

Transit Development Plan

Adopted – September 24, 2025



2025



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Executive Summary

The 2025 Transit Development Plan (TDP) serves as a comprehensive roadmap for the future of mobility in the Capital Region. The process of preparing this plan included a thorough assessment of existing conditions, extensive public engagement, and a detailed market analysis to ensure the recommendations are data-driven and community-focused.

In the decade since CDTA adopted its 2014 TDP, we are proud to have accomplished the goals set out in that plan and more. In 2020 and 2023, we expanded the BusPlus BRT system along two new corridors. Our suite of service offerings now includes microtransit, bikesharing, carsharing, commuter coach service, and paratransit, in addition to BRT and regular fixed-route bus service. During this period, CDTA also expanded into Montgomery County and Warren County, the first time CDTA has expanded the service area since our founding in 1970. The past decade has been full of firsts and accomplishments for CDTA.

This 2025 TDP seeks to build on that legacy by focusing on improving the quality, reliability, and accessibility of our services. Providing a complete mobility solution requires reliable, simple-to-use, high-frequency fixed route transit, backed up by diverse support services and first/last mile options, such as walking, biking, and carsharing. Under this TDP, CDTA will also focus on expanding the places and people covered by that full family of options, and ensure that those services are simple, convenient, safe, and reliable by using customer feedback to drive service improvement.

While this new direction is mostly about building upon success, CDTA is also taking this opportunity to refocus on some fundamental challenges. Four issues have been identified for short-term action: on-time performance, operator staffing, a fare policy update, and customer information and engagement. Addressing these issues will lay the foundation for the broader, phased recommendations outlined in this report. Future expansion opportunities into outlying counties will be evaluated based on commuter patterns, demographics, and infrastructure, with recommendations contingent on additional resources. As this new TDP is implemented, CDTA will continuously monitor its approach to service as constraints, challenges, and opportunities change.



1. Introduction

1.1. Project Purpose

Since the adoption of the last Transit Development Plan (TDP) in 2014, the Capital Region and CDTA have both changed significantly. The region has grown and its demographic and economic characteristics have changed, while CDTA has expanded and introduced many new services. Transit industry-wide challenges, such as operator shortages, have also significantly impacted CDTA's operations and approach to service design and delivery. Most recently, the COVID-19 pandemic demonstrated the essential nature of bus service for traditionally disadvantaged populations and workers who rely on transit for their mobility needs, often facing longer commutes and higher transportation costs as a percentage of their income.

This document serves to update the 2014 TDP, provide a fresh perspective, and identify opportunities to use transit to transform lives for the better. After adoption, the 2025 TDP will be followed by projects to implement its recommendations. These plans will continue to align CDTA's services with the needs of the region.

1.2. Organization

The TDP is organized as follows:

- An introduction, which provides a high-level overview of the TDP and CDTA's principles.
- Existing Conditions, which looks at existing conditions and analyzes the local market for transit, concluding with a summary of needs by each CDTA service type.
- A summary of public involvement, which describes CDTA's efforts to engage the public, partners and CDTA staff, and lists key takeaways of this process for the TDP.
- Recommended changes and projects to be implemented over the lifetime of the TDP.
- Standards for service planning, service monitoring, infrastructure, and land use.
- Next steps and implementation.

The TDP aims to keep these sections as brief as possible while retaining key takeaways at each point in the project. For full details, readers may consult this document's appendices, which can be found at CDTA.org/TDP. The appendices include memos on public engagement, standards, regional population and economic trends, peer TDPs and CDTA's past TDP, existing conditions, transit market analysis, and an analysis of zoning code and land use regulation.

1.3. Principles

This document will first outline the foundational elements that define CDTA's strategic direction, starting with the guiding principles that frame the agency's efforts. By establishing a clear set of principles, CDTA will articulate a vision for each of its services that aligns with its mission to enhance regional mobility and meet evolving community needs.



1.3.1. Strategic Principles

Strategic Principles (see **Figure 1**) capture CDTA's overarching vision of its suite of services.

Figure 1: Strategic Principles.

Ridership and Impact ()	Provide services that are well used and have a positive impact on customers' lives and the region.
Diversity of Services	Go beyond lifeline services to fully cover people's transportation needs and reduce the need to own a personal vehicle.
Support Cities	Support dense, urban environments where CDTA services are naturally supplemented by density and walkability.
Regional Leadership	Promote the CDTA vision in regional land use decisions and use CDTA services to encourage transit-supportive development.
Engagement	Maintain regular engagement with CDTA customers and the public. Continuously re-align services and work to meet customer needs.
Safety	Ensure that CDTA's operational practices and capital investments promote a safe environment for our customers, our employees, and the public.
Simplicity	Make CDTA services simple to use for people new to the region and CDTA, or transit more broadly, as well as long-time customers.
Image	Maintain CDTA's positive image in the region.
Team Focus	Cultivate and support CDTA staff who work every day to put service out on the road. Align services and projects with staff capacity, competitive salaries, and professional development opportunities.



1.3.2. Planning & Operating Principles

CDTA's Planning and Operating Principles provide a framework for the implementation of CDTA's Strategic Principles at the level of individual CDTA services.

FIXED ROUTE

- Prioritize investments in speed, capacity, reliability, and station amenities on existing highridership corridors to maximize ridership. Design routes that prioritize efficient and dependable service.
- Allocate resources to deliver a level of service that provides adequate capacity and convenience.
- Improve on-time performance and provide well-timed, convenient transfers.
- Align fare policy with service improvements to maintain affordability for customers.

FLEX (MICROTRANSIT)

- Use FLEX to support fixed route rather than competing with fixed route.
- Make FLEX more efficient.
- Use small zones to keep wait times reasonable.

SPECIAL TRANSIT AVAILABLE BY REQUEST (STAR)

• Control costs and ensure reliable service for people with disabilities by making operational improvements and not stretching operations too thin.

CAPITAL DISTRICT PHYSICIANS' HEALTH PLAN (CDPHP) CYCLE! (BIKESHARE)

- Use CDPHP *Cycle!* to improve connections to and from fixed route stops, increase customers travel options for essential trips, and support recreational riding.
- Offer flexible fare options and bike types to suit the diverse needs of Cycle! customers.

DRIVE (CARSHARE)

 Use DRIVE to give peace of mind to customers who don't own a car. Customers needs should generally be covered by CDTAs other services, but they will have access to a car if they ever need it.

CUSTOMER ENGAGEMENT AND INFORMATION

- Ensure that fare payment is as intuitive and customer friendly as possible.
- Provide easy methods for riders to give feedback that helps CDTA identify and address problems in a timely manner.
- Continue to develop the Navigator app to meet customer needs and expectations.

PERFORMANCE MONITORING

- Leverage data-driven tools and customer surveys to evaluate and improve service delivery.
- Use performance metrics to set authority priorities and agendas.
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2. Existing Conditions

Below is a summary of the most important elements from the Existing Conditions and Market Analysis memos produced for this TDP update. See the appendices for full details at CDTA.org/TDP.

2.1. Overview of Existing Conditions & Trends

CDTA provides several mobility services throughout the Capital Region, including fixed routes, microtransit, paratransit, bikesharing, and carsharing (Figure 2). Currently, CDTA operates 53 regular fixed routes, including three BRT lines (branded as *BusPlus*). While ridership on CDTA's fixed routes decreased during the COVID-19 pandemic, it has since surpassed prepandemic ridership levels. In Fiscal Year



2025, CDTA exceeded all past annual ridership records, even from before the pandemic.

CDTA's expenditures in fiscal year (FY) 2024 totaled \$169.1 million, with \$134.3 million in operating expenditures and \$34.8 million in capital expenditures (**Figure 3**). Fixed-route service accounts for 79 percent of total expenditures. CDTA exhibits strong service efficiency and ridership performance relative to its peers, but trails them in passenger revenue effectiveness.

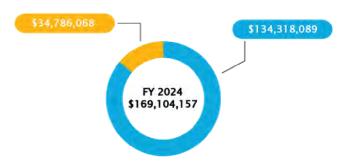


Figure 3: FY 2024 Expenditures

CDTA maintains a fleet of 277 fixed-route buses, 21 microtransit buses, and 30 paratransit vehicles. CDTA serves six counties: Albany, Rensselaer, Saratoga, Schenectady, Montgomery, and Warren. Services are dispatched from five garages located in Albany, Schenectady, Troy, Glens Falls, and Amsterdam. The six-county operating area includes a total of 3,090 bus stops, 358 of which include bus shelters. CDTA has also built three "Mobility Hubs," which provide consolidated locations to access a variety of transportation options, as well as improved transfer hubs for fixed-route service.

Due to a reduced driver headcount over the past few years, CDTA has worked to implement

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workforce strategies to boost recruitment and retain staff. However, headcount shortages continue to present challenges to service efficiency and future service plans. The TDP will consider existing conditions and challenges to determine how best to align CDTA services to the region given needs and resources available to CDTA.

2.1.1. Inventory of Existing Services

CAPITAL DISTRICT TRANSPORTATION AUTHORITY (CDTA)

Table 1 summarizes the range of CDTA mobility options with key characteristics for each service.

Annual Usage **Number of** Service **Typical Fare Cost Booking Options** Vehicles (2024) (FY 2025) Fixed Route 277 17,968,298 \$1.50 N/A Transit **CDTA Call Center** Email STAR 30 367,862 rides \$2.50 Fax Website Interactive Voice Response **ACCESS** Contracted ~33,000 ACCESS Call Center Free FLEX 21 139,618 trips \$1.50 CDTA Navigator App 83,000 trips (2024 CYCLE 600 \$0.08-\$0.15/minute CYCLE App season) MioCar Networks App 300+ members \$5.00/hr DRIVE 7 **DRIVE** Website Vanpool1 73,000 trips Contracted

Table 1: Summary of CDTA Services

FIXED-ROUTE SERVICES

CDTA operates 53 fixed routes. These routes are generally classified by the type of service and geographic area being served. Routes with one- or two-digit numbers are designated as trunk routes, serving high-ridership corridors. Three-digit routes beginning with a number "1" through "4" or "6" are designated as neighborhood routes that serve Albany County (#100's), Rensselaer County (#200's), Schenectady County (#300's), Warren County (#400-#449), Saratoga County (#450-#499), and Montgomery County (#600's). Three-digit routes that start with "5" are designated as express services, operating primarily on highways, while routes beginning with a "7" are commuter services, which only operate during weekday peak periods. Three-digit routes that start with "8" are specialty routes, such as seasonal, school, or trolley service. Routes that start with a "9" are BusPlus BRT routes.

¹ Vanpool stopped operation as of May, 2025.

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Table 2 summarizes the basic service characteristics for each fixed-route type.

Table 2: CDTA Fixed-Route Type Characteristics

Route Type	Peak Frequency ²	Off Peak Frequency ³	Days of Operation	Service Span	Route Examples
BusPlus	Every 10-15 minutes	Every 15-30 minutes	7 days a week	Early morning to late night	905 – Red Line 910 – Purple Line 922/923 – Blue Line
Trunk	Every 10-20 minutes	Every 15-30 minutes	7 days a week	Early morning to late night	1, 10, 22, 85, 87
Neighborhood	Every 20-60 minutes	Every 20-60 minutes	5-7 days a week	6:00 am to 11:00 pm	106, 107, 190, 214, 224, 233, 351, 352, 450, 600, 601, 602
Express	Multiple trips between 6-9am and 3-6pm	0-1 midday trips	Weekdays	6:00 am to 6:00 pm	519, 524, 540 (NX), 560 (TX)
Commuter	Multiple trips between 6-9am and 3-6pm	0-1 midday trips	Weekdays	6:00 am to 6:30 pm	712, 737, 763
Seasonal/ Shuttle	Varies	Varies	Varies	Varies	801, 802, 808, 810, 812, 872, 873, 875

Fixed-route ridership has steadily increased, from around 850,000 rides per month in 2021 to over 1.5 million in 2025. In Fiscal Year 2025, CDTA hit 18 million rides and broke its past annual ridership record. Much of this success is due to CDTA's trunk and BRT routes, which operate at a high level of service in corridors with high transit propensity.

² Some routes may not prescribe to the stated frequency in its category.

³ Some routes may not prescribe to the stated frequency in its category.

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BUSPLUS (BUS RAPID TRANSIT)

BusPlus is CDTA's Bus Rapid Transit (BRT) service, offering frequent, limited-stop service along the busiest corridors in the Capital Region. BusPlus also includes amenities like complimentary device charging, Wi-Fi, and station improvements like large, heated shelters, seating, lighting improvements, pedestrian safety improvements, and heated sidewalks to melt snow and ice. CDTA currently operates three BRT lines, listed below along with annual boardings for each corridor in **Figure 4**. The "corridor" of each BusPlus line includes the BusPlus route itself plus related or parallel routes.

- The Red Line connects downtown Albany to downtown Schenectady along NY Route 5.
- The Blue Line connects South and downtown Albany to Watervliet, Troy, Cohoes, and Waterford along the Hudson River.
- The Purple Line connects downtown Albany to educational institutions, the Harriman State Campus, and Crossgates Mall along Western Avenue and Washington Avenue.

Figure 4: Annual Boardings on BusPlus Corridors (FY25)



NORTHWAY/THRUWAY XPRESS

The Northway Xpress (NX) and Thruway Xpress (TX) are commuter coach services that connect Saratoga and Montgomery counties, respectively, to Downtown Albany. Service runs in peak directions at peak times, to connect commuters to the central business district in the morning and back in the afternoon and evening.

STAR

STAR is CDTA's paratransit service, offering transportation alternatives to people who cannot use the fixed-route bus system because of a disability. Service is provided within ¾ of a mile of CDTA fixed routes during their span of service. Eligibility is determined by CDTA staff through an application and verification process. Reservations are required for all trips, and can be made by phone, email, fax, or online.

ACCESS

ACCESS is a service funded by Albany County that provides senior residents of Albany County transportation for medical trips and other essential trips. Reservations to ACCESS are made through a dedicated call center operated by CDTA. All other operations for ACCESS are run or overseen by Albany County. ACCESS brokered 8,500 trips in the first three months of 2025, 885 of which were fulfilled by STAR.



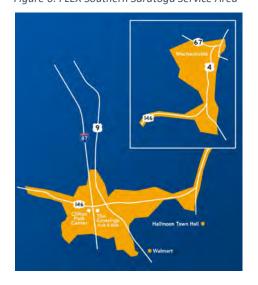
FLEX

FLEX is a demand response microtransit service that operates in two zones. The images below show CDTA's former and current FLEX zones. Unlike STAR, FLEX is open to the public. Customers can use the Navigator app to book a trip within the designated zone. FLEX service is delivered in a CDTA-operated vehicle and provides flexible connections within a zone. As of May 2025, CDTA reduced the size of the Guilderland-Colonie FLEX zone to focus on areas without significant transit service, while replacing other areas with increased fixed-route service. Service in both zones has also been changed from a curb-to-curb model to a point-to-point model with constrained pick-up and drop-off areas.



Figure 5: Former FLEX Guilderland-Colonie Service Area







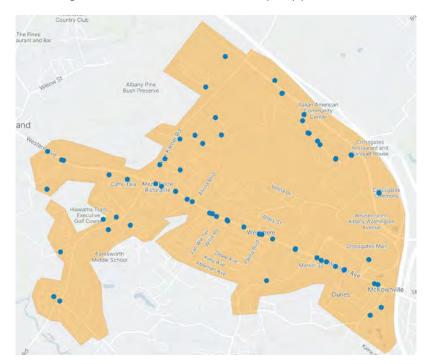


Figure 7: New FLEX Guilderland Zone with pickup points in blue.



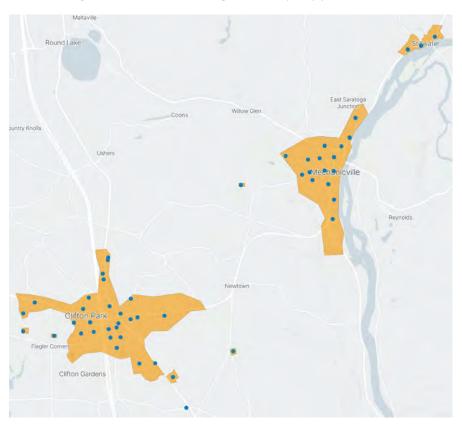




Table 3 summarizes the existing FLEX operating characteristics.

Table 3: FLEX Service Schedule

Zone	Service Span	Peak Vehicles Operated (2023)	Average Monthly Ridership
Guilderland-Colonie (ended May 2025)	Monday-Saturday 6:00 a.m. to 10:45 p.m. Sunday 10:00 a.m. to 6:00 p.m.	7	8,000
Southern Saratoga	Monday-Friday 7:00 a.m. to 8:00 p.m. Saturday-Sunday 10:00 a.m. to 6:00 p.m.	3	3,000
Guilderland (begun May 2025)	Monday-Saturday 6:00 a.m. to 10:45 p.m. Sunday 10:00 a.m. to 6:00 p.m.	3	3,000

CDPHP CYCLE!

CDPHP *Cycle!* is CDTA's seasonal bikesharing program. Service normally runs from May into December. Customers may choose pay-as-you-go pricing, with rates

Two thirds of the CDPHP *Cycle!* bikeshare fleet are electric.

of eight cents per minute for pedal bikes or 15 cents per minute for e-bikes. Alternatively, customers can subscribe to a monthly or seasonal membership, which provides up to 30 minutes of free e-bike or 60 minutes of free pedal bike ride time per day. The system as of 2024 has 600 bikes in total, 400 of which are e-bikes. Customers may view CDPHP *Cycle!* bike locations through the CDTA *Navigator* app, but must use the CDPHP *Cycle!* app to rent a bike. *Cycle!* has rapidly expanded, especially since electric bikes were introduced. CDTA manages *Cycle!* but contracts out operations of the service. In 2024, customers took 82,898 rides and rode 173,719 miles.

DRIVE

DRIVE is an electric carsharing service operated by CDTA. Customers may book a *DRIVE* vehicle for five dollars per hour following a one-time \$20 application fee. Customers are also assessed a 35-cent-per-mile fee for trips greater than 150 miles. Currently, seven electric cars are located in Albany, Troy, Schenectady, and Cohoes, serving approximately 400 members. CDTA hopes to continue to expand *DRIVE* as resources permit. Challenges to expansion have included insurance policy constraints, vehicle availability, and charging infrastructure. In 2024, DRIVE had over 300 members who made 2,500 trips for 107,000 miles.



2.1.2. Budget and Funding

The following analysis summarizes CDTA's finances, including total revenues and expenses, fare structure, and financial productivity for the 2024 fiscal year (FY) (April 2023 – March 2024).

GOVERNANCE

CDTA is overseen by a Board of Directors. The Board's members are appointed by the governor's office and confirmed by the State Senate. The board consists of three representatives for Albany County, two each for Rensselaer, Saratoga, and Schenectady Counties, one for Warren and Montgomery Counties, and a labor representative. These board members also hold special roles as Board Chair, Vice Chair, Treasurer, and Secretary. CDTA is the main reporter to the National Transit Database (NTD) for the counties served by the agency and is the direct recipient of Federal funds. The Board meets on a monthly basis and also convenes committee meetings on a monthly basis. There are three committees: Performance Monitoring and Audit, Community and Stakeholder Relations, and Strategic and Operational Planning.

REVENUES AND EXPENSES

In FY 2024, CDTA's total expenditures were \$169,104,157 with \$134,318,089 in operating and \$34,786,068 in capital expenditures 4 .

Fares and other directly generated funds make up 17% of CDTA's revenue.

Table 4 shows how these expenditures, by type, are divided between CDTA's fixed-route, commuter bus, and demand response services. Among fixed-route services, local bus accounts for 79 percent of CDTA's total expenditures and commuter bus accounts for about two percent. Demand Response accounts for 19%.

 Local Bus
 Commuter Bus
 Demand Response

 Operating Expenditures
 \$100,067,109
 \$2,718,785
 \$31,028,220

 Capital Expenditures
 \$34,159,915
 \$0
 \$626,153

 Total
 \$134,227,024
 \$2,718,785
 \$31,654,373

Table 4: Expenditures by Type and Mode (2024)

Figure 9 and **Figure 10** show CDTA's operating and capital revenue sources, respectively, in Fiscal Year 2024. CDTA's largest operating funding source is State funding. Local funding made up about 7 percent of total operating revenues and fares and directly generated funds (e.g., advertising, mortgage tax, and interest) made up 17 percent. CDTA's capital revenues are from Federal funding (80 percent), State funding (four percent), and local funding (sixteen percent).

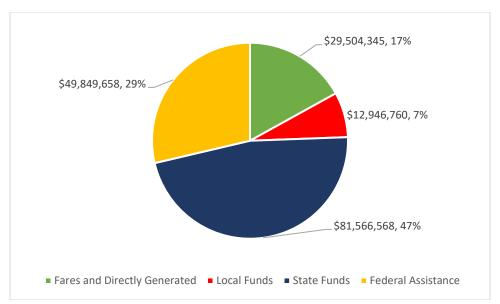
⁴ Source: CDTA FY23 NTD Submission

⁵ Vanpool had \$503,975 in expenses but is excluded for simplicity's sake.

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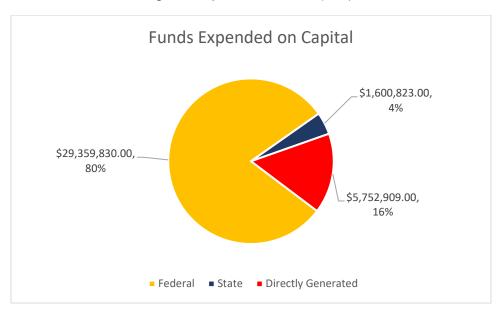


Figure 9: Operating Revenue Sources (2024)



Note that a large portion of Federal operating assistance in Fiscal Year 2024 came from the American Rescue Plan, which was provided in response to the COVID Pandemic. Future Federal operating assistance is expected to be less.

Figure 10: Capital Revenue Sources (2024)





2.1.3. Fares

The base (cash) fare for fixed-route CDTA bus service is \$1.50 for adults, with an increased fare of \$2.00 for BusPlus BRT routes and \$3.50 to \$7.00 for Northway Express routes. Half fare discounts are available for seniors, veterans, and individuals with disabilities (**Table 5**). CDTA also offers bulk ticket sales, such as the 31-day frequent rider pass for \$65.00 and the summer fun pass for \$44.00 for kids 17 and under. Through CDTA's Universal Access program, an organization can cover fare costs for their staff, clients, or students, at a reduced rate.⁶

All fares can be paid with cash, coins, or pre-purchased passes. Passes can be purchased through the Navigator smartphone application, by mail order by completing the order form on the CDTA website, or in person at CDTA's sales office at 85 Watervliet Avenue. Fares can be added to existing Navigator cards on the CDTA website, through the Navigator smartphone application, at the CDTA Customer Service Center, or by phone.

Table 5:	Fixed-Roi	ute Fares
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Fare Type	Fare	
Single Trip Fares		
Adults	\$1.50	
Senior/Disabled Half Fare	\$0.75	
BusPlus Fare	\$2.00	
Senior/Disabled BusPlus Half Fare	\$1.00	
Northway Express Zone 1	\$3.50 (\$4 Cash)	
Northway Express Zone 2	\$3.90 (\$5 Cash)	
Northway Express Zone 3	\$5.00 (\$7 Cash)	
Cards, Passes, Tokens, and Transfers		
Pay As You Go Navigator Card	\$1.30 per ride, add value as needed, capped at \$3.90 per day	
31-Day Frequent Rider Pass	\$65.00	
Northway Express Zone 1 Frequent Rider Pass	\$110	
Northway Express Zone 2 Frequent Rider Pass	\$125	
Northway Express Zone 3 Frequent Rider Pass	\$170	
CDTA's Summer Fun Pass	\$44.00	

The FLEX on-demand base fare is \$1.50 (see **Table 6**) and can be paid using the Pay As You Go option on the Navigator smart card or mobile app, or using the Frequent Rider pass. If using the Pay As You Go option, fares are reduced to \$1.30 and capped at \$3.90 per day to mitigate the cost of transfers. STAR paratransit trips are \$2.50 for each one-way trip. STAR fares can be paid with cash, coins, STAR tickets, or STAR debit. STAR customers personal care attendants (PCAs) may ride fare-free. STAR customers may also bring non-PCAs with them, but those additional riders must pay a fare.

⁶ Source: Capital District Transportation Authority, Universal Access: https://www.cdta.org/universal-access

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Table 6: On-Demand Fares

Rider Category	Fare
FLEX Fare	\$1.50
STAR	\$2.50
STAR Trip Book (13 rides)	\$30.00

2.1.4. Financial Productivity Indicators

CDTA also compiled financial performance metrics by mode. Overall, CDTA's demand response services (which include FLEX and STAR) cost less to operate per revenue mile, but more to operate per revenue hour, than fixed-route local bus service. Commuter coach is the most expensive mode to operate, with the highest cost per revenue mile and revenue hour. Lastly, demand response costs much more to operate per passenger trip than local bus and commuter coach. CDTA earns back fewer of its expenses in fares with demand response compared to other modes (see **Table 7**).⁷

Table 7: Financial Productivity Indicators (2024)

Service Type	Cost per Revenue Mile	Cost per Revenue Hour	Cost per Passenger Trip	Fare Revenue Per Passenger Trip	Farebox Recovery Ratio
Local Bus	\$10.83	\$136.03	\$6.29	\$1.24	20%
Commuter Coach	\$10.13	\$297.69	\$26.93	\$2.74	10%
Demand Response	\$8.74	\$143.17	\$64.71	\$2.01	3%

Local bus metrics were then compared to several peer agencies. To ensure consistent and accurate comparisons, this analysis used the most recent NTD data available (FY 2023) for each agency. The following peers were included in this analysis based on relative size, proximity, and input from stakeholders: CT Transit (Connecticut), Regional Transit Services (Rochester, NY), Niagara Frontier Transportation Authority (Buffalo, NY), Pioneer Valley Transit Authority (Springfield, MA), Rhode Island Public Transit Authority (Providence, RI), Metro Transit (Madison, WI), Pittsburgh Regional Transit (Pittsburgh, PA), and Greater Richmond Transit Company (Richmond, VA).

CDTA outperforms these peers in service efficiency and cost effectiveness, but trails them in passenger revenue effectiveness (**Table 8**). This suggests that adjustments to CDTA's fare policy may be justified during the lifetime of this TDP.

⁷ Source: Federal Transit Administration (FTA) NTD 2024 data

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Table 8: Peer Comparison (Fiscal Year 2023 NTD Data)

Metric	Performance Measure	Peer Average	CDTA	Relative Performance
Service Efficiency	Cost per Revenue Hour	\$178.13	\$132.37	Outperforms Peer Average
Cost Effectiveness	Cost per Passenger Trip	\$10.16	\$8.54	Outperforms Peer Average
Passenger Revenue	Fare Revenue per Passenger Trip	\$1.12	\$0.89	Underperforms Peer Average
Effectiveness	Farebox Recovery Ratio	11.05%	10.4%	Underperforms Peer Average

2.1.5. Historical Trends

The following analysis examines trends over a seven-year period using NTD data. Operating expenses increased from FY 2018 to FY 2024, but fare revenues dropped significantly during COVID, and have in some cases fully recovered. The farebox recovery ratio, the percentage of operating expenses that is covered by fare revenue, decreased significantly for both Local Bus and Commuter Bus (see Figure 11 and **Figure 12**). Both ridership and revenue fell significantly during the COVID pandemic. Demand response services (FLEX and STAR) also experienced yearly increases in operating expenses since FY 2018, most significantly between FY 2019 and FY 2020. However, fare revenues and the farebox recovery ratio remained very low (see Figure 13).

Local Bus \$120,000,000 35% **Expenses & Fare Revenues** 30% \$100,000,000 25% \$80,000,000 20% \$60,000,000 15% \$40,000,000 10% \$20,000,000 5% \$0 0% 2018 2019 2020 2021 2022 2023 2024 Fiscal Year Operating Expenses Fare Revenues Farebox Recovery Ratio

Figure 11: Local Bus Operating Expenses and Fare Revenues (FY 2018-FY 2024)





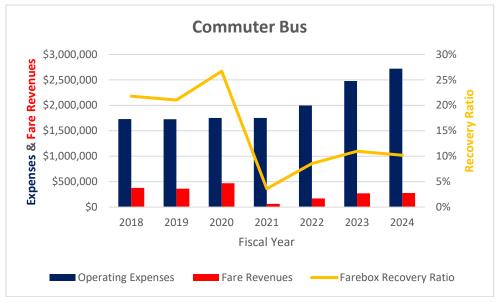
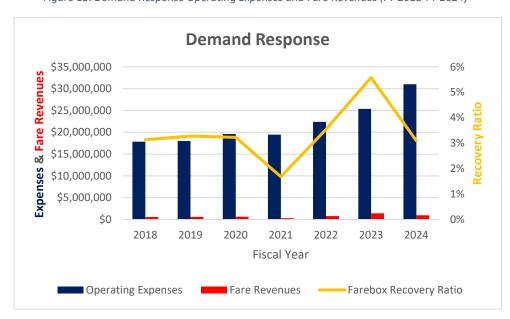


Figure 13: Demand Response Operating Expenses and Fare Revenues (FY 2018-FY 2024)8



⁸ Demand Response includes FLEX, which was introduced in 2020 at \$3.00 a ride. The Colonie FLEX zone switched to \$1.50 a ride in January 2022. Southern Saratoga FLEX was free from its beginning in 2021 until it was raised to \$1.50 in September 2024.

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Operating costs per revenue mile and revenue hour increased for all modes from FY 2018 to FY 2024 (**Figure 14** through Figure 15). All modes experienced a significant increase between FY 2020 and FY 2021 but started to see decreases in cost per revenue mile and revenue hour in FY 2022. Commuter Bus experienced the largest increase during this time, due to the contract price for service remaining the same despite service being reduced due to COVID. As of FY 2024, the cost per revenue hour was \$136 for local buses, \$298 for commuter buses, and \$143 for demand response services.

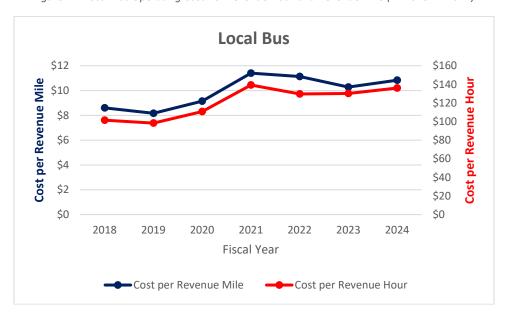


Figure 14: Local Bus Operating Cost Per Revenue Hour and Revenue Mile (FY 2018-FY 2024)





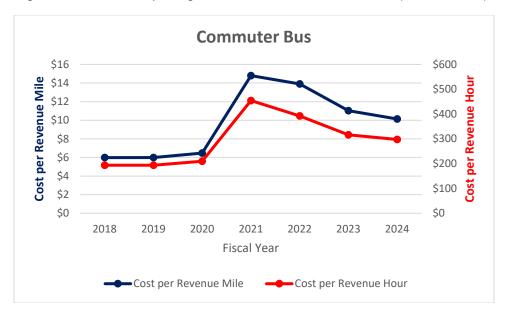
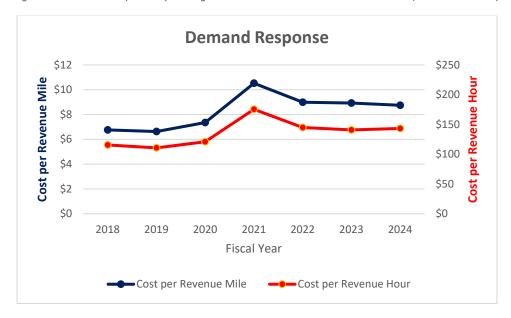


Figure 16: Demand Response Operating Cost Per Revenue Hour and Revenue Mile (FY 2018-FY 2024)





2.1.6. Fleet and Facilities

CDTA's vehicle fleet is the backbone of our service, consisting of buses, vans, paratransit vehicles, and administrative vehicles. Most of the fleet is comprised of 40' buses and 60' articulated buses. There are currently 277 buses in the CDTA local bus fleet, all of which are ADA (Americans with Disabilities Act) compliant and accessible to mobility impaired customers. All CDTA buses are equipped with a bike rack on the front that fits two bicycles.

BUS RAPID TRANSIT BUSES

BRT buses have distinct branding to differentiate them from other CDTA buses. They are housed primarily at their associated divisions (Red Line at the Schenectady Garage, Purple Line at the Albany Garage, Blue Line at the Troy Garage). Because of their distinct branding, they are only intended to be used on their associated BRT routes. These buses have all the amenities of regular fixed-route buses, plus USB charging points, complementary Wi-Fi, transit signal priority technology, and free access to Times Union articles.

COMMUTER COACHES

The Northway and Thruway Expresses use 13 coach buses, housed at the Brown Coach garage in Amsterdam and the Upstate Transit garage in Saratoga Springs. These buses include free Wi-Fi, luggage space, restrooms, and forward-facing cushioned seats. They are ADA accessible.

FLEX

FLEX uses 21 Dodge Ram vans. Most of these vehicles are used in the Colonie FLEX zone.

STAR

STAR uses 30 Ford E-350 buses equipped with back door wheelchair lifts which can transport multiple wheelchairs. Most STAR service is provided by contractors who use a separate fleet of 67 vehicles. Not all contractor vehicles are ADA accessible.

PASSENGER AMENITIES AND TRANSIT FACILITIES

Mobility Hubs/Transit Hubs

CDTA has begun investing in infrastructure at nodes of activity where distinct types of transportation services are grouped, branding them as "mobility hubs." The first location constructed was the Gateway Plaza Mobility Hub in Schenectady. Opened in 2023, this mobility hub connects ten fixed routes, as well as *CDPHP Cycle!* and *DRIVE*. Additionally, customer amenities include new sidewalks with snow and ice melt systems, upgraded traffic signals, a bus-only turnoff, EV charging stations, and an improved waiting area. In 2024, CDTA opened



two additional Mobility Hubs in Albany and Troy, and we intend to construct more in the future.

CDTA also has various non-official hubs and transfer points built into the network. These points are often located in the downtown cores of the region's largest cities, where multiple bus routes converge. Many transfer points include bus shelters with interior lighting, bike racks, and trash cans, while BRT stations also include branded pylons for wayfinding. In addition to downtown cores, there are additional transfer points at locations such as Crossgates Mall, Colonie Center, and Latham Farms, where multiple routes converge.

Bus Stops and Amenities

According to a bus stop assessment completed for CDTA in 2022, CDTA has approximately 3,090 bus stops spread across its six counties. Of these stops, 358 provide shelters. A recent bus stop field assessment, detailed in **Figure 17**, indicated that the majority of bus stop signs (66 percent) and shelters (79 percent) are in good condition.

However, the assessment also indicated that many stops in the system are missing bus stop signs, have incorrect or outdated information, or are faded or damaged and in need of replacement. In addition, 50 percent of all bus stops do not provide ADA loading areas, with 16 percent lacking any sidewalk. The assessment also indicates that 52 percent of stops lack adequate lighting, with 90 bus shelters having no lighting.

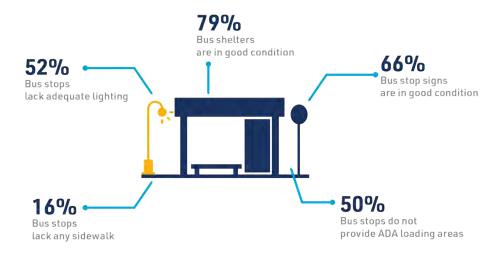


Figure 17: Bus Stop Field Assessment Results

Passenger Information

CDTA bus schedules are available at the Sales Center, aboard buses, and at local institutions. CDTA service information is also available online through our website, https://www.cdta.org,





and the Navigator app. In addition to schedules, the website includes a trip planner tool. Real-time bus tracking is available at https://www.cdta.org/service-map/ and in the Navigator app.

Park-and-Rides

CDTA fixed-route buses serve 21 park-and-ride facilities located across the Capital Region. Most park-and-ride facilities are part of a larger parking lot that is owned by a private or public entity, with a set number of spaces leased to CDTA for park-and-ride use. Aside from these lease agreements, CDTA owns the East Greenbush Park-and-Ride on Route 4, the Albany County Rail Trail Park-and-Ride on South Pearl Street in Albany, and the Route 378 Park-and-Ride in Menands. An additional thirteen lots are listed on the CDTA website, but do not receive CDTA bus service. Most of these lots are used for carpooling, or by a combination of intercity, commuter, and local bus providers outside of CDTA.

To evaluate the utilization rates of the 21 park-and-ride facilities receiving fixed-route bus service, CDTA retained Colliers Engineering to provide data collection and analysis. Visual inspections were conducted on Tuesdays, Wednesdays, and Thursday of each week from 7/20/2023 to 8/8/2023. The morning inspections were conducted between 8:00 AM and 10:00 AM, with the afternoon inspections performed between 2:00 PM and 4:00 PM.

Table 9 shows the utilization rates at these lots, along with the observed number of spaces (by Colliers Engineering during field assessments), and the CDTA routes served.



Table 9: Park-and-Ride Utilization Rates

Lot	Observed Number of Spaces	CDTA Routes Served	AM Utilization	PM Utilization
Albany Rail Trail Park-and-Ride	102	922/923	42%	N/A
Crossgates Mall Park-and-Ride	523	10, 11, 12, 114, 117, 155, 190, 712, 719, 910	6%	42%
Defreestville Rt. 4 Park-and-Ride	152	214/224	25%	N/A
Delaware Ave Park-and-Ride	102	18	16%	N/A
Elm Ave Park-and-Ride	107	519	16%	N/A
Fire Road Clifton Park Park-and-Ride	111	None	N/A	N/A
Hamilton Square (20 Mall) Park-and-Ride	14	117, 763	0%	0%
Latham Farms Park-and-Ride	95	182, 190, 370	8%	13%
Menands Route 378 Park-and-Ride	82	22, 922/923	40%	N/A
Milton Town Hall Park-and-Ride	14	NX	14%	N/A
Northway Exit 12 Park-and-Ride	74	NX	53%	46%
Northway Exit 15 Park-and-Ride	134	450, 452, NX	16%	15%
Northway Exit 8 Park-and-Ride	190	NX	29%	N/A
Northway Exit 9 Park-and-Ride	116	NX	36%	36%
Rotterdam Square Mall Park-and-Ride	111	354	0%	0%
Schodack Rt. 9 & 20 Park-and-Ride	116	233	29%	N/A
Slingerlands ShopRite Park-and-Ride	41	13, 18	2%	1%
Thruway Exit 26 Park-and-Ride	57	TX	64%	N/A
Thruway Exit 27 Park-and-Ride	85	TX	53%	N/A
Woodlawn Plaza Park-and-Ride	68	905, 355	38%	39%
Saratoga Amtrak Park-and-Ride	80	451	0%	0%
St Luke's Church Park-and-Ride	60	905, 355	14%*	N/A

^{*}AM utilization rates at St Luke's Church Park-and-Ride were obtained by Creighton Manning Engineering during data collection for CDTA's Red Line Refresh.



Figure 18 shows the location and spaces of these 22 park-and-ride facilities throughout the region.

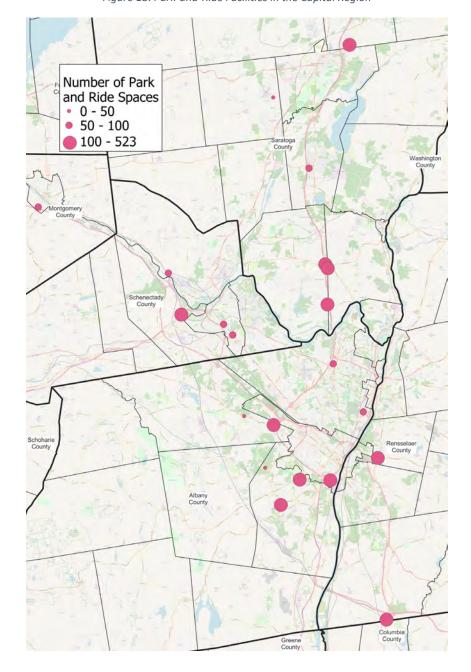


Figure 18: Park-and-Ride Facilities in the Capital Region



RAIL STATIONS

CDTA owns and operates the Saratoga Springs Rail Station and Joseph L. Bruno Rail Stations, including the latter's parking garage. While CDTA constructed these facilities and continues to own and operate them, Amtrak is responsible for train operations, ticketing, and baggage systems.

The Joseph L. Bruno Rail Station, located in the City of Rensselaer, is a key transportation gateway to the Capital Region. This station is the eighth busiest station in the country, serving over 617,000 passengers in 2022. In addition to rail travel, the Joseph L. Bruno Rail Station provides connections with Vermont Translines, CDTA, ridesharing apps, and local taxicab companies. This facility provides 1,300 parking spaces between the parking garage and multiple surface lots to accommodate short- and long-term parking demand. The Saratoga Springs Rail Station sees less activity, with approximately 22,000 Amtrak trips.



BUS DEPOTS

CDTA owns and operates five bus depots, also known as divisions, for storage and maintenance of the existing vehicle fleet.

The Albany Division is located at 110 Watervliet Ave in the City of Albany. Most services in Albany County and southern Rensselaer County operate out of this depot, accounting for about half of CDTA's fixed-route service. The Albany Division is the center of CDTA operations, with the most technicians, bus operators, and road supervisors. It is also home to Central Communications, the STAR and FLEX management and dispatch center, and the training center for drivers and mechanics. Lastly, this depot serves as CDTA's administrative headquarters. The building is 184,600 square feet and houses around 180 service vehicles, including paratransit and microtransit vehicles.

The Troy Division is located at 40 Hoosick Street in the City of Troy. Most services in the City of Troy and some services in Northern Albany County operate out of this depot, accounting for 25 percent of CDTA's fixed-route service. It is a 60,000-square-foot facility housing up to 60 buses.

The Schenectady Division is located at 2401 Maxon Rd Extension in the City of Schenectady. It houses services in Schenectady County, Saratoga County, and Montgomery County, accounting for 25 percent of CDTA's fixed-route service. It is 45,000-square-feet and houses up to 60 buses.

The facility in Glens Falls is located at 495 Queensbury Avenue in the Town of Queensbury. At 13,000 square feet, it accommodates three paratransit vehicles and 16 fixed-route vehicles. There is one bus lift. Vehicles stored at this facility are fueled at the Warren County Airport.

The fifth facility is located at 1430 State Highway 5S in the City of Amsterdam. CDTA leases this space. It houses some of the vehicles that serve Montgomery County. The remaining vehicles serving Montgomery County are housed in the Schenectady Division.

CDTA also purchased the Daily Gazette building at 2435 Maxon Road Extension in December of 2024. This building is located next to the Schenectady Division and will expand CDTA's storage space and ability to serve Schenectady, Saratoga, and Montgomery Counties. The building is 107,045 square feet on a 9.2 acre lot. CDTA plans to make improvements to the building, including but not limited to interior improvements for staff and storage space for 185 buses.



2.1.7. On Time Performance

FIXED ROUTE

CDTA's fixed-route service has experienced a decline in on-time performance (OTP) in recent years. In addition to the overall decline, OTP has developed a seasonal pattern, generally being the best in winter months and the worst in September.

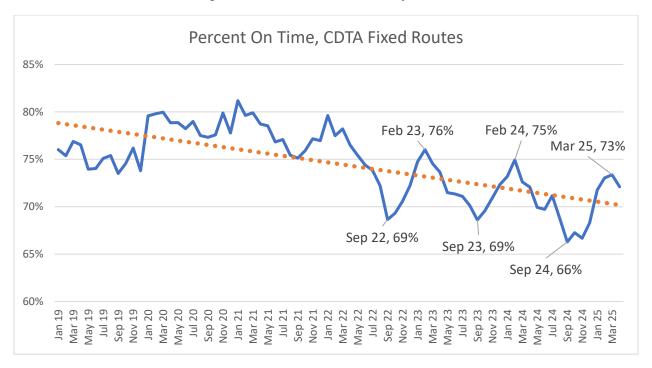


Figure 19: CDTA Fixed-Route On-Time Performance

There may be a number of reasons for the decline, but parsing out the relevant causes is challenging. Commonly suggested causes include driver turnover and inexperience with an assigned route, day-of-service work changes, and new traffic patterns post-COVID. It is also general transportation planning knowledge that traffic is higher in summer than in winter, which may explain the seasonality.



STAR PARATRANSIT

CDTA's STAR Paratransit service has been doing relatively well in its on-time performance, generally achieving above 90% on-time trips and improving overall.

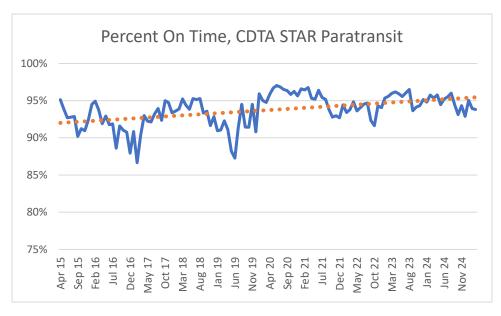


Figure 20: STAR On-time Performance

STAR, however, also follows a different standard for on-time performance. STAR is considered on-time within a 25 minute window, instead of the -1 to 5 minute window for fixed-route service.



FLEX

Looking at FLEX on-time performance according to the STAR standard of picking up within 25 minutes of the original estimated pickup time, we find that FLEX is doing even better than STAR, never dipping below 97%.

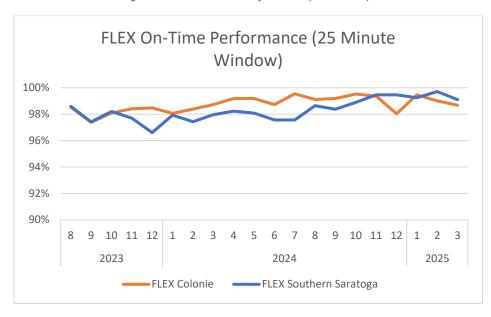


Figure 21: FLEX On-Time Performance (25 Minutes)9

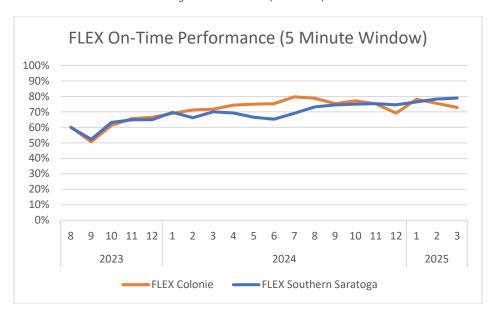
Although FLEX is in many ways similar to STAR, using the same standard may or may not be valid. FLEX schedules pickups immediately while STAR schedules a day out, so FLEX OTP should be expected to be better. This is beneficial to customers, but FLEX customers are also often waiting at a bus shelter to transfer from fixed routes to FLEX, whereas STAR customers are generally waiting in the comfort of their home or at work. In that respect, we could also look at FLEX using the same five-minute window that fixed routes use.

⁹ On-time Performance data is not available before the software switch from Transloc to Moovit

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Figure 22: FLEX OTP (5 Minutes)



By this measure, FLEX on-time performance has improved to the point that it is comparable to fixed-route.

Wait Times

CDTA aims for 30-minute maximum wait times for FLEX. Wait times for FLEX could be seen as similar or parallel to on-time performance, since on-time performance is ultimately about reliability, and FLEX wait times can vary significantly more than fixed-route arrival times.

FLEX customers wait roughly 30 minutes on average for their pickup.

Average FLEX wait times are slightly over 30 minutes, which is what one would expect statistically from a fixed route with 60 minute headways. In the following graphs, the same measurements are also provided for 15 minutes and 10 minutes.¹⁰

¹⁰ Because of suspected database issues, data for Southern Saratoga from August 2023 through March 2024 was excluded in the graphs below.





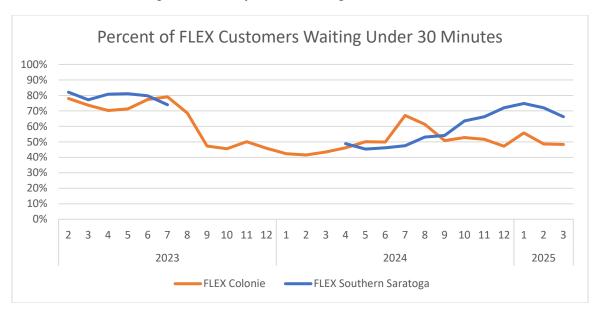
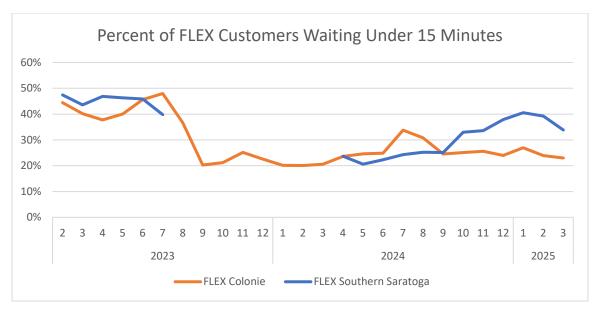


Figure 24: Percent of FLEX Rides Waiting Less than 15 Minutes







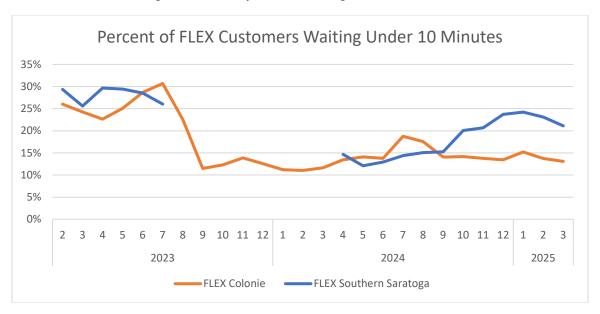
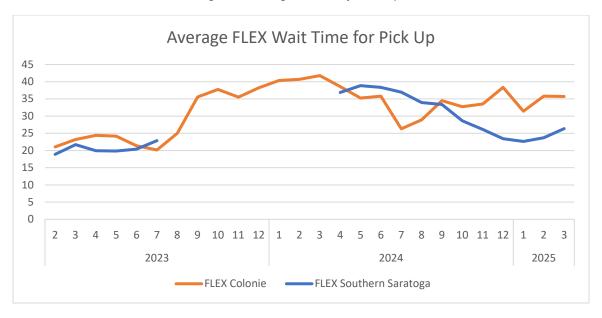


Figure 26: Average Wait Time for Pick Up





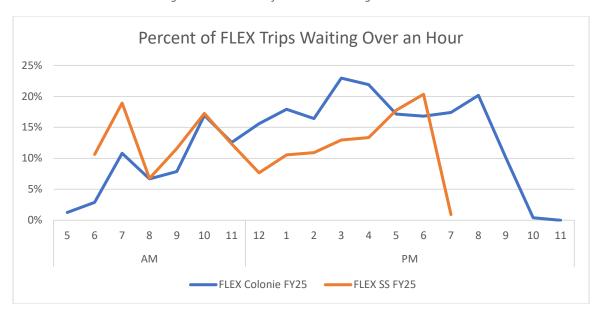


Figure 2527: Percent of FLEX Rides Waiting Over an Hour

To summarize:

- FLEX's on-time performance is roughly equivalent to fixed-route and better than STAR's. Some FLEX customers are waiting less than ten minutes for their pickup, but the average wait time is roughly 30 minutes, and can be much longer
- Wait times are also somewhat better in the Southern Saratoga zone than they were in the Colonie zone.
- Preliminarily, the new Guilderland zone wait times are on average 10-15 minutes, and Southern Saratoga's wait times have improved.



2.1.8. Existing Workforce

CDTA staff members are vital to ensuring the successful operation of our service offerings. A major challenge since the COVID-19 pandemic has been an ongoing operator headcount shortage, creating obstacles to maintaining or expanding service.

Table 10 details the headcount deficits among operators and maintenance staff at CDTA over the past year. On average, CDTA was short 48 operators and nine maintenance technicians.

Month-Year	Operator Headcount Deficit	Maintenance Headcount Deficit
Jul-23	-52	-10
Aug-23	-48	-7
Sep-23	-50	-7
Oct-23	-49	-8
Nov-23	-48	-7
Dec-23	-38	-8
Jan-24	-44	-10
Feb-24	-56	-12
Mar-24	-48	-8
Apr-24	-51	-12
May-24	-47	-9
Jun-24	-48	-12
Average	-48	-9

Table 10: CDTA Headcount Deficits

As a result of the shortage, CDTA has had to adjust service levels. In some cases, trips must be cut to account for operator shortages. Total trips cut on the day of service fluctuates between 0.2 percent and one percent on a monthly basis. Despite these low percentages, every trip that is cut results in a last-minute disruption to a rider's commute and decreases the reliability of CDTA's service. Ultimately, staffing shortages require extra effort from CDTA to maintain service and present challenging tradeoffs as we work to balance service efficiency against the rider experience.

CDTA has implemented workforce strategies to combat staffing shortages. For example, CDTA has increased recruiting efforts and HR staff, including adding an Employee Engagement Manager dedicated to operations staff retention. Additionally, CDTA offered an attendance bonus as an incentive for new and existing staff. Moving forward, it will be important to consider the availability of staff as part of the TDP implementation process to ensure that CDTA's headcount is sufficient to support any proposed service concepts.



2.2. Regional Population and Economic Trends

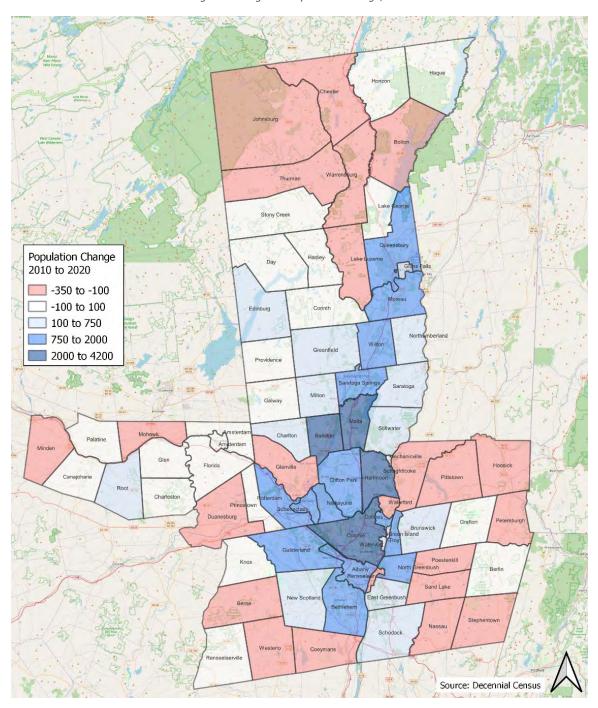
CDTA also looked at trends in the population and economy of the Capital District to identify any changes impacting transit and mobility needs. For full details, see the Regional Population and Economic Trends memo in the TDP appendices, available at CDTA.org/TDP.

KEY TAKEAWAYS

- 1. The region is growing slowly and projected to continue to grow.
- Population growth is centered around the cities, Saratoga County around the I-87 corridor, East Greenbush, and North Greenbush. Population decline is mainly occurring in rural areas. See Figure 28 below.
- 3. The economy is improving, although certain areas, such as Amsterdam, are not experiencing this.
- 4. Work from home increased and was at 11% in 2022.
- 5. CDTA intends to keep monitoring these characteristics as new Census data become available.









2.3. Market Analysis

Density is the primary factor determining the effectiveness and efficiency of public transportation. Higher concentrations of people and/or jobs tend to have higher transit ridership. At the same time, major destinations heavily determine where transit must run.

This Market Analysis consists of two key components to identify the strongest transit corridors in the CDTA service area: Transit Potential and Transit Need. Both analyses were conducted using population data from the U.S. Census American Community Survey (ACS) 2017-2021 5-Year Estimates and data for 2020 from the U.S. Census' Longitudinal Employer-Household Dynamics (LEHD) program.

Transit Potential is an analysis of population and employment density, identifying areas where high concentrations of people and jobs suggest a higher likelihood of transit use. Transit Need focuses on socio-economic characteristics such as income, household automobile availability, age, and disability status that are indicative of a higher propensity to use transit. Additionally, certain land uses—such as supermarkets/major retail, civic/community centers, multifamily housing, educational institutions, and medical facilities—tend to generate more transit trips than other land uses. These ridership-generating land uses are highlighted in county and city maps presented in this chapter.

2.3.1. Transit Potential

POPULATION DENSITY

Public transportation is most efficient when it connects population and employment centers where people can easily walk to and from transit facilities. The reach of transit is generally limited to within one-quarter mile to one-half mile of a transit line, or a five- to ten-minute walk. For this reason, the size of a transit travel market is directly related to an area's population density. Typically,

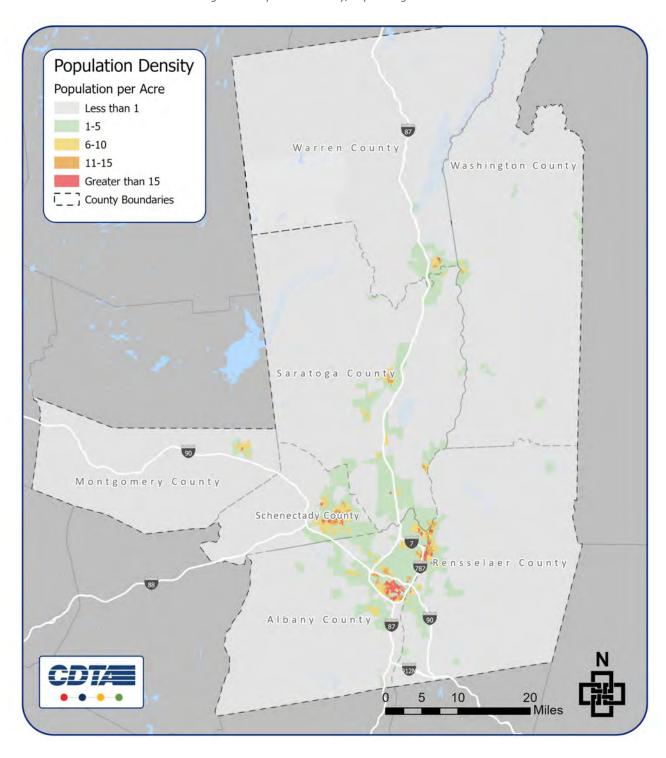
The Capital Region's greatest population densities are found in the Cities of Albany, Schenectady, and Troy.

a density greater than five people per acre is needed to support base-level (hourly) fixed-route transit service. In the map below, yellow areas indicate places where fixed-route service could be feasible; areas that are orange or red have the potential to support more frequent service.

Within the Capital Region, the areas of greatest population densities are concentrated around the cities of Albany, Troy, and Schenectady, with smaller pockets of density around the cities of Saratoga Springs, Glens Falls, and Amsterdam (Figure 29-Figure 35). The Transit Cooperative Research Program Quality Of Service Manual states 4.5 housing units per acre as the minimum density needed for hourly service. This equates to roughly 10 people per acre, or the upper end of the yellow areas on the following maps. CDTA service does exceed this at times, but all routes appear to at least connect to an area that meets that minimum. Transit served areas below that minimum are also generally areas with significant employment.



Figure 29: Population Density, Capital Region¹¹



 $^{^{\}rm 11}$ Population density may represent an underestimate due to difficulty counting college students.

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Figure 30: Population Density, Albany

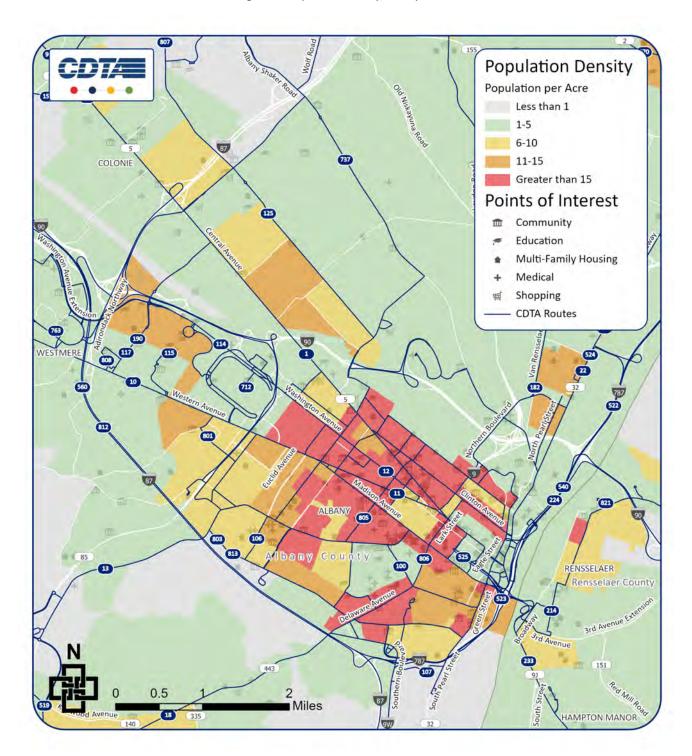




Figure 31: Population Density, Troy

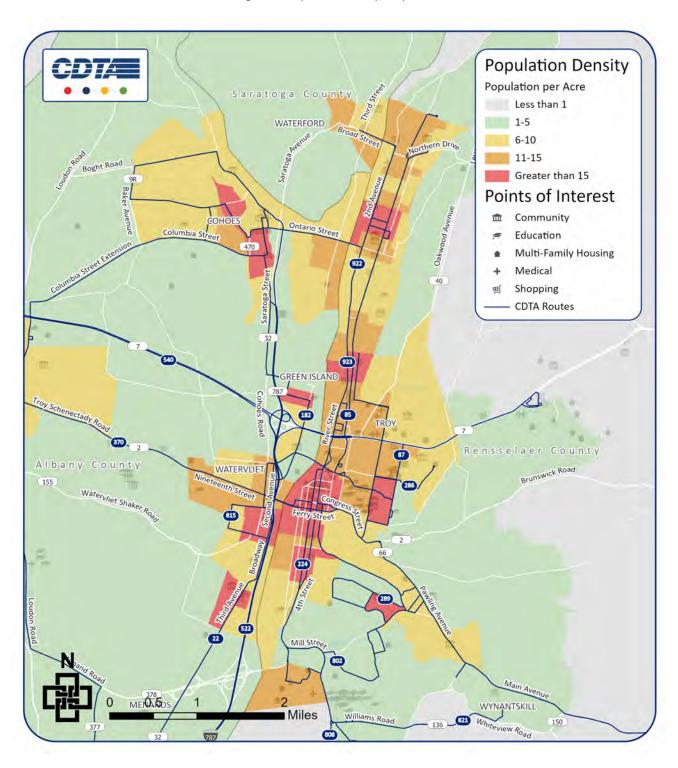




Figure 32: Population Density, Schenectady

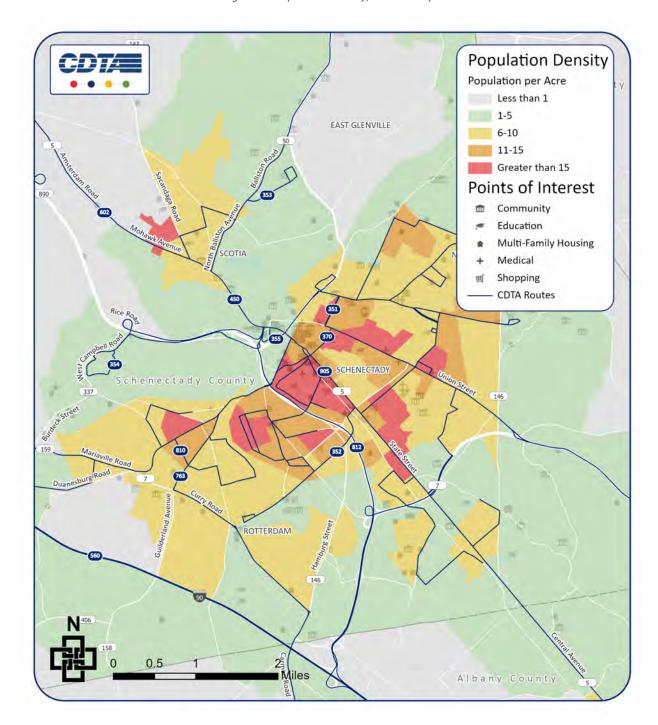




Figure 33: Population Density, Saratoga Springs

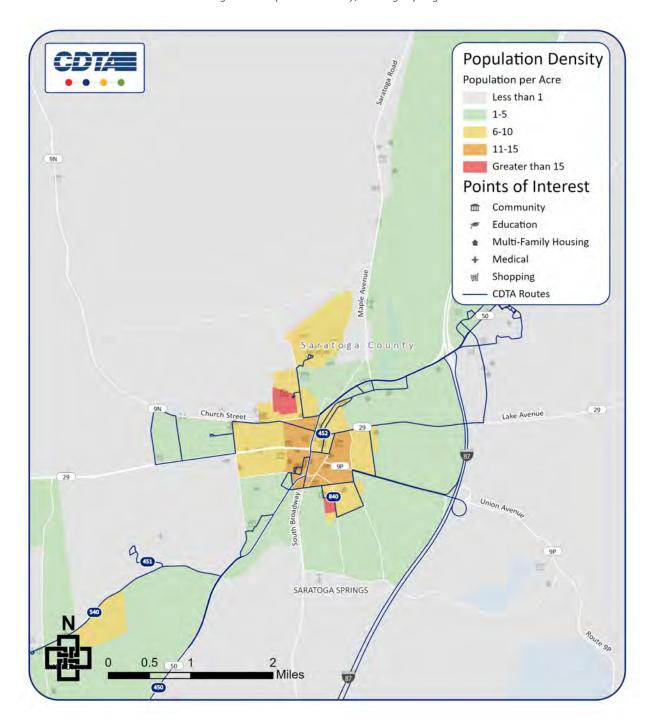




Figure 34: Population Density, Amsterdam

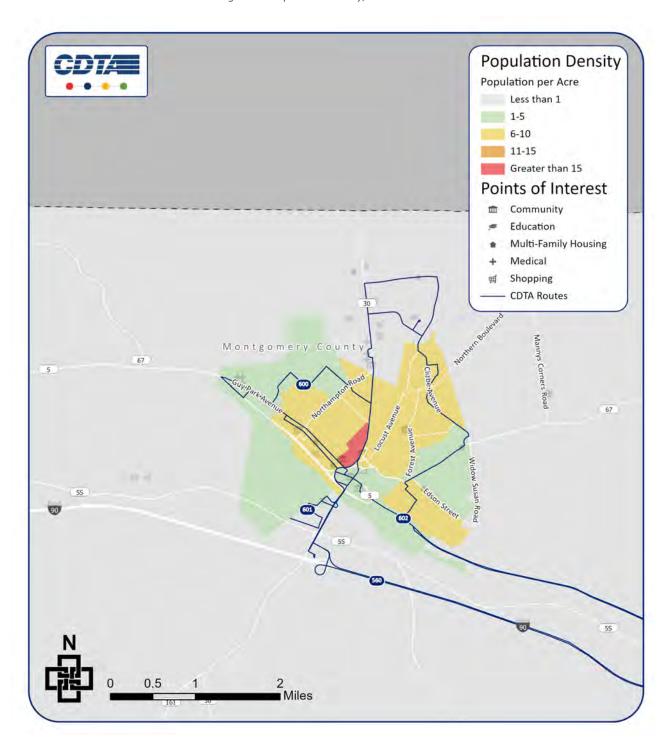
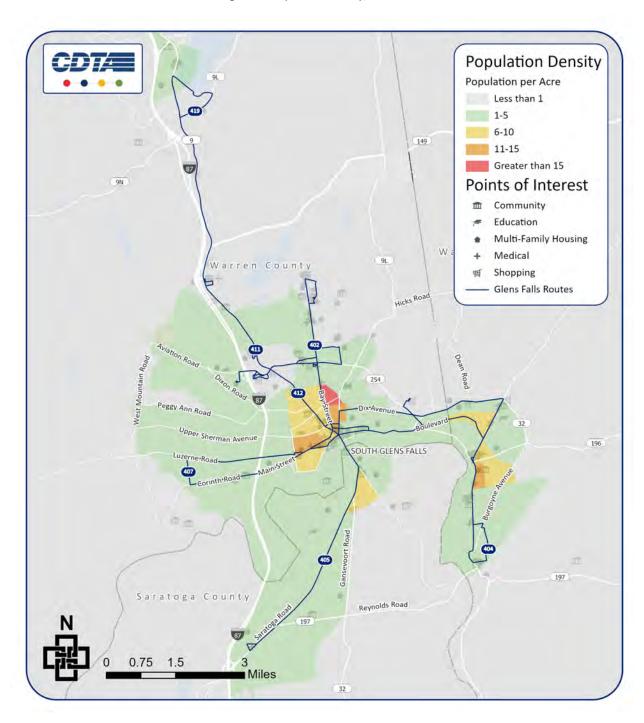




Figure 35: Population Density, Glens Falls





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. The results from the Phase I outreach survey support this claim, with 57

57 percent of respondents cite work as their most common CDTA trip purpose.

percent of respondents citing work as their most common reason for taking transit. Transit service that operates in 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 the yellow, orange, and red areas in **Figure 36** through **Figure 42**, which illustrates that there are pockets of high job density in Albany, Troy, Schenectady, Saratoga Springs, Glens Falls, and Amsterdam.



