Thomas Jefferson Planning District Commission (TJPDC)

Albemarle County, Virginia

Virginia Department of Rail and Public Transportation (DRPT)

Albemarle County Transit Expansion Study **Market and Service Analysis**

August 2021



Submitted by:





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Project Background

The Charlottesville-Albemarle County region is the second-fastest growing metropolitan area in Virginia, behind only Northern Virginia. In recent years, growth has largely been concentrated in the designated Development Areas of Albemarle County, just outside the Charlottesville city limits. Going forward, the region stands to benefit from improved and expanded transit service that can enhance mobility options for residents and visitors. This study assesses the potential for transit expansion in three major growth areas that are currently served by limited fixed-route or demand response transit (as depicted in **Figure 1**):

- The US-29 corridor between Hydraulic Road and Charlottesville-Albemarle Airport.
- The Pantops neighborhood, including Martha Jefferson Hospital, the Virginia Department of Veterans Services, and the Social Security Administration.
- Thomas Jefferson's Monticello is a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site that receives about 500,000 visitors per year.

While not a plan for a full transit service area redesign, this study proposes transit service improvements exclusively to and from these growth areas. Due to this specified approach, transit recommendations presented in this report are intended for implementation in these study areas within a relatively short timeframe: the next five years.

To ensure access and connectivity to the jobs, services, and residential neighborhoods of Albemarle County, the County contributes over \$1 million annually to the region's two primary transit providers:



Charlottesville Area Transit (CAT)'s regular service network consists of 13 fixed routes, including 12 routes requiring a fare and one free trolley connecting the Downtown area and University of Virginia campus. Since the onset of the COVID-19 pandemic, CAT has operated 12 fixed routes on a reduced schedule, Monday through Saturday.

Jaunt provides intra-county, midday, and commuter demand responsive service to the counties of Albemarle, Buckingham, Fluvanna, Greene, Louisa, and Nelson, and the City of Charlottesville. JAUNT also offers contracted service for human services agencies, ADA paratransit service on behalf of CAT, and four fixed-route services branded as CONNECT.

While CAT and Jaunt provide some degree of fixed-route or demand response transit coverage in the three study areas, previous studies, such as the 2018 Transit Development Plans (TDPs) for CAT and Jaunt and the 2015 Albemarle County Comprehensive Plan, have highlighted opportunities for expansion of the current services in the Albemarle development areas, both in terms of coverage and scheduling. This study provides an opportunity to both advance the recommendations of the TDPs and to build on them by considering new mobility opportunities such as microtransit service.

¹ Although stops along some CAT or Jaunt services overlap with University of Virginia's University Transit Service (UTS), UTS does not serve any locations within the three study areas.



FOURSQUARE ITP

Thomas Jefferson Planning District Commission ALBEMARLE COUNTY TRANSIT EXPANSION STUDY **Full Study Area Study Areas** Landmarks 29 North Park Monticello University of Virginia Pantops Airport **Fixed Route Transit** -1- CAT Route 29 NORTH Crozet Jaunt CONNECT Route 10 **PANTOPS** 64 MONTICELLO

Figure 1: Combined Study Areas Map





Market and Service Analysis

Following a brief overview of the three study areas and regional planning context, the Market and Service Analysis begins to address the challenge of providing effective transit service to and from the three areas profiled in this study:

- The Market Analysis examines the effectiveness and efficiency of public transportation by identifying areas with high transit potential, an analysis population and employment density, and high transit need, an analysis of socioeconomic characteristics such as income, automobile availability, age, and disability status.
- The Service Analysis presents route profiles, including strengths, weaknesses, and service opportunities, for each CAT and Jaunt route or service operating to and from the three study areas.

In conjunction with data collected from public and stakeholder outreach, the Market and Service Analysis will each play a key role in developing transit service scenarios and ultimately, time- and cost-constrained recommendations.

Overview of Study Areas

Study Area 1: US-29 North

The US-29 North study area (**Figure 2**), encompassing the US-29 corridor, Rio Road and Airport Road, is bounded by Dickerson Road and Piney Mountain to the north; Hydraulic Road, Woodburn Road, Rio Mills Road, and the Charlottesville Albemarle Airport (CHO) to the east; and Meadow Creek, Polo Grounds Road, Proffit Road, and Pritchett Lane to the west. The southern portion of the study area is bounded by the City of Charlottesville. Retail centers located within the study area include The Shops at Stonefield, Fashion Square Mall, the Rio Hill Shopping Center, the Walmart Supercenter, and the Hollymead Town Center. Employment centers include Charlottesville-Albemarle Airport (CHO), North Fork – A UVA Discovery Park, and the National Ground Intelligence Center (NGIC).

Currently, fixed-route service in the study area is provided by CAT Routes 5, 7, 8, 11, and 12 and the Jaunt 29 North and Buckingham CONNECT (North). Jaunt also provides the following demand response service:

- Albemarle Demand Response transports riders within Albemarle County.
- Link services transport riders from urban Albemarle County to and from other regions, including Earlysville, Crozet, Keswick, Esmont-Scottsville, and State Route 20 North.
- Jaunt ADA paratransit transports riders within the ADA area, which is defined as a three-quarter-mile buffer around CAT fixed-route service.

Ripe for service expansion, the US-29 corridor is the second busiest transit corridor in the region. In 2015, in its listing of Urban Development Areas — places for compact, mixed use urban development that can accommodate 10 to 20 years of growth and are established to improve coordination between transportation and land use — the Albemarle County Comprehensive Plan included two communities — Hollymead and Piney Mountain – and two neighborhoods — the US-29 North study area west of US-29 and south of the Rivanna River, and the US-29 North study area east of US-29 and south of the Rivanna River — along the US-29 corridor.





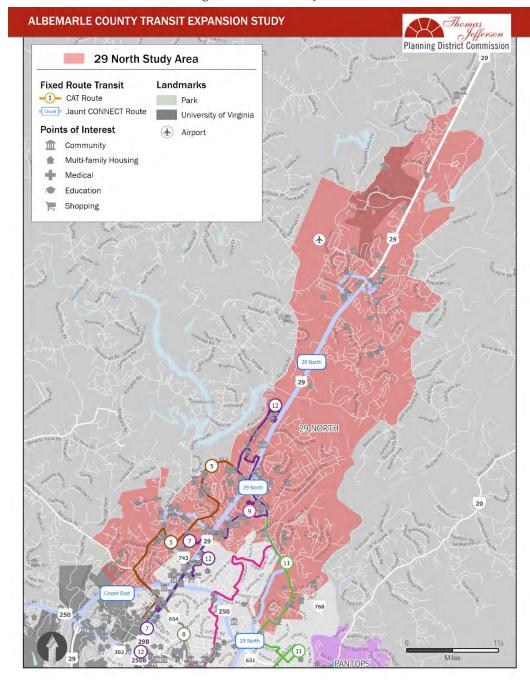


Figure 2: 29 North Study Area

Regional Planning Context

Regional planning efforts in the US-29 North corridor are worthy of consideration when planning transit expansion. Albemarle County's Places29 Master Plan, adopted in 2011 with a 20-year timeframe, identifies transportation improvement projects deemed essential for maintaining and improving traffic flow in response to growing development on the US-29 corridor.

Since the plan's adoption, Albemarle County has implemented several infrastructure projects that could shape transportation in the region, including:





- The widening US-29 from four to six lanes between Polo Grounds Road and Towncenter Drive.
- The extension of Berkmar Drive north from its current terminus at Hilton Heights Road to Towncenter Drive, including a bridge spanning the South Fork Rivanna River. Berkmar Drive runs parallel to Route 29 to the west and offers an alternative for local traffic traveling between downtown Charlottesville to the developed Hollymead area, CHO, and a county park at Chris Greene Lake. This project also included the construction of bike lanes and a multi-use path.

In addition, the Albemarle County Comprehensive Plan, adopted in 2015, outlines goals for increasing the supply of affordable housing for households with incomes between zero percent and 80 percent of area median income, through rezoning and incentives to developers. To prepare for future growth, the County's policy is to locate the majority of new housing units in defined development areas.

Study Area 2: Pantops

The Pantops study area, shown in **Figure 3**, is bounded by the Rivanna River to the west, Interstate 64 to the south, and Cason Farm Road, and Hyland Ridge Drive to the northeast. US-250 cuts through the middle Pantops study area, while State Route 20 (Stony Point Road) runs along the northeast region of the study area.

Retail and employment centers include Pantops Shopping Center, Rivanna Ridge Shopping Center, Martha Jefferson Hospital, and Peter Jefferson Place. Key residential neighborhoods and developments include Fontana, the Avemore Apartments, and the Wilton Farm Apartments. Currently, CAT Route 10 and Jaunt Buckingham CONNECT (east iteration) serve the study area. Jaunt also provides demand response service to and from Pantops:

- Albemarle Demand Response transports riders within Albemarle County.
- Link services transport riders from urban Albemarle County to and from other regions, including Earlysville, Crozet, Keswick, Esmont-Scottsville, and State Route 20 North.
- Jaunt ADA paratransit transports riders within the ADA area, which is defined as a three-quarter-mile buffer around CAT fixed-route service.





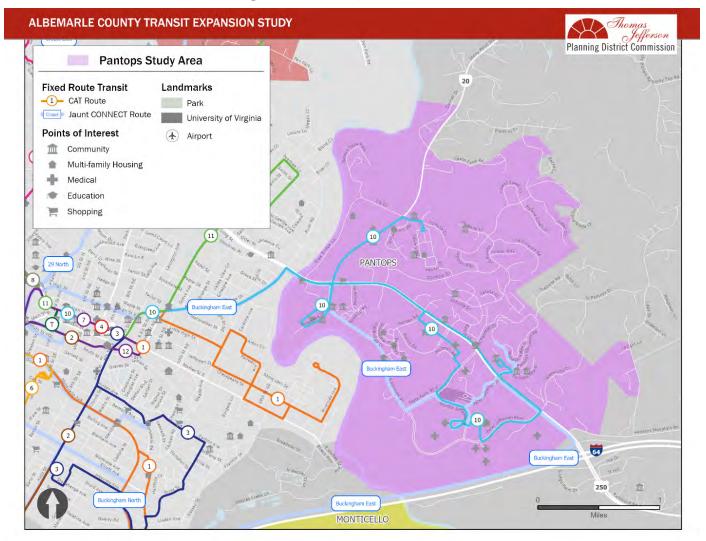


Figure 3: Pantops Study Area

Regional Planning Context

Pantops is a major commercial and residential area served by limited transit. According to the Pantops Master Plan, adopted in June 2019 by Albemarle County, community members cite traffic congestion as an important issue. While US-250 and Stony Point Road experience congestion during peak travel times, ongoing development could worsen traffic congestion, as could the region's high private vehicle mode share: as cited in the Pantops Master Plan, it is estimated that over 95 percent of Pantops residents who work outside of the home commute by car.

The Master Plan includes transportation goals, such as improved connectivity across US-250 and the expansion of transportation choices. Currently, US-250, which bisects the region, is particularly difficult and unsafe to cross on foot or bicycle. This issue has unfortunate consequences for cross-region travel, as those living in neighborhoods north of the corridor cannot easily access commercial and office uses south of US-250, unless traveling by vehicle.

In addition, Albemarle County intends for areas designated as Centers and Districts to be Pantops' most active places, with community amenities and multimodal access. Development within Centers and Districts should





also focus on promoting walkability and public outdoor amenities, such as green space. Urban Centers identified in Pantops are the Riverbend Urban Center (in the vicinity of Pantops Shopping Center) and Rivanna Ridge (in the vicinity of Rivanna Ridge Shopping Center). Plan-identified Districts include an Employment District centered around employers at Martha Jefferson Hospital and Peter Jefferson Place, and a Recreational District at Darden Towe Park.

Study Area 3: Monticello

The Monticello study area, shown in **Figure 5**, is bounded by Interstate 64 to the north; Thomas Jefferson Parkway to the southwest; and the Rivanna River to the northeast. Thomas Jefferson's Monticello is a UNESCO World Heritage Site that receives about 500,000 visitors per year. With James Monroe's Highland three miles down the road, the area is an important historical and cultural destination.

While CAT Route 1 and Jaunt Buckingham East run along the edge of the study area, there is currently no fixed-route public transit that serves the Monticello Visitor Center or the Jefferson home. Visitors to Monticello must park at the Visitor Center and either walk the half-mile trail or take a shuttle bus to the mountain-top home. However, Jaunt provides the following demand response service in the region:

- Albemarle Demand Response transports riders within Albemarle County.
- Jaunt ADA paratransit transports riders within the ADA area, which is defined as a three-quarter-mile buffer around CAT fixed-route service.



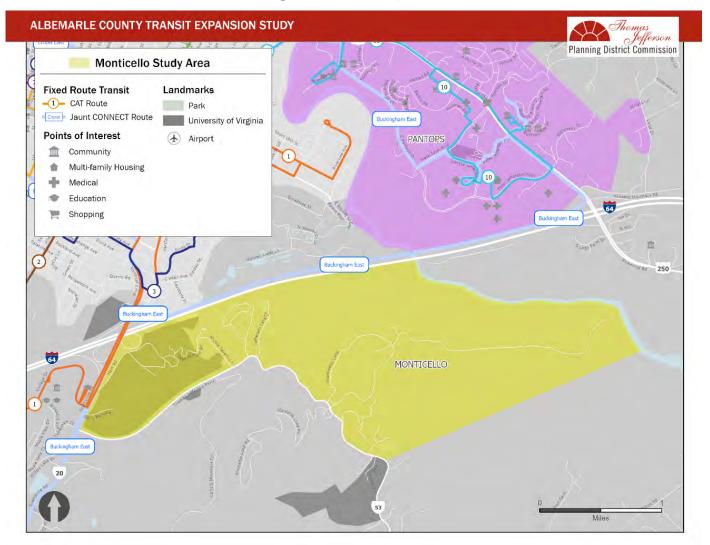


Figure 4: Monticello Study Area

Regional Planning Context

The 2017 Charlottesville to Monticello & Beyond report explores methods to connect the Saunders-Monticello Trail, a two-mile path from off Dairy Barn Road to the Monticello Loop leading to the Visitors Center, with the City of Charlottesville. A public outreach effort associated with the report revealed that respondents preferred connections to Piedmont Virginia Community College (PVCC), Morven Farm, the Rivanna Trail, and James Monroe's Highland. Participants also requested bike access as well as a shuttle bus linking the trail's end to key destinations including PVCC, UVA, and the Downtown Mall. Routes recommended in the report are largely dependent on new or updated infrastructure, such as the construction of pedestrian bridges; installation of crosswalks and signalization; and building and repairing of sidewalks.

