2018 - 2019 Route Performance Report

Introduction

This is CDTA's annual report for all fixed route services for Fiscal Year 2019 (April 2018 - March 2019). It includes information about the performance of our routes, a description of recent service changes, and a look forward with recommendations for the coming year. This report guides planning activities for the next 12-18 months and helps the company to deploy resources in the most effective manner possible.

Route Evaluation

The evaluation of the CDTA route network is outlined in our Transit Development Plan. It focuses on two primary criteria: total boardings, and ridership per hour. These standards are defined as follows:

- **Total Ridership:** The TDP establishes thresholds and ranges of ridership by route category. We enhance our evaluation by looking at the rate of boardings, boardings by day and by time period. For CDTA, acceptable annual ridership thresholds are defined by service type:

  Trunk Routes (including BusPlus) – at least 250,000 boardings
  Neighborhood Routes – at least 100,000 boardings
  Express Routes – at least 30,000 boardings
  Commuter Routes – at least 16,000 boardings

- **Ridership Productivity:** This performance measure divides total ridership by total revenue hours, to indicate whether resources are used efficiently. A route may have high ridership, but due to an over-allocation of resources, still be unproductive. Productivity thresholds are also defined by service type:

  Trunk Routes (including BusPlus) – 25 rides/hour
  Express Routes – 20 rides/hour
  Neighborhood Routes – 15 rides/hour
  Commuter Routes – 12 rides/hour

Routes that fall below ridership thresholds are considered for service restructuring and/or promotional opportunities to increase customer use. Routes that exceed the range for a category, or perform well above average, are examined to determine if a category change is warranted, or if service enhancement is advisable.

It is possible that a route may perform well in one criterion but not in another. If a route is underperforming in total ridership but over-performing in riders per hour, this could indicate the route warrants increased resources. If the opposite is true, a reduction in service may be warranted. Although total riders and riders per hour are clear quantitative measures, routes are also evaluated on the following:

- **Ridership Trend:** This metric shows the percent change in total ridership for each route against the previous year and two years prior.

- **Community Service Needs:** CDTA also considers the needs of sensitive demographics, such as low-income communities, seniors, and people with disabilities, when making service planning decisions.

FY 2018-2019
CDTA Route Performance

	Route	Description	Total Rides	Revenue Hours	1-Year Ridership Trend	2-Year Ridership Trend	Rides per Rev. Hour
	12	Washington Avenue	1,604,487	45,360	-6%	-10%	35.4
	1	Central Ave./Wolf Rd.	1,097,792	33,939	-8%	-7%	32.3
	100	Mid-City Belt	861,159	28,964	-4%	-2%	29.7
	905	BusPlus Red Line Albany - Schenectady	1,726,413	62,248	-7%	-9%	27.7
	6	Second Avenue	450,509	17,333	-8%	-19%	26.0
	22	Albany-Troy-Watervliet	1,011,227	39,079	-10%	-13%	25.9
	353	Mont Pleasant/Scotia	331,508	13,122	8%	6%	25.3
*	85	Troy-Waterford	576,733	23,118	-1%	-5%	24.9
*	11	UAlbany Shuttle	344,060	14,036	-4%	-1%	24.5
*	10	Western Avenue	737,031	30,141	-4%	-8%	24.5
*	87	Beman Park Sycaway	380,187	16,556	-5%	-4%	23.0
*	7	Glenmont	285,766	12,547	-7%	-20%	22.8
	531	St. Luke's Express	50,674	2,261	1%	3%	22.4
	370	Troy/Schenectady	555,676	25,208	5%	7%	22.0
*	18	Delaware Avenue	442,473	20,132	-8%	-7%	22.0
	522	Hudson River Express	51,430	2,421	-4%	15%	21.2
*	80	Albia-Fifth Avenue	263,822	12,486	-9%	-9%	21.1
	355	Schenectady/Wolf Rd.	476,587	22,975	-6%	-10%	20.7
	540	Northway Xpress	181,817	8,960	8%	15%	20.3
	351	Broadway/Van Vranken	234,923	11,593	-3%	4%	20.3
	114	Madison/Washington	386,708	19,120	5%	0%	20.2
	138	Allen/Livingston	211,280	11,113	-4%	-14%	19.0
	289	Griswold Heights - St. Mary's Hospital	91,669	4,885	-8%	-9%	18.8
	182	Troy-Latham-Cohoes	487,820	26,534	-1%	-7%	18.4