Figure 36: Employment Density, Capital Region

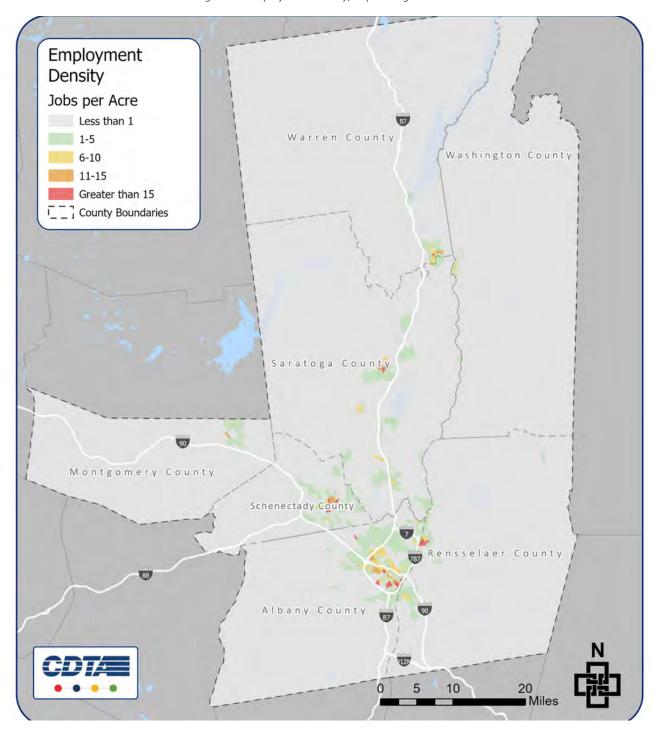




Figure 37: Employment Density, Albany

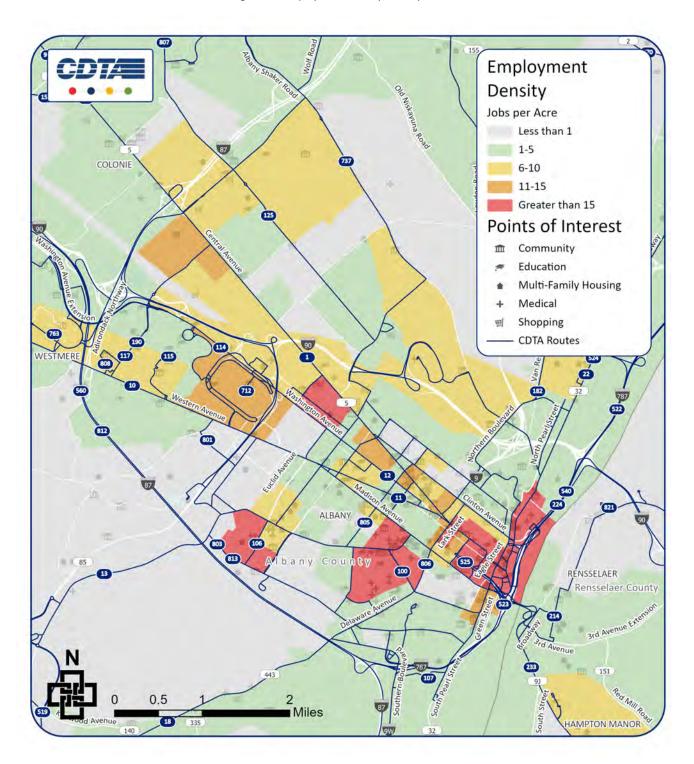




Figure 38: Employment Density, Troy

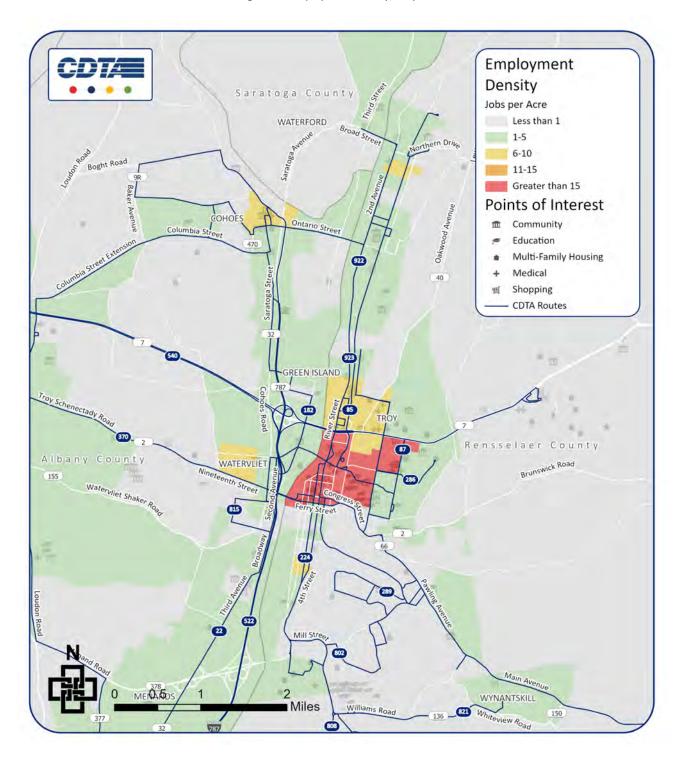




Figure 39: Employment Density, Schenectady

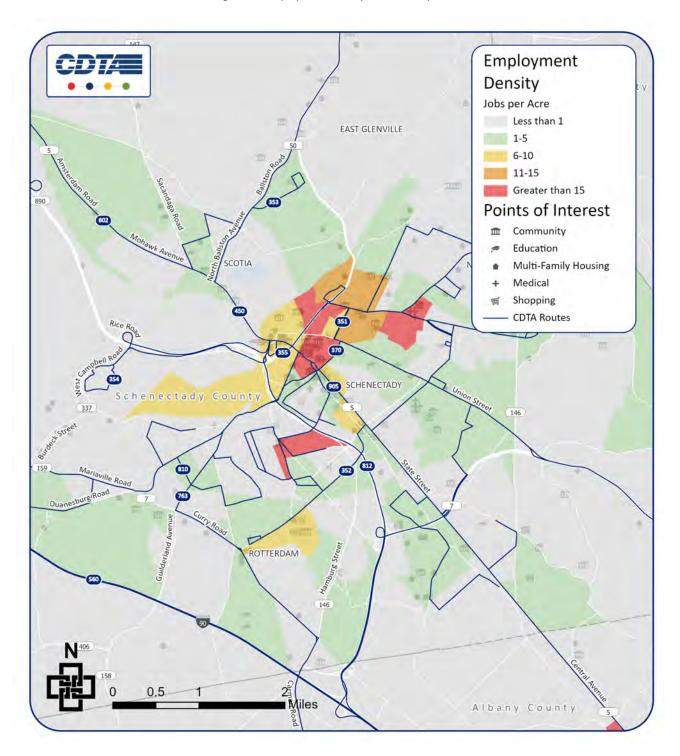




Figure 40: Employment Density, Saratoga Springs

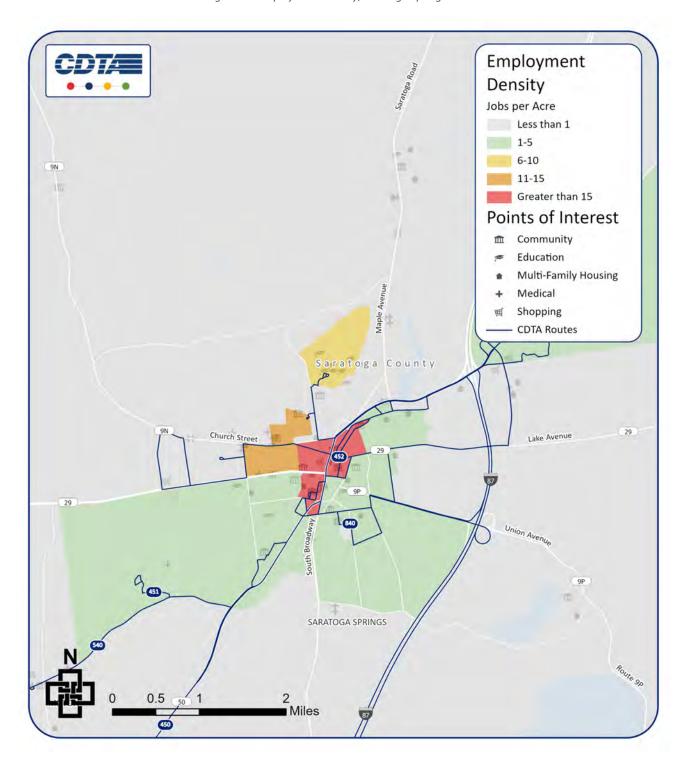




Figure 41: Employment Density, Amsterdam

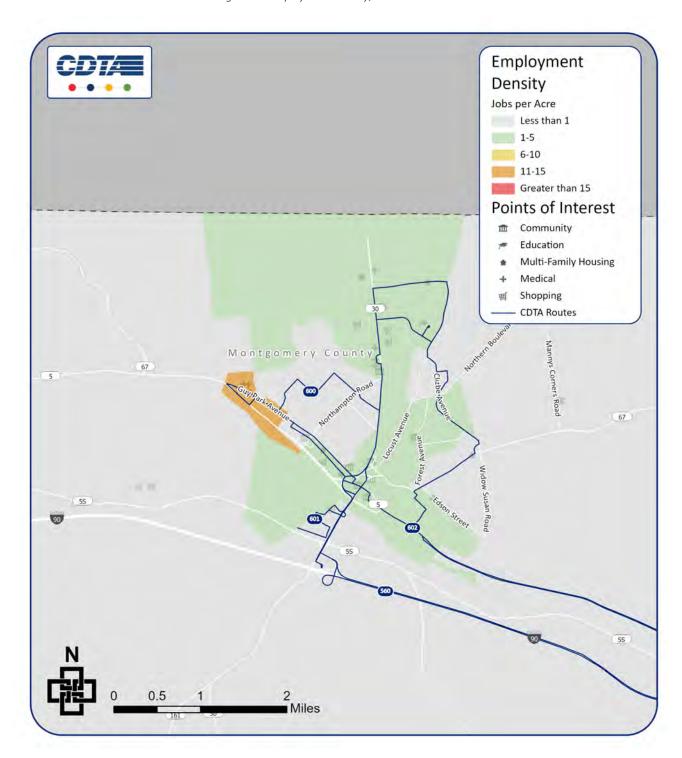
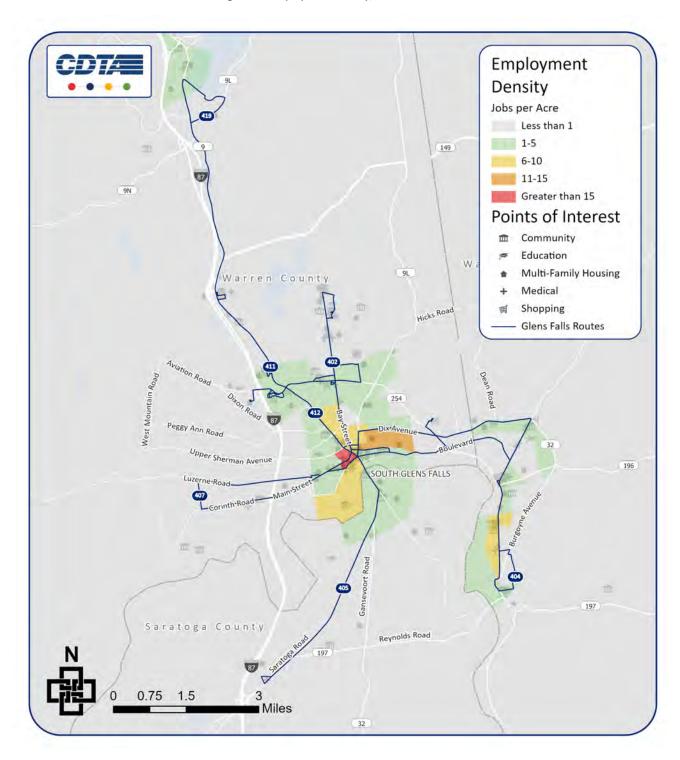




Figure 42: Employment Density, Glens Falls





TRANSIT POTENTIAL RESULTS

Transit Potential, depicted in **Figure 43** through **Figure 49**, combines the population and employment densities for each block group to indicate fixed-route service viability in the study area. Like population and employment densities, the areas with the greatest transit potential are concentrated in Albany, Troy, and Schenectady, with moderate potential in Saratoga Springs, Glens Falls, and Amsterdam.



Figure 43: Transit Potential, Capital Region

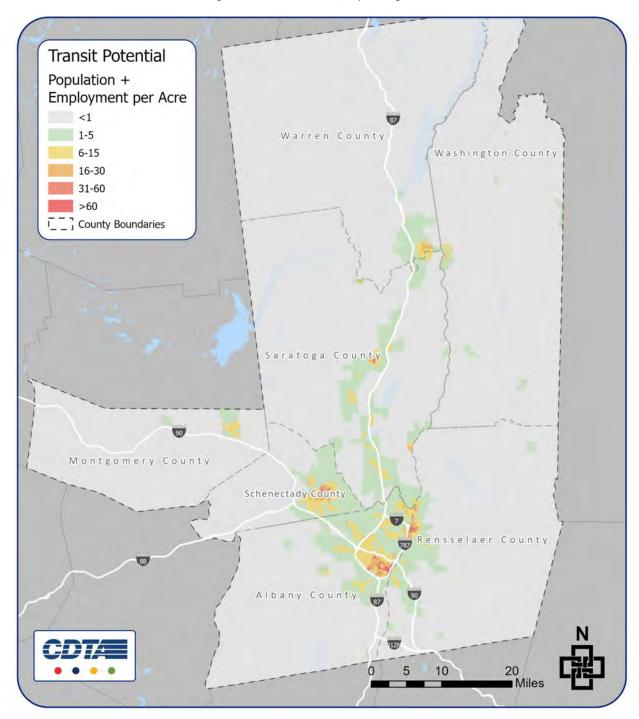




Figure 44: Transit Potential, Albany

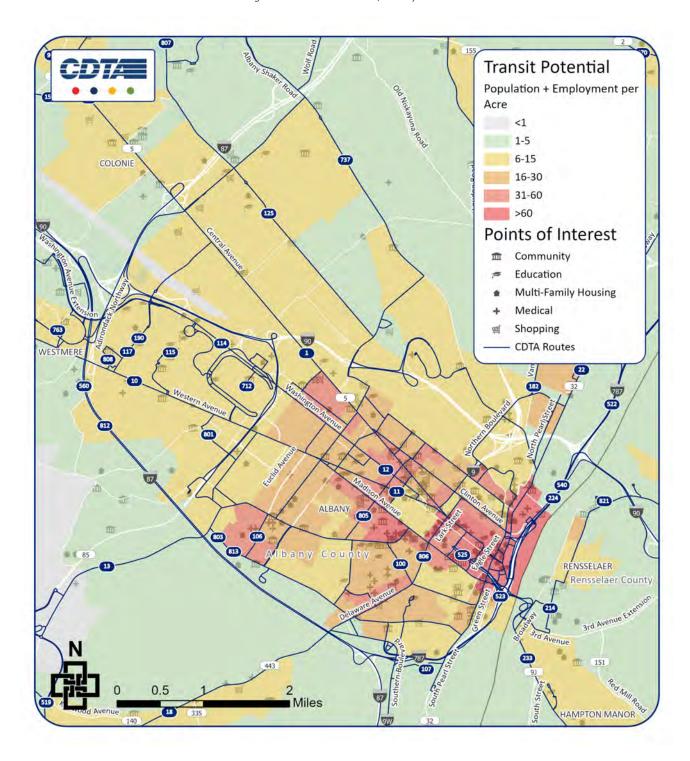




Figure 45: Transit Potential, Troy

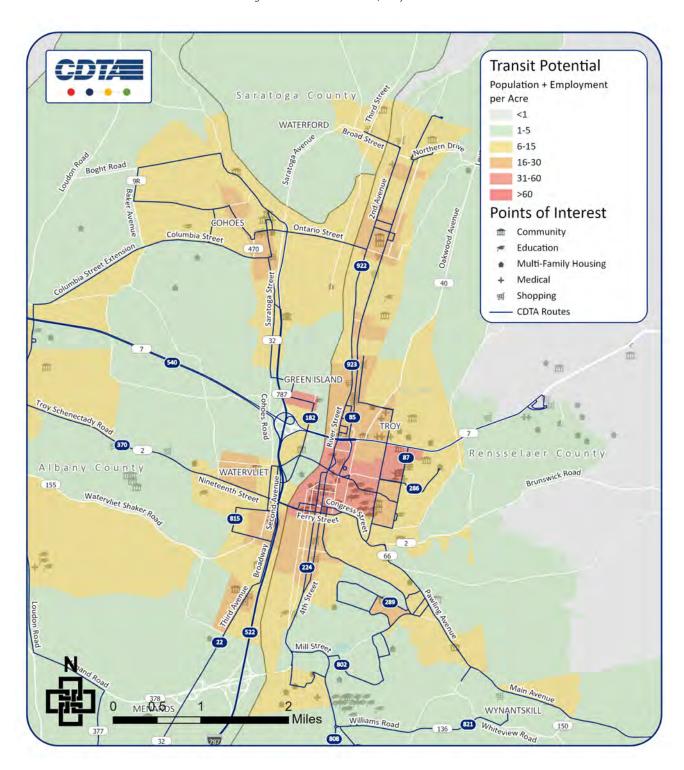




Figure 46: Transit Potential, Schenectady

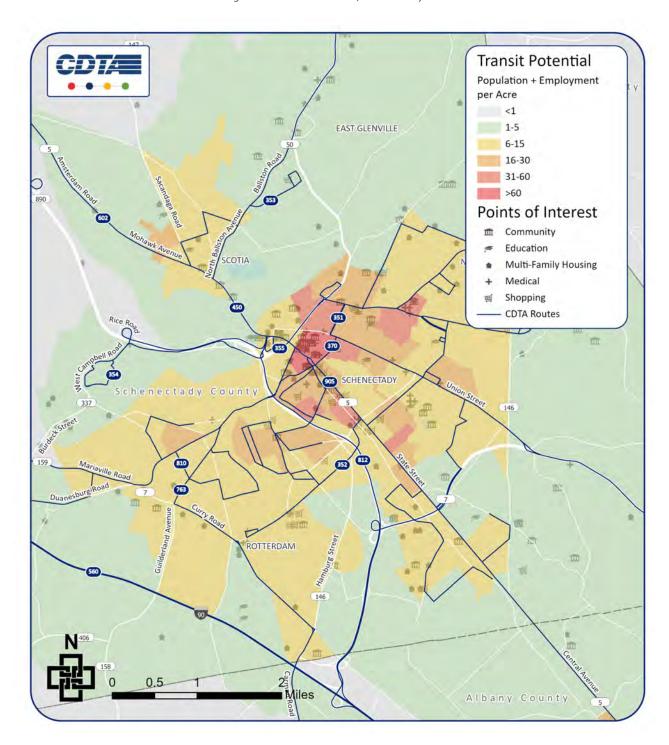




Figure 47: Transit Potential, Saratoga Springs

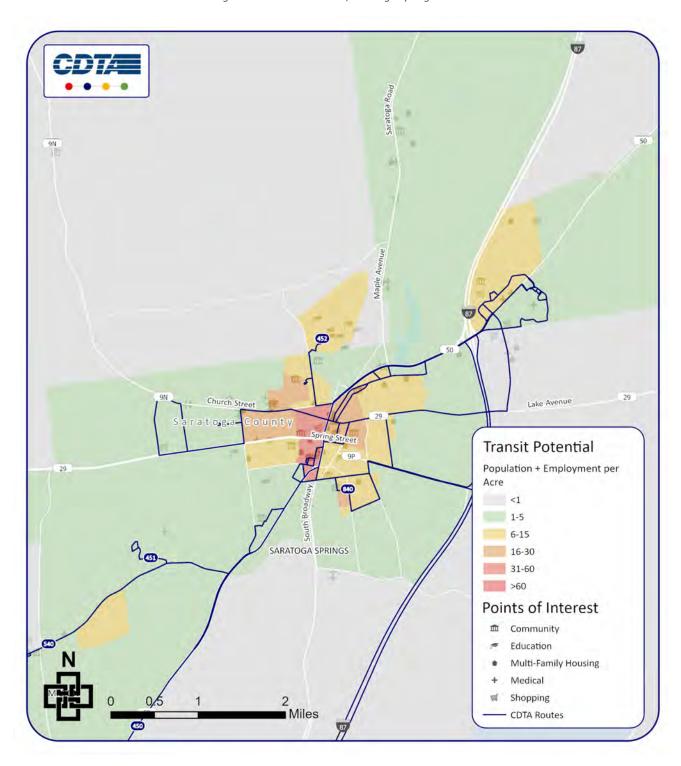




Figure 48: Transit Potential, Amsterdam

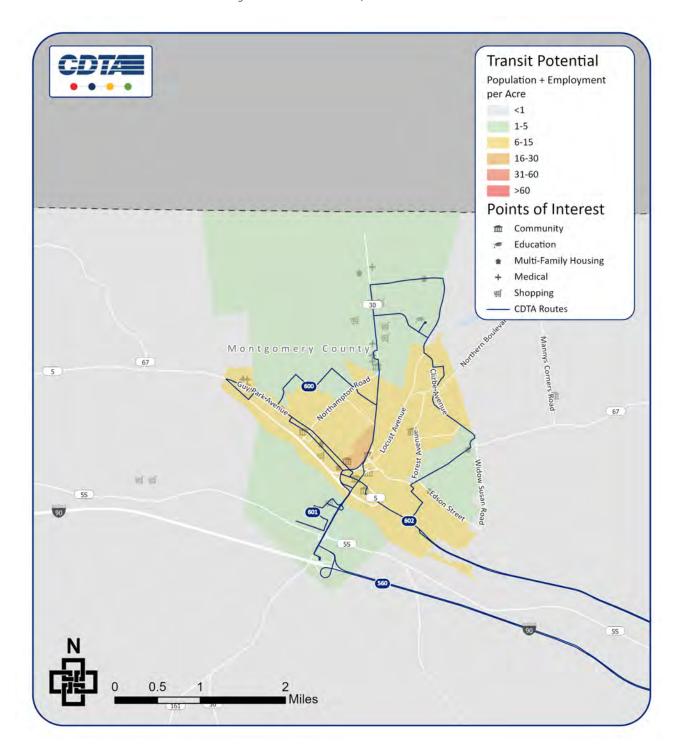
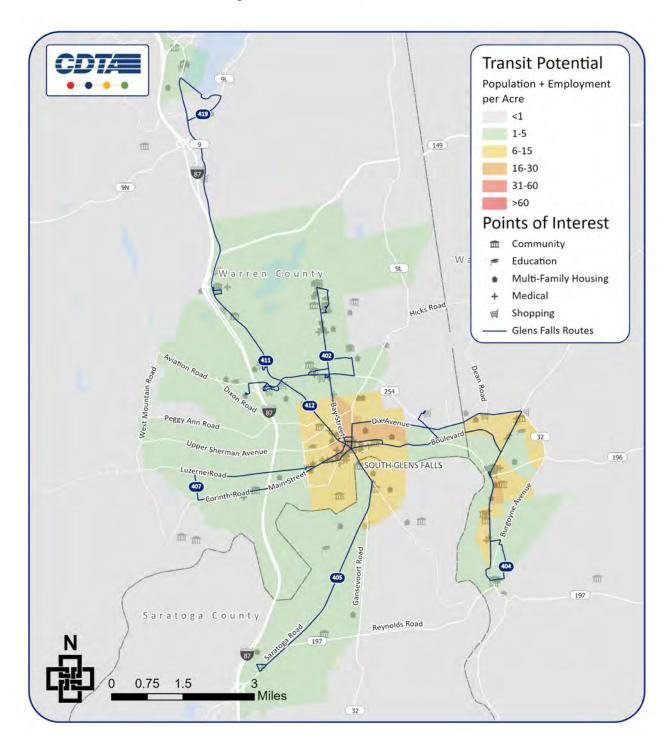




Figure 49: Transit Potential, Glens Falls





2.3.2. 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 by choice or due to financial or legal reasons who often have no other transportation options besides using transit.
- People with disabilities, many of whom cannot drive and/or have difficulty driving.
- Low-income individuals, typically because transit is less expensive than owning, operating, and maintaining a car.
- Young people, who may not be licensed to drive, and who have in recent years shown a
 greater interest in transit, walking, and biking.
- Older adults, who may become less comfortable or able to operate a vehicle as they age.

The maps in this section show the relative densities of each of these five high-transit-propensity population subgroups by Census block groups in the Capital Region to help determine where the need for transit service is greatest.

To determine Transit Need, the above metrics were combined with total population into an index that highlights areas with residents who are more likely to use transit. Each metric is weighted based on its relevance to transit ridership to generate the final score. The metrics with the highest weights are total population, low-income population, and zero-car households. This is followed by people with disabilities with a moderate weight and senior and youth populations with lower weights.

While the Transit Potential analysis highlights areas throughout the Capital 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 will be considered alongside Transit Potential. If two areas have similar and sufficient Transit Potential, the area with higher Transit Need will be prioritized for service. Conversely, in some locations, while the density of transit-dependent population groups may be relatively high, if transit potential is still quite low, the opportunity to generate substantial fixed-route transit ridership will also remain low.

Figure 50 through **Figure 56** presents the composite transit need index for the Capital Region. Maps showing the individual transit need measures (people without access to an automobile, persons with disabilities, low-income individuals, youth, or older adults) are presented in the Market Analysis memo.



These results reveal that the populations most likely to need transit services are spread in and around Albany, Troy, Schenectady, Saratoga Springs, Amsterdam, and Glens Falls. Generally, areas with the highest transit need are well-served by existing bus service.

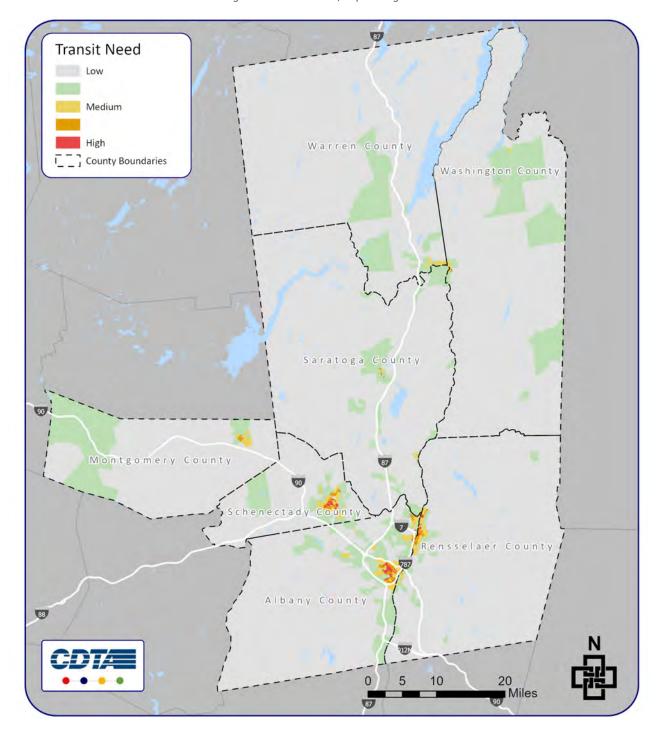


Figure 50: Transit Need, Capital Region





Figure 51: Transit Need, Albany

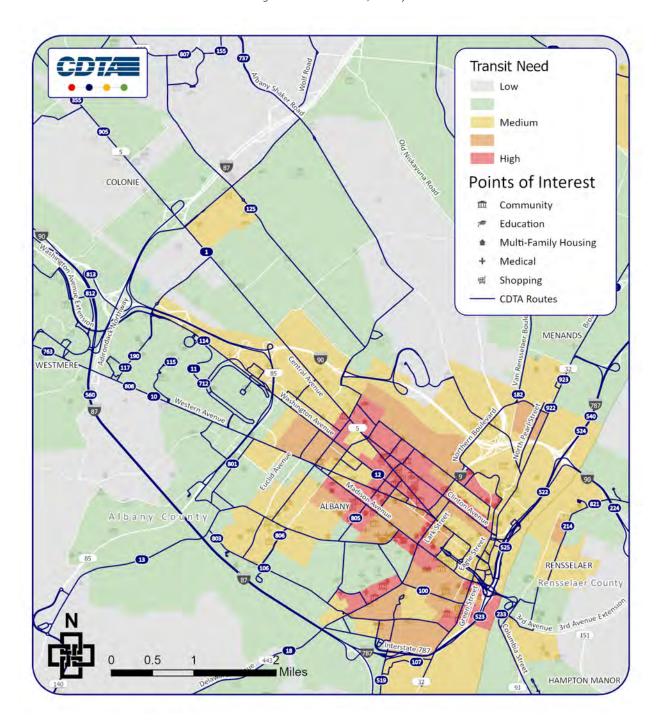




Figure 52: Transit Need, Troy

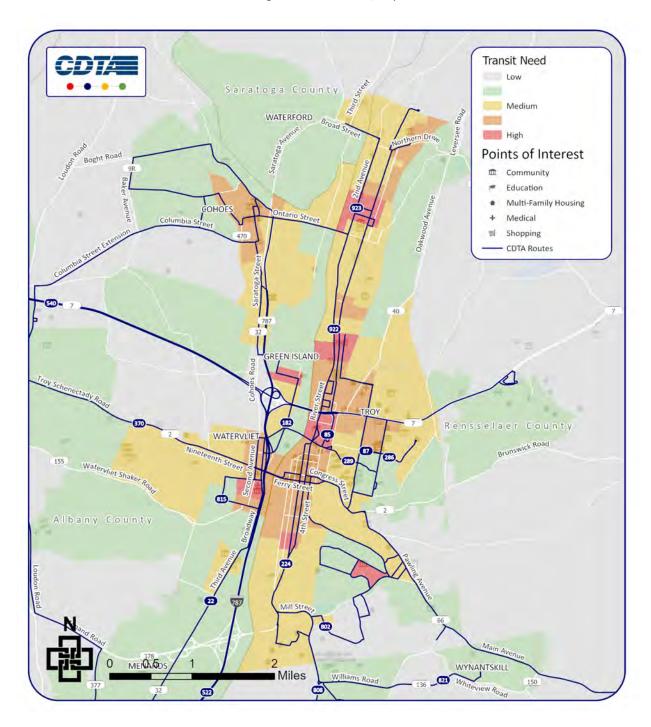




Figure 53: Transit Need, Schenectady

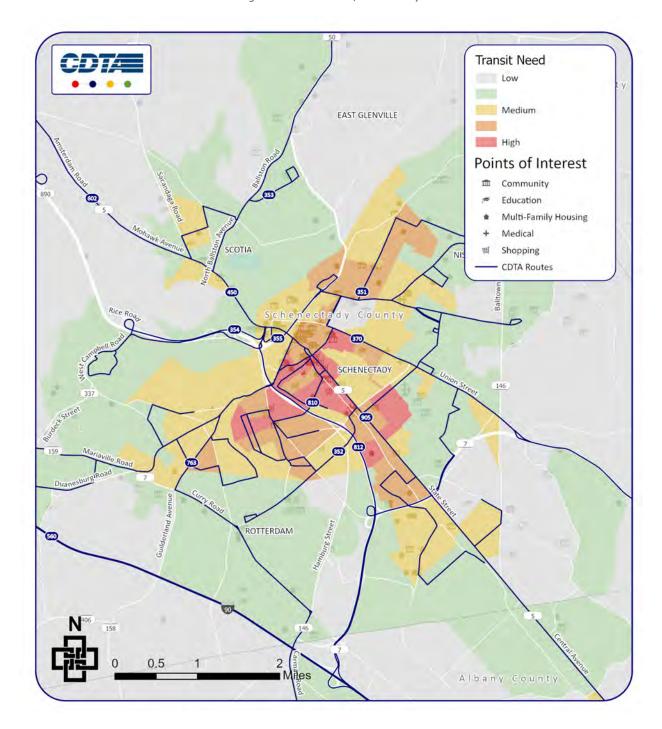




Figure 54: Transit Need, Saratoga Springs

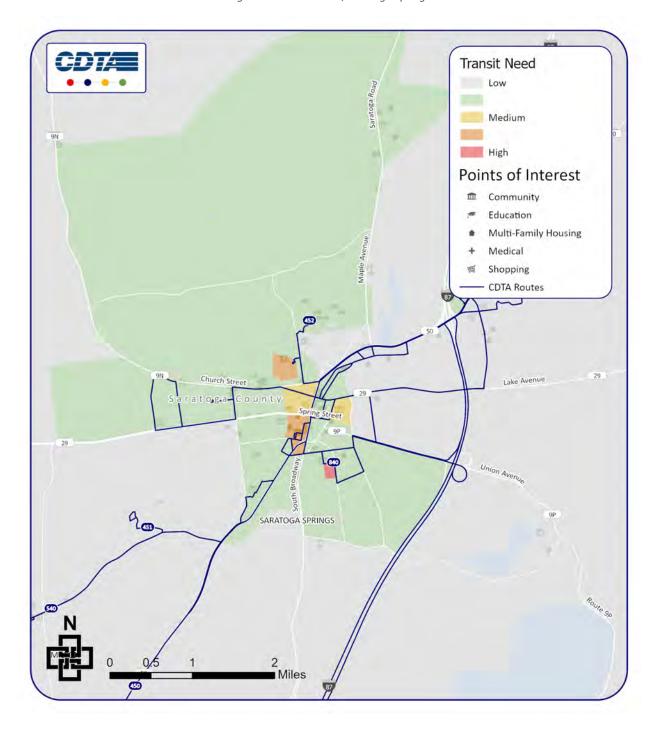




Figure 55: Transit Need, Amsterdam

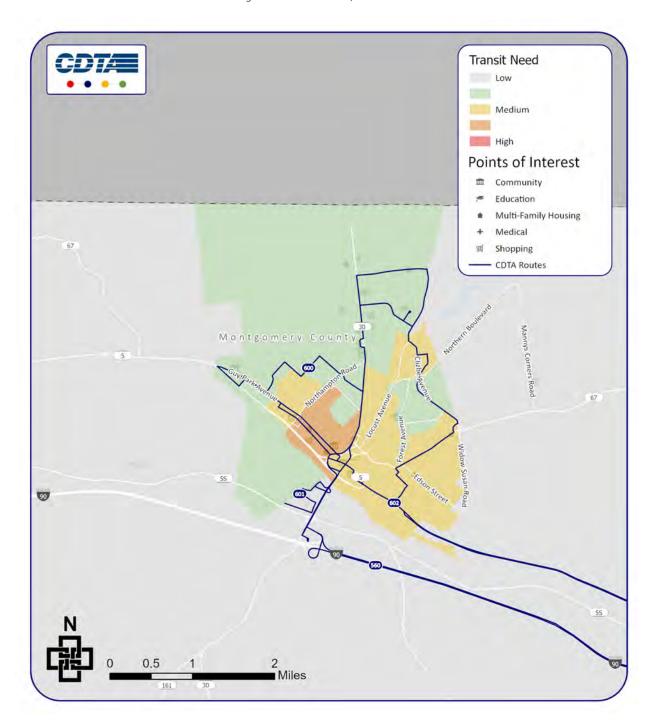
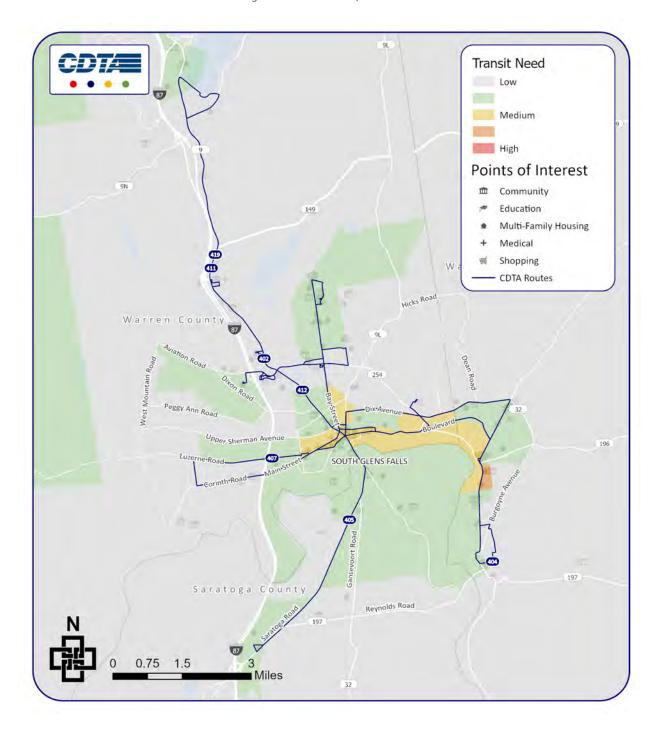




Figure 56: Transit Need, Glens Falls





2.3.3. Microtransit Suitability

A microtransit suitability analysis was conducted to assess locations that may be suitable for microtransit. The microtransit suitability analysis compares Transit Potential to Transit Need. An ideal microtransit zone has a transit need value of at least "Medium" and a combined density of fewer than ten people and jobs per acre.

Areas with low population and job density and low transit need may not be suitable for either microtransit or fixed route service.

Together, these two values indicate that there is some amount of transit need, but the density or road network may not be supportive of fixed-route transit. Areas with low population and job densities and low transit need may not be suitable for either microtransit or fixed-route service. Areas with higher Transit Potential should generally be considered for fixed-route first before microtransit.

As shown in **Figure 57** through **Figure 63**, areas that are most suitable for microtransit are scattered throughout the region's core cities, with visible suitability in Albany, Troy, Schenectady, Amsterdam, Saratoga Springs, and Glens Falls. In general, these areas are located on the periphery of what would be considered the core of each area. Many such areas are likely too small to justify a microtransit zone.

Microtransit suitability is most heavily concentrated throughout Amsterdam. Further exploration into land use, road network, development patterns, and internal travel patterns may be the appropriate next step for any area identified either for microtransit. Note that the areas previously served by the FLEX Colonie zone and now served by FLEX Guilderland are a mix of low and medium Transit Need and Transit Potential. Actual ridership data was used to justify this change, which is the preferred method.



Figure 57: Microtransit Suitability, Capital Region

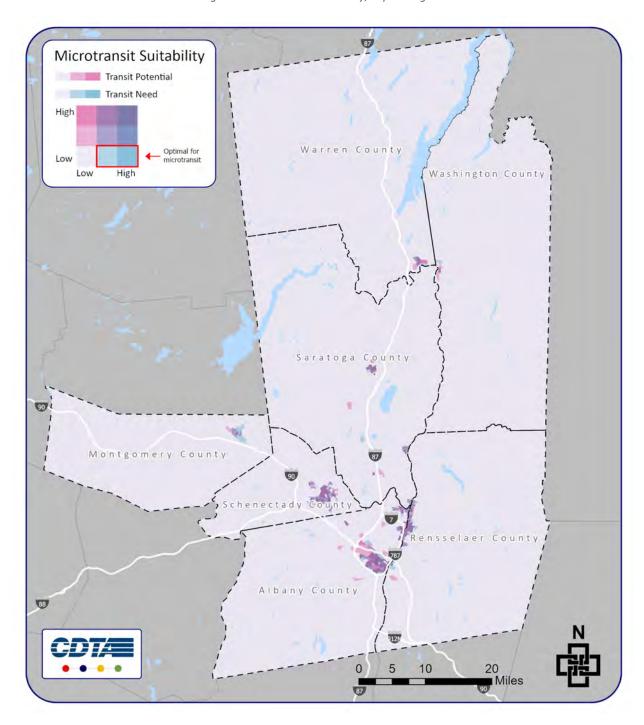




Figure 58: Microtransit Suitability, Albany

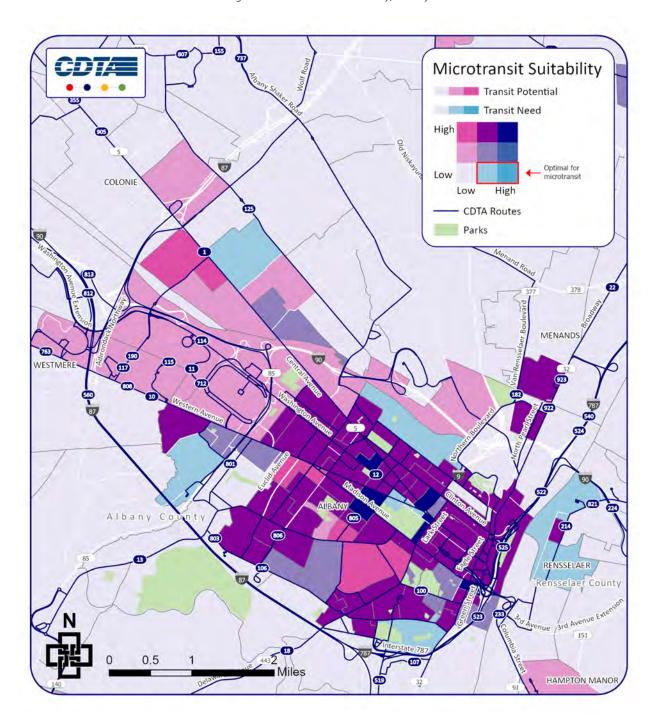




Figure 59: Microtransit Suitability, Troy

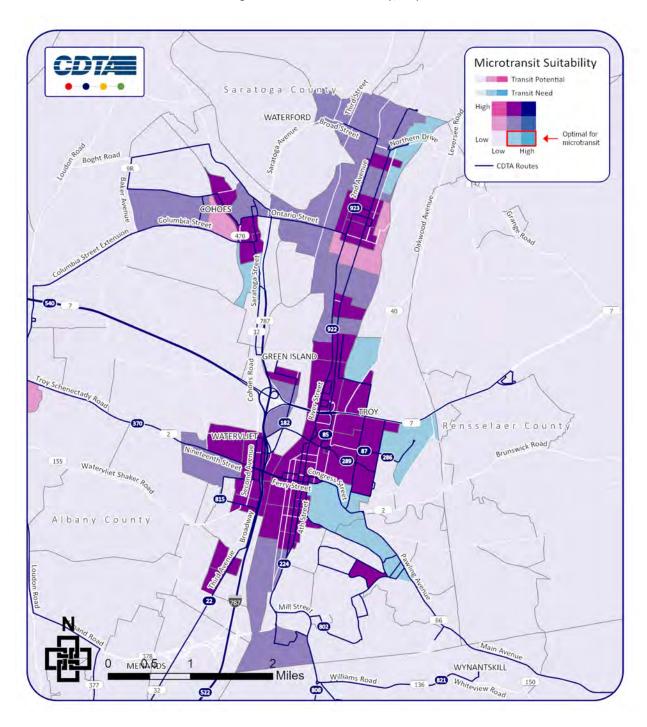




Figure 60: Microtransit Suitability, Schenectady

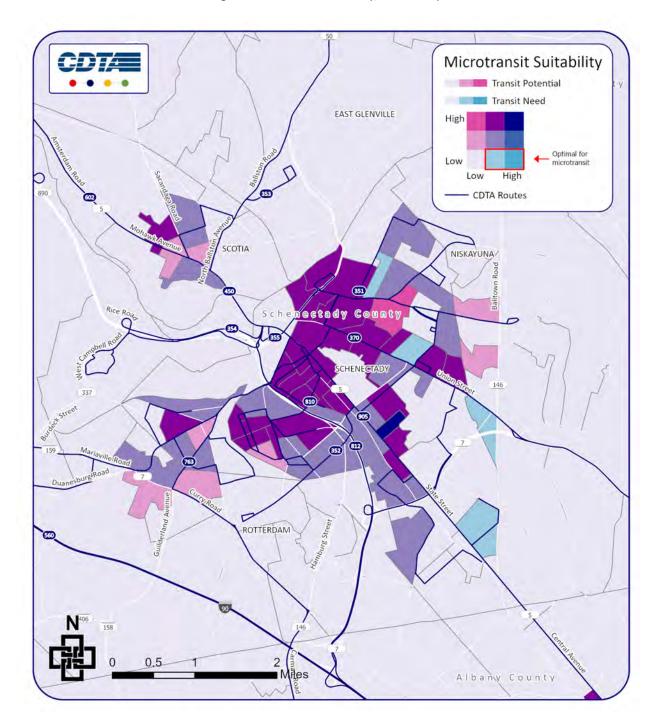




Figure 61: Microtransit Suitability, Saratoga Springs

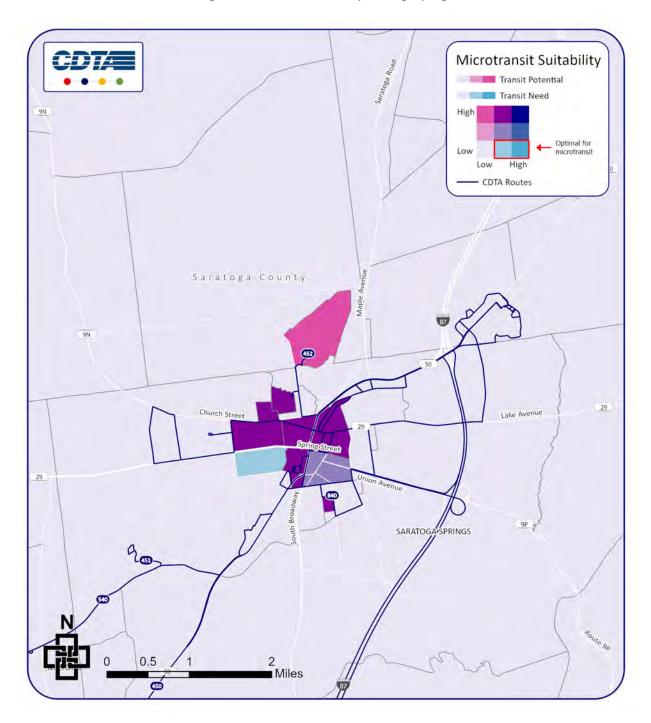




Figure 62: Microtransit Suitability, Amsterdam

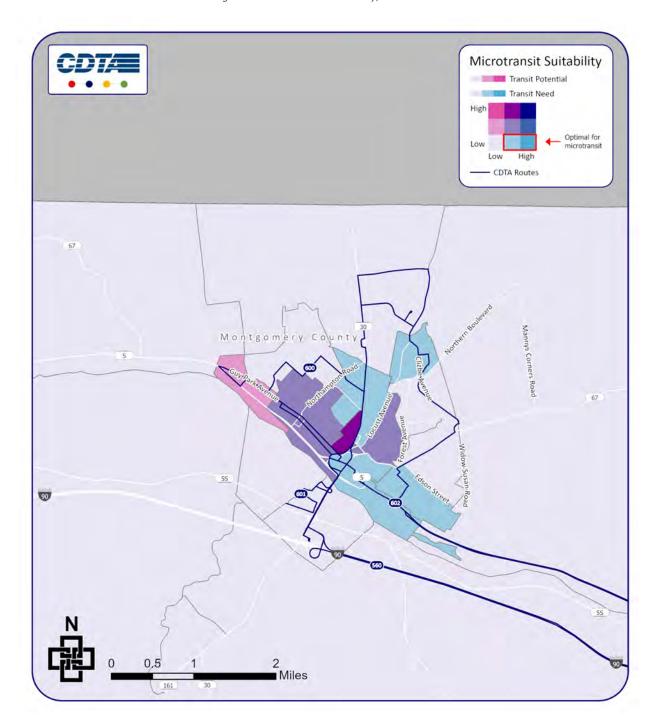
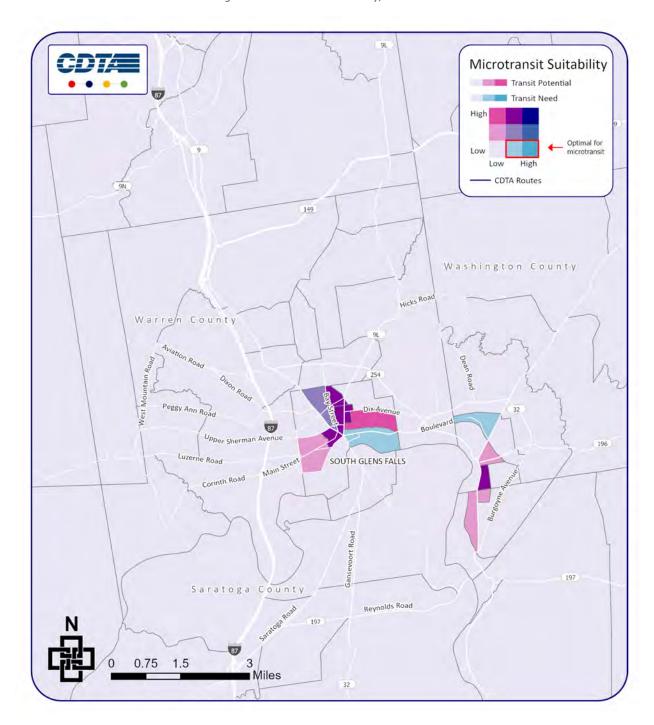




Figure 63: Microtransit Suitability, Glens Falls





2.3.4. Regional Travel Patterns

Transit systems should provide service between destinations that many people want to travel to and should prioritize serving areas where people are particularly likely to use transit. Another way to think about where transit should run is to examine actual travel behavior in the region, regardless of mode. Corridors with a high number of trips may be good candidates for transit service.

Figure 64: Daily Trips, Capital Region**Figure** 64 shows trips between any two census tracts in the Capital Region using data from Replica, an activity-based travel demand model based on anonymous, real-world travel behavior. The greatest density of travel occurs in and around the region's currently served markets, including Albany, Amsterdam, Glens Falls, Saratoga Springs, Schenectady, and Troy. It is important to note that the smaller size of census tracts in high density areas dilutes the intensity of trips between two zones compared to low density areas. This may unrealistically portray low density areas as having higher vehicle activity than high density ones.

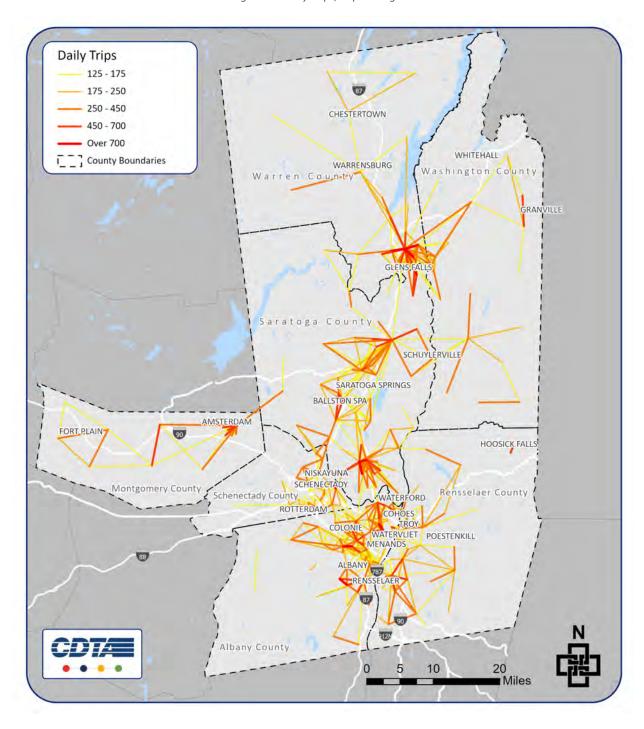
Most areas with the greatest number of trips are currently well-served by existing bus service. However, I-87 towards Warrensburg and Chestertown is a currently unserved and well-travelled corridor between Glens Falls and northern Warren County. Additionally, there are clusters of trips between Glens Falls and western Washington County, presumably along the U.S. Route 4 corridor. Other areas with clusters of trips that do not currently have bus service include Schuylerville in Saratoga County, Granville in Washington County, and Fort Plain in Montgomery County. These areas will be addressed during the service expansion study following the TDP.

A major gap in the CDTA service area currently exists between Saratoga Springs and the new bus routes in and around Glens Falls. The only connections between Glens Falls and the remainder of CDTA's service area are made by private intercity carriers such as Trailways. In late 2025, CDTA plans to establish a new fixed route connecting Glens Falls to Saratoga Springs and the rest of the fixed-route network via the US 9 / I-87 corridor.

Figure 65 and Figure 66 provide a closer look of trips in the Albany and Glens Falls areas.



Figure 64: Daily Trips, Capital Region







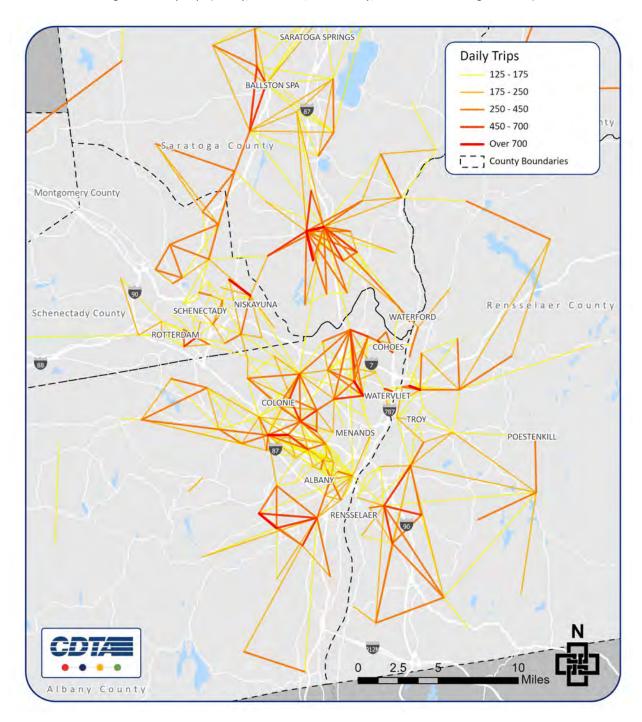
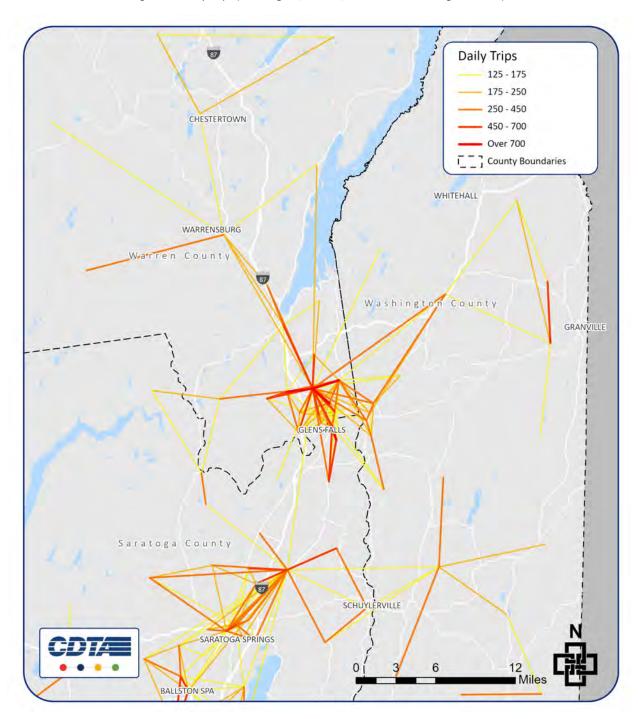




Figure 66: Daily Trips (Washington, Warren, and northern Saratoga counties)





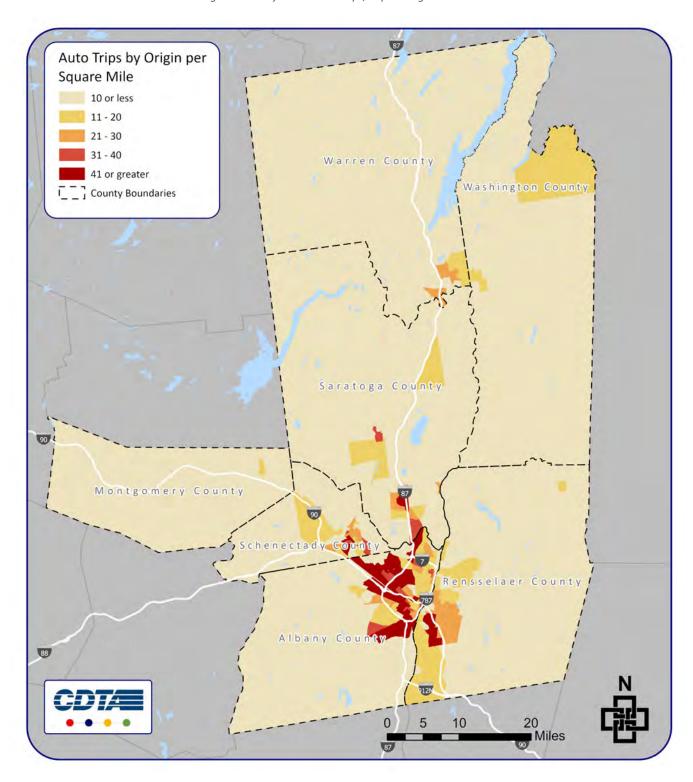
AUTOMOBILE TRIPS

Evaluating automobile trip origins among transit-commuters in the Capital Region can provide insight into where DRIVE carshare vehicles should be located. **Figure 67** shows the origin of automobile trips among people who typically commute by transit using Replica data. Transit commuters taking one-off automobile trips start their rides mostly in Delmar, Colonie, and central neighborhoods throughout Albany.

Other areas with a high density of automobile trips among transit commuters include East Greenbush, Rotterdam, Clifton Park, Ballston Spa, and along Loudon Road in Latham. Currently, DRIVE vehicles are located in central neighborhoods of Albany, Schenectady, Troy, and Cohoes. The large volume of automobile trips made by transit commuters in other jurisdictions suggests that there may be an opportunity to expand the carshare program to areas such as Colonie, East Greenbush, and Clifton Park.



Figure 67: Daily Automobile Trips, Capital Region



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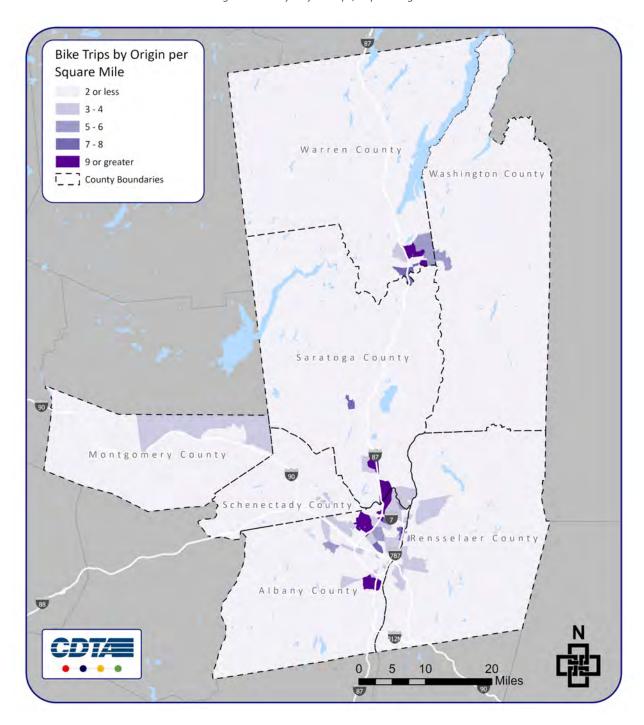
BICYCLE TRIPS

Examining bicycle activity among transit commuters in the Capital Region can help assess whether CDPHP *Cycle!* stations are serving areas with the greatest trip activity and can identify where there may be opportunities to locate stations near current transit service. Figure 68 shows the origin of bicycle trips among people who typically commute by transit using Replica data.

Most transit commuters start their bicycle trips in Delmar, Latham, Clifton Park, Glens Falls, Queensbury, and along Albany-Shaker Road in Colonie. While Glens Falls, Queensbury, and Albany-Shaker Road are currently served by CDPHP *Cycle!* stations, there are no stations currently accessible in Latham or Clifton Park. As the program looks to grow and improve, these areas could be considered for expansion.



Figure 68: Daily Bicycle Trips, Capital Region





2.3.5. Key Takeaways

- 1. Transit Need and Transit Potential data show CDTA service is generally well distributed.
- 2. Transit Need and Transit Potential are useful planning tools, but much interpretation is required. These maps should not be used in a prescriptive formula for service.
- 3. The combination of population and employment into Transit Potential can hide important factors. Amsterdam has much higher residences than it does jobs, which should be considered when planning service but cannot be known from the Transit Potential maps alone.
- 4. These models are only estimates of travel behavior. Real ridership data should be used when it is available.

2.4. Zoning and Land Use Review

Data on the zoning and land use surrounding CDTA's proposed Infrastructure Priority Network was collected and assessed for its suitability for transit. The following takeaways were identified:

- A good share of municipalities say they are changing their zoning codes to be more transitfriendly.
- Progress is uneven. While many municipalities have shifted to allow more high-density and mixed-use development, policies relating to parking are the farthest behind.
- All the Infrastructure Priority routes encounter a mixture of high, medium, and low levels of support along their geography. The methodology shows that Routes #351 and #353 experience the lowest support overall (10-12% high support) and Route #910 the highest (50% high support).

2.5. Summary of Needs

Below is a summary of the concerns and opportunities identified throughout the Existing Conditions Chapter. This, combined with what was learned during public involvement (Chapter 3), form the basis of the recommendations (Chapter 4).

2.5.1. Fixed Routes

Primary concerns for fixed routes are service planning for the future, addressing the driver shortage, and improving the farebox recovery ratio. CDTA must continue to ensure that service is aligned to the region and ready to respond as the region changes. Saratoga County is the fastest-growing county, which poses a problem for fixed-route service, since land development in Saratoga County is generally automobile-oriented.

CDTA also requires additional bus storage space. Many buses are already stored outside, which is not ideal for maintenance, and outdoor space is also now strained. Overparked garages also create work, as buses are often parked in one anothers way. The Albany, Troy, and Schenectady



garages cannot be significantly expanded, meaning that entirely new facilities will become necessary in the future. More space is also needed to accommodate fleet electrification.

2.5.2. STAR Paratransit

CDTA must find a solution to control the costs of STAR. It is difficult to totally separate STAR and FLEX costs, but demand response service (which includes both STAR and FLEX) costs roughly ten times to operate per ride as fixed-route does. Given that STAR is less productive per vehicle

Per ride, demand response costs ten times what fixed route costs.

hour than FLEX, the STAR cost ratio is likely even higher. Because of its low productivity, STAR also collects very little fare revenue and significantly less operating assistance per vehicle hour than fixed-route, compounding the issue.

CDTA has attempted to control costs and headcount challenges in STAR by outsourcing operation to contractors, but these costs have also risen significantly, and contractors are reporting similar challenges hiring enough drivers. Growing ridership also does not improve solvency for STAR, as more ridership creates more work instead of simply filling another seat as it does on fixed routes. Paratransit is legally mandated by the Americans with Disabilities Act. This means that, unlike FLEX, CDTA must provide STAR to everyone who qualifies regardless of its inefficiencies.

CDTA could alleviate some of the strain on STAR by directing clients and trips towards fixed-route where appropriate instead of STAR. Reservation staff would need a great deal of information about the walking environment to evaluate trip eligibility. CDTA has some of this information, such as the list of bus stops with bus shelters, but more relevant information, such as the presence and conditions of sidewalks, does not exist in a complete or up-to-date format that STAR representatives could quickly use.

2.5.3. Infrastructure

Because of the amount of investment CDTA has made into infrastructure improvements to support its BusPlus service, particularly queue jump lanes and transit signal priority, CDTA needs to improve its ability to monitor those assets, both to ensure they are functional and to track performance to support future investment plans. Additionally, CDTA needs clearer agreements between CDTA and roadway owners regarding maintenance and control of these assets.

2.5.4. Expanded Mobility Options

CDTA's expanded mobility options help provide our customers with the full range of options needed to fully benefit from regional transit service. As a whole, CDTA needs to use these services to cover needs that fixed-route buses cannot cover. CDTA does not have substantial data insight into how DRIVE is being used, making it difficult to understand the program's actual value to customers or plan its expansion. DRIVE also needs more vehicles to support demand



based on customer feedback indicating difficulty finding an available vehicle, but procurement has proven difficult.

CDPHP *Cycle!* is seen within CDTA as a successful program that could be expanded. The fact that *Cycle!* is not available year-round means that any role it does plays as a mobility option for customers is not being provided for half of the year.

FLEX faces problems similar to STAR, with the exception that CDTA has more flexibility in how to adjust FLEX, since it is not a legally mandated service like STAR. CDTA must reexamine FLEX's role and how it encumbers CDTA resources. It is partly due to FLEX that demand-response service now occupies 20 percent of CDTA's operating expenses, up from less than 10 percent in the early 2000s.

Demand Response now occupies 20% of CDTA's operating expenses, up from less than 10% in the early 2000s

2.5.5. Staffing, Training, and Resources

After fifteen years of expansion, the workload has increased for most CDTA departments. CDTA now has more service in more counties, more vehicles, and more infrastructure. This adds workload and complexity for the Transportation, Maintenance, Facilities, and IT departments, although all departments are affected to some degree. In order to better meet these challenges going forward, some departments will need more staff, training, and/or resources such as software, facilities, or equipment.

2.5.6. Coverage

For the most part, areas throughout Albany, Troy, and Schenectady have both moderate to high transit potential and moderate to high transit need. In comparison, Saratoga Springs, Glens Falls, and Amsterdam have moderate transit potential and lower transit need. There is moderate transit potential in Colonie and along the I-87 corridor, but low transit need in these areas.

The analysis also reveals that high-potential and high-need areas in the Capital Region are generally well-served by CDTA's existing service. However, there are areas with low transit potential that are also relatively well-served by transit. For instance, Saratoga Springs, Amsterdam, and Glens Falls have large subareas with fewer than five jobs and people per acre, which may not justify the current level of fixed-route service. As CDTA considers network restructuring, there is an opportunity to streamline service by reducing low-ridership routes in areas with low transit potential and enhancing high-ridership routes in areas with high transit potential.

The Microtransit Suitability analysis suggests that areas with low transit potential, but high transit need may be better served by FLEX service. Many of the areas identified by this analysis

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are single census tracts surrounded by areas suitable for fixed routes, and are not large enough to justify a FLEX zone on their own. Given the relative ridership and productivity of existing transit service adjacent to each identified area, the most promising locations to consider further for FLEX are in Amsterdam, Saratoga Springs, and Bethlehem.

Moving forward, CDTA should consider how to balance its service offerings to create the most efficient use of resources while continuing to meet rider needs. This may include adjusting or expanding CDTA's current DRIVE and CDPHP Cycle! offerings. Data on automobile travel among transit commuters suggest that DRIVE may have potential to expand to suburban areas like Colonie, East Greenbush and Clifton Park.

Lastly, there is a relatively high number of typical transit commuters starting bicycle trips in Delmar, Latham, and Clifton Park. These areas should be considered as potential locations for CDPHP *Cycle!* stations as the program looks to grow. Each service offering has a role to play in meeting the region's travel demand, and the market analysis detailed in this report can help provide the context for where these services will be most successful.



3. Public Engagement Summary

As part of the development of the 2025 TDP Update, CDTA engaged in two phases of outreach. The first phase focused on pre-planning efforts, while the second phase aimed to evaluate initial planning concepts through example scenarios. The insights gathered from these outreach efforts were instrumental in aligning CDTA's plans with the community's needs and preferences.

Both phases involved a comprehensive outreach strategy, as detailed in Figure 69.

Figure 69: TDP Outreach Strategy



Public meetings held in person in Albany, Troy, Schenectady, and Amsterdam and one virtual public meeting held via Zoom



Virtual stakeholder meetings held with representatives from universities and educational organizations, major employers, and health and social service organizations.



Employee forums for CDTA drivers and operations staff. Internal meetings with CDTA leadership and senior staff members.



A community survey distributed online.

A summary of this outreach process is provided below. For full details, see the Phase I and Phase II Outreach Reports. All supporting documents can be found in the TDP appendices available at cdta.org/TDP.



3.1. Public Engagement Phase I

Phase I outreach sought general feedback from customers, business partners, and CDTA staff about the service as it is. Phase I included two surveys and public meetings, as well as meetings with partners and CDTA staff. For full details, see the Phase I Outreach Report.

SURVEY HIGHLIGHTS

CDTA conducted two surveys during Phase I. All surveys conducted for the TDP should be considered with the understanding that respondents were self-selected and the demographics of respondents to these surveys differ greatly from those seen during customer satisfaction surveys, which are based on random selection. Some of the highlights from those surveys are below:

Survey 1 (Fixed Route) (1,279 responses)

- Work was by far the most common purpose for customers most frequent transit trip (57%)
- 83% of respondents said their most common trip is under an hour.
- Only 58% of respondents use printed schedules. 83% of respondents use the CDTA website for schedule information.
- Respondents believe fares are reasonable but are less positive about CDTAs service hours and dependability.
- Customers want better frequency and more reliable service more than they want longer service span or better geographic coverage.

Survey 2 (FLEX/DRIVE/Cycle!) (962 responses)

- FLEX is commonly used for work and errands. DRIVE is generally used for errands but only infrequently for work. CDPHP *Cycle!* is most commonly used for recreation, but around 20% said they do use *Cycle!* for essential trips like work and errands.
- Many FLEX customers (68%) have connected to FLEX via fixed route or vice versa. This is far more than *Cycle!* (23%) and Drive (30%).
- 47% of FLEX riders reported there is a fixed route alternative to their FLEX ride. 50% of DRIVE users said the same.
- 50% of FLEX users reported they were either "satisfied" or "very satisfied" with FLEX. This was 65% for CDPHP *Cycle!* and 52% for DRIVE.
- Satisfaction appears to coincide with availability. 39% of FLEX users say FLEX is "Always
 Available" or "Usually Available" when they need it. This was 58% for CDPHP Cycle! and 34%
 for DRIVE.
- Fares are regarded as reasonable for all three services.



KEY TAKEAWAYS

The initial phase of outreach yielded several key insights that guided CDTA in developing service recommendations. Considering the surveys, in-reach and outreach, CDTA settled on these main takeaways.

- Enhance Customer Information: Customers want more information to make using CDTA simpler to understand and use, including more accurate real time information and improvements to the Navigator app. Employers suggested more services helping orient new employees and students to CDTA.
- Increase Service Frequency: The community called for more frequent bus service to improve convenience and accessibility. Survey respondents indicated a preference for increasing bus frequency during peak periods over expanding service hours or extending routes to new destinations.
- Integrate Service: Respondents felt that CDTA services don't always work together well, with one example being the number of different apps needed to use all of CDTA's services. The names of apps often differ from the CDTA name for the service, creating confusion.
- Enhance Access to Key Destinations: Respondents requested improved access to employment sites and educational institutions through fixed-route bus service or FLEX service. Customers requested that Empire State Plaza be served directly by the BusPlus Blue Line, and that some express routes to Empire State Plaza that were cancelled during the COVID-19 pandemic be restored.
- Improve Bus Stop Amenities: Customers expressed the greatest dissatisfaction with stops, benches, and shelters, mainly asking for more shelters and for them to be cleaner.
- **Enhance Employee Experience**: Drivers felt that improving work-life balance will improve driver retention and that there needs to be clearer messaging on performance metrics.

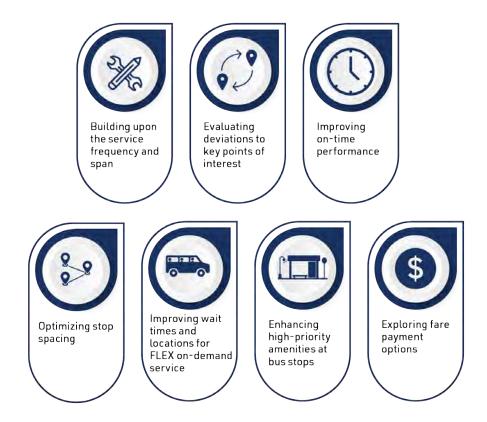
Seven strategic areas of focus were identified based on the key takeaways above. These areas, shown in **Figure 71**, formed the basis of Phase II outreach to engage the public regarding the planning concepts and service improvement strategies.



Figure 70: Attendees providing feedback at the



Figure 71: Strategic Areas of Focus





3.2. Public Engagement Phase II

Phase II of public outreach tested service change concepts with the public based on feedback during Phase I. Phase II was designed around several tangible planning concepts informed by Phase I insights.

PLANNING CONCEPTS

CDTA developed service planning concepts to present to the public. To ensure adequate understanding, examples of possible CDTA service changes were provided for each of the planning concepts listed below in **Figure 73**.



Figure 72: Attendees listening to presentation at the Phase II Amsterdam Public Meeting

Planning Concepts

- Infrastructure improvements on key corridors
- Frequent network centered around trunk routes
- Route deviations versus bus vehicle speed
- Splitting long routes into two separate routes
- Stop spacing adjustments
- FLEX On-Demand improvements
- · Stop amenity enhancements
- Fare payment strategies

Figure 73: Planning Concepts

Feedback was collected via a public survey (569 responses), as well as at meetings with internal CDTA staff, bus operators, community stakeholders, and the public. The key takeaways for each planning concept are detailed below. Full details are provided in the Phase II Public Outreach Report.



Infrastructure Improvements

The Infrastructure Improvements concept focuses on enhancing core routes by prioritizing improvements in speed, capacity, and station design. Based on customer feedback, these improvements may include dedicated bus lanes and transit signal priority to improve travel time and reliability, and expanded bus shelters, seating, and lighting.

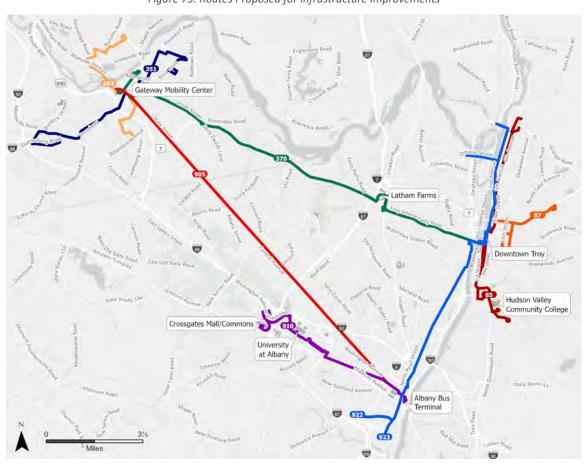
Specifically, these improvements will be implemented across eight high-frequency corridors, which include Route #'s 85, 87, 351, 353, 370, 905, 910, and 922/923.

Figure 75These corridors link major cities in the Capital District and complement the proposals for the Frequent Network concept.

Figure 74: Infrastructure Improvement Corridors



Figure 75: Routes Proposed for Infrastructure Improvements





Key Takeaways

- **Prioritize Improvements on Key Corridors:** Most respondents agreed that the eight routes highlighted in this section were the most important corridors for infrastructure improvements because they serve many residents and are key to connecting communities across the Capital Region.
- **Do Not Neglect Other Routes:** Many respondents supported improvements to these corridors but emphasized the need to improve service across the entire region, including crosstown and rural routes. They stressed the importance of improving reliability, frequency, service span, and weekend availability for these other routes.
- **Expand BusPlus service:** Feedback during this project and analysis for the BRT Expansion study suggest modest demand for more BusPlus service and accompanying infrastructure improvements in the region, particularly along the Troy-Schenectady corridor.

Frequent Network

The Frequent Network proposal aims to reduce the amount of low frequency service by relying more on frequent trunk routes and reinvesting resources to increase frequency on neighborhood routes. This approach also aims to improve crosstown connections for customers and reduce trips involving multiple transfers. By focusing ridership on central corridors, CDTA hopes to also receive more support for capital improvements on those corridors from local, State, and Federal partners.

Key Takeaways

- **Support for the Frequent Network Concept:** The Frequent Network proposals received support from respondents, with 54 percent expressing approval. Respondents appreciated the emphasis on increased frequency across the CDTA network. They also noted that some of the suggested frequency increases were not enough to achieve the Frequent Network concept, such as increasing Route #117 from 90-minute to 60-minute headways.
- Concerns about Removal of Service: Survey respondents were more hesitant to support frequent network changes that resulted in the removal of a route, such as Route #352 in the Schenectady example. They expressed concerns that changes like this would create significant service gaps.
- Support for New Transfer Opportunities: Survey respondents were supportive of extending routes or splitting routes to create new connections, with approval for extending Route #117 to Route #370 and Route #125 to Route #910. However, concerns were raised about ensuring transfers are timed to meet riders' needs.
- Support Hinges Upon Addressing Existing Issues: In general, customer responses indicate the Frequent Network concept will be more successful if CDTA focuses on addressing overcrowding, the fare cost of transfers, on-time performance, and the quality and comfort of bus stops. A network that relies on transfers must make transfers hassle-free. Support for splitting Route #125 was over 50%. However, respondents cited current on-time performance of Route #125 as a concern, as transferring to either leg of Route #125 would pose the risk of a very long wait if a connection is missed.



Deviations vs. Speed

The Deviations vs. Speed proposals balance direct service to major destinations with the overall speed of routes. While deviations shorten the walk to a location, they can inconvenience customers passing through and add time to the route, possibly necessitating a reduction in the overall frequency of the route. Deviations would be implemented when the ridership demand at that location justifies the inconvenience to riders passing through and the added time required to serve the location.

Key Takeaways

- Limit Scope of Changes and Balance Tradeoffs Carefully: Feedback was mostly mixed to this concept. Walking distances—even those under a quarter mile—and the comfort and safety of that walk matter to customers and affect their willingness to ride.
- Maintain Deviations to Key Destinations: Respondents generally preferred to maintain deviations to key destinations due to accessibility for elderly riders, those with limited mobility, and families with children. Respondents were also more likely to oppose removing a deviation in low-income areas.
- Explore Reduced Level of Service to Deviations: Respondents were open to reducing the number of deviations to improve travel time and convenience. However, respondents emphasized the need for better pedestrian infrastructure in areas where service may be reduced or removed.
- Concerns about Route Alignment Impacts: Respondents were hesitant to support adding a deviation if it resulted in the removal of service from other key destinations, such as deviating to Empire State Plaza but removing service from Lark Street on Route #13 and Route #18.

Splitting Routes

Service could potentially be improved through the targeted splitting of especially long routes. This concept aims to improve connectivity, increase on-time performance, and tailor service levels to demand more precisely. By doing so, higher-demand neighborhoods will receive the service they need without compromising availability in other neighborhoods.

Potential outcomes of this service concept include improved on-time performance resulting from shorter, more direct routes, opportunities to increase or expand service, synchronized transfers, and more frequent breaks for drivers.

Key Takeaways

- Conditional Support: Overall, support for splitting routes outweighed opposition, but support was contingent on two conditions: that transfers between routes do not result in additional fare costs for customers, and that on-time performance is improved. Many customers agreed with the idea that splitting routes could lead to better on-time performance by creating shorter, more manageable routes.
- Support for Splitting Overlapping or Inconsistent Routes: Respondents were generally supportive of splitting routes where there is overlapping service or inconsistent ridership.
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- For example, a majority of respondents supported splitting Route #85 due to lower ridership and overlap with the Blue Line along the northern segment.
- Splitting Routes for New Connections is Popular: Respondents were supportive of route splits that were paired with route extensions to new destinations (for example, splitting Route #182 and extending service to Clifton Park).

Stop Spacing

CDTA proposed applying the following checklist when considering a stop removal:

- The stop significantly overlaps with another, alternative stop (stops should be at least 750 feet apart).
- The number of customers on board is significantly higher than the number of customers using the stop.
- Alternative stops (i.e., nearby existing stops on the same route) are normally served on the same trip.
- The walk to the alternative stop is safe, including sidewalks and safe street crossings.
- The operating speed is high, so stopping costs considerable time.

CDTA's goal in stop spacing is to balance speed against access, much like the Deviations versus Speed concept.

Key Takeaways

- Support for Removing Closely Spaced Stops: Most respondents supported removing closely spaced stops along streets with good pedestrian infrastructure, such as Pearl Street. Respondents cited benefits like higher frequency and reduced travel times. It was noted that the Blue Line already serves as a limited-stop bus route in this corridor. There were some concerns that this could adversely impact riders that are elderly, with mobility impairments, with children, or carrying shopping bags.
- Support for Removing Low-Ridership Stops: Most respondents supported removing closely spaced stops in areas with low ridership, such as along Pawling Avenue. However, this support was conditional on ensuring safe pedestrian infrastructure.
- Consider Vulnerable Riders: CDTA should prioritize stops that serve locations frequently used by vulnerable riders, such as facilities for people with disabilities, senior centers, and grocery stores, where passengers are more likely to carry heavy bags. These stops should be prioritized over other stops, as these riders typically have a lower tolerance for walking longer distances to and or from transit stops.
- Implement Proposed Stop Spacing Guidance: Moving forward, most respondents agree that CDTA should remove a stop if it meets the proposed criteria for distance to the next stop, access to pedestrian infrastructure, passenger boardings, and route operating speeds.

FLEX

To make FLEX available to more people and increase its overall usefulness to the public, CDTA proposed the following approach to FLEX:



- Where connections to frequent trunk service are available, use FLEX to promote transfers to the frequent trunk network instead of duplicating fixed-route service.
- Keep FLEX zones small—no more than 10 square miles. Smaller zones will be more manageable, cause less deadheading, and provide more predictable wait times.
- Designate pickup areas within FLEX zones so customers meet the vehicle on a main road or at a common location.
- Create FLEX zones to replace infrequent, unproductive fixed-route service that does not require the capacity of a 40-foot bus.

