

2016 - 2017 Route Performance Report

Introduction

This is CDTA's annual performance report for all fixed route services for the Fiscal Year of April 1, 2016 through March 31, 2017. 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.

State of Affairs

In Fiscal Year 2016-17, the CDTA route network performed very well with boarding counts continuing near record levels. Ridership on all services totaled 16.9 million. This is down about 1% from last year when total boardings were at 17.2 million, which was an all-time CDTA record. The slight decrease in total boardings was not unexpected and comes about due to several factors, including low average fuel costs and a normal winter as compared to one of the mildest winters since records were kept. Last year's lack of snowfall and mild temperatures tempered ridership losses that normally occur on snowy days or on days when temperatures are in single digits. For example, a March snow storm in 2017 resulted in a loss of nearly 60,000 boardings as compared to the same two days in 2016. When the weather is bad, people who use CDTA buses stay at home, just like people who drive their cars. During the year, CDTA continued to invest resources towards its most productive routes. Generally, routes that received service increases went against this pattern of ridership decline, continuing to demonstrate the importance of focusing resources on proven corridors with high transit propensity.

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 2016-2017
CDTA Route Performance

Route	Description	Total Rides	Revenue Hours	1-Year Ridership Trend	2-Year Ridership Trend	Rides per Rev. Hour
12	Washington Avenue	1,778,748	44,840	7%	9%	39.7
1	Central Ave./Wolf Rd.	1,186,320	33,667	-8%	-12%	35.2
100	Mid-City Belt	876,959	27,768	4%	13%	31.6
22	Albany-Troy-Watervliet	1,167,789	37,402	0%	3%	31.2
905	BusPlus Red Line Albany - Schenectady	1,899,158	60,866	0%	4%	31.2
6	Second Avenue	558,941	19,877	-3%	4%	28.1
10	Western Avenue	804,901	29,702	-4%	-2%	27.1
85	Troy-Waterford	607,594	22,716	-1%	-1%	26.7
11	UAlbany Shuttle	346,702	13,184	-4%	-7%	26.3
* 7	Glenmont	355,816	14,432	5%	3%	24.7
* 18	Delaware Avenue	477,332	19,919	6%	-2%	24.0
353	Mont Pleasant/Scotia	312,069	13,125	-6%	7%	23.8
* 87	Beman Park Sycaway	395,051	16,624	-5%	-8%	23.8
* 80	Albia-Fifth Avenue	288,943	12,259	-7%	-5%	23.6
370	Troy/Schenectady	521,447	22,984	1%	6%	22.7
531	St. Luke's Express	49,296	2,206	-9%	-13%	22.3
114	Madison/Washington	387,814	17,694	-3%	5%	21.9
355	Schenectady/Wolf Rd.	527,666	24,139	-7%	-12%	21.9
138	Allen/Livingston	247,054	11,353	3%	3%	21.8
224	Albany-Troy via I-90	319,435	15,166	-4%	-8%	21.1
289	Griswold Heights - St. Mary's Hospital	100,925	4,924	-9%	-14%	20.5
* 13	New Scotland Avenue	425,852	21,628	-5%	-2%	19.7
351	Broadway/Van Vranken	226,703	11,690	4%	1%	19.4
* 522	Hudson River Express	44,664	2,381	-15%	-17%	18.8
BusPlus		Trunk	Neighborhood	Express	Commuter	Seasonal

**Routes with an asterisk are below productivity thresholds.*

FY 2016-2017
CDTA Route Performance (Continued)