**Route below productivity threshold*

	Route	Description	Total Rides	Revenue Hours	1-Year Ridership Trend	2-Year Ridership Trend	Rides per Rev. Hour
	224	Albany-Troy via I-90	281,392	15,508	-3%	-12%	18.1
*	13	New Scotland Avenue	376,324	21,550	3%	-12%	17.5
	233	Albany/Schodack	71,724	4,335	-22%	-11%	16.5
	117	Guilderland/Colonie Crosstown	146,453	9,210	5%	16%	15.9
	354	Nott Street/Rotterdam Sq. Mall	119,188	7,714	7%	21%	15.5
*	214	Rensselaer 3rd Street	160,972	10,998	-8%	-12%	14.6
*	125	Clinton/Sand Creek	183,729	12,801	-12%	-19%	14.4
*	190	Fuller/Wolf	131,197	9,879	-13%	-18%	13.3
	737	Corporate Woods/Airport	92,445	7,269	-19%	8%	12.7
*	352	Altamont Ave/McClellan	52,757	4,207	-1%	1%	12.5
	875	Saratoga Trolley	17,386	1,402	-17%	N/A	12.4
*	450	Schenectady-Wilton Mall via Route 50	284,742	23,450	6%	4%	12.1
*	530	Exit 26 - Rotterdam Square Express	18,908	1,773	5%	7%	10.7
*	734	Hackett/Buckingham Pond	22,309	2,099	15%	-5%	10.6
*	716	Mount Hope/Albany South End	28,942	2,734	N/A	N/A	10.6
*	712	Harriman/Patroon Creek	50,090	4,923	-26%	N/A	10.2
*	155	Suburban Circulator	50,539	5,408	-18%	-24%	9.3
*	763	Albany/Schenectady via Route 20	42,415	4,723	-16%	-39%	9.0
*	520	Nassau Express	13,401	1,496	17%	-29%	9.0
*	286†	RPI Shuttle	43,165	5,427	-12%	40%	8.0
*	719	Altamont/Voorheesville	18,165	2,793	-20%	-35%	6.5
*	452	Skidmore College/Wilton Mall via Downtown Saratoga	68,139	11,435	-7%	-23%	6.0
	871	Electric City Trolley	3,596	765	-19%	N/A	4.7
*	451	Ballston Spa-West Saratoga via East Ave/Lake Ave	27,377	6,359	3%	5%	4.3
	870	Capital City Shuttle	3,519	1,020	-5%	N/A	3.5

Route below productivity threshold

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CDTA's system continues to be very efficient, with an average productivity rate of **22** riders per revenue hour and more than 50% of all routes reaching ridership targets established in the TDP. Continuing to adhere to TDP principles will put us in a position to resume growth patterns. In the coming year, we will make adjustments to match service to demand, investing in high-productivity corridors, reducing service in low-productivity areas, and taking advantage of new opportunities.

As ridership stabilized, **trunk routes** and some **neighborhood routes** bucked the larger trend. Their transit propensity resulted in ridership gains, as opposed to some **commuter** and neighborhood routes, which saw larger declines. Many of these routes have higher rates of **"choice riders"** and are more sensitive to environmental factors and mobility options that affect ridership at CDTA and nationally.

State of Affairs & Ridership

In FY19, ridership on the CDTA route network totaled 15.6 million, representing a 4% decline from last year. Most of the factors that depressed ridership in FY18, discussed in detail in that year's Route Performance Report, were present during FY19 as well. These major contributing factors are as follows:

1. **Introduction of ridesharing companies as a new transportation option.**
2. **Nation-wide decrease in public transit (particularly bus) ridership.**
3. **Side effects of the roll-out of Navigator.**

These factors were present throughout FY19, resulting in a downward ridership trend. However, the effects of these factors decreased as the fiscal year went on, resulting in losses of 0% to -2% in the final quarter, as opposed to losses between -5% and -9% in the first two quarters when these effects were most pronounced.

A fourth factor, the severity of last year's winter weather as compared to the previous, was not present this year, as the frequency of severe storms and extreme low temperatures was roughly the same.