Key Takeaways

- Opposition to New FLEX Zones: Opposition to new FLEX zones came from customers who believed FLEX was not reliable or were hesitant to adjust to a new service. This aligns with the second TDP survey, which found customer satisfaction is lower for FLEX compared to other services for similar reasons. Therefore, customers generally opposed the plans to switch Amsterdam, Saratoga Springs, and Bethlehem to FLEX service.
- Shorten FLEX Wait Times: Riders expressed frustration with long wait times for FLEX, leading some to consider more expensive rideshare options. Reducing wait times is crucial to making FLEX a viable alternative. Most customers expect a wait time of less than thirty minutes.
- Support for Shrinking the Colonie FLEX Zone: Supporters anticipated shorter wait times, better transfer opportunities, and increased reliability, both for FLEX and for fixed routes. Customers expressed a willingness to transfer from FLEX to fixed-route and vice versa, suggesting CDTA should ensure such transfers are convenient and quick.
- Improve Access for All Riders: Although very few people do not own a phone, some CDTA customers do not, and they will have difficulty accessing FLEX. This should be taken into account when considering a transition from fixed-route to FLEX. All FLEX vehicles should be wheelchair accessible in order to ensure ADA compliance.
- Enhance Community Education of FLEX: Many riders do not know how to use FLEX. Increased advertising and outreach are necessary to educate the community about how and why to use FLEX.

Stop Amenities

CDTA is committed to enhancing bus stops by evaluating them based on ridership levels and the surrounding setting. To guide these decisions, the public was asked to rate the importance of a list of possible bus stop improvements.

Key Takeaways

- Enhancing Walkability and Accessibility: Respondents strongly favored improvements to walkability around bus stops, with suggestions including better sidewalks and crosswalks, installation of curb extensions, and removing snow in the winter.
- Implementing Real-Time Arrival Information: There was significant support for adding real-time bus arrival information at bus stop locations, which would be especially beneficial for riders without cell phones. Additionally, respondents requested the inclusion of physical schedules and maps at bus stops to aid all riders, including visitors and infrequent riders.
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- This demand for more information at shelters likely suggests a desire for more information elsewhere, such as on board CDTA buses.
- **Expanding and Upgrading Shelters:** The demand for increased bus shelters throughout the network is high, especially at bus stops serving children, the elderly, and on routes with less frequent service. Some respondents requested enclosed waiting rooms and more shade.
- Improving Safety and Cleanliness: Safety and cleanliness emerged as top priorities, with calls for enhanced lighting and mechanisms for reporting issues, such as call boxes and QR codes. Addressing concerns about non-riders misusing stops and maintaining a cleaner environment were also highlighted.
- Seating and Climate Control: Seating, heating, and improvements to existing shelters were the least important to respondents. Some respondents suggested improved cooling systems for summer and noted that while seating was less critical, benches remain a desired feature where shelters are not feasible.

Fare Payment

CDTA is continuing to develop the Navigator app and other fare payment tools aiming to simplify the use of its services. Respondents were asked to rate the importance of the following fare payment proposals:

- Improving the Navigator Smart Card.
- Adding new features to the Navigator mobile application.
- Accepting additional forms of fare payment on CDTA fareboxes, such as mobile payment apps and credit cards.

Key Takeaways

- Adding New Payment Methods: The highest demand relating to Navigator and fare payment was for additional contactless and mobile payment options, such as Apple Pay, Google Pay, Samsung Pay, and contactless credit cards. Respondents believed these options could attract more riders, particularly infrequent users or visitors.
- New Features and Addressing Issues to the Navigator App: The second most important request was to add new features and improvements to the app such as the ability to integrate physical cards with the app, improving live tracking, and the ability to review payment history. Several technical issues should also be addressed such as QR code scanning and bank linking difficulties.
- Expanding Navigator to Non-Fixed-Route Services: Requests also included the ability to incorporate other non-fixed-route services into Navigator app and the Navigator card, like STAR.
- Improving Accessibility: Respondents suggested several enhancements to make transit more accessible, including enabling online purchases for passes, installing additional ticket vending machines that can make change, and exploring options for making parts of the CDTA system or the entire system fare-free. Respondents also asked for a shorter processing time when reloading Navigator cards, allowing riders to access their added funds more quickly.



4. Recommendations

Over the past fifteen years, CDTA has undergone a period of rapid expansion and service enhancement. With all three originally planned BusPlus routes having been opened, bikeshare and carshare implemented, and two new counties under the CDTA umbrella, there are fewer obvious opportunities for growth now than there were under the previous two TDPs. Given this state of affairs, the 2025 TDP recommends a greater focus on optimizing the service CDTA has built. This has informed the recommendations below.

4.1. Fixed-Route Service

4.1.1. Meeting the Fiscal Budget and Closing the Driver Deficit

Because of budget constraints, including COVID relief funding running out and CDTA's farebox recovery dropping compared to pre-COVID, and because CDTA has struggled for years to close its operator deficit, CDTA will need to look at service reductions. CDTA will also reevaluate its fare policy, which is discussed later in the "Other Recommendations" section.

The driver shortage in particular is a vicious cycle: A lack of drivers results in longer and more difficult work assignments, negatively impacting retention, thereby worsening the driver shortage and making the work harder still. The shortage has persisted for years despite efforts to increase hiring and improve work quality.

CDTA will coordinate the service reduction with efforts to improve retention, so CDTA can meet its budgeted headcount. To improve the work experience for drivers, the Planning Department will re-calibrate schedules to provide adequate running time, and will also work with the Transportation and Facilities departments to identify better layover locations for drivers, primarily focused on increasing bathroom access and addressing any blocks with insufficient breaks. Although service reductions obviously reduce the overall level of service, this effort is anticipated to reduce trip cuts, improve on-time performance, and improve work for drivers and supervisors.

Based on examples from peer agencies, CDTA plans to first make reductions on unproductive routes and services. These are generally low-frequency, coverage-based routes, meaning that reductions will be primarily in terms of geography or span. Reductions will need to occur on CDTA's core routes as well, since they account for the majority of CDTA service hours. CDTA will first reduce service on these routes where it is least used—generally, late at night and early in the morning. CDTA will make efforts to avoid cuts to high-ridership service wherever possible. CDTA will also try to reduce service where alternative routes exist.



4.1.2. System Refinement and Restructuring

Because the region has changed significantly since CDTA last did a major overhaul of its fixed route network, CDTA will initiate a system-wide review of fixed route services and restructure the network where appropriate. The system refinement and restructuring plan will be divided into four phases. These changes will occur in conjunction with the service reductions mentioned above.

- **Phase 1** will focus on reliability improvements and resource-saving or resource-neutral recommendations, involving meaningful changes that can be implemented in the short-term using existing budget and fleet resources.
- **Phase 2** will focus on restoring cuts made during Phase 1 once operator levels and funding stabilize.
- **Phase 3** will focus on medium- and long-term recommendations that may require additional resources, or broader community consensus.

For all phases, public engagement efforts will educate, inform, and engage riders and the public about the planned services. The project team will use an interactive platform to communicate to the public the wider impacts of the recommendations in each phase and allow users to explore the proposed network up close. Service characteristics will be presented using detailed change sheets for affected routes with maps as well as schedules by day and by period. The potential impacts and benefits of recommendations in each phase will also be analyzed regarding low-income riders and disadvantaged neighborhoods, particularly those heavily reliant on transit.

The system restructuring process will culminate in a public education campaign focused on detailing the specific service changes in each phase and their implementation timeline. In addition to clearly explaining the plan and approach, it will be essential to actively promote its benefits. As route restructuring involves trade-offs, some users may experience downsides and upsides they are unaccustomed to. These impacts will be acknowledged, while also clearly highlighting the overall benefits to existing riders, future riders, and the region.

4.1.3. Service Area Expansion Planning

Following the system restructuring plan, the project team will evaluate the future expansion of CDTA's system to outlying counties such as Fulton, Columbia, Schoharie, and Greene. This analysis will evaluate commuter flows and transportation infrastructure as well as population, employment, and development trends for each county. These metrics would help determine whether transit service could be supported in these areas, and if so, when and where such services should be implemented.

This analysis will result in the development of several recommendations that are unconstrained by current resource levels (e.g., funding, operators, vehicles). The service expansion plans will be high-level in nature and include new route alignments, days and spans of service, and headways by time of day. Opportunities for additional service will be defined as short- or long-



term based on the analysis results, feedback from outreach, and relative cost and complexity. Each county expansion plan will include linkages to existing CDTA services and identify intermodal connections to ensure transit integration within the regional transportation network.

Similar to the system restructuring plan, any expansion plan would conclude with a public education campaign to inform and engage the communities and stakeholders affected by the proposed recommendations. However, it is important to emphasize that this expansion planning will only proceed upon further evaluations and the availability of resources. Implementing these unconstrained recommendations will require additional funding and operators to ensure feasibility.

4.1.4. Reliability Improvements

Because some of the recommendations for fixed routes would involve greater reliance on transfers, and because CDTA's on-time performance has been declining, CDTA will focus on improving on-time performance and reliability before implementing in full some of the other recommendations for fixed-route, such as splitting routes and the frequent network.

4.1.5. Evaluate Need for More Articulated Buses

In order to guide future bus procurements, CDTA will investigate the need for more articulated buses. CDTA can use its ridership data to determine how much need there is for more articulated buses and if existing articulated buses are being properly assigned. Articulated buses may also be important as CDTA looks into service reductions, as some reductions will push customers previously served on two buses onto one bus. If it is identified that more are needed, CDTA could bring them in as 40-foot buses are retired, although additional storage space will become necessary as they occupy a larger footprint.

4.1.6. Frequent Network

Given the strong support from the public for more frequent service, CDTA will advance the Frequent Network concept. By shortening low-ridership neighborhood routes and creating more connections to trunk routes, CDTA can improve overall frequency and cross-town connections, enhancing access and mobility while making service more efficient operationally.

The Frequent Network concept relies more on transfers than current CDTA service planning practices, the goal being to provide customers with better frequency and better uptown connections. This tradeoff will be hard to balance, meaning CDTA will proceed cautiously with the concept and save more challenging changes until after CDTA has proven the concept works in service. CDTA may choose to reserve some changes until after on-time performance improvements have been achieved. Lastly, CDTA will aim to increase one-seat connections from neighborhood routes to trunk and BRT routes and reduce dependence upon connections between neighborhood routes, particularly infrequent ones.



Even though transfers currently pay full fare, it is a goal of the Frequent Network concept to roll these changes out without raising the cost of customers daily trips on CDTA. Fare policy will need to be reevaluated to ensure customers are not financially burdened by the Frequent Network concept. This is further discussed in the "Fare Payment" recommendation.

CDTA will also pursue access to better origin-destination data to support the Frequent Network. Knowing where exactly people are trying to go will help CDTA understand what transfers a change will create or eliminate.

Timed transfers are more important when dealing with less frequent routes. Below 15 minute headways, transfers may not need to be timed. At 30 minute headways or longer, a timed transfer should be considered highly important. To better support timed transfers, CDTA will also investigate the ability to use real-time information to hold a bus when a connection is running late.

4.1.7. Deviations vs. Speed

CDTA will consider eliminating route deviations to improve operations and speed up service, but customers generally value route deviations as they are. Removal of deviations will be considered where passengers can safely get to their final destination from the stop, the added walking distance is short, and time savings tangibly benefit onboard passengers. Alternatives, such as reducing the number of trips to the deviation or relocating stops to safer locations, will also be explored. For example, CDTA will also consider reducing deviations to destinations with lower ridership during off-peak hours.

4.1.8. Splitting Routes

CDTA will look to split routes in the system where it could improve service reliability, when different route segments need different levels of service, to establish new connections, or to reduce indirect routing. For example, splitting Route #85 at Riverfront Station to provide more service to HVCC and reallocate resources away from where they duplicate the Blue Line was well-received by the public and CDTA drivers.

Before splitting a route, CDTA should understand the essential connections made by a given route, and therefore, what transfer needs will be created by a route split. Route splits that sever significant connections are allowable, but may create inconveniences that should be weighed against the benefits. Improving the timing of transfer connections can lessen the level of inconvenience felt by the customer.

Route splitting will be more successful once CDTA accomplishes the following:

- Better Origin-Destination data, to understand the transfers that might be created or eliminated by a route split.
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- 2. Improved on-time performance, for better transfers.
- 3. A balanced driver budget, allowing additional resources to be put towards a route split when needed.

4.1.9. Reducing Dwell Time

One of the goals when CDTA introduced Navigator was to reduce dwell time on CDTA buses. Now that Navigator is well established, CDTA will revisit its dwell time impacts to determine how to speed up service going forward.

4.1.10. Revisit Express Service

Commuting was significantly changed by COVID. Based on this and comments received during outreach, CDTA will reevaluate and update its express routes, including routes that were cancelled during COVID and never restored.

4.1.11. Coverage

While there may be demand for additional service outside of CDTAs current service area, these needs cannot generally be addressed until resources become available. Additionally, data show that many places in the greater Capital Region that do not have transit service are declining in population. CDTA's experience indicates that resources are well spent increasing services in the places where it already operates, and new service to areas with low transit propensity rarely produces significant ridership. CDTA will emphasize its DRIVE carshare program to allow customers who don't own a car the opportunity to make occasional trips to more remote locations.

Two exceptions to this may be the growth along I-87 and, to a lesser extent, in Rensselaer County. These segments of the region will likely continue to grow. Opportunities should be created for new residents to choose somewhere to live accessible to transit. If there appears to be a market for it, this could mean providing more transit service in Saratoga County in partnership with transit-friendly development projects, or it could mean working with municipalities already served by transit to increase housing development that is transit-friendly and attractive to new residents.



4.2. Star Paratransit Service

4.2.1. Mix STAR and FLEX

To save resources, CDTA will determine whether it is possible to mix FLEX and STAR trips on the same vehicle. Doing so will save resources by handling common trips with fewer vehicles and drivers.

CDTA will conduct a study on STAR operations and finances to improve quality and efficiency of STAR services and lower overall costs.

4.2.2. Disperse Dispatching to All Three Garages

CDTA will pursue opportunities to dispatch STAR vehicles, which currently dispatch exclusively from Albany, from Troy and Schenectady as well. Doing so will save resources by reducing deadhead hours from Albany.

4.2.3. Reassess Client Eligibility and Trip Eligibility

To save resources and ensure STAR continues to comply with the Americans with Disabilities Act (ADA), CDTA will reassess its client and trip eligibility policies and procedures. CDTA will ensure that only trips required by ADA are provided by STAR and that trips are directed to fixed routes where customer ability allows. It is expected that this will not only save resources but also improve the quality of service as the STAR program becomes less overburdened.

CDTA will explore data and tools needed to support more detailed client and trip eligibility evaluation.



4.3. Infrastructure

4.3.1. Improve maintenance and oversight of Intersection Technology

CDTA will work to improve the maintenance and oversight of its intersection technology, meaning transit signal priority and queue jumpers. CDTA's ability to monitor these assets is currently low, which makes tracking their performance, documenting their value, and planning maintenance difficult.

4.3.2. Infrastructure Priority Network

Based on customer support and CDTAs own analysis, Infrastructure improvements will be prioritized around routes #85, #87, #351, #370, #905, #910, #922/#923. Improvements are intended to speed up service, improve pedestrian safety and convenience, and make waiting areas more comfortable for customers.

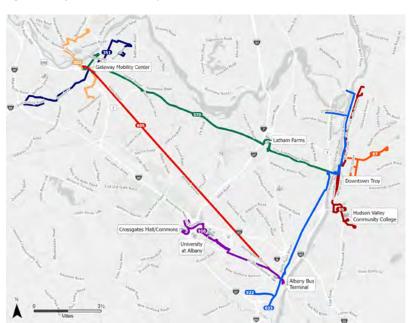


Figure 76: Infrastructure Priority Network

Priority improvements may include loading pads, shelters, transit signal priority, queue jump bypass lanes, and/or bus lanes. CDTA will continue to refer to the Bus Lane Feasibility Study and BRT Expansion Study when planning improvements. The first priority will be to improve existing BRT routes by adding more of the amenities of "true" Bus Rapid Transit, such as a dedicated right-of-way, and making incremental improvements along the potential future BRT corridor from Troy to Schenectady.

4.3.3. Stop Spacing

Based on customer feedback and CDTAs analysis, CDTA should generally maintain its current stop spacing policy, while considering additional factors and bringing older routes in line with current practices.





Going forward, CDTA will also weigh the relative benefit of reducing stopping against the benefit to customers of shorter walking distances by looking at actual ridership and service data. To do this, CDTA will consider the ratio of customers boarding/alighting to those on board, passenger activity at alternative stops, and the safety of walking conditions to nearby stops. For more detail, refer to the Stop Spacing Standards in Chapter 5.

Stop removals along corridors such as Pawling Avenue (Troy), Pearl Street (Albany), and Allen Street (Albany) would improve service while potentially saving resources, and are considered short-term service improvements. CDTA should continue to evaluate the need to adjust stop spacing in the medium-to-long term.

4.3.4. Stop Amenities

To improve customer comfort and safety, CDTA will focus on amenities like shelters, crosswalks and sidewalks, safety features like lighting, and ways to report issues to CDTA, such as QR codes on bus stop signs. Lighting will also be considered for locations where customers report being passed by at night. CDTA will also continue to collaborate with regional partners to prioritize and fund active transportation improvements at and adjacent to bus stops.

CDTA will continue to prioritize stop improvements based on ridership. Shelters and seating are considered "transit amenities," meaning that their siting policy must be submitted for Title VI compliance. For more detailed guidelines, refer to the Standards section.

CDTA will continue to build Mobility Hubs, which have proven valuable in improving the streetscape, the comfort of bus stops, offering intermodal connections, and creating a sense of place.

CDTA has already begun to address the bus stop deficits identified in the bus stop inventory summarized in Section 2.1.6 as part of a 5 year Facilities improvement plan. This plan began implementation in 2024 and will be revisited and updated in 2028.

Lastly, CDTA will invest more in bicycle parking. Many CDTA customers mix cycling with transit, and CDTA drivers frequently report customers leaving their bikes behind when the onboard rack is full.

4.3.5. Customer Information

Based on customer requests, CDTA may revisit the potential for real-time bus arrival information at major bus stations to make the riding experience simpler. CDTA has already installed digital Soofa signs at a number of major stations, and these signs will likely play a part in implementing real time information at stations. CDTA will also increase information about transfer opportunities on CDTA infotainment screens.



4.3.6. Park-and-Rides

In order to modernize CDTAs park and ride system, CDTA will revisit the findings and recommendations of the park-and-ride analysis performed by Colliers Engineering for CDTA in 2023. CDTA will consider the role of park-and-rides in modern service planning, considering factors like work from home, regional population shifts and other possible uses for the lots owned by CDTA.



4.4. Expanded Mobility Services

4.4.1. FLEX Microtransit

Based on five years of operating experience, CDTA has scaled back its expectations for microtransit. It likely cannot achieve the levels of efficiency and customer satisfaction we had hoped for, but it still has a role to play for CDTA riders. CDTA's goal will be to prioritize resources for fixed route, and reserve microtransit for specific cases. In general, microtransit is expected to produce far below ten riders per hour, so resources should be prioritized for fixed routes except where it is expected that microtransit can produce a similar customer experience with fewer resources, or a better customer experience with similar resources. This generally applies in cases where fixed routes produce far below ten rides per hour. Three primary models for FLEX arise based on this concept:

- 1. After-hours service to achieve a "guaranteed ride home" for CDTA's core service areas after fixed routes have stopped running. Fares would be set to encourage customers to plan to use fixed routes but still have a fallback option if they miss the last bus home.
- 2. Feeder service to connect areas of low transit potential and high transit need with fixed-route service. Booking of FLEX trips in advance should be allowed when possible, so CDTA can meet customers when they arrive instead of forcing the customer to wait until they arrive at the transfer point to notify CDTA of their request.
- 3. Coverage service in areas where there is a definite need to provide service but fixed-route has proven unsuccessful.

Under the third model, CDTA will investigate the possibility of using FLEX in Saratoga Springs, Amsterdam, and Glens Falls, where microtransit may be able to provide a better experience and/or use less resources.

Other necessary changes are also being made to improve FLEX efficiency. CDTA has implemented point-to-point service to increase productivity and get buses back into service more quickly by avoiding slow side streets and parking lots where possible. FLEX zones should cover an area of no greater than ten square miles, to increase shared rides and reduce time spent deadheading.

CDTA will also investigate scheduling FLEX rides in advance, which should help reduce wait times when transferring from fixed route.

CDTA will also develop reporting metrics for FLEX to be included in its monthly non-financial report, to ensure that these changes are producing the desired improvements in efficiency and customer satisfaction.



4.4.2. CDPHP Cycle! Bikeshare

CDPHP *Cycle!* is a valuable supplement to fixed route service, providing first/last mile connections to transit, an option when a rider misses the bus, and an especially good option for short trips where the wait for a bus might be longer than a bike ride. *Cycle!* also provides recreation and exercise, and many customers also use *Cycle!* for errands like grocery shopping. CDTA will continue to expand CDPHP *Cycle!* based on the standards established in Section 5.1.2 of the TDP, the results of the *Cycle!*, Drive, and FLEX surveys, and a closer analysis of *Cycle!* ridership data.

CDTA will continue to work to develop *Cycle!* as a first/last mile connection to transit, as a recreational benefit and as a meaningful alternative to driving.

In order to make informed decisions regarding *Cycle!*, CDTA will work to get more data from its *Cycle!* bikes and hubs, and seek input from *Cycle!* customers.

CDTA will investigate the viability of running CDPHP *Cycle!* year round. One study found willingness to ride in winter for other bikeshare systems across the US to vary widely, being generally between 10-30%, but willingness was also much higher among some demographics, such as students. CDTA will also have to consider liability for crashes during bad weather, and wear and tear caused by snow and salt. Whatever winter ridership umbers will be for *Cycle!*, it is safe to assume both that usage in winter will be less and operating costs will be higher. However, year-round service will also close a critical gap for customers who rely on *Cycle!*.

CDTA will continue to develop innovative programs to ensure equitable access to *Cycle!*. CDTA is developing a discount program in collaboration with the Albany Housing Authority. Residents will get access to *Cycle!* for a reduced monthly rate. If this program is successful, it is hoped to be expanded.

CDTA will also develop monitoring standards for *Cycle!* for a more nuanced understanding of its network and report on its performance. CDTA will aim to measure the performance of individual bike hubs and identify where more capacity is needed and where excess capacity exists. This will help with reporting on the program's performance and planning changes to the service. Some possible standards are described in the Standards section.

4.4.3. DRIVE Carshare

Because of high demand, CDTA will continue to expand DRIVE in accordance with new standards established in Section 5.1.2 of the TDP.

¹² Godavarthy, R. P., & Taleqani, A. R. (n.d.). (publication). Winter bikesharing in US: User willingness, and operator's challenges and best practices (Vol. 30, pp. 254–262). Sustainable Cities and Society.

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CDTA will clarify the role DRIVE plays in its family of services. To do so, CDTA will increase its leverage of DRIVE data and customer surveys. It is hoped but not yet known whether DRIVE reinforces CDTAs other services, particularly fixed route. This is an important step before CDTA can confidently plan service improvements, new vehicle locations or other changes to the service.

4.5. Other Recommendations

4.5.1. More Bus Storage Space

CDTA intends to continue increasing garage space to accommodate its existing fleet, support electrification, and allow for future expansion. This primarily means completing the West Facility project, but a solution will be needed to expand capacity for Albany and Troy service as well.

Plans for the West Facility would also address other needs identified by the maintenance department, such as training facilities and a paint shed for 60 foot buses, and infrastructure for vehicle electrification.

4.5.2. Regional Leadership on Land Use and Street Design

CDTA will continue to work with partners on land development and street designs that support transit, biking, and walking. In addition to CDTA's regular work with municipalities on development projects, CDTA will investigate the practices of peer transit agencies and metropolitan planning organizations to encourage this kind of change. CDTA faces a challenge in the significant suburban growth in Saratoga County. Good land use planning now can lead to significantly better transit service in the future.

4.5.3. Support Staff

CDTA will revisit staffing levels to ensure each department is properly staffed to handle their work, particularly in Maintenance, Transportation, IT, and Facilities, whose workloads have been directly increased by service increases and new technology.

CDTA will determine any resources staff need to help them do their jobs well, on-time, and safely. This would mainly mean training, facilities, software, or equipment.

When planning a new service, product, or amenity, CDTA will make impacts to operations a central part of the plan. The plan will document any new responsibilities created by the plan and who will be responsible for those tasks, and those impacts will be considered and planned for.



4.5.4. Simplification

CDTA will work to simplify use of our full family of services, primarily focusing on simplifying the fixed route network, fare payment, mobile apps, and the steps to mix multiple CDTA services into one trip.

4.5.5. Fare Payment

To meet customer needs and simplify fare payment, CDTA will explore new payment options, including open payment, and improve the Navigator app, including features such as live tracking and payment history. Many transit agencies today accept credit card payments or payment apps like Apple Pay or PayPal. CDTA will also pursue opportunities to integrate non-fixed-route services like STAR, FLEX, Drive, and CDPHP *Cycle!* into a unified fare payment application.

Fares were last overhauled in 2009, so CDTA will also revisit its fare structure across all services. Fares need to strike a balance between raising adequate revenues while keeping services affordable. Fares must also align with the way customers use the service. Any unpopular fare options may indicate a need to better understand user needs. Given our wide range of transportation options, CDTA should also use fares to support the kind of mixing of modes that is intended by CDTA's "family of services," encourage use of options with excess capacity, and relieve operationally expensive or overburdened services. Fares should align well with formula-based funding incentives. Higher fares may drive revenue at the farebox but any reduction in ridership will cost some amount of ridership-based Federal and formula funding. A fare overhaul should also consider impacts on operations—some fare options may speed up boarding, while others may create more maintenance work. Lastly, any fare changes must be equitable in accordance with Title VI of the Civil Rights Act and all applicable equity analyses will be included.



4.5.6. Standards

CDTA will adopt new standards for service, infrastructure, land use and development, service monitoring, data collection, and reporting, as described in section 5 of the TDP.

4.5.7. New Employee and Student Orientation

Based on feedback from partners, CDTA will work with interested employers and partners to help new employees, clients, or students orient themselves to the region's mobility options. People who are new to the region are often the most willing to learn a new way to get around.

4.5.8. Increase Public Engagement & Feedback

As CDTA rolls out new initiatives under the updated TDP, CDTA will plan new education campaigns to keep the public informed about changes.

CDTA will increase the use of public feedback and customer satisfaction data to drive short-, medium-, and long-term work plans. Customers often know when something is not working before CDTA does, and CDTA should leverage this as much as possible by encouraging constant feedback. A prime example that emerged from the TDP process is QR codes at bus stops, which would allow customers to quickly report issues or access schedules. The Standards section discusses "Performance Based Management," which describes how CDTA will use customer satisfaction data to set organizational goals. CDTA will continuously engage with the public to understand regional needs. CDTA will also review and adjust its work plan to address major trends in customer sentiment on an annual basis.

4.5.9. Develop a "Gold Standard" of Service

CDTA will create a map of all places where the combination of nearby services achieve a "gold standard" for service, based on the availability and abundance of services and the compliance of those services with the standards laid out in Chapter 5 of this document. Places which achieve this gold standard will be mapped and updated on an annual basis. This map will be used for branding purposes and to increase awareness of CDTA services so the public and partners can plan around CDTA services.

4.5.10. Continued Evaluation of Zero-Emission Technology

As part of CDTA's long-term commitment to sustainable and resilient transit operations, the evaluation of emerging zero-emission technologies—including battery-electric and hydrogen fuel cell buses—will remain a central focus of future fleet planning. These technologies offer significant environmental benefits but also present operational, infrastructure, and financial challenges that require careful consideration. To mitigate risk and ensure service continuity during this transition, CDTA will prioritize the deployment of diesel-electric hybrid buses as a proven bridge technology. Hybrid vehicles provide immediate reductions in fuel consumption and emissions, while offering operational flexibility and compatibility with existing maintenance



and fueling infrastructure. This phased approach allows CDTA to build internal capacity, gather performance data, and prepare for the infrastructure and workforce demands of alternative propulsion systems, ensuring a smooth and cost-effective transition over time.

4.5.11. Incorporate New Technologies

CDTA will continue to incorporate new technologies that make the riding experience better and simpler for CDTA customers. CDTA will take a proactive approach of paying attention not only to what is available today but what may be available in the future. New technologies will have impacts on both customer facing technology and technology used by CDTA staff.

There are in particular a variety of new ways to collect and analyze data. Many AI tools exist today to assist transit which could use video from CDTAs cameras on its buses and transit signal priority intersections to flag important sightings like fare evasion or a shelter that needs to be cleaned, and to collect data like pedestrian counts at intersections. CDTA is also aware of AI companies attempting to provide common transit projects like bus stop inventories exclusively using AI and common tools like Google Street View to replace labor-intensive in-person surveys. Other companies model transportation behavior based on cell phone data and other sources, which could help CDTA plan service changes

CDTA will also continue to investigate autonomous vehicles (AVs) for transit. While challenging to implement, the potential benefits of AVs for transit are huge, and other transit providers are piloting AVs today.



5. Standards

CDTA uses standards to guide management decisions, to monitor the performance of its services, and to identify areas for improvement. Service standards pertain to specific CDTA services, and each service has both "Planning" standards for management decisions and performance standards to monitor the service in operation. Infrastructure standards pertain to street amenities and technology systems CDTA operates. Land Use and Development standards describe streetscape and development standards needed to support transit. Lastly, we describe how CDTA will go about monitoring and reporting on these standards.

5.1. Service Standards

Service standards are standards for specific CDTA services. They cover planned features, like coverage, frequency, and span, as well as performance outcomes like on-time performance, productivity, and passenger loads. Besides data coming from CDTAs own systems, customer satisfaction feedback should play a role in judging the performance of all CDTA services.

5.1.1. Fixed Route

When more routes follow a common standard, service is easier for customers to understand; however, this may lead to inefficiencies on certain routes, such as mismatched frequency and demand, inflexible scheduling during high demand time periods, or an increased need for operational resources (drivers, vehicles, etc). CDTA will weigh simplicity against efficiency when considering adherence to the standards.

PLANNING STANDARDS

Coverage

Coverage standards are widely used by transit agencies to provide a baseline understanding of where to provide fixed-route service. These standards typically incorporate a combination of demographic indicators, similar to those found in the Market Analysis in Chapter 3.

Since the 2007 TDP, CDTA has used a regional coverage standard informed by a transit propensity index (TPI), including demographics, population, and employment statistics. ¹³ At least 75 percent of block groups with a TPI score of two and higher were expected to have transit service available. Within this analysis, population and employment densities are key indicators of potential transit demand and are used to inform service frequencies and route type.

This TDP replaces the TPI with Transit Need and Transit Potential calculations. Transit Potential includes both population density and employment density. Transit Need includes population density, people without access to an automobile, people with disabilities, low-income

¹³ CDTA. Transit Development Plan Update (2013).

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individuals, young people, and older adults. The current maps for this data can be found in the Market Analysis memo. Given that Transit Need and Transit Potential are somewhat simplistic predictors of ridership, CDTA will use Transit Need and Transit Potential as starting points for service planning, but will not tie service to them directly.

Headways and Service Span

Two of the most important aspects of a bus route are when a bus runs and how often it runs. Here, CDTA is using the term headway, which describes how much time passes between each bus arrival. Service span describes when a route starts and stops on a given day. CDTA uses a variety of headways and spans to cover different needs efficiently.

Clockface Headways

In keeping with the strategic principle of simplicity, CDTA will use "clockface" headways wherever feasible. Clockface headways are those that divide evenly into 60 minutes (i.e., a bus every 3, 5, 6, 10, 12, 15, 20, 30, or 60 minutes). When vehicles arrive at the same time each hour, passengers can easily estimate passing times at a stop all day long. Consistent intervals also enable smoother transfers with more predictable wait times. CDTA may violate clockface headways when necessary to make transfer connections, meet shift time requirements for riders, or when scheduling constraints prevent the implementation of clockface headways (e.g., complex route alignment, traffic congestion, or limited vehicle/driver availability).

Headways

Headway standards for CDTA service can be viewed in **Table 3** below. CDTA uses an expected headway by time of day for each service type. Note that BusPlus, Trunk, and Neighborhood service types are expected to have headways of no more than 60 minutes.

Table 11: Standards for Headway Ranges by Time Period and Service Type

Service Type	Headway Ranges						
		V	Veekday		Weekend		
	Peak	Mid-Day	Evening	Late Night/ Early AM	Day	Early AM/Evening	Late Night/Early AM
BusPlus ¹⁴	12-15	12-15	12-15	20-30	15-20	20-30	20-30
Trunk	12-30	12-30	20-30	20-60	15-60	15-60	30-60
Neighborhood	20-60	30-60	30-60	30-60	20-60	20-60	30-60
Express	2+ trips	0-4 trips	-	-	-	-	-

¹⁴ BusPlus service standards will match latest Federal Transit Administration (FTA) requirements for Small Starts project criteria. For fixed guideway or corridor-based bus rapid transit (BRT), the weekday service will operate a 14-hour service span with either 15-minute all-day headways or 10-minute max peak headways with 20-minute max off-peak headways.

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Service Span

Service span varies depending on route type and different needs of riders on a particular route. **Table 12** provides recommended service spans by route type. Many CDTA routes exceed these hours if it caters to a destination with additional service needs. In some cases where ridership might be low during the early morning or late-night hours, service span may be reduced.

Table 12: Standards for Service Span by Time Period and Service Type

Service Type	Service Span (Service Hours)					
	Weekday	Saturday	Sunday/Holiday			
BusPlus ¹⁵	4:00 AM – 2:00 AM (22 hrs)	5:00 AM – 2:00 AM (21hrs)	5:00 AM – 1:00 AM (20 hrs)			
Trunk	5:00 AM – 1:00 AM (20 hrs)	5:30 AM – 1:00 AM (19.5 hrs)	6:30 AM – 12:00 AM (17.5 hrs)			
Neighborhood	5:30 AM – 11:30 PM (18 hrs)	6:30 AM – 11:30 PM (17 hrs)	7:30 AM – 9:30 PM (14 hrs)			
Express	Primarily Peak Periods	-	-			

PERFORMANCE STANDARDS

Passenger Loads

Table 13 displays the vehicle capacities at different load factors, and **Table 14** displays load factor thresholds by service type. Total seating can vary slightly from bus to bus. These standards also assume a diesel bus. Some alternative fuel vehicles do not allow standees because of weight limits.

Table 13: Standards for Vehicle Capacities (Riders) and Load Factors (Occupied Seats)

Load Factor at Busiest Point (Peak Hour)	24' Mini-bus	30' Bus	35' Bus	40' Bus	60' Articulated Bus
60 %	7	17	19	22	33
100 %	12	26	32	37	55
125 %	15	32	40	46	68

Table 14: Load Factor Caps by Service Type

Service Type	Peak Hour Maximum Load Factor	Off-Peak Hour Maximum Load Factor
BusPlus	125 %	100 %
Trunk	125 %	100 %
Neighborhood	125 %	100 %
Express	100 %	-

¹⁵ BusPlus service standards will match latest Federal Transit Administration (FTA) requirements for Small Starts project criteria. For fixed guideway or corridor-based bus rapid transit (BRT), the service will operate at least a 14-hour service span.

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Ridership Productivity

Productivity threshold targets should be aspirational but achievable. **Table 15** summarizes the recommended targets for fixed-route service. While express service is not depicted in the table, it is recommended that the minimum productivity threshold for Express routes is fifteen passengers per trip, which is in line with some of CDTA's peer agencies such as Pioneer Valley Transit Authority.

Table 15: Standards for Productivity (Riders per Revenue Hour) Thresholds Targets by Service Type

		BusPlus		Trunk		Neighborhood	
		<mark>25th</mark> percentile	<mark>75th</mark> percentile	<mark>25th</mark> percentile	<mark>75th</mark> percentile	<mark>25th</mark> percentile	75th percentile
	AM Peak	20	30	20	30	10	20
Weekday	Late Night / Early AM	10	20	10	20	10	15
ĕ	Mid-Day	20	30	20	30	10	20
	PM Peak	20	30	20	30	10	20
	AM Peak	10	20	10	20	10	20
Weekend	Late Night/Early AM	10	15	10	20	10	15
>	Mid-Day	15	25	10	25	10	20
	PM Peak	20	25	15	25	10	20

Productivity is measured by riders per revenue hour. Routes in the bottom quartile should be evaluated for potential reduction in service or size of vehicles after other factors (e.g., equity, lifeline service, Universal Access) are considered.

For some of CDTA's service areas, productivity will inevitably be lower. As CDTA implements this standard, we will adapt standards to geographic areas on a county by county basis. It is expected that Saratoga, Montgomery, and Warren Counties will need their own standards.



On-Time Performance (OTP)

Table 16 compares CDTA's definition for on-time performance with peer agencies.

Table 16: CDTA On-Time Performance Guidelines Compared to Peer Agencies

Agency	Temporal Para	meters	System-Wide Goals	Notes on Measurement Method	
CDTA (Albany, NY)	One minute early to five minutes late		80%	Monitoring occurs at all timepoints	
Madison	Routes Less than five minutes without late timed transfers		90+%	Monitoring will be during March and October due to school schedules and weather fluctuations	
Metro (Madison, WI)	Routes with timed transfers	Trips that arrive after the transfer time instead of a static timeframe			
PVTA (Springfield, MA)	One minute ea	rly to five minutes late	85%	Measured at both termini to account for variability in traffic and driver breaks	
NFTA (Buffalo, NY)	Two minutes early to five minutes late		84% or higher than the prior year's average OTP		
RGRTA (Rochester, NY) ¹⁶	Two minutes early to five minutes late		88%	OTP is measured as part of a quarterly performance scorecard	
RIPTA (Rhode Island)	One minute ea	rly to five minutes late	79%	OTP is measured at every time point for every trip every day	

CDTA determines OTP for fixed routes based on whether they arrive at a time point (a stop with arrival times included in public schedules) at the scheduled arrival time. CDTA gives an on-time performance window of -1 to 5, meaning a bus is on time if it arrives any time between one minute early and five minutes late. CDTA has a systemwide goal of 80 percent on-time. CDTA monitors OTP at timepoints to explore causes for late or early departures and to determine appropriate solutions for any routes not achieving 80 percent OTP.

There are also some special circumstances where CDTA does not follow standard on-time performance rules. Because of how frequent it is and because of the snowball effect of a trip being late, the Route #905 Red Line follows headway management, which aims to keep headways consistent instead of sticking to specific arrival times. This is reflected in the schedule, which shows (for example) "Buses run every 12 minutes" instead of giving specific times. CDTA also runs a pulse system in Glens Falls, meaning that making connections at Ridge Street Terminal are prioritized over strict schedule adherence.

¹⁶ Rochester Genesee Regional Transportation Authority. *Comprehensive Strategic Plan & Financial Plan* (2023).

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5.1.2. STAR

Although CDTA already collects and reports some metrics relating to STAR—these include ridership, on-time performance, missed trips, complaints, calls received, calls in queue over five minutes, and applications received—more work should be done to fuel true performance-based management within STAR. CDTA's planned upcoming operational study will cover performance metrics, among other topics.

5.1.3. Expanded Mobility Options

FLEX MICROTRANSIT

CDTA provides on-demand services through its FLEX microtransit program. Microtransit is common among larger agencies but relatively uncommon among peer agencies. Industry ridership and productivity may not be comparable, and will serve as a reference considering CDTA's FLEX service areas are smaller and less dense than at other agencies that offer similar services.

Microtransit can be a more efficient solution than fixed-route in the right situation, such as covering a large geography with lower ridership demand, but it is not expected to be efficient or cost-effective on its own. Microtransit is expected to function at fewer than ten riders per hour. For that reason, it should be used sparingly and ideally in situations where it connects to fixed-route service. Microtransit can also be a customer experience improvement where the fixed-route option is slow, indirect, has long headways, or requires multiple transfers.

Planning Standards

Service Span and Coverage

FLEX can be used to extend CDTA service span by operating in areas served by fixed-route at times when fixed-route does not operate. This ensures that fixed-route riders aren't stranded late at night and covers late night connections like third shift workers. FLEX may at times be overwhelmed by sudden surges of demand. That information may indicate justification for late night fixed-route service.

FLEX can also extend geographic coverage of fixed-route by connecting areas not served by fixed route to the transit network. The best example in the CDTA service area is Crossgates Mall, which has excellent service headed east towards Albany but very little headed west into Guilderland. A short ride on FLEX gets customers into the entire CDTA network.

Pricing

When used as an overnight stranding prevention service, CDTA should consider pricing FLEX to encourage customers to use fixed-route when possible and only use FLEX as a fallback option when they happen to miss the last bus home.





Performance Standards

On-Time Performance and Reliability

For FLEX, CDTA has a goal of 75 percent on time trips. For on-demand services, on-time includes all arrivals of five minutes early to ten minutes late. Average wait time for a vehicle should ideally be kept under 30 minutes. To improve FLEX wait times, CDTA will rely on methods other than adding vehicles and drivers, such as improving the booking and scheduling process and changing route geography and/or pickup locations. Past experience has shown that adding drivers and vehicles leads to more ridership, which prevents wait times from dropping in the long run. CDTA can also look at adjusting the geography of FLEX in order to improve wait times.

Other Standards

As CDTA changes how it plans and uses FLEX, CDTA will continue to evaluate other ways to report on FLEXs performance. Any metrics selected should capture either the efficiency of the service, such as productivity, or the quality of the service for customers, such as average wait time or customer satisfaction ratings.

CDPHP CYCLE! BIKESHARE

Based on findings from the National Association of City Transportation Officials (NACTO)¹⁷, CDTA will use the following guidelines when locating and designing new CDPHP *Cycle!* stations:

- Stations within a continuous network should be placed within a five-minute walk of others. This allows customers to be close to a *Cycle!* rack without any planning, like high frequency transit lets customers get up and go without having to plan around a schedule.
- All stations should be easily accessible and visible; well-lit locations are strongly encouraged, and locations blocked by walls, buildings or trees are discouraged.
- An ideal location will:
 - Be adjacent to a connected sidewalk network.
 - Avoid conflicts with other streetscape elements like loading bays, fire hydrants, and bus stops.
 - Be well-served by a connected network of bike lanes.
 - Overlap with fixed route network to provide first/last mile connections and cover short trips not well served by fixed route.

Planning Standards

Site Selection

<u>Last Mile Connections with Fixed-Route</u> - Locations with last-mile access needs, such as major employment centers with limited bus frequencies or incomplete fixed-route coverage, may offer other opportunities for popular stations.



<u>Safety</u> - CDTA will prefer locations with safer options for riding. Riders must use their own judgment about safety and their ability as a rider.

<u>Equity</u> - Bikeshare can offer affordable transportation options and may yield even greater ridership in locations with the greatest need for affordable transportation. Communities with a relatively high concentration of zero-car households, college-aged adults, or populations below the poverty line may be well suited for new stations.

<u>Tourism and Recreation</u> - Bike share is often popular with tourists and CDPHP *Cycle!* riders often ride for recreation. Even without a direct connection to fixed-route, *Cycle!* stations can see good utilization.

<u>Customer Feedback</u> - Lastly, soliciting suggestions from existing riders and community members for new station locations may be a beneficial and efficient way to grow the system organically. While still acknowledging the equity goals and technical siting considerations, CDTA could seek feedback on the best new locations.

Performance Standards

Performance standards for CDPHP *Cycle!* are still being developed. However, some likely concepts are below. CDTA may report performance of the the *Cycle!* system as a whole, the performance of sub-areas, or even individual racks. The availability of data may constraint CDTAs choices.

Rides Per Bike Rack Per Day

By tracking the number of times bikes are checked out from a particular rack, CDTA can track the relative popularity of bike racks.

Times Without a Bike Available

CDPHP *Cycle!* racks and bikes should be distributed in a way that bikes get used but that there is, as often as possible, at least one bike left for the next customer at each bike rack. CDTA should track this data to avoid popular bike racks running empty and less popular bike racks being overloaded unnecessarily.

DRIVE CARSHARE

It is expected that even experienced fixed-route customers will need a car from time to time. DRIVE alleviates CDTA customers of the need to own a car "just in case." DRIVE vehicles are intended to be located at mobility hubs or otherwise in proximity to fixed-route service in order to be accessible to transit riders and supplement transit service.

Planning Standards

Guidelines for DRIVE include:



- Vehicles are available 24 hours a day, seven days a week.
- Insurance, maintenance, roadside assistance, and charging are included in the rental cost.
- Vehicles should be available or in use for at least 75 percent of a given month.
- Siting of carshare locations should factor in equity considerations (e.g., prevalence of zero vehicle and low-income households).
- Planning for Mobility Hubs should consider potential for DRIVE locations.
- Because of DRIVE's limited availability and popularity, pricing should change to manage demand and encourage use of fixed-route and CDPHP Cycle! where suitable. Slightly higher prices can keep DRIVE available for when someone really needs it and discourage use of DRIVE when suitable alternatives exist. This approach should have limits, given DRIVE's goal of affordability for people of limited means.
- Conduct annual reporting on DRIVE membership data (age, household income, household size, education level, and ZIP code); utilization, trip data (origins, destinations, purpose, mileage, and times). CDTA will use this report to plan future changes and expansions of DRIVE.

Performance Standards

Similar to *Cycle!*, performance standards for DRIVE are still in development. But the following will be considered.

In-Service Time

DRIVE vehicles should be in use or available (not out for maintenance or other reasons) at least 95% of the time.

Utilization and Availability

As with *Cycle!*, CDTA should strike a balance between high utilization and enough vehicles such that customers feel that DRIVE is generally available when they need it. Customer survey data will be important for identifying perception of availability.



5.2. Infrastructure Standards

Transit infrastructure is typically influenced by the surrounding built environment, ridership, and traffic patterns. The sections below describe infrastructure standards in the Capital Region for bus stops, in terms of amenities and stop spacing, as well as Intelligent Transportation System (ITS) infrastructure.

5.2.1. Stop Spacing

Bus stop spacing aims to balance walkability against minimizing travel time for riders. Closer stops serve passengers more directly but slow down service due to frequent stopping. The balancing of these two considerations is complex. For example, buses generally can run faster in suburban or rural areas than in cities. Closely spaced stops on suburban or rural streets may cause the bus to never get up to top speed, slowing down service.

However, suburban and rural areas often lack pedestrian infrastructure, making walking a longer distance to a bus stop less safe, less convenient, and less comfortable. A stop with low ridership may look like a strong candidate for elimination, but eliminating a stop with no customers also won't reduce the frequency of stopping. CDTA must also weigh the number of customers riding through a neighborhood against the needs of riders who board in that neighborhood. If one group greatly outnumbers the other, this should also be considered.

For BusPlus stations, spacing is determined through dedicated planning studies for each project. Unlike local fixed-route bus stops, limited stops are a feature of Bus Rapid Transit to increase a route's speed and efficiency. Since BusPlus generally overlaps with local fixed routes, customers have a choice between routes using closely spaced stops and BRT with wider stops for a faster ride.

FLEX is a service that uses an on-demand model with key pickup locations. FLEX is moving away from its previous curb-to-curb service model and towards a point-to-point model with designated pick-up/drop-off areas similar to fixed routes.



Peer transit agencies differ in how they approach stop spacing standards (**Table 17**), but they generally set distinct guidance for specific types of routes or density levels.

Table 17: Peer Agency Stop Spacing Standards

Agency	Environment	Stop Spacing
RIPTA	Rapid Bus	1,100 ft – 1,300 ft
	Key Corridor	900 ft – 1,300 ft
	Urban Radial	900 ft – 1,300 ft
	Non-Urban/Suburban/ Crosstown	660 ft – 1,100 ft
	Regional	900 ft – 1,100 ft
	Express/Commuter	900 ft – 1,100 ft
NFTA	Downtown Buffalo	1,200 ft
	Higher-Density Municipality	950 ft
	Lower-Density Municipality	700 ft
	Bus Rapid Transit	¾ mile

Given the relative balance between speed and convenience, stop spacing on CDTA routes will generally be closer together in dense, urban areas, and further apart in less dense areas. Stop spacing may vary in specific circumstances, but it will generally follow the standards shown in **Table 18**.

Table 18: Proposed Stop Spacing Standards

Environment	Stop Spacing				
	Typical	Maximum			
Local Bus: Central Core	750 ft	1,000 ft			
Local Bus: Urban Areas	1,000 ft	1,500 ft			
Local Bus: Suburban & Rural Areas	1,250 ft	2,000 ft			
BusPlus ¹⁸	1,000 ft	2,500 ft			

5.2.2. Stop Amenities & Design

Bus stop amenities are largely based on the number of daily boardings. Specific stops may require additional amenities due to local conditions (e.g., exposure to weather at an isolated stop location may warrant a shelter even where boardings are low). Other factors such as sidewalk width, ADA compliance, or walkability can also influence the ability to install amenities. The walkability of stops varies by location; while all stops are accessible to some extent, access may also depend on other modes of transport, such as park-and-ride options. These considerations are evaluated on a case-by-case basis. **Table 19** offers guidance on amenity placement. More details on specific amenities can be found in the sections below.

¹⁸ BusPlus stop spacing may be closer in the Central Core and other activity centers to balance BRT speed and accessibility to key destinations.

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Table 19: Stop Amenity Placement Guidelines based on Passenger Boarding Activity.

Daily Boardings	Shelter ¹⁹	Bench and Seating	Trash Receptacles	Real-Time Information	Walkability and Stop Access	ADA Accessibility
< 15	No	No	No	Stop ID Only	Yes	Yes
15-35	No	Yes	Case-by-case	Stop ID Only	Yes	Yes
35+	Yes ²⁰	Yes	Yes	Consider Real- Time Sign	Yes	Yes
BusPlus & Key Corridors	Yes ²¹	Yes	Yes	Consider Real- Time Sign	Yes	Yes

Improvements at high-ridership locations will be prioritized for amenities.

SHELTERS

Shelter placement considers several factors, including ridership levels, transit need and potential, existing sidewalk amenities, and the characteristics of the surrounding area. Besides the demand for a shelter, transfers between low frequency routes should also be considered for shelters, as customers may be forced to wait for a long time in bad weather.

All shelters must comply with ADA accessibility standards including PROWAG, ensuring that waiting areas within the shelter accommodate individuals with mobility devices or limitations. This commitment ensures that public transit remains accessible and inclusive to all riders of all abilities.

Because of technical difficulties, radiant heating will not be standard for CDTA shelters going forward. CDTA will revisit this standard once a plan to address known issues has been developed. Roof designs are also evaluated to help maintain customer comfort, with innovative approaches like the green roof piloted at Congress Station in Troy. This pilot demonstrated improved heat retention and better stormwater runoff control, showcasing how shelters can provide environmental benefits. All BRT shelters should also include heated sidewalks to clear snow.

Over 35 daily boardings is the standard requirement for a shelter, but some other factors may be considered, such as if customers often spend a long time waiting at the stop.

Specifications for stops and related equipment are subject to site-specific studies and CDTA's stop amenity guidelines in **Table 19**.

¹⁹ Consider supplying a shelter at isolated stops on a case-by-case basis where passenger exposure to wind, precipitation, traffic, or other adverse conditions.

²⁰ Subject to suitable site conditions (e.g., sufficient right-of-way, grades, and ADA accessibility).

²¹ Subject to suitable site conditions (e.g., sufficient right-of-way, grades, and ADA accessibility).

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BENCHES AND SEATING

Benches and seating enhance passenger comfort, improve accessibility, and increase bus stop visibility. While seating is typically associated with bus stop shelters, it can also be a stand-alone amenity in locations where shelters are either not warranted or are constrained by site limitations. In cases where space is constrained and a bench is not possible given the available space, leaning rails could be considered, as they offer a more compact alternative to a shelter or bench, providing comfort at higher-volume stops, including those on the BusPlus network.

15-35 daily boardings is typically required to justify the installation of a bench; however, not all stops that meet this threshold may be suitable for seating. The decision to install benches or other seating amenities should also consider the stop's strategic importance, such as whether it is part of a key transit corridor or served by multiple bus routes. Demographic and geographic factors (e.g., high concentration of people with disabilities or the elderly, or hilly terrain) may also influence bench placement.

Seating design will discourage non-passenger loitering, such as by using individualized seating elements or partitioned benches.

TRASH RECEPTACLES

The need for a trash receptacles at a bus stop is predicted based on ridership levels and the surrounding environment. A stop with less service may not require a trash receptacle, but a major hub may warrant several. The proximity of landmarks and high-traffic areas, such as takeout restaurants, is also considered, as these areas tend to generate more waste compared to residential neighborhoods. The ease of receptacle maintenance is also a key factor in placement decisions. Trash receptacles are also placed in response to known issues, such as frequent littering.

CDTA will create sensible partnerships with local property owners and municipalities to use their maintenance staff where possible to maintain trash receptacles. CDTA may agree to maintain the receptacles where this is not possible. Clearly defining maintenance responsibilities is essential before implementing trash receptacles at CDTA stops.

In high-volume areas or where trash collection is labor-intensive or infrequent, solar-powered, self-compacting trash receptacles may be considered. These compacting devices have already been deployed at BusPlus stops to manage higher waste volumes efficiently.



LIGHTING

To promote safety and make waiting customers more visible to the driver at night, CDTA will explore lighting solutions inside and around bus shelters, such as smart LED lighting or solar-powered lighting. Where possible, stops will be placed in well-lit areas. Where sufficient lighting does not already exist, CDTA will work to have appropriate lighting installed, either in the shelter, or as needed to make sure customers feel safe and are highly visible to drivers. Pedestrian-scale lighting will include streetlamps that are less than 25 feet high. ²² To avoid glare for pedestrians, lights that are placed lower will be adjusted in brightness. In locations where lighting is limited, some shelters will be equipped with internal lighting options. CDTA will seek customer input about lighting needs in order to identify locations which need lighting. Photovoltaic panels or glazing on the shelter may also be used to generate electricity, providing power for LED lighting. These types of treatments have been successfully piloted at BusPlus Blue Line stations in Troy.

WALKABILITY, STOP ACCESS, & ADA

Bus stop location plays a pivotal role in determining accessibility. When possible, stops will be placed at locations that maximize access to surrounding destinations through direct and safe paths for all users, at all times of day, and in all seasons. Barriers such as excessive roadway crossings, steep grades, or other obstacles will be minimized. Ideally, stops are located near intersections with clear visibility and easy access to return stops in the opposite direction of travel.

Because CDTA does not own the right of way it operates in, CDTA's ability to directly invest in improvements beyond the bus stop is limited. Collaboration with the right of way owner (generally a municipality or New York State) is essential.

Potential access improvements beyond the stop may include sidewalk upgrades or repairs, installation of curb ramps and pedestrian signals, crosswalk enhancements, improved lighting, ADA treatments such as tactile warning surfaces or railings, safety enhancements like removing dense vegetation (aligned with Crime Prevention Through Environmental Design (CPTED) principles, or connections to multi-modal transit. CDTA will work with local and regional stakeholders to prioritize these improvements, but funding will come from a variety sources.

As much as possible, future stop improvements and amenities will adhere to ADA accessibility standards as outlined in FTA's ADA Circular.²³ This includes ensuring a level surface (within ADA slope guidelines) for deploying wheelchair ramps, providing hard landing surfaces, and maintaining adequate clearances for pedestrian pathways and maneuvering within the station

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final FTA ADA Circular C 4710.1.pdf

²² NACTO Transit Street Design Guide.

²³ FTA Circular: ADA Guidance (2015).



area. CDTA will work with partner jurisdictions to address adjacent infrastructure, such as sidewalks, curb ramps, and pedestrian crossings, wherever feasible.

CDTA will also keep a record of which stops are ADA accessible. CDTA will incorporate this information into its trip planner tool and use this information to plan improvements.

COMMUNITY IDENTITY AND PUBLIC ART

Community identity and public art can enrich the public experience and reflect the local history, cultural heritage, and spirit of nearby neighborhoods or cultural institutions.

Public art is typically installed adjacent to a bus stop, or incorporated into stop components, such as shelter panels, bike racks, or cabinet/trash receptacle vinyl wraps. CDTA ensures consistency in the application of community art by identifying specific elements of the stop environment that can be customized.

The placement of public art considers the surrounding environment, aiming to enhance areas that might benefit from additional color or artwork that signifies the neighborhood or nearby landmarks (e.g., the New York State Seal at a bus stop near the State Capitol). Public art installations must not interfere with the functionality of the bus system or the visibility or safety of users. Public art can also make bus stops more visible.

The selection of public art can involve various stakeholders, including CDTA employees, local arts organizations, neighborhood associations, or a consortium of local artists.

BUS STOP PAD

Concrete pads at high-frequency bus and BRT stops are more resilient to wear and tear from braking and accelerating buses than traditional asphalt, particularly on sloped travel lanes. They also provide better control over cross slopes that affect passenger boarding and ramp deployment. In locations where concrete bus pads are installed, they will be at least 8.5 feet wide to accommodate both wheels of a bus.²⁴ Bus pads may be wider or extend across the full width of a lane in some cases to ensure that the surface is consistent. Regardless of whether a reinforced bus pad is used, CDTA and partner agencies will consider the potential impacts of cumulative pavement overlays on curb height and bus stop geometry.

BUS STOP LENGTH

Bus stop lengths will have adequate space to allow buses to safely pull in and out, minimizing conflicts with other vehicles. Bus stops vary in length depending on various features such as the

²⁴ NACTO Transit Street Design Guide (2016).

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number of lanes on a road, the presence of on-street parking, proximity to intersections, and the types of buses that serve it.

High frequency stops served by multiple routes benefit from a multiple berth configuration to reduce vehicle queuing delays. This determination will be made on a site-specific basis based on stop volumes and prevailing roadway geometric conditions. Clearly identified boarding locations are helpful at stops with multiple bus berths to speed up boarding and improve ADA accessibility. Determination of near-side, far-side, or mid-block stops will consider the number of buses serving a stop at a given time, traffic conditions, and road and sidewalk layout. **Table 20** provides the desired minimum bus stop length for each stop position, as well as the types and number of buses.

It is preferable to maintain clearance at bus stops for rear-door passenger alighting. Ideally, stops should allow for exiting the bus onto a smooth paved ADA compliant surface. At certain stops, there may be practical limitations to meeting this objective without relocating the stop (e.g., mature street trees, utility poles, streetscaping, or planter strips).

Bus stops will include regulatory signage to prohibit parking or standing by private automobiles or delivery vehicles in locations reserved for transit. Problematic locations may warrant a closer examination of curb regulation and utilization in the area to reduce conflicts.

Stop Position		40' Bus	60' Bus	2 x 40' Bus	2 x 60' Bus
In-Lane	Near-Side	35	55	80	115
	Far-Side	45	65	90	130
	Mid-Block	35	55	80	115
Pull-Out	Near-Side	100	120	145	185
	Far-Side	90	100	125	165
	Far-Side (right turn)	140	160	140	230
	Mid-Block	120	145	185	210

Table 20: Standards for Minimum Bus Stop Length by Stop Position and Vehicle Type (feet)²⁵

BUS STOP SIGNAGE

Current bus stop signage depicts a color-coded scheme by route classification, as well as a unique sign ID number on the lower left of the sign (see **Figure** 77). This is the minimum standard for all stops in the system.

At bus stops with less than 35 daily passenger boardings, bus schedules, the Navigator app and other options for reviewing the CDTA schedule and real time bus arrivals will be available through QR codes displayed on bus stop signage or near it. As detailed in **Table 19**, more

²⁵ NACTO Transit Street Design Guide (2016).

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advanced technology for displaying real-time information will be explored at BusPlus stations and other high-ridership stops with greater than 35 daily passenger boardings. Additionally, where street parking coexists with bus stops, markings are used to denote the stop area and no parking area.



Figure 77: Example of Current CDTA Bus Stop Signage

CDTA will consider adding more detailed information to bus stop signage or shelters to enhance customer experience and improve accessibility. This could include clearer instructions on how to use real-time services, additional wayfinding information, or maps showing key landmarks and nearby transfer points. To ensure that signage meets the diverse needs of its riders, CDTA should also conduct a comprehensive study to evaluate the effectiveness of current signage, identify potential areas for improvement, and explore the use of more advanced technologies or design features at high-traffic locations, such as dynamic electronic ink schedules²⁶. Static schedules and maps are not used due to the rate at which CDTA services change. See the Bus Stop Technology section for more information on this topic.

²⁶ https://www.mbta.com/projects/solar-powered-e-ink-signs

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5.2.3. ITS Technology & Priority Infrastructure Standards

TRANSIT SIGNAL PRIORITY

CDTA is an early adopter of Transit Signal Priority (TSP) with widespread deployment within the service area for nearly 15 years. TSP is installed on the three BusPlus rapid transit corridors. TSP improves transit performance by reducing average travel time, facilitating recovery from delays, and reducing travel time variability.

Any consideration of TSP will begin with a quantitative assessment of service deficiencies in the corridor, and the root cause of delay: intersections, congestion, bus stop boarding activities, and other operational phenomena.

TSP is considered to have a significant improvement on bus operations in high density transit and traffic corridors. TSP can reduce travel time by up to ten percent and can help reduce delays by as much as 50 percent.²⁷ The feasibility and effectiveness of TSP depends on site-specific factors including the location of TSP, traffic and transit volumes, intersection geometry, and stop location.

CDTA will investigate new locations for transit signal priority, starting with the Infrastructure Priority Network. Any additional locations will be identified based on the potential benefits for reducing passenger and bus delay. Corridors with more than four buses per hour, relatively low speeds, and relatively high throughput will be prioritized as potential candidates for future TSP treatments.²⁸

Besides CDTA's own operational needs, TSP should be planned based on the willingness of the owner of street (generally a municipality or NYSDOT) and emergency responders, who are also important stakeholders when controlling signal phases.

Oversight responsibilities will be shared jointly between CDTA and the owning agency. CDTA will monitor the performance of TSP for purposes of both maintenance and optimization. Figure 78 depicts the application of TSP at an intersection.

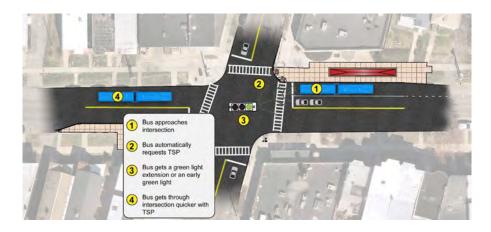
Figure 78: Visual of Transit Signal Priority

²⁷NACTO Transit Street Design Guide https://nacto.org/publication/transit-street-design-guide/intersections/signals-operations/active-transit-signal-priority/

²⁸ Capital Region Bus Lane Feasibility Study (2023).

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QUEUE JUMP BYPASS LANES

CDTA is an early adopter of queue jump bypass lanes with widespread deployment within the operating region. Locations with queue jump bypass lanes include intersections along Route #905, such as Central Avenue and Wolf Road and Central Avenue and New Karner Road in Colonie. Queue jump bypass lanes are an effective tool in corridors that experience significant delays at one or more intersections.



Queue jump bypass lanes are a bus-only lane with their own signal phase, allowing buses to get ahead of traffic at a busy intersection, usually by seven to nine seconds. When activated, a queue jump signal allows the bus to proceed through the intersection-going straight or making a right turn. Queue jump bypass lanes will be evaluated on site-specific studies, which include, an assessment of road layout and capacity, potential for realignment, street geography, and roadway congestion. **Figure** 79 depicts the use of a queue jump at an intersection.

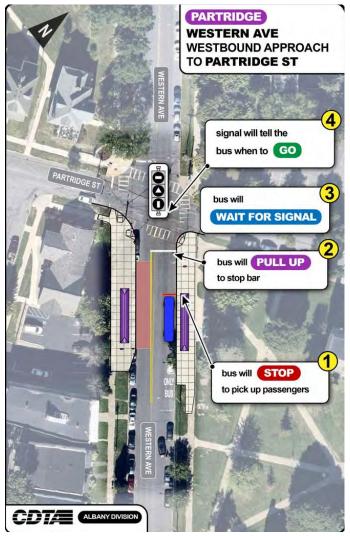


Figure 79: Visual of Queue Jump on BusPlus Purple Line

The CRTC Bus Lane Feasibility Study found queue jump bypass lanes would be most useful at Central Avenue and Washington/State/Broadway in Albany, State Street in Schenectady, and 3rd/4th Street in Troy (see Figure 80 through Figure 83). These corridors have high transit ridership, but also experience high levels of passenger delay, slow bus speeds, and unreliable service. Future locations for queue jump bypass lanes will be identified and prioritized based on



high bus density or congestion, lower transit speeds, transfer opportunities to other routes, and potential for growth and redevelopment.²⁹

Figure 80: Central Avenue, Albany



Figure 82: State Street, Schenectady



Figure 81: Washington/State/Broadway, Albany



Figure 83: 3rd/4th Street, Troy



As with TSP, CDTA does not own the roads and depends on the cooperation and willingness of the roadway owner.

²⁹ Capital Region Bus Lane Feasibility Study (2023).

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BUS LANES

Planning for bus lanes must consider road layout and capacity, congestion, and high-volume traffic, as well as opportunity costs, such as road space taken away from other purposes such as a regular travel lane, parking lane, or a bike lane. Bus lanes do not necessarily translate into exclusive lanes for bus movement only, as they can also be turn lanes (often referred to as Business Access and Transit, or BAT lanes) or shared bike lanes. Bus lanes can work in conjunction with TSP and queue jump bypass lanes for improved efficiency. CDTA and local jurisdictions will collaborate with local authorities to ensure proper enforcement of bus lane usage. Figure 84 shows an example of a bus lane at a mid-block stop.

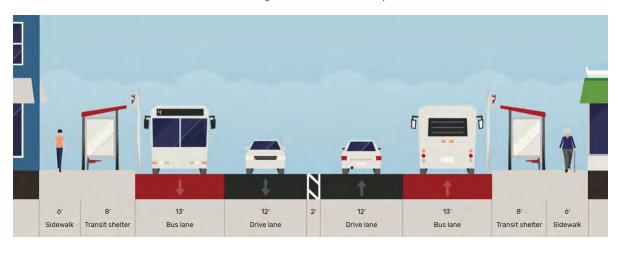


Figure 84: Bus Lane Concept

Bus lanes may be beneficial in similar areas as TSP and queue jump bypass lanes. Given their ability to increase bus speeds and improve reliability, bus lanes will be considered in areas with high transit volumes as well as high passenger and bus delay. Current corridors that fit this description and may benefit from bus lanes include Central Avenue and Washington/State/Broadway in Albany, State Street in Schenectady, and 3rd/4th Street in Troy. Troy. Future studies may identify additional locations based on high bus density or congestion, lower transit speeds, transfer opportunities to other routes, and potential for growth and redevelopment. The state of the

REAL-TIME INFORMATION

Real-time customer information provides estimated next bus arrival times. CDTA will distribute real-time information updates through a variety of channels, including digital signage, cdta.org, and the Navigator mobile app. CDTA also makes its GTFS and real-time GTFS publicly available for third party developers.

³⁰ Capital Region Bus Lane Feasibility Study (2023).

³¹ Capital Region Bus Lane Feasibility Study (2023).

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CDTA also owns digital Soofa signs at a number of major CDTA stations, which can be used to provide real-time information.

AUDIO ANNOUNCEMENTS

CDTA aims to ensure onboard audio announcements are clear, timely, and compliant with ADA regulations while minimizing unnecessary noise on the bus. On fixed-route transit systems, stop announcements will be made for every stop. Stop announcements will be made regardless of whether a passenger with a disability is onboard, and they will be completed with enough time to allow riders to pull the stop cord. Stop announcements will be short enough that they keep up with the pace at which stops are being passed. Stop announcement volume will also be set to a high enough volume that they can be heard by all customers but not so loud as to be irritating. Exterior route announcements are also made whenever the front door is opened, so visually impaired customers can know what bus has arrived. CDTA will seek feedback from riders who depend upon audio announcements to identify any possible problems. Stop names will strike a balance between brevity for timeliness of announcements while providing enough detail to orient the listener.

ON-BOARD DIGITAL SIGNAGE

CDTA provides digital signage inside every CDTA bus. This display provides a slideshow of important information to CDTA customers. Every other side shows real time information. This slide shows upcoming stops, and an ETA for those stops. CDTA will also develop these slides to show which stops are ADA accessible and what transfers are available at each stop.

VIDEO SURVEILLANCE

Video and audio surveillance is universal on the interior and exterior of CDTA fixed-route buses, which will continue to be CDTA's standard. Cameras cover the driver, both doors, all seats, as well as many angles outside the bus. Video cameras have also been implemented at certain CDTA stop locations to enhance safety and security (e.g., BusPlus stops in Schenectady). Video surveillance will be provided at bus stops as needed, but will generally be limited to major transfer centers, mobility hubs, or BusPlus stops. CDTA will prioritize video surveillance in locations that are served during late night or early morning hours.³²

Cameras and video infrastructure located at bus stops enhance passenger safety, provide timely and more accurate incident response, facilitate law enforcement investigations, provide asset protection, deter fraudulent claims, and provide real-time operational insight. The operational intentions drive the design approach and requirements of the surveillance system, as well as the CDTA and external users who require access to historical or real-time video feeds.

³² MDOT MTA Bus Stop Design Guide (2019).

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The installation and use of camera and video infrastructure is subject to site- and asset-specific studies and assessments. Camera installations also consider partnerships with local authorities and neighboring communities, for emergency response, privacy concerns, and prevailing video surveillance laws.



5.3. Land Use and Development Standards

This section describes the zoning code and land use standards for properties which receive transit service. Development and transit both make one another better, so both CDTA and developers should aim to collocate transit and development as much as possible and design both to work together.

5.3.1. Residential Density

Residential density of at least 12 people per acre is necessary to support 30-minute transit service.³³ When residential density reaches about 30 people per acre, transit service every 10 to 15 minutes is possible.¹¹ As detailed in the Zoning Code and Land Use Regulations, Appendix F, CDTA can work with municipalities to expand transit-supportive land use practices. This may include creating incentives for increasing building height maximums, which can allow for denser residential zones.

5.3.2. Employment Density

Employment density of 10 to 20 employees per acre is necessary for 30–60-minute service.³³ Employment density of at least 20 employees per acre is necessary to support 10–15-minute local transit service.¹¹ Remote work may be prevalent post-COVID in areas that traditionally had high employment densities in the past. CDTA will evaluate how this impacts demand before determining level of service.

5.3.3. Land Use Patterns

Zoning and land development has a huge effect on the viability of transit and peoples transportation choices generally. Although typical 20th century zoning spreads properties out and separates uses, with an ostensible goal of providing people with more space for access to nature, fresh air, and quiet, that sprawl also creates pollution, noise, and danger when everyone gets around by car. CDTA encourages municipalities to create communities which are less burdened by traffic, pollution, noise, and danger by using zoning to promote land use which supports biking, walking, and transit.

Mixed use zoning and density put more destinations in walking distance of any one point, whether that point is a bus stop, where someone lives, where they work, or anywhere else. Such environments are needed for walkability, biking, and transit. Low-density, single-use zoning (especially residential only zoning)spreads people too thinly to serve effectively with transit, and separates people's homes from the places they want to walk to, creating car dependency. Serving a smaller area means CDTA can provide high quality, frequent service instead of low-frequency coverage service over a larger geography.

³³ TCRP Report 16: Transit and Urban Form, https://onlinepubs.trb.org/onlinepubs/tcrp/tcrp rpt 16-1.pdf

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Individual lots can also be planned to support transit. Buildings should be placed in a lot to minimize walking distance from the bus stop to the building entrance. Parking lots should be placed in the side or rear of the building rather than in front. This means shorter walking distances and less conflicts between cars and pedestrians. Zero setback can be a negative for some properties, as when a property faces onto a roadway with lots of high-speed traffic. A small setback of a hundred feet or less with landscaping can significantly mitigate those impacts without creating too much hassle for pedestrians.

Municipalities looking to support transit must also consider the effects of parking. Excessive amounts of parking reduce density, increase walking distances, and create safety hazards and unpleasant environments for walking. Since transit riders do not use parking, properties near transit need less parking, allowing more land to be devoted to profitable uses. Some strategies CDTA recommends to manage the impact of parking include eliminating parking minimums, reducing curb cuts to reduce pedestrian/vehicle conflicts through shared parking agreements and other access management strategies. Properties should also include bicycle parking as transit customers often bike.

Developers should also consider unbundling parking from apartment rents. In such an arrangement, a tenant rents housing through a lease and may choose to also rent parking. Doing so allows tenants who do not own a car to save money by opting out of paying for parking. It also frees up more parking for families who want it and means the developer can build less parking overall. This type of lease is common in Boston, Seattle, San Francisco, Bellevue, Washington, Arlington, Virginia, and many more places, but has not yet been implemented in the Capital Region to our knowledge.

Municipalities can also consider transit-oriented development overlay zones near major transit stops to encourage more development with lower or no parking requirements near transit and greater density allowances.

5.3.4. Public Street Designs

SAFETY FOR VULNERABLE ROAD USERS

Public street design should focus on eliminating, minimizing, and mitigating safety hazards for vulnerable road users, especially around busy CDTA transit stops, as well as making travel convenient for transit, bicyclists, and pedestrians.

Eliminating a safety hazard means making it physically impossible or at least unlikely for a crash to occur. Sidewalks are an example of a design feature that minimizes safety hazards by providing a space for pedestrians and a curb that separates them from vehicular traffic.

Minimizing hazards means reducing the number of risks. An example of this is access management, which reduces the number of curb cuts and turning motions on a busy street, reducing conflict points.

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Lastly, mitigating means making the consequences of a hazard less severe. An example of this is a speed limit reduction or lane narrowing, both of which slow cars down, so when a crash does occur, it isn't as severe. Municipalities should refer to the Capital Region Transportation Council's Vision Zero Action Plan and Complete Street Design Guide for more complete guidance.

SUPPORT FOR TRANSIT

Complete Street designs should consider efficient movement of transit vehicles through signal optimization or transit signal priority and reducing driveways to minimize turning conflicts. In areas with higher speeds (those over 40 MPH) bus pull-outs and a balanced approach to the turning radii at intersections will be considered. The turning radius should be wide enough to allow buses to navigate corners smoothly and safely to avoid blocking traffic or endangering pedestrians on the sidewalk.

SUPPORT FOR BIKING AND WALKING

Transit, biking, and walking all reinforce one another. With the growth of e-bikes, cycling is poised to grow as a part of the transportation landscape. Good bicycle infrastructure—mainly bicycle parking, bike lanes, multi-use paths and trails—create more options for CDPHP Cycle! riders and makes better first/last mile connections to transit by bike. All transit trips include the first/last mile connection, which refers to the travel between a location and the bus stop at the start and end of a trip. If that connection is too far, dangerous, inaccessible, or unpleasant, it can hinder the viability of transit, making biking an important support for transit, particularly in suburban or rural areas, where the walk to a bus stop might be longer than in a city.

Pedestrian infrastructure should get customers from the bus stop to the front door of their destination conveniently and with minimal safety hazards. This means looking both at pedestrian infrastructure on the street and on individual lots.

