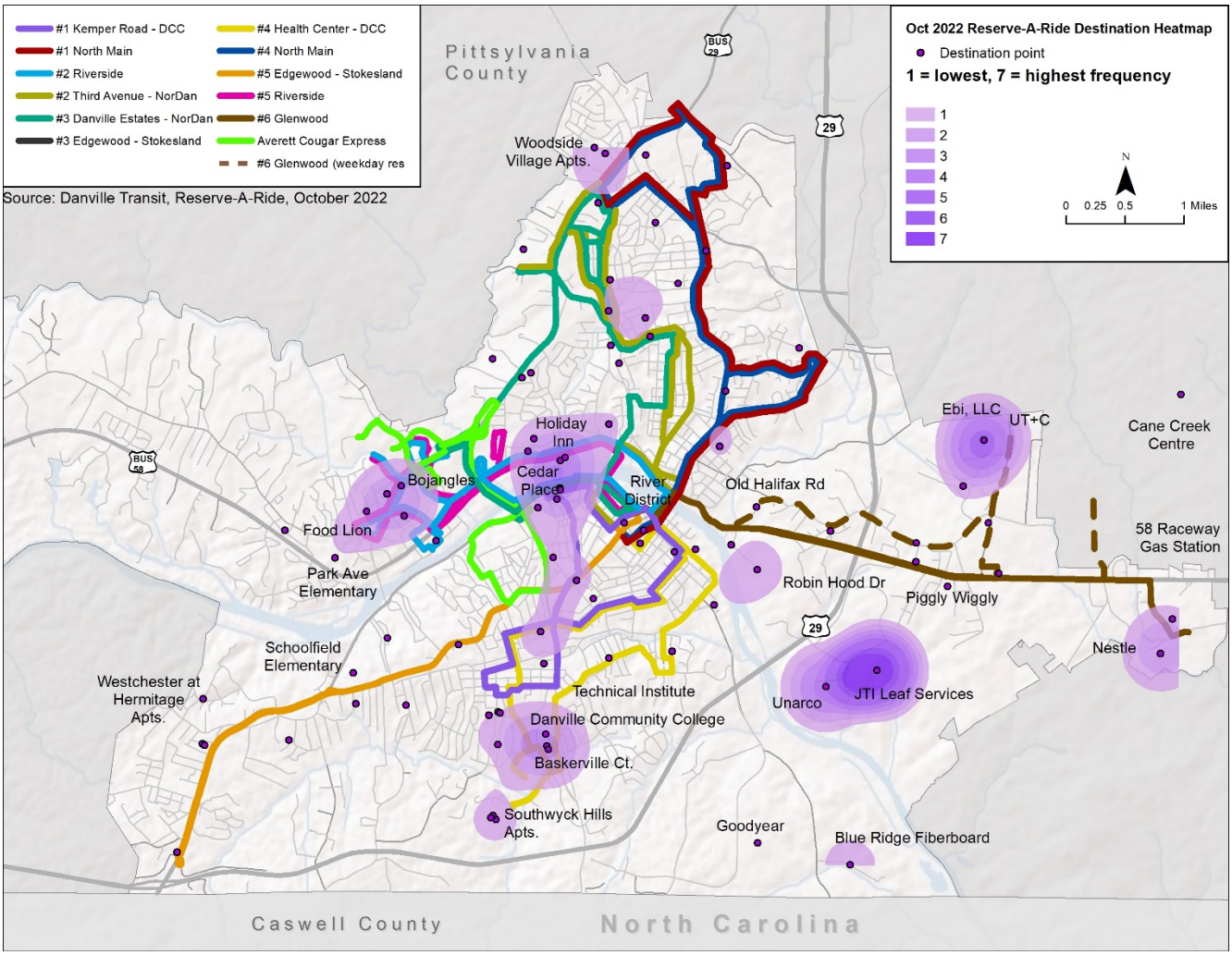
RAR destinations outside of fixed-route hours were concentrated at JTI Leaf Services and the Ebi and UT+C furniture manufacturers. Unlike RAR destinations during fixed-route hours, there were few trips that ended near the River District and no trips to the Walmart or Food Lion. Additional hotspots included:

- Apartments nearby Danville Community College
- Biscuitville
- Holiday Inn Express on Riverside Drive

About 348 (or 34%) of the October RAR trips taken outside of fixed route hours ended at the manufacturing companies and warehouses in the eastern part of Danville. This includes JTI Leaf Services, Ebi, UT+C, Unarco Industries, and Nestle. About 117 (or 11%) of current RAR trips (outside of fixed route hours) began at the next-most frequent hotspot, which is about a half-mile wide zone between Food Lion on Westover Drive and Walmart, which also has various small employers ranging from fast food establishments, office buildings and an assisted living facility. During fixed route hours, this area is served by the Riverside Route pairs (#2 and #5). Additionally, 6% of RAR trips (62) outside of fixed-route hours ended at this hotspot (mostly residents).

About 65 (or 6%) of current RAR trips (outside of fixed route hours) ended at apartments at Baskerville Court or Southwyck Hills Apartments, which are served by the #4 Health Center – DCC route during fixed route hours. The RAR trip data does not show as many trip origins that begin in this area, which suggests some of these riders may have taken a fixed route during the day but used RAR to return home after work. These riders arrived home between about 6:00 p.m. and 11:00 p.m. Figure 5 provides a heatmap of the RAR destinations outside of the fixed route service hours.