Ridership Change, Current v. Previous Year
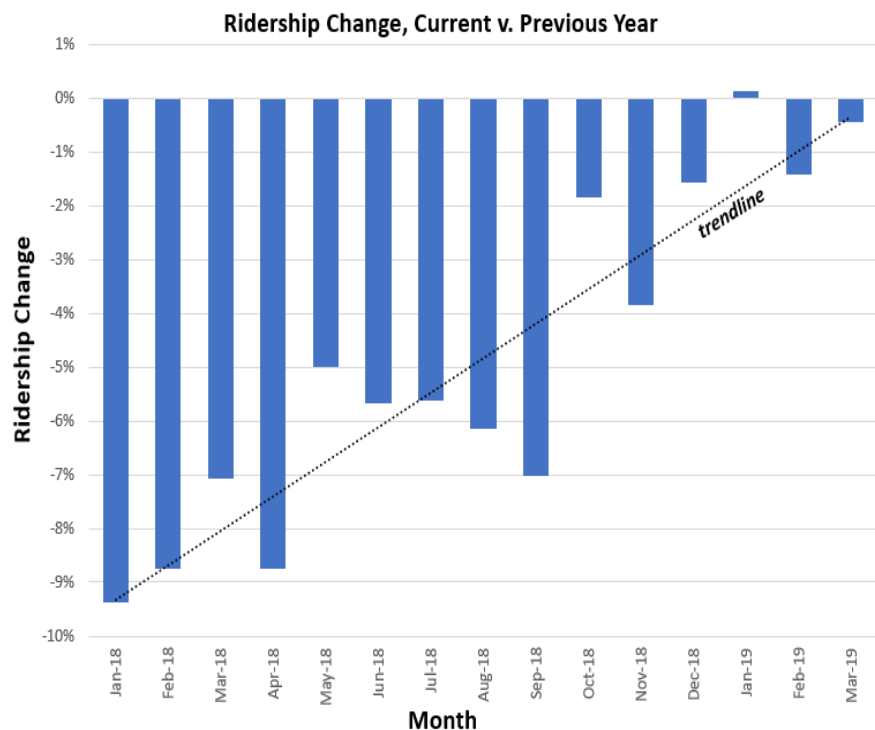
Service Changes and Accomplishments in 2018-19

The following is a summary of service changes that have occurred over the previous fiscal year.

Service Enhancements – May 2018 to September 2019

As a result of increasing ridership, several routes warranted a higher level of service, and have received service enhancements over the past year to improve frequency and span.

Route	Day Type	Service Change	Date
12	Fridays	Frequency increased from 30 to 15 minutes between 10pm and 11:30pm	September 2019
	Saturdays	Frequency increased from 30 to 15 minutes between 10:40pm and 11:40pm	September 2019
22	Weekdays	New 4:40am southbound trip	September 2019
114	Weekdays	Frequency increased from 30 to 20 minutes in the peaks and late midday	May 2018
	Sundays	New service from 8:00am to 9:00pm	September 2019
182	Saturdays	Frequency increased from 60 to 50 minutes during the midday	September 2019
School Services	Weekdays	Trips added during peak hours	Various

Total service hours increased: ~4,000+

Service Reductions – May 2018 to September 2019

In order to minimize the financial impact of service enhancements, the least productive routes and trips were reduced in proportion to their level of demand. All reduced services were on routes below productivity thresholds, or on parts of routes/trips with very low ridership.

Route	Day Type	Service Change	Date
22	Weekdays	Two unproductive trips discontinued	June 2019
80	Saturdays	Trips before 8:00am and after 11:30 pm discontinued	April 2019
116	Weekdays	Unproductive trips throughout day discontinued; Service rebranded as Route #716 (commuter route)	April 2019
117	Saturdays	Frequency reduced from 45 to 50 minutes	April 2019
125	Weekdays	First AM round trip discontinued	April 2019
	Saturdays	First AM one-way trip discontinued, Frequency reduced from 45 to 90 minutes	April 2019
155	Saturdays	Service reduced to match Sunday service	April 2019