In addition, while not specifically transportation-related, the Albemarle County Comprehensive Plan focuses on strategies to protect Monticello's viewshed. Recommendations include making the Monticello Viewshed Map, which represents all properties potentially visible from the Monticello mountaintop, available to the public. The plan also recommends assisting land developers in preventing negative visual impacts on the Monticello viewshed.





Market Analysis

More than any other factor, the effectiveness and efficiency of public transportation is determined by density. Where there are higher concentrations of people and/or jobs, transit ridership tends to be higher. At the same time, most transit agencies have a mandate to provide comprehensive service in the communities they serve, and to provide mobility for residents with no other means of transportation. The purpose of this Market Analysis is to both identify strong transit corridors in the Albemarle County region and to highlight areas with relatively high transit need. Thus, the Market Analysis consists of two key components: Transit Potential and Transit Need.

While Transit Potential is an analysis of population and employment density, Transit Need focuses on socio-economic characteristics such as income, automobile availability, age, and disability status that are indicative of a higher propensity to use transit. Transit use is also influenced by land-use and the built environment. If a prospective transit rider can easily walk to a bus stop, they are far more likely to use the service than a resident of a neighborhood with few sidewalks and difficult-to-cross streets. In addition, there are certain land uses—such retail centers, civic buildings, multifamily housing, educational institutions, medical facilities, and major employment centers—that tend to generate transit trips at a relatively higher rate. As such, these ridership generators are included in the maps describing Transit Potential and Transit Need.

Transit Potential

Transit service is generally most effective in areas with high concentrations of residents and/or jobs. The following Transit Potential analysis uses American Community Survey 2019 5-year population and employment projections from the Census. The geographic divisions used to analyze population and employment density in this section are Census Block Groups. Given that densities may be diluted in cases where Block Groups are especially large, this analysis also takes land use and key activity centers into account to assess transit potential.

Population Density

Public transportation is most efficient when it connects population and employment centers where people can easily walk to and from bus stops. The reach of transit is generally limited to within one-quarter mile to one-half mile of the transit line, or a 10-minute walk. For this reason, the size of a transit travel market is directly related to an area's population density. Typically, a density greater than five people per acre is needed to support base-level (hourly) fixed-route transit service. In the following population density maps, yellow areas indicate places where fixed-route service could be feasible, and areas with darker colors have the potential to support more frequent service.

While much of the 29 North study area, shown in **Figure 5**, has low to moderate population density, pockets of higher density can be found around The Shops at Stonefield, Rio Road East, and Hollymead in the US-29 area. Virtually all areas and corridors that have the density to support fixed-route transit service currently have some level of service.

The Pantops study area, shown in **Figure 6**, has a low population density, though the area north of US-250 is ripe for growth because of construction of new housing developments. The entirety of the Monticello study area, shown in **Figure 7**, has a population density of fewer than one person per acre. This result is expected, given that population density is calculated based on residential rather than tourist population.





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson Planning District Commission Population Density: 29 North Study Area **Fixed Route Transit** Landmarks -(1)- CAT Route Park Crozet Jaunt CONNECT Route University of Virginia Points of Interest Airport Community **Study Areas** Multi-family Housing Medical Education Shopping Population per Acre (by Block Group) > 60 people / acre 31 - 60 people / acre 16 - 30 people / acre 6 - 15 people / acre 1 - 5 people / acre < 1 person / acre

Figure 5: 29 North Population Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson
Planning District Commission Population Density: Pantops Study Area **Fixed Route Transit** Landmarks -(1)- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community **Study Areas** Multi-family Housing Medical Education Mark Shopping Population per Acre (by Block Group) > 60 people / acre PANTOPS 31 - 60 people / acre 16 - 30 people / acre 6 - 15 people / acre 1 - 5 people / acre < 1 person / acre

MONTICELLO

Figure 6: Pantops Population Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Population Density: Monticello Study Area **Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community Population per Acre (by Block Group) Multi-family Housing > 60 people / acre Medical 31 - 60 people / acre Education 16 - 30 people / acre Shopping PANTOPS 6 - 15 people / acre 1 - 5 people / acre < 1 person / acre MONTICELLO

Figure 7: Monticello Population Density





Employment Density

Given that traveling to and from work accounts for the largest single segment of transit trips in most markets, the location and number of jobs in a region are also strong indicators of transit demand. Transit that serves areas of high employment density also provides key connections to job opportunities. Like population density, an employment density greater than five jobs per acre can typically support base-level fixed-route service. This density corresponds with yellow areas in the following maps.

In the 29 North study area, shown in **Figure 8**, the area around The Shops at Stonefield has a high employment density. Jobs are also concentrated around the Seminole Square Shopping Center, Branchlands, Fashion Square Mall, and the 29th Place Mall. Employment density dissipates further outside the University region.

In the Pantops study area, shown in **Figure 9**, the area south of US-250 (Richmond Road) has moderate employment density. Employment centers in this area include Martha Jefferson Hospital, Peter Jefferson Place, the Rivanna Ridge Shopping Center, Pantops Shopping Center, and the stretch of car dealerships along US-250 (Richmond Road).

The entire Monticello study area, shown in **Figure 10**, has an employment density of fewer than one job per acre. Low density numbers are expected, because the density of the Monticello region is diluted by the size of the Census Block Group used for the analysis.





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson Planning District Commission **Employment Density: 29 North Study Area Fixed Route Transit** Landmarks -(1)- CAT Route Park Crozet Jaunt CONNECT Route University of Virginia Points of Interest Airport Community **Study Areas** Multi-family Housing Medical Education Shopping Jobs per Acre (by Block Group) > 60 jobs / acre 31 - 60 jobs / acre 16 - 30 jobs / acre 6 - 15 jobs / acre 1-5 jobs / acre < 1 job / acre

Figure 8: 29 North Employment Density





Thomas Jefferson Planning District Commission ALBEMARLE COUNTY TRANSIT EXPANSION STUDY **Employment Density: Pantops Study Area Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community **Study Areas** Multi-family Housing Medical Education Shopping Jobs per Acre (by Block Group) > 60 jobs / acre PANTOPS 31 - 60 jobs / acre 16 - 30 jobs / acre 6 - 15 jobs / acre 1 - 5 jobs / acre MONTICELLO

Figure 9: Pantops Employment Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission **Employment Density: Monticello Study Area** 0 10 **Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community Jobs per Acre (by Block Group) Multi-family Housing > 60 jobs / acre Medical 31 - 60 jobs / acre Education 16 - 30 jobs / acre Shopping PANTOPS 6 - 15 jobs / acre 1 - 5 jobs / acre < 1 job / acre MONTICELLO

Figure 10: Monticello Employment Density





Transit Potential

Transit Potential combines the population and employment densities for each Block Group to indicate the viability of fixed-route service in an area. In the 29 North study area, shown in **Figure 11**, moderate-to-high transit potential is found primarily south of the Rivanna River. The highest density in the corridor is found near Commonwealth Drive, between Hydraulic and Greenbriar Drive, which includes The Shops at Stonefield and the Commonwealth Drive neighborhood. A pocket of moderate Transit Potential also exists in the Hollymead area. Most of the areas with density sufficient to support fixed-route service are currently served by at least one CAT or Jaunt route. The largest service gaps include neighborhoods northeast of Rio Road and Hollymead area.

In the Pantops area, shown in **Figure 12**, moderate Transit Potential is found south of US-250 (Richmond Road). This Transit Potential southwest of US-250 (Richmond Road) is driven primarily by relatively high employment density, including retail, medical, and community services. The area north of US-250 (Richmond Road) is seeing growth in population density, including new multifamily housing.

The Monticello area, shown in **Figure 13**, shows a low Transit Potential due to the population and employment density being diluted over a large area. However, transit service is most efficient when destinations and connecting services are concentrated, as is the case with the Monticello Visitor's Center.





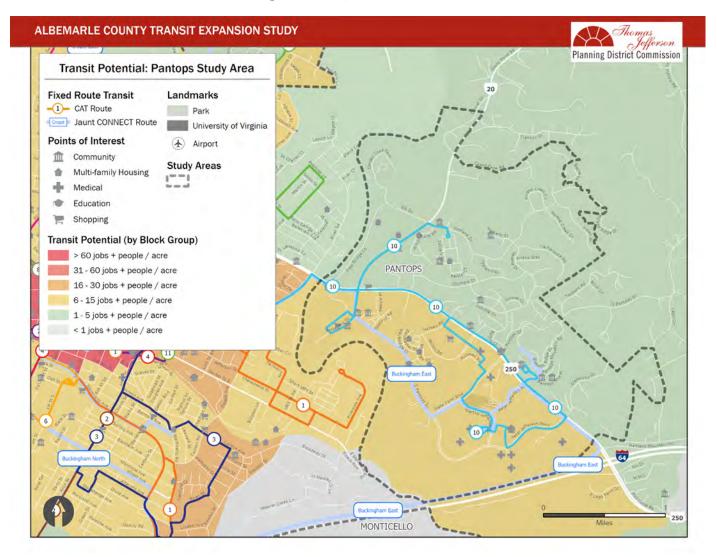
ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson
Planning District Commission Transit Potential: 29 North Study Area **Fixed Route Transit** Landmarks -(1)- CAT Route Park Grozet Jaunt CONNECT Route University of Virginia Points of Interest Airport Community **Study Areas** Multi-family Housing Medical Education Shopping Transit Potential (by Block Group) > 60 jobs + people / acre 31 - 60 jobs + people / acre 16 - 30 jobs + people / acre 6 - 15 jobs + people / acre 1 - 5 jobs + people / acre < 1 jobs + people / acre

Figure 11: 29 North Transit Potential





Figure 12: Pantops Transit Potential



ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Transit Potential: Monticello Study Area **Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community Transit Potential (by Block Group) Multi-family Housing > 60 jobs + people / acre Medical 31 - 60 jobs + people / acre Education 16 - 30 jobs + people / acre Shopping **PANTOPS** 6 - 15 jobs + people / acre 1 - 5 jobs + people / acre < 1 jobs + people / acre MONTICELLO

Figure 13: Monticello Transit Potential





Transit Need

Above all, public transportation is a mobility tool. Certain population subgroups have a relatively higher propensity to use transit as their primary means of local and regional transportation. These groups include:

- People without access to an automobile, whether it be by choice or due to financial or legal reasons, often have no other transportation options besides using transit.
- Persons with disabilities, many of whom cannot drive and/or have difficulty driving.
- Low-income individuals, typically because transit is less expensive than owning and operating a car.
- Youth / young adults who are either too young to drive or have in recent years shown a greater interest in transit, walking, and biking than in driving.
- Older adults, who as they age, often become less comfortable or less able to operate a vehicle.

The maps that follow (**Figure 14** – **Figure 28**) show the densities of each of these five high transit propensity population subgroups by Census Block Group to help determine where the need for transit service in the study area is greatest.

With density ranges differing for each demographic analysis, the maps utilize a Jenks Natural Breaks Classification Method to assign each block group to one of five density categories. For each analysis, depending on the natural break category into which it falls, a score from 1 (lowest density) to 5 (highest density) is assigned to each block group. Following the analysis of each individual factor, the Transit Need Index maps (Figure 29 – Figure 31) show the composite Transit Need score for each study area based on the sum of its scores in each preceding analysis. For example, if a block group falls in the highest density category for each of the five demographic analyses, it will end up with a Transit Need Index value of 25 (5+5+5+5). The lowest possible Transit Need Index score is 5 (1+1+1+1+1).

While the Transit Potential analysis highlights areas of the study area region with actual densities to support fixed-route service, Transit Need is a relative measure that estimates the need for transit compared to other block groups. There is not, however, a specific Transit Need Index score or value that represents a threshold for supporting fixed-route service. Instead, Transit Need should be considered alongside Transit Potential. If two areas have similar and sufficient Transit Potential, the area with higher Transit Need should be prioritized for service. Conversely, in some locations, while the density of transit-dependent population groups may be relatively high, if the total population and/or employment density are still quite low, the potential to generate substantial fixed-route transit ridership will also remain low.

Zero-Vehicle Household Density

Figure 14 shows the density of zero-vehicle households in the 29 North study area. The highest densities of zero-vehicle households can be found in the area surrounding multifamily housing east of Georgetown Road. The area of multifamily housing northeast of Barracks Road, The Shops at Stonefield and Commonwealth Drive neighborhood, and the neighborhoods south of Rio Road bordering the City of Charlottesville all have high densities of zero-vehicle households. All areas with a score of 4 or 5 are currently served by public transit.

In Pantops, shown in **Figure 15**, the area south of US-250 has a moderate density of zero-vehicle households. The entire Monticello study area, shown in **Figure 16**, has a zero-vehicle household density score of 1.