Figure 5: Heatmap of RAR Destinations Outside of Fixed-Route Hours (October 2022)



Potential Ways to Reduce RAR Demand – Transitioning Riders to Fixed Route

The RAR analysis has shown that about 35.5% of the RAR trips taken in October 2022 could have been completed using the existing fixed route network. For October, this was 685 trips. If these trips are annualized, the total annual number of trips would be 8,220 and the cost to provide these trips is estimated to be about $314,400.

Given this overlap, there are two potential ways to transition riders from RAR to the fixed routes without changing the fixed route network. These are:

1. Raise the RAR fare from $4.00 to $5.00 for RAR trips that could be taken during fixed route hours
2. Mandate that riders use the fixed routes if the origin and destination are both within the fixed route network

Additional ways to reduce RAR demand could include:

1. Adding additional hours to the Glenwood route and extending it JTI Leaf Services
2. Adding hours to the fixed route network so that the routes start earlier and end later

These options will be discussed with Danville Transit staff and further analyzed within the service alternatives. Danville staff has preliminarily indicated that there is not support to raise the fare and adding hours to the fixed route network is not likely to be as efficient as the current RAR service.

Appendix B
Reserve-A-Ride Analysis December 2022 Sample

Paige Rich

CUSTOMER FIRST NAME	CUSTOMER LAST NAME	CUSTOMER HOME ADDRESS	PICKUP ARRIVE	ORIGIN COMMON NAME	ORIGIN ADDRESS	DROPOFF ARRIVE	DEST. ADD.	POSSIBLE YES/NO
ALICE	AARON	2266 S Boston Rd	05:27:33 AM		2266 S Boston Rd	05:43:01 AM	2344 Riverside Dr	No
SHAAHIDA	AKBAR	141 Levelton St	03:46:06 PM		141 Levelton St	03:55:41 PM	1282 S Boston Rd	No
SYLVIA	AKERS	3050 W Main St	06:29:26 PM	PIGGLY WIGGLY - 58 EAST	1304 S Boston Rd	06:45:29 PM	3050 W Main St	No
JORDAN	BANKS	120 Garden Grove Ave	09:58:23 PM	DANVILLE MALL	325 Piedmont Dr	10:13:07 PM	120 Garden Grove Ave	No
CADERIOUS	BRANDON	1206 Richmond Blvd	06:59:52 AM		1206 Richmond Blvd	07:47:13 AM	1750 S Main St	No
CIERRA	BROOKS	1927 HALIFAX ROAD	11:07:57 PM		149 Executive Court	11:18:37 PM	1927 HALIFAX ROAD	No
KIANA	BROOKS	103 Crosland Ave	02:11:51 PM		103 Crosland Ave	02:13:35 PM	149 Executive Ct	Yes
LENA	BRYDIE	110 N Hills Ct	02:29:27 PM		110 N Hills Ct	02:44:25 PM	432 Hermitage Dr	No
JASMINE	BUTLER	66 Schoolfield Dr	09:18:13 AM		66 Schoolfield Dr	09:30:01 AM	130 Camden St	No
KAMESHIA	CARTER	1037 Main St	02:40:39 PM		1037 Main St	02:45:17 PM	2344 Riverside Dr	Yes
MIL'YADA	CHANEY	1321 Piney Forest Hwy	07:07:13 AM		1321 Piney Forest Hwy	07:11:45 AM	130 Camden St	No
QUENCY	CHAVIS	641 Glendale Ave	05:11:39 AM		641 Glendale Ave	05:16:44 AM	2121 Riverside Dr	No
RITA	CLAIBORNE	253 Turpin St	07:28:30 AM		253 Turpin St	07:38:43 AM	651 Cardinal Pl	No
MICAH	CLARK	69 Fairfield Ave	06:54:59 AM		69 Fairfield Ave	07:27:13 AM	2311 Cane Creek Pkwy	No
Shanell	Clarke	1575 Richmond Blvd	09:55:08 PM		1575 Richmond Blvd	10:08:12 PM	3290 Riverside Dr	Yes
JESSICA	COLEMAN	215 Barrett St	10:17:27 PM		215 Barrett St	10:23:31 PM	149 Executive Ct	No
GABBY	CONWAY	233 Allison Dr	07:28:24 AM		233 Allison Dr	07:37:50 AM	450 MALL DR	No
JORDAN	COTHRAN	235 ROCKY LANE	09:27:36 PM	WESTERN SIZZLIN	3211 Riverside Dr	09:35:46 PM	235 ROCKY LANE	No
DIERATHA	COWAN	316 Seminole Trl	11:05:38 PM	WAL-MART	515 Mount Cross Rd	11:16:08 PM	316 Seminole Trl	Yes
IVAN	DAILEY	633 Holbrook St	10:00:08 PM	WAL-MART	515 Mount Cross Rd	10:07:19 PM	633 Holbrook St	Yes
LADEDRA	DICKERSON	624 Arnett Blvd	10:32:22 PM		624 Arnett Blvd	10:35:25 PM	677 Craghead St	No
MEYA	EMERSON	642 Franklin St	09:03:41 AM		642 Franklin St	09:09:46 AM	1008 S Main St	Yes
MELISSA	EUBANKS	219 Edgewood Dr	09:23:15 AM		219 Edgewood Dr	09:26:12 AM	114 Sandy Ct	Yes
LAMAR	FERRELL	190 New Hope Way	06:39:08 AM		190 New Hope Way	06:50:09 AM	1127 PINEY FOREST ROAD	No
STACEY	FERRELL	516 Brooke Dr	02:40:46 PM	GW HIGH SCHOOL- Main	701 Broad St	03:08:08 PM	516 Brooke Dr	No