Lastly, municipalities should build streets to create less circuitous walking and biking routes and less dead-ends. This can be done without opening neighborhoods to car through traffic, which is a common goal for a typical suburban cul de sac. Examples of pedestrian and bicycle friendly connections can be found on Justin Street, Bonnie Court, and History Hills Court in Colonie, and on Myrtle Avenue in Albany between Manning Boulevard and Marion Avenue. More pedestrian permeability means more access to transit stops and more walkability. Not every street needs to be designed to facilitate a 40-foot bus. But those that aren't should be in walking distance of streets that are.

5.3.5. Large Development Private Street Design

If a private development is to receive transit service, the following will be considered: a balanced approach to driveway and intersection turn radii, appropriate lane widths, low

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roadway grades (or slopes), pavement to handle vehicle loads of 20,000 pounds per axle, and proper bus passenger loading pads. Bus boarding zones and sidewalks throughout the property will meet ADA requirements to ensure the service is accessible to all riders.

5.4. Service Monitoring, Data Collection, and Reporting Standards

A program of ongoing data collection, service monitoring, and reporting is critical to the effectiveness of CDTA's service standards. Standards are designed to ensure delivery of service appropriate to CDTA's mission statement and customer-focused priorities, and to continually assess the performance of the suite of services against benchmarks with clear thresholds for action.

CDTA's emphasis for monitoring is on the performance side rather than policy. This is to ensure that individual services perform at or above expectations within their categories, though adjustments are to be considered within the parameters of policy standards. For example, if a bus route exhibits below-average ridership productivity, reducing frequency is a possible corrective action, so long as the revised frequencies adhere to minimum standards for that type of service.

Performance thresholds will highlight services that do not meet standards (e.g., lower than target ridership productivity), as well as those that exceed standards. Low-performing services will be flagged for a range of potential corrective actions. High-performing services will be flagged for potential service increases, additional vehicles, and other measures to capitalize on their effectiveness.

Application of CDTA's service standards will be incorporated into quarterly service planning cycles associated with schedule changes, as well as regular reporting mechanisms such as route profiles. This way, any review of performance and service characteristics is linked to the established standards. Any new routes, however, will have a grace period in the first two years. **Table 21** outlines the trajectory of expected ridership for a new route.

Table 21: Expected Ridership of New Routes

Time from Implementation	Expected Ridership (Percent of Classification Standard)
6 months	70 percent
12 months	80 percent
18 months	90 percent
24 months	100 percent

A monitoring program will fall under the purview of a specific CDTA staff member who is responsible for:

- Ensuring collection and accuracy of data.
- Input of data into an ongoing tracking mechanism.
- Application of standards against the data to assess performance and compliance.
- Internal staff collaboration and coordination to identify and advance actions when specific. services are flagged against standards (low- and high-performers).
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Finally, linking monitoring to standards, corrective actions, and reporting allows CDTA to demonstrate its commitment to continuous improvement of service quality to its internal and external stakeholders.

A recommended framework for monitoring incorporates the relevant standards and identifies data sources, frequency of review, responsible parties, and reporting. Internal reporting should highlight performance for a given timeframe (e.g., monthly in the case of typical route performance metrics) and note degree of change relative to prior report and prior year.

5.4.1. Service Standards

Table 22: Service Standards Monitoring

Standard or Guideline	Data to Review	Frequency of Review	Responsibility	Reporting
Fixed Routes				
Coverage	US Census	Annual	Strategic Planning	Follow TDP cycles
Headways and Service Span	Route timetables, classification	Quarterly (regular service change cycle)	IT, Service Planning	Quarterly service changes
Passenger loads	APC	Monthly for all routes; more frequently as needed when known crowding occurs	IT, Service Planning	Monthly route performance report
Productivity	Farebox, operating trip reports	Quarterly (regular service change cycle)	IT, Service Planning	Quarterly service changes
On-time performance	AVL (scheduled vs. actual OTP)	Monthly	IT, Service Planning	Monthly route performance report
Additional Services				
On-Demand (FLEX)	Farebox, operating trip reports (trips completed), operating cost	Monthly	IT, Service Planning	Monthly service performance report
Car share (DRIVE)	Vendor reporting (usage, frequency, duration, operating cost)	Monthly	IT, Service Planning	Monthly service performance report
Bike share (CDHP Cycle!)	Vendor reporting (usage, frequency, duration, operating cost)	Monthly	IT, Service Planning	Monthly service performance report

Additionally, CDTA plans for future copies of the Annual Route Performance Report to include route profiles, which cover some of these metrics on a route-by-route basis. The route profiles which were used to support the development of this document can be found in the appendix.



5.4.2. Infrastructure Standards

Table 23: Infrastructure Standards Monitoring

Standard or Guideline	Data to Review	Frequency of Review	Responsibility	Reporting
Stop spacing	Ridership data, geographic constraints	3-5 years	Service Planning, Strategic Planning, Facilities	TDP Update
Stop amenities	Inventory of shelters, benches, trash receptacles, lighting, customer feedback	3-5 years	Facilities	Amenities Audit
Stop infrastructure	ADA compliance, pavement condition, shelter structural integrity	3-5 years	Facilities	Stop Infrastructure Audit
Stop technology	Real-time information systems, electronic signage functionality	3-5 years	Facilities, IT	Technology Audit



5.4.3. Performance-Based Management

CDTA uses customer satisfaction surveys to set organizational priorities and to track improvement. Customer satisfaction data is compiled into reporting, like the "Key Driver Analysis" shown in **Figure** 85. Figure 85 shows that CDTA performs well in areas of lower importance to customers but faces challenges in areas that customers consider important. Targeted improvements are needed in the areas that matter most to riders. Projects and objectives will be evaluated and prioritized based on their perceived potential to improve issues customers care about.

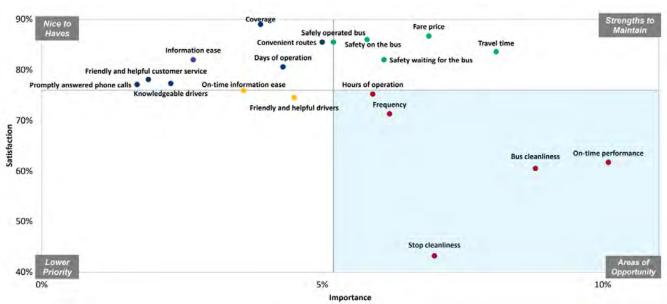
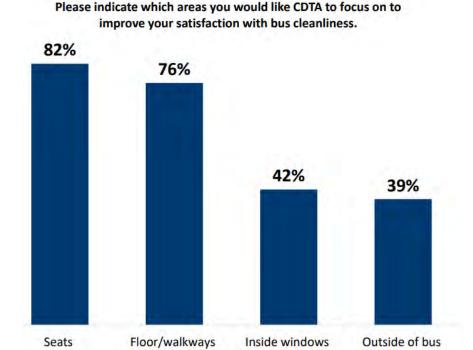


Figure 85: Key Driver Analysis

Further dives on each metric help plan improvements. **Figure 86** shows that a bus cleanliness campaign should focus primarily on seats and floors.



Figure 86: Customer Concerns on Bus Cleanliness

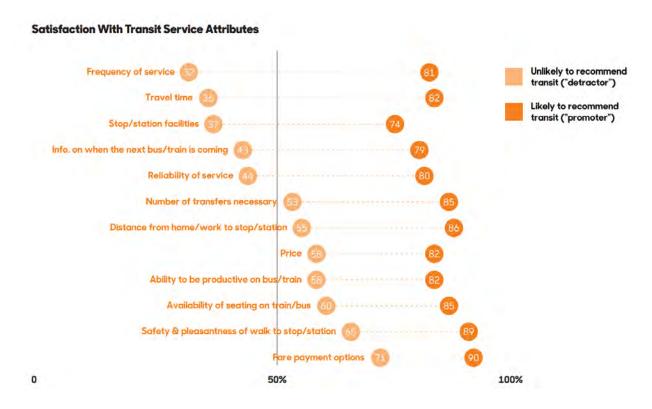


CDTA uses these surveys to set objectives at CDTA, both short-term and long-term. Going forward, CDTA will also share these findings and objectives with all CDTA employees, and, when appropriate, the public.

CDTA will also continue to test out ways of tracking customer satisfaction. For example, other studies have tracked the connection between Net Promoter Score and satisfaction with specific aspects of transit service. Tracking both points of information side by side reveals the actual importance of each factor rather than relying solely on customer estimates. See **Figure** 87 on the next page.



Figure 87: Satisfaction with Transit Service Attributes³⁴



Having robust customer satisfaction data also speeds up other projects by reducing the need for project specific surveys.

This information can be collected through manually collected surveys, or it can be collected passively, through surveys published online or on the Navigator app. Other third-party transit apps also collect rider survey data and offer it to transit agencies for a fee.

CDTA should be careful to ensure such surveys are representative of CDTA ridership. Manually collected surveys avoid self-selection bias and can be used to establish demographics off of which passively collected surveys can be statistically corrected. It is important than CDTA also collects enough customer feedback to ensure a statistically representative sample size.

³⁴ Transit Center. (2019, August 13). Who's On Board. TransitCenter.org. https://transitcenter.org/publication/whos-on-board-2016/

^{● ● ●} Capital District Transportation Authority | 110 Watervliet Avenue | Albany, NY 12206 (518) 437-8300 | CDTA.ORG



6. Next Steps & Implementation

The Recommendations section is written only with enough detail to provide a vision of what CDTA will look like once this TDP is fully implemented, without specifics of who, how, or when. The next step is for CDTA to develop the implementation plan. As described in the "Support Staff" recommendation, impacts to staff and resources needed will be addressed upfront. CDTA will revisit the TDP in 2030 to report on the progress of each of the recommendations found in the 2025 TDP and set new direction for CDTA.



7. Appendices

The supporting documents for the TDP can be found at CDTA.org/TDP. The only exception being the Route Profiles, which formed a basis for much of the service planning concepts presented during the second phase of public engagement, and can be found starting on the next page. The route profiles were produced in 2023, so some routes that exist today are missing. CDTA plans to start including updated route profiles as part of its annual Route Performance Report.

Central Avenue

Service Type: Trunk

Description: Central Avenue, between Colonie Center and Downtown Albany (7 days a

Key Destinations: New York state comptroller's office, New York State Capitol Building, Albany County Social Services Department, Albany Public Library Main Branch, Townsend Park homes, Westview Senior Center, Hannaford Plaza, Colonie Center, Westgate Plaza, Albany Institute of History & Art, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena)

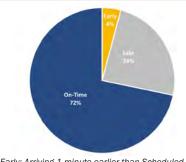
Operating Characteristics





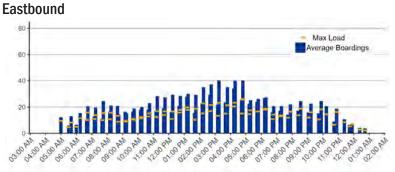


On-Time Performance

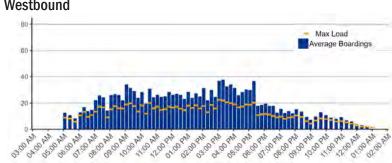


*Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time



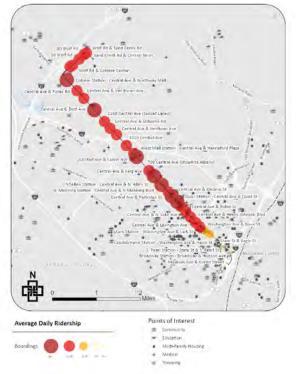


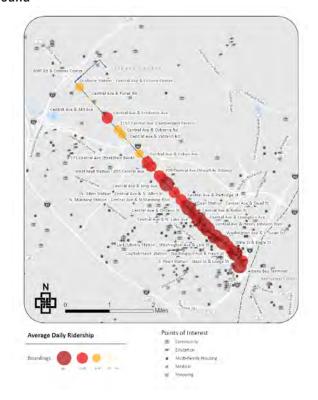
Westbound





Eastbound







Central Avenue

Service Type: Trunk

Description: Central Avenue, between Colonie Center and Downtown Albany (7 days a

Key Destinations: New York state comptroller's office, New York State Capitol Building, Albany County Social Services Department, Albany Public Library Main Branch, Townsend Park homes, Westview Senior Center, Hannaford Plaza, Colonie Center, Westgate Plaza, Albany Institute of History & Art, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena)

Daily Statistics









		Rank
Weekday	2,936	2/9
Saturday	2,559	2/9
Sunday	2,154	2/9

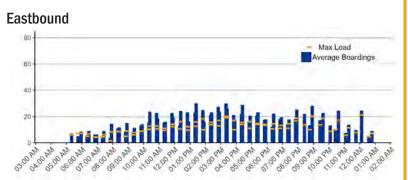
	Rank
27.4	2/9
26.6	2/9
23.3	2/9

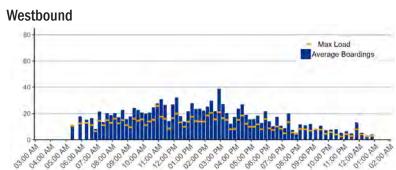
	Rank
3.0	1/9
2.8	2/9
2.5	2/9

	Rank
19.8	2/9
17.7	2/9
16.1	2/9



Saturday Ridership by Trip



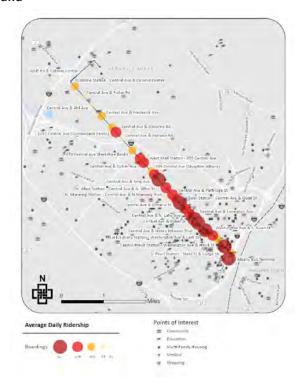




Saturday Ridership by Stop

Eastbound







Central Avenue

Service Type: Trunk

Description: Central Avenue, between Colonie Center and Downtown Albany (7 days a

Key Destinations: New York state comptroller's office, New York State Capitol Building, Albany County Social Services Department, Albany Public Library Main Branch, Townsend Park homes, Westview Senior Center, Hannaford Plaza, Colonie Center, Westgate Plaza, Albany Institute of History & Art, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena)

Route Analysis

Strengths

- Very direct and streamlined alignment
- Easy-to-remember clockface
- frequency for much of the service day Complements Red Line by providing
- local access in Albany
- Frequent service during peak and offpeak periods
- Seven-day-a-week service
- Extensive span of service on weekdays and weekends
- Second-highest ridership among Trunk routes Strong productivity with highest
- ridership per mile among Trunk routes on weekdays

Weaknesses

- Nearly 25 percent of sampled timepoints served late
- No direct access to Empire Plaza, a major employment hub
- Reduced frequency to Colonie Center, despite strong ridership
- Low ridership in the evenings
- Access for southern end of route is not very convenient
- First westbound run on Sundays has high average boardings, which may indicate demand for earlier service

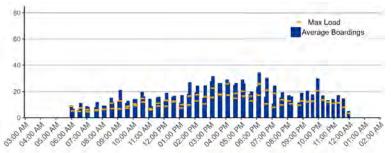
Opportunities

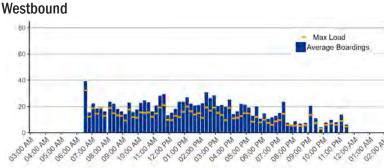
- Consider closer access to Empire Plaza via Eagle Street, Madison Avenue, Swan Street, and State Street
- Extend all trips to Colonie Center
- Recalibrate running and layover times to improve on-time performance
- Expand Sunday span of service by at least one trip in the morning



Sunday Ridership by Trip

Eastbound

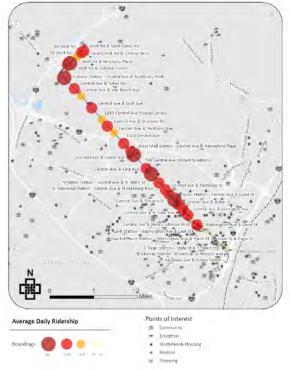


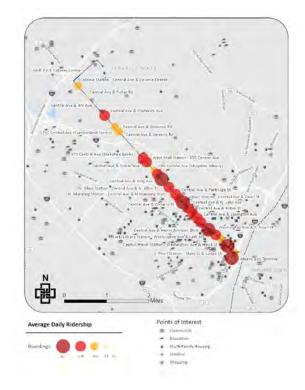




Sunday Ridership by Stop

Eastbound







Western Ave

Service Type: Trunk

Description: Western Avenue, between Crossgates Mall, Stuyvesant Plaza and Downtown Albany (7 days a week)

Key Destinations: Department of Environmental Conservation, Union Station, Albany Downtown, Albany City Hall, New York State Capitol, Albany Institute of History & Art, Times Union Center, Empire State Plaza, Albany Public Library Pine Hills Branch, University at Albany, College of Saint Rose, CVS Pharmacy Homestead St/US20, Westmere Elementary School, Stuyvesant Plaza, Crossgates Mall

Operating Characteristics



Annual Statistics

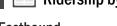


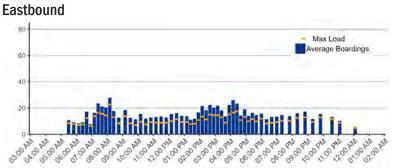
On-Time Performance



Late: Arriving over 5 minutes later than Scheduled Time



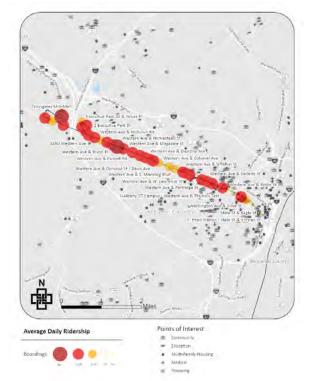


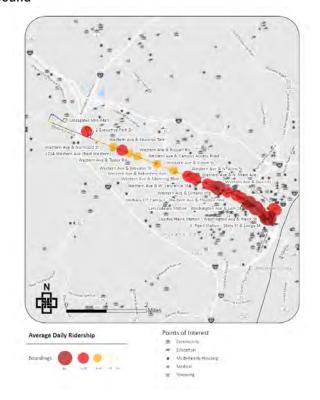






Eastbound







Western Ave

Service Type: Trunk

Description: Western Avenue, between Crossgates Mall, Stuyvesant Plaza and Downtown Albany (7 days a week)

Key Destinations: Department of Environmental Conservation, Union Station, Albany Downtown, Albany City Hall, New York State Capitol, Albany Institute of History & Art, Times Union Center, Empire State Plaza, Albany Public Library Pine Hills Branch, University at Albany, College of Saint Rose, CVS Pharmacy Homestead St/US20, Westmere Elementary School, Stuyvesant Plaza, Crossgates Mall

4/9

1.8

Daily Statistics



3/9

19.3

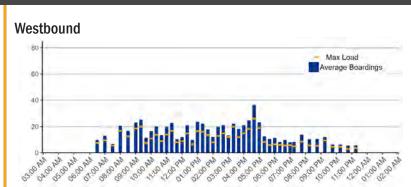
Saturday
Ridership by Trip

Sunday

Eastbound Max Load Average Boardings Average Boardings And Load Average Boardings

846

3/9

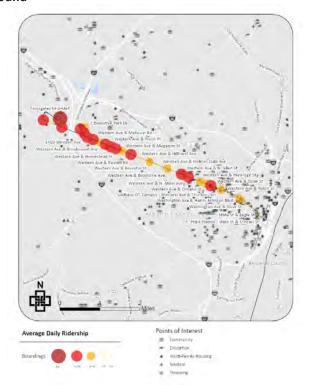


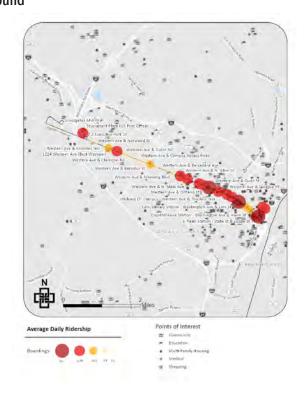
14.6

3/9

Saturday Ridership by Stop

Eastbound







Western Ave

Service Type: Trunk Description: Western Avenue, between Crossgates Mall, Stuyvesant Plaza and Downtown Albany (7 days a week)

Key Destinations: Department of Environmental Conservation, Union Station, Albany Downtown, Albany City Hall, New York State Capitol, Albany Institute of History & Art, Times Union Center, Empire State Plaza, Albany Public Library Pine Hills Branch, University at Albany, College of Saint Rose, CVS Pharmacy Homestead St/US20, Westmere Elementary School, Stuyvesant Plaza, Crossgates Mall

Route Analysis

Strengths

- Direct and streamlined alignment, with the exception of deviation into Stuyvesant Plaza
- Easy-to-remember clockface frequency for much of the service
- Will complement Purple Line by
- providing local access in Albany Relatively frequent service during peak and off-peak periods
- Seven-day-a-week service

Weaknesses

- Highest Sunday ridership occurs on first westbound trip, suggesting pent-up demand for earlier Sunday service
- Ridership spike on last eastbound trip on Sundays, suggesting likely support for later Sunday service
- Nearly 20 percent of sampled timepoints served late
- No direct access to Empire Plaza, a major employment hub
- May require transfer to reach Walmart (a major ridership generator) at Crossgate Commons (depending on interlines)

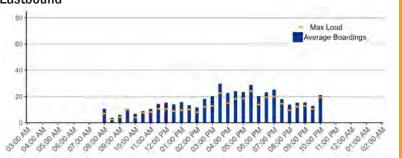
Opportunities

- Consider closer access to Empire Plaza via Eagle Street, Madison Avenue, Swan Street, and State Street
- Interline with Route 12 or Route 155 to provide one-seat ride to/from Walmart
- Expand Sunday span of service by at least one trip in the morning and one trip in the evening in response to high demand
- Recalibrate running and layover times to improve on-time performance

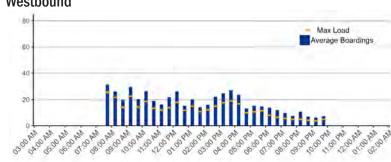


Sunday Ridership by Trip





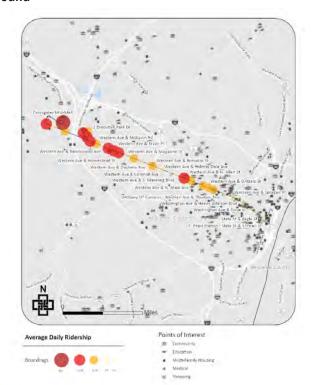
Westbound

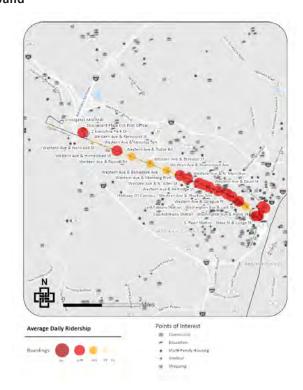




Sunday Ridership by Stop

Eastbound





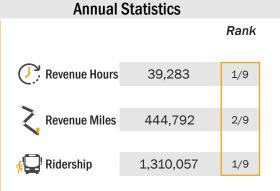


Washington Ave
Service Type: Trunk

Description: Washington Avenue, between Crossgate Mall, Crossgates Commons, UAlbany and Downtown Albany (7 days a week)

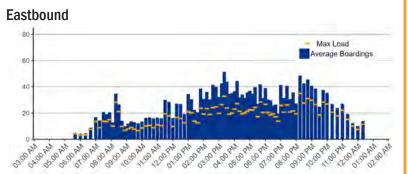
Key Destinations: Crossgates Commons, SUNY Polytechnic Institute, University at Albany SUNY - Uptown Campus, Western Avenue & Manning Boulevard, Albany High School, Washington Park, University at Albany - Downtown Campus, Washington Avenue Armory Sports and Convention Arena, Albany Public Library, Downtown Albany

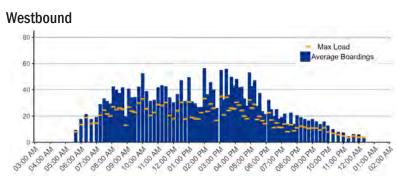
Operating Characteristics Span Frequency Peak Off-Peak Weekday 5:40 AM to 12:53 AM 10 min 20 min Saturday 5:42 AM to 12:46 AM 15 min 20 min Sunday 8:26 AM to 11:10 PM 15 min 15 min





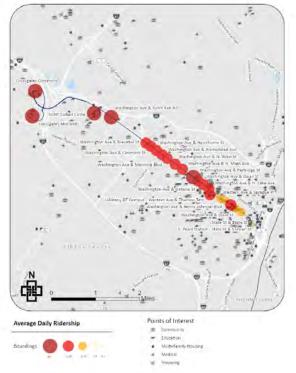


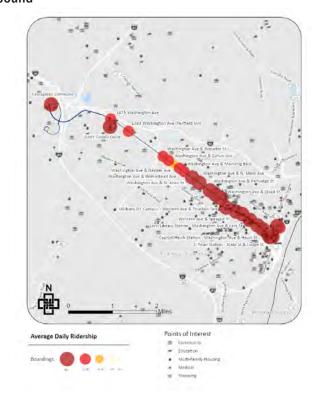




Weekday ** Ridership by Stop

Eastbound







Washington Ave Service Type: Trunk Description: Washington Avenue, between Crossgate Mall, Crossgates Commons, UAlbany and Downtown Albany (7 days a week)

Key Destinations: Crossgates Commons, SUNY Polytechnic Institute, University at Albany SUNY - Uptown Campus, Western Avenue & Manning Boulevard, Albany High School, Washington Park, University at Albany - Downtown Campus, Washington Avenue Armory Sports and Convention Arena, Albany Public Library, Downtown Albany

Daily Statistics









		Rank
Weekday	3,841	1/9
Saturday	3,618	1/9
Sunday	2,584	1/9

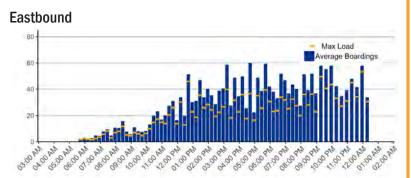
	Rank
33.4	1/9
35.3	1/9
31.1	1/9

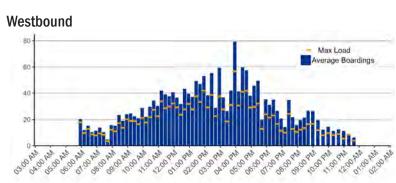
	Rank
2.8	2/9
3.0	1/9
2.7	1/9

	Rank
25.3	1/9
25.7	1/9
23.1	1/9



Saturday Ridership by Trip

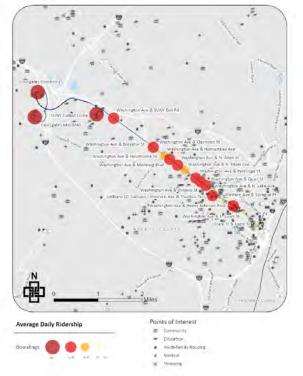


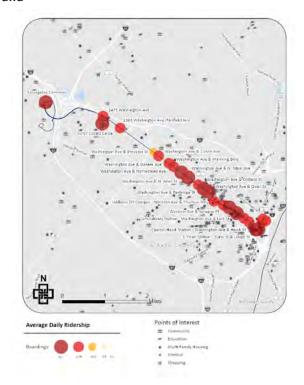




Saturday Ridership by Stop

Eastbound







Washington Ave

Service Type: Trunk

Description: Washington Avenue, between Crossgate Mall, Crossgates Commons, UAlbany and Downtown Albany (7 days a week)

Key Destinations: Crossgates Commons, SUNY Polytechnic Institute, University at Albany SUNY - Uptown Campus, Western Avenue & Manning Boulevard, Albany High School, Washington Park, University at Albany - Downtown Campus, Washington Avenue Armory Sports and Convention Arena, Albany Public Library, Downtown Albany

Route Analysis

Strengths

- Direct and streamlined alignment serving several key hubs including downtown Albany, both UAlbany campuses, Walmart, and Crossgates Mall
- Will complement Purple Line by providing local access in Albany
- Highest ridership among Trunk routes
- Seven-day-a-week service
- Extensive service span on weekdays and
- Strong productivity with highest ridership per hour and ridership per trip among Trunk routes
- Frequent service during peak and off-peak periods

Weaknesses

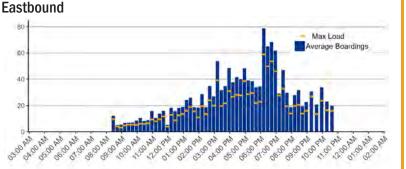
- Ridership spikes on first westbound trip on Saturdays and Sundays, and first eastbound trip on Sundays, suggesting pent-up demand for earlier and later weekend service
- Over 25 percent of sampled timepoints served late
- Lake Avenue is narrow, resulting in safety concerns when two buses pass each other
- No direct access to Empire Plaza, a major employment hub
- Route ends just short of relatively large concentration of housing and employment on Washington Avenue Extension, forcing transfer to infrequent Route 155 or FLEX

Opportunities

- Shift alignment to Washington Street at the intersection of Western and Washington to
- Consider interlining Route 10 and Route 12 to provide one-seat service to Walmart and Crossgates Mall for riders of both routes
- To complement the Purple Line, consider operating Route 12 between Crossgates Mall and UAlbany Downtown BRT Station only. Both locations could be interline points with
- Consider expanding weekend span of service in response to demonstrated demand
- Improve integration and cross-marketing between fixed-route and FLEX service to better support first/last mile connections

Sunday

Ridership by Trip

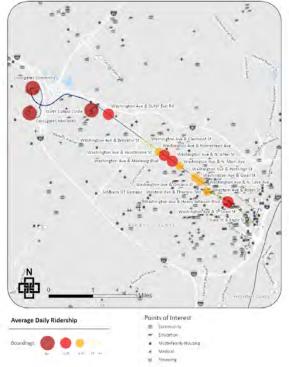


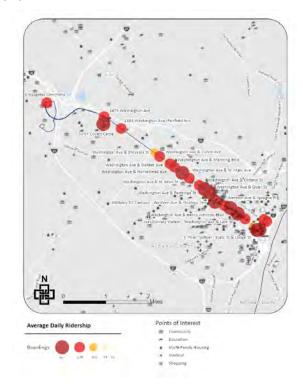
Westbound Max Load Average Boardings 60 OT OO AM 08:00 AM Og do An 10:00 AM 11:00 AM 12.00 PM OT OO PM 03:00 PM 04.00 PM 05:00 PM 02:00 PM 08:00 PM



Sunday Ridership by Stop

Eastbound





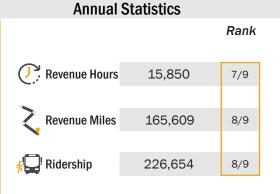


New Scotland Ave
Service Type: Trunk

Description: New Scotland Avenue, between Downtown Albany via St. Peter's Hospital and Albany Medical Center (7 days a week)

Key Destinations: Downtown Albany (New York State Capitol, Empire State Plaza, Albany City Hall, Washington Park), The Sage Colleges - Albany Campus, Albany Medical Center, St. Peter's Hospital, Slingerlands Price Chopper Centre, Albany College of Pharmacy and Health Sciences, Albany Law School, Maria College

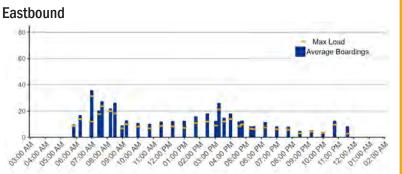
Operating Characteristics Span Frequency Peak Off-Peak Weekday 5:40 AM to 12:10 AM 45 min 45 min Saturday 5:40 AM to 12:12 AM 45 min 45 min Sunday 6:15 AM to 10:55 PM 45 min 45 min

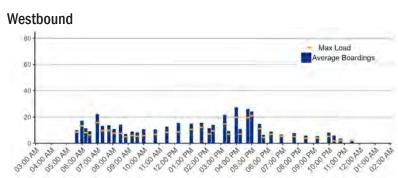




*Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time

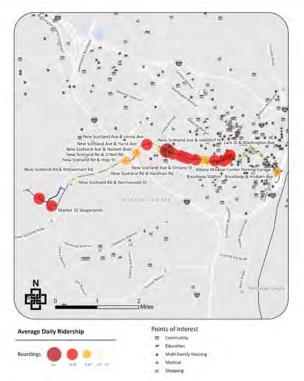


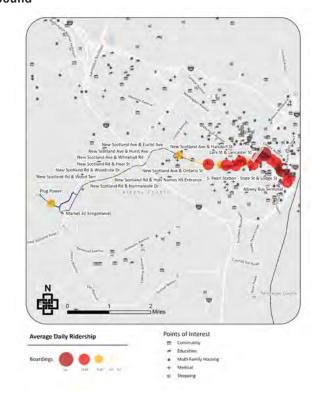




Weekday **
Ridership by Stop

Eastbound







New Scotland Ave
Service Type: Trunk

Description: New Scotland Avenue, between Downtown Albany via St. Peter's Hospital and Albany Medical Center (7 days a week)

Key Destinations: Downtown Albany (New York State Capitol, Empire State Plaza, Albany City Hall, Washington Park), The Sage Colleges - Albany Campus, Albany Medical Center, St. Peter's Hospital, Slingerlands Price Chopper Centre, Albany College of Pharmacy and Health Sciences, Albany Law School, Maria College

Daily Statistics



Passengers per Revenue Hour





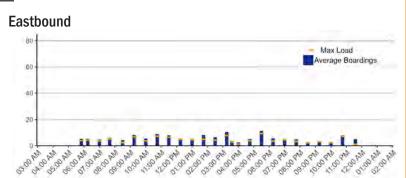
		Rank
Weekday	780	8/9
Saturday	342	9/9
Sunday	223	9/9

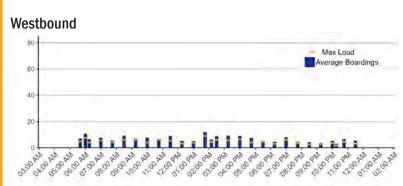
	Rank
15.8	7/9
8.9	9/9
9.0	8/9

	Rank
1.4	6/9
0.8	9/9
0.8	7/9

	Rank
11.4	7/9
6.6	8/9
6.7	8/9

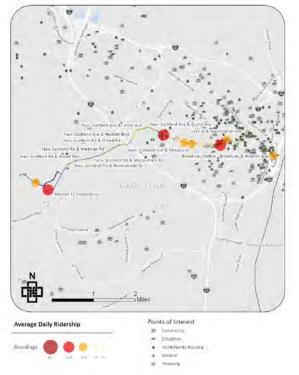
Saturday
Ridership by Trip

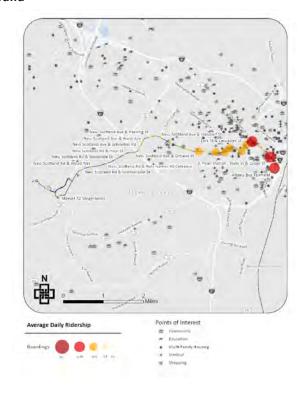




Saturday
Ridership by Stop

Eastbound







New Scotland Ave Service Type: Trunk

Description: New Scotland Avenue, between Downtown Albany via St. Peter's Hospital and Albany Medical Center (7 days a week)

Key Destinations: Downtown Albany (New York State Capitol, Empire State Plaza, Albany City Hall, Washington Park), The Sage Colleges - Albany Campus, Albany Medical Center, St. Peter's Hospital, Slingerlands Price Chopper Centre, Albany College of Pharmacy and Health Sciences, Albany Law School, Maria College

Route Analysis

Strengths

- One of two routes linking Albany and Slingerlands
- Facilitates both traditional and reverse commutes to major employers and activity centers such as PlugPower, St. Peter's Hospital, and Albany Medical Center
- Seven-day-a-week service
- Extensive span of service on weekdays and Saturdays

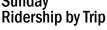
Weaknesses

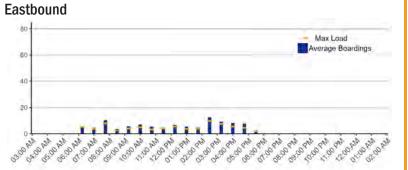
- Lowest weekend ridership among trunk
- Relatively low productivity on all service days with fewer than fewer than 16 passengers per hour
- 20 percent of sampled timepoints served late
- Relatively infrequent and non-clockface service during peak and off-peak periods
- Highest Sunday ridership occurs on first westbound trip, suggesting pent up demand for earlier service
- Fairly long stretch of low-ridership stops along New Scottland Road, west of I-87
- No direct access to Empire Plaza, a major employment hub

Opportunities

- Truncate all trips at St. Peter's Hospital to avoid long stretch of unproductive stops west of I-87
- Explore interline opportunities with Route 18 to create a cycle time that can support clockface service and higher peak-period frequency on both routes
- Consider closer access to Empire Plaza via Eagle Street, Madison Avenue, Swan Street, and State Street
- Expand Sunday span of service by at least one trip in the morning in response to demonstrated demand

Sunday



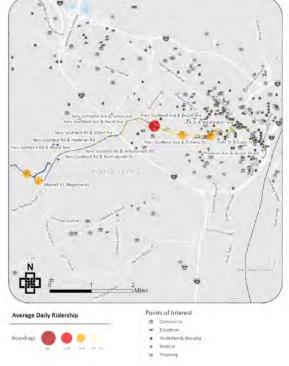


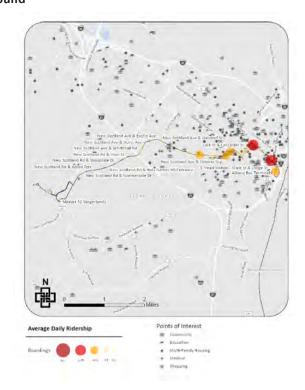
Westbound Max Load Average Boardings 60



Sunday Ridership by Stop

Eastbound







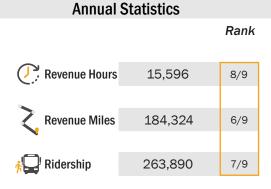
Delaware Ave

Service Type: Trunk

Description: Delaware Avenue, between Albany via Delmar (7 days a week)

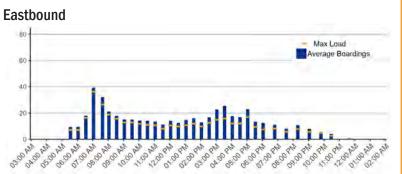
Key Destinations: Empire State Plaza, New York State Capitol, Albany City Hall, Albany Institute of History & Art, Washington Park, Delaware Avenue Plaza, Bethlehem Central High School, Slingerlands Price Chopper Centre

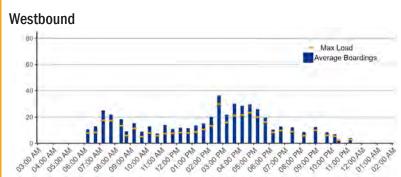
Operating Characteristics Span Frequency Off-Peak Peak Weekday 5:33 AM to 12:12 AM 30 min 45 min 30 Saturday 6:10 AM to 12:11 AM min 45 min Sunday 7:20 AM to 10:54 PM 45 min





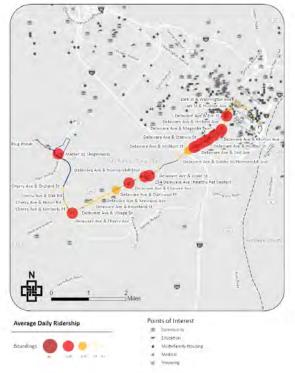


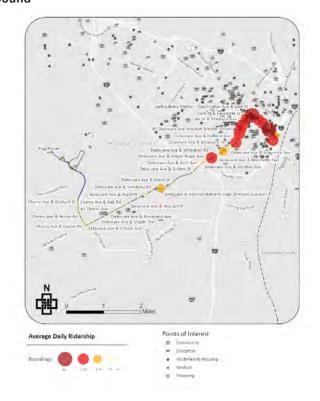




Weekday ** Ridership by Stop

Eastbound







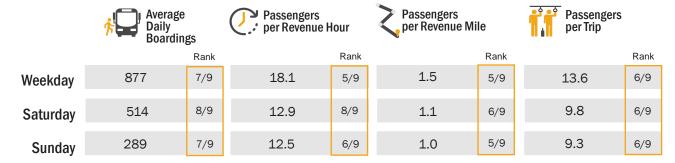
Delaware Ave

Service Type: Trunk

Description: Delaware Avenue, between Albany via Delmar (7 days a week)

Key Destinations: Empire State Plaza, New York State Capitol, Albany City Hall, Albany Institute of History & Art, Washington Park, Delaware Avenue Plaza, Bethlehem Central High School, Slingerlands Price Chopper Centre

Daily Statistics



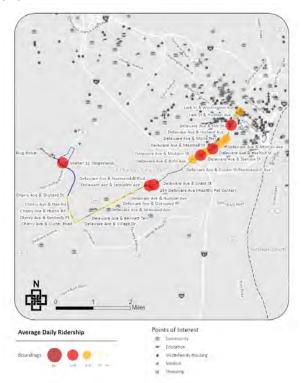
Saturday
Ridership by Trip

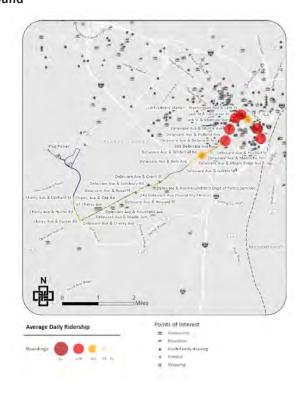
Eastbound Max Load Average Boardings Average Boardings

Westbound Max Load Average Boardings Average Boardings

Saturday Ridership by Stop

Eastbound







Delaware Ave

Service Type: Trunk

Description: Delaware Avenue, between Albany via Delmar (7 days a week)

Key Destinations: Empire State Plaza, New York State Capitol, Albany City Hall, Albany Institute of History & Art, Washington Park, Delaware Avenue Plaza, Bethlehem Central High School, Slingerlands Price Chopper Centre

Route Analysis

Strengths

- One of two routes linking Albany and Slingerlands
- Facilitates both traditional and reverse commutes, as well as local connections to several grocery stores
- Seven-day-a-week service
- Extensive span of service on weekdays and Saturdays
- Strong ridership during peak periods

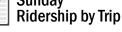
Weaknesses

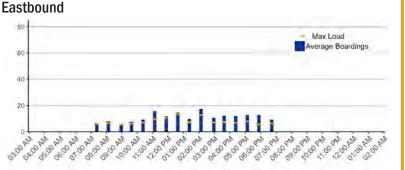
- Near-capacity passenger loads on a few peak-period trips, suggesting demand for greater peak-period frequency
- Low ridership along Cherry Avenue between Delaware Avenue and Market
- No direct access to Bethlehem Central High School, which is likely driving the relatively high ridership at Delaware and Cherry Avenue, ½ mile away
- 20 percent of sampled timepoints served late
- Low ridership after 9:00 pm

Opportunities

- Restructure route to serve Bethlehem Central High School, Fisher Boulevard, and New Scottland Road to increase ridership compared to Cherry Avenue
- Explore interline opportunities with Route 18 to create a cycle time that can support clockface service and higher peak-period frequency on both routes Complement wester end of route with FLEX zone to increase coverage to
- additional neighborhoods and corridors including Kenwood Avenue and Fisher Boulevard
- Increase weekday peak-period frequency to every 20 minutes, while also ending service at 9:00 pm

Sunday



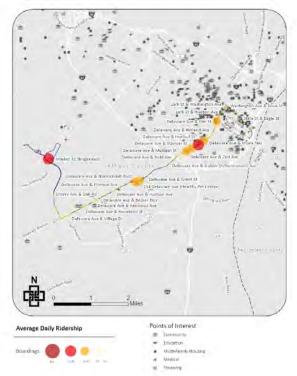


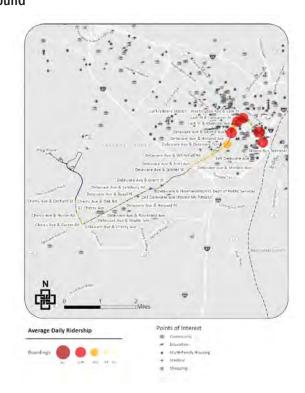
Westbound Max Load Average Boardings 60 08:00 PM 09.00 PM 10:00 Pm. 00 Pm



Sunday Ridership by Stop

Eastbound





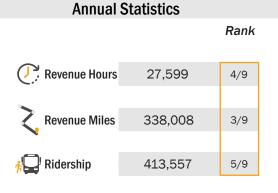


Albany-Troy-Watervliet **Service Type:** Trunk

Description: Albany/Troy via Watervliet, between Empire State Plaza, Albany and Fulton & 4th, Troy (7 days a week)

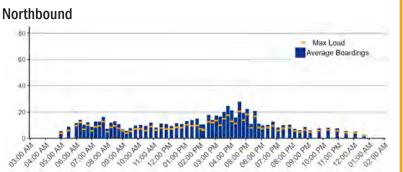
Key Destinations: Downtown Albany, Broadway Plaza Building, Albany Center Galleries, Union Station, Department of Environmental Conservation New York, Albany Public Library North Albany Branch, Village One Apartments, Russell Sage College (Troy), Downtown Troy Business Improvement District

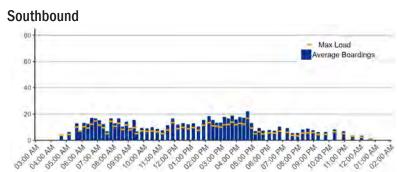
Operating Characteristics Span Frequency Off-Peak Peak 4:40 AM to 1:11 AM 20 Weekday 15 min min 20 Saturday 6:00 AM to 1:11 AM min 30 min Sunday 6:30 AM to 1:21 AM 30 min min





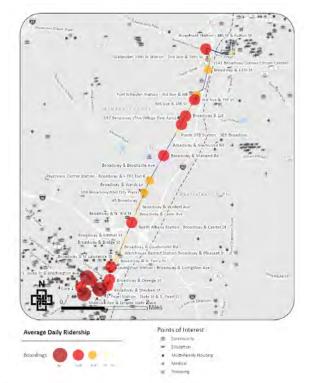


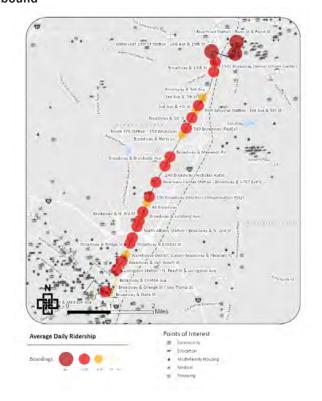




Weekday ** Ridership by Stop

Northbound





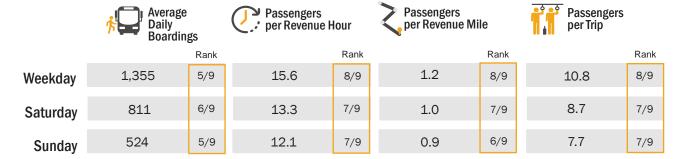


Albany-Troy-Watervliet **Service Type:** *Trunk*

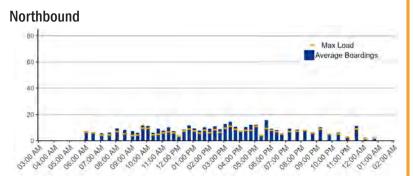
Description: Albany/Troy via Watervliet, between Empire State Plaza, Albany and Fulton & 4th, Troy (7 days a week)

Key Destinations: Downtown Albany, Broadway Plaza Building, Albany Center Galleries, Union Station, Department of Environmental Conservation New York, Albany Public Library North Albany Branch, Village One Apartments, Russell Sage College (Troy), Downtown Troy Business Improvement District

Daily Statistics





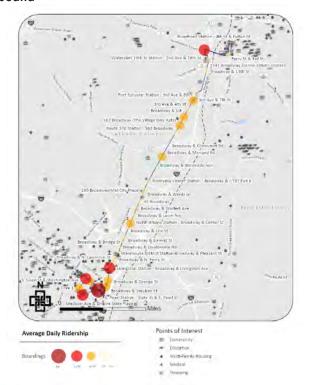


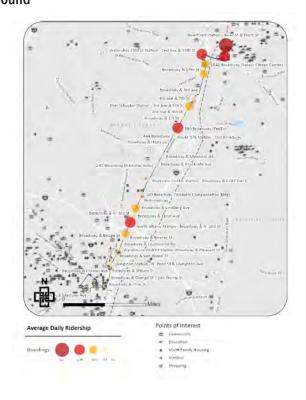
Southbound* Max Load Average Boardings Average Boardings

*Some trips may be missing due to data quality issues



Northbound







Albany-Troy-Watervliet **Service Type:** *Trunk*

Key Destinations: Downtown Albany, Broadway Plaza Building, Albany Center Galleries, Union Station, Department of Environmental Conservation New York, Albany Public Library North Albany Branch, Village One Apartments, Russell Sage College (Troy), Downtown Troy Business Improvement District

& 4th, Troy (7 days a week)

Description: Albany/Troy via Watervliet, between Empire State Plaza, Albany and Fulton

Route Analysis

Strengths

- Very direct and streamlined alignment connecting downtown Albany and downtown Troy
- Easy-to-remember clockface
- frequency for much of the service day Complements Blue Line by providing local service in Albany
- Frequent service during peak periods
- Seven-day-a-week service Extensive span of service on weekdays and weekends
- Provides direct access to Empire State Plaza

Weaknesses

- Nearly 20 percent of sampled timepoints served late
- Second-lowest weekday productivity in terms of passengers per hour among Trunk routes Low ridership after 11 pm on most
- davs
- Less than 9 passengers per trip on
- Saturdays and Sundays
 Non-clockface frequencies on Sunday evenings

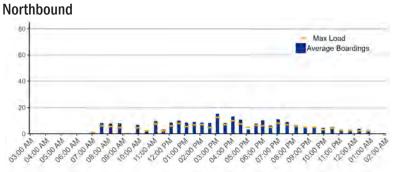
Opportunities

- End service at 11 on weekdays to better align service supply and demand
- Operate 30-minute service all day on Saturdays, as there is no peak period justifying 20-minute service
- Recalibrate running and layover times to improve on-time performance
- Provide direct access to Empire State Plaza
- Extend to Samaritan Hospital and RPI
- Extend to Hoosick and Samaritan Hospital via River St

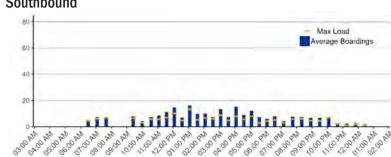


Sunday Ridership by Trip





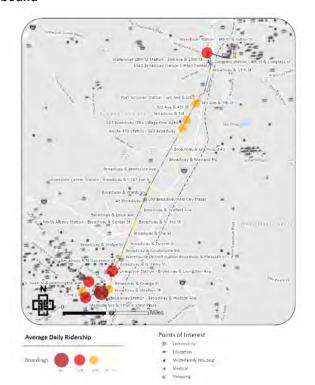
Southbound

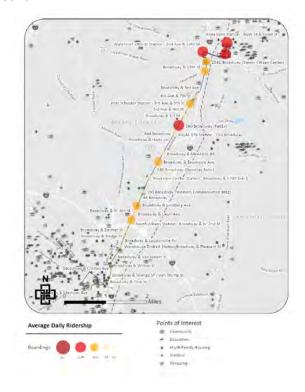




Sunday Ridership by Stop

Northbound







Waterford-Troy

Service Type: *Trunk*

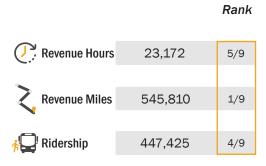
Description: Between Lansingburgh, South Troy via 5th Avenue and 4th Street (7 days

Key Destinations: Hudson Valley Plaza, Hudson Valley Community College, Troy City Library, Vicina Modern Urban Flats, Troy Medical Plaza, Russell Sage College, The Arts Center of the Capital Region, Troy Waterfront Farmers Market, Troy Public Library - Lansingburgh Branch, Lansingburgh High School, Riverside Plaza, Powers Park, Monument Square (Troy)

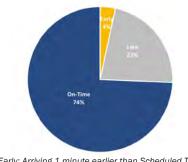
Operating Characteristics





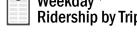


On-Time Performance



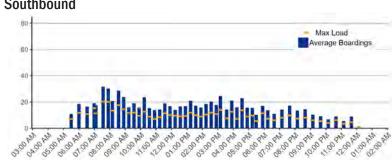
*Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time







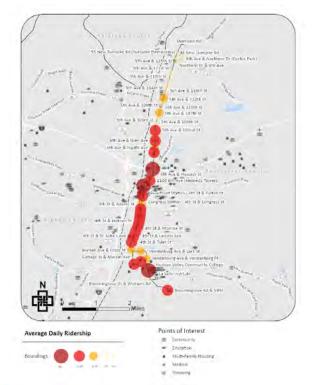


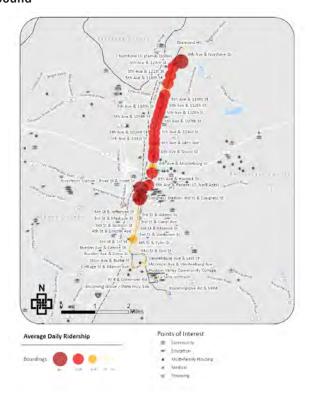




Northbound

20





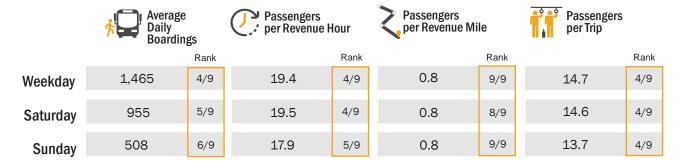


Waterford-Troy
Service Type: Trunk

Description: Between Lansingburgh, South Troy via 5th Avenue and 4th Street (7 days a week)

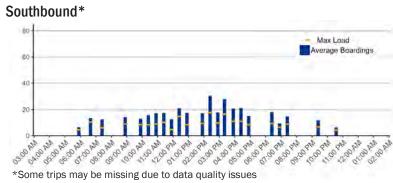
Key Destinations: Hudson Valley Plaza, Hudson Valley Community College, Troy City Library, Vicina Modern Urban Flats, Troy Medical Plaza, Russell Sage College, The Arts Center of the Capital Region, Troy Waterfront Farmers Market, Troy Public Library - Lansingburgh Branch, Lansingburgh High School, Riverside Plaza, Powers Park, Monument Square (Troy)

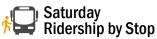
Daily Statistics



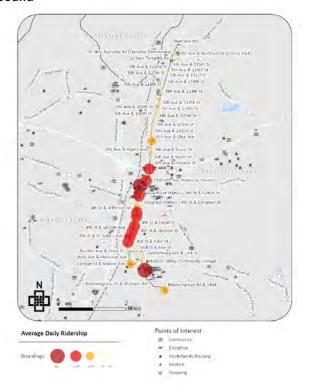


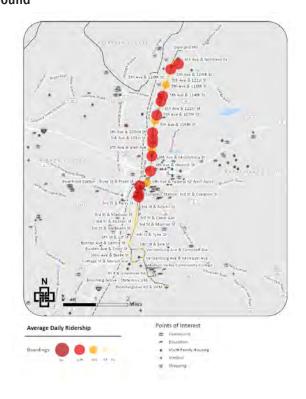






Northbound







Waterford-Troy

Service Type: Trunk

Description: Between Lansingburgh, South Troy via 5th Avenue and 4th Street (7 days

Key Destinations: Hudson Valley Plaza, Hudson Valley Community College, Troy City Library, Vicina Modern Urban Flats, Troy Medical Plaza, Russell Sage College, The Arts Center of the Capital Region, Troy Waterfront Farmers Market, Troy Public Library - Lansingburgh Branch, Lansingburgh High School, Riverside Plaza, Powers Park, Monument Square (Troy)

Route Analysis

Strengths

- Simple and streamlined alignment (except on the far ends of the route)
- Frequent weekday service on trunk portion of the route
- Seven-day-a-week service
- Extensive span of service on weekdays and weekends
- Complements Blue Line by providing parallel local access in Troy

Weaknesses

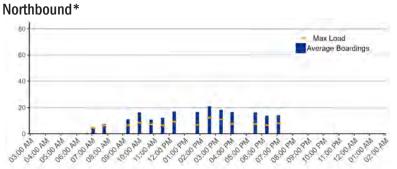
- More than 20 percent of sampled timepoints served late
- Non-clockface frequencies on weekends
- Challenging built environment for efficient transit operations. For example, south of Williams Road is a destination-rich environment. However, none of these destinations have connected roadway or pedestrian networks.
- Dangerous unprotected left turn from Bloomingrove Drive onto Williams Road
- Irregular and infrequent service to destinations including Collar City Rehabilitation, LaSalle Institute, and Mill

Opportunities

- Simplify service by reducing variants and increasing frequency to strongest ridership generators, including Van Rensselaer Manor and Corliss Park
- Replace service to Collar City Rehabilitation with a FLEX zone anchored at Hannaford on 2nd Avenue, and serving neighborhoods east of the Uncle Sam Bikeway and north of Troy
- Operate along Cottage Street on all trips, due to higher ridership compared to Mill Street
- Use South Drive to improve access to HVCC and avoid unprotected left turns for buses leaving Van Rensselaer Manor via Michaels Way
- Coordinate with municipal leaders and property owners to improve pedestrian and bicycle connections between key destinations
- Expand Cycle! program to HVCC and near-by neighborhoods and destinations, and consider offering program year-round, to facilitate simplification of Route 85

Sunday

Ridership by Trip



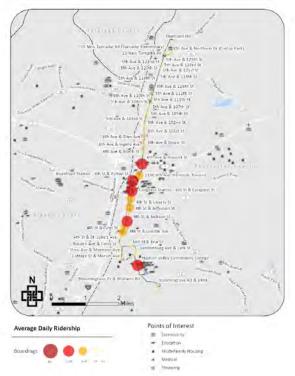
*Some trips may be missing due to data quality issues

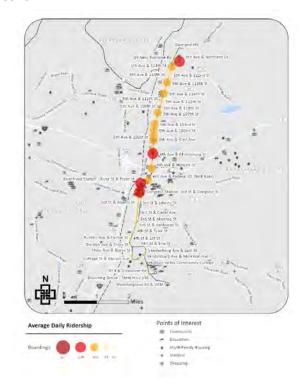
Southbound* Max Load Average Boardings 60 OBJO OBJO PA AND AND AND AND Chy Chy Chy Chy Chy 1000 PM PM

*Some trips may be missing due to data quality issues

Sunday Ridership by Stop

Northbound







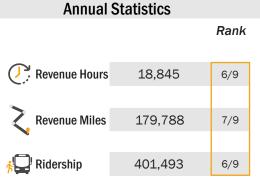
Beman Park

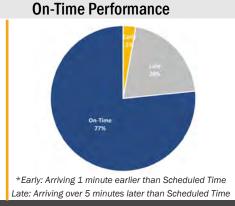
Service Type: Trunk

Description: Downtown Troy between State St. & 4th Ave, Brunswick Plaza, Hoosick St and Burdett Ave (7 days a week)

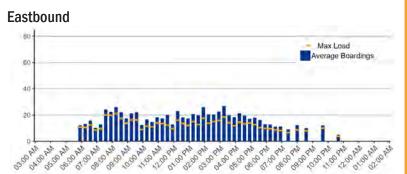
Key Destinations: Troy City Library, Vicina Modern Urban Flats, Troy Medical Plaza, Russell Sage College, The Arts Center of the Capital Region, Troy Middle School, Troy High School, Russell Sage College, Brunswick Plaza (shopping center), Walmart Supercenter

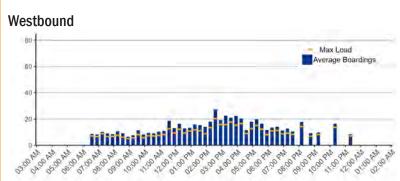






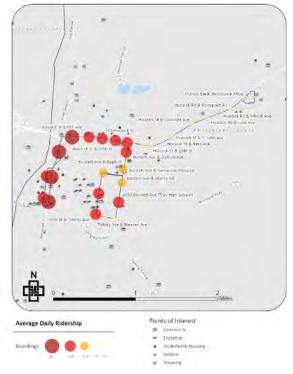
Weekday *
Ridership by Trip

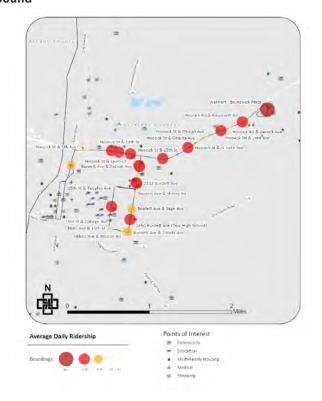




Weekday **
Ridership by Stop

Eastbound







Beman Park

Service Type: Trunk

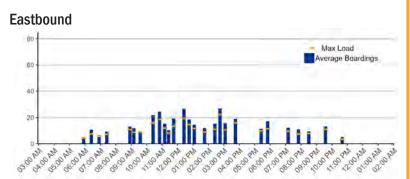
Description: Downtown Troy between State St. & 4th Ave, Brunswick Plaza, Hoosick St and Burdett Ave (7 days a week)

Key Destinations: Troy City Library, Vicina Modern Urban Flats, Troy Medical Plaza, Russell Sage College, The Arts Center of the Capital Region, Troy Middle School, Troy High School, Russell Sage College, Brunswick Plaza (shopping center), Walmart Supercenter

Daily Statistics



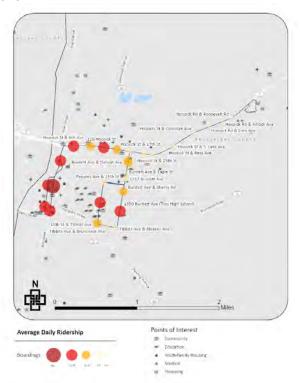
Saturday
Ridership by Trip

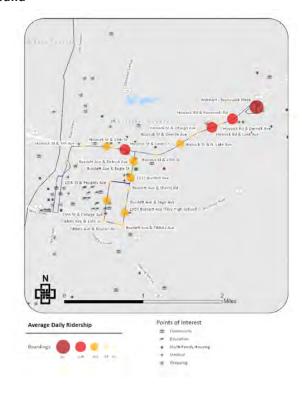


Westbound Max Load Average Boardings Average Boardings

Saturday Ridership by Stop

Eastbound







Beman Park

Service Type: Trunk

Description: Downtown Troy between State St. & 4th Ave, Brunswick Plaza, Hoosick St and Burdett Ave (7 days a week)

Key Destinations: Troy City Library, Vicina Modern Urban Flats, Troy Medical Plaza, Russell Sage College, The Arts Center of the Capital Region, Troy Middle School, Troy High School, Russell Sage College, Brunswick Plaza (shopping center), Walmart Supercenter

Route Analysis

Strengths

- Destination-rich route, including Walmart, Samaritan Hospital, RPI, and downtown Troy
- Relatively frequent service, with clockface frequencies, on weekdays and Saturdays
- Extensive span of service on weekdays and Saturdays
- Third-highest productivity in terms of passengers per revenue mile among Trunk routes

Weaknesses

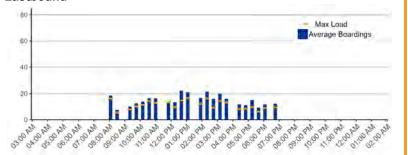
- Ridership surges on first and last trips of the day on Sundays, suggesting pent-up demand for expanded span of service on Sundays
- Circuitous alignment with long deviation from Hoosick Street to serve Samaritan Hospital and RPI before returning to Hoosick Street to complete east-west route
- No direct service between Walmart (one of the most popular CDTA destinations east of the Hudson River) and neighborhoods north and south of downtown Troy
- 20 percent of sampled timepoints served late

Opportunities

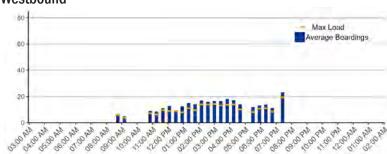
- Split or incorporate Rouet 87 coverage into three new routes to provide more direct service to Walmart. One route could serve Walmart, Samaritan Hospital, RPI, and downtown Troy before turning north to serve neighborhoods north of downtown. Another route could follow a similar alignment between Walmart and downtown Troy, but then turn south to serve HVCC and surrounding neighborhoods. A third route could operate between HVCC and Walmart via Pawling Avenue, RPI, and Samaritan Hospital, without serving
- Expand Sunday span of service to address pent-up ridership demand
- Eliminate Samaritan/RPI Loop
- Eliminate lower Hoosick segment

Sunday Ridership by Trip

Eastbound



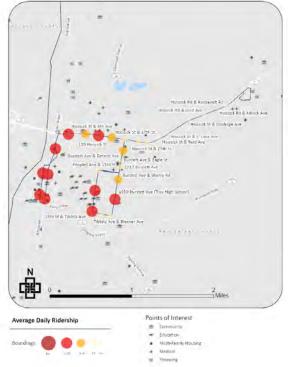
Westbound

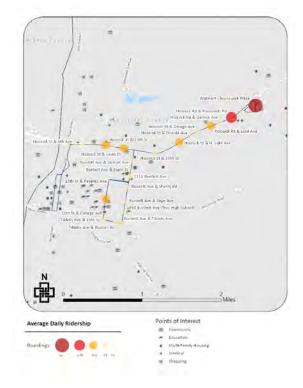




Sunday Ridership by Stop

Eastbound







Mid City Belt

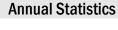
Service Type: Neighborhood

Description: Pearl Street, Morton Avenue, Quail Street, Livingston Avenue and Lark Drive (7 days a week)

Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, South Mall Towers Apartments, Albany Downtown, Arbor Hill Community Center, Easha Inc., Lincoln Park, Sunshine School, Thomas O'Brian Academy of Science and Technology

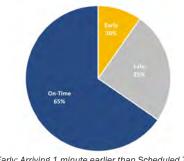
Operating Characteristics







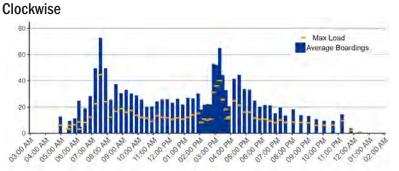
On-Time Performance



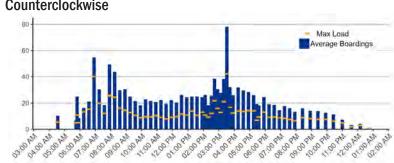
*Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time





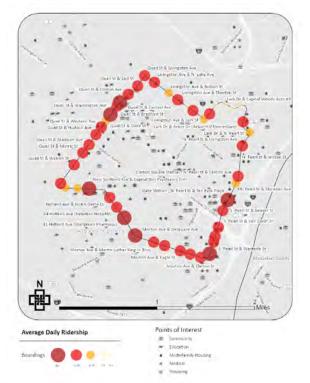




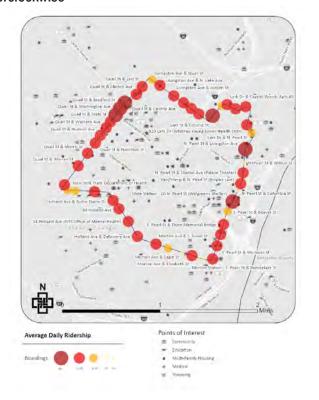




Clockwise



Counterclockwise





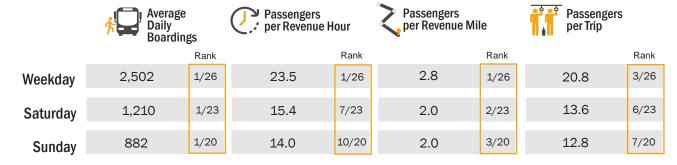
Mid City Belt

Service Type: Neighborhood

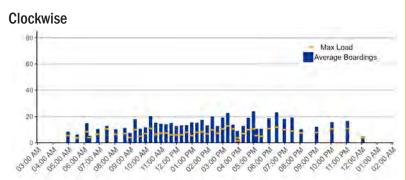
Description: Pearl Street, Morton Avenue, Quail Street, Livingston Avenue and Lark Drive (7 days a week)

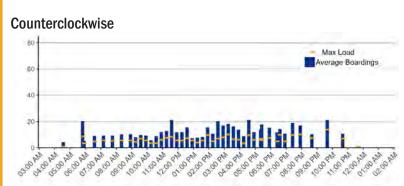
Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, South Mall Towers Apartments, Albany Downtown, Arbor Hill Community Center, Easha Inc., Lincoln Park, Sunshine School, Thomas O'Brian Academy of Science and Technology

Daily Statistics



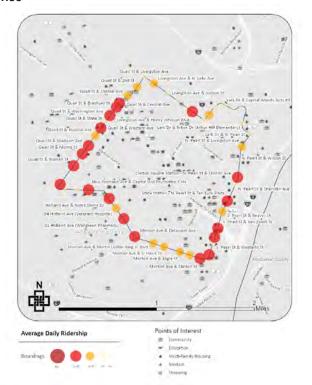
Saturday Ridership by Trip



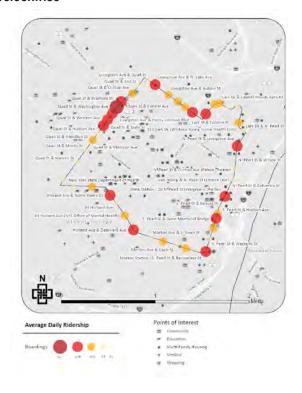


Saturday Ridership by Stop

Clockwise



Counterclockwise





Mid City Belt

Service Type: Neighborhood

Description: Pearl Street, Morton Avenue, Quail Street, Livingston Avenue and Lark Drive (7 days a week)

Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, South Mall Towers Apartments, Albany Downtown, Arbor Hill Community Center, Easha Inc., Lincoln Park, Sunshine School, Thomas O'Brian Academy of Science and Technology

Route Analysis

Strengths

- Provides bi-directional service to facilitate local circulation and connection opportunities to radial routes
- Provides direct or proximate service to numerous educational institutions including Albany College of Pharmacy and Health Sciences, Sage College, UAlbany Downtown, and several middle and high schools
- Key route serving Albany Medical Center
- Very strong ridership, especially during peak periods Highest ridership per hour among Neighborhood
- routes
- Very frequent weekday service, up to every 12 minutes
- 7-day-a-week service
- Extensive span of service on all service days

Weaknesses

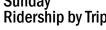
- Poor on-time performance with 25% of sampled timepoints served late and 10% served early
- Likely overcrowding during peak periods with maximum loads exceeding 40 passengers
- Uninterrupted circulation can make it difficult to manage schedules and customer expectations, as there is no obvious reset point to clear out passengers and reset headways
- Rider survey comments emphasize unreliable schedules and overcrowding associated with schoolchildren

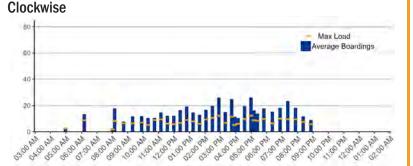
Opportunities

- Consider splitting route into two separate crescent-shaped routes at points of greatest ridership turn-over, such as State Station and Quail Station, to help manage rider expectations regarding excessive layover times at endpoints
- Operate routes between newly established endpoints with headway-based schedules, metering buses to depart endpoints at regular intervals, rather than at specific times
- Operate Cycle! program year-round to provide alternative for short trips and help relieve overcrowding on Route 100

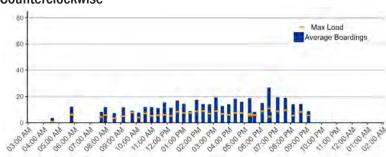
Sunday

Ridership by Trip





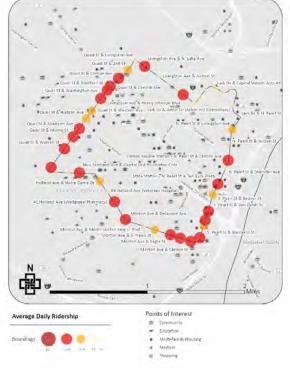
Counterclockwise



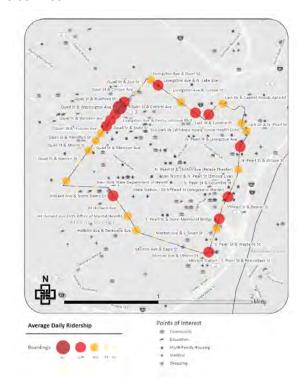


Sunday Ridership by Stop

Clockwise



Counterclockwise





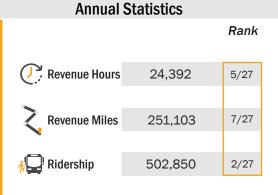
Uptown Belt

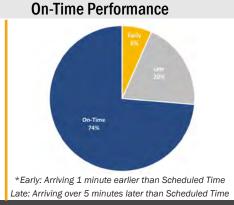
Service Type: Neighborhood

Description: Via Pearl Street, Second Ave, Whitehall Rd, Allen Street, Livingston Ave and Lark Drive (7 days a week)

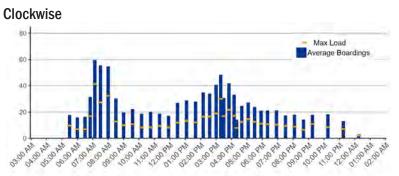
Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, Albany Downtown, Arbor Hill Community Center, Westview Senior Center, St. Peter's Hospital, City Square Plaza

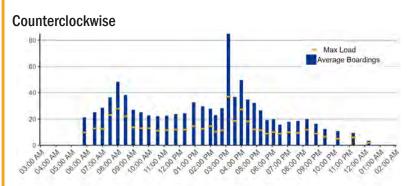
Operating Characteristics Span Frequency Peak Off-Peak 5:30 AM to 1:07 AM Weekday 20 min 20 min Saturday 6:30 AM to 12:39 AM 40 min 60 min Sunday 7:30 AM to 7:38 PM 40 min





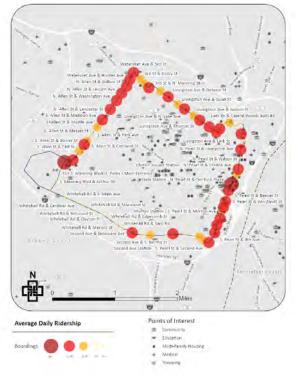




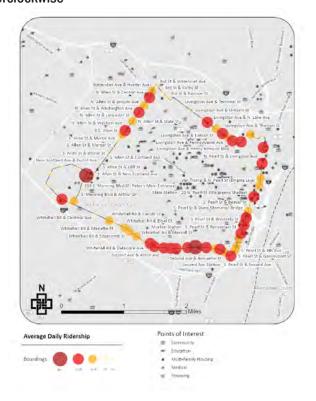


Weekday **
Ridership by Stop

Clockwise



Counterclockwise





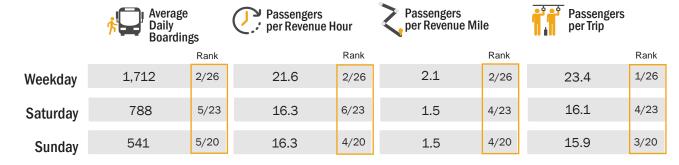
Uptown Belt

Service Type: Neighborhood

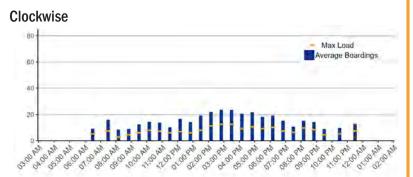
Description: Via Pearl Street, Second Ave, Whitehall Rd, Allen Street, Livingston Ave and Lark Drive (7 days a week)

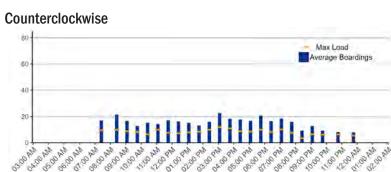
Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, Albany Downtown, Arbor Hill Community Center, Westview Senior Center, St. Peter's Hospital, City Square Plaza