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson
Planning District Commission Zero-Car Households per Acre: 29 North Study Area **Fixed Route Transit** Landmarks -1 CAT Route Park Grozet Jaunt CONNECT Route University of Virginia Points of Interest (A) Airport Community Study Areas Multi-family Housing Medical Education Shopping Zero-Car Households per Acre (Score) > 1.02 (5 Points) 0.68 - 1.02 (4 Points) 0.32 - 0.67 (3 Points) 0.09 - 0.31 (2 Points) < 0.08 (1 Point) 29 NORTH

Figure 14: 29 North Zero-Car Households Density





Thomas Jefferson Planning District Commission ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Zero-Car Households per Acre: **Pantops Study Area Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community **Study Areas** Multi-family Housing Medical Education M Shopping Zero-Car Households per Acre (Score) PANTOPS > 1.02 (5 Points) 0.68 - 1.02 (4 Points) 0.32 - 0.67 (3 Points) 0.09 - 0.31 (2 Points) < 0.08 (1 Point) MONTICELLO

Figure 15: Pantops Zero-Car Households Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Zero-Car Households per Acre: Monticello Study Area **Fixed Route Transit** Landmarks -1 CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community Zero-Car Households per Acre (Score) Multi-family Housing > 1.02 (5 Points) Medical 0.68 - 1.02 (4 Points) Education 0.32 - 0.67 (3 Points) Shopping **PANTOPS** 0.09 - 0.31 (2 Points) < 0.08 (1 Point) MONTICELLO

Figure 16: Monticello Zero-Car Household Density





Disabled Population Density

In the 29 North study area, shown in **Figure 17**, the highest concentration of disabled populations can be found in the Barracks West area, and the neighborhoods south of Rio Road bordering the City of Charlottesville. The area south of Georgetown Road and bordering Charlottesville and area including the Shops at Stonefield and Commonwealth Drive neighborhood also have a high density of disabled populations. All areas with a score of 4 or 5 are currently served by public transit.

In Pantops, shown in **Figure 18**, the entire study area has a low, but not the lowest, concentration of disabled populations. The Monticello area, shown in **Figure 19**, has a disabled population per acre lower than 0.12.





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson
Planning District Commission Disabled Population per Acre: 29 North Study Area **Fixed Route Transit** Landmarks -1 CAT Route Park Grozet Jaunt CONNECT Route University of Virginia Points of Interest (A) Airport Community Study Areas Multi-family Housing Medical Education Shopping Disabled Population per Acre (Score) > 1.35 (5 Points) 0.87 - 1.35 (4 Points) 0.46 - 0.86 (3 Points) 0.13 - 0.45 (2 Points) < 0.12 (1 Point) 29 NORTH

Figure 17: 29 North Disabled Population Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Disabled Population per Acre: **Pantops Study Area Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community **Study Areas** Multi-family Housing Medical Education M Shopping Disabled Population per Acre (Score) > 1.35 (5 Points) **PANTOPS** 0.87 - 1.35 (4 Points) 0.46 - 0.86 (3 Points) 0.13 - 0.45 (2 Points) < 0.12 (1 Point) MONTICELLO

Figure 18: Pantops Disabled Population Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Disabled Population per Acre: Monticello Study Area **Fixed Route Transit** Landmarks -(1)- CAT Route Park Croset Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community Disabled Population per Acre (Score) Multi-family Housing > 1.35 (5 Points) 0.87 - 1.35 (4 Points) Education 0.46 - 0.86 (3 Points) Mark Shopping PANTOPS 0.13 - 0.45 (2 Points) < 0.12 (1 Point) MONTICELLO

Figure 19: Monticello Disabled Population Density





Low-Income Population Density

In the 29 North study area, shown in **Figure 20**, a higher density of low-income population – defined as population living in a household with annual income less than 150 percent of the federal poverty line – can be found in Barracks West area, the multifamily housing south of Georgetown Road, and The Shops at Stonefield and Commonwealth Drive neighborhood. Each of these areas is currently served by public transit.

Both the entire Pantops study area, shown in **Figure 21**, and the entire Monticello study area, shown in **Figure 22**, have a low-income population density score of 1.





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson
Planning District Commission Low-Income Population per Acre: 29 North Study Area **Fixed Route Transit** Landmarks -1 CAT Route Park Crosset Jaunt CONNECT Route University of Virginia Points of Interest (A) Airport Community Study Areas Multi-family Housing Medical Education Shopping Low-income Population per Acre (Score) > 13.71 (5 Points) 5.10 - 13.71 (4 Points) 2.00 - 5.09 (3 Points) 0.67 - 1.99 (2 Points) < 0.67 (1 Point) 29 NORTH

Figure 20: 29 North Low-Income Population Density





Thomas Jefferson Planning District Commission ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Low-Income Population per Acre: **Pantops Study Area Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community **Study Areas** Multi-family Housing Medical Education M Shopping Low-income Population per Acre (Score) PANTOPS > 13.71 (5 Points) 5.10 - 13.71 (4 Points) 2.00 - 5.09 (3 Points) 0.67 - 1.99 (2 Points) < 0.67 (1 Point) MONTICELLO

Figure 21: Pantops Low-Income Population Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Low-Income Population per Acre: Monticello Study Area 250 10 **Fixed Route Transit** Landmarks -(1)- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community Low-income Population per Acre (Score) Multi-family Housing > 13.71 (5 Points) 5.10 - 13.71 (4 Points) Education 2.00 - 5.09 (3 Points) Shopping **PANTOPS** 0.67 - 1.99 (2 Points) < 0.67 (1 Point) MONTICELLO

Figure 22: Monticello Low-Income Population Density





Youth/Young Adult Population Density

The youth and young adult population density shows the amount of the population per acre that is between 15 and 24 years old. In the 29 North study area, shown in **Figure 23**, the highest density of youths and young adults is in the Barracks West area, the area south of Georgetown Road, and The Shops at Stonefield and the Commonwealth Drive neighborhood. Most of the moderate to high concentrations of youths and young adults are closer towards the City of Charlottesville, but there is a pocket of moderate density around the Hollymead and Forest Lakes neighborhoods. All areas with a score of 4 or 5 are currently served by public transit.

Both the entire Pantops study area, shown in **Figure 24**, and the entire Monticello study area, shown in **Figure 25**, have a youth and young adult population density score of 1.



ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson
Planning District Commission Youth/Young Adult Population per Acre: 29 North Study Area **Fixed Route Transit** Landmarks -1 CAT Route Park Grozet Jaunt CONNECT Route University of Virginia Points of Interest (A) Airport Community Study Areas Multi-family Housing Medical Education Shopping Youth/Young Adult Population per Acre (Score) > 15.44 (5 Points) 10.13 - 15.44 (4 Points) 5.99 - 10.12 (3 Points) 2.08 - 5.98 (2 Points) < 2.08 (1 Point) 29 NORTH

Figure 23: 29 North Youth/Young Adult Population Density





Thomas Jefferson Planning District Commission ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Youth/Young Adult Population per Acre: **Pantops Study Area Fixed Route Transit** Landmarks -1 CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport Community **Study Areas** Multi-family Housing Education Shopping Youth/Young Adult Population per Acre (Score) > 15.44 (5 Points) **PANTOPS** 10.13 - 15.44 (4 Points) 5.99 - 10.12 (3 Points) 2.08 - 5.98 (2 Points) < 2.08 (1 Point) MONTICELLO

Figure 24: Pantops Youth/Young Adult Population Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Youth/Young Adult Population per Acre: Monticello Study Area **Fixed Route Transit** Landmarks -1- CAT Route Park Grozot Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community Youth/Young Adult Population per Acre (Score) Multi-family Housing > 15.44 (5 Points) 10.13 - 15.44 (4 Points) Education 5.99 - 10.12 (3 Points) Shopping 2.08 - 5.98 (2 Points) **PANTOPS** < 2.08 (1 Point) MONTICELLO

Figure 25: Monticello Youth/Young Adult Population Density





Older Adult Population Density

Figure 26 shows the density of older adults in the 29 North study area. The highest densities of older adults are south of Rio Road, with one pocket of high density in Hollymead. Almost every neighborhood east of Route 29 in the study area has a score of 2 points or higher. All areas with a score of 4 or 5 are currently served by public transit.

The entire Pantops study area, shown in **Figure 27**, has a moderate density of older adults. This is expected because Pantops has an older population relative to the rest of Albemarle County. The entire Monticello study area, shown in **Figure 28**, has an older adult population density score of 1.



ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson
Planning District Commission Older Adult Population per Acre: 29 North Study Area **Fixed Route Transit** Landmarks -1 CAT Route Park Grozet Jaunt CONNECT Route University of Virginia Points of Interest (A) Airport Community Study Areas Multi-family Housing Medical Education Shopping Senior Population per Acre (Score) > 1.20 (5 Points) 0.70 - 1.20 (4 Points) 0.30 - 0.69 (3 Points) 0.09 - 0.29 (2 Points) < 0.09 (1 Point)

Figure 26: 29 North Older Adult Population Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Older Adult Population per Acre: **Pantops Study Area Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport Community **Study Areas** Multi-family Housing Education Shopping Senior Population per Acre (Score) > 1.20 (5 Points) PANTOPS 0.70 - 1.20 (4 Points) 0.30 - 0.69 (3 Points) 0.09 - 0.29 (2 Points) < 0.09 (1 Point) MONTICELLO

Figure 27: Pantops Older Adult Population Density





ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Older Adult Population per Acre: Monticello Study Area **Fixed Route Transit** Landmarks -1- CAT Route Park Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community Senior Population per Acre (Score) Multi-family Housing > 1.20 (5 Points) 0.70 - 1.20 (4 Points) Education 0.30 - 0.69 (3 Points) Shopping **PANTOPS** 0.09 - 0.29 (2 Points) < 0.09 (1 Point) MONTICELLO

Figure 28: Monticello Older Adult Population Density





Transit Need

The following maps (**Figure 29** – **Figure 31**) combine the five density maps into one composite Transit Need Index for each study area. In the 29 North study area, shown in Figure 29, Transit Need is highest in the southwestern leg of the study area, between Barracks Road and Greenbrier Drive. The areas with the highest Transit Need align fairly closely to areas with highest fixed-route Transit Potential (**Figure 11**). The largest service gaps exist in the neighborhoods northeast of Rio Road.

Transit Need in Pantops, shown in **Figure 30**, is relatively low compared to nearby areas. However, the area is rich in regionally significant destinations that may drive transit activity.

Transit Need in Monticello, shown in **Figure 31**, is low compared to nearby areas. However, Monticello attracts around 500,000 visitors per year, which is not reflected in the metrics comprising Transit Need.





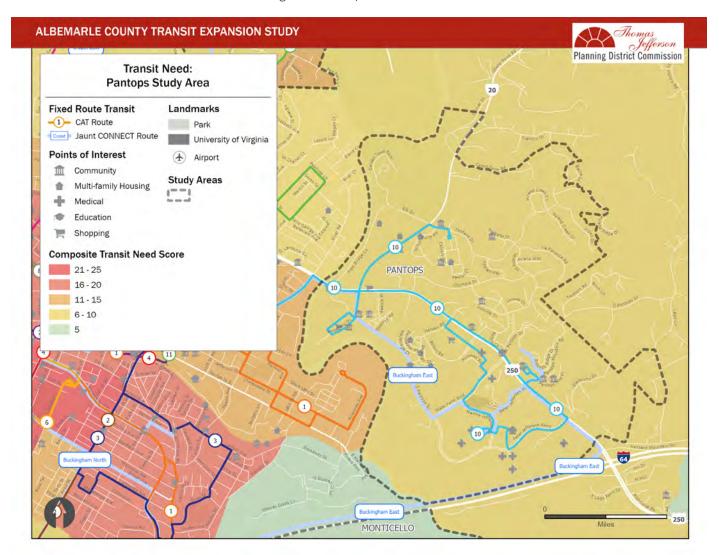
ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Jefferson
Planning District Commission **Transit Need:** 29 North Study Area **Fixed Route Transit** Landmarks -1 CAT Route Park Crozet Jaunt CONNECT Route University of Virginia Points of Interest Airport Community **Study Areas** Multi-family Housing Medical Education Shopping **Composite Transit Need Score** 21 - 25 16 - 20 11 - 15 6-10 5

Figure 29: 29 North Transit Need





Figure 30: Pantops Transit Need



ALBEMARLE COUNTY TRANSIT EXPANSION STUDY Thomas Jefferson Planning District Commission Transit Need: Monticello Study Area Landmarks **Fixed Route Transit** -1- CAT Route Park Croset Jaunt CONNECT Route University of Virginia Points of Interest Airport m Community **Composite Transit Need Score** Multi-family Housing 21 - 25 16 - 20 Education 11 - 15 Shopping **PANTOPS** 6-10 MONTICELLO

Figure 31: Monticello Transit Need





Service Analysis

This section provides detailed profiles of current transit service to and from the US-29 North, Pantops, and Monticello study areas. The study areas are all served by Jaunt demand response service, which serves the entirety of Albemarle County, and CAT ADA service (provided by Jaunt), which serves the area within three quarters of a mile of CAT fixed-route service. UVA's University Transit Service (UTS) does not serve the study areas, which are served by the following fixed routes:²

Charlottesville Area Transit (CAT):

- Route 5: Barracks Road Shopping Center / Fashion Square Mall / Walmart (29 North)
- Route 7: Downtown / Barracks Road Shopping Center / Fashion Square Mall (29 North)
- Route 8: Downtown / Barracks Road Shopping Center / Seminole Square (29 North)
- Route 10: Downtown / Sentara Martha Jefferson Hospital (Pantops)
- Route 11: Downtown / Fashion Square Mall (29 North).

Jaunt:

- 29 North CONNECT (29 North)
- Buckingham CONNECT North (29 North)
- Buckingham CONNECT East (Pantops).

For each route, the profiles list the current operating characteristics³ and major ridership generators. For CAT routes, route strengths and weaknesses are evaluated alongside current CAT proposals for short-term service improvement. Jaunt profiles evaluate strengths and weaknesses alongside proposed service improvement opportunities. Each profile also summarizes ridership prior to and during the COVID-19 pandemic. CAT weekday ridership is summarized by stop and trip, including maximum load by trip. As Jaunt fixed-route ridership was unavailable at the stop or trip level, the 29 North and Buckingham CONNECT route profiles summarize total route average daily ridership. Jaunt demand response ridership patterns are also summarized in the form of a heat map. **Table 1** summarizes the date ranges associated with each agency's ridership data used in this analysis.