YES	7
NO	18
	25

BY: PAIGE RICH

Jackie Foster

CUSTOMER FIRST NAME	CUSTOMER LAST NAME	CUSTOMER HOME ADDRESS	PICKUP ARRIVE	ORIGIN COMMON NAME	ORIGIN ADDRESS	DROPOFF ARRIVE	DEST. ADD.	POSSIBLE YES/NO
JACQUELINE	FITZGERALD	405 Montague St	11:50:40 PM	COURTHOUSE	427 Patton St	11:56:29 PM	405 Montague St	NO
SONIA	FITZGERALD	610 Arlington Rd	06:05:10 AM		610 Arlington Rd	06:22:42 AM	680 Arnett Blvd	NO
ANTOINE	FULLERWINDER	627 Arnett Blvd	08:11:55 PM	PLANET FITNESS	3360 Riverside Dr	08:33:34 PM	627 Arnett Blvd	NO
ANTOINE	FULLERWINDER	627 Arnett Blvd	06:34:02 PM	WESTWOOD MIDDLE SCHOOL	500 APOLLO AVENUE	06:34:07 PM	627 Arnett Blvd	NO
ROBERT	GIBBS	10 Sunset Way	11:02:27 PM	SOVAH HOSPITAL - S. MAIN	142 S Main St	11:07:25 PM	10 Sunset Way	NO
SHYNIQUE	GOODE	130 James Rd	09:57:18 PM	McDONALD'S-OLD RIVERSIDE	348 OLD RIVERSIDE DRIVE	10:11:14 PM	130 James Rd	NO
TAMMIE	GRAVES	1239 Paxton St	05:12:38 PM	WAL-MART	515 Mount Cross Rd	05:12:43 PM	1239 Paxton St	NO
LINDA	HAIRSTON	122 Baskerville Ct	09:02:55 AM		122 Baskerville Ct	09:53:46 AM	515 Mount Cross Rd	NO
NAHEED	HASSAN	125 Elon Pl	03:38:19 PM	ABERCROMBIE PHYSCL THRPY	2811 Riverside Dr	03:46:35 PM	125 Elon Pl	NO
NATHANIEL	HINES	2120 Spencer St	11:41:18 PM	Train Station	667 Craghead St	12:13:11 AM	2120 Spencer St	NO
PAULA	HOOD	1575 Richmond Blvd	07:51:53 AM	RIVERSIDE HEALTH CARE	2344 Riverside Dr	07:51:56 AM	1575 Richmond Blvd	NO
AVONTAE	HORTON	1321 Piney Forest Rd BLD E	07:46:23 AM	WAL-MART	515 Mount Cross Rd	07:46:58 AM	1321 Piney Forest Rd BLD E	NO
RASHIQUE	JEFFERIES	825 Riverview St	02:36:38 PM		825 Riverview St	02:52:22 PM	450 Piney Forest Rd	NO
JAY	JELASO	119 Concord St	03:17:52 PM		119 Concord St	03:26:46 PM	326 Taylor Dr	NO
RITA	JENNINGS	633 Arnett Blvd	02:37:03 PM	GIBSON MIDDLE SCHOOL	1215 Industrial Ave	02:58:07 PM	633 Arnett Blvd	NO
RITA	JENNINGS	633 Arnett Blvd	07:11:30 AM		633 Arnett Blvd	07:34:19 AM	1215 Industrial Ave	NO
ALEASE	JOHNSON	769 Memorial Dr	05:06:46 AM		769 Memorial Dr	05:13:43 AM	130 Camden St	NO
CAROL	JONES	178 Lynndale Dr	07:38:14 PM	Roman Eagle Memorial Home	2526 N Main St	07:43:07 PM	178 Lynndale Dr	NO
DEBRA	JONES	225 Winslow St	02:27:38 PM		209 Broadnax Street	02:27:43 PM	225 Winslow St	NO
JORDAN	JONES	225 Winslow St	07:09:58 PM	SALVATION ARMY	123 HENRY STREET	07:20:20 PM	225 Winslow St	NO
KAYLA	JONES	412 Church Ave	07:25:16 AM		412 Church Ave	07:56:22 AM	705 Main St	NO
TERRA	JONES	83 Bishop Ave	02:21:47 PM		83 Bishop Ave	02:37:01 PM	2344 Riverside Dr	NO
JULIA	KELLY	503 Gay St	07:43:21 AM		503 Gay St	07:51:11 AM	625 Piney Forest Rd	NO
LUSH	KENNEDY	208 Belaire dr	09:44:26 AM		208 Belaire dr	09:53:31 AM	607 W Main St	NO
CHARLOTTE	KING	213 Cleveland St	10:06:30 AM		213 Cleveland St	10:16:08 AM	1304 S Boston Rd	NO