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182	Weekdays	Frequency reduced from 45 to 50 minutes during the midday	April 2019
233	Weekdays	Service after 7:00pm discontinued; two other unproductive trips discontinued	May 2018, April 2019
286	Weekdays & Saturdays	First AM round trip discontinued	April 2019
352	Weekdays	Last PM round trip discontinued; Frequency reduced from 60 to 70 minutes	April 2019
352	Saturdays	Saturday service discontinued	April 2019
450	Weekdays	Last PM round trip discontinued	April 2019
450	Saturdays	Last PM round trip discontinued; Frequency reduced from 40 to 50 minutes	April 2019
452	Weekdays	Service before 7:30am discontinued	June 2019
452	Weekdays & Saturdays	Summer frequency reduced from 30 to 65 minutes	June 2019
452	Sundays	Frequency reduced from 45 to 70 minutes	June 2019
712	Weekdays	Three unproductive trips discontinued	April 2019
734	Weekdays	Two unproductive trips discontinued	April 2019
763	Weekdays	Two unproductive trips discontinued	April 2019

Total service hours decreased: ~-10,000

Other Service Changes – May 2018 to September 2019

| Route	Period	Service Change	Date
114	All Days	New routing via Washington Ave Extension instead of Fuller Road	May 2018
712			May 2018
214	All Days	Stop for Empire State Plaza moved from Madison Avenue to the ESP Concourse	April 2019
233			April 2019
520			September 2018
522			September 2018
530			September 2018
531			September 2018
719			November 2018
530	All Days	New routing via Kiernan Plaza instead of Broadway Station	September 2019

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New 800-Series Routes

In September 2019, CDTA "spun off" trips from several Albany-based routes that deviated from regular route patterns to increase peak hour service. These trips now operate as standalone routes, numbered #805 to #809. The routes from which these trips originated may experience ridership declines during FY20, as they are now handled by the 800-series. The FY19-20 Route Performance Report will analyze these changes in greater detail.

805 806 807 808 809

Trolleys

A comprehensive family of trolley routes were introduced in 2017. Specially branded vehicles provide service for residents, tourists, and visitors to downtown attractions. In 2018, the Capital City Shuttle was rebranded the Capital City Trolley, with a new route pattern that concentrates service in areas of greatest activity and ridership. The Electric City Trolley in Downtown Schenectady and the Saratoga Visitors Trolley in Saratoga Springs operated under the same route patterns.

Ridership on trolley services in Albany and Schenectady remained low; the Capital City Trolley saw small gains from 2017 to 2019. The Saratoga Summer Trolley is the most productive but has lost some ridership over the years – which may be attributable to the emerging popularity of ridesharing.


Trolley Productivity, 2017-2019
Memorial Day - Labor Day
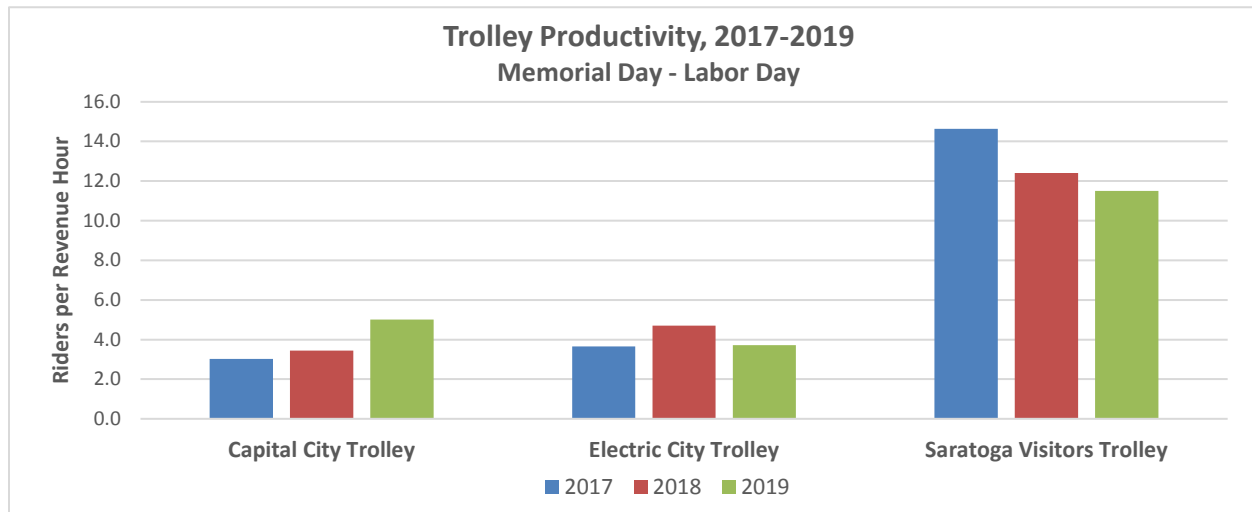
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Universal Access Contracts

