

# 2017 - 2018 Route Performance Report

## Introduction

This is CDTA's annual performance report for all fixed route services for the Fiscal Year of April 1, 2017 through March 31, 2018 (FY18). The report includes information about the performance of our route network, including ridership, hours, and productivity measurements. It also includes a description of service changes that were undertaken, their impact, and a look forward with recommendations for the coming year. The report and the information contained in it guide planning activities for the next 12-18 months, and helps the company to use its resources and prioritize them in the most effective manner possible.

## Route Evaluation

The evaluation of the CDTA route network and the services provided is outlined in our Transit Development Plan. The TDP is a board adopted document with a 5-year life. It is reviewed and readopted by the board after each 5-year period to insure its accuracy and consistency with development patterns throughout the Capital Region. The individual route evaluation is focused on two criteria: total boardings, and ridership per hour. These standards are defined as follows:

- **Total Boardings:** The CDTA Route Classification system 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 includes several performance measurements that work with total boardings to measure route productivity and indicate whether resources are used efficiently. A route may have high ridership, but due to an over-allocation of resources, may 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 – 16 rides/hour
  - Commuter Routes – 12 rides/hour

Routes that fall below acceptable ridership thresholds are considered for corrective actions and assessments of 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 a route restructuring 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:

- **Productivity Change:** Changes over time are used to judge the effectiveness of route changes and other factors. New or restructured services are usually introduced for a trial period to establish and measure productivity targets.
- **Community Service Needs:** Community centers like medical facilities, convalescent centers, and locations that serve seniors, disabled and special needs populations require consideration for service. The population, trip making patterns and any special needs are considered in service assessments along with geographic and social equity considerations.

## FY 2017-2018 CDTA Route Performance

Route	Description	Total Rides	Revenue Hours	1-Year Ridership Trend	2-Year Ridership Trend	Rides per Rev. Hour
<b>12</b>	Washington Avenue	1,709,462	44,242	-4%	3%	<b>38.6</b>
<b>1</b>	Central Ave./Wolf Rd.	1,192,183	33,509	0%	-7%	<b>35.6</b>
<b>100</b>	Mid-City Belt	897,928	29,064	2%	7%	<b>30.9</b>
<b>905</b>	BusPlus Red Line Albany - Schenectady	1,863,531	62,424	-2%	-2%	<b>29.9</b>
<b>22</b>	Albany-Troy-Watervliet	1,121,987	39,214	-4%	-4%	<b>28.6</b>
<b>6</b>	Second Avenue	488,360	18,107	-13%	-15%	<b>27.0</b>
<b>11</b>	UAlbany Shuttle	358,897	14,018	4%	-1%	<b>25.6</b>
<b>85</b>	Troy-Waterford	585,381	23,151	-4%	-5%	<b>25.3</b>
<b>10</b>	Western Avenue	764,444	30,400	-5%	-9%	<b>25.1</b>
* <b>18</b>	Delaware Avenue	478,756	19,656	0%	6%	<b>24.4</b>
* <b>531</b>	St. Luke's Express	50,140	2,087	2%	-7%	<b>24.0</b>
* <b>87</b>	Beman Park Sycaway	400,565	16,741	1%	-3%	<b>23.9</b>
* <b>7</b>	Glenmont	308,100	12,918	-13%	-9%	<b>23.9</b>
* <b>80</b>	Albia-Fifth Avenue	288,602	12,340	0%	-7%	<b>23.4</b>
<b>353</b>	Mont Pleasant/Scotia	305,963	13,173	-2%	-8%	<b>23.2</b>
* <b>522</b>	Hudson River Express	53,669	2,374	20%	3%	<b>22.6</b>
<b>355</b>	Schenectady/Wolf Rd.	507,697	24,031	-4%	-11%	<b>21.1</b>
<b>114</b>	Madison/Washington	369,868	17,643	-5%	-8%	<b>21.0</b>
<b>351</b>	Broadway/Van Vranken	242,708	11,604	7%	11%	<b>20.9</b>
<b>370</b>	Troy/Schenectady	531,237	25,558	2%	3%	<b>20.8</b>
<b>289</b>	Griswold Heights - St. Mary's Hospital	99,687	4,901	-1%	-10%	<b>20.3</b>
<b>138</b>	Allen/Livingston	219,148	10,988	-11%	-8%	<b>19.9</b>
<b>233</b>	Albany/Schodack	91,688	4,734	14%	17%	<b>19.4</b>
<b>224</b>	Albany-Troy via I-90	289,989	15,240	-9%	-13%	<b>19.0</b>
	<b>BusPlus</b>	<b>Trunk</b>	<b>Neighborhood</b>	<b>Express</b>	<b>Commuter</b>	<b>Seasonal</b>