0
25
25

Jackie Lou

CUSTOMER FIRST NAME	CUSTOMER LAST NAME	CUSTOMER HOME ADDRESS	PICKUP ARRIVE	ORIGIN ADDRESS	DROPOFF ARRIVE	DEST. ADD.	DEST. ADD2.	POSSIBLE YES/NO
THOMAS	KING	141 Lowell St	11:47:43 AM	141 Lowell St	12:14:28 PM	515 Mount Cross Rd		YES
CORETHA	LAW	123 COURTNEY STREET	05:41:34 AM	123 COURTNEY STREET	05:52:39 AM	661 PARK AVENUE		NO
TERVER	LAW	420 Patton St	08:04:37 AM	420 Patton St	08:09:10 AM	639 Craghead St		YES
CENORITA	LEE	172 NORTHWEST BLVD	10:19:21 AM	172 NORTHWEST BLVD	10:33:54 AM	341 Main St		YES
VICKY	LOGAN	117 Crosland Ave	07:20:45 AM	117 Crosland Ave	07:27:18 AM	2526 N Main St		NO
MARY	MARTIN	2259 Robin Hood Dr	07:02:04 PM	196 Hamlin Ave	07:17:39 PM	2259 Robin Hood Dr		NO
MACEY	MCGHEE	208 Thunderbird Cir	04:33:01 PM	208 Thunderbird Cir	04:44:35 PM	3585 Riverside Dr		YES
KEVIN	MCKENSIE	1708 N Main St	09:09:39 AM	1708 N Main St	09:19:38 AM	245 Hairston St		YES
PATRICK	MCLAUGHLIN	1575 Richmond Blvd	07:05:24 PM	512 Westover Dr	07:17:40 PM	1575 Richmond Blvd	Apt A2	NO
CARLOS	MEDINA	219 Central St	10:27:45 PM	106 SANDY COURT	10:34:41 PM	219 Central St		NO
ERICA	MILLNER	311 LINCOLN STREET	10:59:25 PM	301 Cathy Dr	11:07:39 PM	311 LINCOLN STREET		NO
WILLIS	MORRIS	540 Gay St	08:03:03 PM	512 Westover Dr	08:03:08 PM	540 Gay St	203	NO
BREANNA	MORRISON	820 Arnett Blvd	04:41:18 AM	820 Arnett Blvd	04:48:49 AM	1282 S Boston Rd		NO
AMBER	MURPHY	127 TATE STREET	05:33:24 AM	127 TATE STREET	05:33:33 AM	211 Nor Dan Dr		NO
SUE	MURPHY	211 Stephens St apt 3	12:37:59 PM	211 Stephens St apt 3	12:49:03 PM	540 WESTOVER DRIVE		YES
WILLIAM	OVERBY	175 Mabin St	08:16:22 PM	540 WESTOVER DRIVE	08:17:17 PM	175 Mabin St		NO
THOMAS	OWEN	144 HOLBROOK AVENUE	04:42:04 AM	144 HOLBROOK AVENUE	04:48:31 AM	2101 Riverside Dr		NO
REGINA	PALMER	864 Paxton Ave	06:42:41 AM	864 Paxton Ave	06:47:55 AM	427 Patton St	MCPL BLDG	NO
STEPHANIE	PALMER	605 Holbrook Ave	05:33:02 AM	605 Holbrook Ave	05:40:05 AM	2101 Riverside Dr		NO
AMANDA	PLUMMER	536 Keen St	05:33:25 AM	536 Keen St	05:40:14 AM	450 Piney Forest Rd		NO
CAROLYN	PRITCHETT	744 Glendale Ave	07:27:08 AM	744 Glendale Ave	07:27:12 AM	3260 Riverside Dr		YES
TERRESA	REESE	1141 Paxton St	05:24:37 AM	1141 Paxton St	05:33:16 AM	515 Mount Cross Rd		NO
TIMBERLEE	RITCHIE	1509 Myrtle Ave	10:25:59 AM	1509 Myrtle Ave	10:26:06 AM	1461 S Boston Rd		NO
MONTHNEA	ROBERTS	656 Cardinal Pl	09:30:22 PM	656 Cardinal Pl	09:40:28 PM	450 Piney Forest Rd		NO
SHIRLEY	SAUNDERS	1222 Stokes St	08:08:07 AM	1222 Stokes St	08:14:32 AM	701 Broad St		YES