Daily Statistics



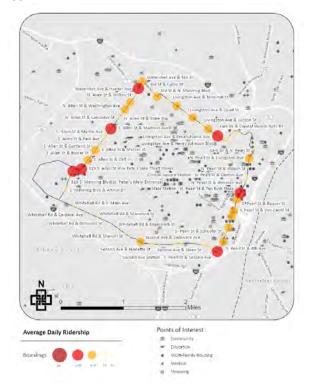
Saturday Ridership by Trip



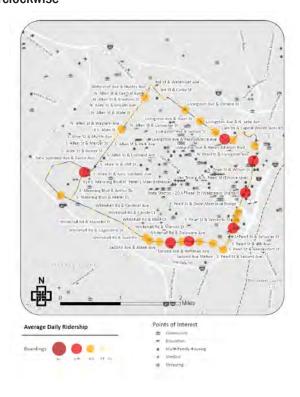


Saturday Ridership by Stop

Clockwise



Counterclockwise





Uptown Belt

Service Type: Neighborhood

Description: Via Pearl Street, Second Ave, Whitehall Rd, Allen Street, Livingston Ave and Lark Drive (7 days a week)

Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, Albany Downtown, Arbor Hill Community Center, Westview Senior Center, St. Peter's Hospital, City Square Plaza

Route Analysis

Strengths

- Provides bi-directional service to facilitate local circulation and connection opportunities to radial
- Provides direct or proximate service to numerous educational institutions including The College of Saint Rose, Albany High School, KIPP Charter School, and Meyers Middle School
- Key route serving Saint Peter's Hospital
- 7-day-a-week service
- Relatively frequent weekday service
- Extensive span of service on weekdays and Saturdays Second highest ridership among Neighborhood routes
- Highest productivity in terms of passengers per trip on weekdays and Saturdays among Neighborhood routes

Weaknesses

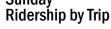
- Relatively poor on-time performance with 20% of sampled timepoints served late and 6% served
- Likely occasional overcrowding during peak periods with maximum loads approaching or exceeding 40 passengers on some trips
- Uninterrupted circulation can make it difficult to manage schedules and customer expectations, as there is no obvious reset point to clear out passengers and reset headways
- Rider survey comments emphasize unreliable schedules and confusion with designation of clockwise an counter-clockwise service, especially in the vicinity of Saint Peter's Hospital

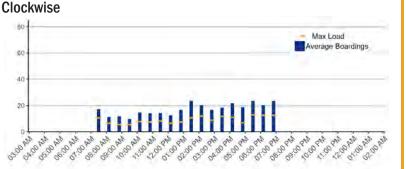
Opportunities

- Consider splitting route into two separate crescent-shaped routes at points of greatest ridership turn-over, such as State Station and Saint Peter's Hospital, to help manage rider expectations regarding excessive layover times at endpoints
- Renumber newly split routes
- Operate routes between newly established endpoints with headway-based schedules, metering buses to depart endpoints at regular intervals, rather than at specific times
- Serve Whitehall and New Scottland Avenue bi-directionally, rather than part of a oneway loop with Manning Boulevard to reduce confusion among riders

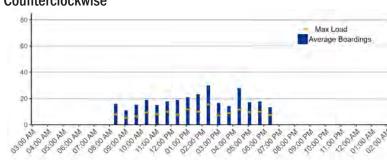


Sunday





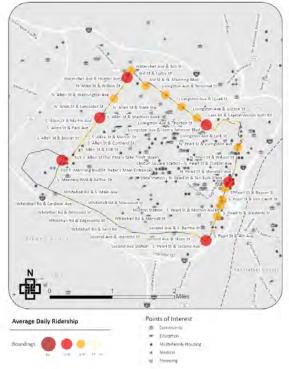
Counterclockwise



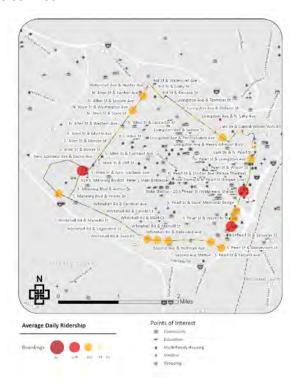


Sunday Ridership by Stop

Clockwise



Counterclockwise





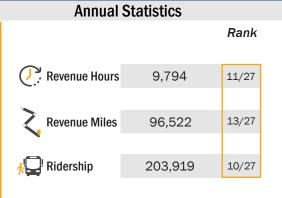
Albany Glenmont

Service Type: Neighborhood

Description: Between Albany and Glenmont via Pearl St, Mt. Hope and 9w (7 days a week)

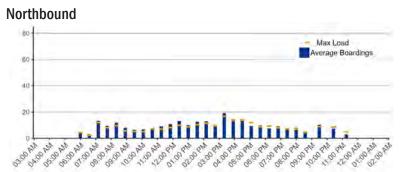
Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, Albany Downtown, Glenmont Shopping Plaza, Albany Community Charter School, Ezra Prentice Homes

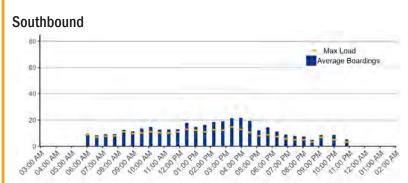
Operating Characteristics Span Frequency Peak Off-Peak Weekday 6:00 AM to 11:36 PM 35 min 35 min Saturday 6:30 AM to 11:34 PM 35 min 60 min Sunday 8:30 AM to 7:51 PM 35 min





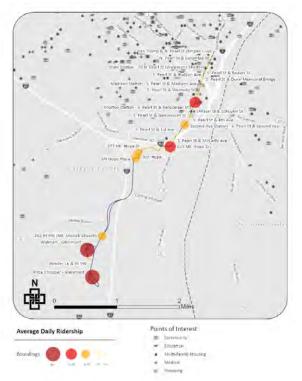


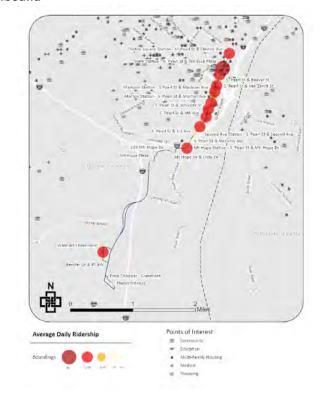




Weekday ** Ridership by Stop

Northbound







Albany Glenmont

Service Type: Neighborhood

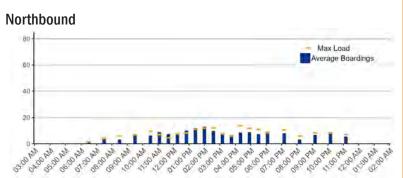
Description: Between Albany and Glenmont via Pearl St, Mt. Hope and 9w (7 days a week)

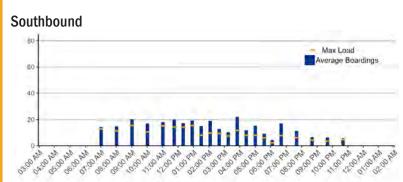
Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, Albany Downtown, Glenmont Shopping Plaza, Albany Community Charter School, Ezra Prentice Homes

Daily Statistics



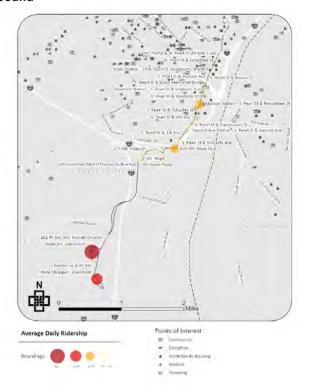
Saturday Ridership by Trip

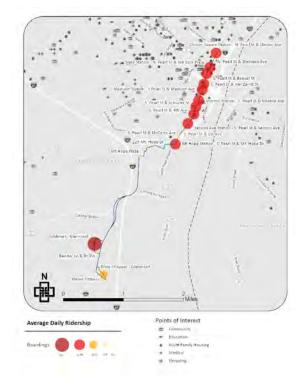




Saturday
Ridership by Stop

Northbound







Albany Glenmont

Service Type: Neighborhood

Description: Between Albany and Glenmont via Pearl St, Mt. Hope and 9w (7 days a

Key Destinations: Albany Criminal Court, Albany Public Library Howie Branch, Giffen elementary School, Albany County Department of Health, South Mall Towers Apartments, Albany Downtown, Glenmont Shopping Plaza, Albany Community Charter School, Ezra Prentice Homes

Route Analysis

Strengths

- · Links downtown and neighborhoods south of downtown with key retail and grocery destinations in the 9W corridor
- Very streamlined and direct alignment
- High productivity in terms of passengers per mile and passengers per hour, especially on weekends
- Extensive span of service on weekdays and Saturdays
- 7-day-a-week service

Weaknesses

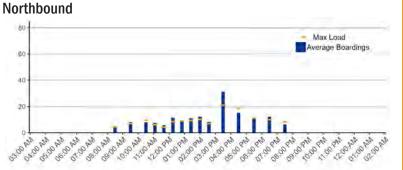
- Non-clockface service frequency during most service periods
- More than 20 percent of sampled timepoints served late
- Relatively long stretch of closed-door service with no boarding opportunities as 9W alternates between a local arterial and a divided highway
- Operator feedback suggests that passengers tend to get confused about the direction of buses serving Walmart and sometimes board outbound buses when they mean to travel inbound
- No coverage to pockets of multi-family housing south and west of the current end-of-line
- No direct coverage to Glenmont Plaza

Opportunities

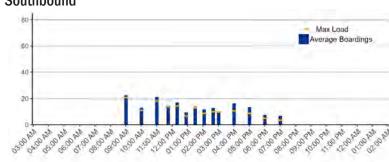
- Consider extending route west along Glenmont Road and Feura Bush Road to Elsmere Avenue to serve Glenmont Plaza, and the Kendal Square Apartments
- Establish a new FLEX zone anchored at Walmart on 9W and serving retail destinations and neighborhoods south and west of current end-of-line, including Glenmont Abbey Village, The Residence at Wemple Road, Van Allen Senior Apartments, and Kendall Square Apartments
- Adjust headsign messaging on buses and/or split inbound and outbound pick-up locations at Walmart to avoid passenger confusion
- Recalibrate schedule to provide clockface frequency during peak periods, and better on-time performance

Sunday

Ridership by Trip



Southbound

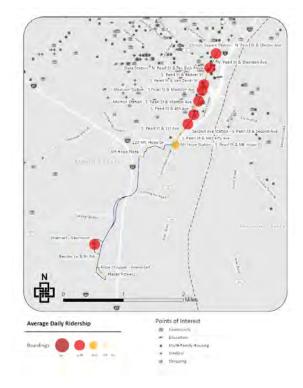




Sunday Ridership by Stop

Northbound







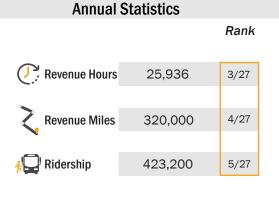
Madison/Washington

Service Type: Neighborhood

Description: Between Crossgates Mall, UAlbany, Downtown Albany, and Rensselaer Rail Station (7 days a week)

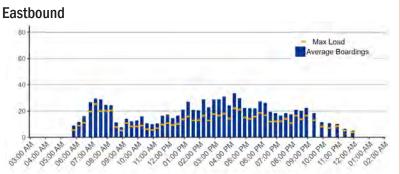
Key Destinations: Rensselaer Rail Station, Greyhound Bus Terminal at Liberty St, South Mall Towers Apartments, Department of Environmental Conservation New York, Lark Street, The College of Saint Rose, Saint Anne Institute, The State University of New York (SUNY), Crossgates Mall, Walmart Supercenter

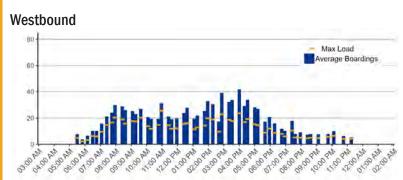
Operating Characteristics Span Frequency Peak Off-Peak Weekday 5:30 AM to 12:34 AM 20 min 30 min Saturday 8:00 AM to 11:42 PM 35 min 60 min Sunday 8:00 AM to 10:42 PM 120 min 120 min





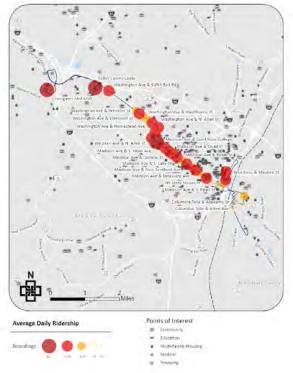


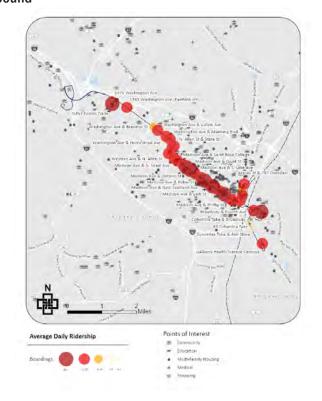




Weekday ** Ridership by Stop

Eastbound







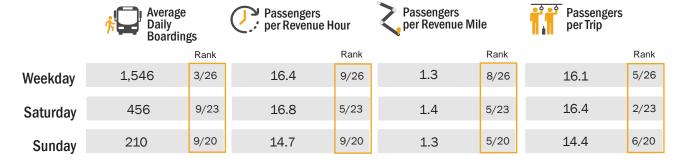
Madison/Washington

Service Type: Neighborhood

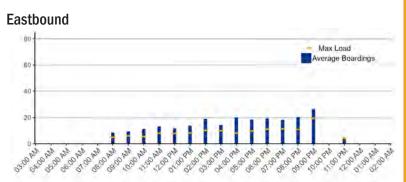
Description: Between Crossgates Mall, UAlbany, Downtown Albany, and Rensselaer Rail Station (7 days a week)

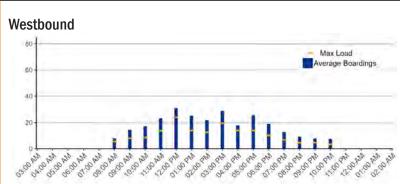
Key Destinations: Rensselaer Rail Station, Greyhound Bus Terminal at Liberty St, South Mall Towers Apartments, Department of Environmental Conservation New York, Lark Street, The College of Saint Rose, Saint Anne Institute, The State University of New York (SUNY), Crossgates Mall, Walmart Supercenter

Daily Statistics



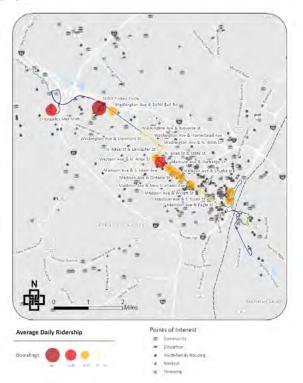
Saturday
Ridership by Trip

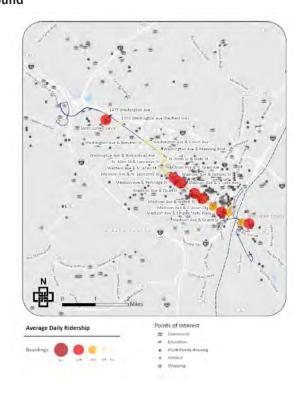




Saturday Ridership by Stop

Eastbound







Madison/Washington

Service Type: Neighborhood

Description: Between Crossgates Mall, UAlbany, Downtown Albany, and Rensselaer Rail Station (7 days a week)

Key Destinations: Rensselaer Rail Station, Greyhound Bus Terminal at Liberty St, South Mall Towers Apartments , Department of Environmental Conservation New York, Lark Street, The College of Saint Rose, Saint Anne Institute, The State University of New York (SUNY), Crossgates Mall, Walmart Supercenter

Route Analysis

Strengths

- Destination-rich route serving retail, transportation hubs, educational institutions, multi-family housing, and other activity centers
- Provides one-seat ride from Amtrak station to downtown Albany, Empire State Plaza, and UAlbany' Uptown and Health Science Campuses
- Frequent peak-period service
- Relatively strong on-time performance with 80 percent of sampled timepoints served on time
- 7-day-a-week service
- Extensive span of service on all days
- Third-highest weekday ridership among Neighborhood routes

Weaknesses

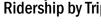
- Requires transfer at Crossgate Commons to reach Walmart (a major ridership generator)
- Limited coverage in the vicinity of UAlbany Health Science Campus. For example, several Regeneron facilities are between 1/4 and 1/2 of a mile from the nearest CDTA bus stop
- No service to UAlbany Health Science Campus on weekends
- Very limited Sunday frequency, with service every two hours

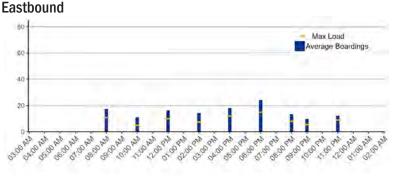
Opportunities

- Add loop through Crossgates Commons (Walmart) via Springsteen Road on inbound and outbound trips, due to high ridership potential
- Operate hourly service on Sundays, especially if service is added to Crossgates
- Extend service along Discover Drive to better serve Regeneron and other area
- Expand Cycle! program to UAlbany Health Science Campus to complement limited coverage of existing bus service. Cycle! stations in this area could improve access to Regeneron and to the Health Science Center when Route 114 is not running
- Consider truncating Route 114 in downtown Albany and extending the Purple Line to serve Amtrak via the Empire State Plaza tunnels or Pearl Street

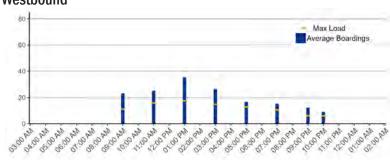


Sunday Ridership by Trip





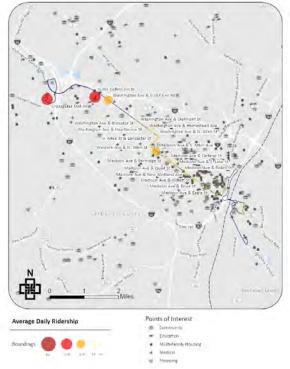
Westbound

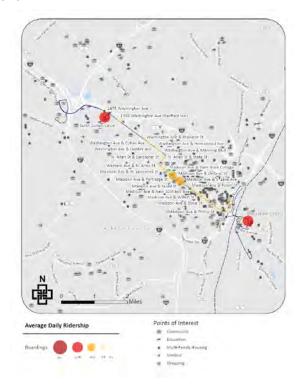




Sunday Ridership by Stop

Eastbound



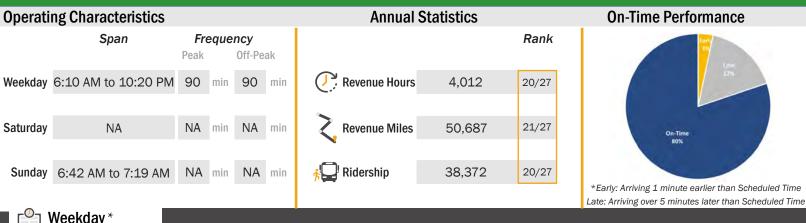




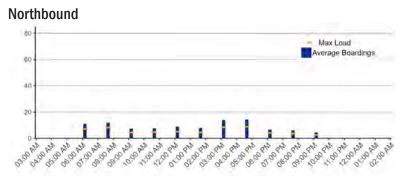
Guilderland/Colonie Crosstown
Service Type: Neighborhood

Description: Between Crossgates Mall, Colonie Center and Albany Internation Airport (weekdays and Saturdays)

Key Destinations: Crossgates Mall, Colonie Center, The State University of New York (SUNY), Albany International Airport



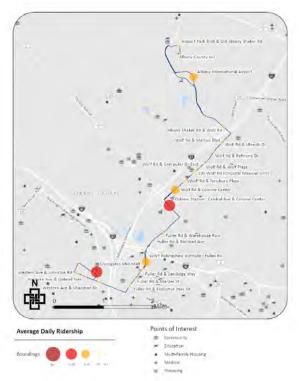


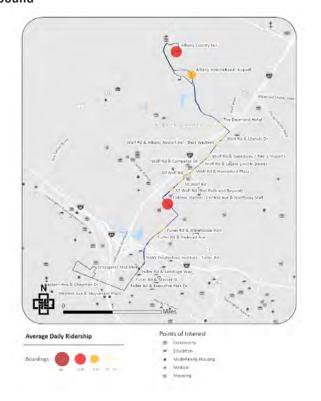


Southbound Max Load Average Boardings Average Boardings

Weekday ** Ridership by Stop

Northbound





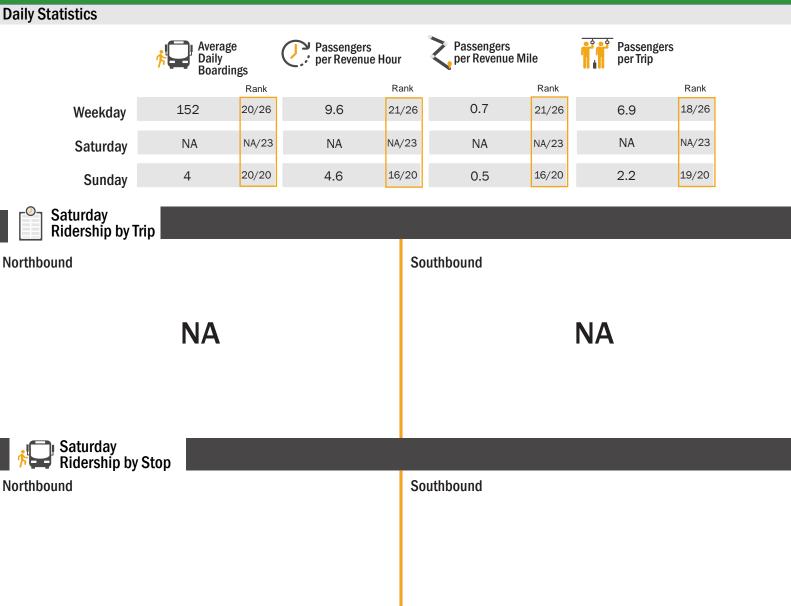


Guilderland/Colonie Crosstown Service Type: Neighborhood

Description: Between Crossgates Mall, Colonie Center and Albany Internation Airport (weekdays and Saturdays)

Key Destinations: Crossgates Mall, Colonie Center, The State University of New York (SUNY), Albany International Airport

Daily Statistics



NA NA



Guilderland/Colonie Crosstown Service Type: Neighborhood

Description: Between Crossgates Mall, Colonie Center and Albany Internation Airport (weekdays and Saturdays)

Key Destinations: Crossgates Mall, Colonie Center, The State University of New York (SUNY), Albany International Airport

Route Analysis

Strengths

- Connects key regional activity centers and transit hubs, including Crossgates Mall, Colonie Center, Albany International Airport, and Albany County Correctional Facility
- Complements Colonie FLEX service on Sundays, with an early jobaccess trip to Shaker Place Rehabilitation and Nursing Center

Weaknesses

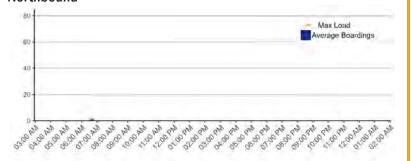
- Infrequent service at every 90 minutes No Saturday service, and only one Sunday trip per direction
- Route ends short of Troy Schenectady Road, limiting its ridership potential
- Low ridership along Fuller Road
- Survey comments suggest passengers are unfamiliar with connection opportunities between Route 117 and Colonie FLEX zone, especially for access to Shaker Place

Opportunities

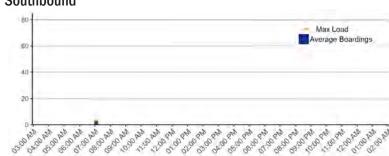
- Improve integration and cross-marketing between fixed-route and FLEX service to better support first/last mile connections
- Extend route to Troy Schenectady Road to connect with Route 370, creating new transfer opportunities and supporting more travel patterns
- Restructure route to operate via Crossgates Commons (Walmart) rather than Fuller Road to increase ridership potential
- Consider increasing service frequency to hourly
- Consider consolidating stops and running the route as a limited-stop express service

Sunday Ridership by Trip





Southbound





Sunday Ridership by Stop

Northbound







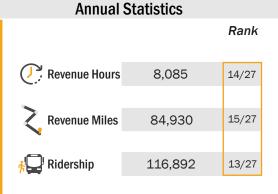
Clinton/Sand Creek

Service Type: Neighborhood

Description: Clinton Ave, Sand Creek Rd., Colonie Center and Downtown Albany (weekdays and Saturdays)

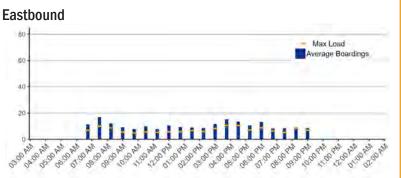
Key Destinations: MVP Arena, Albany Downtown, Leo W O'Brien Federal Building, Albany County Family Court, Quail St Intersection, Manning Blvd Intersection at Manning Sq., Westview Senior Center, Colonie Center

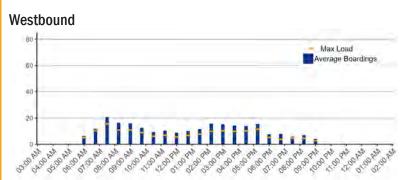
Operating Characteristics Span Frequency Peak Off-Peak 6:00 AM to 9:32 PM Weekday 45 min 45 min Saturday 7:05 AM to 7:35 PM 80 min 80 min Sunday NA NA min NA min





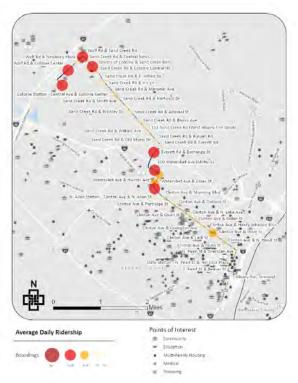


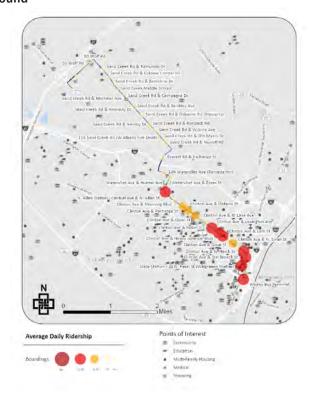




Weekday ** Ridership by Stop

Eastbound







Clinton/Sand Creek

Service Type: Neighborhood

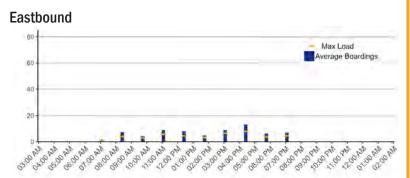
Description: Clinton Ave, Sand Creek Rd., Colonie Center and Downtown Albany (weekdays and Saturdays)

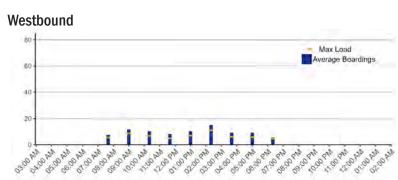
Key Destinations: MVP Arena, Albany Downtown, Leo W O'Brien Federal Building, Albany County Family Court, Quail St Intersection, Manning Blvd Intersection at Manning Sq., Westview Senior Center, Colonie Center

Daily Statistics



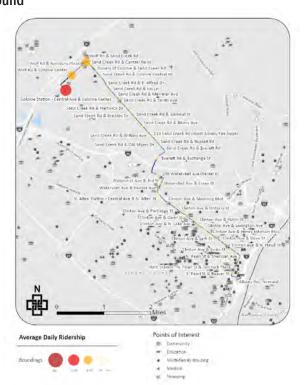
Saturday
Ridership by Trip

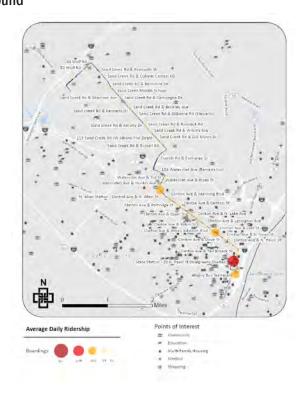




Saturday Ridership by Stop

Eastbound







Clinton/Sand Creek

Service Type: Neighborhood

Description: Clinton Ave, Sand Creek Rd., Colonie Center and Downtown Albany (weekdays and Saturdays)

Key Destinations: MVP Arena, Albany Downtown, Leo W O'Brien Federal Building, Albany County Family Court, Quail St Intersection, Manning Blvd Intersection at Manning Sq., Westview Senior Center, Colonie Center

Route Analysis

Strengths

- Fairly direct and streamlined alignment
- Connects residential neighborhoods along Sand Creek Road corridor to downtown Albany and Colonie Center
- Relatively strong ridership along Clinton Avenue and in the vicinity of Colonie Center
- Connection opportunities to the Red Line and Blue Line
- Service past 9:00 pm of weekdays
- Saturday service



- Provides no direct service or convenient connections to University of Albany, outside of downtown Albany
- Poor on-time performance with nearly 30 percent of sampled timepoints served late
- Non-clockface service frequency on weekdays
- Infrequent service on Saturdays
- Relatively weak ridership along Sand Creek Road

Opportunities

- Reduce weekday service frequency to hourly service to improve on-time performance, simply schedules, and better align service availability with demand
- Eliminate Saturday service due to low ridership
- Increase Saturday service frequency to once an hour to appeal to more riders
- Shift alignment from Washington Avenue to Western Ave

Sunday Ridership by Trip

Eastbound

Westbound

NA

NA



Eastbound

Westbound

NA

NA



Suburban Circulator

Service Type: Neighborhood

Description: From Crossgates Mall to Albany International Airport via Route 155 (7 days a week)

Key Destinations: Crossgates Mall, Crossgates Commons, Intersection at NY5, Albany International Airport



Suburban Circulator

Service Type: Neighborhood

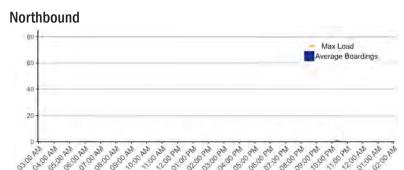
Description: From Crossgates Mall to Albany International Airport via Route 155 (7 days a week)

Key Destinations: Crossgates Mall, Crossgates Commons, Intersection at NY5, Albany International Airport

Daily Statistics



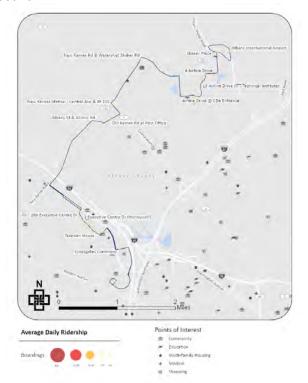
Saturday
Ridership by Trip

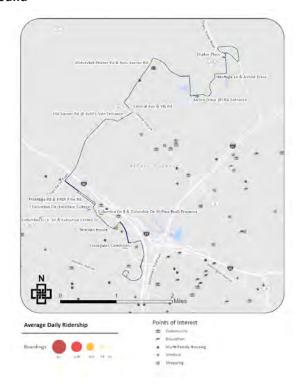


Southbound Max Load Average Boardings Average Boardings

Saturday Ridership by Stop

Northbound







Suburban Circulator

Service Type: Neighborhood

Description: From Crossgates Mall to Albany International Airport via Route 155 (7 days a week)

Key Destinations: Crossgates Mall, Crossgates Commons, Intersection at NY5, Albany International Airport

Route Analysis

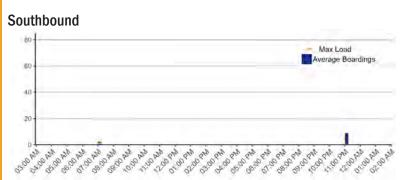
Strengths

Weaknesses

Opportunities

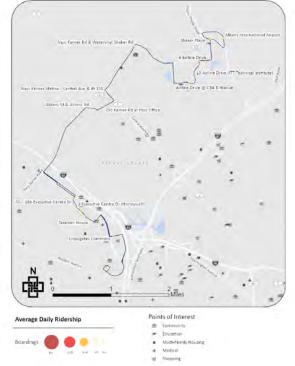
Sunday Ridership by Trip

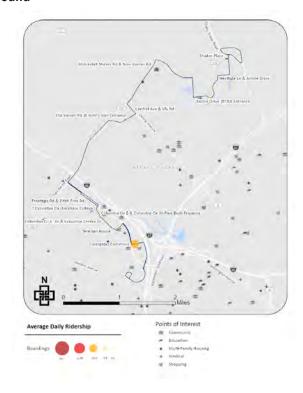




Sunday Ridership by Stop

Northbound







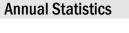
Troy-Cohoes-Latham-Albany Service Type: Neighborhood

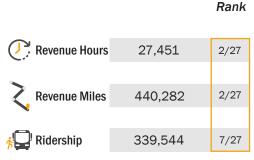
Description: Troy/Albany via Cohoes/Latham, from Downtown Troy, Watervliet, Green Island, Cohoes and Latham Farms, Latham Shoppes to Albany (7 days a week)

Key Destinations: Troy Downtown, Riverfront Park, Troy Medical Plaza, Rensselaer Polytechnic Institute (RPI), Vicinia Apartments, Rensselaer Supreme Court, Sage Grad School, Cohoes Family Health Center, Cohoes Public Library, The Shoppes at Latham Circle, Washington Park, Albany Public Library Main Branch, Townsend Park Apartments, Albany Downtown, Greyhound Bus Terminal at Liberty St

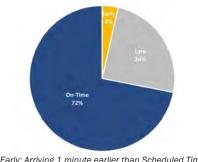
Operating Characteristics





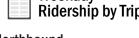


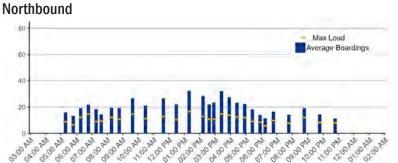
On-Time Performance



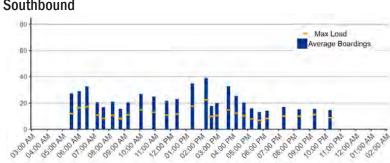
*Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time





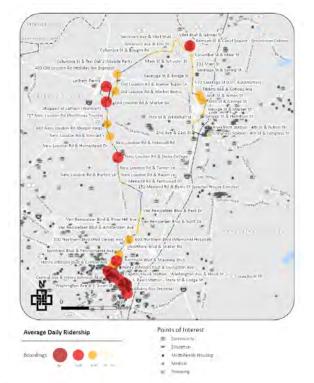


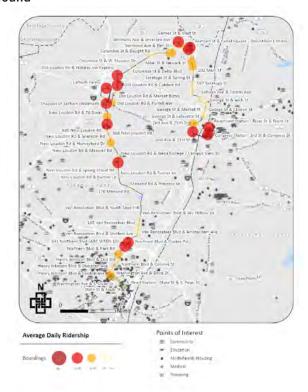
Southbound





Northbound







Troy-Cohoes-Latham-Albany **Service Type:** Neighborhood

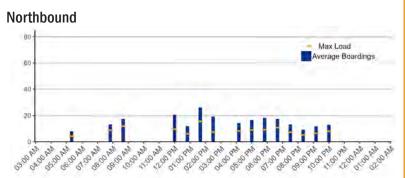
Description: Troy/Albany via Cohoes/Latham, from Downtown Troy, Watervliet, Green Island, Cohoes and Latham Farms, Latham Shoppes to Albany (7 days a week)

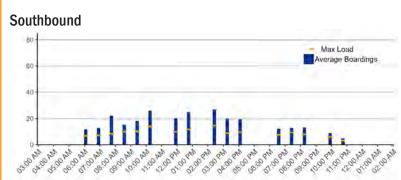
Key Destinations: Troy Downtown, Riverfront Park, Troy Medical Plaza, Rensselaer Polytechnic Institute (RPI), Vicinia Apartments, Rensselaer Supreme Court, Sage Grad School, Cohoes Family Health Center, Cohoes Public Library, The Shoppes at Latham Circle, Washington Park, Albany Public Library Main Branch, Townsend Park Apartments, Albany Downtown, Greyhound Bus Terminal at Liberty St

Daily Statistics



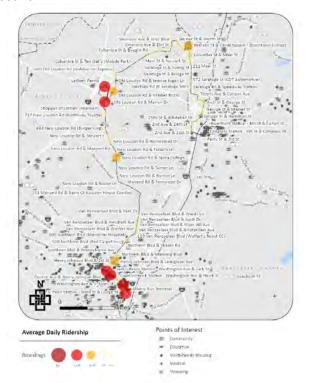


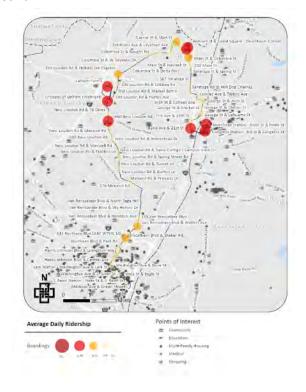




Saturday Ridership by Stop

Northbound







Troy-Cohoes-Latham-Albany Service Type: Neighborhood

Description: Troy/Albany via Cohoes/Latham, from Downtown Troy, Watervliet, Green Island, Cohoes and Latham Farms, Latham Shoppes to Albany (7 days a week)

Key Destinations: Troy Downtown, Riverfront Park, Troy Medical Plaza, Rensselaer Polytechnic Institute (RPI), Vicinia Apartments, Rensselaer Supreme Court, Sage Grad School, Cohoes Family Health Center, Cohoes Public Library, The Shoppes at Latham Circle, Washington Park, Albany Public Library Main Branch, Townsend Park Apartments, Albany Downtown, Greyhound Bus Terminal at Liberty St

Route Analysis

Strengths

- Connects Cohoes and Latham to downtown Albany and downtown Troy
- Relatively direct and streamlined alignments from Cohoes to points southeast and southwest 30-minute peak frequency
- Serves several regionally significant destinations including Albany Memorial Campus, Siena College, and the Shoppes at Latham Circle
- Second-highest productivity among Neighborhood routes, with 20.9 passengers per
- 7-day-a-week service
- Extensive span of service on weekdays and Saturdays

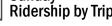
Weaknesses

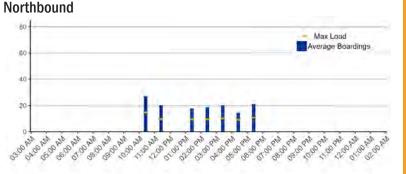
- Circuitous alignment for passengers traveling beyond Cohoes
- Poor on-time performance with nearly 25 percent of sampled timepoints served late
- Non-clockface service frequency on Saturdays
- Survey comments suggest strong demand for service to Clifton Park
- No service to Waterford, despite pockets of relatively high density

Opportunities

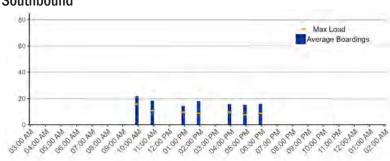
- Consider designating Latham Farms/Latham Circle as a transfer point between the Colonie and Southern Saratoga County FLEX zones
- Split Route 182 into two new routes, with one operating between Albany and Cohoes, and potentially extending to north Troy via Waterford, and the other operating between Troy and Cohoes, and potentially extending to Clifton Park

Sunday Ridership by Trip





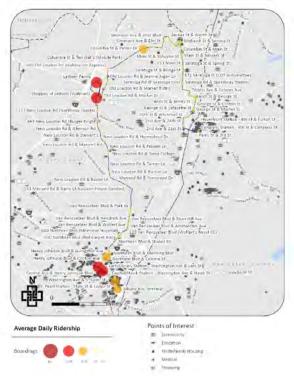
Southbound

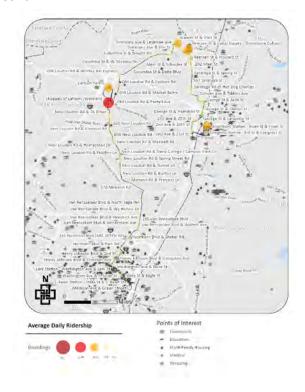




Sunday Ridership by Stop

Northbound





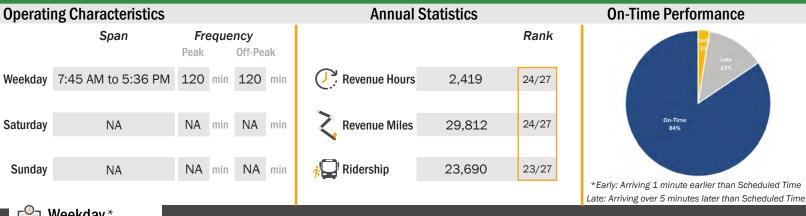


Fuller/Wolf

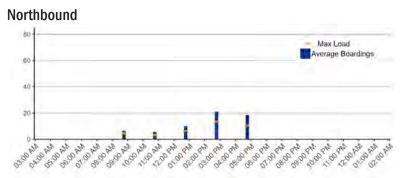
Service Type: Neighborhood

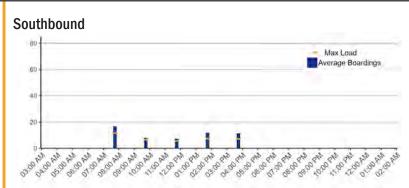
Description: From Latham Farms, Wolf Road and Crossgates Mall (weekdays only)

Key Destinations: Crossgates Mall, Crossgate Commons, University at Albany - Uptown Campus, SUNY Polytechnique, Colonie Center, Albany International Airport, Latham Farms





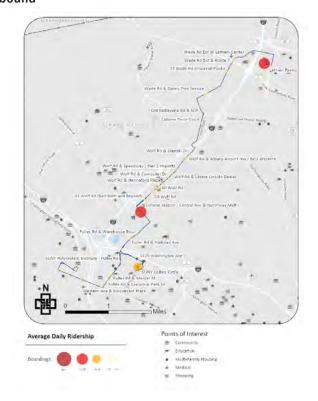




Weekday **
Ridership by Stop

Northbound







Fuller/Wolf

Service Type: Neighborhood

Description: From Latham Farms, Wolf Road and Crossgates Mall (weekdays only)

Key Destinations: Crossgates Mall, Crossgate Commons, University at Albany - Uptown Campus, SUNY Polytechnique, Colonie Center, Albany International Airport, Latham Farms

Daily Statistics



Saturday
Ridership by Trip

Northbound Southbound

NA NA

Saturday Ridership by Stop

Northbound Southbound

NA NA



Fuller/Wolf

Service Type: Neighborhood

Description: From Latham Farms, Wolf Road and Crossgates Mall (weekdays only)

Key Destinations: Crossgates Mall, Crossgate Commons, University at Albany - Uptown Campus, SUNY Polytechnique, Colonie Center, Albany International Airport, Latham Farms

Route Analysis

Strengths

- Provides cross-town service between Latham Farms and Crossgates Mall, via Colonie Center and UAlbany
- Relatively strong on-time performance with nearly 85 percent of sampled timepoints served on schedule

Weaknesses

- Does not provide direct service to Albany International Airport
- Service only once every two
- Service only operates until 5:36 on weekdays
- No weekend service
- Fewer than 10 passengers per
- Significant deviation to serve Collins Circle

Opportunities

- Interline Route 190 with Route 117 to provide one seat rides to Albany International Airport and Latham Farms on one end, and Walmart and Crossgates Mall on the other
- Increase service frequency during peak periods to make route more appealing and practical as a commuting option
- Streamline route by eliminating deviation to Collins Circle, as several other routes, including Purple Line, provide frequent connections to UAlbany campus
- Coordinate with City and University to improve pedestrian and cycling connections to and from Fuller Road, where existing bus stops are isolated from
- Eliminate Route and expand FLEX zone to include airport area and Latham Farms as an anchor



Northbound

NA

Southbound

NA



Northbound

Southbound

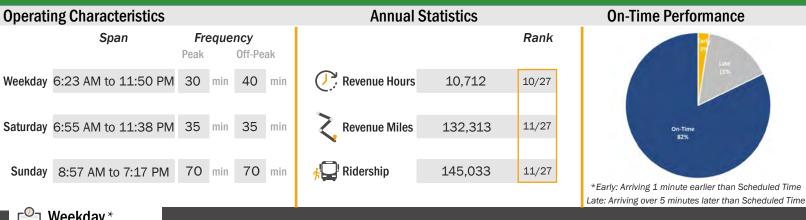
NA

NA

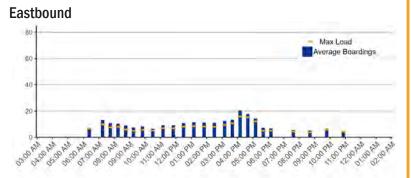


Rensselaer Third Street - Amtrak
Service Type: Neighborhood

Key Destinations: Albany Downtown, Greyhound Bus Terminal at Liberty St, Albany-Rensselaer Amtrak Station, Rensselaer County Plaza



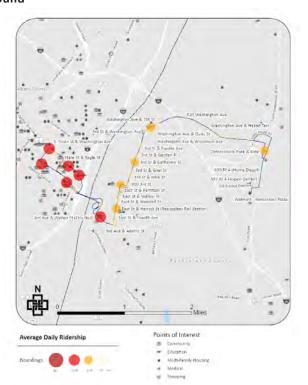


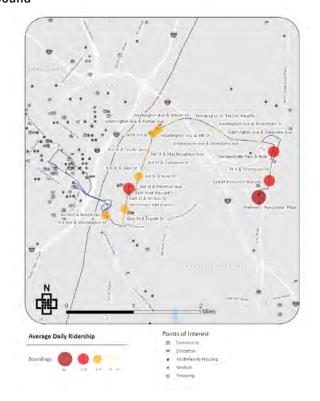


Westbound Max Load Average Boardings Average Boardings

Weekday ** Ridership by Stop

Eastbound







Rensselaer Third Street - Amtrak
Service Type: Neighborhood

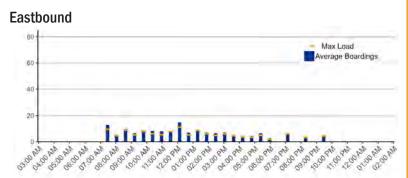
Description: Rensselaer 3rd Street/Amtrak, via Downtown Albany (7 days a week)

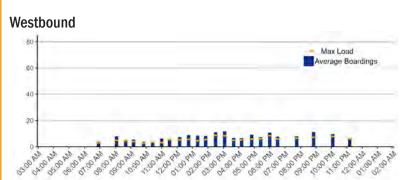
Key Destinations: Albany Downtown, Greyhound Bus Terminal at Liberty St, Albany-Rensselaer Amtrak Station, Rensselaer County Plaza

Daily Statistics



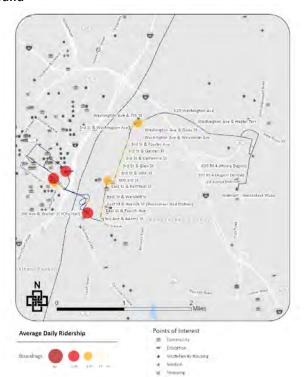


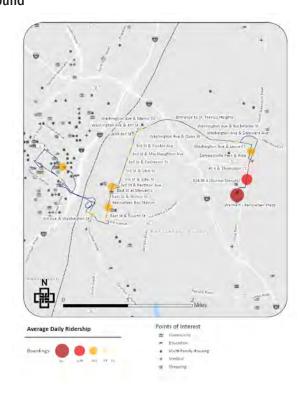




Saturday Ridership by Stop

Eastbound







Rensselaer Third Street - Amtrak Service Type: Neighborhood

Description: Rensselaer 3rd Street/Amtrak, via Downtown Albany (7 days a week)

Key Destinations: Albany Downtown, Greyhound Bus Terminal at Liberty St, Albany-Rensselaer Amtrak Station, Rensselaer County Plaza

Route Analysis

Strengths

- Directly connects Amtrak station to Empire State Plaza
- 30-mintue peak-period frequency
- Serves well-placed park-and-ride, relative to major highways, making for convenient service for commuters traveling to Albany or destinations served by Amtrak
- Connects Rensselaer residents to major retail destinations along the US-4 corridor
- 7-day-a-week service
- Extensive span of service on weekdays and Saturdays
- Relatively strong on-time performance with more than 80 percent of sampled timepoints served on schedule

Weaknesses

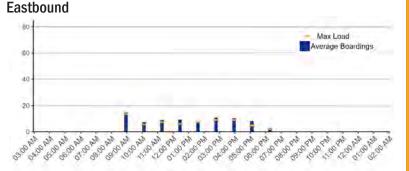
- Fewer than 10 passengers per trip on all service days
- Route doesn't quite reach Capital View Apartments or the Rensselaer Housing Authority property on Aiken Avenue, both potentially strong ridership generators
- Automobile-oriented environment east of downtown Rensselaer makes it difficult to serve potential ridership generators including Aldi, ShopRite, Regeneron, and several large apartment communities along Valley View Boulevard
- Insufficient frequency at most times to guarantee convenient Amtrak connections

Opportunities

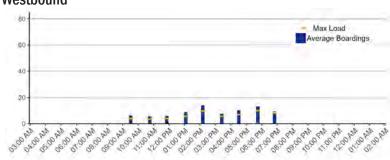
- Consider establishing a FLEX zone east of Rensselaer to extend the reach of CDTA to several potential ridership generators such as Aldi, Regeneron, multiple apartment communities along Valley View Boulevard, and the Rensselaer Housing Authority property on Aiken Avenue
- Extend service south along US-4 corridor to serve an unserved destinationrich area in the vicinity of I-90, US-4, and Route 151 (Luther Road)

Sunday Ridership by Trip





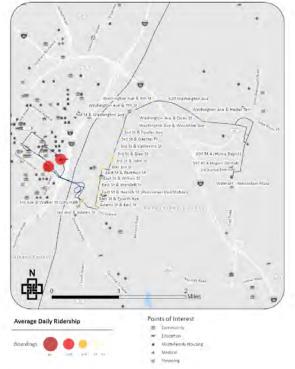
Westbound

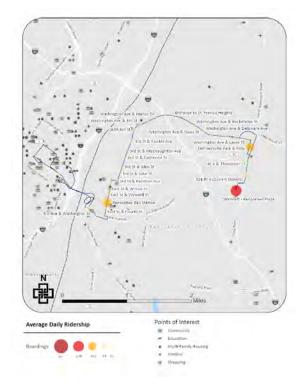




Sunday Ridership by Stop

Eastbound

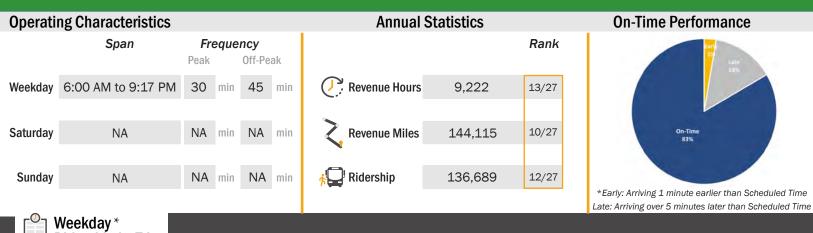




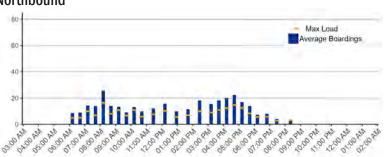


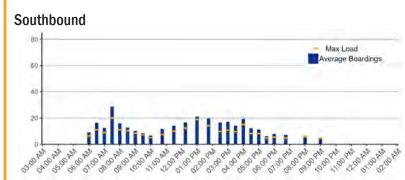
Albany - Troy - Rensselaer Service Type: Neighborhood **Description:** Between Downtown Albany, via Route 4 and Downtown Troy (weekdays

Key Destinations: Albany Downtown, Greyhound Bus Terminal at Liberty St, Department of Environmental Conservation, Hudson Valley Community College, Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library, Russel Sage College



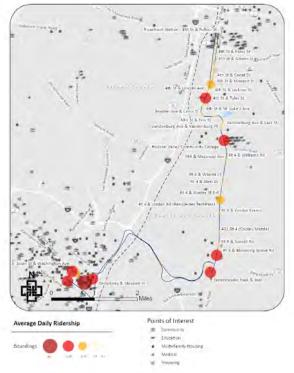


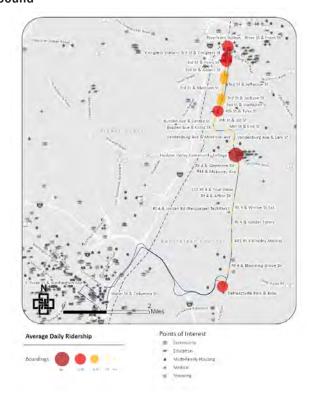




Weekday ** Ridership by Stop

Northbound

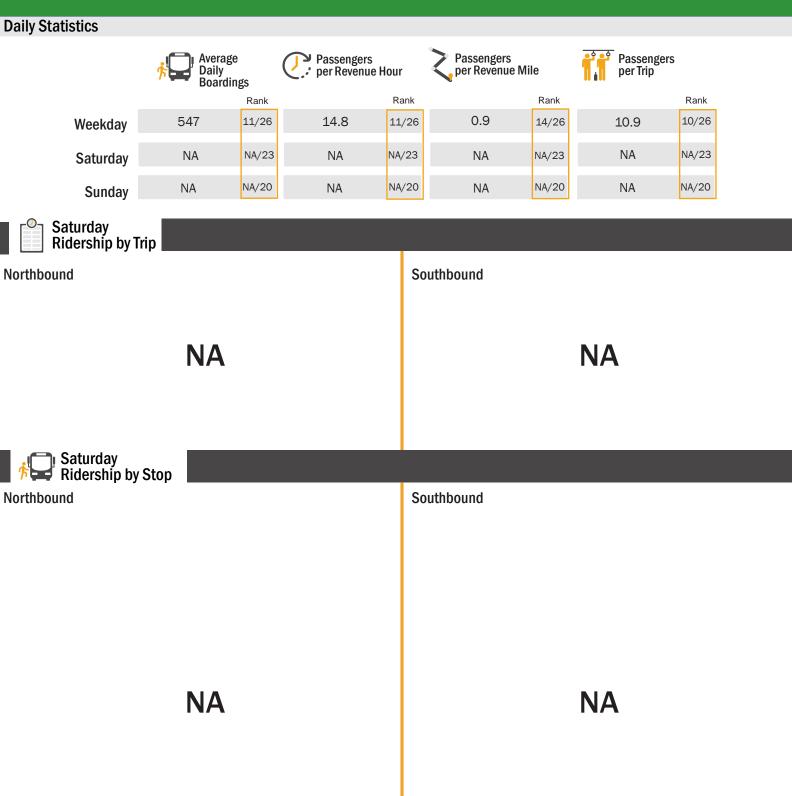






Albany - Troy - Rensselaer Service Type: Neighborhood Description: Between Downtown Albany, via Route 4 and Downtown Troy (weekdays

Key Destinations: Albany Downtown, Greyhound Bus Terminal at Liberty St, Department of Environmental Conservation, Hudson Valley Community College, Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library, Russel Sage College





Albany - Troy - Rensselaer Service Type: Neighborhood Description: Between Downtown Albany, via Route 4 and Downtown Troy (weekdays

Key Destinations: Albany Downtown, Greyhound Bus Terminal at Liberty St, Department of Environmental Conservation, Hudson Valley Community College, Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library, Russel Sage College

Route Analysis

Strengths

- Provides fast and relatively frequent (during peak-periods) service connecting Empire State Plaza, downtown Albany, Defreestville Park-and-Ride, and downtown Troy
- Direct and simple alignment
- Relatively strong on-time performance with nearly 85 percent of sampled timepoints served on schedule

Weaknesses

- Connects downtowns of Albany and Troy to HVCC, but not downtown Rensselaer
- Does not resemble a Neighborhood Route due to extensive highway operations
- No weekend service
- Relatively low frequency outside of peak periods
- Ends short of regionally significant destinations such as RPI
- No service after 9:00 hour

Opportunities

- Extend route past downtown Troy to Samaritan Hospital and RPI, two regionally significant activity and employment hubs
- Extend hours and days of service if additional activity hubs are added to route
- Establish a shared-use park-and-ride at Walmart on Hoosick Street (when/if development increases along Route 7) and extend route there instead of RPI
- Consider more "neighborhood" service including a variant that operates through Rensselaer via Washington Avenue or 3rd Avenue to directly link provide the city with HVCC
- Re-route to route 9 or route 20 to cover Hampton Manor and create a stronger north/south Connection in Rensselaer County



Sunday Ridership by Trip

Northbound

Southbound

NA



Northbound

Southbound

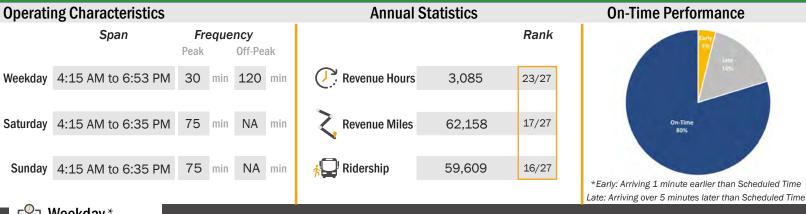
NΑ



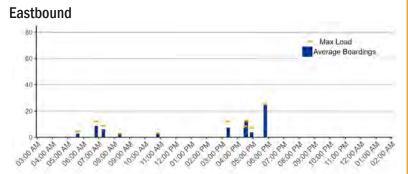
Albany - Schodack

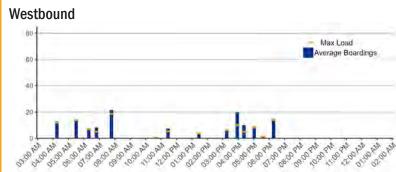
Service Type: Neighborhood

Key Destinations: MVP Arena, Albany Downtown, Greyhound Bus Terminal at Liberty St, University of Albany East Campus, Amazon Fulfillment Center ALB1





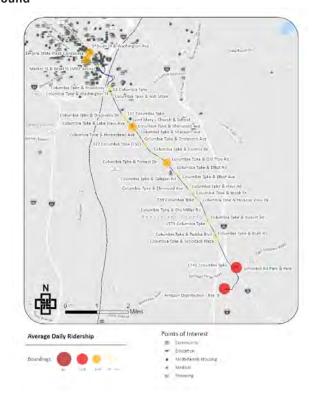




Weekday ** Ridership by Stop

Eastbound







Albany - Schodack

Service Type: Neighborhood

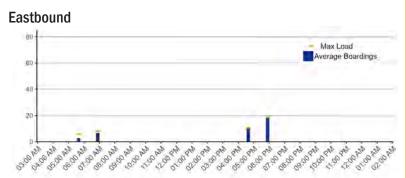
Description: Between Downtown Albany and Schodak Park & Ride (weekdays only)

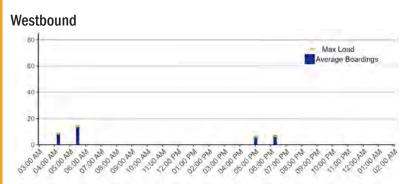
Key Destinations: MVP Arena, Albany Downtown, Greyhound Bus Terminal at Liberty St, University of Albany East Campus, Amazon Fulfillment Center ALB1

Daily Statistics



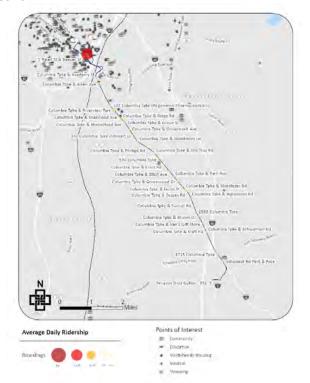


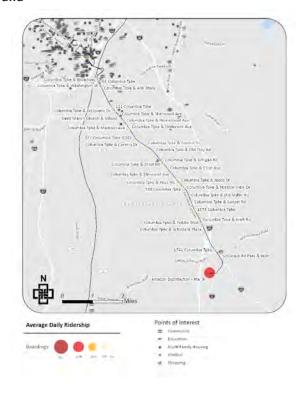




Saturday Ridership by Stop

Eastbound







Albany - Schodack

Service Type: Neighborhood

Description: Between Downtown Albany and Schodak Park & Ride (weekdays only)

Key Destinations: MVP Arena, Albany Downtown, Greyhound Bus Terminal at Liberty St, University of Albany East Campus, Amazon Fulfillment Center ALB1

Route Analysis

Strengths

- Serves traditional commuters traveling to Albany and reverse commuters traveling to destinations like the Amazon Distribution Center in Schodack
- Relatively strong on-time performance with 80 percent of sampled timepoints served on schedule
- Service to and from Nassau on select trips
- Highest weekend ridership per hour among Neighborhood routes

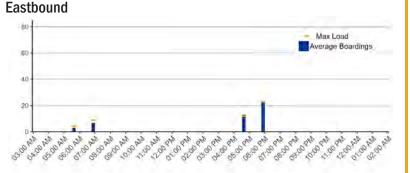
Weaknesses

- Fairly limited schedule for a Neighborhood route
- Ridership spikes before long service gaps suggest demand for more departure times in both directions
- Gaps in service to Schodack Park-and-Ride may limit the appeal of the service for prospective commuters. For example, a morning commuter to Albany can't return to the park-and-ride before 3:47. Similarly, a commuter to Albany must leave work by 5:30 to catch the last trip back to the park-and-ride
- Only one morning and one evening weekday trip allows Amazon employees to connect with Nassau service

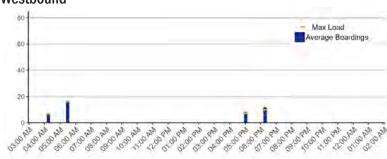
Opportunities

- Close schedule gaps to better accommodate existing riders and attract new passengers
- Alternatively, reclassify route as a Commuter route to manage rider expectations
- Consider combining more frequent Route 233 service as far south as Hannaford at US-4 and Columbia Turnpike with a new FLEX zone anchored at the same supermarket. The FLEX zone could provide feeder and circulator service in East Greenbush, as well as destinations along the US-4 corridor as far north as the Defreestville Park-and-Ride, and along Columbia Turnpike, as far south as Amazon

Sunday Ridership by Trip



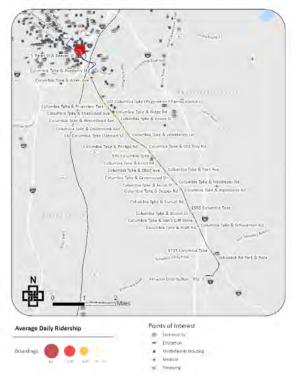
Westbound

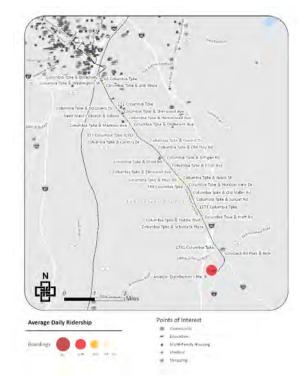




Sunday Ridership by Stop

Eastbound







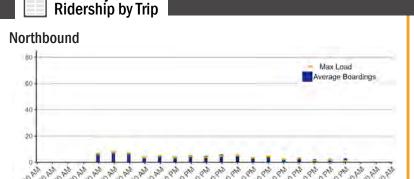
RPI Shuttle

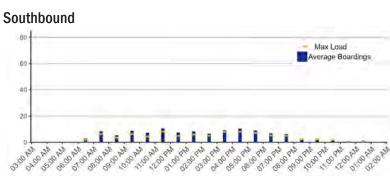
Service Type: Neighborhood

Description: Troy/Wynantskill via RPI Campus, between Downtown Troy and Wynantskill (weekdays and Saturdays)

Key Destinations: Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library, Russel Sage College, Rensselaer Polytechnic Institute (RPI), Monument Square (Troy), The Arts Center of the Capital Region, Emma Willard School

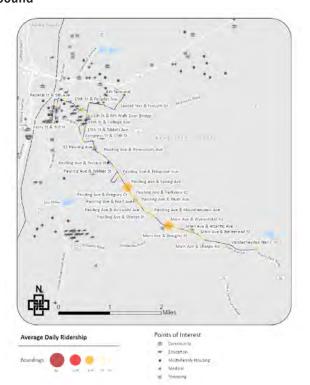
Annual Statistics On-Time Performance Operating Characteristics Span Frequency Rank Peak Off-Peak Weekday 6:30 AM to 12:53 AM **Revenue Hours** 4,685 60 60 min 19/27 min Revenue Miles Saturday 9:30 AM to 12:53 AM 60 min 60 min 57,566 19/27 Sunday NA NA min NA min Ridership 43,388 19/27 *Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time Weekday *

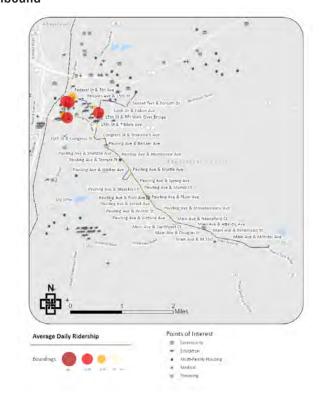




Weekday **
Ridership by Stop

Northbound







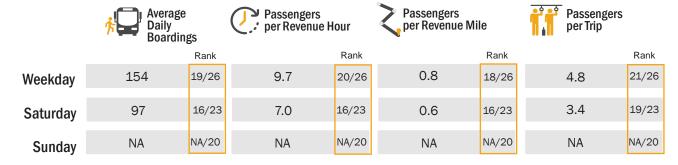
RPI Shuttle

Service Type: Neighborhood

Description: Troy/Wynantskill via RPI Campus, between Downtown Troy and Wynantskill (weekdays and Saturdays)

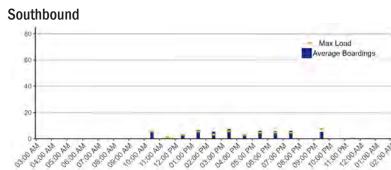
Key Destinations: Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library, Russel Sage College, Rensselaer Polytechnic Institute (RPI), Monument Square (Troy), The Arts Center of the Capital Region, Emma Willard School

Daily Statistics



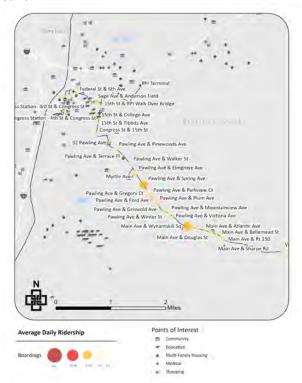
Saturday
Ridership by Trip

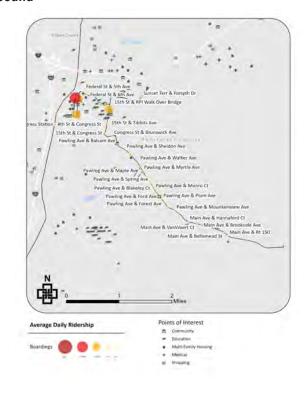




Saturday Ridership by Stop

Northbound







RPI Shuttle

Service Type: Neighborhood

Description: Troy/Wynantskill via RPI Campus, between Downtown Troy and Wynantskill (weekdays and Saturdays)

Key Destinations: Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library, Russel Sage College, Rensselaer Polytechnic Institute (RPI), Monument Square (Troy), The Arts Center of the Capital Region, Emma Willard School

Route Analysis

Strengths

- Provides several connections for students throughout Troy, including direct service to Russell Sage College and Rensselaer Polytechnic Institute
- Extensive span of service, especially at night
- Relatively strong on-time performance with nearly 80 percent of sampled timepoints served on schedule

Weaknesses

- Fewer than 5 passengers per trip on all service days
- Relatively low frequency
- No Sunday service
- Somewhat circuitous alignment between RPI and Russell Sage before continuing on to Wynantskill
- Ends short of several apartment complexes along Hoosick Drive, which are potentially strong ridership generators
- No direct access between east side of Troy near Emma Willard to Hudson Valley Community College, two major educational institutions and ridership generators

Opportunities

- Consider establishing a FLEX zone east of Troy to extend the reach of CDTA to and between several ridership generators, such as Hudson Valley Community College.
 The new zone would replace the Pawling Avenue section of route 286.
- Extend route north to Hoosick Street to serve apartment complexes such as Colonie Apartments, Troy Gardens Apartments, and Cedar Park Apartments
- Consider providing limited service on Sundays if additional ridership generators are added to route



Northbound

Southbound

NA

NA



Northbound

Southbound

NA

NA



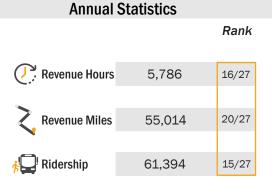
Griswold Heights

Service Type: Neighborhood

Description: Griswold Heights, Downtown Troy and St. Mary's Hospital (7 days a week)

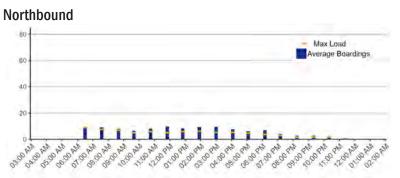
Key Destinations: Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library, Russel Sage College, Rensselaer Polytechnic Institute (RPI), John F Kennedy Towers Senior Housing, Monument Square (Troy), The Arts Center of the Capital Region, Emma Willard School, Griswold Heights Community Center

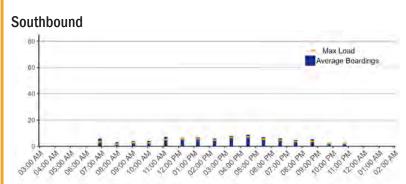
Operating Characteristics Span Frequency Peak Off-Peak Weekday 6:30 AM to 11:40 PM 65 65 min min Saturday 6:30 AM to 11:40 PM 65 min 65 min Sunday 8:50 AM to 6:05 PM 65 min





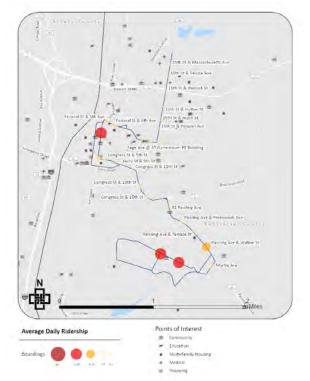


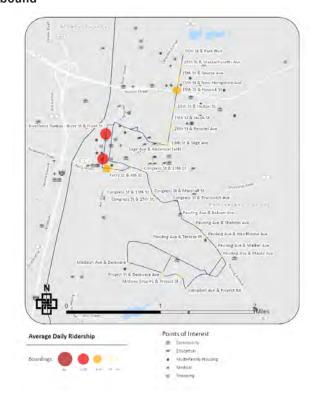




Weekday ** Ridership by Stop

Northbound







Griswold Heights

Service Type: Neighborhood

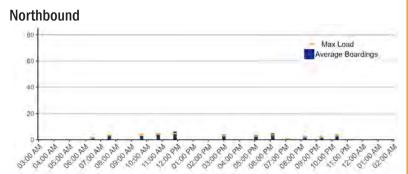
Description: Griswold Heights, Downtown Troy and St. Mary's Hospital (7 days a week)

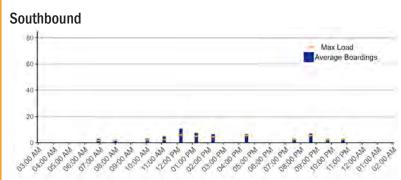
Key Destinations: Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library , Russel Sage College, Rensselaer Polytechnic Institute (RPI), John F Kennedy Towers Senior Housing, Monument Square (Troy), The Arts Center of the Capital Region, Emma Willard School, Griswold Heights Community Center

Daily Statistics

	Average Daily Boardings		Passengers per Revenue Hour		Passengers per Revenue Mile		Passengers per Trip	
		Rank		Rank		Rank		Rank
Weekday	195	17/26	11.3	16/26	1.1	10/26	5.8	20/26
Saturday	153	14/23	9.0	15/23	0.9	12/23	4.5	15/23
Sunday	75	14/20	8.2	14/20	0.8	11/20	4.1	15/20

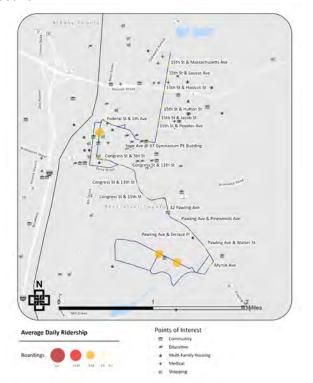
Saturday
Ridership by Trip

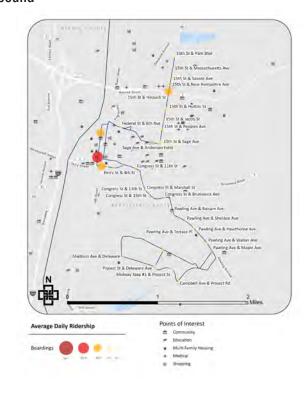




Saturday Ridership by Stop

Northbound







Griswold Heights

Service Type: Neighborhood

Description: Griswold Heights, Downtown Troy and St. Mary's Hospital (7 days a week)

Key Destinations: Troy Downtown, Waterfront Park, Troy Medical Plaza, Troy City Library , Russel Sage College, Rensselaer Polytechnic Institute (RPI), John F Kennedy Towers Senior Housing, Monument Square (Troy), The Arts Center of the Capital Region, Emma Willard School, Griswold Heights Community Center

Route Analysis

Strengths

- Provides access to important connections such as Rensselaer Polytechnic Institute, Russell Sage College, Emma Willard School, and St. Mary's Hospital
- Connects the Griswold Heights housing development and community center to Downtown Troy and North Troy
- Connects to the 370 to Schenectady and to multiple trunk routes in Downtown Troy
- Extensive span on weekdays and Saturdays
- Seven-day-a-week service

Weaknesses

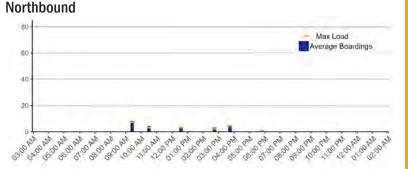
- Weekend trips average less than 5 passengers, and weekday trips average roughly 6 passengers
- 20 percent of sampled timepoints are served late
- Service is relatively infrequent, with 65 minute headways during all operating hours
- Short span of service on Sundays
- Part of the route is limited service only, stopping only in the Southbound direction and only 6 times a day
- The majority of riders board at stops closer to the terminals or in Downtown, while fewer passengers board at intermediate stops

Opportunities

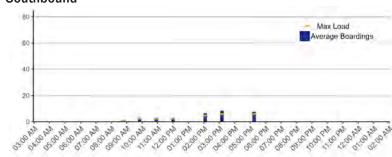
- The first Northbound trip on weekdays and Sundays sees the highest number of average boardings for those days, indicating that earlier operating hours in that direction may be appropriate
- Consider increasing the frequency of service to attract more riders
- Consolidate trips to increase passenger loads and improve efficiency and supplement service with the introduction of a FLEX zone
- 289 and 286 routes could be better scheduled along Pawling Avenue to have more consistently-timed headways between the two routes
- Recalibrate running and layover times to improve on-time performance
- Consider extending route to HVCC