*\*Route below productivity threshold*

**FY 2017-2018**  
**CDTA Route Performance (Continued)**

Route	Description	Total Rides	Revenue Hours	1-Year Ridership Trend	2-Year Ridership Trend	Rides per Rev. Hour
* 540	Northway Xpress	168,910	8,960	7%	-8%	18.9
182	Troy-Latham-Cohoes	490,306	26,821	-7%	-6%	18.3
737	Corporate Woods/Airport	113,747	6,560	32%	14%	17.3
* 13	New Scotland Avenue	365,653	21,411	-14%	-18%	17.1
125	Clinton/Sand Creek	208,786	12,883	-8%	-8%	16.2
214	Rensselaer 3rd Street	174,216	10,968	-5%	-13%	15.9
117	Guilderland/Colonie Crosstown	139,015	9,070	10%	26%	15.3
190	Fuller/Wolf	150,162	9,894	-6%	-17%	15.2
875	Saratoga Trolley	20,865	1,426	N/A	N/A	14.6
* 354	Nott Street/Rotterdam Sq. Mall	111,755	7,667	13%	-11%	14.6
* 352	Altamont Ave/McClellan	53,423	4,220	2%	-4%	12.7
* 116	Mount Hope/Albany South End	32,701	2,731	-25%	-41%	12.0
* 155	Suburban Circulator	61,762	5,245	-8%	-29%	11.8
* 712	Harriman/Patroon Creek	68,141	5,844	N/A	N/A	11.7
* 450	Schenectady-Wilton Mall via Route 50	269,101	23,456	-3%	N/A	11.5
* 763	Albany/Schenectady via Route 20	50,423	4,683	-28%	-37%	10.8
* 530	Exit 26 - Rotterdam Square Express	18,073	1,730	2%	-7%	10.4
* 734	Hackett/Buckingham Pond	19,399	2,091	-17%	-39%	9.3
* 286†	RPI Shuttle	48,985	5,437	45%	N/A	9.0
* 520	Nassau Express	11,477	1,332	-39%	-54%	8.6
* 719	Altamont/Voorheesville	22,749	2,817	-19%	-21%	8.1
* 452†	Skidmore College/Wilton Mall via Downtown Saratoga	73,522	12,712	-3%	N/A	5.8
* 451†	Ballston Spa-West Saratoga via East Ave/Lake Ave	26,523	6,374	-2%	N/A	4.2
* 871	Electric City Trolley	4,460	1,218	N/A	N/A	3.7
* 870	Capital City Shuttle	3,702	1,222	N/A	N/A	3.0
	<b>BusPlus</b>	<b>Trunk</b>	<b>Neighborhood</b>	<b>Express</b>	<b>Commuter</b>	<b>Seasonal</b>

\*Route below productivity threshold  
†FY17 ridership projected from partial year

## FY 2017-2018

### CDTA Route Performance – General Discussion

As in previous years, the strongest-performing services in the CDTA transit system continue to be its trunk routes. These are high frequency services that operate in core employment areas of the Capital Region. They serve major travel corridors with high population densities, operate in mostly straight-line configurations, and are scheduled from early morning to late evening, seven days a week. Neighborhood services feed, support, and compliment trunk routes. They radiate from trunks and provide geographic coverage that gives the transit system depth and width. Express and commuter routes provide direct connections between residential and employment sites during peak travel periods.

In a year where CDTA experienced overall system ridership decline, our **trunk routes** also proved the most resilient. These routes, having developed a robust customer base on the strength of their high levels of service, reliability, and convenience, were somewhat insulated from the confluence of factors that depressed ridership in the final quarter of the fiscal year. Trunk routes #1, #11, #18, #80, #87, and #100 actually bucked this trend entirely and experienced a **ridership increase or no change** from year to year. Greater losses on Routes #6 and #7 are largely attributable to a slight reduction in weekday frequency to improve operational efficiency.

The route categories with the **most significant decreases** in ridership and/or performance were again **commuter routes, express routes, and neighborhood routes** with the lowest levels of service. These routes tend to have higher rates of “**choice riders**” than trunk routes, and are consequently much more sensitive to the types of environmental factors that affected ridership this year.

In spite of ridership losses this year, the CDTA system continues to be productive and healthy, with an overall productivity rate of **23.6** riders per revenue hour. The road to recovering our previous trends of increasing ridership will consist of, to the greatest extent possible, continuing to reinvest our resources from low-ridership corridors with **low transit propensity**, and high-ridership corridors with **high transit propensity**, in accordance with CDTA’s Transit Development Plan. We must also continue to explore the industry’s new mobility tools, such as bikesharing, carsharing, and microtransit, for better and more efficient ways to serve low-ridership markets.

### State of Affairs & Ridership

In FY18, ridership on the CDTA route network totaled 16.3 million, representing a 3% decline from last year’s total. 92% of CDTA’s ridership losses occurred during the second half of FY18, and 66% occurred in the final quarter alone. Since the beginning of Fiscal Year 2018-19, these losses have continued through the writing of this report, though they have diminished in magnitude.