YES	8
NO	17
	25

Brenda

CUSTOMER FIRST NAME	CUSTOMER LAST NAME	CUSTOMER HOME ADDRESS	CUSTOMER HOME ADDRESS2	PICKUP ARRIVE	ORIGIN ADDRESS	DROPOFF ARRIVE	DEST. COMMON NAME	DEST. ADD.	POSSIBLE YES/NO
SHEILA	SCOTT	601 Bridge St	Apt 110	06:09:41 AM	601 Bridge St	06:22:55 AM	SCHOOLFIELD SCHOOL	1400 WEST MAIN STREET	NO
DAVID	SMITH	131 Phillips Ct		07:55:31 PM	131 Phillips Ct	08:06:45 PM	WAL-MART	515 Mount Cross Rd	NO
TAWANDA	SPRAGGIN	162 Searcy St		07:02:45 AM	409 Wimbush Dr	07:05:39 AM		162 Searcy St	NO
WANDA	STANFIELD	1261 S Boston Rd		07:58:47 AM	1261 S Boston Rd	08:08:25 AM	WOODBERRY HILLS ELEMENTARY SCHOOL	614 Audubon Dr	NO
MEGAN	SUDDUTH	136 Canterbury Rd		11:15:09 AM	136 Canterbury Rd	11:27:21 AM	GOODWILL - WESTOVER	512 Westover Dr	NO
MATEYO	SUQUA	74 Glen Oak Dr		11:11:33 AM	74 Glen Oak Dr	11:11:37 AM	NESTLE	201 Airside Dr	NO
TARA	TABB	202 Banner St		04:11:38 AM	202 Banner St	04:23:36 AM	WAL-MART	515 Mount Cross Rd	NO
KANIIYAH	TERRY	219 Central St		04:15:35 PM	467 Church Ave	04:48:14 PM		219 Central St	NO
KANIIYAH	TERRY	219 Central St		08:54:06 AM	219 Central St	08:54:12 AM		467 Church Ave	NO
AUDREY	THOMAS	337 Hermitage Dr	APT.D	08:29:06 AM	337 Hermitage Dr	08:39:28 AM	I-HOP	101 Teal Ct	NO
JAMES	THOMAS	114 Sedgefield Ct	Apt 14	03:19:33 PM	114 Sedgefield Ct	03:36:29 PM		1804 Halifax Rd	NO
KATHLEEN	THOMAS	219 Central St		03:31:03 PM	467 Church Ave	03:31:13 PM		219 Central St	NO
KATHLEEN	THOMAS	219 Central St		08:18:15 AM	219 Central St	08:44:14 AM		467 Church Ave	NO
FREDDIE	WALTON	116 N Hills Ct		05:23:39 AM	116 N Hills Ct	05:25:20 AM	McDONALD'S - W. MAIN	651 WEST MAIN STREET	NO
ATAVIA	WHITE	215 Floral Ave		10:38:13 AM	215 Floral Ave	10:41:32 AM	MCDONALDS	683 W Main St	NO
DEMETRIUS	WHITE	704 3rd St		05:40:06 AM	704 3rd St	05:40:18 AM	Jersey Mike's	165 Holt Garrison Pkwy	NO
NECOMAUS	WILLIAMS	223 Thunderbird Cir		12:19:19 AM	2344 Riverside Dr	12:28:58 AM		223 Thunderbird Cir	NO
CAROL	WITCHER	119 Cedar Pl	Apt 4	02:05:04 PM	119 Cedar Pl	02:26:31 PM		149 Executive Court	YES
LINDA	WITCHER	133 Hamilton St		04:22:05 AM	133 Hamilton St	04:27:45 AM	BOJANGLES	106 SANDY COURT	NO
AUDREY	WOMACK	141 Starmont Dr		09:23:45 AM	141 Starmont Dr	09:39:13 AM	HARDEE'S - PINEY FOREST	1192 Piney Forest Rd	NO

YES	1
NO	19
	20

Appendix C
Passenger Surveys – Fixed Route and Paratransit

How's your ride on the bus today?

Fixed Route Survey

1. **What is your primary type of transportation?**
   ❑ Public Transit ❑ Drive alone ❑ Carpool ❑ Taxi ❑ Uber/Lyft
   ❑ Walk ❑ Bicycle ❑ Other: _____

2. **How did you get to your bus stop from your home today?**
   ❑ Walked ❑ Caught a ride
   ❑ Rode Bicycle ❑ Other: _____

3. **Which transit route(s) are you taking for your trip today?**
   ❑ 1- North Main
   ❑ 1- Kemper Road - DCC
   ❑ 2 - Riverside
   ❑ 2 - Third Ave - NorDan
   ❑ 3 - Edgewood – Stokesland
   ❑ 3 - Danville – Estates
   ❑ 4 - Health Center - DCC
   ❑ 4 - North Main
   ❑ 5 - Riverside
   ❑ 5 - Edgewood - Stokesland
   ❑ 6 - Glenwood
   ❑ Averett Cougar Express

4. **Did or will you TRANSFER to another bus to complete this trip?**
   ❑ Yes ❑ No

5. **What is the purpose of your trip today?**
   ❑ Work ❑ School ❑ Shopping/Errands ❑ Social/Recreation
   ❑ Medical ❑ Governmental/Social Service ❑ Other: _____

6. **On average, how often do you use public transit?**
   ❑ 5-6 days a week ❑ 3-4 days a week ❑ 1-2 days a week
   ❑ Less than once a week ❑ Less than once a month

7. **If you were not taking the bus, how would you make this trip?**
   ❑ Drive ❑ Walk ❑ Bicycle ❑ Family/Friends ❑ Wouldn't make trip
   ❑ Taxi ❑ Uber/Lyft ❑ Carpool/Vanpool ❑ Other: _____

8. **Which of the following potential transit service improvements would be the most helpful to you? Please choose up to 3.**
   ❑ More frequent service
   ❑ Additional Saturday service
   ❑ Service on Sundays
   ❑ Faster, more direct routes
   ❑ Better timeliness
   ❑ Service later in the evenings
   ❑ Service earlier in the mornings
   ❑ Bus shelters and benches at stops
   ❑ Improved bus stop accessibility
   ❑ Service to additional locations (where?): _____
   ❑ On-demand service using my smartphone
   ❑ Other: _____

continued on back ☛

9. Of the following non-cash fare payment options, which one would be the most convenient for you?

❑ Use of credit/debit card ❑ Pre-paid fare card

❑ Tokens ❑ Smart phone payment application

10. Please rate Danville Transit's services in the following areas by placing a check mark or X:

	 Strongly Satisfied	 Satisfied	 Neutral	 Dissatisfied	 Strongly Dissatisfied
Overall service					
Days/hours of service					
Buses running on-time					
Frequency of buses					
Availability of information					
Route brochures					
Website					
Cost of bus fare					
Sense of security					
Cleanliness of buses					
Bus drivers					
Bus stops/shelters					
Signage					

Please answer a few questions about yourself. These are for reporting purposes only.