Sunday

Ridership by Trip



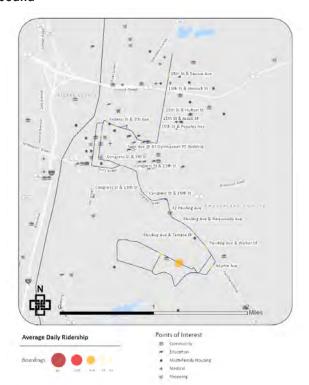
Southbound

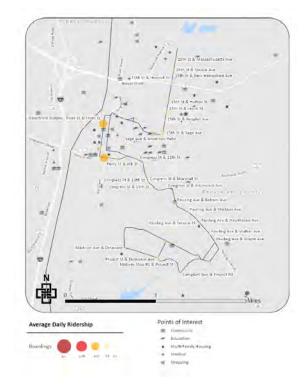




Sunday Ridership by Stop

Northbound



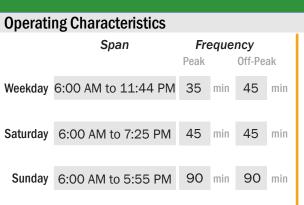


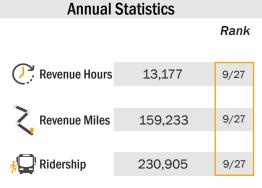


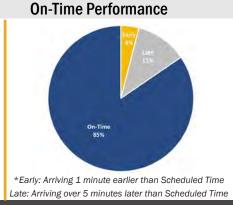
Van Vranken Avenue and Broadway
Service Type: Neighborhood

Description: Yates Village, Union College and Department of Social Services, Rotterdam Industrial Park (7 days a week)

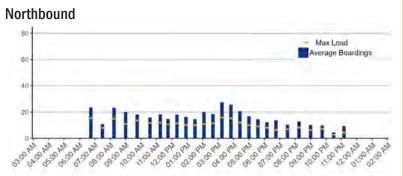
Key Destinations: Golub Price Chopper Warehouse, Schenectady County Department of Social Services, New York State Department of Transportation, MVP Healthcare, Clarkson University Capital Region Campus, Union College, Yates Magnet Elementary School, Sheridan Apartments

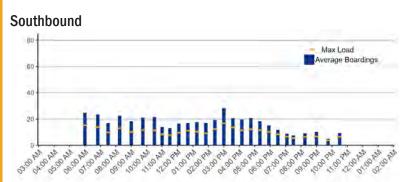






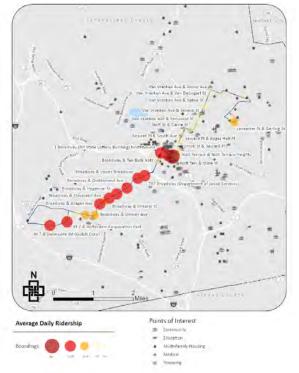


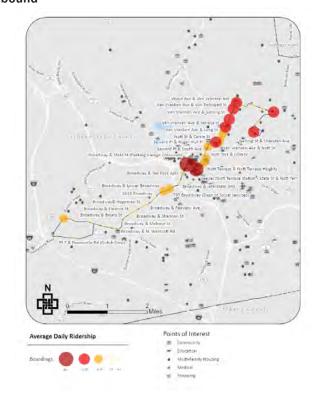






Northbound





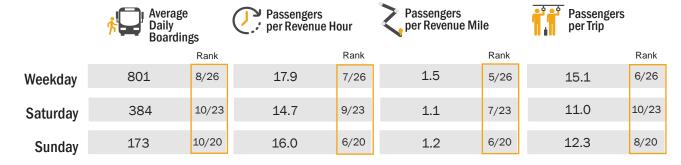


Van Vranken Avenue and Broadway
Service Type: Neighborhood

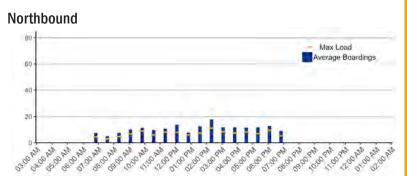
Description: Yates Village, Union College and Department of Social Services, Rotterdam Industrial Park (7 days a week)

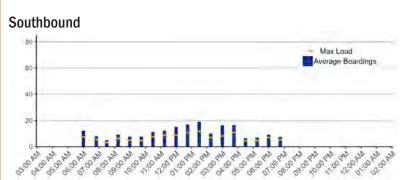
Key Destinations: Golub Price Chopper Warehouse, Schenectady County Department of Social Services, New York State Department of Transportation, MVP Healthcare, Clarkson University Capital Region Campus, Union College, Yates Magnet Elementary School, Sheridan Apartments

Daily Statistics



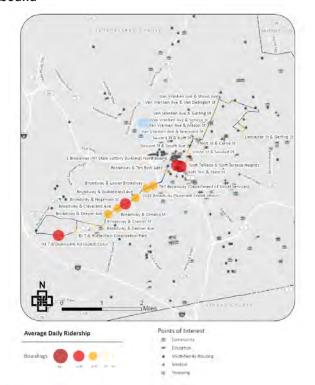
Saturday
Ridership by Trip

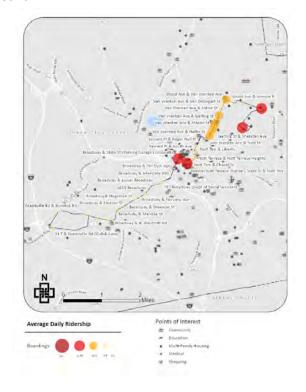




Saturday
Ridership by Stop

Northbound







Van Vranken Avenue and Broadway Service Type: Neighborhood

Description: Yates Village, Union College and Department of Social Services, Rotterdam Industrial Park (7 days a week)

Key Destinations: Golub Price Chopper Warehouse, Schenectady County Department of Social Services, New York State Department of Transportation, MVP Healthcare, Clarkson University Capital Region Campus, Union College, Yates Magnet Elementary School, Sheridan Apartments

Route Analysis

Strengths

- Connects Union College, the Rotterdam Industrial Park, and housing developments in East Schenectady to Downtown Schenectady, the Schenectady Train Station, and BRT (Red Line)
- 85 percent of sampled timepoints are served on-time
- There are an average of 15 passengers per trip on weekdays, which is relatively high in comparison to other neighborhood routes. This ridership is consistent throughout the day, particularly on weekdays and Saturdays
- Seven-day-a-week service

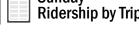
Weaknesses

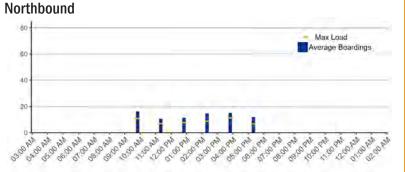
- Somewhat short span of service on weekends, closing at 7:25 p.m. on Saturdays and 5:55 p.m. on Sundays
- Somewhat infrequent service, with the shortest headways (30 minutes) on Sundays only, while weekdays and Saturdays have 35-45 minute headways
- Does not connect to Ellis Hospital, which currently lacks direct access to/ from areas west of Downtown Schenectady and Rotterdam

Opportunities

- Consider increasing frequency of service due to high ridership and high productivity of this route, especially on weekdays
- Consider reconfiguring the route to service Ellis Hospital without having to transfer, or adjusting schedule to facilitate shorter transfers to the 354

Sunday Ridership by Trip



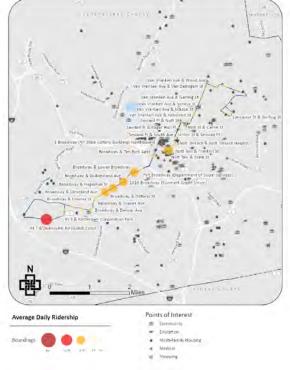


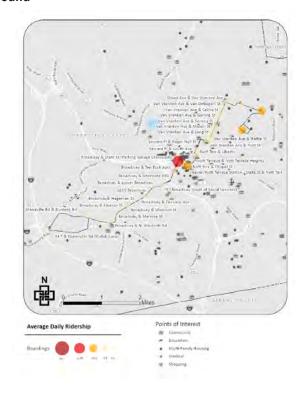
Southbound Max Load Average Boardings 60 THO AND M. Land Sam W. 160 Peg 05:00 Ptg 050 Ptg Can the the the the the



Sunday Ridership by Stop

Northbound



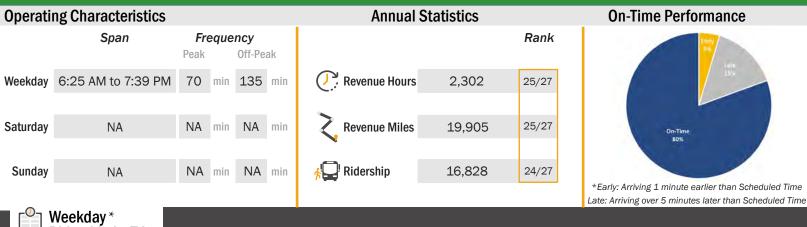




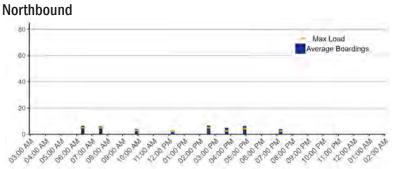
McClellan Street and Altamont Avenue Service Type: Neighborhood

Description: McClellan St/Altamont Ave, between Ellis Hospital, Sheridan Village and Walmart, Price Chopper (weekdays only)

Key Destinations: Price Chopper Center, Walmart at Hannaford Plaza, Walgreens at McAllen and Eastern Parkway, CVS at McAllen and Eastern Parkway, Schenectady High School, Ellis Hospital, Terminal at Zoller School



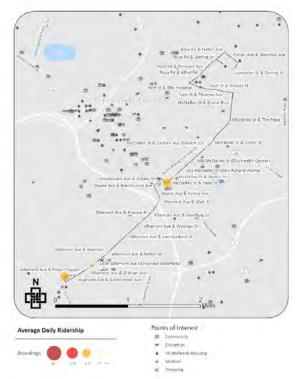




Southbound Max Load Average Boardings Average Boardings

Weekday **
Ridership by Stop

Northbound





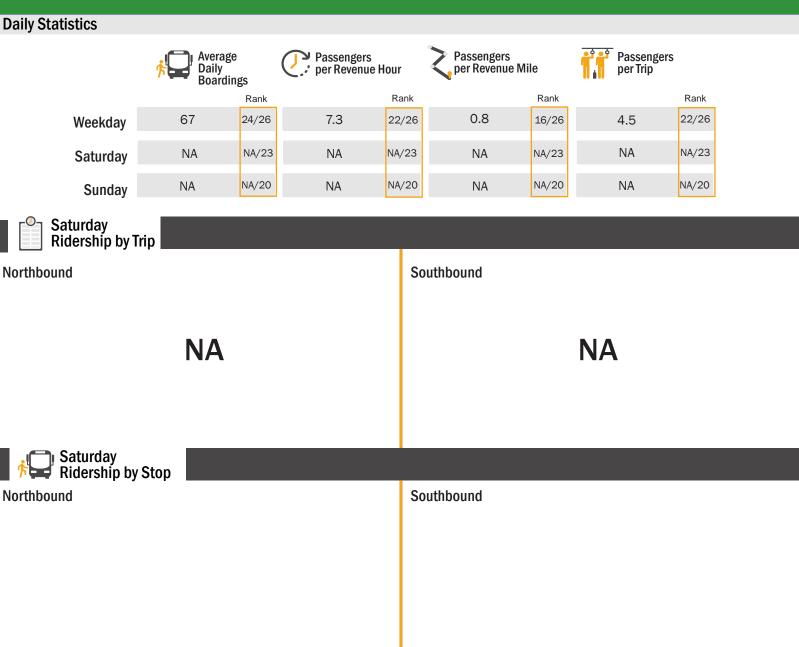


McClellan Street and Altamont Avenue Service Type: Neighborhood

Description: McClellan St/Altamont Ave, between Ellis Hospital, Sheridan Village and Walmart, Price Chopper (weekdays only)

Key Destinations: Price Chopper Center, Walmart at Hannaford Plaza, Walgreens at McAllen and Eastern Parkway, CVS at McAllen and Eastern Parkway, Schenectady High School, Ellis Hospital, Terminal at Zoller School

Daily Statistics



NA NA



McClellan Street and Altamont Avenue Service Type: Neighborhood

Description: McClellan St/Altamont Ave, between Ellis Hospital, Sheridan Village and Walmart, Price Chopper (weekdays only)

Key Destinations: Price Chopper Center, Walmart at Hannaford Plaza, Walgreens at McAllen and Eastern Parkway, CVS at McAllen and Eastern Parkway, Schenectady High School, Ellis Hospital, Terminal at Zoller School

Route Analysis

Strengths

- Straightforward alignment
- Connects to important shopping points of interest, including Walmart and Price Chopper, as well as Ellis Hospital and Sheridan Apartments

Weaknesses

- Very limited service, running infrequently on weekdays and not at all on weekends
- Averages less than 5 passengers per trip
- One of the least productive neighborhood routes when considering passengers per revenue mile and passengers per trip

Opportunities

- Consider combining with route 351, with a few trips running an extension to Schenectady High School
- Consider adding stop at Schenectady High School, providing an alternative route to what is now a high-ridership stop for the 810 neighborhood shuttle
- Alternatively, consider eliminating this route and rely on added FLEX service as well as overlapping shuttle and neighborhood routes



Northbound

Southbound

NA

NA



Northbound

Southbound

NA

NA



Scotia and Mt. Pleasant

Service Type: Neighborhood

Description: Scotia/Mt. Pleasant, between Glenville Walmart, Hamilton Hill and Altamont Avenue (7 days a week)

Key Destinations: Price Chopper Center,, Walmart at Hannaford Plaza, Hamilton Elementary School, Mont Pleasant Middle School, Martin Luther King Elementary School, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Schenectady County Community College, Walmart Supercenter - Glenville

Operating Characteristics





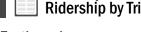


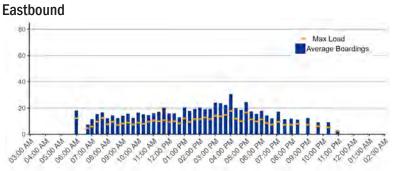
On-Time Performance



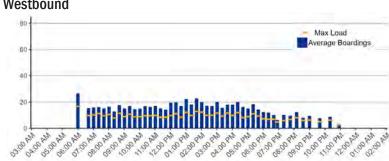
Late: Arriving over 5 minutes later than Scheduled Time





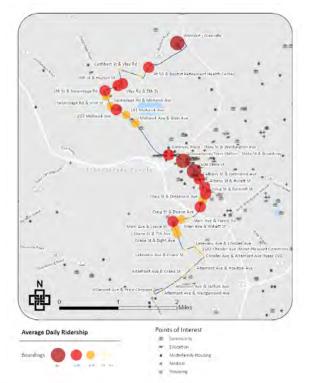


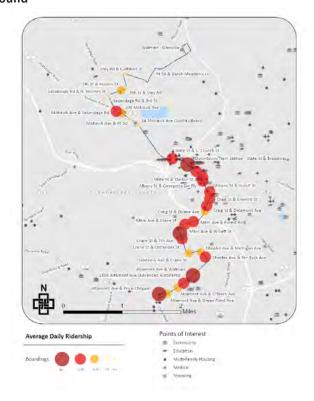
Westbound





Eastbound







Scotia and Mt. Pleasant

Service Type: Neighborhood

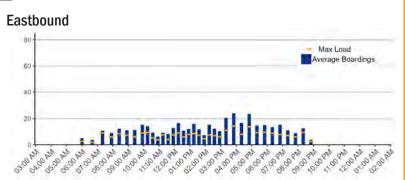
Description: Scotia/Mt. Pleasant, between Glenville Walmart, Hamilton Hill and Altamont Avenue (7 days a week)

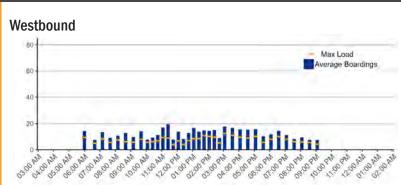
Key Destinations: Price Chopper Center,, Walmart at Hannaford Plaza, Hamilton Elementary School, Mont Pleasant Middle School, Martin Luther King Elementary School, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Schenectady County Community College, Walmart Supercenter – Glenville

Daily Statistics

	Average Daily Boardings		Passengers per Revenue Hour		Passengers per Revenue Mile		Passengers per Trip	
		Rank		Rank		Rank		Rank
Weekday	1,343	5/26	19.9	4/26	1.8	4/26	14.4	7/26
Saturday	1,021	2/23	19.0	3/23	1.9	3/23	14.4	5/23
Sunday	596	3/20	24.0	2/20	2.1	2/20	15.7	4/20

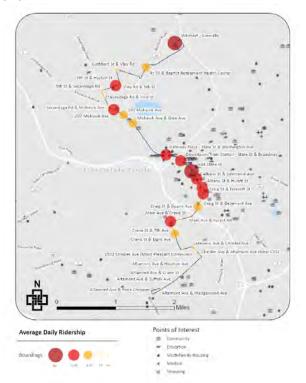
Saturday
Ridership by Trip

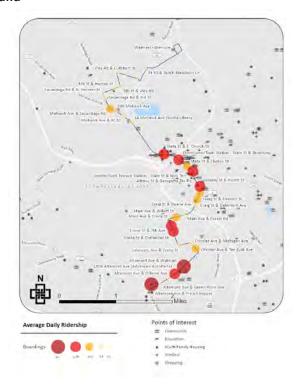




Saturday Ridership by Stop

Eastbound







Scotia and Mt. Pleasant

Service Type: Neighborhood

Description: Scotia/Mt. Pleasant, between Glenville Walmart, Hamilton Hill and Altamont Avenue (7 days a week)

Key Destinations: Price Chopper Center,, Walmart at Hannaford Plaza, Hamilton Elementary School, Mont Pleasant Middle School, Martin Luther King Elementary School, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Schenectady County Community College, Walmart Supercenter - Glenville

Route Analysis

Strengths

- Well-connected to other CDTA and transit
- Connects multiple shopping destinations, such as Walmart, Price Chopper shopping center, CVS, and Dollar Store
- Seven-day-a-week service
 - 84% of sampled timepoints are served on-time
- Excellent span of service and frequencies on weekdays
- The route averages 14-15 passengers per trip on weekdays, which is relatively high compared to other neighborhood routes
- There are a consistent number of passengers boarding at most stops along the route

Weaknesses

- On weekdays, the number of passengers per trip in the Westbound direction peaks on the first trip of the day, suggesting that earlier operating hours may be appropriate
- On Sundays, the average number of passengers per trip increases, but the frequency of service is lower (i.e., 40minute headways)

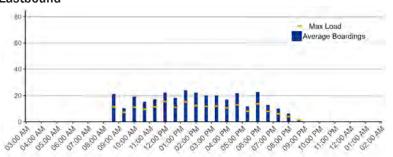
Opportunities

- Increase span of service to open earlier on weekday mornings
- Consider increasing the frequency of service on Sundays to match Saturday service

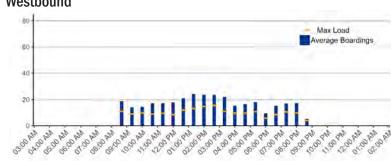


Sunday Ridership by Trip





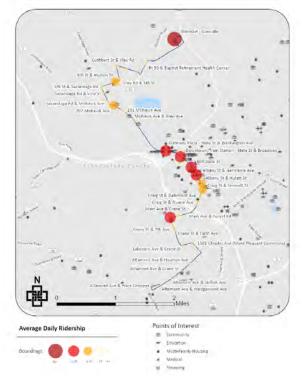
Westbound

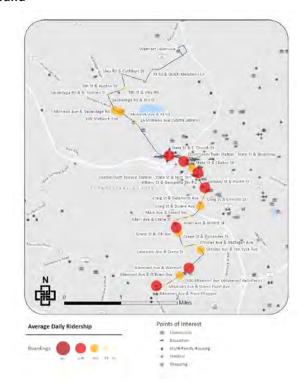




Sunday Ridership by Stop

Eastbound





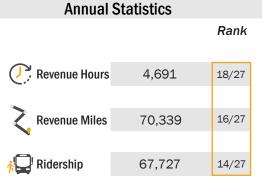


Rotterdam Square Mall and Nott Street **Service Type:** Neighborhood

Description: Ellis Hospital, Shop Rite Plaza, Union College, Downtown Schenectady, via Port Rotterdam (7 days a week)

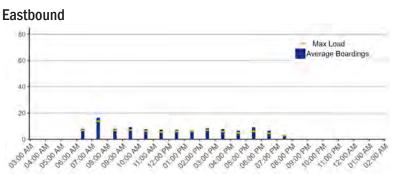
Key Destinations: Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), MVP Healthcare at Nott Terrace/State Street, Schenectady County Community College, Union College, Ellis Hospital, Schenectady High School, Niskayuna High School

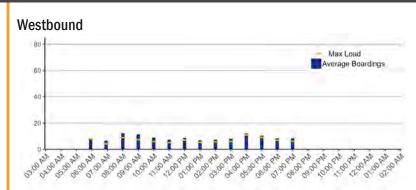






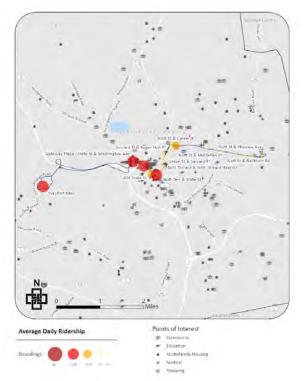


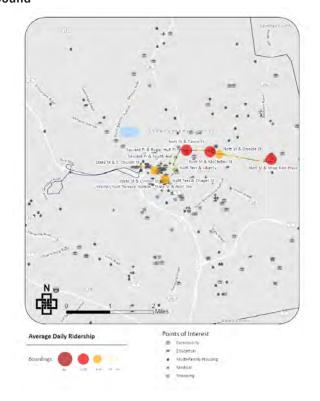




Weekday ** Ridership by Stop

Eastbound





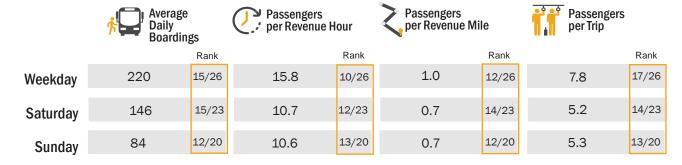


Rotterdam Square Mall and Nott Street **Service Type:** Neighborhood

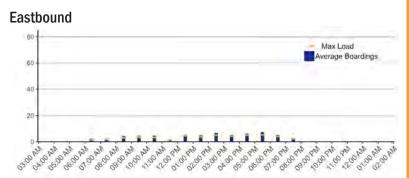
Description: Ellis Hospital, Shop Rite Plaza, Union College, Downtown Schenectady, via Port Rotterdam (7 days a week)

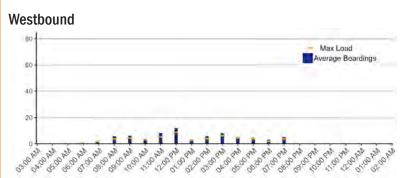
Key Destinations: Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), MVP Healthcare at Nott Terrace/State Street, Schenectady County Community College, Union College, Ellis Hospital, Schenectady High School, Niskayuna High School

Daily Statistics



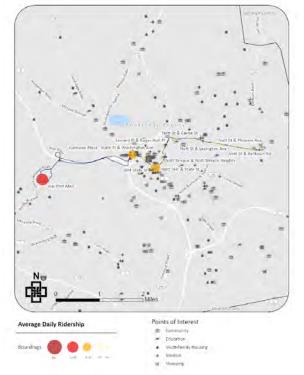
Saturday Ridership by Trip

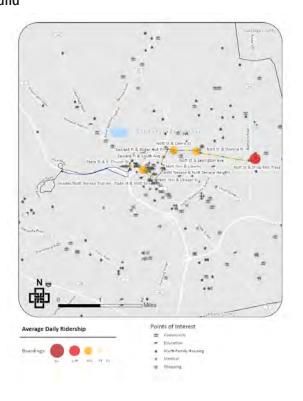




Saturday
Ridership by Stop

Eastbound







Rotterdam Square Mall and Nott Street Service Type: Neighborhood

Description: Ellis Hospital, Shop Rite Plaza, Union College, Downtown Schenectady, via Port Rotterdam (7 days a week)

Key Destinations: Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), MVP Healthcare at Nott Terrace/State Street, Schenectady County Community College, Union College, Ellis Hospital, Schenectady High School, Niskayuna High School

Route Analysis

Strengths

- Connects Downtown Schenectady to Ellis Hospital, Union College, Schenectady County Community College, Shoprite, and Via Port / Rotterdam Square Mall
- Well-connected to other CDTA and transit routes, including several other neighborhood routes, the Red Line, the 810 shopping route, the 763 commuter route, and the Schenectady Train Station
- 84% of sampled time points arrived on time
- Seven-day-a-week service

Weaknesses

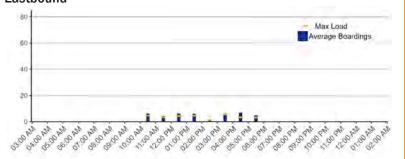
- The route stops short from or does not serve several medium-density housing areas which are not currently served by the fixed-route system
- Somewhat limited span of service, especially on Sundays
- Limited frequency, running only every 60 minutes throughout the week

Opportunities

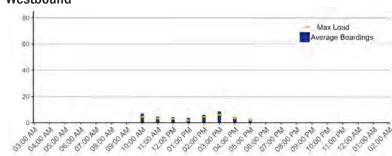
- Consider extending route to the West to serve more housing developments, such as Edison Senior Apartments, Brookview Court Apartments, Burdeck Street Apartments, and/or Solara Luxury Apartments
- Add a stop at Long Pond Village apartments
- Alternatively, create a FLEX zone to service apartment complexes not serviced by fixed-route
- Increase frequency of service to attract more ridership

Sunday Ridership by Trip

Eastbound



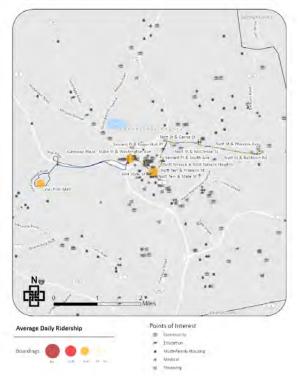
Westbound

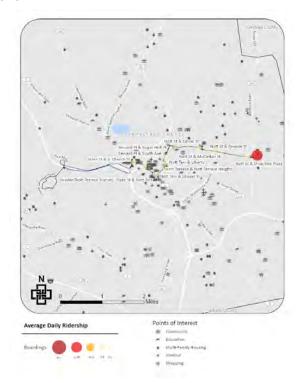




Sunday Ridership by Stop

Eastbound







Schenectady/Colonie

Service Type: Neighborhood

Description: Schenectady/Colonie, between Downtown Schenectady and Colonie Center (7 days a week)

Key Destinations: Schenectady County Community College, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Vale Park, William C Keane Elementary School, Schenectady Union College, ALDI at Albany St and School St, Mohawk Commons at Baltown Road, Colonie Plaza at NY5/NY155, Kim's Asian Market at Locust Park/NY5, Colonie Center

Operating Characteristics

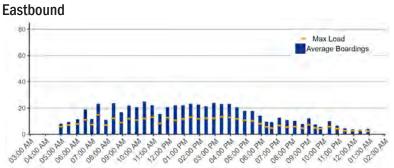


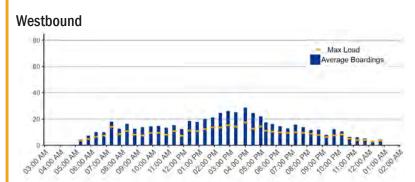




Weekday * Ridership by Trip

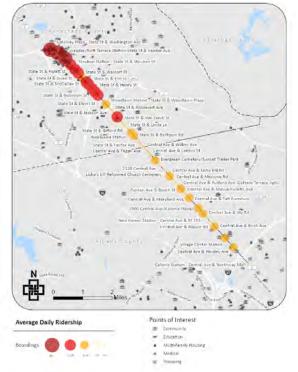


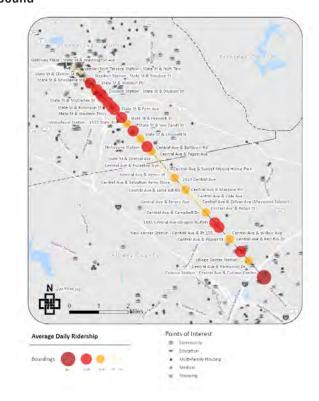




∥ Weekday ** Ridership by Stop

Eastbound







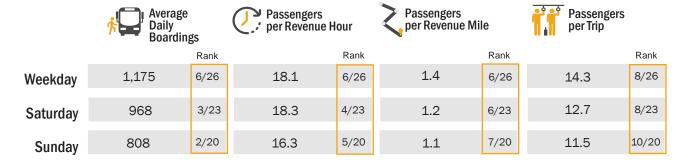
Schenectady/Colonie

Service Type: Neighborhood

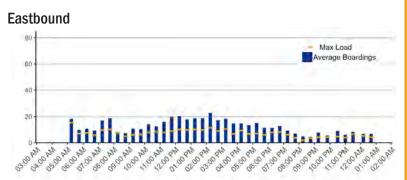
Description: Schenectady/Colonie, between Downtown Schenectady and Colonie Center (7 days a week)

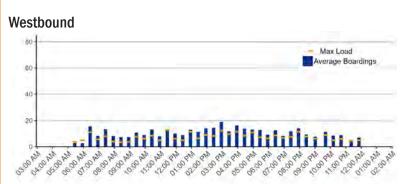
Key Destinations: Schenectady County Community College, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Vale Park, William C Keane Elementary School, Schenectady Union College, ALDI at Albany St and School St, Mohawk Commons at Baltown Road, Colonie Plaza at NY5/NY155, Kim's Asian Market at Locust Park/NY5, Colonie Center

Daily Statistics



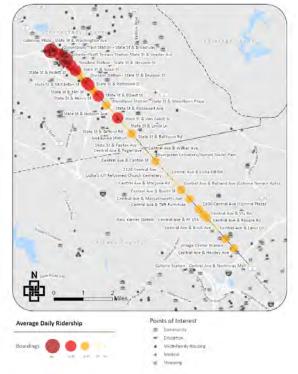
Saturday Ridership by Trip

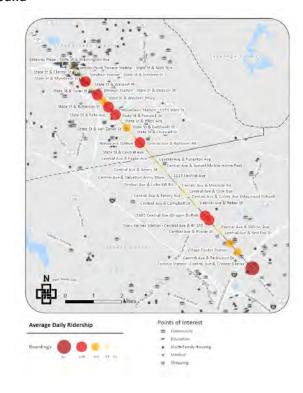




Saturday Ridership by Stop

Eastbound







Schenectady/Colonie

Service Type: Neighborhood

Description: Schenectady/Colonie, between Downtown Schenectady and Colonie Center (7 days a week)

Key Destinations: Schenectady County Community College, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Vale Park, William C Keane Elementary School, Schenectady Union College, ALDI at Albany St and School St, Mohawk Commons at Baltown Road, Colonie Plaza at NY5/NY155, Kim's Asian Market at Locust Park/NY5, Colonie Center

Route Analysis

Strengths

- Direct alignment connecting to Route 1 into Albany, and connecting to all Red Line stops
- Well-connected to other CDTA and transit routes, including several other neighborhood routes, the Red Line, the 810 shopping route, the 763 commuter route, and the Schenectady Train Station
- Connects to multiple educational institutions and libraries, and serves a mixed-use shopping corridor with multiple groceries, pharmacies, and shopping malls
- 7-day-a-week service
- Excellent span of service, with both early morning and late-night service, as well as relatively frequent service

Weaknesses

- 23% of sampled timepoints are served late
- On Saturdays and Sundays, the number of passengers per trip peaks on the first trip in the Eastbound direction, indicating that earlier operating hours may be appropriate

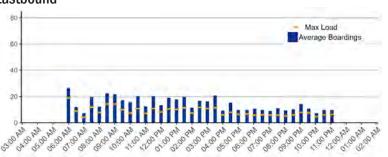
Opportunities

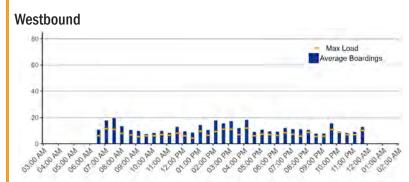
- Consider increasing the frequency of service at peak hours in order to accommodate higher ridership during the day
- Consider adding earlier Eastbound trips on Saturdays and Sundays to accommodate for high demand
- Recalibrate running and layover times to improve on-time performance

Sunday

Ridership by Trip



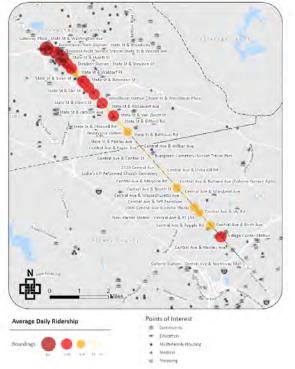


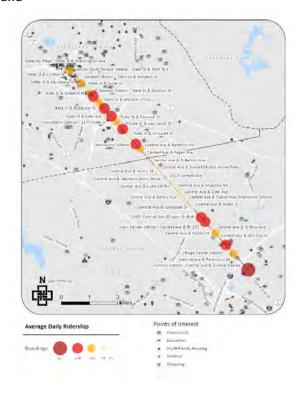




Sunday Ridership by Stop

Eastbound







Troy/Schenectady

Service Type: Neighborhood

Description: Troy/Schenectady, between Downtown Troy, Latham Farms, Downtown Schenectady and Rivers Casino (7 days a week)

Key Destinations: Schenectady County Community College, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Union College, Walgreens at McAllen and Eastern Parkway, CVS at McAllen and Eastern Parkway, Albany International Airport, Latham Farms Shopping Center, The Shoppes at Latham Circle, Troy Downtown

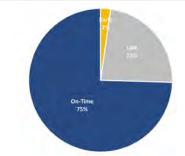
Operating Characteristics







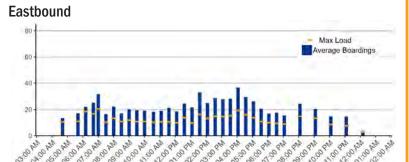
On-Time Performance



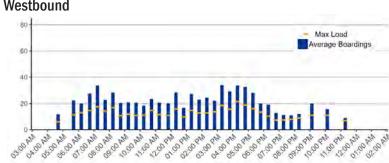
*Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time





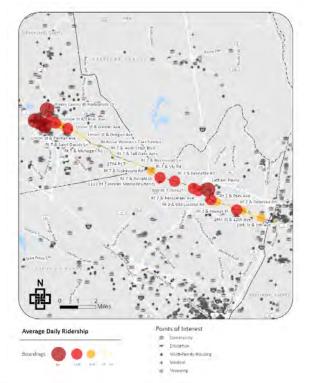


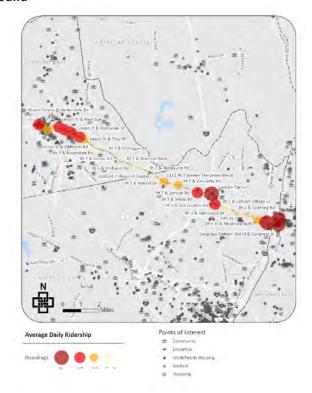
Westbound





Eastbound







Troy/Schenectady

Service Type: Neighborhood

Description: Troy/Schenectady, between Downtown Troy, Latham Farms, Downtown Schenectady and Rivers Casino (7 days a week)

Key Destinations: Schenectady County Community College, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Union College, Walgreens at McAllen and Eastern Parkway, CVS at McAllen and Eastern Parkway, Albany International Airport, Latham Farms Shopping Center, The Shoppes at Latham Circle, Troy Downtown

Daily Statistics





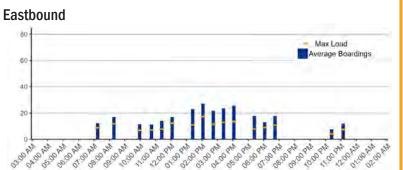




		Rank		Rank		Rank		Rank
Weekday	1,405	4/26	17.0	8/26	1.2	9/26	20.7	4/26
Saturday	891	4/23	15.2	8/23	1.1	9/23	18.6	1/23
Sunday	510	6/20	15.6	7/20	0.9	10/20	17.0	1/20



Saturday Ridership by Trip

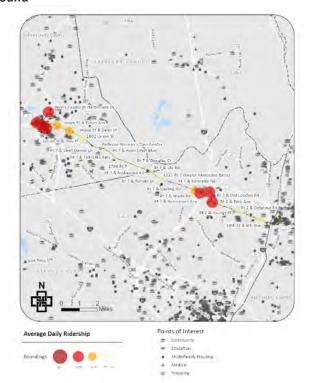


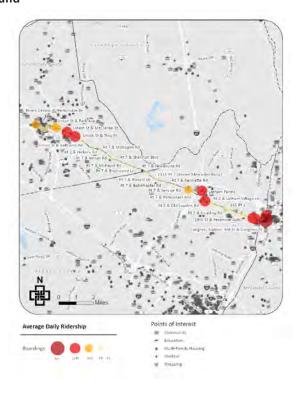
Westbound Max Load Average Boardings



Saturday
Ridership by Stop

Eastbound







Troy/Schenectady

Service Type: Neighborhood

Description: Troy/Schenectady, between Downtown Troy, Latham Farms, Downtown Schenectady and Rivers Casino (7 days a week)

Key Destinations: Schenectady County Community College, MVP Healthcare at Nott Terrace/State Street, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Union College, Walgreens at McAllen and Eastern Parkway, CVS at McAllen and Eastern Parkway, Albany International Airport, Latham Farms Shopping Center, The Shoppes at Latham Circle, Troy Downtown

Route Analysis

Strengths

- Direct alignment connecting Downtown Troy and Downtown Schenectady, as well as multiple colleges and significant shopping districts in between
- Well-connected to other CDTA and transit routes, including several neighborhood routes and the Schenectady Train Station
- Seven-day-a-week service
- Excellent span of service on weekdays and Saturdays, with both early morning and late-night service
- Relatively frequent service on weekdays

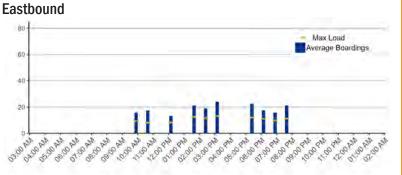
Weaknesses

- 23% of sampled timepoints are served
- Somewhat limited span and frequency of service on Sundays
- Misses some higher density living options in Schenectady and Latham that are relatively close to the route, and runs somewhat far from Siena College

Opportunities

- Consider extending route across the river in Schenectady by roughly a mile to provide service to Heritage Garden Apartments, Holiday Senior Living Glenville, and/or The Reserve at Glenville apartments, as well as to the apartments and senior living residential areas off Delatour Rd in Latham
- Alternatively, offer FLEX service to missed medium-density residential destinations
- Expand FLEX service to include Siena College
- Consider offering express service for this route, especially on weekends when the number of passengers boarding remains low between Downtown Schenectady, the Latham shopping centers, and Downtown Troy
- Recalibrate running and layover times to improve on-time performance
- Extend service to RPI in Troy

Sunday Ridership by Trip



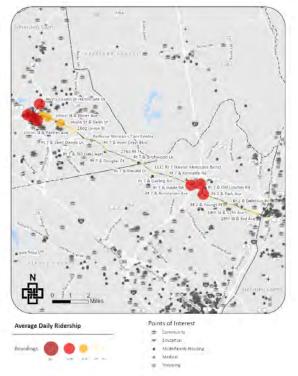
Westbound

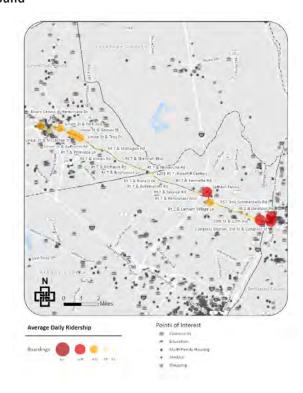




Sunday Ridership by Stop

Eastbound





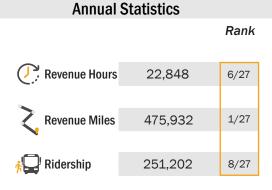


Schenectady-Wilton Mall via Route 50 **Service Type:** Neighborhood

Description: Route 50, between Downtown Schenectady, Saratoga (High Rock/Quad Graphics), and Wilton (7 days a week)

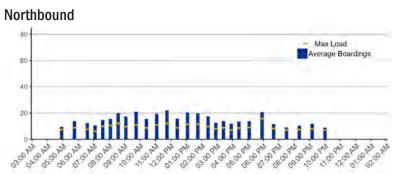
Key Destinations: Schenectady County Community College, Saratoga Spring High School, Saratoga Congress Park, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall, Wilton Mall (Terminal), Walmart Supercenter in Saratoga Springs

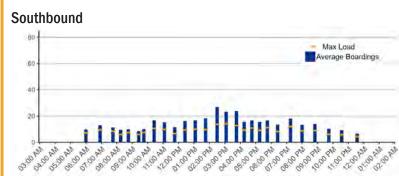
Operating Characteristics Span Frequency Peak Off-Peak Weekday 4:55 AM to 12:28 AM 40 40 min min Saturday 4:55 AM to 12:27 AM 40 min 40 min Sunday 8:05 AM to 8:20 PM 50 min





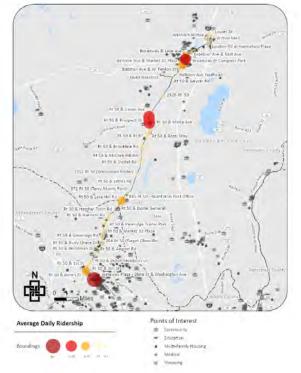


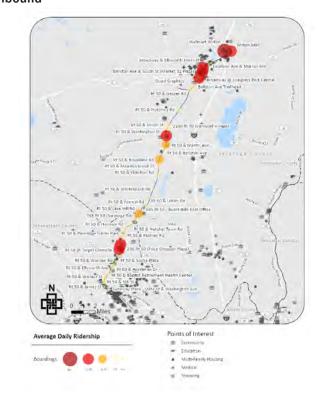




Weekday ** Ridership by Stop

Northbound





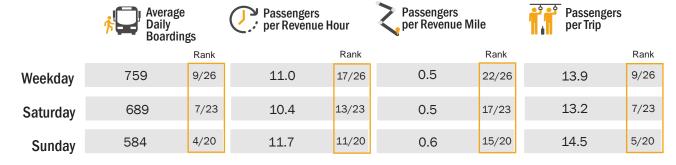


Schenectady-Wilton Mall via Route 50 **Service Type:** Neighborhood

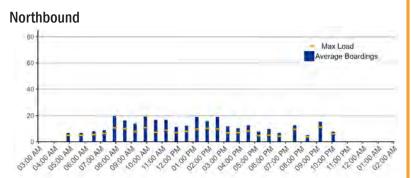
Description: Route 50, between Downtown Schenectady, Saratoga (High Rock/Quad Graphics), and Wilton (7 days a week)

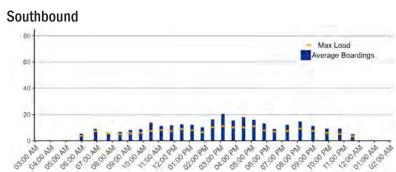
Key Destinations: Schenectady County Community College, Saratoga Spring High School, Saratoga Congress Park, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall, Wilton Mall (Terminal), Walmart Supercenter in Saratoga Springs

Daily Statistics



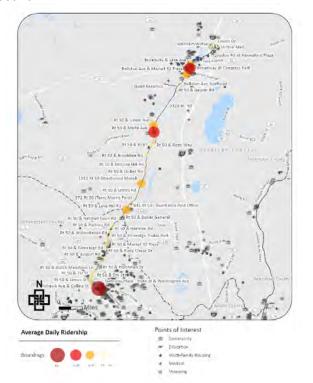
Saturday
Ridership by Trip

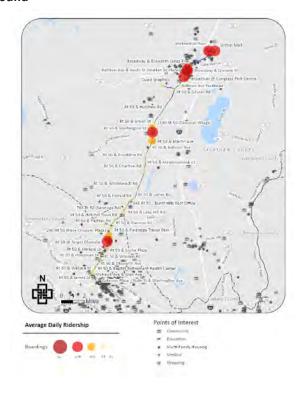




Saturday Ridership by Stop

Northbound







Schenectady-Wilton Mall via Route 50 Service Type: Neighborhood

Description: Route 50, between Downtown Schenectady, Saratoga (High Rock/Quad Graphics), and Wilton (7 days a week)

Key Destinations: Schenectady County Community College, Saratoga Spring High School, Saratoga Congress Park, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall, Wilton Mall (Terminal), Walmart Supercenter in Saratoga Springs

Route Analysis

Strengths

- Direct route connecting Schenectady and Saratoga Springs, as well as multiple shopping destinations and some medium-density housing options
- Excellent span of service on weekdays and Saturdays, offering both early morning and late-night service

Weaknesses

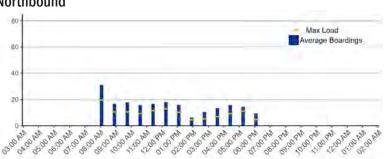
- 22% of samples timepoints are served late
- Limited frequency and span of service on Sundays
- Ridership on Sundays in the Northbound direction peaks on the first trip of the day, indicating that earlier service may be appropriate

Opportunities

- Recalibrate running and layover times to improve on-time performance
- Consider operating earlier on Sundays



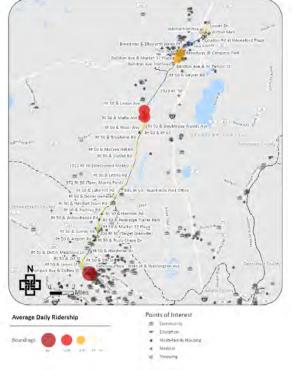


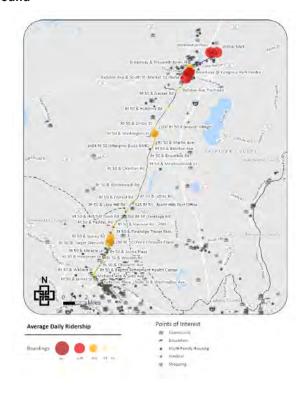


Southbound Max Load Average Boardings 60 OS/OO AM



Northbound







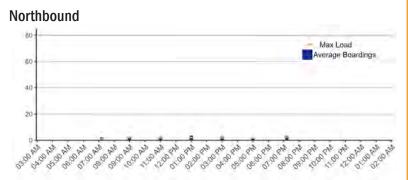
Ballston Spa-West Saratoga via East Service Type: Neighborhood

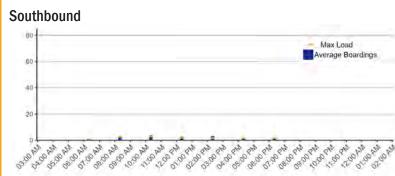
Description: Between Saratoga Regional YMCA and Saratoga Springs Rail Station via Downtown Saratoga Springs (7 days a week)

Key Destinations: Saratoga Spring High School, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall

Annual Statistics On-Time Performance Operating Characteristics Span Frequency Rank Peak Off-Peak **Revenue Hours** 3,857 Weekday 6:20 AM to 7:44 PM 65 120 min 21/27 min **Revenue Miles** Saturday 6:20 AM to 7:44 PM 115 min 120 min 36,909 23/27 Sunday 9:10 AM to 4:37 PM 115 min 120 min 🖁 Ridership 12,190 25/27 *Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time







Weekday ** Ridership by Stop

Northbound





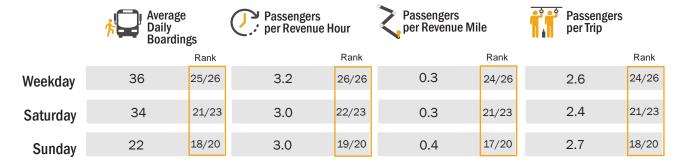


Ballston Spa-West Saratoga via East **Service Type:** Neighborhood

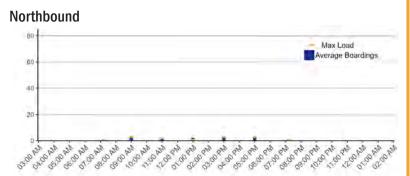
Description: Between Saratoga Regional YMCA and Saratoga Springs Rail Station via Downtown Saratoga Springs (7 days a week)

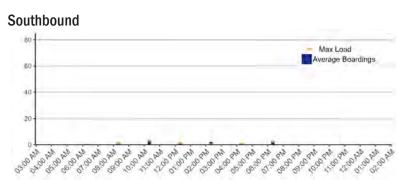
Key Destinations: Saratoga Spring High School, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall

Daily Statistics



Saturday
Ridership by Trip

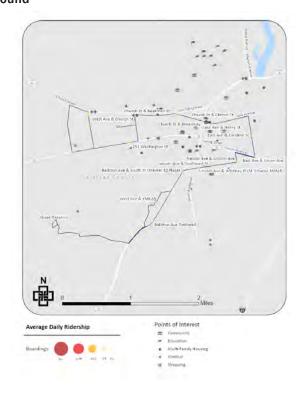




Saturday Ridership by Stop

Northbound







Ballston Spa-West Saratoga via East Service Type: Neighborhood

Description: Between Saratoga Regional YMCA and Saratoga Springs Rail Station via Downtown Saratoga Springs (7 days a week)

Key Destinations: Saratoga Spring High School, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall

Route Analysis

Strengths

- 81% of sampled timepoints are served on time
- Seven-day-a-week service
- Connects to route 450 and 452, which provide service to Schenectady, Skidmore College, and other parts of Saratoga Springs and intermediate neighborhoods

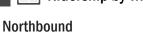
Weaknesses

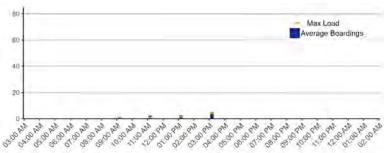
- The route is somewhat indirect and considered inefficient to some
- Somewhat limited span of service on weekdays and Saturdays, opening early but also closing early
- Very limited span on Sundays Infrequent service throughout the
- week
- Very few passengers per trip, averaging less than 3 passengers per trip on all days of the week

Opportunities

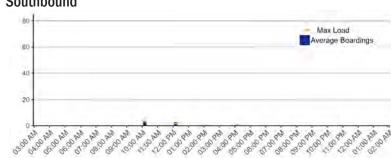
- Consider either increasing the frequency of service to attract more riders
- Consider consolidating trips to increase passenger loads and improve efficiency
- Alternatively, consider eliminating or reducing route service and replacing with an additional FLEX zone

Sunday Ridership by Trip





Southbound

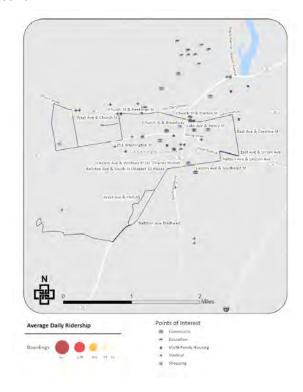




Sunday Ridership by Stop

Northbound



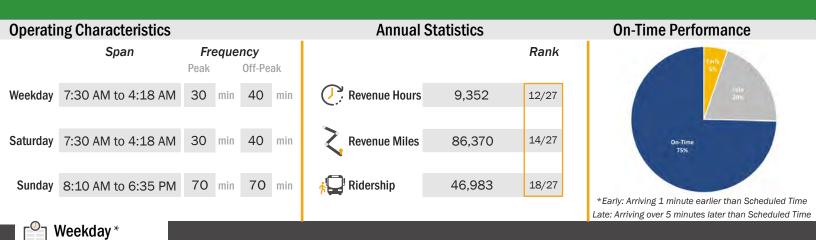


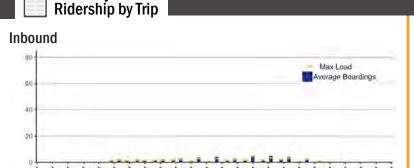


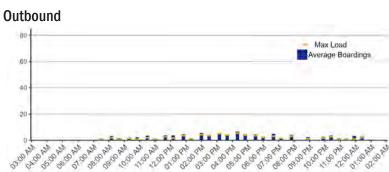
Skidmore College-Wilton Mall via
Service Type: Neighborhood

Description: Between Skidmore College and Downtown Saratoga Springs (7 days a week)

Key Destinations: Skidmore College, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall, Wilton Mall (Terminal), Walmart Supercenter in Saratoga Springs







Weekday **
Ridership by Stop

Inbound



Outbound



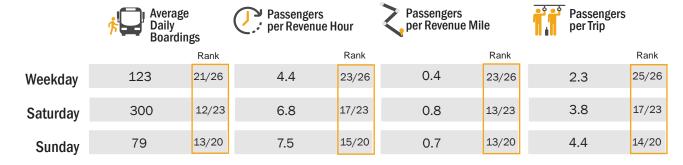


Skidmore College-Wilton Mall via **Service Type:** Neighborhood

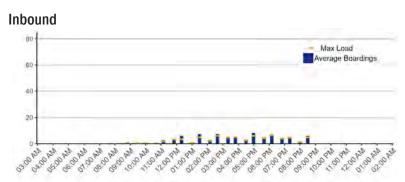
Description: Between Skidmore College and Downtown Saratoga Springs (7 days a week)

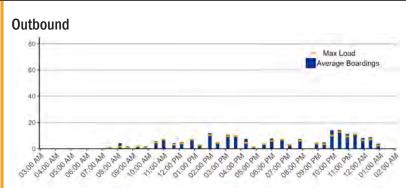
Key Destinations: Skidmore College, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall, Wilton Mall (Terminal), Walmart Supercenter in Saratoga Springs

Daily Statistics



Saturday Ridership by Trip



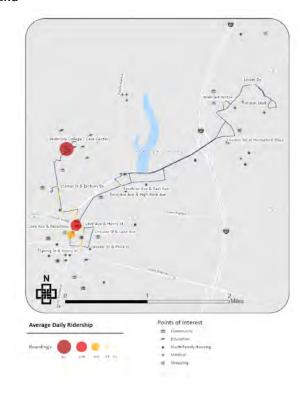


Saturday Ridership by Stop

Inbound



Outbound





Skidmore College-Wilton Mall via Service Type: Neighborhood

Description: Between Skidmore College and Downtown Saratoga Springs (7 days a

Key Destinations: Skidmore College, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall, Wilton Mall (Terminal), Walmart Supercenter in Saratoga Springs

Route Analysis

Strengths

- Seven-day-a-week service Connects to route 450 and 451, serving Schenectady and other parts of
- Saratoga Springs Excellent span of service on weekdays and Saturdays, and somewhat frequent service on weekdays and Saturdays during peak hours

Weaknesses

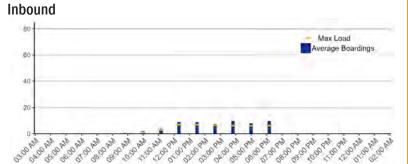
- 20% of sampled timepoints are served late
- Somewhat limited span of service on Sundays, and relatively infrequent service during off-peak hours, and very infrequent service on Sundays
- An average of only 2 passengers per trip on weekdays, and only 4 passengers per trip on weekends

Opportunities

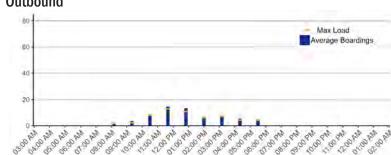
- Consider either increasing the frequency of service to attract more riders, or consolidating trips to increase passenger loads and improve efficiency
- Recalibrate running and layover times to improve on-time performance



Sunday Ridership by Trip



Outbound





Sunday Ridership by Stop

Inbound



Outbound





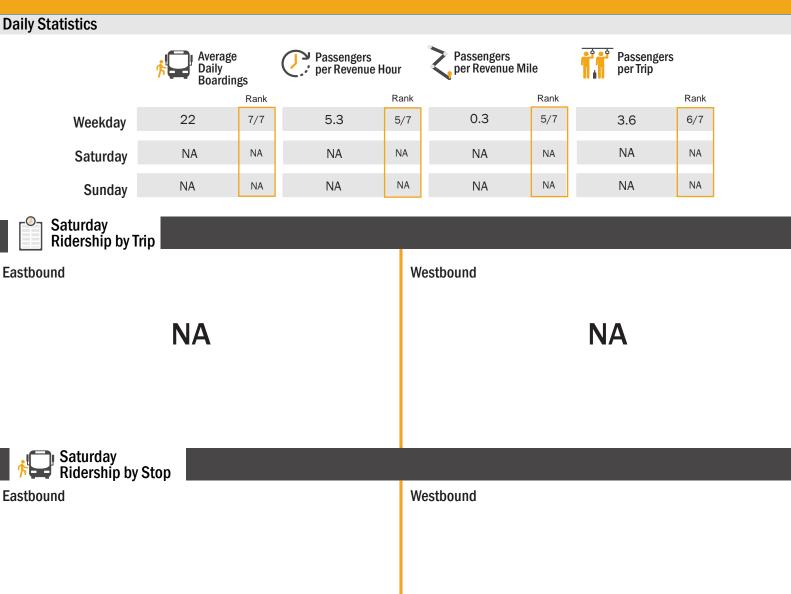
Delmar Bypass Express
Service Type: Express

Key Destinations: Albany Downtown, Empire State Plaza, New York State Museum, Albany Institute of History & Art, Albany City Hall, New York State Capitol, Times Union Center, SUNY System Administration Building and Plaza, Federal Bureau of Investigation Albany Field Office, Bethlehem Central Senior High School



Service Type: Express

Daily Statistics



NA

NA



Delmar Bypass Express
Service Type: Express

Description: Between Elm Ave Park & Ride and Downtown Albany (weekdays only,

Key Destinations: Albany Downtown, Empire State Plaza, New York State Museum Albany Institute of History & Art, Albany City Hall, New York State Capitol, Times Union Center, SUNY System Administration Building and Plaza, Federal Bureau of Investigation Albany Field Office, Bethlehem Central Senior High School

Route Analysis

Strengths

- Eastern segment provides direct access between Empire State Plaza and Park & Ride Lots.
- Western segment provides lifeline service to Voorheesville (note CM worked with CDTA on this extension in response to political request from the Village)

Weaknesses

- Limited service with only three morning and three evening trips.
- Last WB bus leaves relatively early at 5:13 pm and may not be a viable option for some commuters.
- Western portion of the route acts as local service with lots of stops yet doesn't have frequency representative of local service.
- Ranks 7/7 in ridership among express routes with only 22 average daily weekday riders.
- Per the timetable, buses stop every two to three minutes.

Opportunities

- Consider extending several Route #13 trips to Voorheesville following the current alignment of the Route #519 western segment.
- Consider revising downtown stop spacing.
- Eliminate Voorheesvile section of the route

Sunday Ridership by Trip

Eastbound

Westbound

NA

NA



Eastbound

Westbound

NA

NA

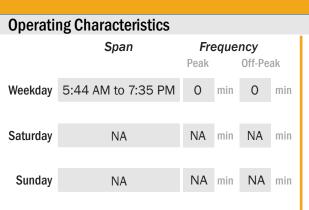


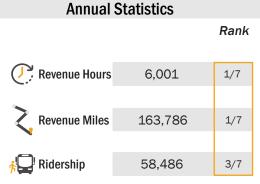
NX Express

Service Type: Northway Express

Description: Northway Express- Exits 8,9,11,12,15, Ballston Spa, Downtown Saratoga, South Glens Falls and Corporate Woods (weekdays only)

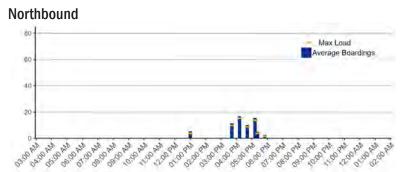
Key Destinations: Albany Downtown, Union Station, Department of Environmental Conservation, The Crossing Plaza at Halfmoon Crossing, Wilton Mall at Saratoga, Walmart Supercenter in Saratoga Springs, Saratoga Spring High School, Saratoga Congress Park, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall

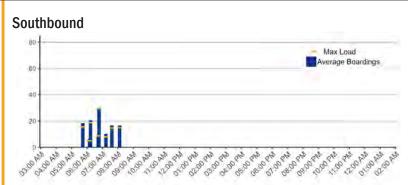






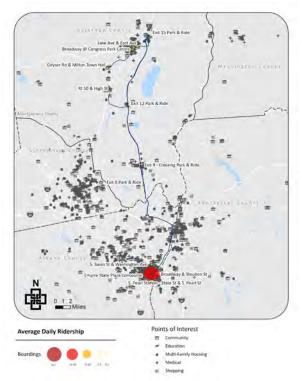


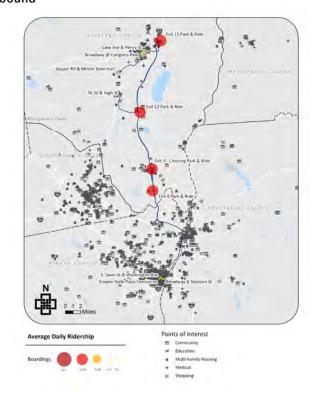




Weekday ** Ridership by Stop

Northbound

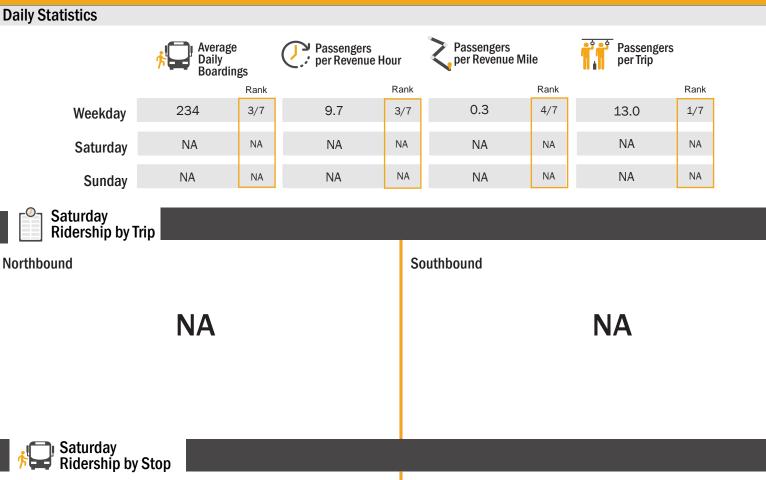






Service Type: Northway Express

Daily Statistics



Northbound

Southbound

NA NA



NX Express

Service Type: Northway Express

Description: Northway Express- Exits 8,9,11,12,15, Ballston Spa, Downtown Saratoga, South Glens Falls and Corporate Woods (weekdays only)

Key Destinations: Albany Downtown, Union Station, Department of Environmental Conservation, The Crossing Plaza at Halfmoon Crossing, Wilton Mall at Saratoga, Walmart Supercenter in Saratoga Springs, Saratoga Spring High School, Saratoga Congress Park, Saratoga Springs City Center, Saratoga Springs Public Library, Saratoga Springs City Hall

Route Analysis

Strengths

- Ranks 3/7 in ridership among express routes
- It effectively serves a very logical ridership market.
- The Bus Operators are very resourceful when detouring to avoid traffic and get the customers to their destinations

Weaknesses

- Poor on-time performance.
- At 13 passengers per trip, many coach buses are underutilized.

Opportunities

- Consider consolidating trips to increase passenger loads and improve efficiency.
- First and last trips have the highest ridership, indicating that there could be demand for earlier/later service.
- Consider extending one or more trips to the Albany Train Station in Rensselaer.
- Consider restoring NX service to Glens Falls.
- Consider serving the Harriman State Office Campus.



Northbound

NA

Southbound

NA



Northbound

Southbound

NA

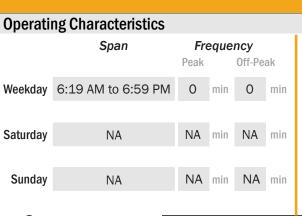
NA

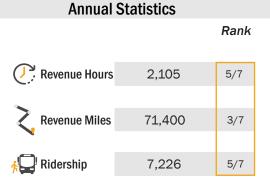


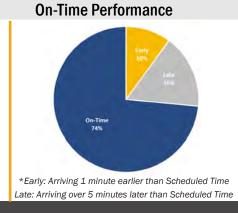
Thruway Express
Service Type: Express

Description: Downtown Amsterdam, Exit 27, and Exit 26 via New York State Thruway to Downtown Albany (weekdays only)

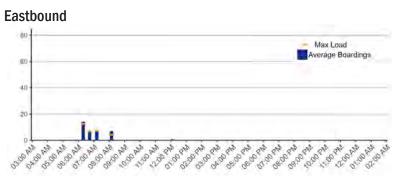
Key Destinations: Albany Downtown, Union Station, Department of Environmental Conservation, Rotterdam Park and Ride, Amsterdam Riverfront Center, Amsterdam Free Library. Amsterdam Police Department

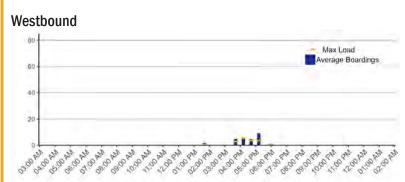






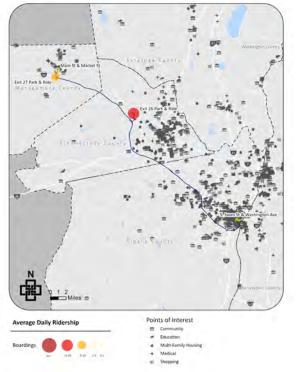


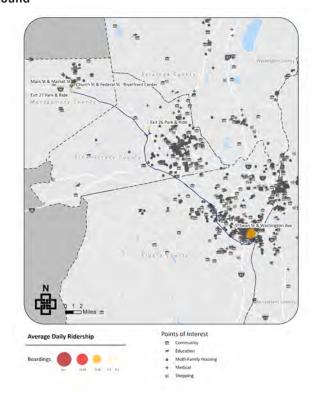




Weekday ** Ridership by Stop

Eastbound

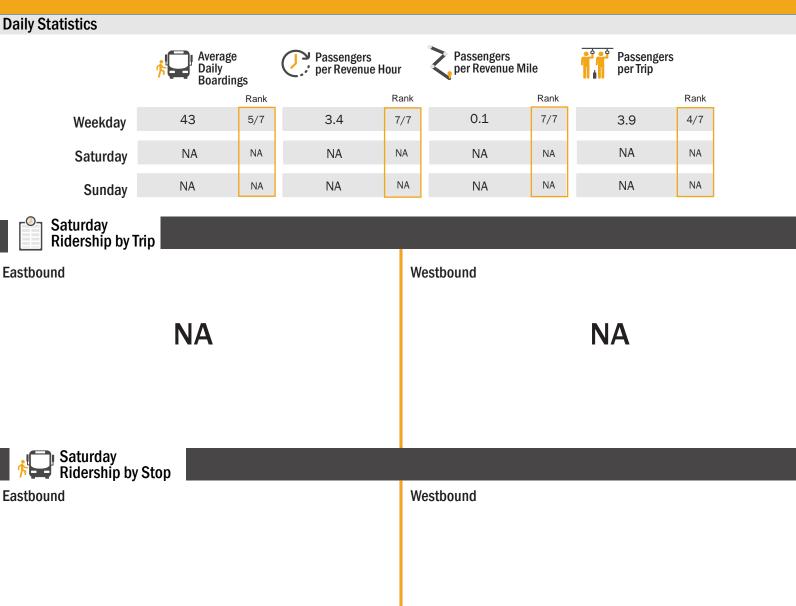






Service Type: Express

Daily Statistics



NA



Thruway Express
Service Type: Express

Description: Downtown Amsterdam, Exit 27, and Exit 26 via New York State Thruway to Downtown Albany (weekdays only)

Key Destinations: Albany Downtown, Union Station, Department of Environmental Conservation, Rotterdam Park and Ride, Amsterdam Riverfront Center, Amsterdam Free Library. Amsterdam Police Department

Route Analysis

Strengths

 Provides commuters a transit option between Amsterdam and downtown Albany

Weaknesses

- Poor on-time performance.
- Uneven and long headways not conducive to attracting riders, particularly in the evening.
- Ranks 5/7 in ridership 43 average daily weekday riders.
- Mid-day service is underutilized.

Opportunities

- Consider operating longer headways mid-day.
- Consider serving the Harriman State Office Campus.