Table 1: CAT and Jaunt Route Profiles Ridership Data Summary

Agency	Dataset	Date Range
Charlottesville Area Transit (CAT)	Fixed-Route Weekday Ridership, Pre- COVID-19	September 11 – September 15, 2017
	Fixed-Route Weekday Ridership, Current	April 1 - May 31, 2021
Jaunt	Fixed-Route Weekday Ridership, Pre- COVID-19 ⁴	July 1, 2018 - February 29, 2020
	Fixed-Route Weekday Ridership, Current	May 1, 2020 - March 31, 2021

² Although Monticello is not served by fixed-route service, Jaunt Albemarle demand response or ADA passengers may reserve trips to the historical site.

⁴ Jaunt fixed-route ridership is currently unavailable at the stop and trip level due to data limitations.





³ Operating characteristics are current as of August 2021. CAT is currently operating "Reduced Lifeline" service to address reduced ridership patterns resulting from the COVID-19 pandemic.

Agency	Dataset	Date Range
	Demand Response Weekday Ridership, Pre-COVID-19	July 1, 2018 – February 29, 2020
	Demand Response Weekday Ridership, Current	March 1, 2020 – June 30, 2020



Route Profiles: Charlottesville Area Transit



Route 5: Barracks Road Shopping Center / Fashion Square Mall / Walmart



Study Area: US-29 North

Operates between the Barracks Road Shopping Center and Walmart, via Barracks Road, Georgetown Road, Commonwealth Drive, Rio Road, and Berkmar Drive.

Service Span	Average Service Frequency	Major Generators
Monday-Friday: 6:30 a.m. – 9:00 p.m.	Peak: 30 minutes Off-Peak: 30 minutes	 Barracks Road Shopping Center Shops at Stonefield Fashion Square Mall Virginia Workforce Center Albemarle Square Shopping Center Rio Hill Shopping Center US-29 Walmart
Saturday: 6:30 a.m. – 9:00 p.m.	All Day: 30 minutes	
Sunday: No service	No Service	
Stre	ngths	Weaknesses
Clasifos fraguency	20	Circuitous alignment to Eachian Causes Mall

- Clockface frequency (30 minutes)
- Relatively extensive span of service
- Multiple connection opportunities available
- Identical weekday and Saturday schedules
- Circuitous alignment to Fashion Square Mall
- No Sunday service
- Past challenges with on-time performance
- Poor access to Albemarle High School

Upcoming Service Modifications

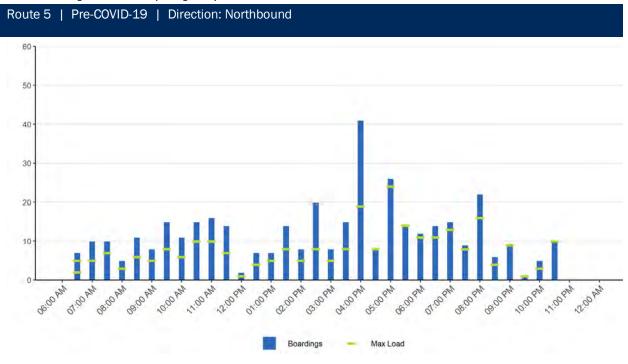
CAT is currently proposing service changes for Fiscal Year 2022. In many cases, recommendations address weaknesses identified above. Service improvements proposed for Route 5 include:

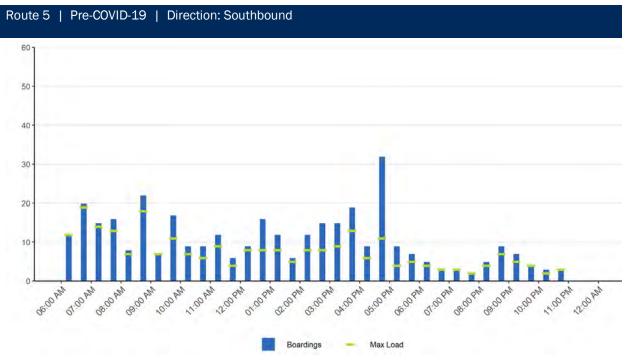
- Improved service between the UVA campus/Hospital and US-29 corridor.
- Termination of the north end of the route at Fashion Square Mall.
- Extension of the south end of the alignment to UVA Hospital.
- Continued operation at 30-minute frequencies on weekdays and Saturdays.



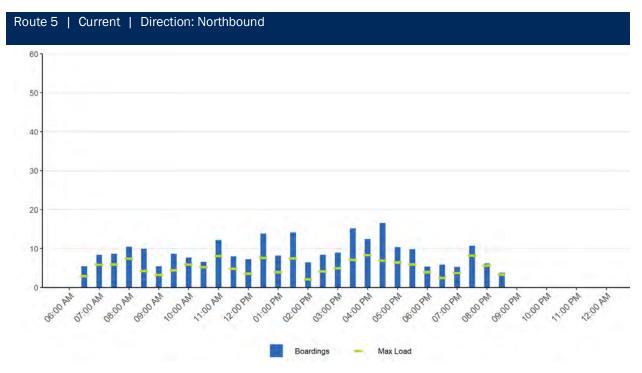


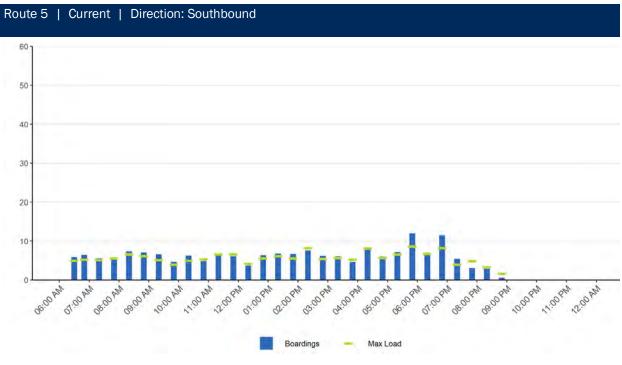
Weekday Ridership by Trip





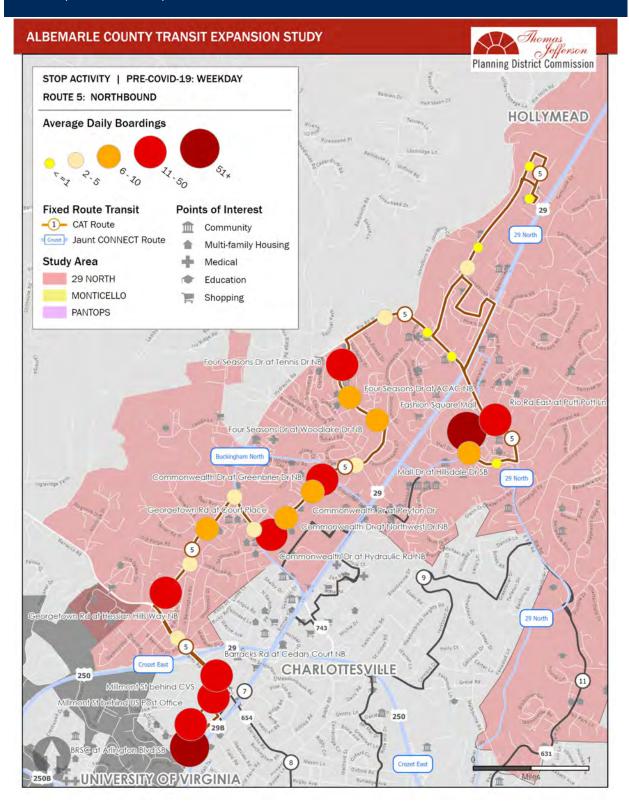






Weekday Ridership by Stop

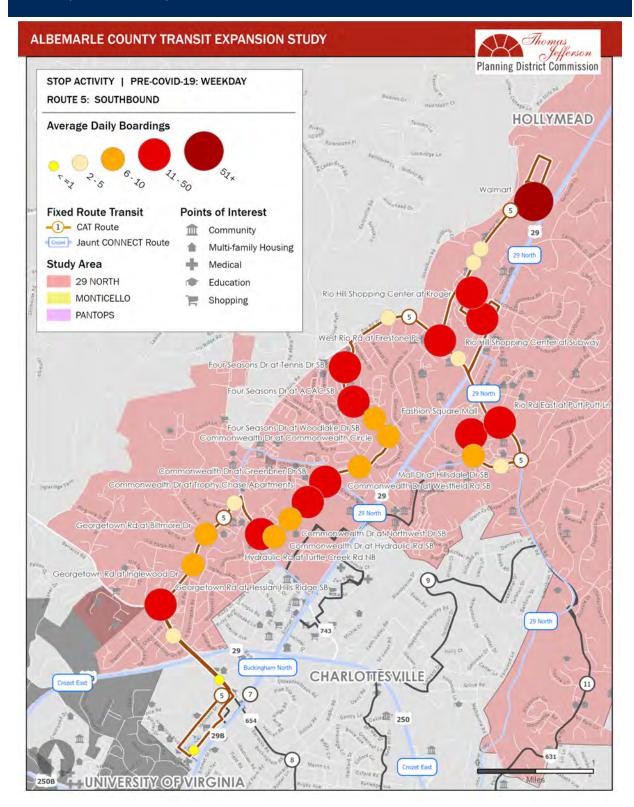
Route 5 | Pre-COVID-19 | Direction: Northbound







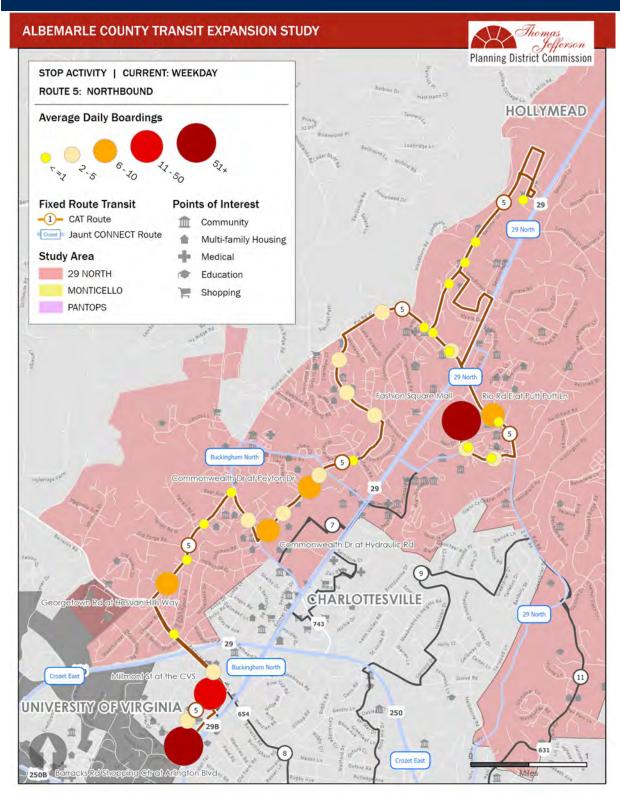
Route 5 | Pre-COVID-19 | Direction: Southbound





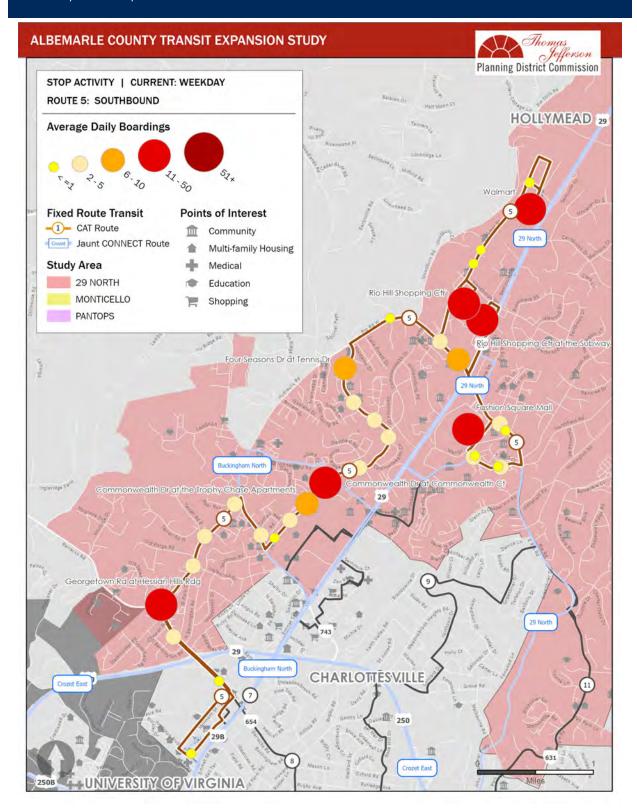


Route 5 | Current | Direction: Northbound





Route 5 | Current | Direction: Southbound





Route 7: Downtown / Barracks Road Shopping Center / Fashion Square Mall



Study Area: US-29 North

Operates between downtown Charlottesville and Fashion Square Mall, via UVA, Barracks Road Shopping Center, Hydraulic Road, and Hillsdale Drive.. Prior to the COVID-19 pandemic, Sunday service along the Route 7 alignment was provided via Route 12.