What is your zip code? _____

How old are you?

❑ Under 18 ❑ 18-24 ❑ 25-34 ❑ 35-54 ❑ 55-64 ❑ 65+

Do you have an internet enabled "smart" phone? ❑ Yes ❑ No

Do you have a valid driver's license? ❑ Yes ❑ No

Do you have access to a functioning vehicle? ❑ Yes ❑ No

Which one of the following best describes your race? (check all that apply)

❑ White/Caucasian ❑ African American/Black ❑ Asian ❑ Prefer not to answer

❑ American Indian/Alaskan Native ❑ Native Hawaiian/Pacific Islander ❑ Hispanic/Latino

What is your employment status? (check all that apply)

❑ Employed (Full-time) ❑ Student (Full-time) ❑ Retired ❑ Unemployed

❑ Employed (Part-time) ❑ Student (part-time) ❑ Homemaker ❑ Other

What is your annual household income? (optional)

❑ $14,999 or less ❑ $15,000 - $29,999 ❑ $30,000 - $44,999

❑ $45,000 - $59,999 ❑ $60,000 - $74,999 ❑ $75,000 or higher

Comments:

How's your ride on the bus today?

Reservation-Based Service

1. **Do you sometimes ride Danville Transit's fixed routes?**
   ❑ Yes ❑ No

2. **Which service are you using today?**
   ❑ Handivan ❑ Reserve-A-Ride ❑ Senior Transportation

3. **What is the purpose of your trip today?**
   ❑ Work ❑ School ❑ Shopping/Errands ❑ Social/Recreation
   ❑ Medical ❑ Governmental/Social Service ❑ Other: _____

4. **On average, how often do you use this service?**
   ❑ 5-6 days a week ❑ 3-4 days a week ❑1-2 days a week
   ❑ Less than once a week ❑ Less than once a month

5. **If you were not using this service, how would you make this trip?**
   ❑ Drive ❑ Walk/Bicycle ❑ Family/Friends ❑ Wouldn't make trip
   ❑ Danville Transit's Fixed Routes ❑ Taxi ❑ Uber/Lyft
   ❑ Carpool/Vanpool ❑ Other: _____

6. **Please rate Danville Transit's services in the following areas by placing a check mark or X**:

	 Strongly Satisfied	 Satisfied	 Neutral	 Dissatisfied	 Strongly Dissatisfied
Overall Service					
ADA Certification Process (*if applicable to you*)					
Trip Scheduling Process					
Telephone Customer Service					
On-time Performance					
Days/Hours of Service					
Availability of Information					
Transit Guides					
Website					
Cost of Bus Fare					
Sense of Security					
Cleanliness of Vehicles					
Bus Drivers					

→

7. Which of the following potential transit service improvements would be the most helpful to you? Please choose up to 3.

- ❑ More convenient trip scheduling
- ❑ Service later in the evenings
- ❑ Service on Sundays
- ❑ Service earlier in the mornings
- ❑ Better timeliness
- ❑ Service to additional locations (where?): _____
- ❑ On-demand service using my smart phone
- ❑ Other: _____

8. Of the following non-cash fare payment options, which one would be the most convenient for you?

- ❑ Use of credit/debit card
- ❑ Pre-paid fare card
- ❑ Tokens
- ❑ Smart phone payment application

Please answer a few questions about yourself. These are for reporting purposes only.

What is your zip code? _____

How old are you?

❑ Under 18 ❑ 18-24 ❑ 25-34 ❑ 35-54 ❑ 55-64 ❑ 65+

Do you have an internet enabled "smart" phone? ❑ Yes ❑ No

Do you have a valid driver's license? ❑ Yes ❑ No

Do you have access to a functioning vehicle? ❑ Yes ❑ No

Which one of the following best describes your race? (check all that apply)

❑ White/Caucasian ❑ African American/Black ❑ Asian ❑ Prefer not to answer

❑ American Indian/Alaskan Native ❑ Native Hawaiian/Pacific Islander

❑ Hispanic/Latino

What is your employment status? (check all that apply)

❑ Employed (Full-time) ❑ Student (Full-time) ❑ Retired ❑ Unemployed

❑ Employed (Part-time) ❑ Student (part-time) ❑ Homemaker ❑ Other

What is your annual household income? (optional)

❑ $14,999 or less ❑ $15,000 - $29,999 ❑ $30,000 - $44,999

❑ $45,000 - $59,999 ❑ $60,000 - $74,999 ❑ $75,000 or higher

Comments:

Thank you!

Appendix D
Public Survey

Public Transportation Survey

Danville Transit is conducting a Public Transportation Survey. Please help us learn more about community transportation needs by completing this survey.

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1. Are you aware of the services provided by Danville Transit?

   ❑ Not Aware ❑ Aware; overall positive impression ❑ Aware; overall negative impression

2. How do you ***usually*** get to where you need to go within the community for work, school, shopping, errands, or medical appointments? *Please choose the one you use the most*.