The timing of these losses is extremely well-correlated with several tangible factors that likely explain the majority of the decline:

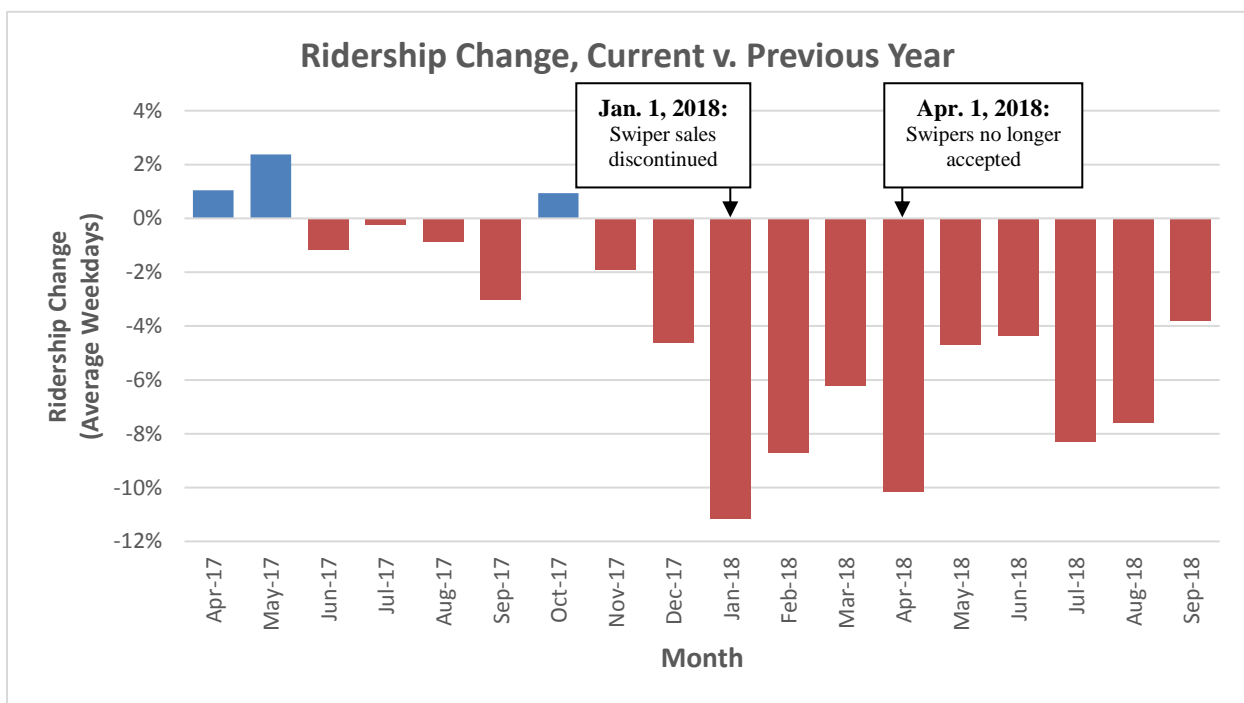
1. **Side effects of the roll-out of Navigator.**
2. **More frequent severe weather events in late winter.**
3. **The introduction of ridesharing companies as a new transportation option.**
4. **Nation-wide decrease in public transit (particularly bus) ridership.**

## Navigator

The first and most pronounced of these factors has been an apparent side effect of the full roll-out of *Navigator*, CDTA's new fare collection system.

On January 1<sup>st</sup>, 2018, CDTA discontinued sales of *Swiper* and all other magnetic-stripe fare media, thus requiring a large subset of our passengers to begin transitioning to a new suite of fare media. This date is also consistent with a sharp decrease in ridership. The decrease continued through the end of the fiscal year, but steadily subsided from an 11% decrease in January to a 6% decrease in March.

On April 1<sup>st</sup>, 2018, CDTA stopped accepting *Swiper* and other magnetic-stripe fare media, thereby completing this transitional period and forcing *all* passengers to use *Navigator* to access CDTA's prepaid fare products. In the month following this change, ridership again fell significantly, though it has gradually begun to recover in the first half of FY19.



### Reaction to Change

It is possible that a subset of customers is actually riding less due to the inconvenience (real or perceived) of transitioning to *Navigator*. In CDTA's experience, initial resistance to change is a common reaction to the roll-out of projects and/or services that force people to change their habits. These changes are often associated with a temporary decline in ridership, as our customers adjust and become accustomed to their new routines.

For example, many of CDTA's route restructuring initiatives of the past decade showed only modest ridership increases, or even decreases, in the first months following roll-out. However, ridership has usually grown significantly after passengers became accustomed to the new system. For this same reason, and because we believe *Navigator* to be a better overall option for most customers, we expect that lost ridership associated with this change is a *temporary* phenomenon and will be recovered in the long term.