Route	Description	Total Rides	Revenue Hours	1-Year Ridership Trend	2-Year Ridership Trend	Rides per Rev. Hour
182	Troy-Latham-Cohoes	527,168	29,133	1%	7%	18.1
* 540	Northway Xpress	158,436	9,031	-14%	-18%	17.5
125	Clinton/Sand Creek	227,030	13,124	0%	12%	17.3
233	Albany/Schodack	80,703	4,711	3%	6%	17.1
763	Albany/Schenectady via Route 20	69,922	4,232	-13%	-12%	16.5
214	Rensselaer 3rd Street	182,565	11,114	-9%	-9%	16.4
190	Fuller/Wolf	160,099	9,833	-12%	-12%	16.3
712	Harriman/Patroon Creek	102,335	6,489	-22%	-23%	15.8
* 117	Guilfordland/Colonie Crosstown	125,917	8,766	14%	21%	14.4
* 116	Albany/Menands	43,968	3,115	-21%	-16%	14.1
* 354	Nott Street/Rotterdam Sq. Mall	98,788	7,670	-22%	-15%	12.9
737	Corporate Woods/Airport	85,887	6,694	-14%	10%	12.8
* 352	Altamont Ave/McClellan	52,306	4,236	-6%	-12%	12.3
* 450 [†]	Schenectady-Wilton Mall via Route 50	231,966	19,228	N/A	N/A	12.1
* 520	Nassau Express	18,823	1,624	-25%	-13%	11.6
* 734	Hackett/Buckingham Pond	23,393	2,236	-26%	-21%	10.5
* 155	Suburban Circulator	66,806	6,608	-23%	-32%	10.1
* 719	Altamont/Voorheesville	28,124	2,906	-2%	19%	9.7
* 530	Exit 26 - Rotterdam Square Express	17,647	1,930	-9%	-9%	9.1
* 286 [†]	RPI Shuttle	24,229	2,934	N/A	N/A	8.3
* 875	Saratoga Trolley	11,775	1,437	N/A	N/A	8.2
* 452 [†]	Skidmore College/Wilton Mall via Downtown Saratoga	74,516	13,689	N/A	N/A	5.4
* 451 [†]	Ballston Spa-West Saratoga via East Ave/Lake Ave	22,646	5,281	N/A	N/A	4.3
BusPlus		Trunk	Neighborhood	Express	Commuter	Seasonal

*Route below productivity thresholds.

[†]Route has operated for fewer than 12 months. Ridership & hours represent a portion of the full fiscal year.

FY 2016-2017

CDTA Route Performance – General Discussion

The CDTA route network is supported by the strong performance of trunk routes. These are high frequency services that operate in core employment areas in 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.

For the most part, routes with the **highest levels of service** (Route 12, Route 100, Route 22, Route 905) continue to experience the **greatest increases in ridership**. Exceptions to this trend are routes that **share a corridor** with a route that underwent a recent **service improvement**. For example, service improvements on Route 12 may have attracted ridership from Routes 10 and 11 that operate along adjacent corridors, serving many of the same locations and populations. Likewise, service improvements on Route 905 may have attracted ridership from Routes 1 and 355, both of which travel on the same corridor but make local stops (note Route 905 is BRT service, which stops only at designated stations).

Because of the unique relationship between routes that operate along aligned corridors, we allow for **12-18 months of observation** before considering actions to address shifts in ridership. The overall health and productivity of trunk routes throughout the CDTA system is a point of emphasis and a clear sign of our success.

The route categories with the **most significant decreases** in ridership and/or performance are **commuter** and **express** services. These routes, which are designed for peak-hour service and park-and-ride connections, tend to have the highest rate of **“choice riders”**, whose attraction to transit services are very sensitive to environmental factors, like the price of fuel and weather. They may require schedule adjustments or examinations of the destinations that they serve. Several neighborhood routes with lower levels of service also saw drops in ridership. They are being considered for restructuring and/or service reduction as appropriate.

The route network continues to be productive and responsive to the demands of customers. As currently designed, the capacity of the system is likely **topped-out** at or around **17 million boardings**. The network is healthy and vibrant, and the long term results (5-7 years) of the structure, categorizations, assessments, and improvement plans directed by the TDP have been outstanding. We have **grown ridership, improved the depth of the system**, and designed it to **better serve residential and employment locations**. The services offered by CDTA are complimentary to economic development initiatives and flexible to meet the changing needs of our communities.