   ____ I drive ____ I use public transportation ____I walk
   ____ Friends/family drive me ____ I ride a bicycle ____I take a taxi
   ____ I use Uber or Lyft ____ Carpool/vanpool

3. Do you currently use any of the following transportation services?

   ❑ Danville Transit's fixed routes
   ❑ Danville Transit's Handivan
   ❑ Virginia Breeze
   ❑ Danville Transit's Reserve A Ride
   ❑ Danville Senior Transportation
   ❑ Vanpools or carpools
   ❑ Pittsylvania County Community Action Senior Transportation or other Human Service Transportation Programs
   ❑ Taxis ❑ Uber/Lyft
   ❑ Other: _____
   ❑ I do not currently use public transportation

4. If you **DO** use public transportation, what are the primary reasons why you choose public transportation? *Please check all that apply*

   ❑ I do not have access to a vehicle
   ❑ I am unable to drive
   ❑ I do not have a driver's license
   ❑ It saves me time
   ❑ It saves me money
   ❑ For environmental reasons
   ❑ Public transit is more convenient than other modes
   ❑ Other: _____
   ❑ I do not like to drive
   ❑ Public transit is safer

5. If you **DO NOT** use public transportation currently, **OR ARE ONLY ABLE TO USE IT FOR SOME TRIPS**, what transit service improvements would be needed for you to choose to ride public transportation more frequently? *Please check all that apply.*

   ❑ Better service availability near my home/work/school- location: _____
   ❑ Improved access to transit information
   ❑ More frequent buses
   ❑ Service to areas outside the region
   ❑ Less crowded vehicles
   ❑ Improved reliability
   ❑ Better security on board the vehicles
   ❑ Bus stop/shelter improvements
   ❑ I would not ride, I prefer to drive
   ❑ Shorter travel time
   ❑ Service earlier in the morning
   ❑ Service later in the evening
   ❑ Sunday service
   ❑ On-demand service using my smart phone
   ❑ Lower fares
   ❑ Other: _____

6. Would you use public transportation if there was a service that met your travel needs?

   ❑ Yes ❑ No

7. Do you think there is a need for additional or improved public transportation in the City of Danville?

   ❑ Yes ❑ No

continued on back ☛

8. Are there specific locations in the region that are not currently served by public transportation, but you feel should be in the future? Please be as specific as possible.

9. Please provide any comments you may have concerning public transportation in the City of Danville:

Please answer a few questions about yourself

10. What is your zip code? _____

11. How old are you? ❑ Under 18 ❑ 18-24 ❑ 25-34 ❑ 35-54 ❑ 55-64 ❑ 65+

12. Do you have an internet enabled "smart" phone? ❑ Yes ❑ No

13. Do you have a valid driver's license? ❑ Yes ❑ No

14. Do you have access to a functioning vehicle? ❑ Yes ❑ No

15. Which one of the following best describes your race? (check all that apply)
    ❑ White/Caucasian ❑ African American/Black ❑ Asian ❑ Prefer not to answer
    ❑ American Indian/Alaskan Native ❑ Native Hawaiian/Pacific Islander ❑ Hispanic/Latino

16. What is your employment status? (check all that apply)
    ❑ Employed (Full-time) ❑ Student (Full-time) ❑ Retired ❑ Unemployed
    ❑ Employed (Part-time) ❑ Student (part-time) ❑ Homemaker ❑ Other

17. What is your annual household income?
    ❑ $14,999 or less ❑ $15,000 - $29,999 ❑ $30,000 - $44,999
    ❑ $45,000 - $59,999 ❑ $60,000 - $74,999 ❑ $75,000 or higher

Thank you!

Appendix E
Public Survey Comments

Responses
I use the senior transportation. It was nice for seniors. Now it takes you and gives you a pickup time. It picks you up 30 to 45 minutes later than your pickup time. Most of the time they do not answer the phone.
@1st use the pay system was cash only, now it's tokens only. Why not just provide bus passes, like larger cities, to which monies can be added to? This would make it more convenient and easier for anyone with a disability and for those who provide monies for said people. Looking for convenience, swipe and ride.
Automatic handicap door
Bus steps are hard to climb
Can you have one specific bus for same day service. I love riding the bus when I doing on a full time. I would like to see more shelters put up, the summer it hot standing outside.
Drivers need to stop on the side of the road and not in the middle of the road at the bus stops
Expand beyond Danville to Lynchburg and Greensboro areas
Fares too high, not enough buses, not enough routes.
Get you on time, very helpful staff, good services
Good job!
Have the drivers start understanding they don't have the right of way just because they are part of the city of Danville public system
How about putting some white peoples' picture on buses. There are a lot of people who are white that started businesses in Danville. You know who they are. So much for diversity in Danville
I also got run over by a transit bus in the river district. Please have your drivers yield to people in cross walks.
I been having problems getting transportation for the past few weeks and when I do I have to stay for 2 hours, and I am finished in 45 minutes to an hour.
I have used the service long ago. I have spoken many times about the need for more benches and covers over each one for years.
I think it would benefit more if it ran later into the evenings
I think the busses are a great way to get around when you don't have a vehicle. There should be maybe a little shorter time frame but other than that, everything is great
I think there needs to be some designated driver options for people who want to go out and have some drinks, but do not want to drink and drive.
I used to ride the bus every day in the late 1980s and early 1990s. It was a wonderful service. About five years ago, I used the Reserve-a-Ride service a few times. It was wonderful, too, except for one time when they arranged to pick up another passenger at a location across the street. He was very late coming out of the building and didn't have the $4 to pay, so since the driver wasted time catering to him, I was late to my appointment.
I wish the busses came to my home or at least on my block. I wish the police would stop the aggressive speeding drivers on my road. And I fear for my safety on public transportation and walking in Danville because there are no sidewalks near me but there are a lot of speeding vehicles.
I work from 4:00 pm to 12:30 am at Unyque's, I'm going to end up getting hit by a vehicle