Our Universal Access program has changed the way transit services are consumed in the region. More than 20 partners work with us to provide access to our system for employees and students. CDTA technology allows ID cards to be recognized on buses. The partner is billed according to a prearranged contract that outlines terms, conditions and expectations. In FY19, these arrangements accounted for 4.3 million boardings, or nearly 30% of all system ridership. Progressive businesses and colleges work with CDTA to expand the mobility menu that their constituents want and need. This year, the resilience of our Universal Access program acted as a bulwark against a trend of declining ridership. While overall system ridership declined by 4%, contract ridership increased by 4.6%.

Highlights of Universal Access contracts that experienced significant ridership changes are as follows:
- **Rivers Casino:** +64,500 rides (470%) due to operation of new contract for a full year
- **HVCC EOC:** +33,800 rides (+88%) due to operation of new contract for a full year
- **Cohoes SD:** +23,500 rides (+57%) due to operation of new contract for a full year and addition of new service
- **Albany SD:** +21,600 rides (+2%) due to addition of new services
- **Albany Public Library:** -6,200 rides (-42.0%) due to stricter enforcement of eligible rides

Universal Access Agreements – Ridership, FY18 vs FY19
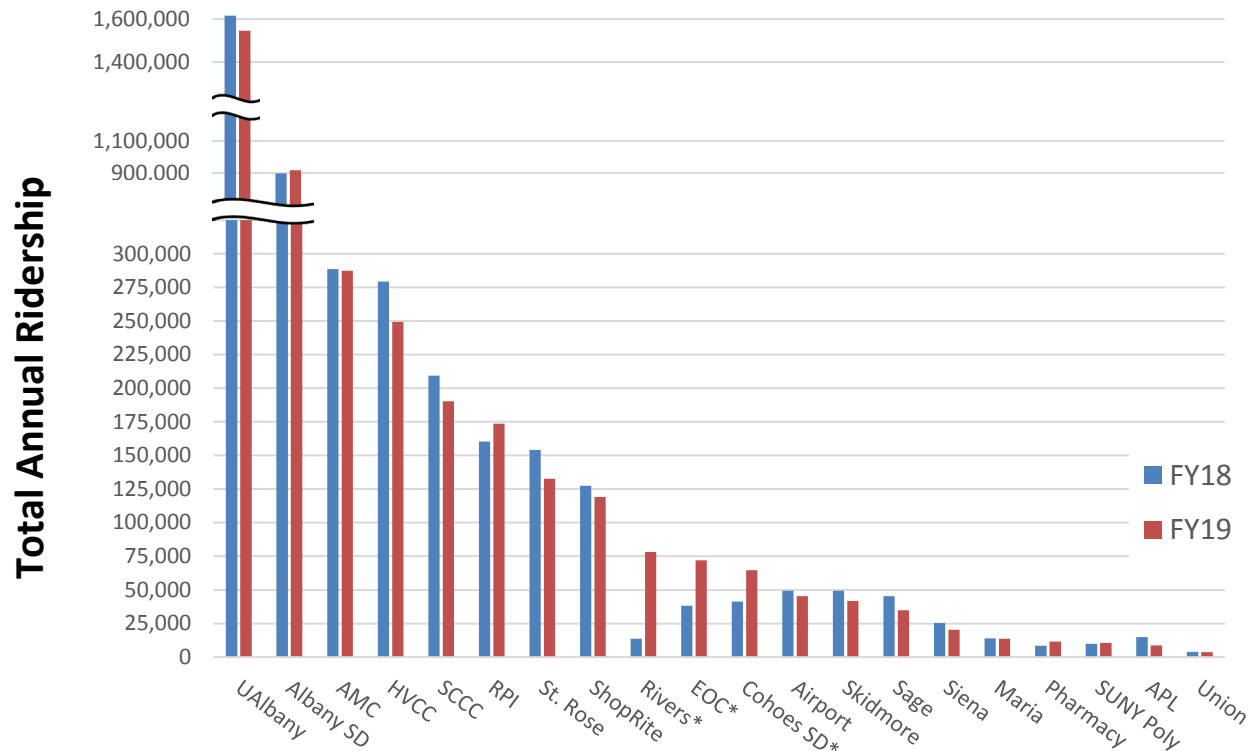
*Agreement started within the last two years.