### Undercounted Ridership

Because this is still a new system, and customer confusion and/or malfunctioning passes can cause delays at the farebox, bus operators are theoretically more likely to “wave on” passengers, so as not to prolong dwell time, than they were before. This requires that operators manually count these rides, in order for them to appear in CDTA ridership reports. It is possible that reported ridership is being at least moderately depressed by this factor. Accordingly, as operational procedures adapt to the new system, we expect to recover more of this “lost” ridership in the long term as well.

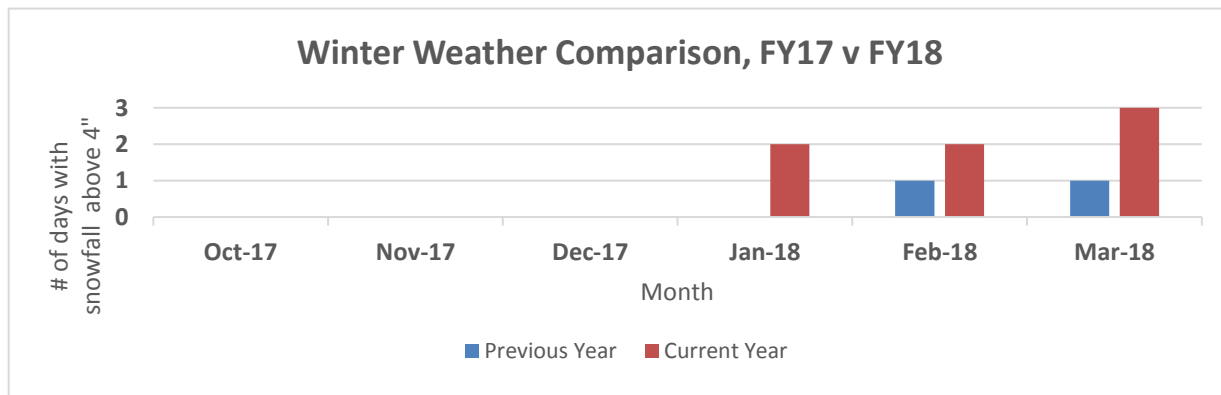
### Technology

Finally, as with the roll-out of any new system, there is always the possibility of mechanical or software issues affecting our ridership counts in some way. Since the start of the downward ridership trend, CDTA IT staff have been in ongoing correspondence with support staff at Genfare, our fare collection vendor, to check for data integrity issues. CDTA staff is also developing a process to improve system data integrity through increased validation by Automated Passenger Counters (APCs) and on-board observations.

### Severe Weather Events

The negative effects of winter weather on ridership is a familiar challenge for transit authorities in cold climates. In particularly bad storms with heavy snow accumulation, factors such as bad road conditions, school closures, and the obvious impulse to stay inside and avoid discretionary travel can converge to curb ridership by double-digit percentages on the affected days, as has been observed on such days at CDTA. Analysis of the frequency and severity of these events suggests that the winter of early 2018 in the Capital Region was much harsher than in years past.

The following chart compares the number of days in which snowfall exceeded 4” in the most recent winter versus the winter of the previous year. From October to December, no events of this type occurred in either year, in line with the continuation of more or less flat ridership through this period. From January to March, however, we experienced much more snowfall: Seven days with 4” or more, compared to two such days last year. This effect combined with that of the *Navigator* roll-out to significantly reduce ridership in the final quarter of the fiscal year.



Typically, ridership variances due to inclement weather in cold climates subside in the spring and summer months. This appeared to be the case in May and June of 2018, but July and August 2018 saw a third drop in ridership. The full causes of this event are still under investigation by CDTA and Genfare staff, but this decrease appears at least partially related to an uptick of severe *summer* weather events, such as heavy thunderstorms and flash flooding, as compared to the summer of FY17-18.

## **Ridesharing**

The introduction of ridesharing companies (e.g. Uber, Lyft) to the menu of transportation options in the Capital Region has likely created an additional downward pressure on ridership. After one year in this market, ridesharing is still too new to comprehensively understand its effect on ridership, but it has been associated with a net 6% decline in larger cities, such as Chicago and New York.

At this point, in the Capital Region, the minimum ridesharing fare of approximately \$7 per trip limits the ability of these companies to absorb ridership from most transit trips, as CDTA still offers a comparable service at a much lower price. However, they are showing signs of having an impact in situations where CDTA service is less likely to be immediately available – namely, late at night and on weekends.

In the coming years, ridesharing companies are likely to introduce pooled-ride options, such as UberPool and Lyft Line, to the Capital Region as they have in many other cities. Under this arrangement, customers share their rides with others who happen to be going roughly the same way, resulting in dramatically lower fares for each passenger. This will make ridesharing a more competitive alternative to transit, which threatens to cut further into transit ridership.