Eastbound

NA

Westbound

NA



Eastbound

Westbound

NA

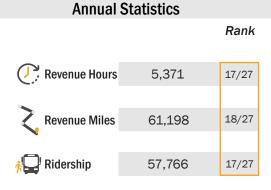


Neighborhood Belt Line
Service Type: Neighborhood

Description: Via Perth Rd, Guy Park Ave/Division St, E. Main St, Church St, and Clizbe Ave (7 days a week)

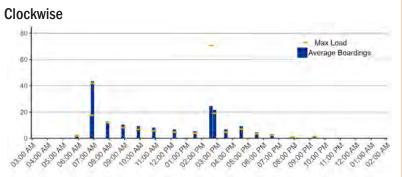
Key Destinations: Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, St. Mary's Healthcare Memorial Campus, Sanford Farms Shopping Center, Amsterdam High School

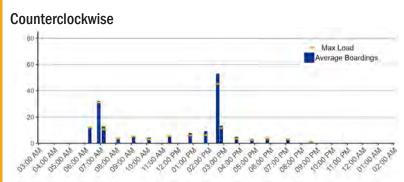
Operating Characteristics Span Frequency Peak Off-Peak Weekday 5:54 AM to 9:51 PM 60 65 min min Saturday 8:50 AM to 6:45 PM 80 min 80 min Sunday 8:50 AM to 6:03 PM 80 min min









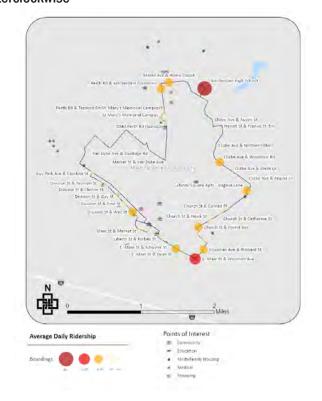


Weekday ** Ridership by Stop

Clockwise



Counterclockwise





Neighborhood Belt Line **Service Type:** Neighborhood

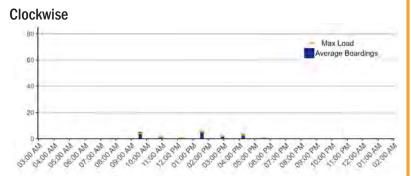
Description: Via Perth Rd, Guy Park Ave/Division St, E. Main St, Church St, and Clizbe Ave (7 days a week)

Key Destinations: Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, St. Mary's Healthcare Memorial Campus, Sanford Farms Shopping Center, Amsterdam High School

Daily Statistics



Saturday Ridership by Trip



Counterclockwise Max Load Average Boardings

Saturday Ridership by Stop

Clockwise



Counterclockwise





Neighborhood Belt Line

Service Type: Neighborhood

Description: Via Perth Rd, Guy Park Ave/Division St, E. Main St, Church St, and Clizbe Ave (7 days a week)

Key Destinations: Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, St. Mary's Healthcare Memorial Campus, Sanford Farms Shopping Center, Amsterdam High School

Route Analysis

Strengths

- Provides service to several key destinations throughout Amsterdam, such as St. Mary's Healthcare and Amsterdam High School
- Relatively strong on-time performance, with over 80 percent of sampled timepoints served on schedule
- Strong weekday ridership during morning and afternoon peak periods

Weaknesses

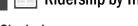
- Fewer than 10 passengers per trip on all service days
- Among the lowest performing neighborhood routes in terms of weekend ridership and productivity
- Low frequency, especially during peak periods and on weekends
- High maximum loads on weekdays during 7am hour and 3pm hour could lead to overcrowding

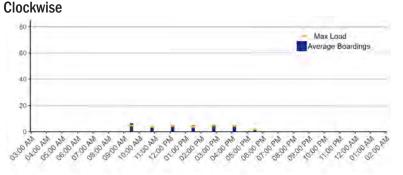
Opportunities

- Consider removing weekend service due to low ridership and productivity and supplement with a FLEX on-demand zone connecting key destinations in Amsterdam
- Consider increasing weekday peak-period frequency to prevent overcrowding during morning and afternoon commutes
- Consider removing weekend service and supplement with a route that eliminates golf park neighborhood

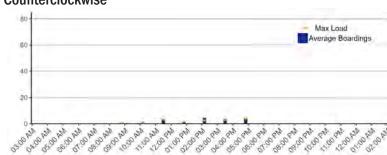


Sunday Ridership by Trip





Counterclockwise





Sunday Ridership by Stop

Clockwise



Counterclockwise

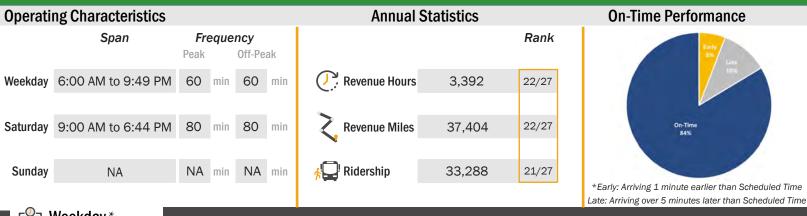




South Side and Route 30 Service Type: Neighborhood

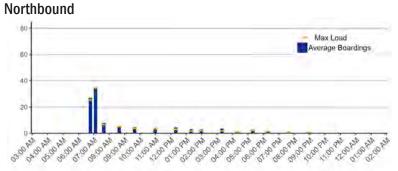
Description: Via Midline Rd, Wallins Corners Rd, Rt 30, Downtown Amsterdam, and Amsterdam South Side (weekdays and Saturdays)

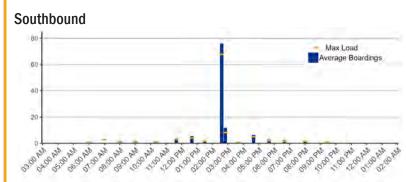
Key Destinations: Amsterdam High School, St. Mary's Healthcare Memorial Campus, Sanford Farms Shopping Center, Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, Barkley School





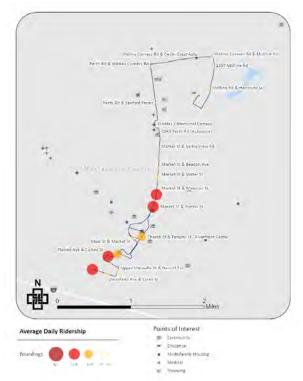






Weekday ** Ridership by Stop

Northbound



Southbound



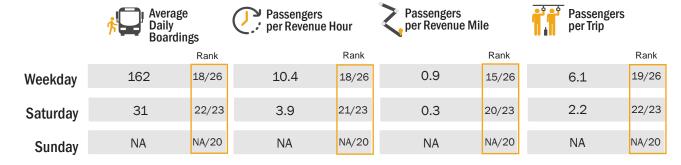


South Side and Route 30
Service Type: Neighborhood

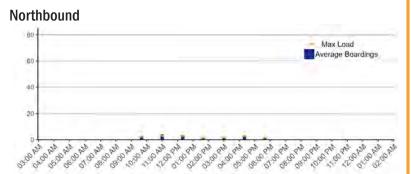
Description: Via Midline Rd, Wallins Corners Rd, Rt 30, Downtown Amsterdam, and Amsterdam South Side (weekdays and Saturdays)

Key Destinations: Amsterdam High School, St. Mary's Healthcare Memorial Campus, Sanford Farms Shopping Center, Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, Barkley School

Daily Statistics



Saturday Ridership by Trip



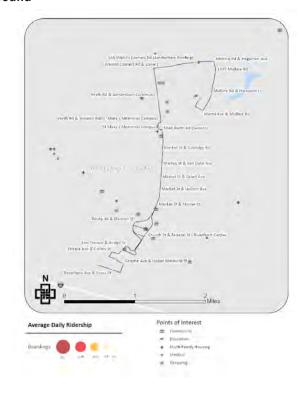
Southbound Max Load Average Boardings Average Boardings

Saturday Ridership by Stop

Northbound



Southbound





South Side and Route 30
Service Type: Neighborhood

Description: Via Midline Rd, Wallins Corners Rd, Rt 30, Downtown Amsterdam, and Amsterdam South Side (weekdays and Saturdays)

Key Destinations: Amsterdam High School, St. Mary's Healthcare Memorial Campus, Sanford Farms Shopping Center, Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, Barkley School

Route Analysis

Strengths

- Strong on-time performance with nearly 85 percent of sampled timepoints served on schedule
- Strong weekday ridership during morning and afternoon peak periods
- Extensive span of service on weekdays
- No Sunday service

Weaknesses

- Low frequency, especially during peak periods and on Saturdays
- Relatively low ridership compared to other neighborhood routes, with fewer than seven passengers per trip on all service days
- Potential for overcrowding during school commute hours, with over 70 average daily boardings during 2:30pm trip in the southbound direction

Opportunities

- Consider removing Saturday service due to low ridership and productivity and supplement with a FLEX on-demand zone connecting key destinations throughout

 Ameterdam
- Consider increasing weekday peak-period frequency to prevent overcrowding and provide more service for students travelling to and from Amsterdam High School
- Rider feedback indicates a need for additional bus shelters throughout Amsterdam

Sunday Ridership by Trip

Northbound

Southbound

NA

NA



Northbound

Southbound

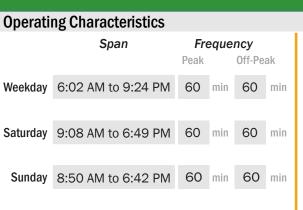
NA

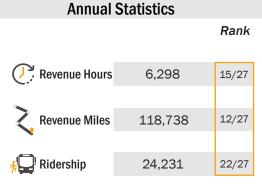


Amsterdam to Schenectady **Service Type:** Neighborhood

Description: Via Guy Park Ave/Division St, E. Main St, NY Route 5, Scotia, and Downtown Schenectady (7 days a week)

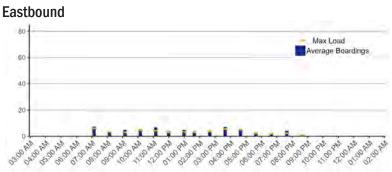
Key Destinations: St. Mary's Hospital at Guy Park Avenue, Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, Rotterdam Park and Ride, Scotia Police Department, Scotia Fire Department, Gateway Plaza at State St/Washington Ave, Schenectady County Community College

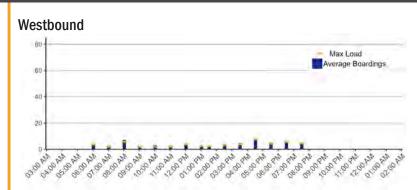






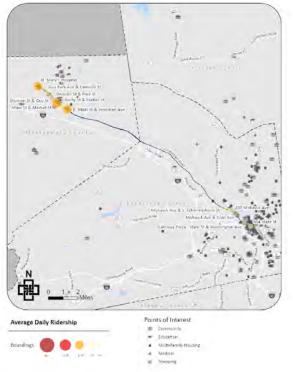


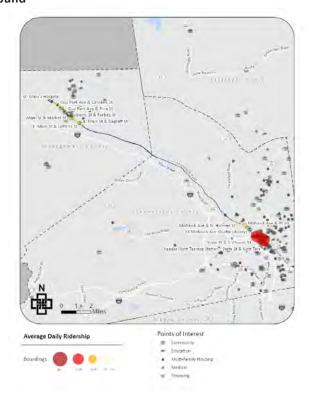




Weekday ** Ridership by Stop

Eastbound





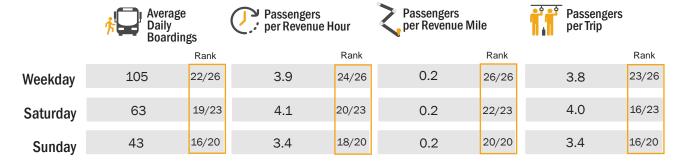


Amsterdam to Schenectady
Service Type: Neighborhood

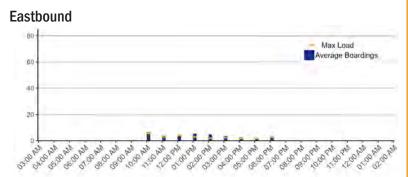
Description: Via Guy Park Ave/Division St, E. Main St, NY Route 5, Scotia, and Downtown Schenectady (7 days a week)

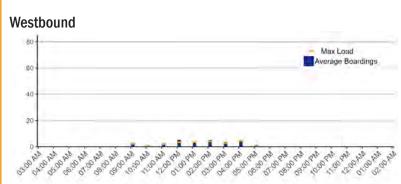
Key Destinations: St. Mary's Hospital at Guy Park Avenue, Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, Rotterdam Park and Ride, Scotia Police Department, Scotia Fire Department, Gateway Plaza at State St/Washington Ave, Schenectady County Community College

Daily Statistics



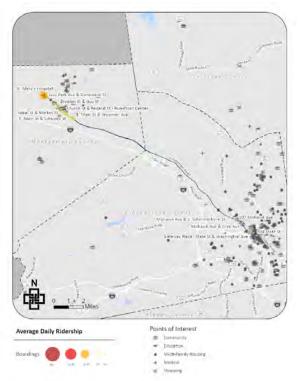
Saturday
Ridership by Trip

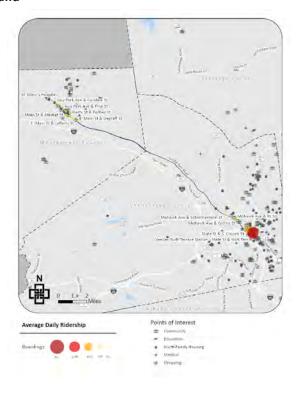




Saturday Ridership by Stop

Eastbound







Amsterdam to Schenectady Service Type: Neighborhood

Description: Via Guy Park Ave/Division St, E. Main St, NY Route 5, Scotia, and Downtown Schenectady (7 days a week)

Key Destinations: St. Mary's Hospital at Guy Park Avenue, Amsterdam Free Library, Amsterdam Police Department, Amsterdam Riverfront Center, Rotterdam Park and Ride, Scotia Police Department, Scotia Fire Department, Gateway Plaza at State St/ Washington Ave , Schenectady County Community College

Route Analysis

Strengths

- Provides only service between Amsterdam and Schenectady, offering connections to several key destinations and other fixed-route services
- Relatively strong on-time performance, with over 80 percent of sampled timepoints served on schedule
- 7-day-a-week service
- Streamlined and simple alignment

Weaknesses

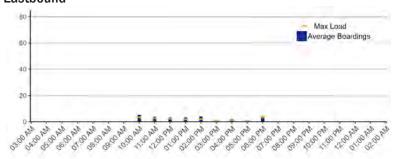
- Poor ridership and productivity compared to other neighborhood routes, with fewer than four passengers per trip on all service days
- Short span of service on weekends

Opportunities

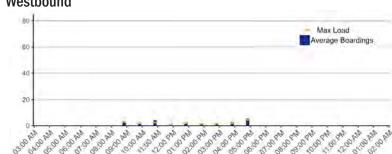
- Per rider feedback, consider extending route into Fulton County to serve Johnstown and Gloversville
- Consider lowering off-peak frequency on weekends due to low ridership
- Consider increasing service on the current alignment

Sunday Ridership by Trip

Eastbound



Westbound

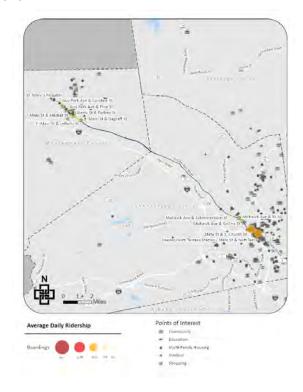




Sunday Ridership by Stop

Eastbound





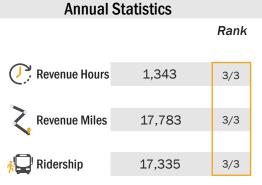


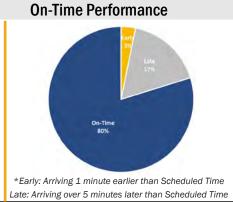
Harriman Campus/Patroon Creek
Service Type: Commuter

Description: Crossgates Mall, UAlbany, via Central Ave to Downtown Albany (weekdays only)

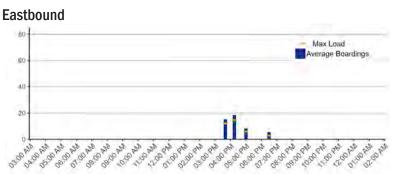
Key Destinations: Crossgates Mall, Crossgate Commons, University at Albany, SUNY - Uptown Campus, Westgate Plaza NY5 at Colvin Ave, ETEC (Emerging Technology and Entrepreneurship Complex), Central Point Plaza, Westview Senior Center, Capitol Green Apartments, NY5/Quail St (Terminal)

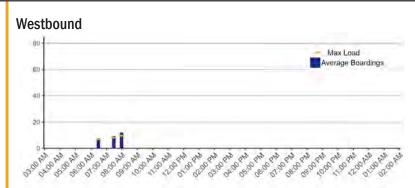






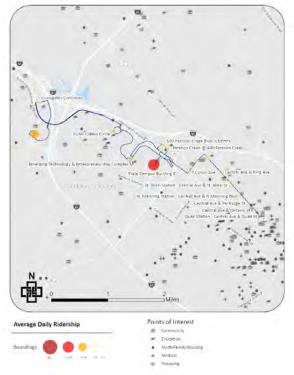


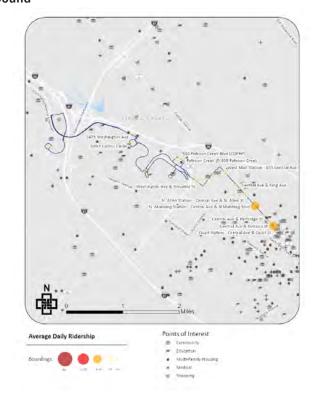




Weekday ** Ridership by Stop

Eastbound





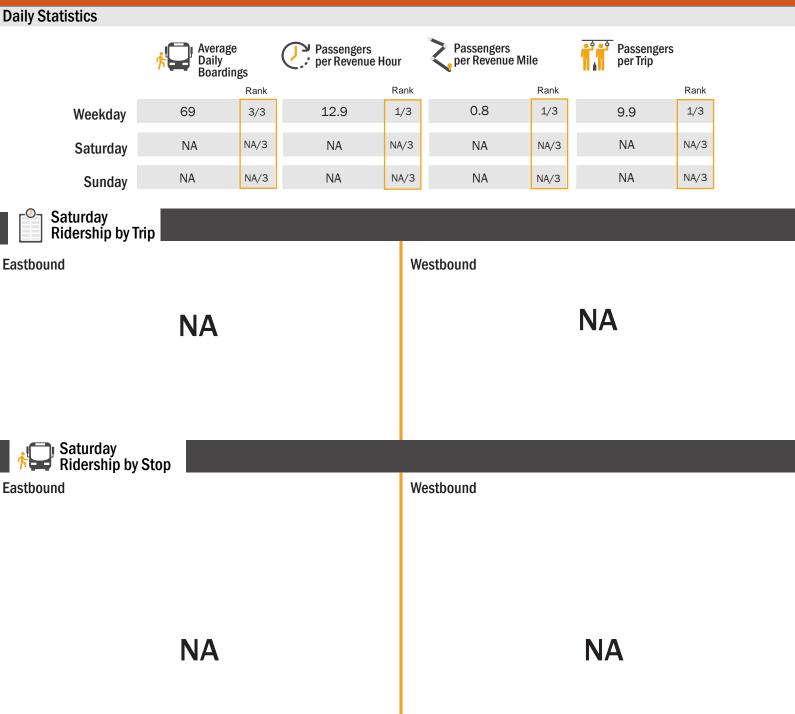


Harriman Campus/Patroon Creek **Service Type:** Commuter

Description: Crossgates Mall, UAlbany, via Central Ave to Downtown Albany (weekdays

Key Destinations: Crossgates Mall, Crossgate Commons, University at Albany, SUNY - Uptown Campus, Westgate Plaza NY5 at Colvin Ave, ETEC (Emerging Technology and Entrepreneurship Complex), Central Point Plaza, Westview Senior Center, Capitol Green Apartments, NY5/Quail St (Terminal)

Daily Statistics





Harriman Campus/Patroon Creek Service Type: Commuter

Description: Crossgates Mall, UAlbany, via Central Ave to Downtown Albany (weekdays only)

Key Destinations: Crossgates Mall, Crossgate Commons, University at Albany, SUNY - Uptown Campus, Westgate Plaza NY5 at Colvin Ave, ETEC (Emerging Technology and Entrepreneurship Complex), Central Point Plaza, Westview Senior Center, Capitol Green Apartments, NY5/Quail St (Terminal)

Route Analysis

Strengths

- Provides UAlbany with intra-campus circulation.
- Provides direct access to St. Peter's, CDPHP, and housing at Patroon Creek Blvd.
- Complements Red Line by providing local access between Central Avenue and UAlbany

Weaknesses

- 17 percent of timepoints served late
- No weekend service
- Relatively low productivity on all service days with fewer than 13 passengers per revenue hour
- About half of stops have 0-1 riders per day.

Opportunities

- Bus stop balancing could reduce travel time and provide more direct service between Central Ave and UAlbany.
- Increase frequency during peak periods to make more appealing as a commuting option.
- Restore service to Walmart and Crossgates Mall.
- Consider adding FLEX service between Harriman Campus, Patroon Creek, and ETEC.



Eastbound

NA

Westbound

NA



Eastbound

Westbound

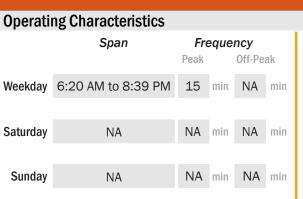
NA

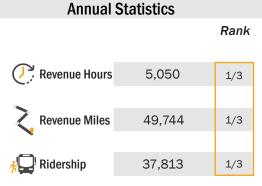


Corporate Woods/Airport Service Type: Commuter

Description: British American Blvd., Corporate Woods via Albany International Airport (weekdays only)

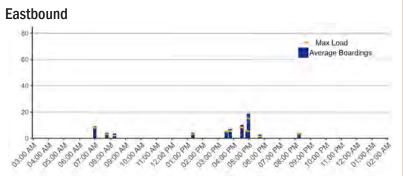
Key Destinations: Greyhound Bus Terminal at Liberty St, Downtown Albany, Washington Avenue Armory Sports and Convention Arena, Townsend Park Homes, Albany Community Development Agency at 3rd St, Corporate Woods Office Park, Albany International Airport

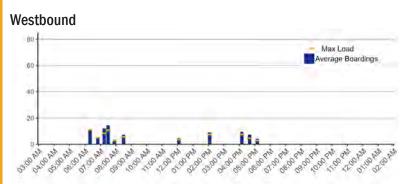






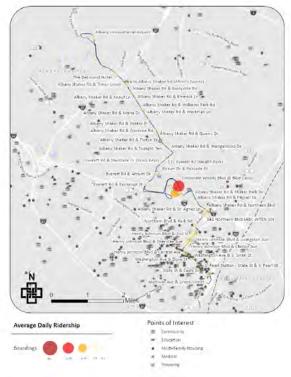


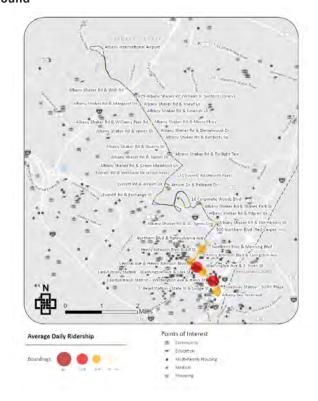




Weekday ** Ridership by Stop

Eastbound



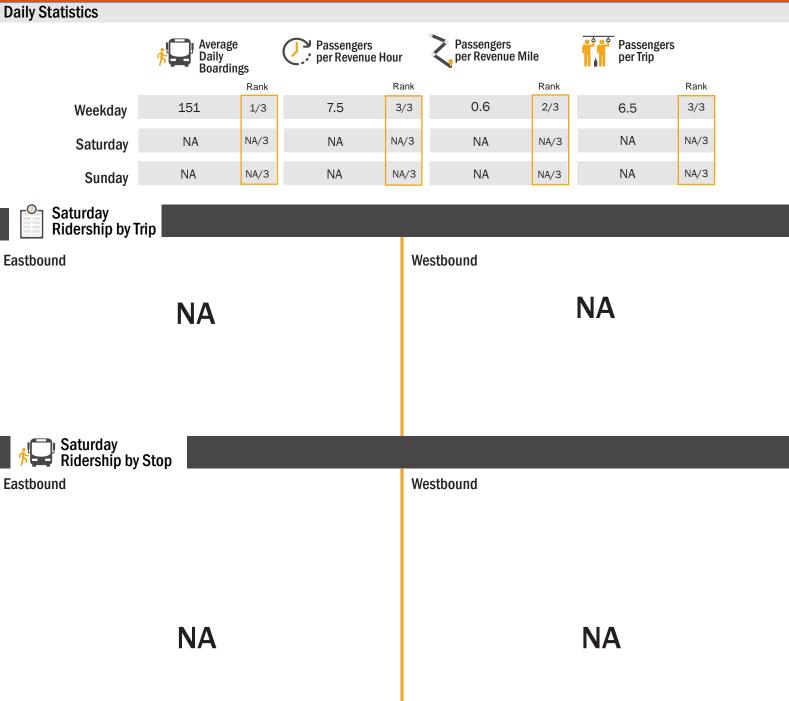




Corporate Woods/Airport Service Type: Commuter

Description: British American Blvd., Corporate Woods via Albany International Airport (weekdays only)

Key Destinations: Greyhound Bus Terminal at Liberty St, Downtown Albany, Washington Avenue Armory Sports and Convention Arena, Townsend Park Homes, Albany Community Development Agency at 3rd St, Corporate Woods Office Park, Albany International Airport





Corporate Woods/Airport Service Type: Commuter

Description: British American Blvd., Corporate Woods via Albany International Airport (weekdays only)

Key Destinations: Greyhound Bus Terminal at Liberty St, Downtown Albany, Washington Avenue Armory Sports and Convention Arena, Townsend Park Homes, Albany Community Development Agency at 3rd St, Corporate Woods Office Park, Albany International Airport

Route Analysis

Strengths

- Highest annual ridership among commuter routes
- Offers connections among Albany Bus Terminal, Downtown, Corporate Woods Boulevard, and the airport
- Complements Red and Purple lines along Washington in Downtown.

Weaknesses

- 16 percent of timepoints served late
- No weekend service
- Relatively low productivity on all service days with fewer than 8 passengers per revenue hour

Opportunities

- Eliminate portion of route to airport and expand FLEX zone.
- Increase frequency during peak periods to make more appealing as a commuting option.
- Create more consistent headways and trim trips with low productivity
- Eliminate route entirely and replace with FLEX Plus service between key destinations such as Corporate Woods and the North Albany Station



Eastbound

Westbound

NA



NA

Sunday Ridership by Stop

Eastbound

Westbound

NA

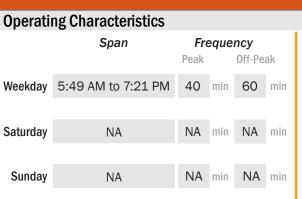


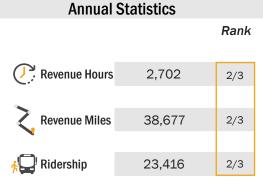
Albany/Schenectady

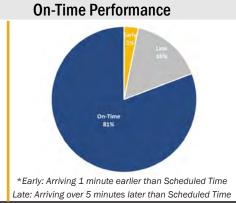
Service Type: Commuter

Description: Between Schenectady and Guilderland via Carman Rd and Western Ave (weekdays only)

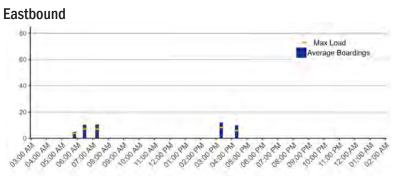
Key Destinations: Crossgates Mall, Westmere Elementary School, Schenectady County Human Services, MVP Healthcare at Nott Terrace/NY5, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Schenectady County Community College, Mohawk Harbor and River Casino

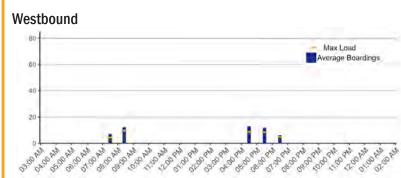






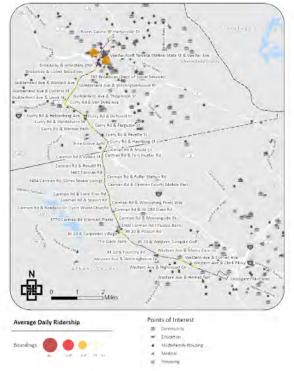


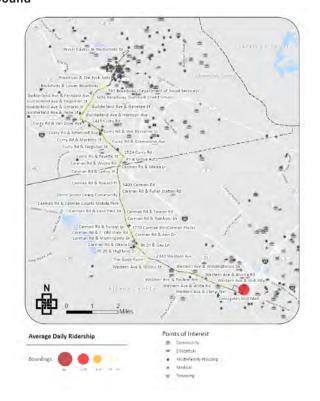




Weekday ** Ridership by Stop

Eastbound



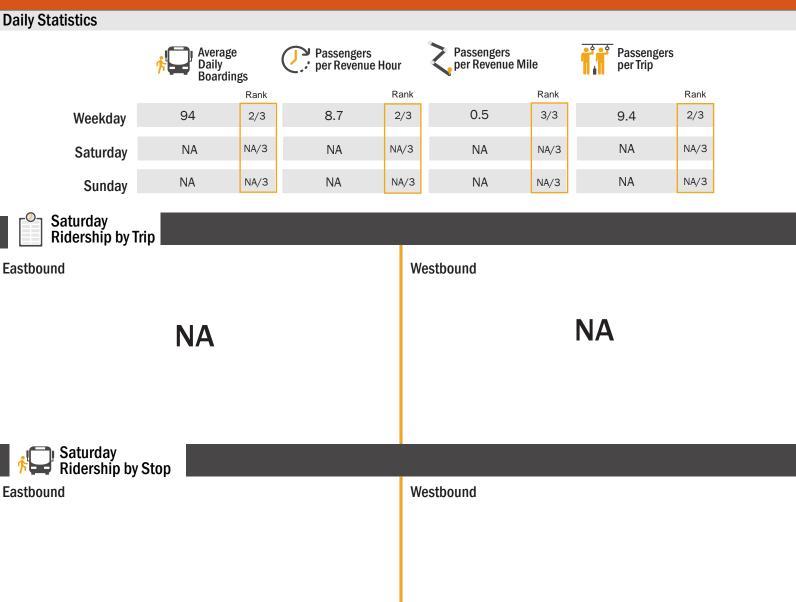




Albany/Schenectady **Service Type:** Commuter Description: Between Schenectady and Guilderland via Carman Rd and Western Ave (weekdays only)

Key Destinations: Crossgates Mall, Westmere Elementary School, Schenectady County Human Services, MVP Healthcare at Nott Terrace/NY5, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Schenectady County Community College, Mohawk Harbor and River Casino

Daily Statistics



NA



Albany/Schenectady

Service Type: Commuter

Description: Between Schenectady and Guilderland via Carman Rd and Western Ave (weekdays only)

Key Destinations: Crossgates Mall, Westmere Elementary School, Schenectady County Human Services, MVP Healthcare at Nott Terrace/NY5, Schenectady County Court House, Schenectady Downtown Train Station (BusPlus), Schenectady County Community College, Mohawk Harbor and River Casino

Route Analysis

Strengths

- Offers direct access to Rivers Casino and Crossgates Mall
- Serves Carman Road, Route 20, and other corridors that do not have local bus service
- Offer connections to Purple Line at Crossgates Mall and Red Line in Downtown Schenectady

Weaknesses

- 16 percent of timepoints served late
- No weekend service
- Relatively low productivity on all service days with fewer than 9 passengers per revenue hour
- Aside from Nott Terrace and Crossgates Mall, there are no stops with more than 5 average daily boardings.

Opportunities

- Per rider feedback, increase frequency during peak periods to make more appealing as a commuting option or offer a neighborhood route.
- Consider deviation on State Farm Road to provide more convenient access for apartment residents.



Eastbound

Westbound

NA

NA



Eastbound

Westbound

NA



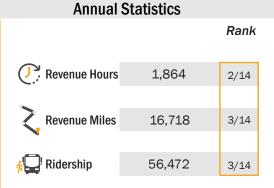
Albany Shuttle

Service Type: Shopping/Special

Description: Albany Shuttle (weekdays only)

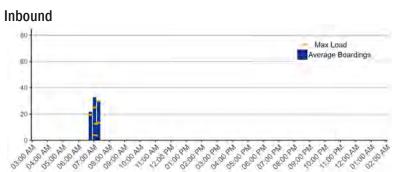
Key Destinations: Albany City Square Plaza, Albany Community Charter School, Giffen Memorial Elementary School, Albany County Department of Health, Thomas O'Brian Academy of Science and Technology, Greyhound Bus Terminal at Liberty St, South Mall Towers Apartments, Union Station, Skyline Garden Apartments, College of Saint Rose, Saint Peter's hospital at South Manning Boulevard, Westview Senior Center, University at Albany - Uptown Campus, Crossgates Mall, Washington Park

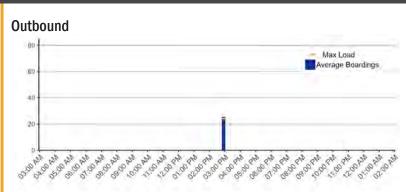
Operating Characteristics Span Frequency Peak Off-Peak 6:47 AM to 3:58 PM Weekday NA NA min min Saturday NA NA min NA min Sunday NA NA min min





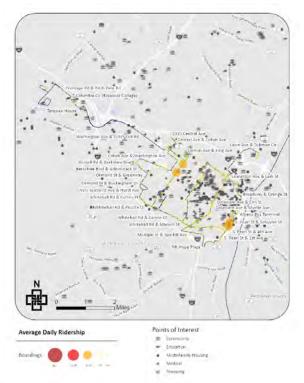
Weekday *
Ridership by Trip



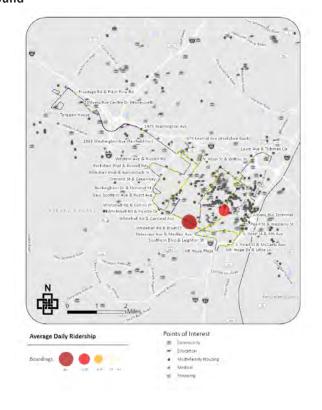


Weekday **
Ridership by Stop

Inbound



Outbound





Albany Shuttle

Service Type: Shopping/Special

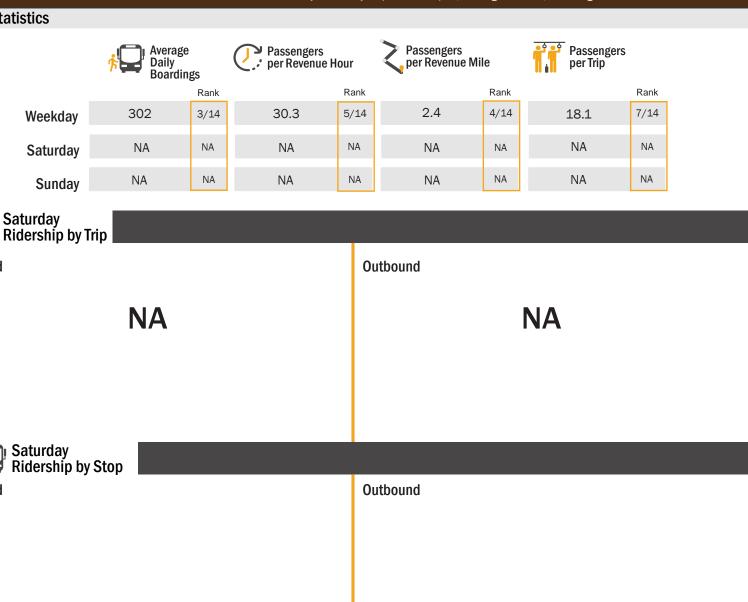
Description: Albany Shuttle (weekdays only)

Key Destinations: Albany City Square Plaza, Albany Community Charter School, Giffen Memorial Elementary School, Albany County Department of Health, Thomas O'Brian Academy of Science and Technology, Greyhound Bus Terminal at Liberty St, South Mall Towers Apartments, Union Station, Skyline Garden Apartments, College of Saint Rose, Saint Peter's hospital at South Manning Boulevard, Westview Senior Center, University at Albany - Uptown Campus, Crossgates Mall, Washington Park

Daily Statistics

Inbound

Inbound



NA NA



Albany Shuttle

Service Type: Shopping/Special

Description: Albany Shuttle (weekdays only)

Key Destinations: Albany City Square Plaza, Albany Community Charter School, Giffen Memorial Elementary School, Albany County Department of Health, Thomas O'Brian Academy of Science and Technology, Greyhound Bus Terminal at Liberty St, South Mall Towers Apartments, Union Station, Skyline Garden Apartments, College of Saint Rose, Saint Peter's hospital at South Manning Boulevard, Westview Senior Center, University at Albany - Uptown Campus, Crossgates Mall, Washington Park

Route Analysis

Strengths

- Albany Shuttle: Serves many key destinations including schools. (Hackett & Myers Middle School)
- Annual Ridership is high on total daily boardings (3/14 of Shopping/ Special routes)
- Timed with school start/end times

Weaknesses

- No weekend service
- Available only when school is in session
- 7 trips in each direction operates a different pattern

Opportunities

- Consider eliminating this route and rely on added FLEX service.
- Combine with Route 803. Both serve Hackett Middle School
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



____vo.o....p .o,

Inbound

NA

Outbound

NA



Inbound

Outbound

NA



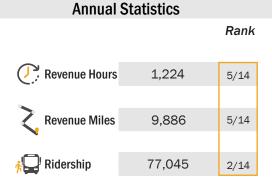
Troy Shuttle

Service Type: Shopping/Special

Description: Troy Shuttle (weekdays only)

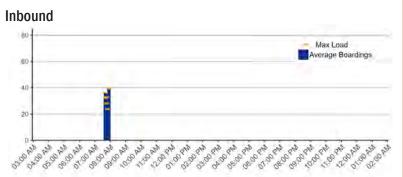
Key Destinations: Perfect Mart at 6th Ave/Glen Ave, Rensselaer County Social Services, Rensselaer Polytechnic Institute, Troy Waterfront Farmers Market, Troy Savings Bank Music Hall, Troy Downtown (Uncle Sam Parking Garage), Uncle Sam Monument, Russell Sage College, Hudson Valley Community College, Hudson Valley Plaza

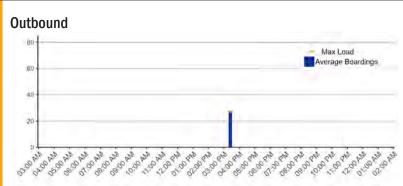
Operating Characteristics Span Frequency Peak Off-Peak Weekday 7:41 AM to 3:47 PM NA NA min min Saturday NA NA min NA min Sunday NA NA min NA min





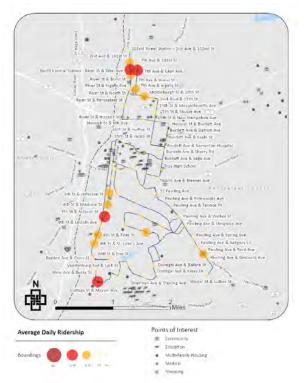
Weekday *
Ridership by Trip



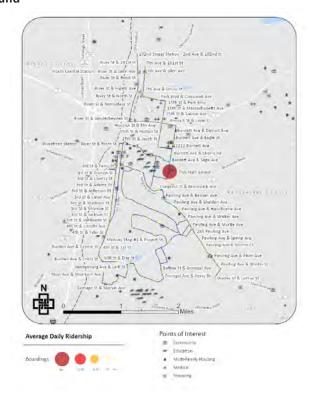


Weekday **
Ridership by Stop

Inbound



Outbound





Troy Shuttle

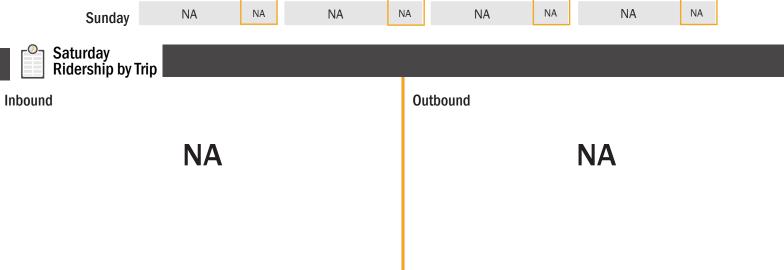
Service Type: Shopping/Special

Description: Troy Shuttle (weekdays only)

Key Destinations: Perfect Mart at 6th Ave/Glen Ave, Rensselaer County Social Services, Rensselaer Polytechnic Institute, Troy Waterfront Farmers Market, Troy Savings Bank Music Hall, Troy Downtown (Uncle Sam Parking Garage), Uncle Sam Monument, Russell Sage College, Hudson Valley Community College, Hudson Valley Plaza

Daily Statistics





Saturday Ridership by Stop

Inbound Outbound

NA NA



Troy Shuttle

Service Type: Shopping/Special

Description: Troy Shuttle (weekdays only)

Key Destinations: Perfect Mart at 6th Ave/Glen Ave, Rensselaer County Social Services, Rensselaer Polytechnic Institute, Troy Waterfront Farmers Market, Troy Savings Bank Music Hall, Troy Downtown (Uncle Sam Parking Garage), Uncle Sam Monument, Russell Sage College, Hudson Valley Community College, Hudson Valley Plaza

Route Analysis

Strengths

- Troy Shuttle: Serves many key destinations including schools. (Troy High School)
- Annual Ridership is high on total daily boardings (2/14 of Shopping/Special routes)
- Passengers per revenue hour, mile, and trip ranks 1/14 of Shopping/Special routes)
- Timed with school start/end times

Weaknesses

- No weekend service
- Available only when school is in session
- 6 trips in each direction operates a different pattern
- Poor On-Time Performance with 26% of trips late and 12% of trips

Opportunities

- Consider eliminating this route and rely on added FLEX service
- Most boardings occur at Cottage St & Marvin Ave and along 4th street. Then again along 7th Avenue and River Street. Consider streamlining the
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



Sunday

Ridership by Trip

Inbound

Outbound

NA

NA



Inbound

Outbound

NA



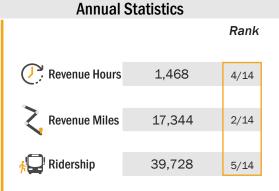
North Albany Shuttle

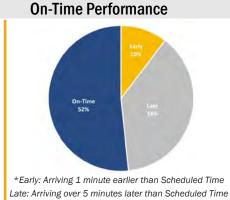
Service Type: Shopping/Special

Description: North Albany Shuttle (weekdays only)

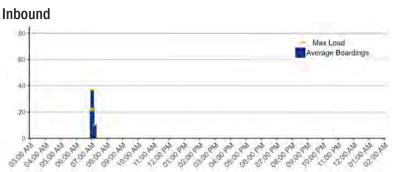
Key Destinations: Albany Community Charter School, City Square Plaza, Thomas O'Brian Academy of Science and Technology, Albany Public Library Main Branch, North Albany Academy, Albany Public Library North Branch, Skyline Garden Apartments, Albany High School, Saint Peter's Hospital at South Manning Boulevard, Westview Senior Center at Central Ave, University at Albany - Uptown Campus, Crossgates Mall, Crossgates Commons, Washington Park, W A Harriman State Office Campus

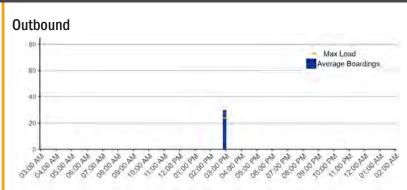
Operating Characteristics Span Frequency Peak Off-Peak 6:59 AM to 3:43 PM Weekday NA min NA min Saturday NA NA min NA min Sunday NA NA min NA min





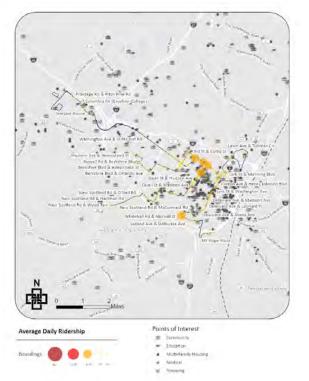




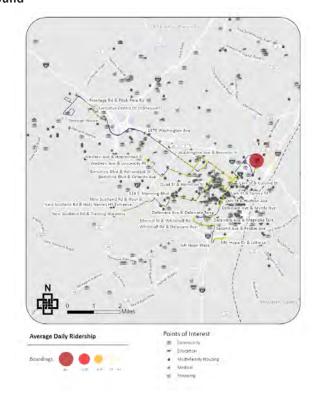




Inbound



Outbound





North Albany Shuttle

Service Type: Shopping/Special

Description: North Albany Shuttle (weekdays only)

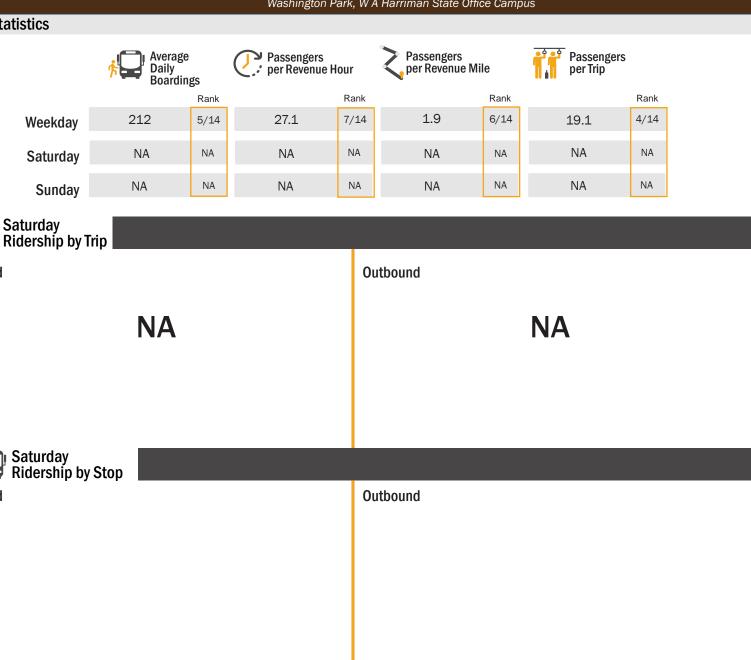
Key Destinations: Albany Community Charter School, City Square Plaza, Thomas O'Brian Academy of Science and Technology, Albany Public Library Main Branch, North Albany Academy, Albany Public Library North Branch, Skyline Garden Apartments, Albany High School, Saint Peter's Hospital at South Manning Boulevard, Westview Senior Center at Central Ave, University at Albany - Uptown Campus, Crossgates Mall, Crossgates Commons, Washington Park, W A Harriman State Office Campus

NA

Daily Statistics

Inbound

Inbound





North Albany Shuttle

Service Type: Shopping/Special

Description: North Albany Shuttle (weekdays only)

Key Destinations: Albany Community Charter School, City Square Plaza, Thomas O'Brian Academy of Science and Technology, Albany Public Library Main Branch, North Albany Academy, Albany Public Library North Branch, Skyline Garden Apartments, Albany High School, Saint Peter's Hospital at South Manning Boulevard, Westview Senior Center at Central Ave, University at Albany - Uptown Campus, Crossgates Mall, Crossgates Commons, Washington Park, W A Harriman State Office Campus

Route Analysis

Strengths

- North Albany Shuttle: Serves many key destinations including schools (North Albany Middle School).
- Annual Ridership is high on total daily boardings (5/14 of Shopping/ Special routes)
- Passengers per revenue hour, mile, and trip ranks high among the Shopping/Special routes.
- Timed with school start/end times

Weaknesses

- No weekend service
- Available only when school is in session
- 4 trips in each direction operates a different pattern
- Poor On-Time Performance with 38% of trips late and 10% $\,$ of trips early.

Opportunities

- Consider eliminating this route and rely on added FLEX service.
- The Blue Line trip has the least boardings and can be eliminated.
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



Inbound

NA

Outbound

NA



Inbound

Outbound

NA



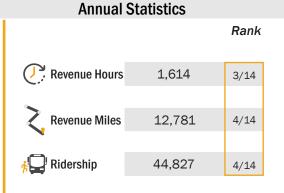
Mid Town Shuttle

Service Type: Shopping/Special

Description: Kiernan Plaza, Clinton Ave, New Scotland, Whitehall, 2nd and Delaware; Albany HS (school, weekdays only)

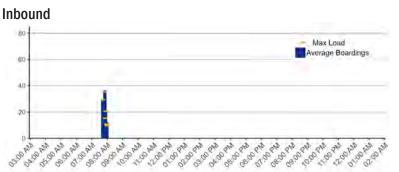
Key Destinations: Albany City Square Plaza, Albany Community Charter School, Giffen Memorial Elementary School, Thomas O'Brian Academy of Science and Technology, Greyhound Bus Terminal at Liberty St, South Mall, Towers Apartments, Union Station (The Peter Kierman Building), Skyline Garden Apartments, College of Saint Rose, Washington Park, Saint Peter's Hospital at South Manning Boulevard, Albany City Square Plaza, Saint Peter's Hospital, CVS Pharmacy at New Scotland Avenue/Winnie Street

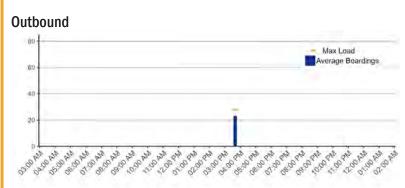
Operating Characteristics Span Frequency Peak Off-Peak Weekday 7:43 AM to 4:14 PM NA NA min min Saturday NA NA min NA min Sunday NA NA min NA min





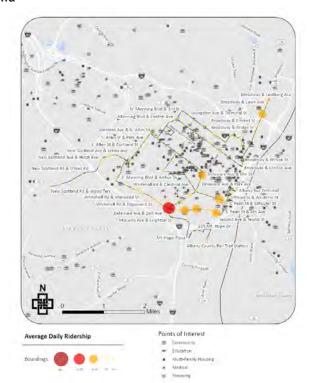




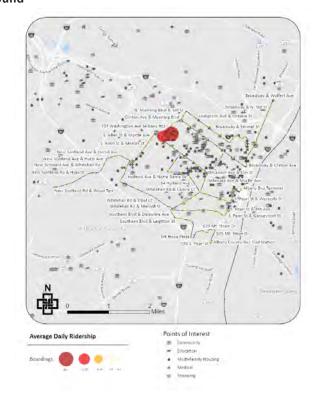


Weekday **
Ridership by Stop

Inbound



Outbound





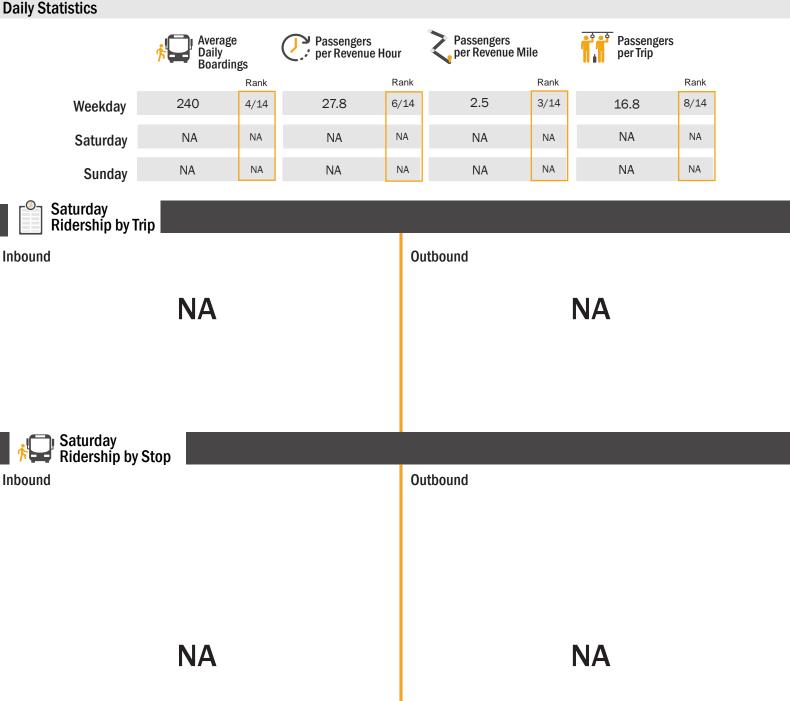
Mid Town Shuttle

Service Type: Shopping/Special

Description: Kiernan Plaza, Clinton Ave, New Scotland, Whitehall, 2nd and Delaware; Albany HS (school, weekdays only)

Key Destinations: Albany City Square Plaza, Albany Community Charter School, Giffen Memorial Elementary School, Thomas O'Brian Academy of Science and Technology, Greyhound Bus Terminal at Liberty St, South Mall, Towers Apartments, Union Station (The Peter Kierman Building), Skyline Garden Apartments, College of Saint Rose, Washington Park, Saint Peter's Hospital at South Manning Boulevard, Albany City Square Plaza, Saint Peter's Hospital, CVS Pharmacy at New Scotland Avenue/Winnie Street

Daily Statistics





Mid Town Shuttle

Service Type: Shopping/Special

Description: Kiernan Plaza, Clinton Ave, New Scotland, Whitehall, 2nd and Delaware; Albany HS (school, weekdays only)

Key Destinations: Albany City Square Plaza, Albany Community Charter School, Giffen Memorial Elementary School, Thomas O'Brian Academy of Science and Technology, Greyhound Bus Terminal at Liberty St, South Mall, Towers Apartments, Union Station (The Peter Kierman Building), Skyline Garden Apartments, College of Saint Rose, Washington Park, Saint Peter's Hospital at South Manning Boulevard, Albany City Square Plaza, Saint Peter's Hospital, CVS Pharmacy at New Scotland Avenue/Winnie Street

Route Analysis

Strengths

- Mid Town Shuttle: Serves many key destinations including schools (Albany High School).
- Annual Ridership is high on total daily boardings (4/14 of Shopping/ Special routes)
- Passengers per revenue hour, mile, and trip ranks high among the Shopping/Special routes.
- Timed with school start/end times

Weaknesses

- No weekend service
- Available only when school is in session
- 6 trips in each direction operates a different pattern
- Poor On-Time Performance with 21% of trips late and 8% of trips early.

Opportunities

- Consider eliminating this route and rely on added FLEX service as well as overlapping neighborhood routes
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



Outbound

NA



Inbound

Inbound

Outbound

NA



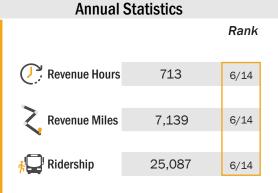
Delaware Shuttle

Service Type: Shopping/Special

Description: Mt. Hope via S.Pearl St via New Scotland Ave Hackett MS (school) (weekdays only)

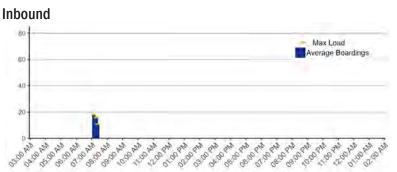
Key Destinations: University at Albany, SUNY - Uptown Campus, Westview Senior Center at Central Ave, Washington Park, City Square Plaza, Thomas O'Brian Academy of Science and Technology, Saint Peter's Hospital at South Manning Boulevard, Westview Senior Center at Central Ave, MVP Arena, Giffen Memorial Elementary School, Albany Public Library Howie Branch, South Mall Towers Apartments, Times Union Center, North Albany Academy, Albany Public Library North Library Branch

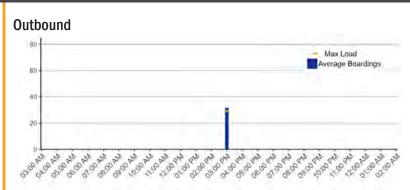
Operating Characteristics Span Frequency Peak Off-Peak 7:08 AM to 3:32 PM Weekday NA NA min min Saturday NA NA min NA min Sunday NA NA min NA min









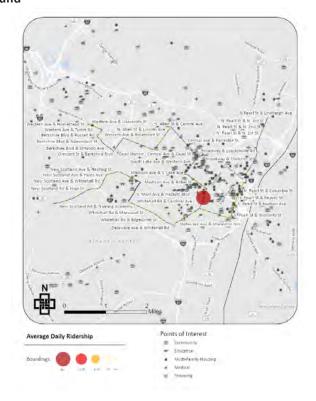


Weekday ** Ridership by Stop

Inbound



Outbound





Delaware Shuttle

Service Type: Shopping/Special

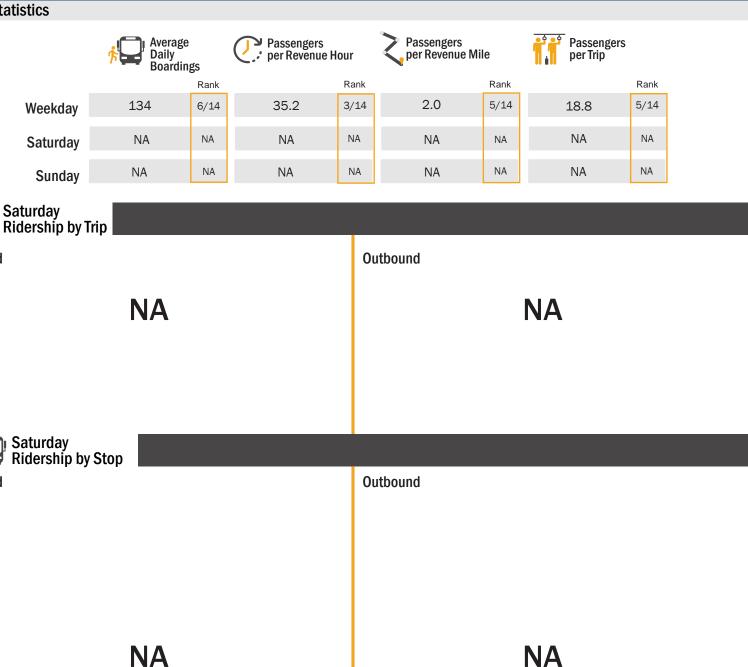
Description: Mt. Hope via S.Pearl St via New Scotland Ave Hackett MS (school) (weekdays only)

Key Destinations: University at Albany, SUNY - Uptown Campus, Westview Senior Center at Central Ave, Washington Park, City Square Plaza, Thomas O'Brian Academy of Science and Technology, Saint Peter's Hospital at South Manning Boulevard, Westview Senior Center at Central Ave, MVP Arena, Giffen Memorial Elementary School, Albany Public Library Howie Branch, South Mall Towers Apartments, Times Union Center, North Albany Academy, Albany Public Library North Library Branch

Daily Statistics

Inbound

Inbound





Delaware Shuttle

Service Type: Shopping/Special

Description: Mt. Hope via S.Pearl St via New Scotland Ave Hackett MS (school) (weekdays only)

Key Destinations: University at Albany, SUNY - Uptown Campus, Westview Senior Center at Central Ave, Washington Park, City Square Plaza, Thomas O'Brian Academy of Science and Technology, Saint Peter's Hospital at South Manning Boulevard, Westview Senior Center at Central Ave, MVP Arena, Giffen Memorial Elementary School, Albany Public Library Howie Branch, South Mall Towers Apartments, Times Union Center, North Albany Academy, Albany Public Library North Library Branch

Route Analysis

Strengths

- Delaware Shuttle: Serves Hackett Middle School.
- Annual Ridership is high on total daily boardings (6/14 of Shopping/Special routes)
- Passengers per revenue hour, mile, and trip ranks high among the Shopping/Special routes.
- Timed with school start/end times

Weaknesses

- No weekend service
- Available only when school is in session
- 3 trips in each direction operates a different pattern
- Poor On-Time Performance with 27% of trips late and 7% of trips

Opportunities

- Consider eliminating this route and rely on added FLEX service.
- Combine with Route 801. Both serve Hackett Middle School
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



Inbound

NA

Outbound

NA



Inbound

Outbound

NA



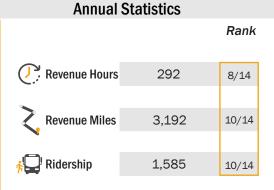
Suburban Shuttle

Service Type: Shopping/Special

Description: Crossgates Mall, UAlbany, C.B.A. (school), via Central Ave to Downtown Albany (weekdays only)

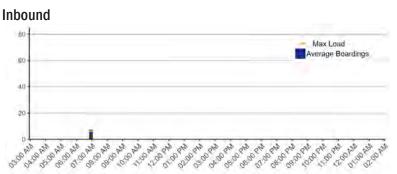
Key Destinations: New York State Capitol Building, Albany County Social Services Department, Albany public library Main Branch, Townsend Park homes, The Linda WAMC's performing arts studio, Westview Senior Center, Hannaford plaza, Colonie Center, Westgate Plaza, Albany Institute of History & Art, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena)

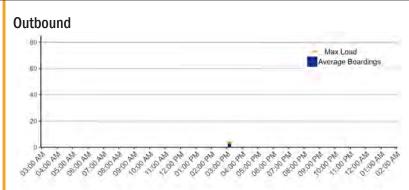
Operating Characteristics Span Frequency Peak Off-Peak 6:57 AM to 3:50 PM Weekday NA NA min min Saturday NA NA min NA min Sunday NA NA min NA min





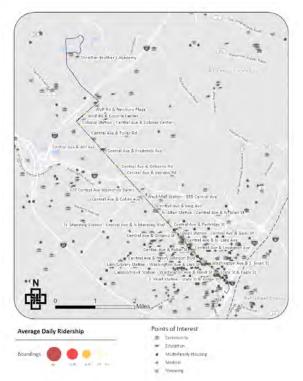


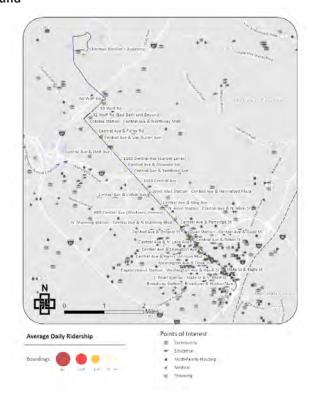




Weekday **
Ridership by Stop

Inbound







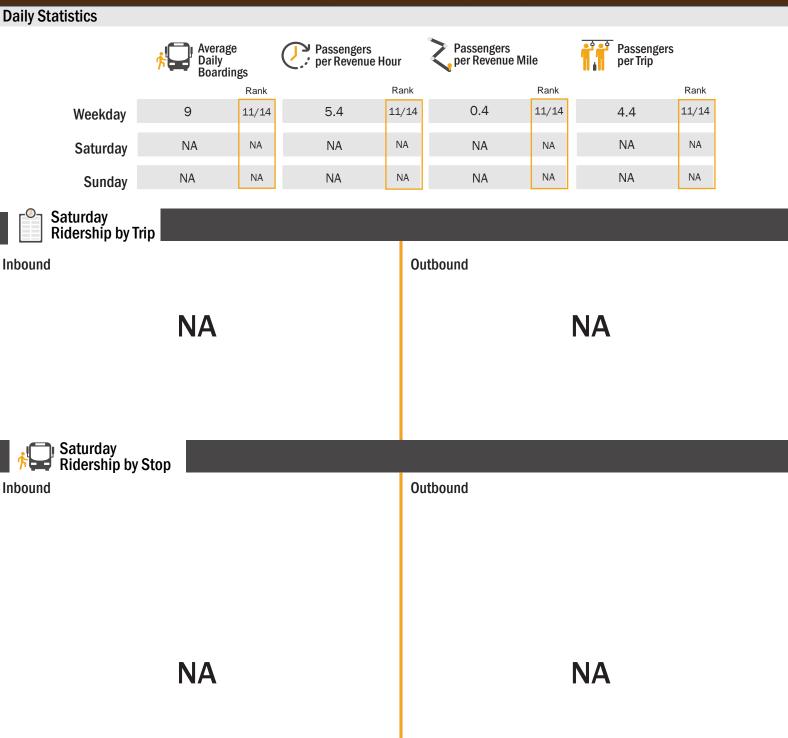
Suburban Shuttle

Service Type: Shopping/Special

Description: Crossgates Mall, UAlbany, C.B.A. (school), via Central Ave to Downtown Albany (weekdays only)

Key Destinations: New York State Capitol Building, Albany County Social Services Department, Albany public library Main Branch, Townsend Park homes, The Linda WAMC's performing arts studio, Westview Senior Center, Hannaford plaza, Colonie Center, Westgate Plaza, Albany Institute of History & Art, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena)

Daily Statistics





Suburban Shuttle

Service Type: Shopping/Special

Description: Crossgates Mall, UAlbany, C.B.A. (school), via Central Ave to Downtown Albany (weekdays only)

Key Destinations: New York State Capitol Building, Albany County Social Services Department, Albany public library Main Branch, Townsend Park homes, The Linda WAMC's performing arts studio, Westview Senior Center, Hannaford plaza, Colonie Center, Westgate Plaza, Albany Institute of History & Art, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena)

Route Analysis

Strengths

- Suburban Shuttle: Serves Christian Brother's Academy
- Simple and streamlined alignment
- Timed with school start/end times

Weaknesses

- No weekend service
- Available only when school is in session
- Only 1 trip in each direction
- Ridership is low, 10/14 of Shopping/Special type routes
- Poor On-Time Performance with 21% of trips late and 11% of trips early.

Opportunities

- Ridership is low (4.4 pax per trip). Consider eliminating this route and rely on added FLEX zone,
- Consider timing the 155 neighborhood route
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



Inbound

Outbound

NA

NA



Inbound

Outbound

NA

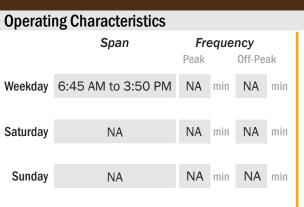
NA

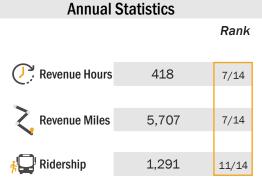


Albany-North Greenbush Shuttle **Service Type:** Shopping/Special

Description: Stuyvesant Plaza, Downtown Albany via Rensselaer, LaSalle (school) (weekdays only)

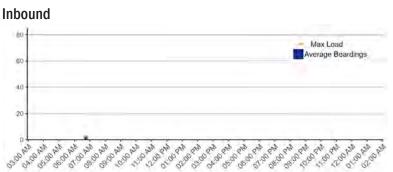
Key Destinations: Albany Downtown, Albany Public Library Pine Hills Branch, University at Albany - Downtown Campus, College of Saint Rose, CVS Pharmacy Homestead St/US20, University at Albany - Uptown Campus, Westmere Elementary School, Stuyvesant Plaza, Crossgates Mall, Greyhound Bus Terminal at Liberty St, SUNY System Administration Building and Plaza, Rensselaer Rail Station, Hudson Valley Community College

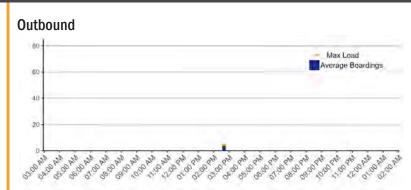






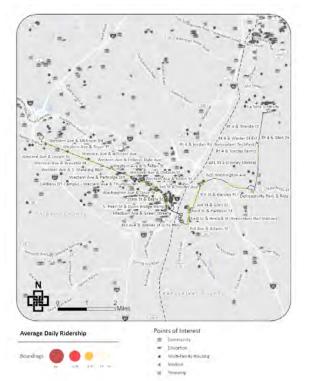


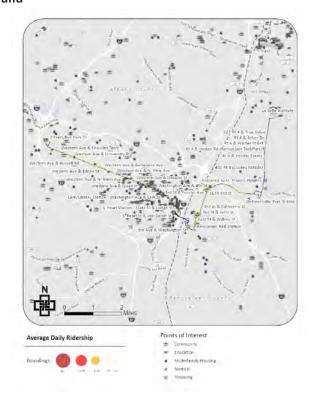




Weekday ** Ridership by Stop

Inbound





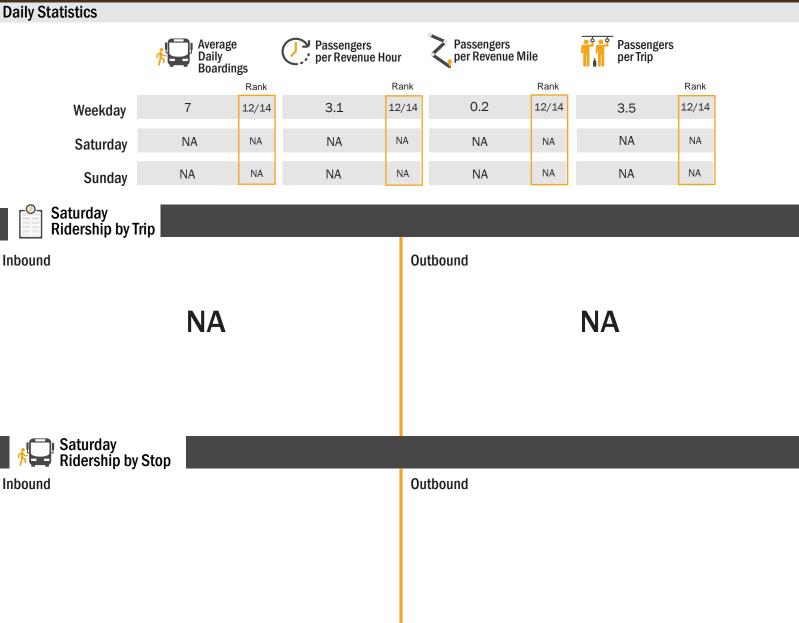


Albany-North Greenbush Shuttle **Service Type:** Shopping/Special

Description: Stuyvesant Plaza, Downtown Albany via Rensselaer, LaSalle (school) (weekdays only)

Key Destinations: Albany Downtown, Albany Public Library Pine Hills Branch, University at Albany - Downtown Campus, College of Saint Rose, CVS Pharmacy Homestead St/US20, University at Albany - Uptown Campus , Westmere Elementary School, Stuyvesant Plaza, Crossgates Mall, Greyhound Bus Terminal at Liberty St, SUNY System Administration Building and Plaza, Rensselaer Rail Station, Hudson Valley Community College

Daily Statistics



NA NA



Albany-North Greenbush Shuttle **Service Type:** Shopping/Special

Description: Stuyvesant Plaza, Downtown Albany via Rensselaer, LaSalle (school) (weekdays only)

Key Destinations: Albany Downtown, Albany Public Library Pine Hills Branch, University at Albany - Downtown Campus, College of Saint Rose, CVS Pharmacy Homestead St/US20, University at Albany - Uptown Campus , Westmere Elementary School, Stuyvesant Plaza, Crossgates Mall, Greyhound Bus Terminal at Liberty St, SUNY System Administration Building and Plaza, Rensselaer Rail Station, Hudson Valley Community College

Route Analysis

Strengths

- Albany/North Greenbush Shuttle: Serves La Salle Institute
- Timed with school start/end times

Weaknesses

- No weekend service
- Available only when school is in session
- Only 1 trip in each direction
- Ridership is low, 11/14 of Shopping/Special type routes (7/14 revenue hours/miles)
- Poor On-Time Performance with 19% of trips late and 17% of trips early.

Opportunities

- Ridership is low (3.5 pax per trip).
- Consider eliminating this route and rely on added FLEX zone.
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



Inbound

Outbound

NA

NA



Inbound

Outbound

NA

NA



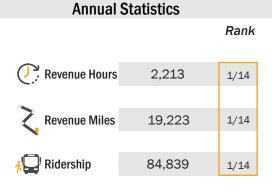
Schenectady Shuttle

Service Type: Shopping/Special

Description: Between Schenectady neighborhoods and Schenectady High School (weekdays only)

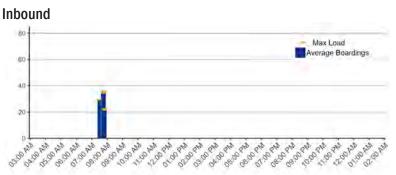
Key Destinations: Mohawk Commons, Walmart at Mansion Boulevard, ALDI at Albany St and School St, William C Keane Elementary School, Schenectady High School, Mohawk Harbor, Rivers Casino & Resort, Schenectady County Community College, Vale Cemetery, MVP Healthcare Nott Terrace/NY5, Schenectady Amtrak Station, Schenectady High School, Yates Magnet Elementary School

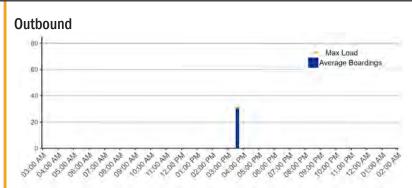
Operating Characteristics Span Frequency Peak Off-Peak Weekday 7:29 AM to 4:22 PM NA NA min min Saturday NA NA min NA min Sunday NA NA min NA min





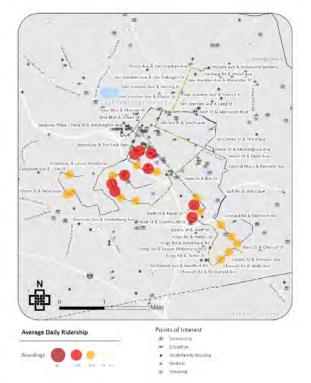


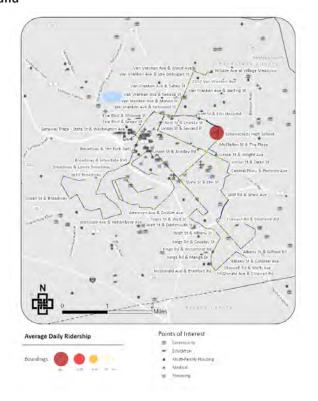




Weekday ** Ridership by Stop

Inbound







Schenectady Shuttle

Service Type: Shopping/Special

Description: Between Schenectady neighborhoods and Schenectady High School (weekdays only)

Key Destinations: Mohawk Commons, Walmart at Mansion Boulevard, ALDI at Albany St and School St, William C Keane Elementary School, Schenectady High School, Mohawk Harbor, Rivers Casino & Resort, Schenectady County Community College, Vale Cemetery, MVP Healthcare Nott Terrace/NY5, Schenectady Amtrak Station, Schenectady High School, Yates Magnet Elementary School

Daily Statistics





Schenectady Shuttle

Service Type: Shopping/Special

Description: Between Schenectady neighborhoods and Schenectady High School (weekdays only)

Key Destinations: Mohawk Commons, Walmart at Mansion Boulevard, ALDI at Albany St and School St, William C Keane Elementary School, Schenectady High School, Mohawk Harbor, Rivers Casino & Resort, Schenectady County Community College, Vale Cemetery, MVP Healthcare Nott Terrace/NY5, Schenectady Amtrak Station, Schenectady High School, Yates Magnet Elementary School

Route Analysis

Strengths

- Schenectady Shuttle: Serves La Salle Institute
- Annual Ridership, Revenue Hours and Revenue Miles is highest (1/14) of Shopping/Special routes.
- Passengers per revenue hour, mile, and trip ranks high among the Shopping/Special routes.
- Timed with school start/end times

Weaknesses

- No weekend service
- Available only when school is in session
- Poor On-Time Performance with 43% of trips late and 2% of trips

Opportunities

- Consider eliminating this route and rely on added FLEX zone.
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



Ridership by Trip

Inbound

NA NA



Inbound

Outbound

Outbound

NA NA



Schenectady-Albany Shuttle
Service Type: Shopping/Special

Description: Between State Street Schenectady and Green Tech via I-890 and Thruway (weekdays Only)

Key Destinations: William C Keane Elementary School, Schenectady County Community College, Vale Cemetery, MVP Healthcare Nott Terrace/NY5, Schenectady Amtrak Station, ALDI at Albany St and School St, Green Tech High Charter School



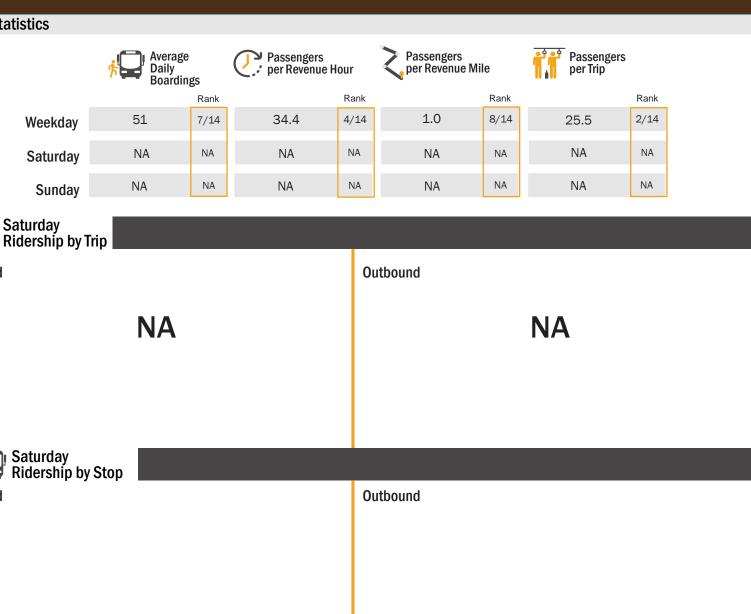
Schenectady-Albany Shuttle **Service Type:** Shopping/Special Description: Between State Street Schenectady and Green Tech via I-890 and Thruway (weekdays Only)

Key Destinations: William C Keane Elementary School, Schenectady County Community College, Vale Cemetery, MVP Healthcare Nott Terrace/NY5, Schenectady Amtrak Station, ALDI at Albany St and School St, Green Tech High Charter School

Daily Statistics

Inbound

Inbound



NA NA



Schenectady-Albany Shuttle

Service Type: Shopping/Special

Description: Between State Street Schenectady and Green Tech via I-890 and Thruway (weekdays Only)

Key Destinations: William C Keane Elementary School, Schenectady County Community College, Vale Cemetery, MVP Healthcare Nott Terrace/NY5, Schenectady Amtrak Station, ALDI at Albany St and School St, Green Tech High Charter School

Route Analysis

Strengths

- Schenectady-Albany Shuttle: Serves Green Tech
- Timed with school start/end times
- 25.5 passengers per trip

Weaknesses

- No weekend service
- Available only when school is in session
- Only 1 trip in each direction.
 Monday-Thursday PM trip is at a different time than the Friday PM trip.
- 17% of trips late and 6% of trips early.

Opportunities

- Consider eliminating this route and rely on added Microtransit/FLEX
- Recalibrate running and layover times to improve on-time performance

This route will be removed from further analysis.



__ Inbound

NA

Outbound

NA



Inbound

Outbound

NA

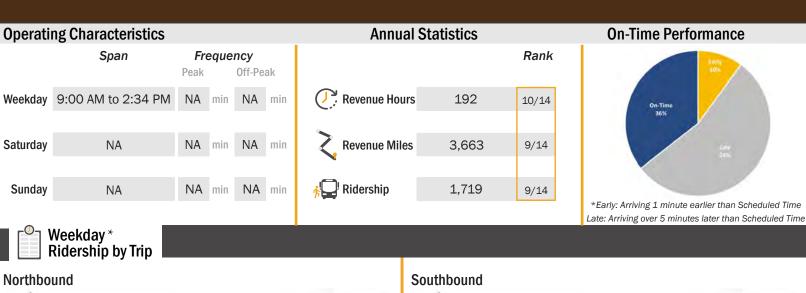
NA

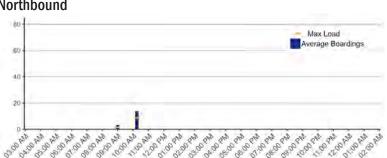


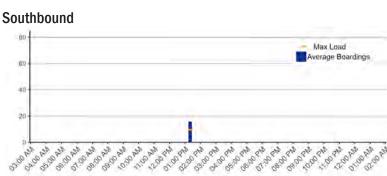
Ravena Shopping Shuttle **Service Type:** Shopping/Special

Description: Ravena Shopping Shuttle, between Ravena, Colonie Center and Crossgates Mall (Tuesdays only)

Key Destinations: Colonie Center, Crossgates Mall, Crossgates Commons, Bethlehem Town Center, Price Chopper at Glenmont Road, Hoffman Park, Albany City Square Plaza, Stephen and Harriet Myers Middle School, Northway Mall, University at Albany - Uptown Campus, Saint Peter's Hospital

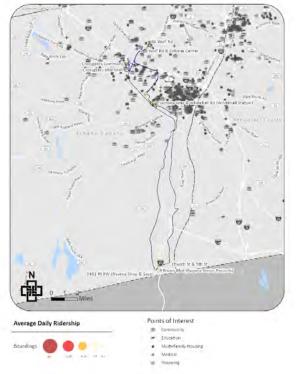


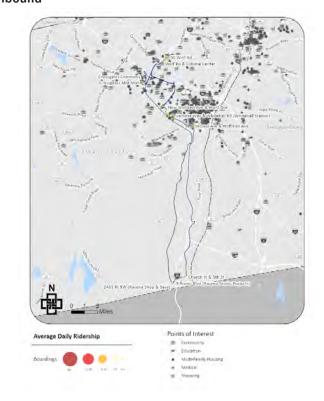






Northbound





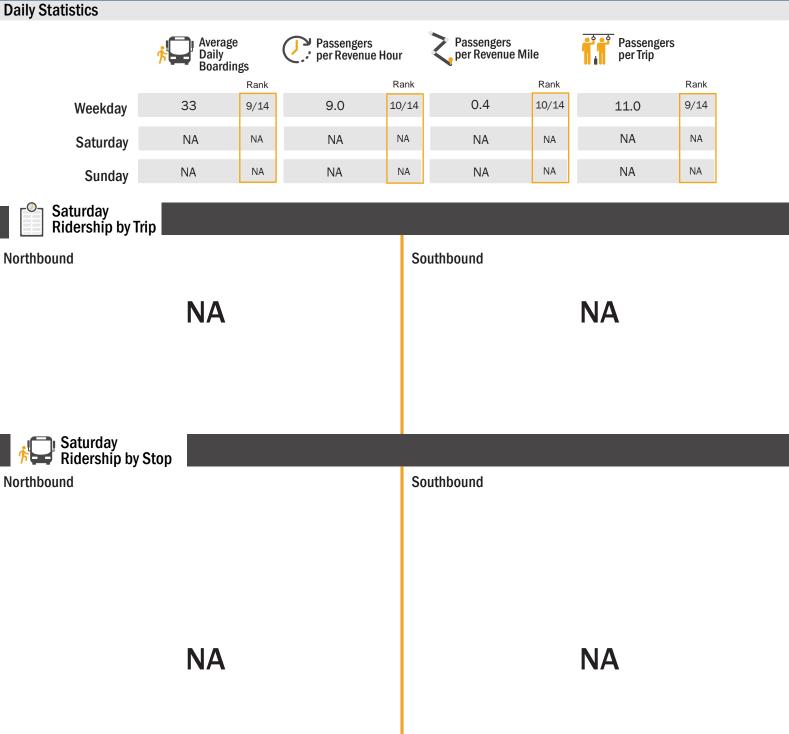


Ravena Shopping Shuttle

Service Type: Shopping/Special

Description: Ravena Shopping Shuttle, between Ravena, Colonie Center and Crossgates Mall (Tuesdays only)

Key Destinations: Colonie Center, Crossgates Mall, Crossgates Commons, Bethlehem Town Center, Price Chopper at Glenmont Road, Hoffman Park, Albany City Square Plaza, Stephen and Harriet Myers Middle School, Northway Mall, University at Albany -Uptown Campus, Saint Peter's Hospital





Ravena Shopping Shuttle

Service Type: Shopping/Special

Description: Ravena Shopping Shuttle, between Ravena, Colonie Center and Crossgates Mall (Tuesdays only)

Key Destinations: Colonie Center, Crossgates Mall, Crossgates Commons, Bethlehem Town Center, Price Chopper at Glenmont Road, Hoffman Park, Albany City Square Plaza, Stephen and Harriet Myers Middle School, Northway Mall, University at Albany -Uptown Campus, Saint Peter's Hospital

Route Analysis

Strengths

- Ravena Shopping Shuttle: Serves Ravena, Colonie Center, Crossgate Mall
- Tailored service for shopping needs, catering to specific community demands.