Service Span	Average Service Frequency	Major Generators
Monday-Friday: 6:35 a.m 9:15 p.m.	Peak: 30 minutes Off-Peak: 30 minutes	 Downtown Mall Amtrak station UVA hospital Barracks Road Shopping Center Seminole Square Shopping Center
Saturday: 6:35 a.m 9:15 p.m.	All Day: 30 minutes	
Sunday: No service	No Service	Shops at StonefieldFashion Square Mall
Stre	engths	Weaknesses
	wn Mall, UVA, UVA hospital, mmercial destinations	 Inconsistent northbound and southbound alignment along Seminole Trail forces out-of-direction travel Past challenges with on-time performance Parallels but does not overlap Route 5 between

- Identical weekday and Saturday schedules
- Parallels but does not overlap Route 5 between Barracks Road Shopping Center and Fashion Square Mall
- Standing passenger loads on several trips prior to COVID
- No Sunday service (provided via Route 12)

Upcoming Service Modifications

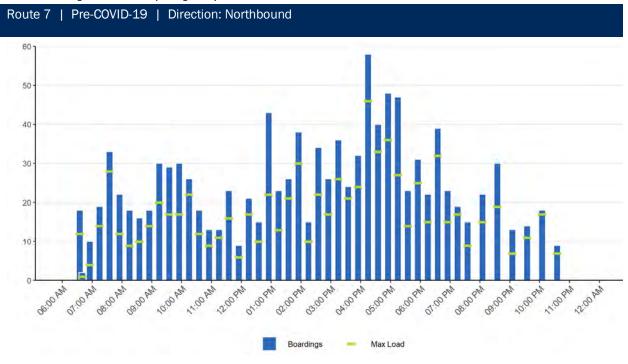
CAT is currently proposing service changes for Fiscal Year 2022. In many cases, recommendations address weaknesses identified above. Service improvements proposed for Route 7 include:

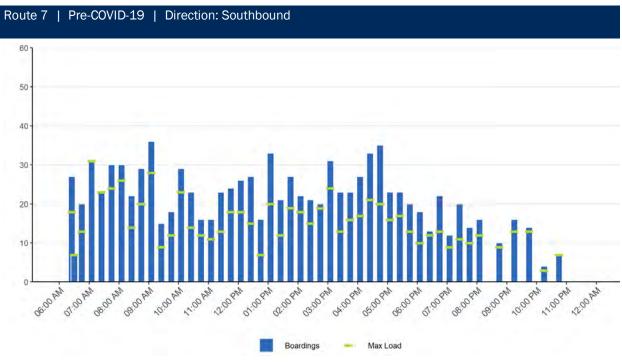
- Extension of route to Walmart.
- Continued operation of 30-minute frequencies, weekdays and Saturdays.
- Route operation on Sundays (60-minute frequencies).
- Provision of supplemental weekday service between downtown and Barracks Center during peak periods, resulting in 15-minute service along this segment.



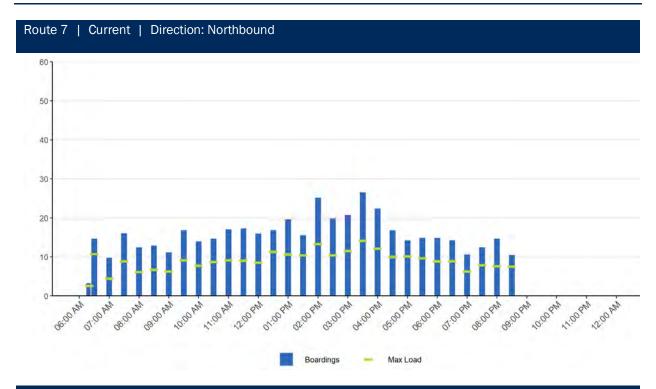


Weekday Ridership by Trip

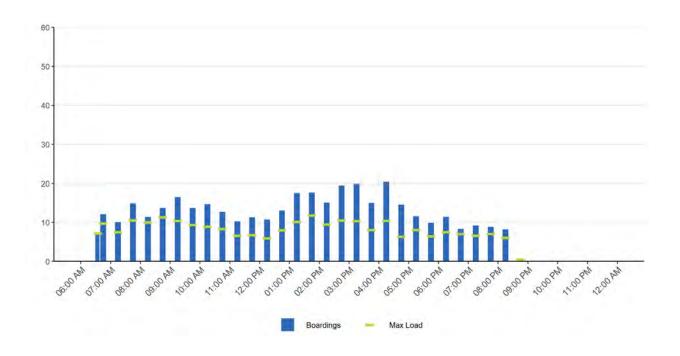








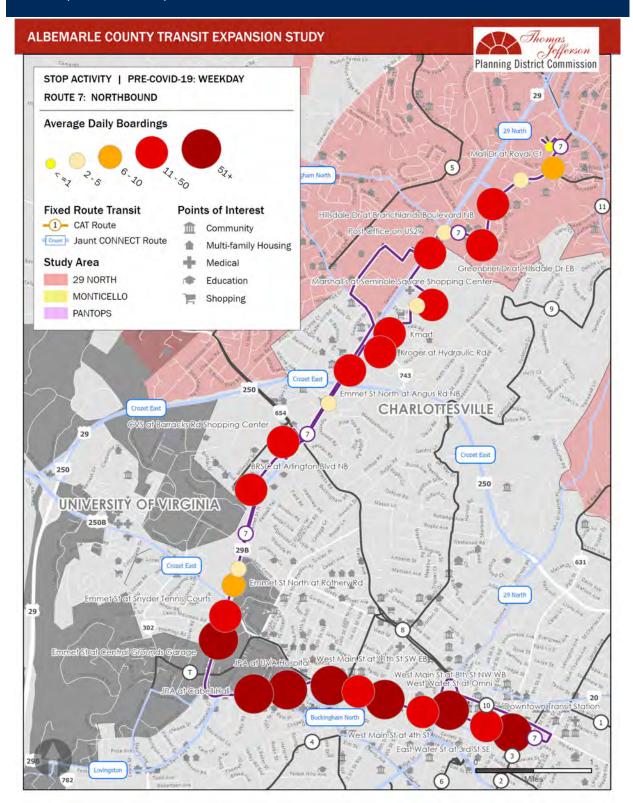
Route 7 | Current | Direction: Southbound





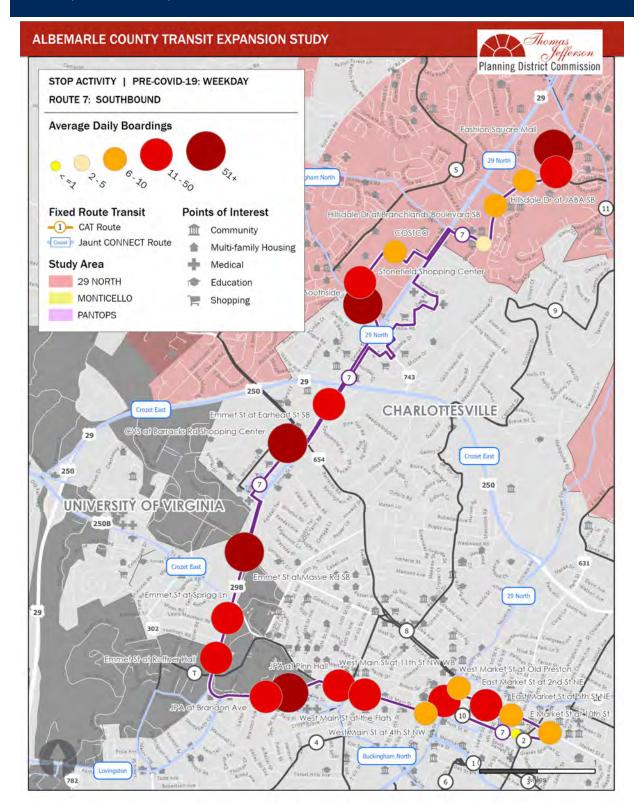
Weekday Ridership by Stop

Route 7 | Pre-COVID-19 | Direction: Northbound





Route 7 | Pre-COVID-19 | Direction: Southbound





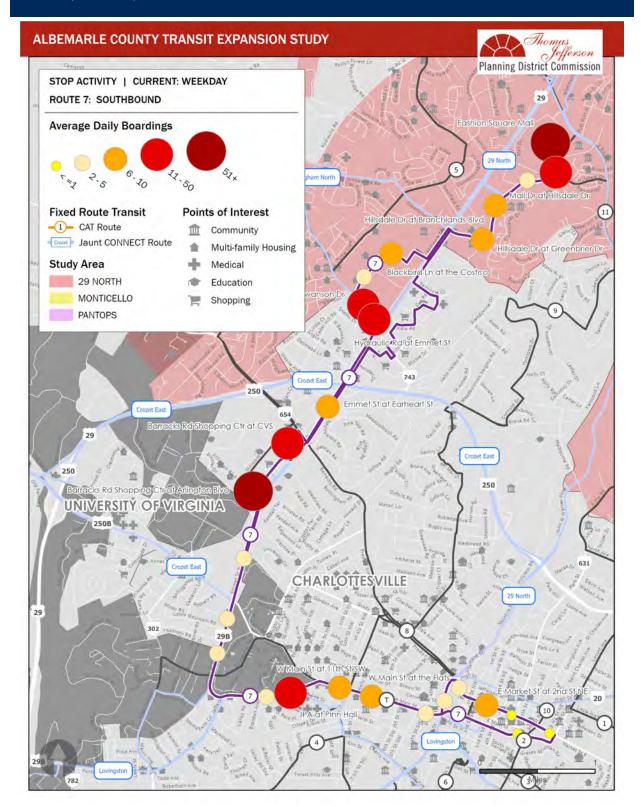


Route 7 | Current | Direction: Northbound Thomas Jefferson Planning District Commission ALBEMARLE COUNTY TRANSIT EXPANSION STUDY STOP ACTIVITY | CURRENT: WEEKDAY **ROUTE 7: NORTHBOUND Average Daily Boardings** 12.50 **Fixed Route Transit** Points of Interest -(1)- CAT Route Community Jaunt CONNECT Route Multi-family Housing Study Area Medical 29 NORTH Education MONTICELLO Shopping PANTOPS Emmet St at Angus Rd CHARLOTTESVILLE UNIVERSITY OF VIRGINIA 29 n Transit Station





Route 7 | Current | Direction: Southbound





Route 8: Downtown / Barracks Road Shopping Center / Seminole Square



Study Area: US-29 North

Operates between downtown Charlottesville and the Shops at Stonefield, via the Barracks Road Shopping Center.

Service Span	Average Service Frequency	Major Generators
Monday-Friday: 6:30 a.m. – 6:27 p.m.	Peak: 60 minutes Off-Peak: 60 minutes	 Downtown Mall Washington Park Barracks Road Shopping Center Seminole Square Shopping Center Shops at Stonefield
Saturday: 6:30 a.m 6:27 p.m.	All Day: 60 minutes	
Sunday: No service	No Service	-

Strengths

- Relatively direct connector between Downtown Mall and commercial destinations
- Clockface frequency (either 30 or 60 minutes) for majority of service span
- Identical weekday and Saturday schedules

Weaknesses

- One-way end-of-line loop allows passengers to cross Seminole Trail westbound but not eastbound
- Lower (pre-COVID) ridership than Routes 5 and7, which serve similar destinations
- Limited weekday and Saturday service span
- No Sunday service

Upcoming Service Modifications

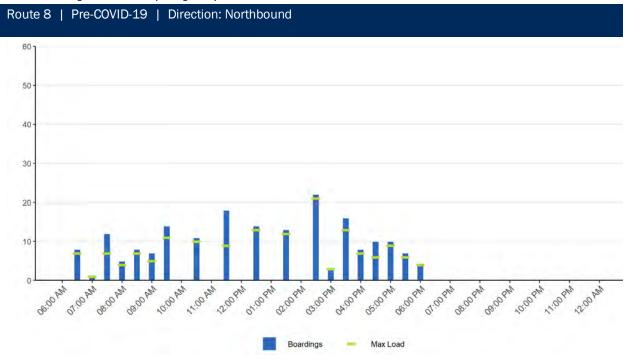
Serves several regional centers

CAT is currently proposing service changes for Fiscal Year 2022. In many cases, recommendations address weaknesses identified above. Service improvements proposed for Route 8 include:

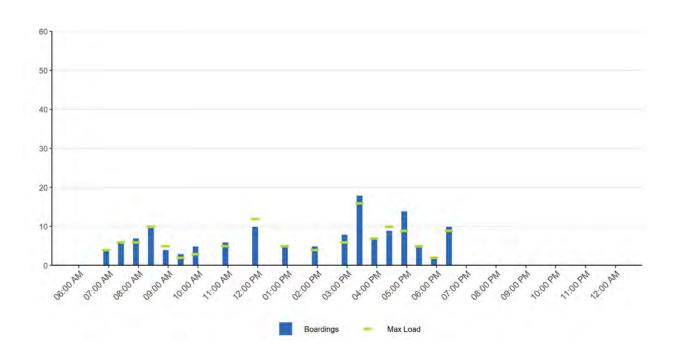
- Modification of the route alignment to operate as a new crosstown service between the Shops at Stonefield and Willoughby Square.
- Continued operation of 60-minute frequencies on weekdays and Saturdays.