Ridership and the network’s performance has reinforced CDTA’s practice of investing resources in established high-ridership corridors, which exhibit a **high transit propensity**. Even in conditions that are somewhat unfavorable to transit, ridership on these routes is **more resilient** than with services that are designed to provide **geographic coverage**, but with lower levels of service and fewer customers who are likely to try or use transit. The Transit Development Plan provides a foundation and architecture for service design. It guides the assessment of services and points the network in a direction for growth, improved quality, and for integration with the economic development process in the Capital Region.

Service Changes and Accomplishments

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

Service Enhancements – May 2016 to January 2017

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
10	Weekdays	Frequency increased in the midday
12	Weekdays	Frequency increased in the PM peak
22	Weekdays	Frequency increased throughout the day
85	Weekdays	Frequency increased at night
	Sundays	Span of service extended
100	Weekdays	Frequency increased in early morning & midday
	Sundays	Span of service extended
370	Saturdays	Frequency increased throughout the day
905	Weekdays	Frequency increased throughout the day; span of service extended

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 extremely low ridership.

Route	Period	Service Change
116	Weekdays	Unproductive trips eliminated
155	Weekdays	Unproductive trips eliminated
	Saturdays	Frequency reduced throughout the day

Saratoga County Route Restructuring

In 2007, CDTA restructured all Saratoga County neighborhood routes and increased the total level of service, yet the rate of transit utilization remained lower than in the rest of our service area. However, segments of these routes generated a significant amount of ridership, and revealed valuable information about transit travel patterns within the City of Saratoga Springs. From these segments,

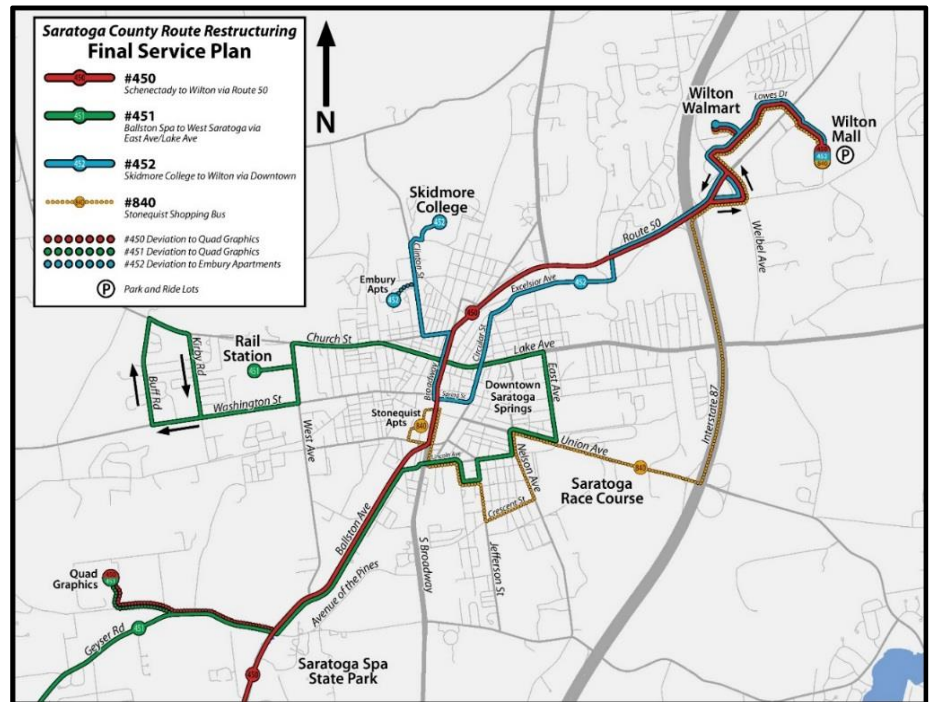
CDTA again restructured neighborhood service in Saratoga County with the intent of growing ridership and improving efficiency.

During the 2015-16 fiscal year, CDTA staff worked with Saratoga County customers, elected officials, businesses, service providers, and other stakeholders to develop a new route network. The final plan, rolled out in May 2016, allocates more service to the corridors with highest demand (such as NYS Route 50), while providing connections to destinations that previously did not have service (e.g. Kirby Road / Buff Road).