Over the past fiscal year, CDTA staff have researched the landscape of ridesharing as a mobility option throughout the country, including opportunities to partner with ridesharing companies or provide a similar form of service in-house. Ridesharing or “microtransit”, as opposed to traditional fixed-route public transportation, may prove to be a better mobility solution for markets with lower transit propensity, by allowing us to serve these areas and times of day at significantly lower operating costs. These savings could be reinvested into CDTA’s services in more productive corridors, improving efficiency and the riding experience for our customers (see “Microtransit” section on Page 14).

## **National Trends**

Over the past decade, CDTA’s dramatic growth has defied a national and regional trend of declining ridership on public transportation services, particularly on bus-only systems. Recently, CDTA ridership has “topped out” at approximately 17 million boardings and has seen slight declines in the past two fiscal years, but it is still performing ahead of the rest of the country on average.

According to a recent TransitCenter study, nationwide bus ridership fell 5% in 2018 against the previous year, in what has been sometimes described as an “emergency” for the industry overall. During this period, ridership fell in 31 of the country’s 35 major metropolitan areas, including those with extremely high rates of population growth (e.g. Charlotte, Austin). Researchers tied these losses to “lower fuel costs, increased teleworking, higher car ownership and the rise of alternatives such as Uber and Lyft.” While the region-specific factors identified in this report likely had a greater effect on CDTA ridership in FY18, these macro trends are worth taking into account for a more complete picture of what is taking place.

Many large urban areas around the country are now in the process of implementing full bus network redesigns to better allocate transit service to levels of demand, as CDTA did earlier this decade. CDTA’s service restructurings have set up our transit system to better withstand the various factors and trends that can periodically depress ridership. The implementation of Universal Access agreements with many area institutions has also helped CDTA to maintain its high ridership levels. Future changes to service should continue to follow the model set out in our current Transit Development Plan, so as to resume growth as soon as possible once these factors begin to abate.



## Service Changes and Accomplishments in 2017-18

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

### Service Enhancements – May 2017 to August 2018

As a result of increasing ridership, many of our routes warranted a higher level of service, and have received service enhancements over the past year to improve their frequency and span. Most of these routes have increased or level ridership, in spite of the slight decline in systemwide ridership.

Route	Day Type	Service Change
114	Weekdays	Frequency increased in the peaks and late midday
712	Weekdays	One AM trip and one PM trip added
737	Weekdays	One AM trip and two PM trips added
870	Thu-Fri-Sat (Summers Only)	New route connecting major tourist and nightlife destinations around Downtown Albany
871	Thu-Fri-Sat (Summers Only)	New route connecting major tourist and nightlife destinations around Downtown Schenectady
905	Weekdays	Frequency increased in the late evening

### Service Reductions – August 2016 to January 2017

In order to minimize the impact of service enhancements on CDTA's budget, the least productive services were reduced in correspondence to their level of demand. All reduced services were on routes below productivity thresholds, or on parts of routes with very low ridership.

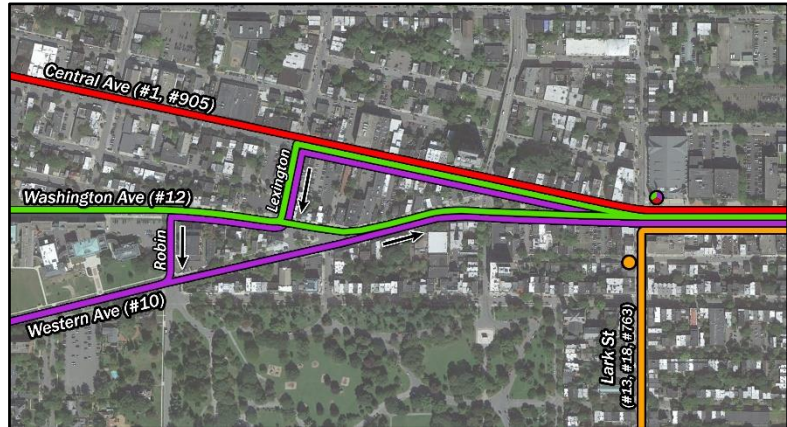
Route	Period	Service Change
6	Weekdays	Frequency reduced in the midday and at night
7	Weekdays	Frequency reduced at night
87	All Days	Reduced trips directly service Market 32 Plaza
125	Weekdays	Two unproductive night trips eliminated
182	Weekdays	Frequency reduced in the midday
233	Weekdays	Two unproductive trips eliminated
452	Weekdays, Saturdays	Frequency reduced
712	Weekdays	Route short-turned at Quail-WAMC Station
905	Weekdays	Frequency decreased in the early evening