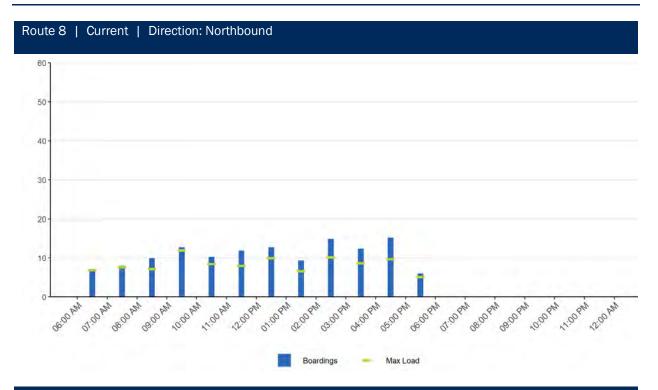


Weekday Ridership by Trip

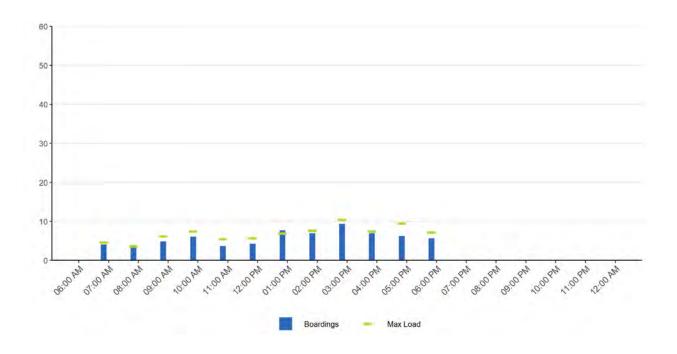


Route 8 | Pre-COVID-19 | Direction: Southbound





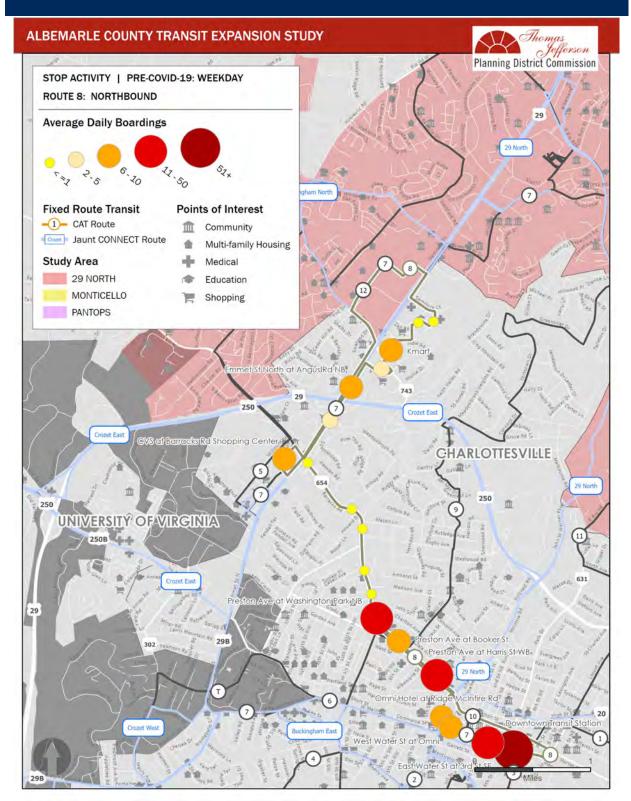






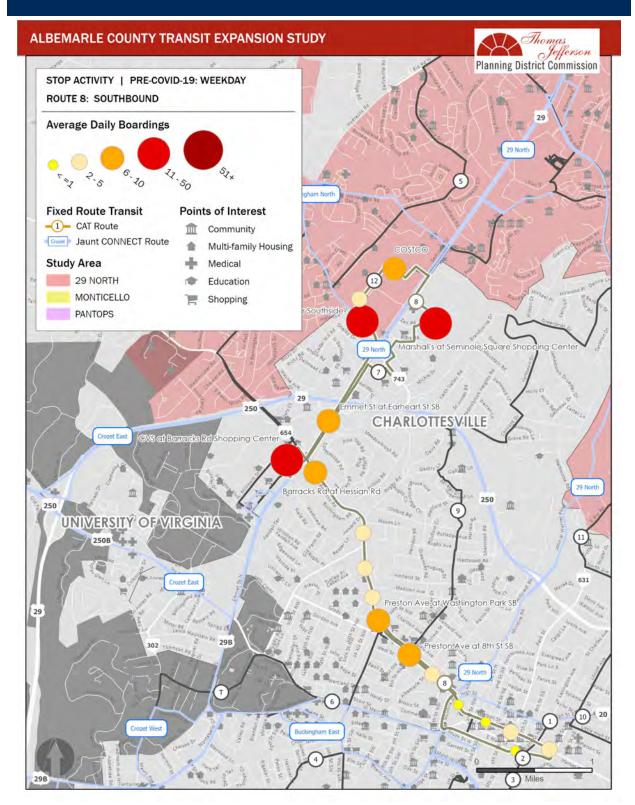
Weekday Ridership by Stop

Route 8 | Pre-COVID-19 | Direction: Northbound





Route 8 | Pre-COVID-19 | Direction: Southbound



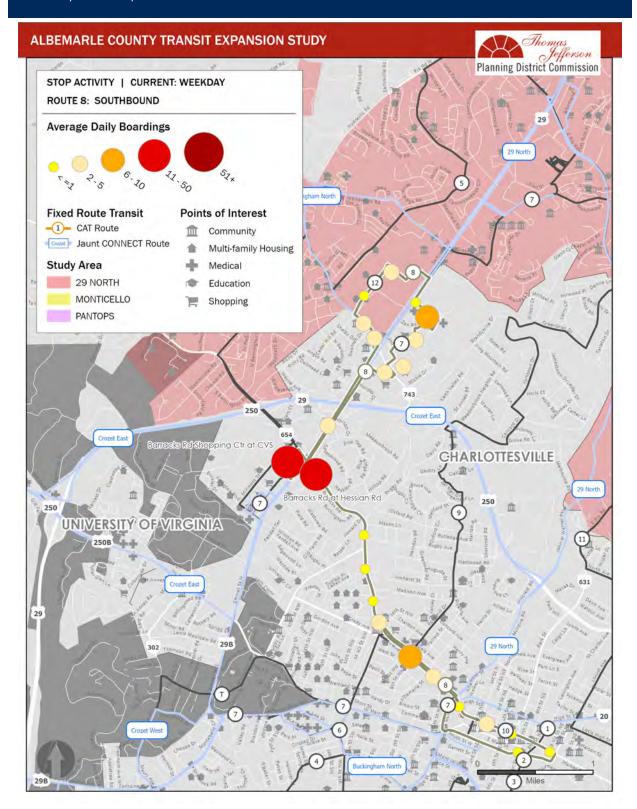


Route 8 | Current | Direction: Northbound Thomas Jefferson Planning District Commission ALBEMARLE COUNTY TRANSIT EXPANSION STUDY STOP ACTIVITY | CURRENT: WEEKDAY **ROUTE 8: NORTHBOUND Average Daily Boardings** 12.50 **Fixed Route Transit** Points of Interest -(1)- CAT Route Community Grozet Jaunt CONNECT Route Multi-family Housing Study Area Medical 29 NORTH Education MONTICELLO Shopping PANTOPS CHARLOTTESVILLE UNIVERSITY OF VIRGINIA 29 29B





Route 8 | Current | Direction: Southbound





Route 10: Downtown / Martha Jefferson Hospital



Study Area: Pantops

Operates between the Downtown Mall and Sentara Martha Jefferson Hospital, via East High Street, Richmond Road, and Peter Jefferson Parkway. Includes stops at the Pantops Shopping Center and Rivanna Ridge Shopping Center, as well as the Avemore apartment complex.

Service Span	Average Service Frequency	Major Generators
Monday-Friday: 6:30 a.m. – 9:00 p.m.	Peak: 60 minutes Off-Peak: 60 minutes	Downtown MallPantops Shopping Center
Saturday: 6:30 a.m. – 9:00 p.m.	All Day: 60 minutes	 Rivanna Ridge Social Security Administration office Veterans Administration office
Sunday: No service	No Service	Martha Jefferson HospitalAvemore Apartments
Stre	engths	Weaknesses

- Direct service to key regional destinations, such as Sentara Martha Jefferson Hospital, the VA Medical Center, and Social Security Administration
- Relatively extensive span of service
- Clockface frequency (60 minutes)
- Multiple connection opportunities in downtown Charlottesville
- Identical weekday and Saturday schedules
- Service along Stony Point Road available in the westbound direction only, requiring out-ofdirection travel for residents of Avemore **Apartments**
- Service to Pantops Shopping Center available only eastbound direction only
- No crosswalk at the intersection of US-250 and Stony Point Road (where riders cross between the Stony Point Road stop and Pantops Shopping Center)
- Low frequency (60 minutes)
- Large one-way loop that limits travel options

Upcoming Service Modifications

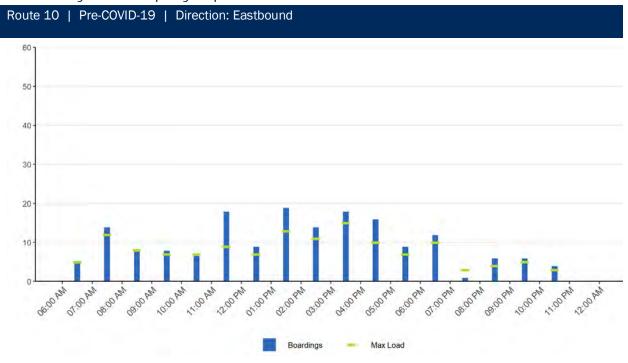
CAT is currently proposing service changes for Fiscal Year 2022. In many cases, recommendations address weaknesses identified above. Service improvements proposed for Route 10 include:

- Elimination of the Stony Point segment; replacement with bidirectional Pantops service (currently only served in the outbound direction).
- Modification of the east end of the route to provide bidirectional service.
- Improvement of weekday frequencies to 30 minutes.
- Addition of Sunday service at 60-minute frequencies.
- Continued operation of 60-minute frequency service on Saturdays.