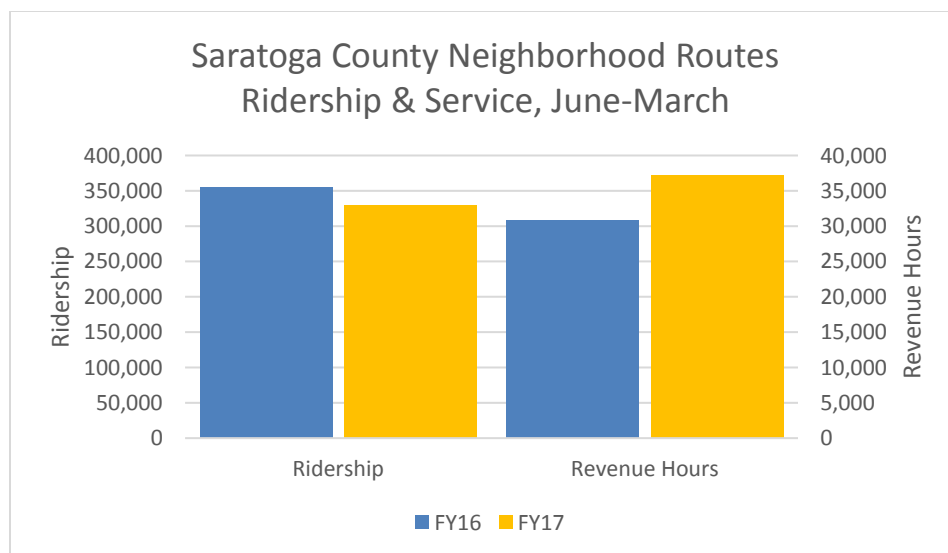
Unfortunately, Saratoga County ridership experienced a slight decline after the restructuring initiative. This is likely due to the same external factors that decreased ridership on other routes (e.g. fuel prices, weather).

However, as with many express and commuter routes, Saratoga County ridership has a very high rate of “choice riders” with a high sensitivity to these environmental factors.

By focusing service on productive corridors, the restructuring may have actually mitigated ridership losses. For example, ridership on Saratoga County neighborhood routes decreased by 7%, whereas ridership on other routes with similar levels of service decreased by 12% on average. In the coming fiscal year, CDTA staff will re-evaluate ridership patterns in Saratoga County and make adjustments as necessary, as in previous restructuring initiatives.



Final Saratoga County Route Restructuring Plan.



Albany Medical Center / Park South

As part of CDTA’s universal access partnership with Albany Medical Center, Route 13 was modified to serve lower New Scotland Avenue via Madison Avenue, providing direct service to the AMC campus as well as the large Park South redevelopment project underway between Dana Avenue and Myrtle Avenue. In addition to the service change, new stops, bus shelters, and pedestrian infrastructure have been installed in strategic locations on the corridor. Providing front-door access to the center of the medical campus further encourages employees and visitors to travel to the hospital via transit.

Since opened, the new stops on lower New Scotland Avenue have attracted over 170 rides per average weekday. This number is expected to increase in the coming year alongside climbing utilization of the Albany Medical Center Universal Access partnership.

For more information on CDTA’s partnership with Albany Medical Center, see the Universal Access section of this document.



New Bus Stops and Route Patterns on lower New Scotland Avenue.

Rivers Casino / Mohawk Harbor

In February 2017, Rivers Casino & Resort opened on the site of the former American Locomotive Company works, immediately north of Downtown Schenectady. This facility is the first component of a larger redevelopment of the area, which will eventually feature a mixed-use “master-planned community” and marina. CDTA partnered with the casino operator to provide regular transit service between Downtown Schenectady and the site. Several neighborhood routes were extended from their terminus at Liberty Park/SCCC Station to the casino via Erie Boulevard.



CDTA Bus at Rivers Casino & Resort.