## Lark / Library Station – New Route Patterns

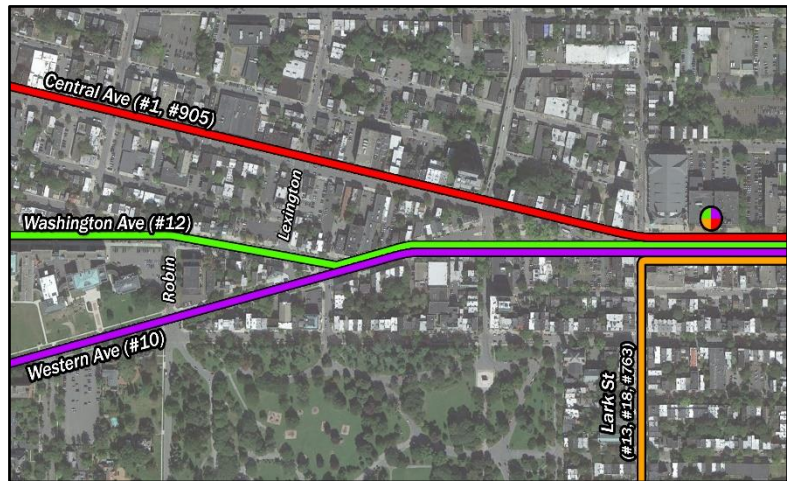
In August 2018, CDTA completed work on a full relocation and reconstruction of the westbound side of Lark/Library Station (formerly Lark-Armory), a BusPlus Red Line station that will be shared with the BusPlus Purple Line in the future.

The implementation of this project was crucial to the operation of the future Purple Line, as it permits westbound buses to directly continue along Washington Avenue toward the next proposed station (UAlbany Downtown) without having to perform a “zig-zag” deviation along Central Avenue that adds travel time and introduces potential confusion for customers.

However, this reconfiguration also realizes significant benefits for existing Routes #10 and #12, which can now proceed directly west along Washington Avenue, and Routes #13, #18, #734, and #763, which now share a common westbound transfer hub with the other CDTA services available at Lark/Library Station.



Previous westbound route patterns at Lark-Armory Station. Note Central Avenue “zig-zag” on Routes #10 and #12.



New westbound route patterns, made possible by reconfigured traffic patterns at Lark/Library Station.



Completed Westbound Lark/Library Station shelter and pedestrian infrastructure.

This project also made significant upgrades to the pedestrian and traffic infrastructure of the blocks around Lark/Library station, including but not limited to:

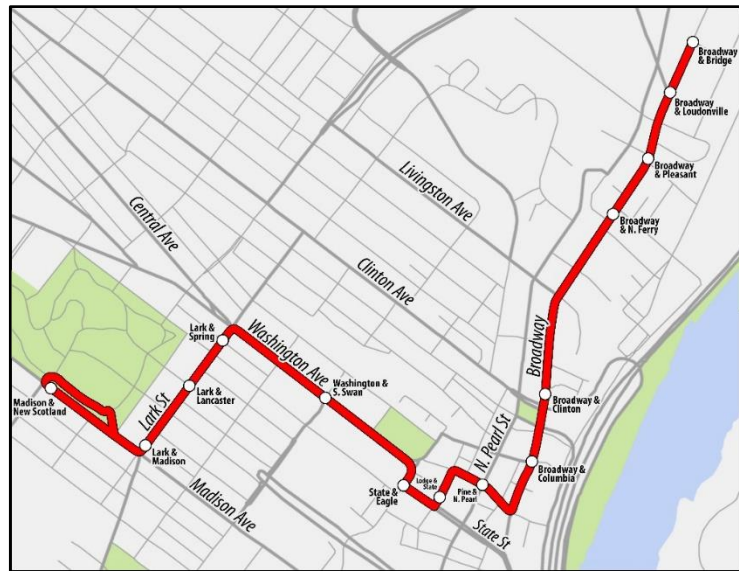
- A new, signalized mid-block crossing between Lark Street and Dove Street
- New or upgraded crosswalks, curb extensions, and lighting
- Creation of urban “parklets” around new local stops at Henry Johnson Boulevard and Sprague Place

These infrastructure enhancements were an essential component to lay the groundwork for future Bus Rapid Transit, but will also deliver immediate benefits to the existing routes that serve the station area.

### **Downtowners**

Starting in Summer 2017, CDTA began operation of two new seasonal bus routes, known internally as “Downtowners”. These unique, specially branded services connect hotels and transportation hubs to major destinations in the vicinity of a city’s central business district with high-frequency, circulator-style service.

Due to a recent uptick in development and tourism initiatives, many more of these types of destinations (e.g., the Albany Capital Center, Rivers Casino) have appeared in recent years, with more to come later this decade.



Capital City Trolley 2017 Route Map.