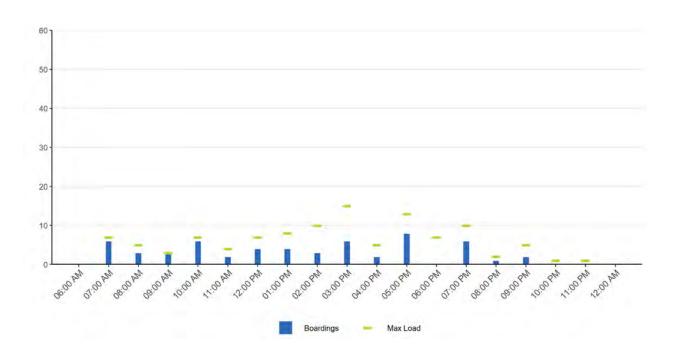


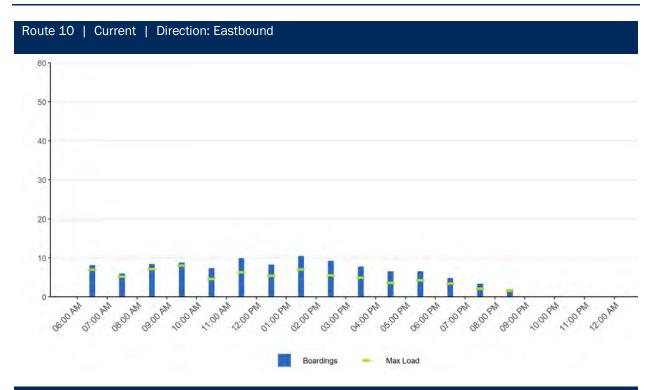


Weekday Ridership by Trip

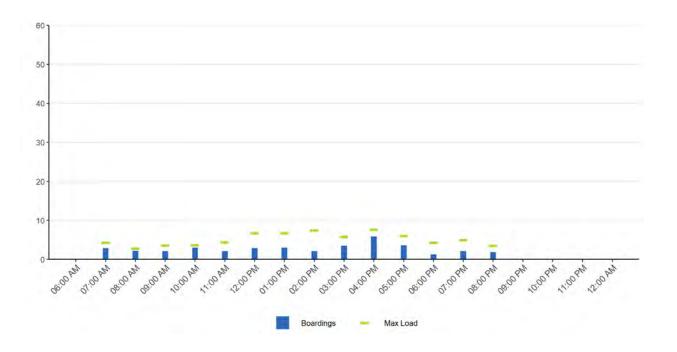


Route 10 | Pre-COVID-19 | Direction: Westbound



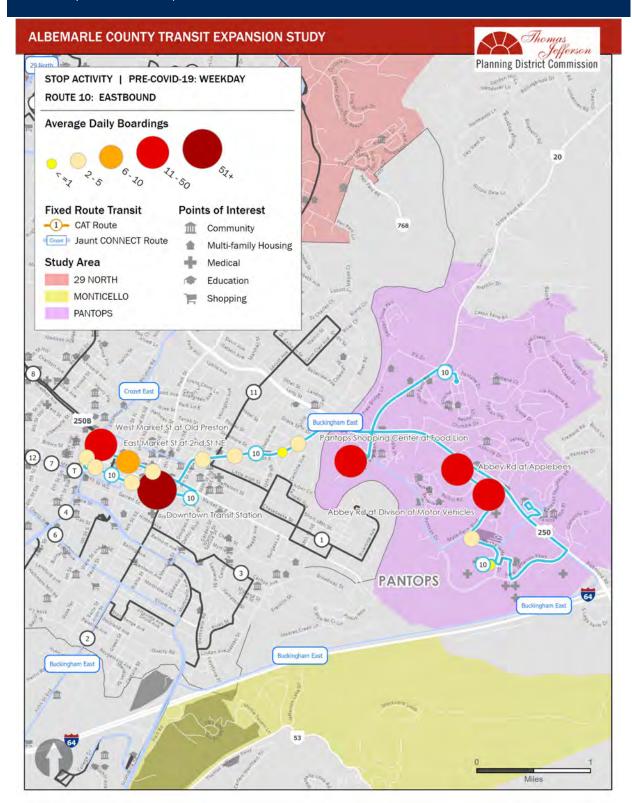






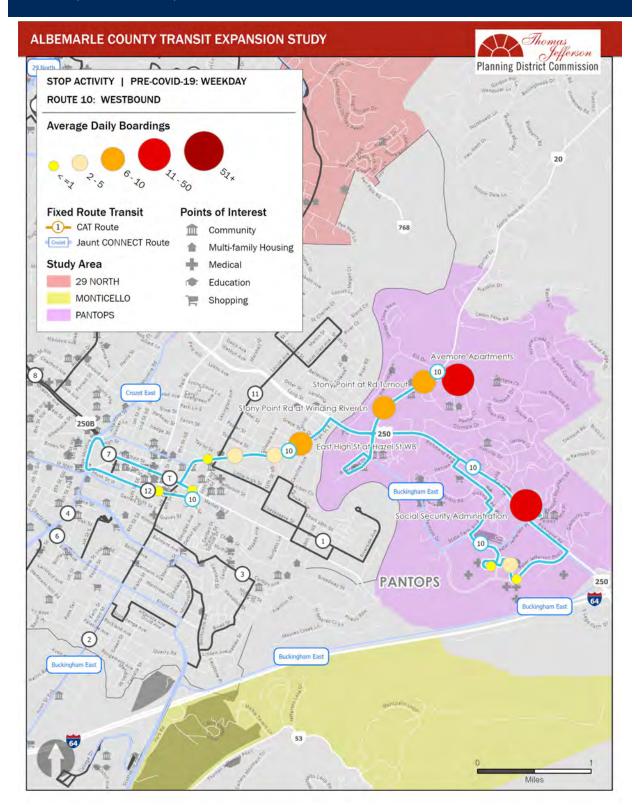
Weekday Ridership by Stop

Route 10 | Pre-COVID-19 | Direction: Eastbound





Route 10 | Pre-COVID-19 | Direction: Westbound



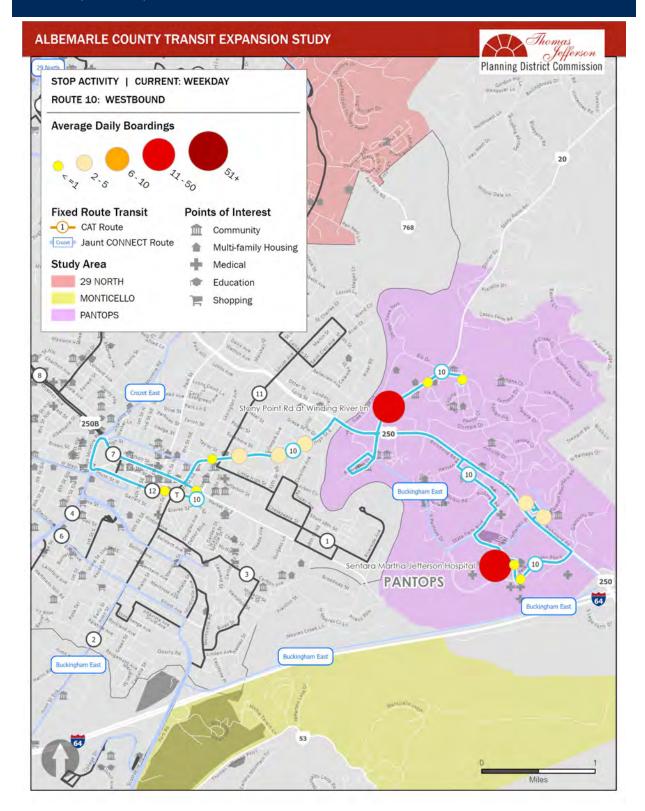


Route 10 | Current | Direction: Eastbound Thomas Jefferson Planning District Commission ALBEMARLE COUNTY TRANSIT EXPANSION STUDY STOP ACTIVITY | CURRENT: WEEKDAY ROUTE 10: EASTBOUND **Average Daily Boardings Fixed Route Transit** Points of Interest -1 CAT Route Community Grozet Jaunt CONNECT Route Multi-family Housing Study Area Medical 29 NORTH Education MONTICELLO Shopping **PANTOPS PANTOPS** 250 64





Route 10 | Current | Direction: Westbound







Route 11: Downtown / Fashion Square Mall



Study Area: US-29 North

Operates between the Downtown Mall and Fashion Square Mall along Locust Avenue, North Avenue, and Rio Road.

Service Span	Average Service Frequency	Major Generators
Monday-Friday: 6:00 a.m 9:00 p.m. Saturday:	Peak: 60 minutes Off-Peak: 60 minutes All Day: 60 minutes	 Fashion Square Mall Downtown Mall Charlottesville-Albemarle Technical Education Center (CATEC)
6:00 a.m. – 6:30 p.m. Sunday:	No Service	Charlottesville Catholic School
No service	No Service	

Strengths

- Only CAT route with direct service to CATEC
- Multiple connection opportunities in downtown Charlottesville and at Fashion Square Mall
- Clockface frequency (60 minutes)

Weaknesses

- Low frequency
- Relatively low overall ridership
- No Sunday service
- Shorter Saturday span of service
- No direct access to a supermarket

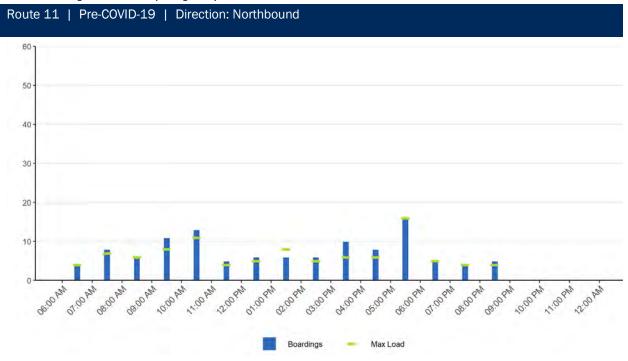
Upcoming Service Modifications

CAT is currently proposing service changes for Fiscal Year 2022. In many cases, recommendations address weaknesses identified above. Service improvements proposed for Route 11 include:

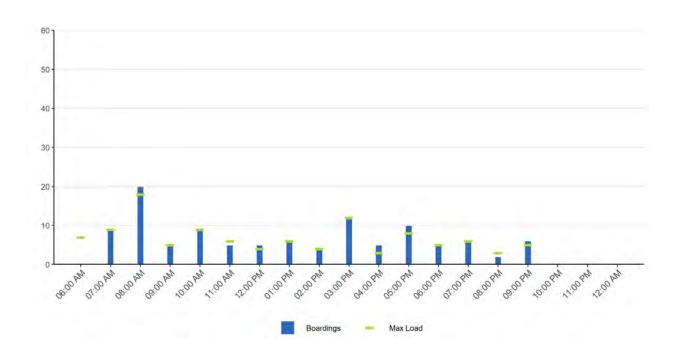
- Addition of northbound only service to the Center on Rio Road; southbound service is not possible due to the lack of a signal at Rio Road and Belvedere Boulevard.
- Elimination of Locust/Peartree/Street Clair loop to provide time for proposed Rio Road service.
- Continued operation of 60-minute frequencies on weekdays and Saturdays.

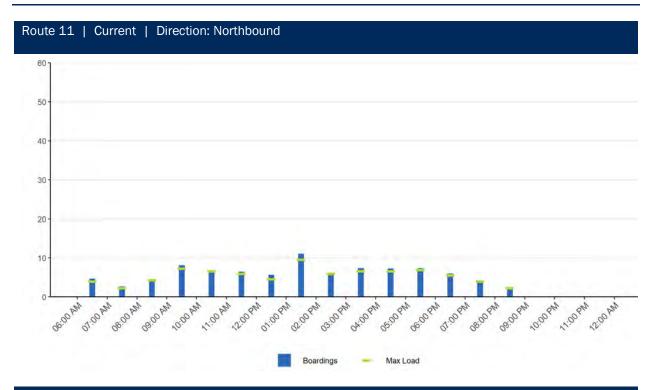


Weekday Ridership by Trip

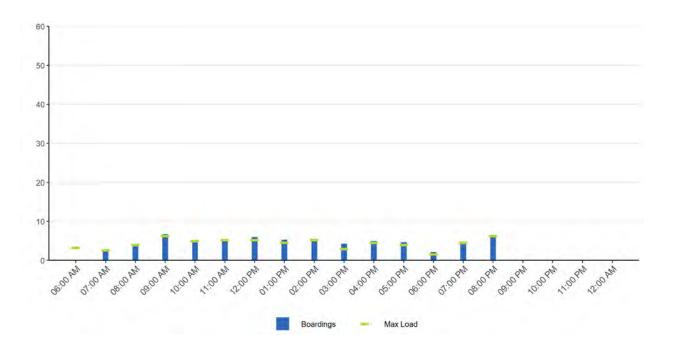


Route 11 | Pre-COVID-19 | Direction: Southbound



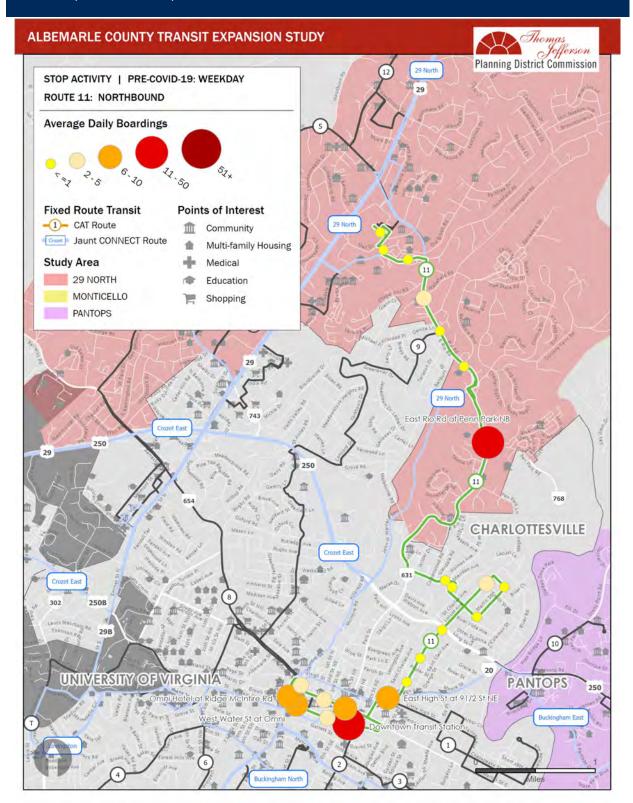


Route 11 | Current | Direction: Southbound



Weekday Ridership by Stop

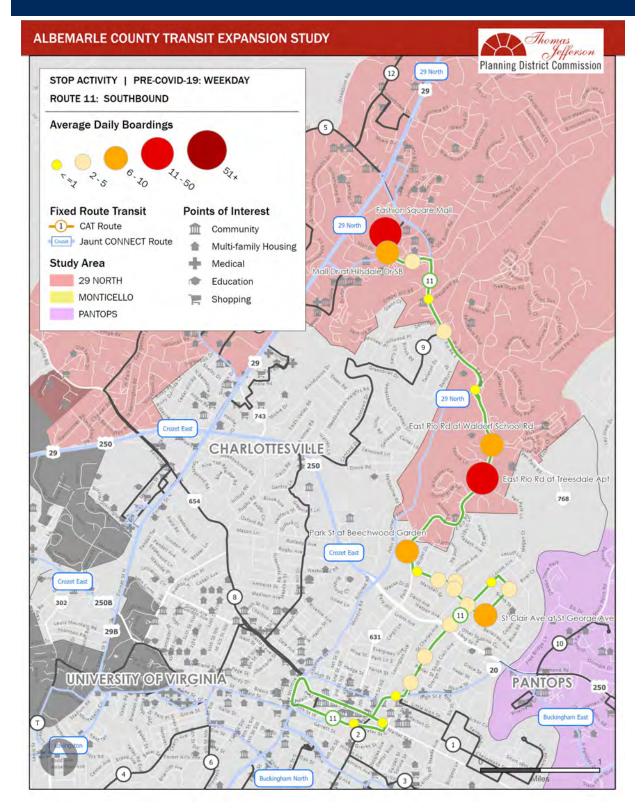
Route 11 | Pre-COVID-19 | Direction: Northbound







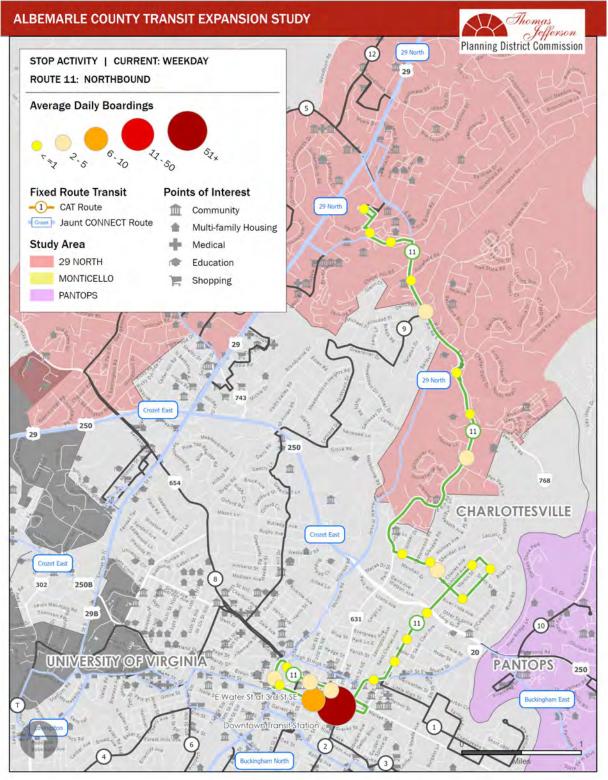
Route 11 | Pre-COVID-19 | Direction: Southbound





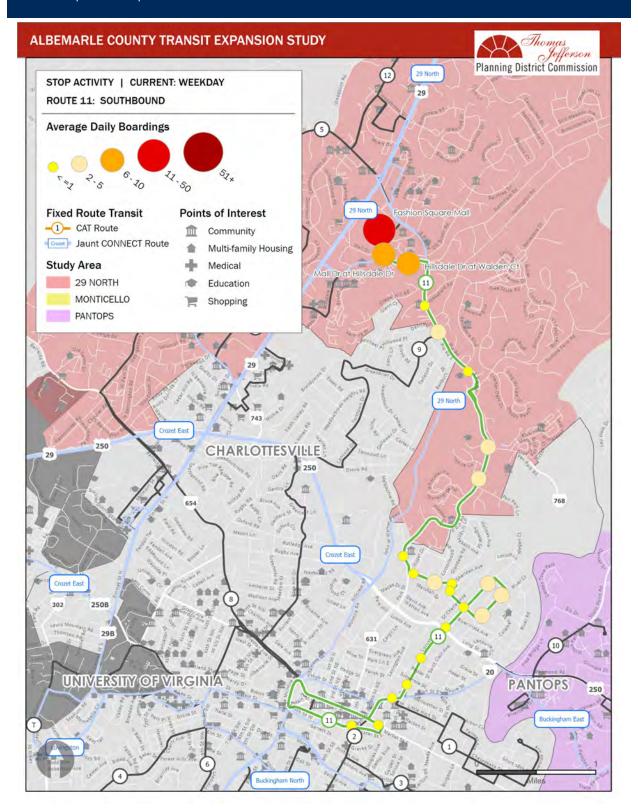


Route 11 | Current | Direction: Northbound





Route 11 | Current | Direction: Southbound





Route Profiles: Jaunt



29 North CONNECT



Study Area: US-29 North

Operates between downtown Charlottesville, UVA hospital, and towns north of Charlottesville, including Forest Lakes and Hollymead. Operates along US-29 North, Seminole Trail, Emmet Street, West Main Street, McIntire Road, John W. Warner Parkway, and East Rio Road.