We will add Albany Law School and the New Scotland Village development as Universal Access partners and are pursuing opportunities for new and expanded agreements.
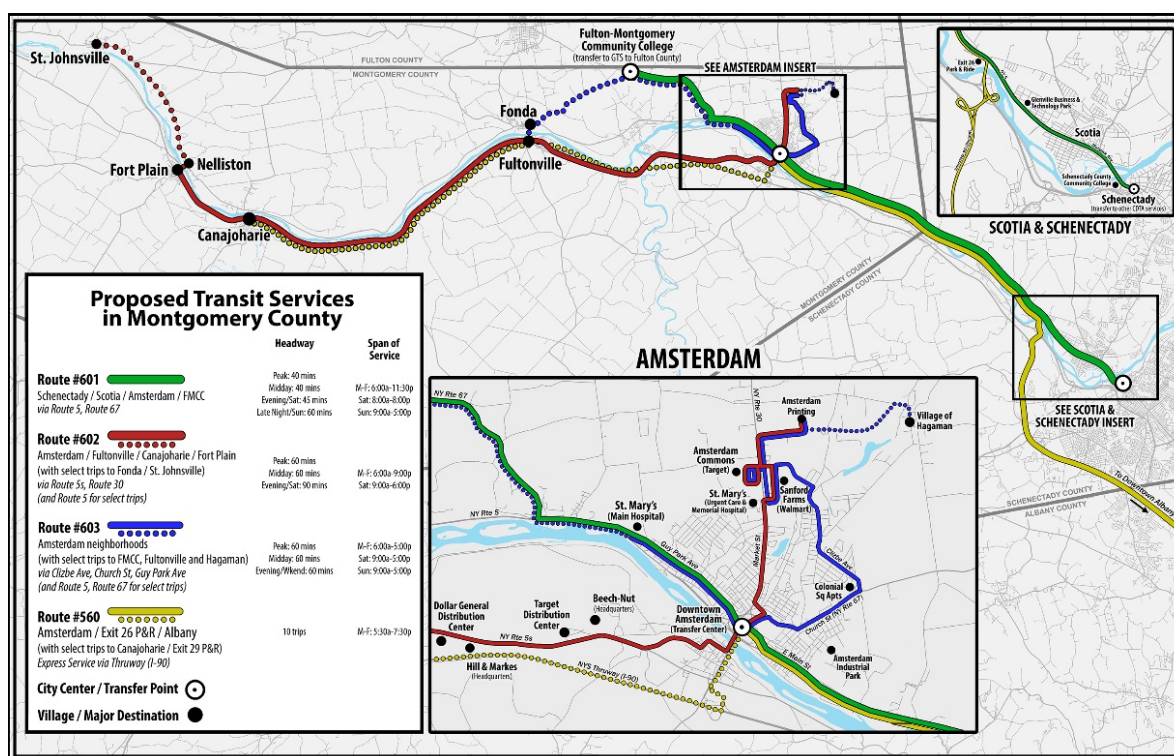
Planning for Montgomery County Service

In April 2018, the City of Amsterdam eliminated its municipal bus service without a substitute in place. During this time, NYSDOT, Montgomery County, and Fulton County conducted a transit study, which recommended CDTA as a service provider. We have investigated the potential to extend our service area to Montgomery County, which is a short distance from service in Schenectady. This will require formal action on the part of the Montgomery County legislature.

The characteristics of Montgomery County make it a good candidate for CDTA service expansion. Although it is largely rural, the county has pockets of high transit propensity in a cluster along the Mohawk River. These communities are characterized by large low-income and low-car-ownership populations that need connections to educational, healthcare, and employment destinations.

We have developed a conceptual plan for a transit network in Montgomery County that is similar in scale to our operation in Saratoga County. It would feature neighborhood routes centered in Amsterdam with connections to the CDTA system in downtown Schenectady and downtown Albany, as well as service to Fulton-Montgomery Community College (FMCC).

Deploying service in Montgomery County would entail an increase in operating costs and a capital investment (new vehicles). We are working with the city, county and state to fund this expansion.

Conceptual service plan for Montgomery County
An official plan would be created after public/stakeholder outreach and determination of level of funding.