I work with clients that have transportation needs, their complaints are that the buses do not run to several areas, they do not run frequently enough and that the service ends too early in the day

I work with community service type people coming out of prison/ jail, which is why I am filling this out. Needs: More times or stops - cross bussing in addition to circle routes (people need a direct route across towns north, east, west, south to skip riding in circles). If someone works at McDonald's they cannot work except times during the bus system runs. Some can't get to factories out in the edge of town. Or they have to get up at 4 to get somewhere at 630/7 am.

I would like the buses to run on Sunday most ppl work on Sunday and it be hard trying to catch a cab when we only have one cab service.

I would like to be able to ride the bus on a Sunday

I would love to use for night events in the area. Uber is too expensive! I have never, in 42 years used your bus system. I know nothing about changing buses at the station. Danville is not so large that would require changing buses to get to most sought after drop offs. Will I use the bus service, probably if changes made.

I'm not sure of when the busses are coming or going. If I did know then I don't know how much it costs. If the city had an app or something on the internet that'd be good.

If covered wait areas at bus stops are added, make those in locations that are mutually beneficial to school bus stop youth who deserve the same resource. Plan to include space at shelter that provide space for paid advertising.

If there was a more extensive greenway, like in Raleigh over the sewer lines, more folks could bike

I'm new to the area and there are very few if any large visible road signs informing the public of the Danville transit service.

I'm not a frequent user, but I am impressed by what I see. Two improvements involving travel outside the city I would love to see are more regular stops by Amtrak trains and commercial flights (even if only to and from one destination like Lynchburg) out of the Danville Airport.

In order to fully take advantage of the tourist that will come to the casino there will need to be reliable transportation in between the casino and downtown. Frequent, high end shuttles are very much needed for these out of town patrons to enjoy our city.

Install automatic handicap door button at the hub

It definitely can improve most people that have a decent job a lot of times they work in factories and don't have transportation either they don't drive or maybe can't afford a vehicle at the time friends and family members don't always have time or other coworkers

It is a Godsend for everyone, especially for seniors

It sucks

It will help people find and maintain jobs.

It'd be nice to have buses run on the evening and weekends.

It's a great service to have

More benches and shelter for those who just got off

Need handicap access door - automatic

Need more weekend buses

Need service from 29 South.. near Danville Golf Club- Withers Road area

Need Service on Sundays thank you
Needs more routes for employees and new locations throughout the city so its advantageous for ALL
Needs to be better advertised
Needs to go both directions on the main roads.
No Uber, public transit does not provide travel to the city as a whole
Public transportation is vitally important to a city that serves everyone. I hope we can continue to improve this service, year by year.
Regular transportation goes in too early. Buses in Roanoke and Richmond are still running when y'all going in.
Reserve a ride is crucial for older folks who don't drive but reserving it should be simple and arrival times need to be accurate.
Reserve A Ride is the route I use the most. I have had problems with drivers, dispatch & supervisors time and time again. A lot of them are unprofessional. A lot of them are rude. A lot of them are lazy. A lot of them don't take the time out to listen to what the passengers are trying to tell them when it comes down to pick-ups and drop offs. I have been told multiple times of my pickup being one time, but the drivers are pulling up at a different time. I've waited well over an hour to be picked up from work time and time again. It's ridiculous. I rely on reserve a ride because I don't have a car and I don't have people to take me to work as early as I have to be. Things need to be dealt with and handled when it comes to reserve a ride.
Reserve-a-ride is a great service, but many city residents don't know about it.
Run on holiday days
Safety It is very expensive for a small town
Scheduling of transportation is not accessible you are required to travel to certain destinations in order to travel certain routes
Security
Sometimes reserve a ride isn't available
The bus need working air conditioning and heat.
The bus route is extremely difficult to understand. This is why a lot of those in need don't use it!!
The concern I have for public transportation in the city of Danville is Danville needs to add more areas for buses to pick up people, I am talking fixed route services not reserve a ride
The drivers are expected to put up with entirely too much from passengers. They are for transportation not medical assistant. I rode once an witnessed a lady pee all over the bus in her wheelchair and the driver gagging because the woman smelt so bad! The driver should NEVER have to put up with that! PERIOD!
The public transit improvement that I would be most likely to use it improved bicycle infrastructure.

The southside of town will basically be its own little city within a city once Caesars opens. It would be good to have a dedicated line from the NC line to train station and back. Whether that is a working trolley line or a driverless cab/van line (Phoenix, AZ has this option).
State line down West Main to Main to Train Station and down Memorial to N. Ridge St. to Main St. and back.
They are rude down there, if I get off at 2 why do y'all pick me up at 2:40/3:00? My mornings I have to be to work at 6 why y'all pick me up at 5:05? I'm at work a whole hour early
They need to improve their scheduling, and always they're communicating skills, they need more drivers, they also need to be very careful on how they do they pick up and drop offs.
They should run on Sunday so people can have a way to work that don't have a vehicle.
We need transportation up Westover Drive
With the possibility of a traffic increase, rise in fuel, more people may find interest in public transit