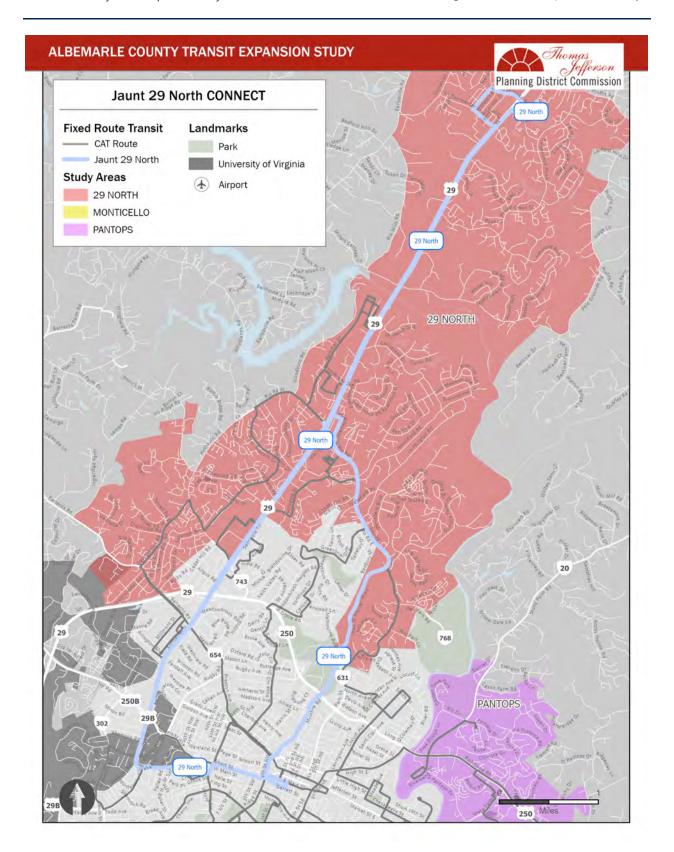
Service Span	Average Service Frequency	Major Generators
Monday-Friday: 6:05 a.m 8:43 a.m. 4:33 p.m 7:15 p.m.	Morning: 3 Trips Afternoon: 3 Trips	Hollymead Town CenterUniversity of VirginiaUVA Hospital
Saturday: No service	No Service	Omni Hotel
Sunday: No service	No Service	

Strengths	Weaknesses	Opportunities
 Explicitly designed for commuters Offers direct connection from Charlottesville and communities along US-29 North One of Jaunt's only fixed-route services (four total) Free for UVA students, and currently free for all riders due to COVID-19 	 Limited service span and frequency: three morning and afternoon trips No weekend service 	 Extend service to Charlottesville-Albemarle Airport Extend service to National Ground Intelligence Center (NGIC) Operate more frequent, all- day service Publish route maps on website to supplement Google Maps and Transloc app

Average Daily Ridership Summary				
Pre-COVID-19 Current				
Southbound (AM):	Northbound (PM):	Southbound (AM):	Northbound (PM):	
20.3 Riders	21.2 Riders	6.5 Riders	7.3 Riders	











Buckingham CONNECT (Buck North)

Study Area: US-29 North



Operates between Buckingham County and Charlottesville destinations, including UVA hospital and Sentara Martha Jefferson Hospital. Route runs on US-20 between Buckingham County and Charlottesville, and in a loop along Avon Street, Elliott Avenue, Cherry Avenue, West Main Street, High Street, South Pantops Drive, Peter Jefferson Parkway (serving Martha Jefferson Hospital), I-64, and Scottsville Road.

Service Span	Average Service Frequency	Major Generators
Monday-Friday: 6:00 a.m 7:43 a.m. 5:02 p.m 6:48 p.m.	Morning: 1 Trip Afternoon: 1 Trip	Sentara Martha Jefferson HospitalPiedmont Virginia Community CollegeUVA Hospital
Saturday: No service	No Service	■ Scottsville Farmers Market
Sunday: No service	No Service	

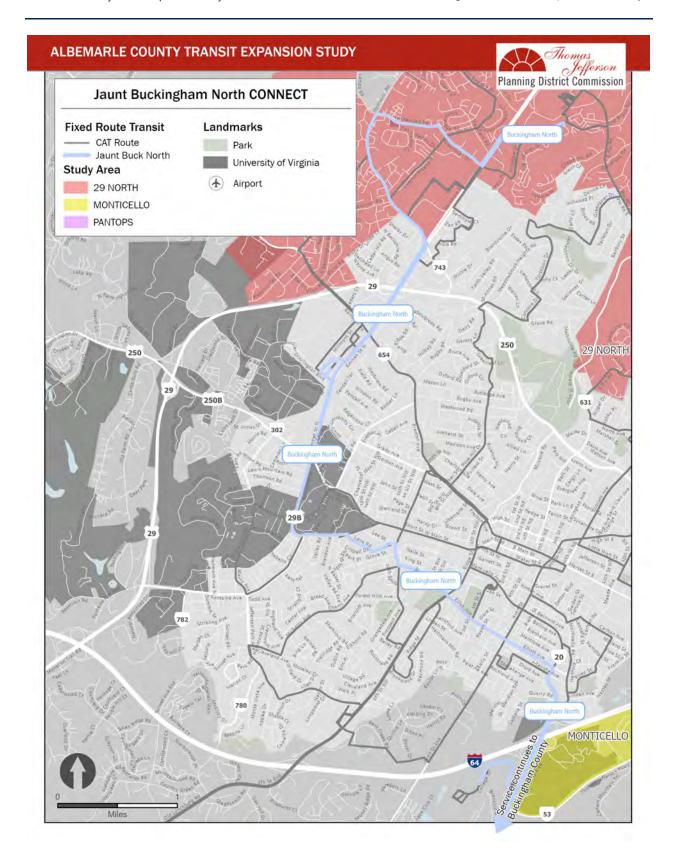
Strengths		Weaknesses		Opportunities		
•	Provides reliable connection from central Buckingham County to Charlottesville and Urban Albemarle	:	Limited geographic coverage Limited service span and frequency: one morning and afternoon trip	•	Complement commuter- focused service with zone- based microtransit service for local circulation	
	One of Jaunt's only fixed-route services (four total) Free for UVA students, and currently free for all riders due to COVID-19	•	No weekend service Relatively low ridership		Publish route maps on website to supplement Google Maps and Transloc app	

Average Daily Ridership Summary				
Pre-C	0VID-19 ⁵	Current		
Northbound (AM): Not Available	Southbound (PM): Not Available	Northbound (AM): 5.5 Riders	Southbound (PM): 4.3 Riders	

⁵ Pre-COVID-19 ridership data unavailable due to data limitations.











Buckingham CONNECT (Buck East)



Study Area: Pantops

Operates between Buckingham County and destinations in Charlottesville and Albemarle County, including downtown Charlottesville, UVA University Hospital, the Sentara / Martha Jefferson Hospital, and the Westminster-Canterbury retirement community.

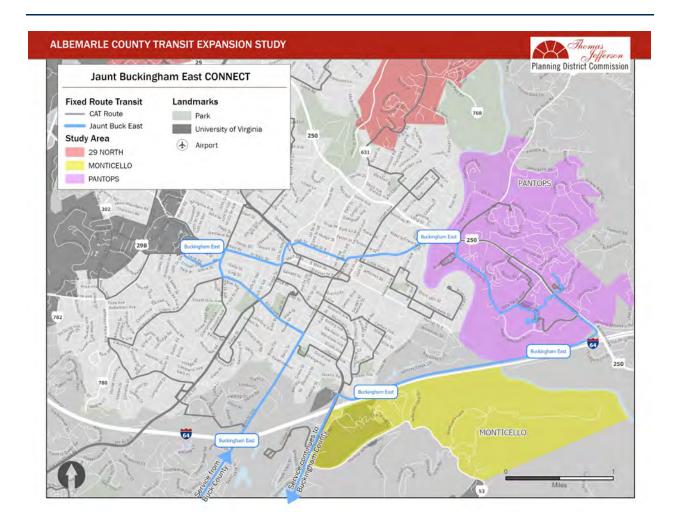
Service Span	Average Service Frequency	Major Generators
Monday-Friday: 5:45 a.m 7:07 a.m. 4:00 p.m 5:27 p.m. Saturday: 5:45 a.m 7:07 a.m.	Morning: 1 Trip Afternoon: 1 Trip Morning: 1 Trip	 Sentara Martha Jefferson Hospital UVA Hospital Westminster Canterbury Scottsville Farmers Market Pantops
4:00 p.m. – 5:27 p.m. Sunday: 5:45 a.m 7:07 a.m. 4:00 p.m. – 5:27 p.m.	Afternoon: 1 Trip Morning: 1 Trip Afternoon: 1 Trip	
		-

1.00 p.m. 0.27 p.m.		
Strengths	Weaknesses	Opportunities
 One of Jaunt's only fixed-route services (four total) Free for UVA students, and currently free for all riders due to COVID-19 	 Limited service span and frequency: one morning and afternoon trip per weekday, Saturday, and Sunday Relatively low current ridership 	 Complement commuter-focused service with zone-based microtransit service for local circulation Publish route maps on website to supplement Google Maps and Transloc app

Average Daily Ridership Summary				
Pre-COVID-19		Current		
Northbound (AM): 14.8 Riders	Southbound (PM): 14.7 Riders	Northbound (AM): 8.6 Riders	Southbound (PM): 8.1 Riders	









Jaunt Demand Response Service



Study Areas: US-29 North, Pantops, and Monticello

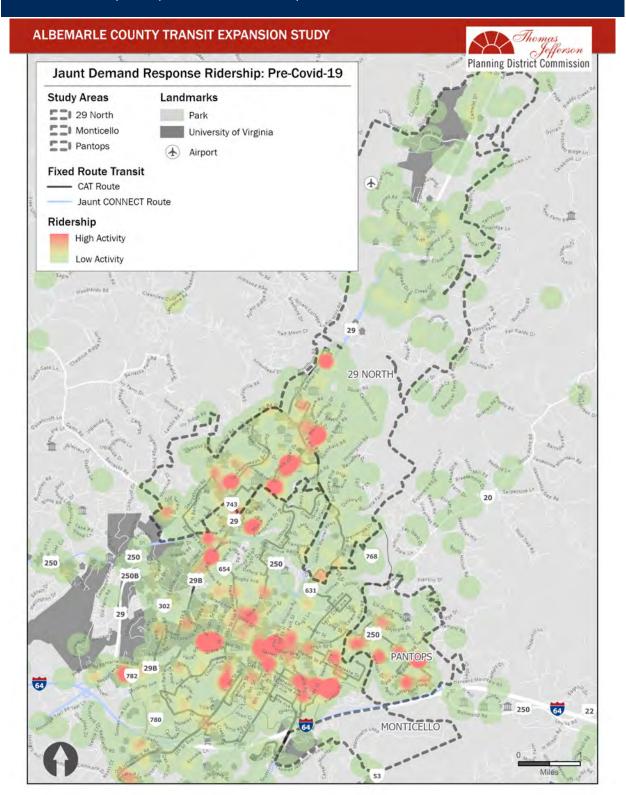
Jaunt provides demand response service throughout the region. Demand response services are branded as Demand Response, Link, Circulator, and Americans with Disabilities Act (ADA) paratransit. Prospective riders may make reservations by phone or email in advance. Services, locations served, and days in operation for Jaunt services that enter the three study areas are shown below. Heat maps showing ridership patterns during the pre-COVID-19 and current periods (across the three project study areas) are displayed in the pages that follow.

Demand Response Service Name		Lagations Compa	Days in Operation						
Response Category	Service Name	Locations Served	Sun	Мо	Tu	Wed	Thu	Fri	Sat
ADA	ADA Service	Three-quarter mile buffer of CAT fixed-route service	X	Х	X	X	X	X	Х
	Albemarle Demand Response	Within Albemarle County or between Albemarle County and the Albemarle Priority Zone or Federal ADA Zone.		Х	Х	Х	Х	Х	
Demand Response	Wintergreen Shopping Shuttle	Wintergreen to Barracks Road Shopping Center	Х			Х	X		
	Greene County Transit	Greene County to Charlotteville		X	X	X	X	X	

Demand Response Category	Service Name	Locations Served	Days in Operation						
			Sun	Мо	Tu	Wed	Thu	Fri	Sat
Link Demand Response	Earlysville Link	Charlottesville/Urban Albemarle to Earlysville		X	X	X	X	X	
	29 North Link	Charlottesville and Urban Albemarle to 29 North past CHO		Х	Х	Х	Х	Х	
	Fluvanna Commuter Link	Fork Union through Fluvanna County to Charlottesville/Urban Albemarle		Х	Х	Х	Х	Х	
	Fluvanna Midday Link	Fluvanna County to Charlottesville/Urban Albemarle			Х		Х		
	Nelson Link	Nelson County to Charlottesville/Urban Albemarle		Х				х	
	Louisa Link	Louisa County to Charlottesville/Urban Albemarle		Х		Х		Х	
	20 North Link	Route 20 North region to Charlottesville/Urban Albemarle		Х	Х	х	Х	Х	
	Keswick Link	Keswick area to Charlottesville/Urban Albemarle		Х	Х	Х	Х	Х	
	Esmont/Scottsville Link	Esmont-Scottsville region to Charlottesville/Urban Albemarle		Х	Х	х	Х	Х	
	Crozet Link	Crozet to Charlottesville and Urban Albemarle		Х	Х	Х	Х	Х	

Ridership Heat Maps

Jaunt Demand Response | Pre-COVID-19 Ridership







Jaunt Demand Response | Current Ridership