Microtransit

Microtransit is an emerging mode that leverages ridesharing technology to deliver on-demand trips within defined areas and times. Customers request a pick-up and drop-off location in a mobile app, web browser, or over the phone. Requests are processed by microtransit software to generate efficient and convenient routes, which are passed on to the operator as turn-by-turn directions.

Microtransit may better serve areas that have lower demand but need some form of affordable vehicular transportation. Other potential applications of microtransit include:

Rendering of a Microtransit Vehicle

- Replacing low-productivity fixed route services.
- Expanding transit to new markets.
- Expanding mobility options at off-peak times.
- Addressing the "last mile" problem by enlarging the catchment area of fixed routes.

We will begin a microtransit pilot in the suburban area west of Albany, mostly within the towns of Colonie and Guilderland, followed by a similar pilot in Southern Saratoga Counties. These areas are difficult to serve with fixed routes due to the low density of development, long distances between origins and destinations, and lack of pedestrian infrastructure. We will use the pilot to learn how microtransit can fit into our suite of mobility services.

Route Adjustments

13 Route #13 connects Downtown Albany to Slingerlands; 93% of its ridership is between downtown and St. Peter's Hospital. This segment is characterized by dense urban neighborhoods with large employers like St. Peter's and Albany Medical Center. The segment west of St. Peter's carries only 7% of route ridership, as it traverses lower density areas. In spring 2020, we will short-turn the #13 at St. Peter's and increase frequency between the hospital and downtown. Service will remain on the western segment with the #113, a new neighborhood route, with service that matches demand.

737 Route #737 has an uneven ridership pattern. The inner segment between Downtown Albany, Corporate Woods, and Everett Road produces 87% of total ridership, the outer segment west of Wolf Road with the Albany International Airport produces 10%, while the middle segment along Albany-Shaker Road between Everett and Wolf produces 3%. In 2020, we will short-turn the #737 at Corporate Woods/Everett Road and increase trips on the inner segment. Service will remain on the outer segment with Route #117. Service on the middle segment will be eliminated due to very low ridership.

520 **719** Route #520 and #719 have not reached productivity targets since their introductions in 2009 and 2012. These routes produce half of their goals for their service classifications. We are considering a reduction of service on these lines.

BusPlus Blue Line

In April 2019, the Federal Transit Administration announced the allocation of $26.9 million for construction of the River Corridor Bus Rapid Transit (Blue Line). The commitment of funding, along with a significant state contribution, allowed us to begin construction on the Blue Line this past summer, setting the stage for initiation of service in late 2020.
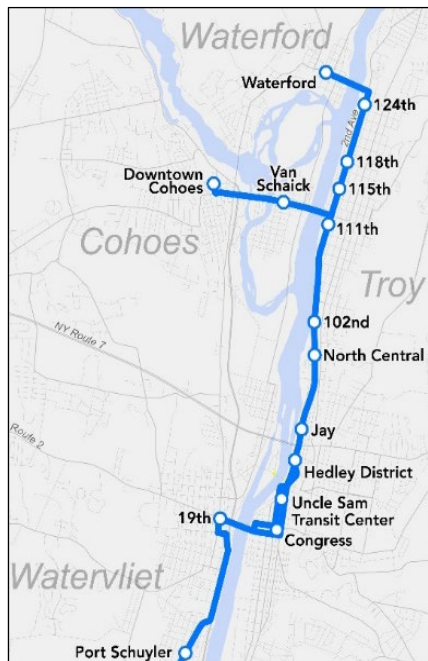
The Blue Line is the second piece of our 40-mile Bus Rapid Transit system. It will be a 16-mile route along CDTA's third busiest corridor, with 31 stations. Service will be faster and more direct between Albany, Menands, Watervliet, Troy, Cohoes and Waterford. It includes queue jumpers at busy intersections, signal priority along the corridor, and enhanced waiting areas and pedestrian infrastructure.

BusPlus Blue Line between Watervliet, Cohoes, and Waterford.

BusPlus Blue Line between Albany and Menands.