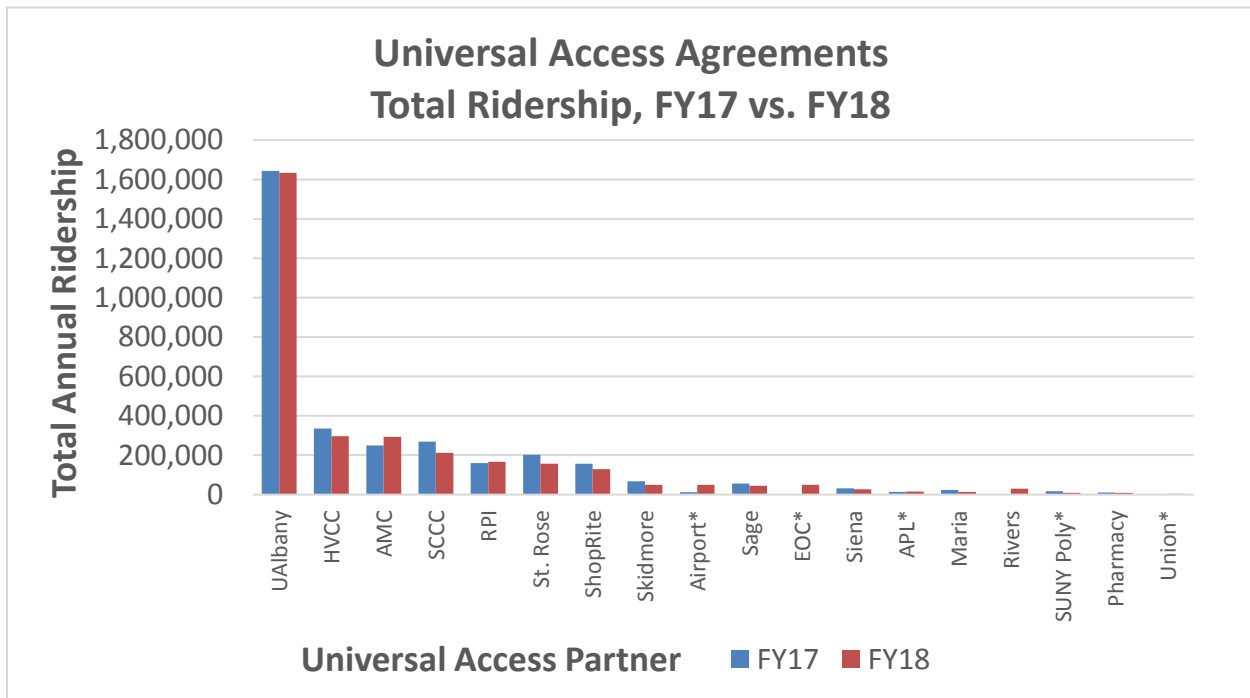
The intent of Downtowner routes is to attract a share of new tourist and business trips to public transportation, though they will also make it easier for existing transit riders to get around their city’s downtowns and reduce overcrowding on our regular routes.

CDTA’s new Capital City Shuttle in downtown Albany and Electric City Trolley in downtown Schenectady, combined with a reconfigured Summer Visitors Trolley in Saratoga Springs, offer new **fare-free** door-to-door connections between the emerging clusters of tourism, entertainment, and late-night destinations in each city. Although ridership on the Downtowner routes in Albany and Schenectady was low in their first season of operation, CDTA staff were able to identify productive segments and destinations on each, leading to redesigned route patterns that are expected to grow ridership in the second season. The Saratoga Summer Visitors Trolley significantly increased ridership over its previous iteration, nearly doubling between FY2017 and FY2018.

## Universal Access Contracts

Perhaps the single most important ridership advancement for us is our Universal Access program. This game changing product, developed in response to the needs of community partners, 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 their ID cards to be recognized on buses with appropriate tracking mechanisms to collect data. The partner is billed according to a prearranged contract that outlines terms, conditions and expectations. These arrangements account for close to 5 million boardings on CDTA buses and nearly 30% of all customer revenue. Ridership has increased year over year with partnerships constantly expanding. Progressive businesses and colleges work with CDTA to expand the mobility menu that their constituents want and need.

This year, CDTA entered into a new Universal Access agreement the Educational Opportunity Center (EOC) in Downtown Troy, an academic and workforce development program for “disadvantaged and educationally under-prepared New York State residents 16 years and older.” This agreement, as with others, allows EOC participants to ride CDTA transit services fare-free, and has resulted in over 50,000 boardings since its inception in September 2017. CDTA also began a Universal Access partnership with Rivers Casino in Schenectady. This partnership has produced over 30,000 boardings since it began in October 2017.



\*Agreement started within the last two fiscal years.