Weaknesses

- Service only provided on Tuesdays may restrict accessibility for potential riders
- Only two AM trips to Albany and one PM trip to Ravena
- Very poor On-Time Performance with 54% of trips late and 10% of trips early.

Opportunities

- Consider eliminating this route and rely on added FLEX zone.
- Recalibrate running and layover times to improve on-time performance
- Collaborate with local businesses to promote and expand shuttle ridership.

Sunday Ridership by Trip

Northbound

Southbound

NA

NA



Northbound

Southbound

NA

NA

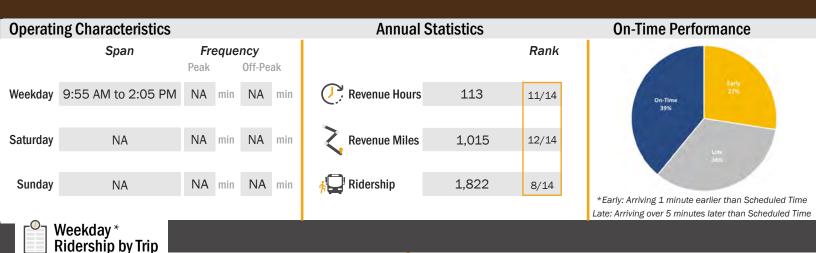


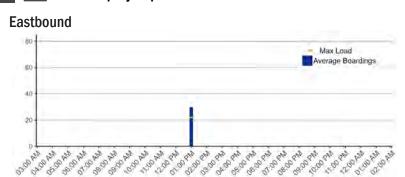
Troy Shopping Bus

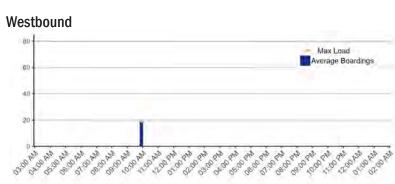
Service Type: Shopping/Special

Description: Troy Shopping Shuttle, between Troy to Downtown Troy and Brunswick Walmart (Wednesdays only)

Key Destinations: Walmart Supercenter in Brunswick, Brunswick Plaza Shopping Center, Troy Garden Apartments, Hudson River Commons, Collar City Bridge, Unity House of Troy, Tapestry on The Hudson Apartments, Rensselaer Polytechnic Institute, Perfect Mart at 6th Ave/Glen Ave, CVS at 2nd Ave Troy, Waltervilet Public Library

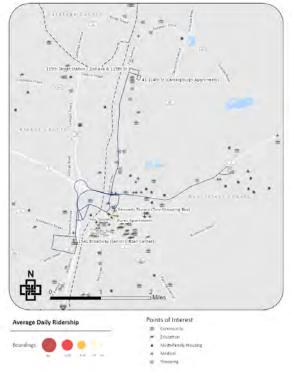


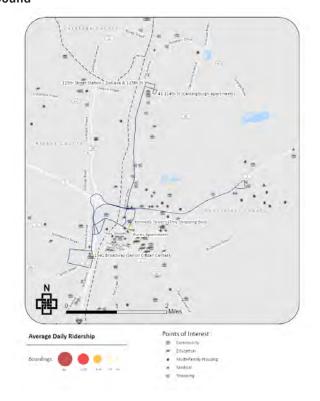






Eastbound







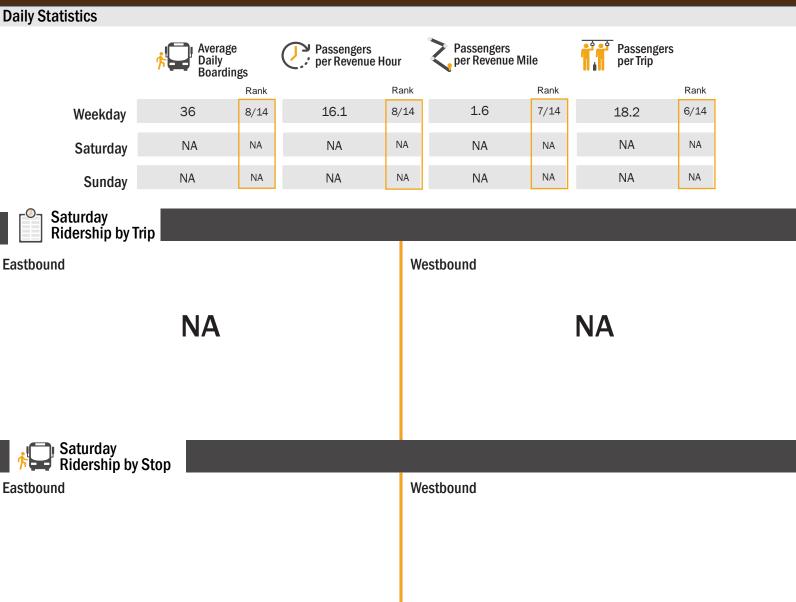
Troy Shopping Bus

Service Type: Shopping/Special

Description: Troy Shopping Shuttle, between Troy to Downtown Troy and Brunswick Walmart (Wednesdays only)

Key Destinations: Walmart Supercenter in Brunswick, Brunswick Plaza Shopping Center, Troy Garden Apartments, Hudson River Commons, Collar City Bridge, Unity House of Troy, Tapestry on The Hudson Apartments, Rensselaer Polytechnic Institute, Perfect Mart at 6th Ave/Glen Ave, CVS at 2nd Ave Troy, Waltervilet Public Library

Daily Statistics



NA NA



Troy Shopping Bus

Service Type: Shopping/Special

Description: Troy Shopping Shuttle, between Troy to Downtown Troy and Brunswick Walmart (Wednesdays only)

Key Destinations: Walmart Supercenter in Brunswick, Brunswick Plaza Shopping Center, Troy Garden Apartments, Hudson River Commons, Collar City Bridge, Unity House of Troy, Tapestry on The Hudson Apartments, Rensselaer Polytechnic Institute, Perfect Mart at 6th Ave/Glen Ave, CVS at 2nd Ave Troy, Waltervilet Public Library

Route Analysis

Strengths

- Troy Shopping Shuttle: Serves Troy (Downtown Troy) and Brunswick Walmart)
- Tailored service for shopping needs, catering to specific community demands.

Weaknesses

- Service only provided on Wednesdays may restrict accessibility for potential riders
- Only 1 trip in each direction.
- Very poor On-Time Performance with 34% of trips late and 27% of trips early.

Opportunities

- Consider eliminating this route and rely on added FLEX zone.
- Consider replacing segments of the route with regular fixed-route service where possible.
- Recalibrate running and layover times to improve on-time performance
- Collaborate with local businesses to promote and expand shuttle ridership.



Eastbound

Westbound

NA

NA



Eastbound

Westbound

NA

NA

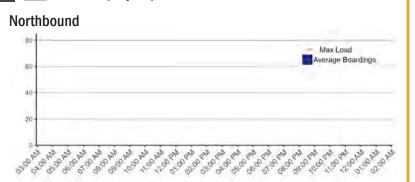


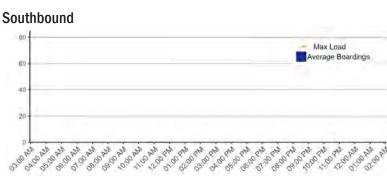
North Greenbush Shopping Bus **Service Type:** Shopping/Special

Description: North Greenbush Shoppers Shuttle, between St Jude Snior Apartments and Walmart Rensselaer Plaza (Thursdays only)

Key Destinations: Rensselaer County Plaza, Walmart at Rensselaer County Plaza, Shoppers at Greenbush Commons, Defreestville Park and Ride, Van Rensselaer Square Shopping Center, Hudson Valley Community College

Annual Statistics On-Time Performance Operating Characteristics Span Frequency Rank Peak Off-Peak Weekday 10:50 AM to 2:47 PM **Revenue Hours** 82 NA NA min min 12/14 NA Saturday NA NA min NA min **Revenue Miles** 1,097 11/14 Sunday NA NA min NA min 4 Ridership 0 14/14 *Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time Weekday * Ridership by Trip







Northbound





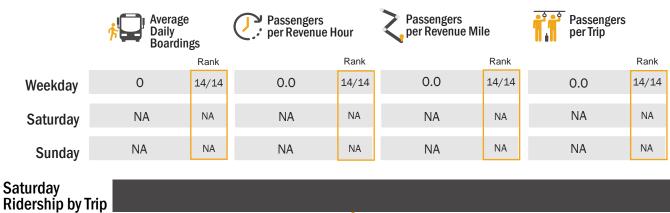


North Greenbush Shopping Bus **Service Type:** Shopping/Special

Description: North Greenbush Shoppers Shuttle, between St Jude Snior Apartments and Walmart Rensselaer Plaza (Thursdays only)

Key Destinations: Rensselaer County Plaza, Walmart at Rensselaer County Plaza, Shoppers at Greenbush Commons, Defreestville Park and Ride, Van Rensselaer Square Shopping Center, Hudson Valley Community College

Daily Statistics



Ridership by Trip

Northbound Southbound

NA NA

Saturday Ridership by Stop

Northbound Southbound

NA NA



North Greenbush Shopping Bus **Service Type:** Shopping/Special

Description: North Greenbush Shoppers Shuttle, between St Jude Snior Apartments and Walmart Rensselaer Plaza (Thursdays only)

Key Destinations: Rensselaer County Plaza, Walmart at Rensselaer County Plaza, Shoppers at Greenbush Commons, Defreestville Park and Ride, Van Rensselaer Square Shopping Center, Hudson Valley Community College

Route Analysis

Strengths

- North Greenbush/Rensselaer Shopping Shuttle: Serves St Jude Senior Apartments and Walmart Rensselaer Plaza
- Tailored service for shopping needs, catering to specific community demands.

Weaknesses

- Service only provided on Thursdays may restrict accessibility for potential riders
- Only 2 trips in each direction.

Opportunities

- Consider eliminating this route and rely on added FLEX zone.
- Collaborate with local businesses to promote and expand shuttle ridership.

Sunday Ridership by Trip

Northbound

Southbound

NA

NA



Northbound

Southbound

NA

NA



Saratoga Stonequist Shopper Bus Service Type: Shopping/Special

Description: Saratoga Springs Shoppers Shuttle, between Downtown Saratoga, Walmart and Wilton Mall (Tuesdays only)

Key Destinations: Walmart Supercenter in Saratoga Springs, Wilton Mall Terminal, Saratoga Springs Public Library, Saratoga Central Catholic High School, Saratoga Congress Park, Saratoga Springs High School, Price Chopper 115 Ballston Ave

Annual Statistics On-Time Performance Operating Characteristics Span Frequency Rank Peak Off-Peak **Revenue Hours** 45 Weekday 10:57 AM to 2:00 PM 60 NA min min 14/14 Saturday NA NA min NA min **Revenue Miles** 741 14/14 On-Time 72% Sunday NA NA min NA min Ridership 656 12/14 *Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time Weekday * Ridership by Trip Northbound Southbound 80 Max Load Max Load verage Boardings Average Boardings 4.0 of Original of on pay 10:00 AM 7.00 PM OE GO PH ¶ Weekday ** Ridership by Stop Southbound Northbound



Average Daily Ridership

Points of Interest

Multi-Family Housing

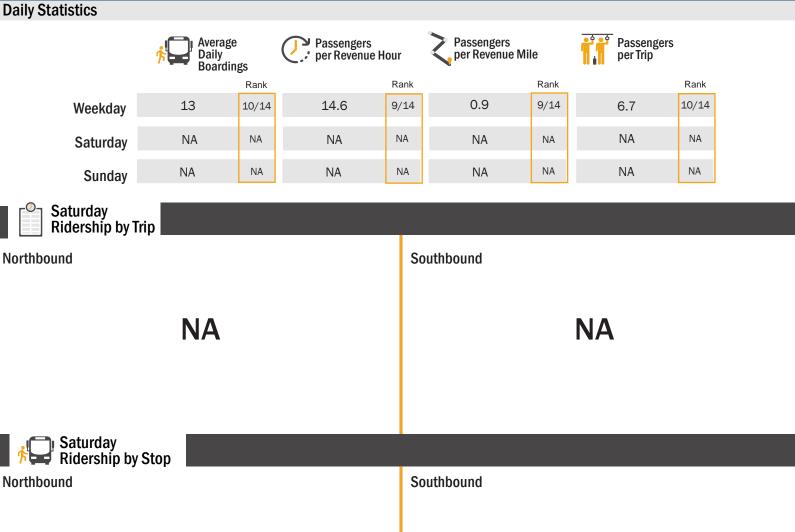


Saratoga Stonequist Shopper Bus Service Type: Shopping/Special

Description: Saratoga Springs Shoppers Shuttle, between Downtown Saratoga, Walmart and Wilton Mall (Tuesdays only)

Key Destinations: Walmart Supercenter in Saratoga Springs, Wilton Mall Terminal, Saratoga Springs Public Library, Saratoga Central Catholic High School, Saratoga Congress Park , Saratoga Springs High School, Price Chopper 115 Ballston Ave

Daily Statistics



NA NA



Saratoga Stonequist Shopper Bus Service Type: Shopping/Special Description: Saratoga Springs Shoppers Shuttle, between Downtown Saratoga, Walmart and Wilton Mall (Tuesdays only)

Key Destinations: Walmart Supercenter in Saratoga Springs, Wilton Mall Terminal, Saratoga Springs Public Library, Saratoga Central Catholic High School, Saratoga Congress Park, Saratoga Springs High School, Price Chopper 115 Ballston Ave

Route Analysis

Strengths

- Saratoga Springs Shopping Shuttle: Serves Downtown Saratoga, Walmart and Wilton Mall
- Tailored service for shopping needs, catering to specific community demands.

Weaknesses

- Service only provided on Tuesdays may restrict accessibility for potential riders
- Only 2 trips in each direction.
- On time performance is 22% late and 6% early.

Opportunities

- Recalibrate running and layover times to improve on-time performance
- Collaborate with local businesses to promote and expand shuttle ridership

Sunday Ridership by Trip

Northbound

Southbound

NA

NA



Northbound

Southbound

NA

NA



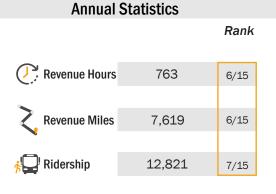
Saratoga Summer Trolley

Service Type: Shopping/Special

Description: Complimentary summer service between Saratoga Casino, Saratoga Race Course and Dowtown Saratoga Springs (runs from mid-July to early September)

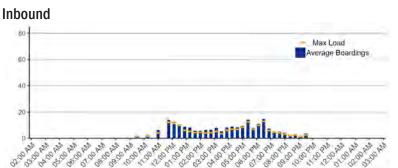
Key Destinations: Downtown Saratoga Springs, Saratoga Hilton, Visitor Center and Heritage Area, Congress Park, Holiday Inn, Hampton Inn, Saratoga Race Track, Saratoga Casino-Hotel

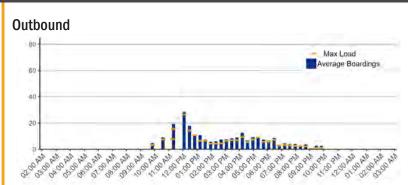
Operating Characteristics Span Frequency Peak Off-Peak Weekday 9:30 AM to 10:08 PM 23 45 min min Saturday 9:30 AM to 10:08 PM 23 min 45 min Sunday 9:30 AM to 10:08 PM 23 min







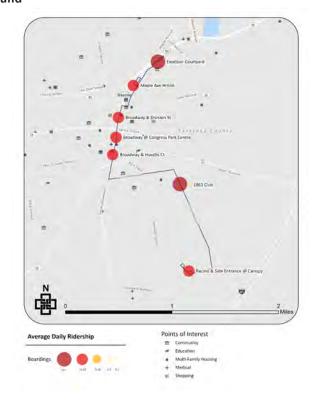






Inbound







Saratoga Summer Trolley

Service Type: Shopping/Special

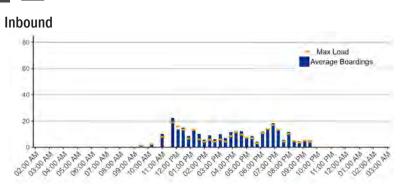
Description: Complimentary summer service between Saratoga Casino, Saratoga Race Course and Dowtown Saratoga Springs (runs from mid-July to early September)

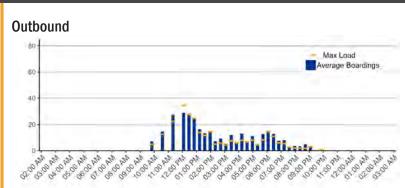
Key Destinations: Downtown Saratoga Springs, Saratoga Hilton, Visitor Center and Heritage Area, Congress Park, Holiday Inn, Hampton Inn, Saratoga Race Track, Saratoga Casino-Hotel

Daily Statistics

	Average Daily Boardings		Passengers per Hour		Passengers per Mile		Passengers per Trip	
		Rank		Rank		Rank		Rank
Weekday	370	3/15	16.3	5/15	1.6	4/15	6.1	7/15
Saturday	497	1/1	22.6	1/1	2.2	1/1	8.3	1/1
Sunday	278	1/1	12.6	1/1	1.3	1/1	4.6	1/1

Saturday
Ridership by Trip





Saturday
Ridership by Stop

Inbound







Saratoga Summer Trolley

Service Type: Shopping/Special

Description: Complimentary summer service between Saratoga Casino, Saratoga Race Course and Dowtown Saratoga Springs (runs from mid-July to early September)

Key Destinations: Downtown Saratoga Springs, Saratoga Hilton, Visitor Center and Heritage Area, Congress Park, Holiday Inn, Hampton Inn, Saratoga Race Track, Saratoga Casino-Hotel

Route Analysis

Strengths

- Provides direct connections between major points of interest and tourist destinations in Saratoga Springs
- Only shopping/special route to provide extensive weekday service
- Strong Saturday ridership
- Among the highest weekday average daily boardings for shopping/special routes

Weaknesses

- Relatively poor on-time performance, with 30 percent of timepoints served late
- No service on Mondays or Tuesdays
- Relatively low productivity, with only 6 passengers per trip on weekdays and less than 5 passengers per trip on Sundays

Opportunities

- Consider reducing peak frequency to improve productivity and create a simpler clockface schedule
- Recalibrate running and layover times to improve on-time performance
- Re-evaluate span of service

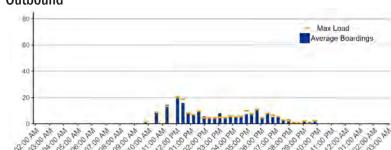


Sunday Ridership by Trip





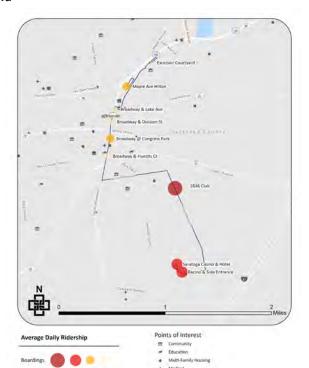
Outbound





Sunday Ridership by Stop

Inbound





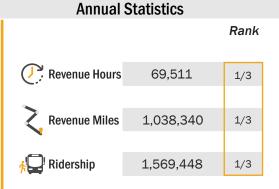


Red Line Albany/Schenectady
Service Type: BusPlus (BRT)

Description: BusPlus+ between Downtown Schenectady and Downtown Albany (7 days a week)

Key Destinations: New York State Capitol Building, Albany County Social Services Department, Albany public library Main Branch, Westview Senior Center, Hannaford plaza, Colonie Center, Westgate Plaza, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena), Schenectady County Community College, Schenectady Downtown Train Station (BusPlus), ALDI at Albany St and School St, Mohawk Commons

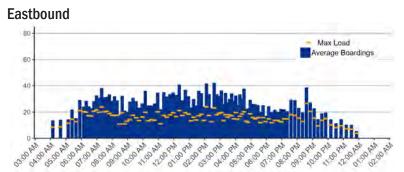
Operating Characteristics Span Frequency Peak Off-Peak 4:09 AM to 1:00 AM Weekday 10 min 20 min Saturday 6:00 AM to 12:39 AM 10 min 20 min



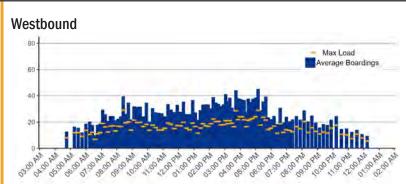




Sunday 7:10 AM to 11:45 PM

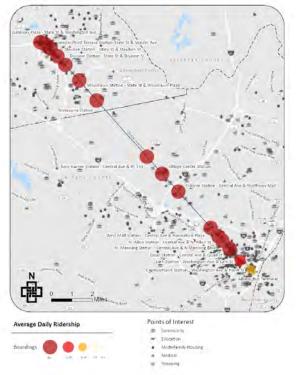


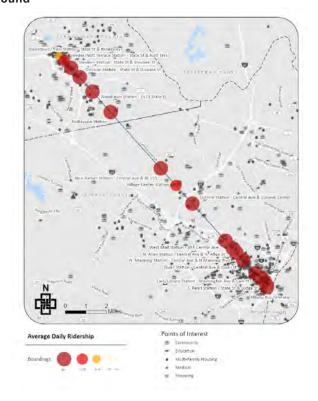
15 min





Eastbound





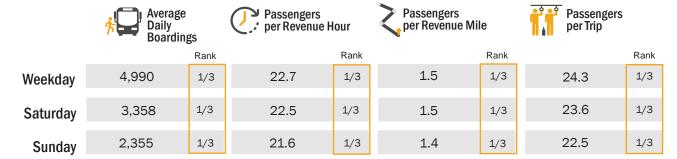


Red Line Albany/Schenectady
Service Type: BusPlus (BRT)

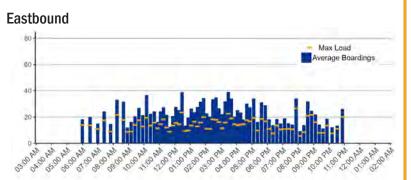
Description: BusPlus+ between Downtown Schenectady and Downtown Albany (7 days a week)

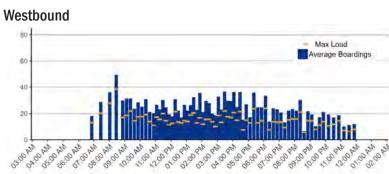
Key Destinations: New York State Capitol Building, Albany County Social Services Department, Albany public library Main Branch, Westview Senior Center, Hannaford plaza, Colonie Center, Westgate Plaza, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena), Schenectady County Community College, Schenectady Downtown Train Station (BusPlus), ALDI at Albany St and School St, Mohawk

Daily Statistics



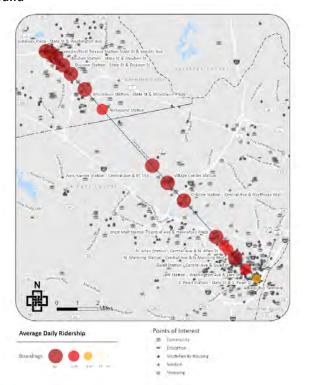


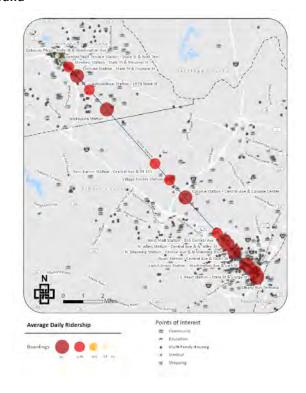




Saturday
Ridership by Stop

Eastbound







Red Line Albany/Schenectady **Service Type:** BusPlus (BRT)

Description: BusPlus+ between Downtown Schenectady and Downtown Albany (7 days a week)

Key Destinations: New York State Capitol Building, Albany County Social Services Department, Albany public library Main Branch, Westview Senior Center, Hannaford plaza, Colonie Center, Westgate Plaza, Empire State Plaza, Albany City Hall, Times Union Center (MVP Arena), Schenectady County Community College, Schenectady Downtown Train Station (BusPlus), ALDI at Albany St and School St, Mohawk Commons

Route Analysis

Strengths

- Direct alignment connecting downtown Schenectady and downtown Albany
- Well-connected to other CDTA and transit
- Connects to multiple educational institutions and libraries, and serves a mixed-use shopping corridor with multiple groceries, pharmacies, and shopping malls
- 7-day-a-week service
- Excellent span of service, including early morning and late-night service on all days
- High frequency service, coming as often as every 8 minutes during weekday peak
- Consistently high ridership during peak and mid-day hours

Weaknesses

- On Sundays, the number of passengers per trip peaks in the first trip in the Westbound direction, suggesting that earlier service may be appropriate
- 22% of sampled timepoints are served late
- Rider and operator feedback indicates there is frequent overcrowding and issues with bunching

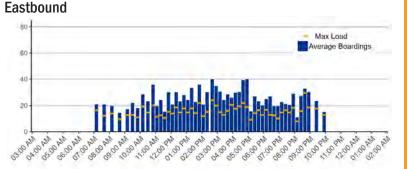
Opportunities

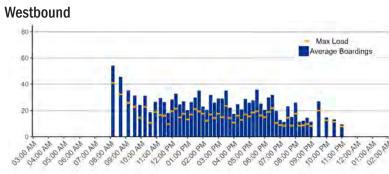
- Consider adding earlier Westbound trips on Sundays to accommodate for high
- Recalibrate running and layover times to improve on-time performance



Sunday Ridership by Trip



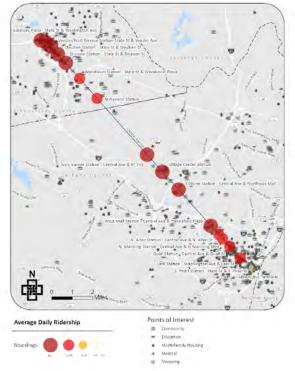


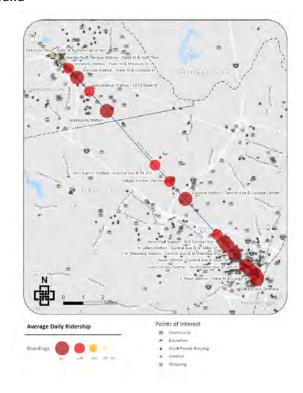




Sunday Ridership by Stop

Eastbound







Blue Line Cohoes to Delaware Station **Service Type:** BusPlus (BRT)

Description: BusPlus+ between Second Ave in Albany and Van Shaick Island/ Downtown Cohoes via Ontario and Remsen Street (7 days a week)

Key Destinations: Cohoes Family Health Center, Cohoes Public Library, Powers Memorial Park, Perfect Mart at 6th Ave/Glen Ave, Capital District Educational Opportunity Center EOC, Riverfront Park, Troy Downtown, Leo W O'Brien Federal Building, Albany Public Library North Albany Branch, Dollar Store of Watervliet at 19th/NY32 (Schuyler Plaza), Russell Sage College (Troy), City Square Plaza, Giffen

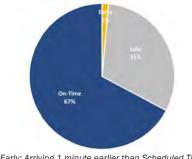
Operating Characteristics





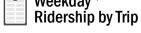


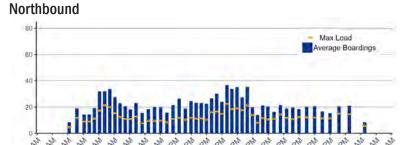
On-Time Performance

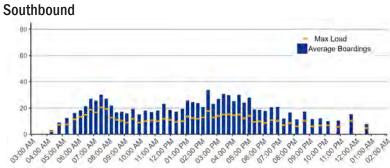


*Early: Arriving 1 minute earlier than Scheduled Time Late: Arriving over 5 minutes later than Scheduled Time



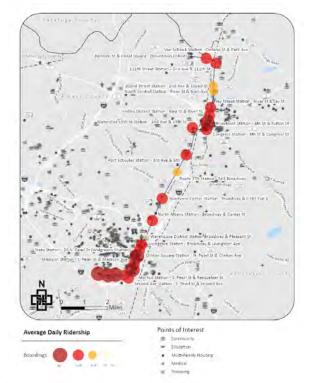


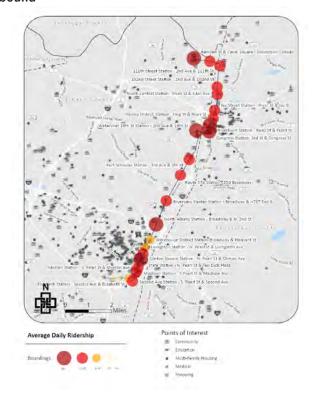






Northbound







Blue Line Cohoes to Delaware Station
Service Type: BusPlus (BRT)

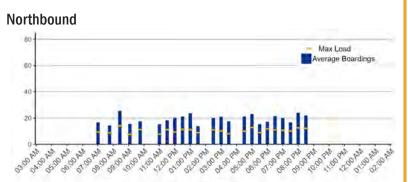
Description: BusPlus+ between Second Ave in Albany and Van Shaick Island/ Downtown Cohoes via Ontario and Remsen Street (7 days a week)

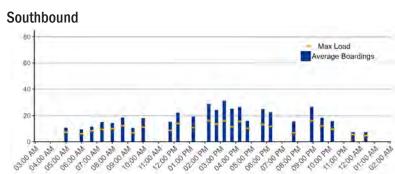
Key Destinations: Cohoes Family Health Center, Cohoes Public Library, Powers Memorial Park, Perfect Mart at 6th Ave/Glen Ave, Capital District Educational Opportunity Center EOC, Riverfront Park, Troy Downtown, Leo W O'Brien Federal Building, Albany Public Library North Albany Branch, Dollar Store of Watervliet at 19th/NY32 (Schuyler Plaza), Russell Sage College (Troy), City Square Plaza, Giffen

Daily Statistics



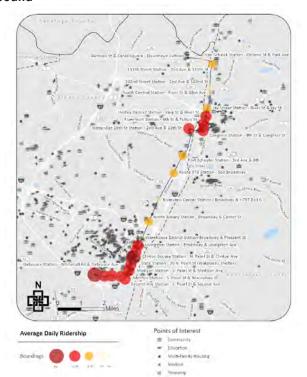


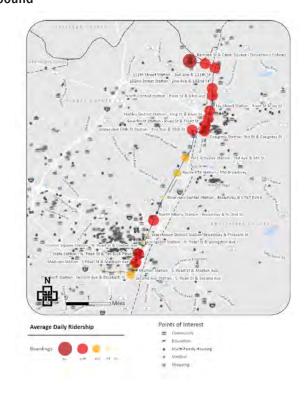






Northbound







Blue Line Cohoes to Delaware Station **Service Type:** BusPlus (BRT)

Description: BusPlus+ between Second Ave in Albany and Van Shaick Island/ Downtown Cohoes via Ontario and Remsen Street (7 days a week)

Key Destinations: Cohoes Family Health Center, Cohoes Public Library, Powers Memorial Park, Perfect Mart at 6th Ave/Glen Ave, Capital District Educational Opportunity Center EOC, Riverfront Park, Troy Downtown, Leo W O'Brien Federal Building, Albany Public Library North Albany Branch, Dollar Store of Watervliet at 19th/NY32 (Schuyler Plaza), Russell Sage College (Troy), City Square Plaza, Giffen

Route Analysis

Strengths

- Connects Cohoes to Albany via
- High-frequency service on weekdays during peak hours, and relatively frequent service during most of the week
- Average of about 18 passengers per trip on weekdays, about 16 on Saturdays, and about 17 on Sundays

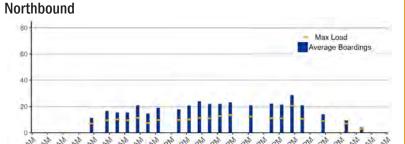
Weaknesses

- 31% of sampled timepoints are served late
- Somewhat infrequent service on Sundays during off-peak hours

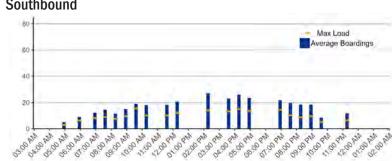
Opportunities

- Recalibrate running and layover times to improve on-time performance
- Consider increasing frequency during off-peak hours on weekends due to consistent ridership throughout the day

Sunday Ridership by Trip



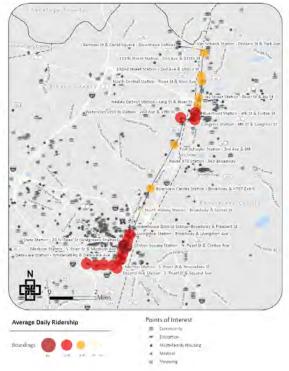
Southbound

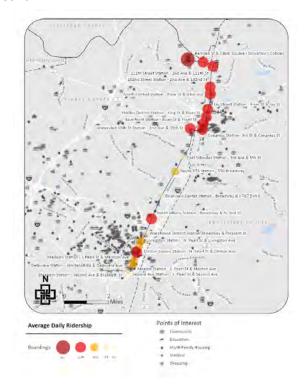




Sunday Ridership by Stop

Northbound





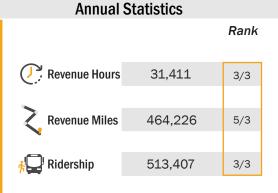


Blue Line Waterford to Rail Trail
Service Type: BusPlus (BRT)

Description: BusPlus+, between South Pearl Street in Albany, northern Lansingburgh and Waterford via 2nd Ave and Broad Street (7 days a week)

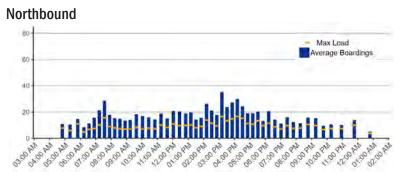
Key Destinations: h Ave/Glen Ave, Capital District Educational Opportunity Center EOC, Riverfront Park, Troy Downtown, Leo W O'Brien Federal Building, Albany Public Library North Albany Branch, Dollar Store of Watervliet at 19th/NY32 (Schuyler Plaza), Russell Sage College (Troy), Giffen Elementary High School, South Mall Towers, Albany County Helderberg-Hudson Rail Trail

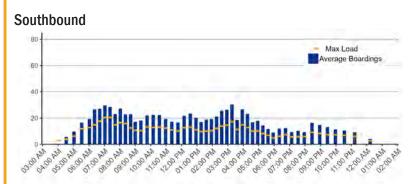
Operating Characteristics Span Frequency Peak Off-Peak 4:02 AM to 2:22 AM Weekday 10 20 min min Saturday 5:27 AM to 1:54 AM 15 min 20 min Sunday 5:22 AM to 12:30 AM 20 min





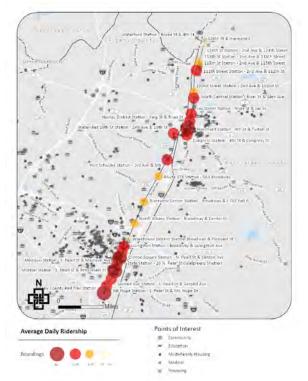


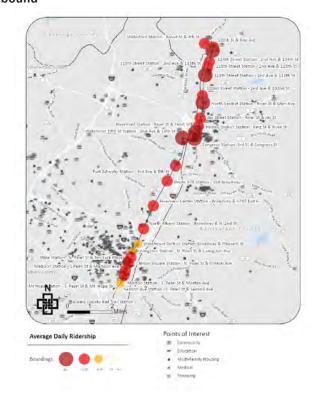




Weekday ** Ridership by Stop

Northbound





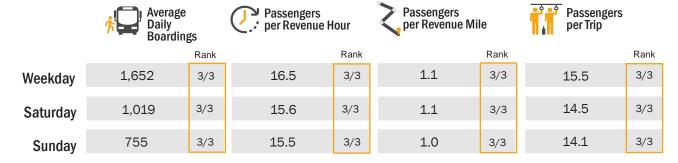


Blue Line Waterford to Rail Trail Service Type: BusPlus (BRT)

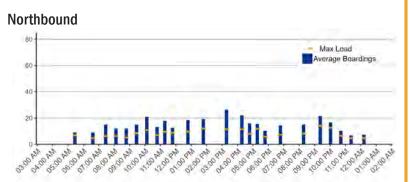
Description: BusPlus+, between South Pearl Street in Albany, northern Lansingburgh and Waterford via 2nd Ave and Broad Street (7 days a week)

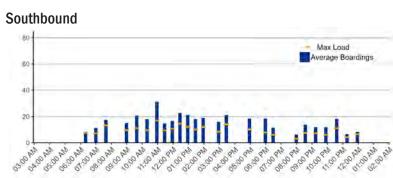
Key Destinations: h Ave/Glen Ave, Capital District Educational Opportunity Center EOC, Riverfront Park, Troy Downtown, Leo W O'Brien Federal Building, Albany Public Library North Albany Branch, Dollar Store of Watervliet at 19th/NY32 (Schuyler Plaza), Russell Sage College (Troy), Giffen Elementary High School, South Mall Towers, Albany County Helderberg-Hudson Rail Trail

Daily Statistics



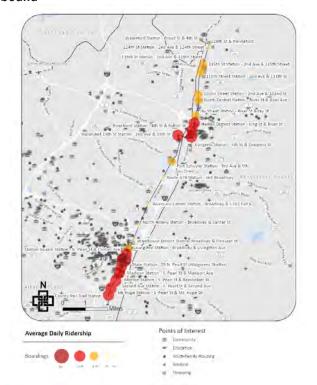


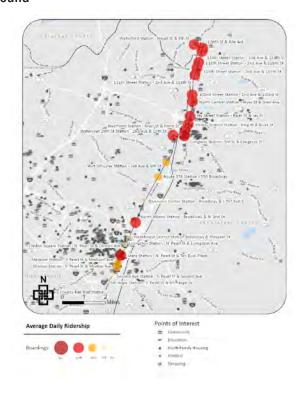




Saturday Ridership by Stop

Northbound







Blue Line Waterford to Rail Trail **Service Type:** BusPlus (BRT)

Description: BusPlus+, between South Pearl Street in Albany, northern Lansingburgh and Waterford via 2nd Ave and Broad Street (7 days a week)

Key Destinations: h Ave/Glen Ave, Capital District Educational Opportunity Center EOC, Riverfront Park, Troy Downtown, Leo W O'Brien Federal Building, Albany Public Library North Albany Branch, Dollar Store of Watervliet at 19th/NY32 (Schuyler Plaza), Russell Sage College (Troy), Giffen Elementary High School, South Mall Towers, Albany County Helderberg-Hudson Rail Trail

Route Analysis

Strengths

- Connects Cohoes to Albany via
- High-frequency service on weekdays during peak hours, and relatively frequent service during most of the week
- Average of about 16 passengers per trip on weekdays, about 15 on Saturdays, and about 14 on Sundays

Weaknesses

- 30% of sampled timepoints are served late
- Somewhat infrequent service on Sundays during off-peak hours

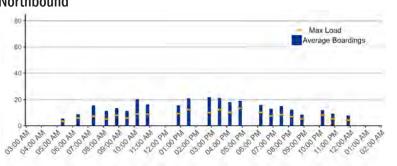
Opportunities

- Recalibrate running and layover times to improve on-time performance
- Consider increasing frequency during off-peak hours on weekends due to consistent ridership throughout the day
- Consider more direct service to Empire State Plaza



Sunday Ridership by Trip



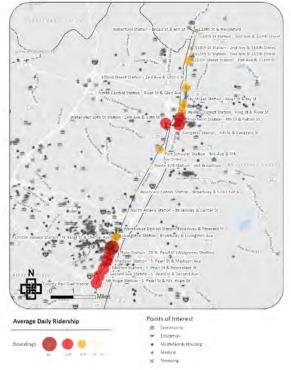


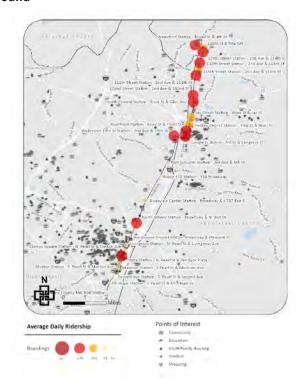
Southbound Max Load Average Boardings 60 N. ZOO PAN OZOG PM 40,00 AM AM



Sunday Ridership by Stop

Northbound









Description: On-Demand service operating throughout Colonie, Guilderland, and Latham.

Key Points of Interest: Crossgates Mall, Crossgates Commons, Stuyvesant Plaza, Colonie Center, William K Sanford Town Library, Colonie Town Court, Albany International Airport

Operating Characteristics

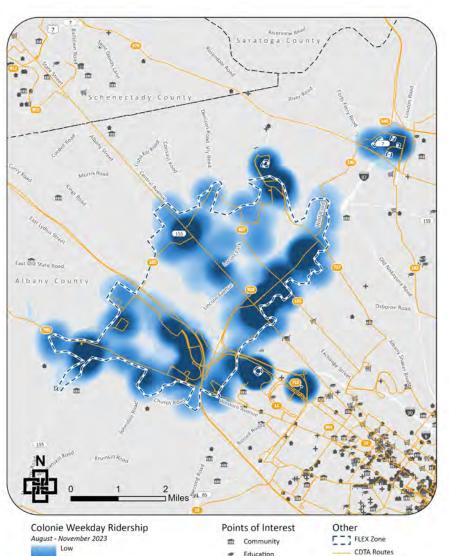
Annual Statistics

	Span
Weekday	6:00 a.m 10:45 p.m.
Saturday	6:00 a.m 10:45 p.m.
Sunday	10:00 a.m 6:00 p.m.

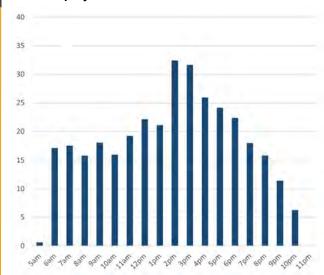
		Rank
Revenue Hours	13,572	1/2
Revenue Miles	233,440	1/2
ridership Ridership	52,800	1/2



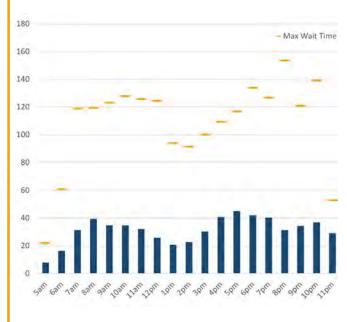
Total Weekday Ridership (Aug-Nov 2023)

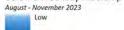


Average Weekday Ridership by Hour



Average Weekday Wait Time by Hour (Min)







Education

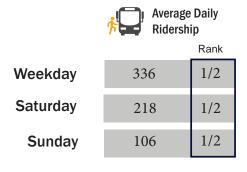
Multi-Family Housing



Description: On-Demand service operating throughout Colonie, Guilderland, and Latham.

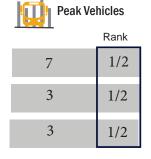
Key Points of Interest: Crossgates Mall, Crossgates Commons, Stuyvesant Plaza, Colonie Center, William K Sanford Town Library, Colonie Town Court, Albany International Airport

Daily Statistics



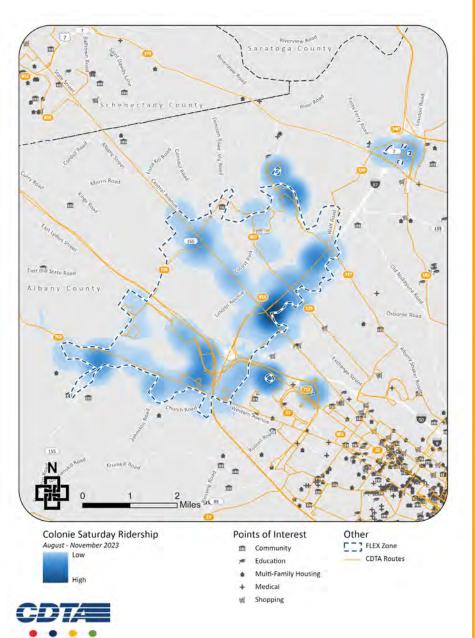
Passengers per Revenue Hour	
	Rank
4.8	1/2
4.6	1/2
5.4	1/2

Average Trip Duration (Min) Rank	
13.1	1/2
13.4	2/2
13.3	2/2

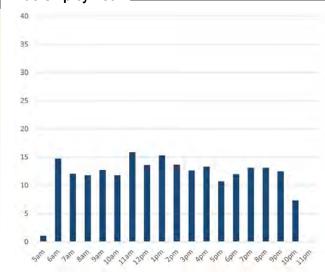




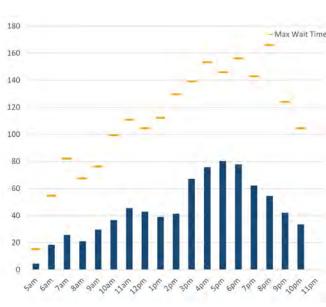
Total Saturday Ridership (Aug-Nov 2023)



Average Saturday Ridership by Hour



Average Saturday Wait Time by Hour (Min)





Description: On-Demand service operating throughout Colonie, Guilderland, and Latham.

Key Points of Interest: Crossgates Mall, Crossgates Commons, Stuyvesant Plaza, Colonie Center, William K Sanford Town Library, Colonie Town Court, Albany International Airport

Route Assessment

Strengths

- Provides broad on-demand coverage in a relatively auto-oriented environment
- Extensive span of service on weekdays and Saturdays
- Operates on Sundays
- Average trip duration under 15 minutes

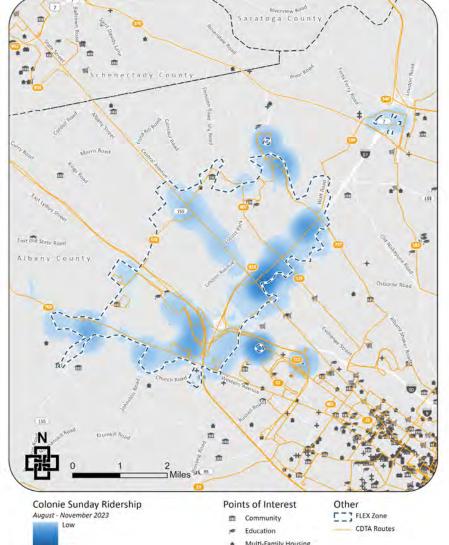
Weaknesses

- Very large zone, with several physical barriers including I-87 and I-90 with limited crossing opportunities
- Long wait times appear to be a common occurrence Provides service to destinations that are well served by
- fixed-route service such as the UAlbany campus
- Provides service to multiple locations of the same retail destination such as Target at Latham Center and Target at Northway Center
- Limited service to Heritage Village, a sprawling apartment community
- No service to British American Boulevard, a fairly large employment hub
- No ramp-up or ramp-down of ridership on Sunday, suggesting pent-up demand for earlier and later

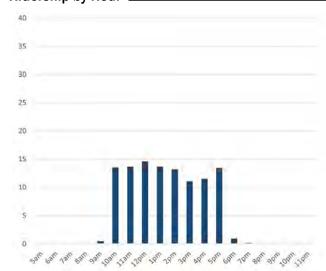
Opportunities

- Split zone into two zones on either side of I-90 to help reduce travel distances and wait times
- Expand coverage to include more of Heritage Village and British American Boulevard
- Eliminate service to UAlbany due to redundancy with fixed-route services
- Consider a new Latham FLEX zone anchored at Latham Center/Latham Farms and including residential neighborhoods near Forts Ferry Road, employment destinations along the US-9 corridor, and potentially the large Valley View Apartment complex in Watervliet
- Start service earlier on Sundays to allow for job access opportunities
- Increase peak vehicles to reduce wait times

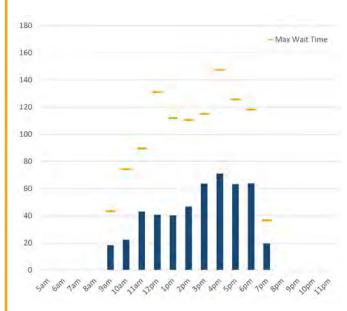
Total Sunday Ridership (Aug-Nov 2023)



Average Sunday Ridership by Hour



Average Sunday Wait Time by Hour (Min)





Multi-Family Housing





Zone: Southern Saratoga

Description: On-Demand service operating throughout Southern Saratoga County including connections to Mechanicville, Halfmoon, and Clifton Park.

Key Points of Interest: Clifton Park Town Justice, Price Chopper, Clifton Park Center, Saratoga Hospital Medical Group - Mechanicville, Mechanicville District Public Library

Operating Characteristics

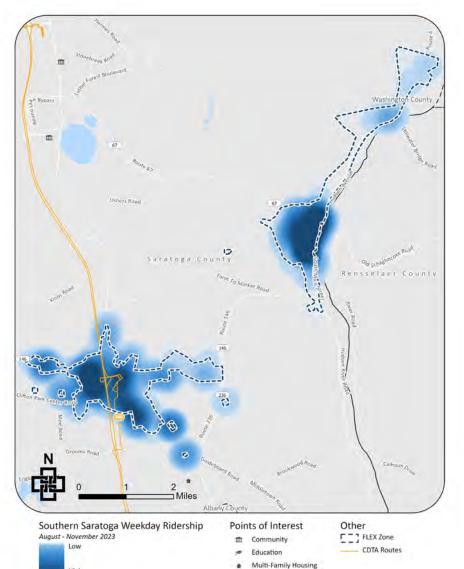
Annual Statistics

	Span
Weekday	7:00 a.m 8:00 p.m.
Saturday	10:00 a.m 6:00 p.m.
Sunday	10:00 a.m 6:00 p.m.

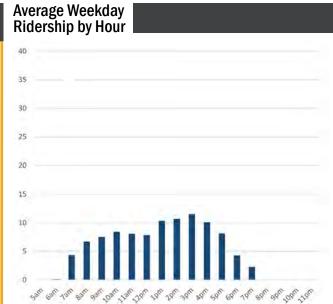




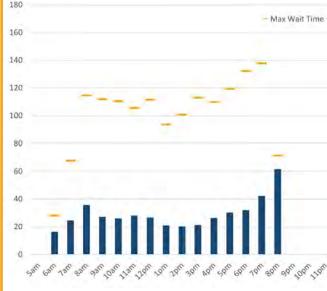
Total Weekday Ridership (Aug-Nov 2023)



Shopping







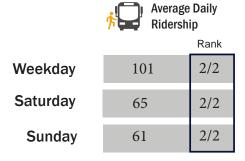


Zone: Southern Saratoga

Description: On-Demand service operating throughout Southern Saratoga County including connections to Mechanicville, Halfmoon, and Clifton Park.

Key Points of Interest: Clifton Park Town Justice, Price Chopper, Clifton Park Center, Saratoga Hospital Medical Group - Mechanicville, Mechanicville District Public Library

Daily Statistics



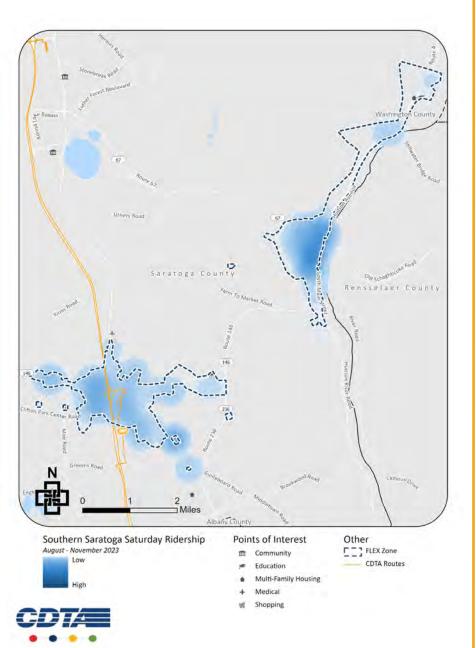
Passengers per Revenue Hour	
Rank	
3.7	2/2
3.9	2/2
3.7	2/2

Average Trip Duration (Min)	
13.7	2/2
13.0	1/2
11.3	1/2

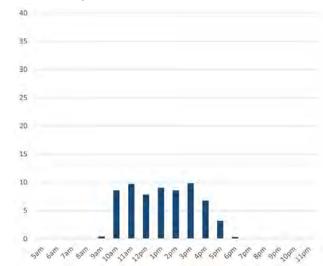
Peak Vehicles		
	Rank	
3	2/2	
2	2/2	
2	2/2	



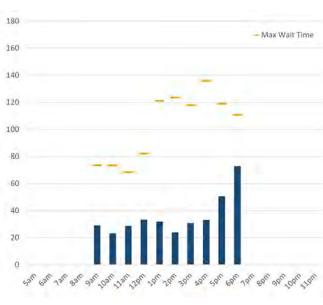
Total Saturday Ridership (Aug-Nov 2023)



Average Saturday Ridership by Hour



Average Saturday Wait Time by Hour (Min)





Zone: Southern Saratoga

Description: On-Demand service operating throughout Southern Saratoga County including connections to Mechanicville, Halfmoon, and Clifton Park.

Key Points of Interest: Clifton Park Town Justice, Price Chopper, Clifton Park Center, Saratoga Hospital Medical Group - Mechanicville, Mechanicville District Public Library

Route Assessment

Strengths

- Provides broad on-demand coverage throughout Clifton Park, a relatively autooriented environment frequently cited as needing more service
- Provides service to areas not served by fixed-route transit such as Mechanicville and Stillwater
- Operates seven days a week
- Average trip duration under 15 minutes

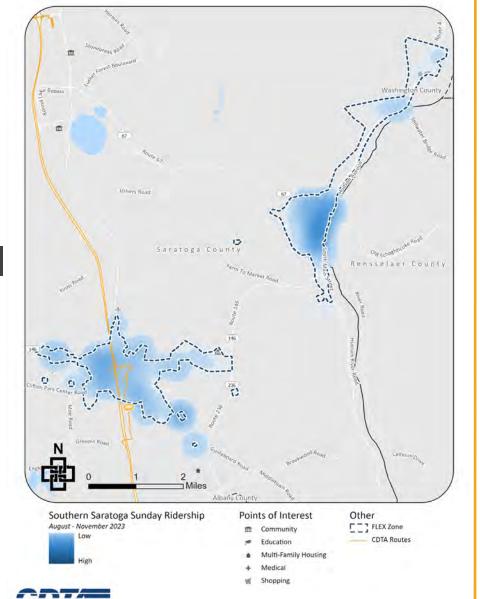
Weaknesses

- I-87 creates a physical barrier through the zone with limited crossing opportunities
- Long wait times appear to be a common occurrence, especially towards the end of the service day
- No service to Clifton Park Senior Community Center or Clifton Park Town Hall
- No service to Shenendehowa High School, one of the largest public schools in the Capital Region
- Zone spans around 12 miles from furthest point in Stillwater to Clifton Park Center, resulting in potentially longer wait times and trip durations

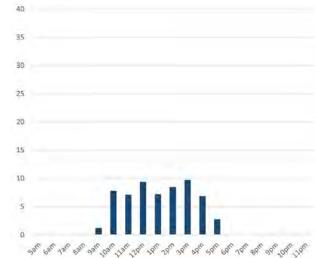
Opportunities

- Expand coverage to include Clifton Park Senior Community Center, Clifton Park Town Hall, and Shenendehowa High School
- Consider splitting into two zones to help reduce travel distances and wait times: one zone in Clifton Park and one zone in Mechanicville/Stillwater with a transfer location at Clifton Park Center
- Increase peak vehicles to reduce wait times

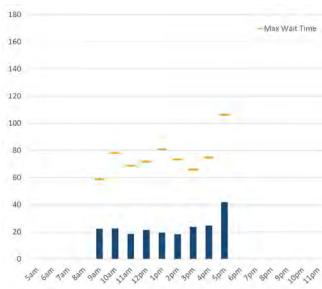
Total Sunday Ridership (Aug-Nov 2023)



Average Sunday Ridership by Hour



Average Sunday Wait Time by Hour (Min)



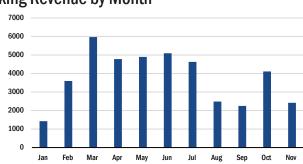


Description: CDTA's electric car sharing service. There are currently 6 cars serving approximately 400 members in the City of Albany and Cohoes

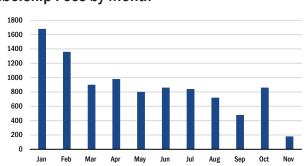
Car Locations: Albany County Department of Health, Albany Public Library: Delaware, Washington/Lark BRT, Church of St. Vincent DePaul, Maria College, Cohoes BRT

Operating Characteristics

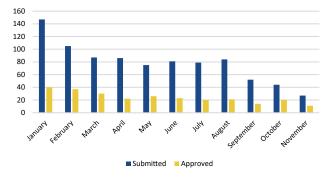




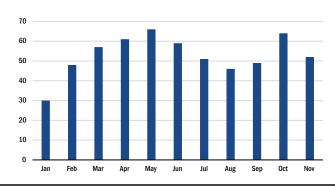
Membership Fees by Month

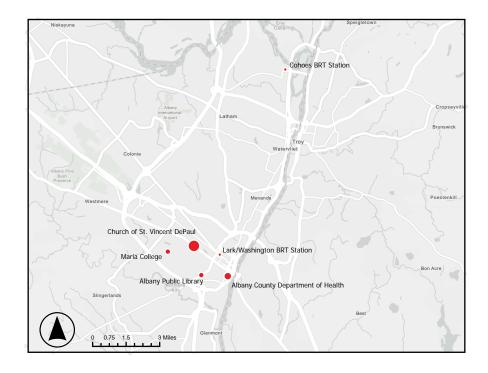


Approved/Submitted Applications by Month



Total Active Members by Month





Utilization by Station

- 26% 31%
- 22% 26%
- 19% 22%
- · 18% 19%

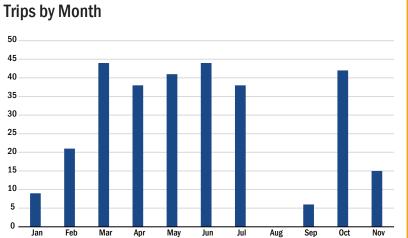


DRIVE Albany County Department of Health

Description: CDTA's electric car sharing service. There are currently 6 cars serving approximately 400 members in the City of Albany and Cohoes

Car Locations: Albany County Department of Health, Albany Public Library: Delaware, Washington/Lark BRT, Church of St. Vincent DePaul, Maria College, Cohoes BRT

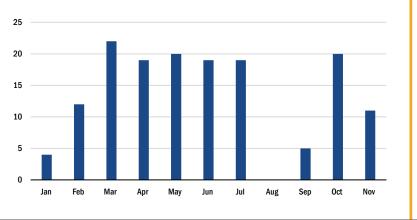
Operating Characteristics



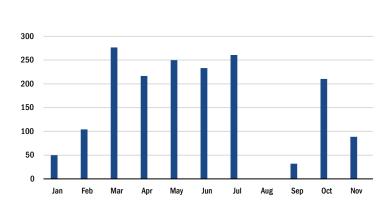
Annual Statistics

		Rank
Total Trips	298	2/6
Active Members	71	4/6
Rental Time	1,721	2/6

Active Members by Month



Rental Time by Month



Route Analysis

Strengths

Second highest number of trips in the system

Second highest overall rental time

Weaknesses

Genearlly fewer active members than other locations

Average trip duration greater than 5.5 hours (Second highest in the system)

Opportunities

Consider adding a second vehicle at this location

Consider direct marketing to increase membership in the area



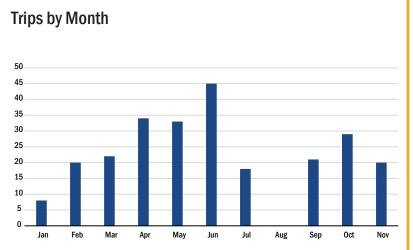
DRIVE

Albany Public Llbrary: Delaware Branch

Description: CDTA's electric car sharing service. There are currently 6 cars serving approximately 400 members in the City of Albany and Cohoes

Car Locations : Albany County Department of Health, Albany Public Library: Delaware, Washington/Lark BRT, Church of St. Vincent DePaul, Maria College, Cohoes BRT

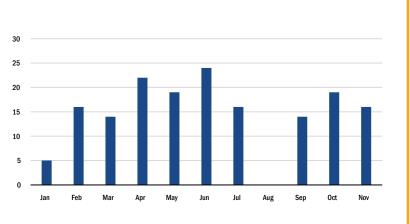
Operating Characteristics



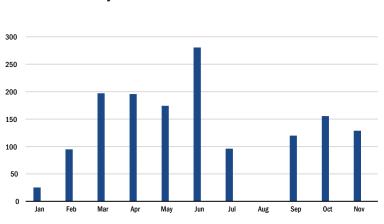
Annual Statistics

		Rank
Total Trips	250	4/6
Active Members	91	2/6
Rental Time	1,467	4/6

Active Members by Month



Rental Time by Month



Route Analysis

Strengths

Second highest active users in the system

Weaknesses

Generally fewer trips than other locations

Average trip duration greater than 5.5 hours (Highest in the system)

Less than 3 trips per active member (Lowest in the system)

Opportunities

Promote usage during summer months

Consider adding a second vehicle at this location



DRIVELark/Washington BRT Station

Apr

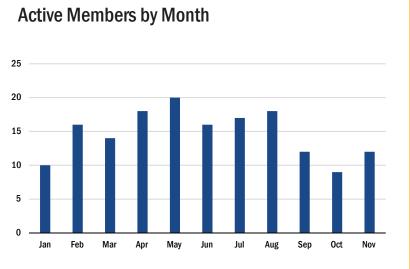
Description: CDTA's electric car sharing service. There are currently 6 cars serving approximately 400 members in the City of Albany and Cohoes

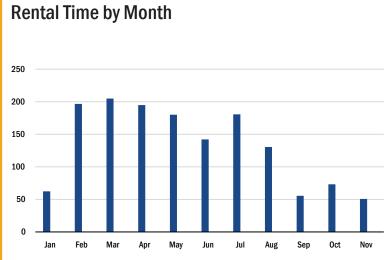
Car Locations: Albany County Department of Health, Albany Public Library: Delaware, Washington/Lark BRT, Church of St. Vincent DePaul, Maria College, Cohoes BRT

Operating Characteristics Trips by Month 35 30 25 20 15 10 5

Jun

Annual Statistics Rank Total Trips 292 3/6 Active Members 80 3/6 Rental Time 1,471 3/6





Route Analysis

Strengths

Consistent number of users and trips

Average trip duration is generally shorter than other locations

Weaknesses

Decreased usage during winter months

Low rental time during winter months

Opportunities

Promote usage during fall and winter months

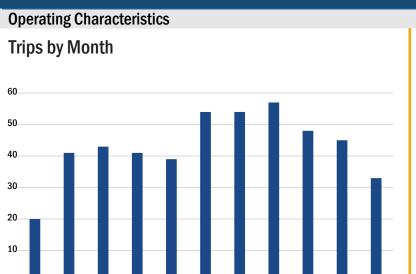


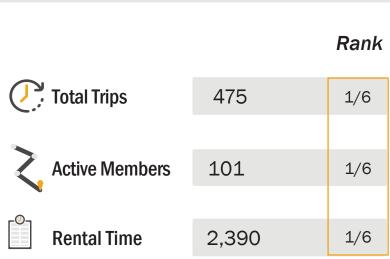
DRIVE Church of St. Vincent DePaul

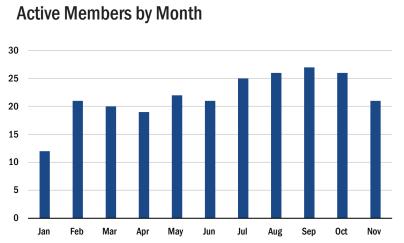
Description: CDTA's electric car sharing service. There are currently 6 cars serving approximately 400 members in the City of Albany and Cohoes

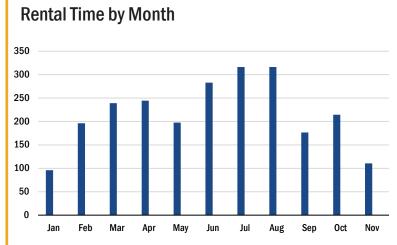
Car Locations: Albany County Department of Health, Albany Public Library: Delaware, Washington/Lark BRT, Church of St. Vincent DePaul, Maria College, Cohoes BRT

Annual Statistics









Route Analysis

Strengths

Highest usage in the DRIVE system

Most active users

Shortest average trip duration

Second highest location for repeat customers

Weaknesses

Lower rental time in winter months

Opportunities

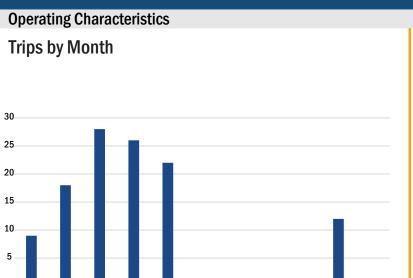
Expand avialiable cars at this location or add locations nearby



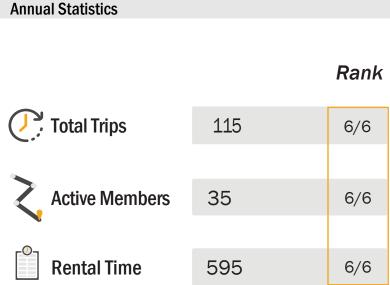


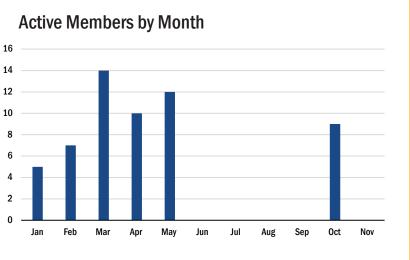
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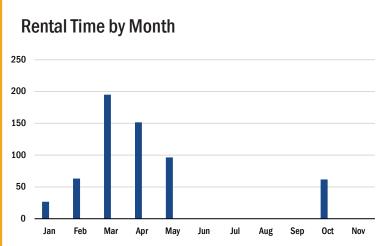
Car Locations: Albany County Department of Health, Albany Public Library: Delaware, Washington/Lark BRT, Church of St. Vincent DePaul, Maria College, Cohoes BRT



Jun







Route Analysis

Strengths

High trip rates in spring months

Weaknesses

System downtime during summer months

Sep

Lowest use rates in the DRIVE system

Least active users

Opportunities

Consider adding spare vehicles to maintain availability



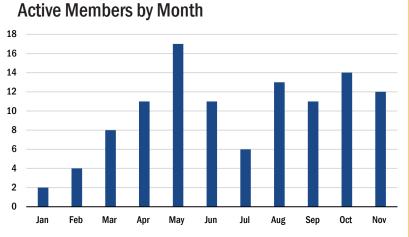


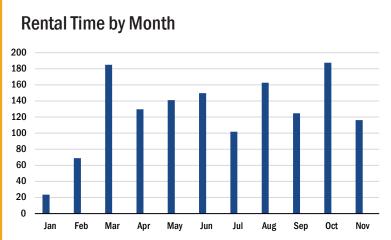
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Operating Characteristics Trips by Month 40 35 30 25 20 15 10 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov

Annual Statistics Rank Total Trips 241 5/6 Active Members 48 5/6 Rental Time 1,351 5/6





Route Analysis

Strengths

Higher trips rate in the late summer and fall

Most frequent repeat customers

Weaknesses

Second lowest use rates in the DRIVE system

Second least active users

Opportunities

Highest rental time in March and October

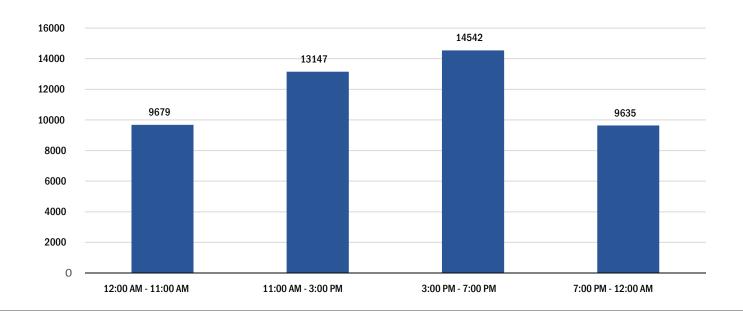
Promote use during winter months







Trip Frequency by time of day (2022 Data)



Route Analysis

Strengths

Usage to/from certain parks and colleges is among the highest in the system

Strong weekened vs. weekday use could indicate a solid recreational market

E-bikes are very popular

Numerous fare types serve a wide range of travel needs

High percentage of out-of-network trips indicates flexibility and opportunity to serve a broad market of users

Weaknesses

Low frequency of trips per user shows that customers are trying out the service but not sticking with it

Lower weekday use relative to weekends suggests the program is less popular for commuting

Some parks rank among the lowest in trip starts and ends

Opportunities

Expand E-bike opportunties

Ensure that all colleges/universities are served by the program and consider incorporating CYCLE into Universal Access agreements

Ensure that parks with potential to be served by bike are accessible through the program

Examine travel flows to identify where infrastructure and safety improvements in high use confidors could lead to increased CYCLE use

Explore the potential for moe connections with existing transit services through the expansion of mobility hubs

Market the program to strengthen its attractiveness at colleges/universities and recreational facilities, and to increase its use for commuting

Conduct focus groups with users to determine why they may have used the system only a few times

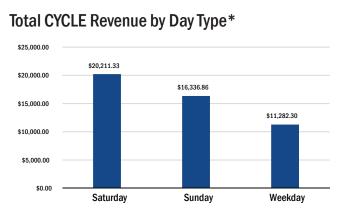


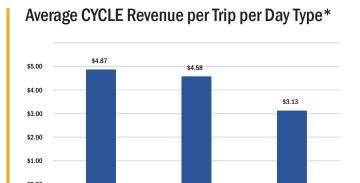


Fee Structure: Users may pay as they ride for \$0.15/minute on electric bikes and \$0.08/minute on pedal bikes. Memberships can be purchased for \$15 per month or \$50 per season that include up to 30 minutes of e-bike riding or 60 minutes of pedal bike riding. After those times, regular rates per minute apply. Members do not pay an unlock fee, even after their free time is used up.

*Revenue projections are based on total distance and do not include membership fees.

CYCLE Revenue



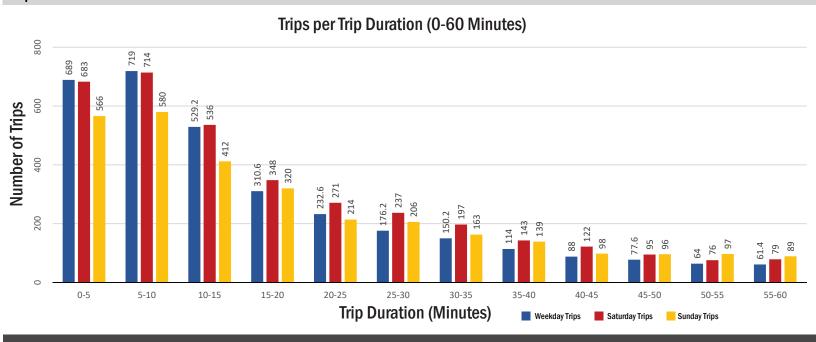


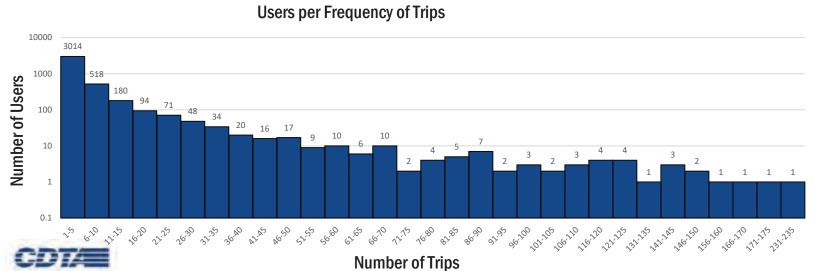
Sunday

Weekday

Saturday

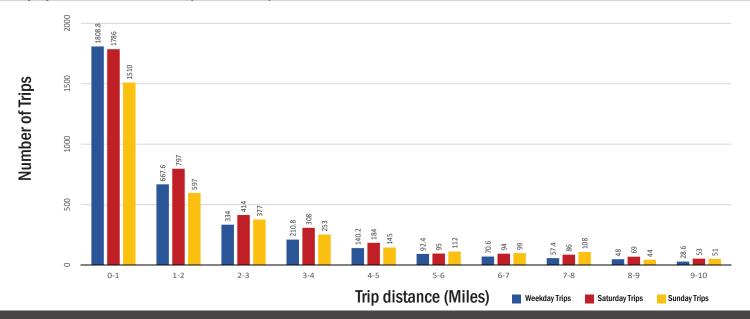
Trip Details



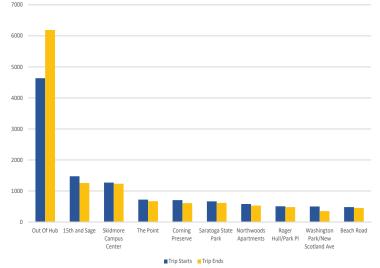




Trips per Distance Travelled (0 - 10 Miles)



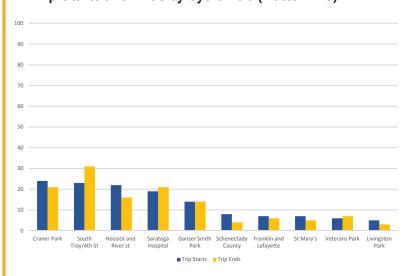
Trip Starts and Ends by Cycle Hub (Top 10)



Top 10 Origin/Destination Pairs

Start	End	Trips
Out of Hub	Out of Hub	2425
Skidmore Campus Center	Skidmore Campus Center	665
15th and Sage	15th and Sage	640
Saratoga State Park	Saratoga State Park	482
Corning Preserve	Corning Preserve	472
Mohawk Hudson Rail Trail	Mohawk Hudson Rail Trail	429
Beach Road	Beach Road	382
15th and Sage	ООН	339
Sage College, Troy	Sage College, Troy	328
Roger Hulland Park Pl	Roger Hulland Park Pl	271

Trip Starts and Ends by Cycle Hub (Bottom 10)



Trips In and Out of Hubs