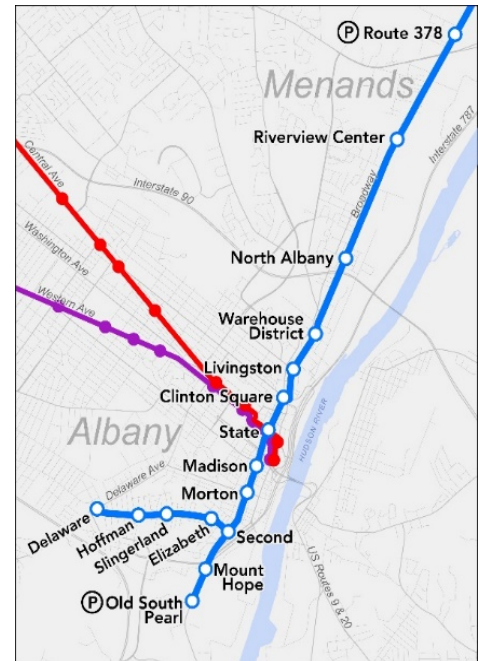Service will be provided on two branches; one running from South Pearl Street in Albany to Waterford, and the other from Second and Delaware Avenues in Albany to Downtown Cohoes. For most of the corridor, branches overlap, combining service levels. The Blue Line will operate between 4:15am and 2:30am on weekdays and between 5:00am and 2:30am on weekends. On the combined trunk, the Blue Line will operate every 10 minutes during peak hours, every 10 to 15 minutes during the off-peak hours, and every 15-30 minutes at all other times.

We will provide local service along the corridor, matching service to demand:

- **Route #6** will be combined with Route #138 to become Route #106, an Uptown Belt service.
- **Route #7** will become Route #107 and be short-turned at the McCarty Avenue Nutgrove Apartments.
- **Route #22** will have a reduction in frequency but no changes to the route pattern.
- **Route #85** will replace Route #80 and provide service on 5th Avenue.
- **Route #716:** Will be eliminated.
- **Route #522:** No route change but some trip reductions.

State Worker Transportation

The New York State Office of General Services (OGS) provides transit services for state employees in downtown Albany. This consists of shuttles that connect parking lots and office buildings around downtown Albany. As the current contract expires, CDTA plans to submit a proposal to operate this service.

Our approach will expand the mobility options for state employees. In addition to operating service, CDTA will develop a Universal Access agreement with OGS, allowing state employees to ride on any CDTA bus. This would resolve some parking challenges and reduce traffic congestion, by allowing employees to board buses near their homes instead of driving to state-owned lots and garages.

New Performance Indicators

During FY19, CDTA plans to evaluate routes using new performance indicators that will yield more insight into our investment of operating resources. For example, average cost/subsidy per trip, calculated by dividing route revenue minus route expenses by route ridership, can account for the unique costs of running diverse service in a way that riders per revenue hour cannot. This will bring CDTA's data analysis methods in line with our peers as well as industry best practices.
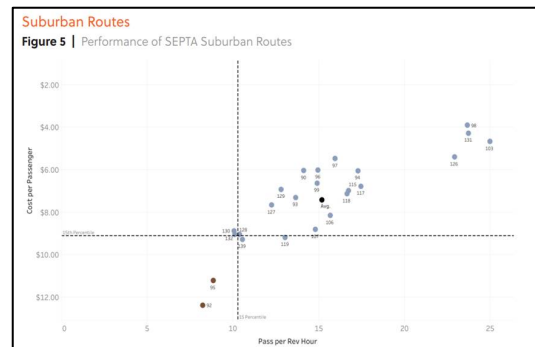
SEPTA Chart of Cost Per Passenger against Passengers per Revenue Hour.

Strategic Planning Initiatives

In FY20, we will update our Transit Development Plan as part of an update to *New Visions 2050*, the Regional Transportation Plan (RTP) prepared by the Capital District Transportation Committee (CDTC), the region's Metropolitan Planning Organization. This will integrate CDTA's short-to-medium-term planning initiatives into CDTC's long-range vision for the region.

In addition to laying out the projects that CDTA plans to pursue over the next 5-10 years, the TDP will update performance thresholds, the Transit Propensity Index (TPI), and the Transit Priority Network (TPN). This helps to outline a direction on where and how to deploy service resources, as well as where to encourage or coordinate with major development projects.

CDTA is also assembling a larger organizational Strategic Plan that will clarify a vision for the development and improvement of all aspects of the Authority's activities in addition to what is covered in the TDP. This document and the TDP/*New Visions 2050* will be crafted to support one another's goals and initiatives.