## Service Recommendations for 2018-19

### Planning for Montgomery County Service

In 2018, staff began to investigate the potential for CDTA to extend its service area to Montgomery County, a peripheral county of the Capital Region west of Schenectady and Saratoga. CDTA's enabling legislation allows these peripheral counties to elect to become members of the CDTA transportation district through legislative action. This would entail the raising of a 0.25% mortgage recording tax as a source of dedicated transit funding, and the addition of new members to the CDTA Board of Directors to represent the county.

The demographic characteristics of Montgomery County make it a good potential candidate for CDTA service expansion. Although it is largely rural, the county is home to several "pockets" of high density and high transit propensity in a roughly linear cluster along the Mohawk River. These small communities are characterized by significant low-income and low-car-ownership populations that require vehicular connections to educational, healthcare, and employment destinations. The transit-supportive characteristics of Montgomery County are comparable to those counties where CDTA currently operates (in particular, Rensselaer and Saratoga).

	Median Income	% of Households with zero cars	% of County with Higher Density
<b>Rensselaer</b>	\$32,700	31%	13%
<b>Montgomery</b>	\$34,700	27%	11%
<b>Schenectady</b>	\$40,400	20%	36%
<b>Albany</b>	\$42,786	24%	29%
<b>Saratoga</b>	\$57,100	13%	3%

Demographic Characteristics of Capital District counties  
(areas with 6,000+ persons per sq. mi.)

Furthermore, existing connections in Montgomery County are arguably insufficient to residents' needs at present. In April 2018, the City of Amsterdam eliminated Amsterdam Community Transit, a municipally funded bus service, without a substitute in place. Services provided by the County itself remain, but are still inadequate in terms of frequency and hours of operation.

CDTA staff are currently developing a conceptual plan for a transit network in Montgomery County that is similar in scale to our current operations in Saratoga County. It would feature three to four neighborhood routes, an express commuter coach to Downtown Albany, STAR paratransit, and connections to services in Fulton County at Fulton Montgomery Community College (FMCC).

The deployment of this service would entail a significant increase in operating costs and a capital investment in new transit vehicles, maintenance and storage space, and on-street pedestrian and transit infrastructure. Staff are currently evaluating options for funding of the operating and capital components of this potential service expansion. It is also possible that the mobility needs of Montgomery County residents could be met partially or fully through a microtransit approach based on dynamic route booking and bus routing to optimize both cost efficiency and customer

convenience. Because of this, CDTA plans to evaluate the suitability of Montgomery County as a future market for microtransit.

### **Microtransit**

Microtransit is an emerging form of demand-response transit that leverages ridesharing technology to flexibly book, schedule, and route on-demand trips within agency-defined areas and times. Unlike standard fixed bus routes, customers hail microtransit service by requesting a pick-up and drop-off location in a mobile app, web browser, or over the phone. These combined requests are processed by microtransit software to generate the most efficient and convenient possible route, which is passed on to the operator as turn-by-turn directions.

Because it does not require trips to be delivered regardless of demand as with fixed-route service, microtransit could become a critical asset in CDTA’s mobility “toolbox” to serve areas that have low transit propensity but nonetheless need some form of affordable vehicular transportation. Potential scenarios where microtransit solutions could be effective include, but are not necessarily limited to:



Rendering of a CDTA Microtransit Vehicle

- Replacing low-productivity fixed route services in suburban or rural areas at a lower cost.
- Expanding transit coverage to new and/or unproven markets (e.g. Montgomery County).
- Expanding mobility options at off-peak times (e.g. nights and weekends).
- Addressing the “last mile” problem by enlargening the catchment area of fixed route transit.

Microtransit can be implemented at a transit agency through a partnership with an existing ridesharing company, or performed in-house by integrating the necessary technology into our service delivery process. In the next fiscal year, CDTA staff will identify potential microtransit markets in the Capital Region and develop a plan to serve them through a microtransit pilot.

### **Route Segment Adjustments**

Detailed analysis of route ridership at the segment level this year has revealed further opportunities around the fixed-route system where the level of service could be better aligned to the level of demand.

Route #13, a currently underperforming trunk route connecting Downtown Albany to Slingerlands via New Scotland Avenue, carries 93% of its ridership on the segment between downtown and St. Peter’s Hospital. This segment is characterized by dense urban neighborhoods, mixed land uses, and large institutional employers such as St. Peter’s and Albany Medical Center. The segment west of St. Peter’s Hospital only carries 7% of total route ridership, as it traverses a low-density area with fewer major generators.



Commuter Route #737 is currently performing above its performance threshold but has a similar issue. On this route, 87% of total ridership is carried between Downtown Albany and Corporate Woods, while the low-density and largely single-family residential segment between Corporate Woods and Albany International Airport only carries 13%.



In the coming year, CDTA will evaluate these cases and other similar opportunities to more appropriately serve underperforming route sub-components.