RPI Services

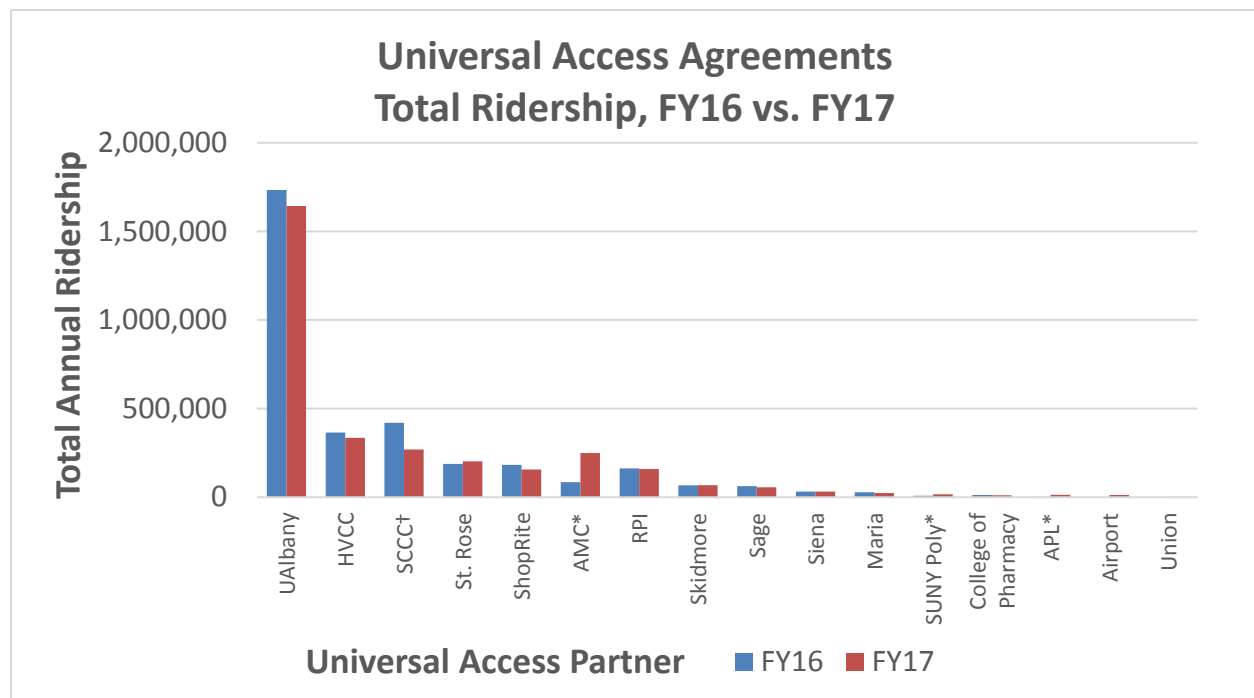
Throughout 2016, CDTA staff worked with officials of the Rensselaer Polytechnic Institute to develop a new neighborhood route connecting the campus to major residences and destinations. The new service combines the most productive segments of former Routes 280 and 286 into a revamped 286. This service was implemented in October 2016. By merging the two routes together, the productivity of RPI services has increased from 7.6 rides per hour to 8.3 rides per hour.

Other Service Changes

In addition to the service changes described above, CDTA also made a series of smaller changes throughout the fiscal year. In Uptown Albany, Routes 114 and 763 were rerouted to serve a single stop at North Allen Street and Western Avenue, providing a single transfer point and laying the groundwork for a future Washington-Western BRT station. In Downtown Schenectady, Route 351 was rerouted from Franklin Street to State Street, allowing the route to more directly serve the area's primary ridership generators. Other routes that underwent minor service changes were Routes 6, 80, 87, 117, 182, 190, 233, 520, 522, 530, 531, and 719.

Universal Access Contracts

This year, CDTA entered into new Universal Access agreements with the Albany Public Library (APL), Albany International Airport, and Union College. Our existing agreement with Albany Medical Center (AMC) was also bolstered by a major investment of service and infrastructure in August 2016. Some agreements saw decreased utilization due to the same factors affecting the rest of the CDTA system (e.g. lower average fuel prices, more intense winter weather).



*Agreement started within the last two fiscal years.

† SCCC ridership decline due to increased efforts to reduce ineligible card use.

Service Recommendations for 2017 - 2018

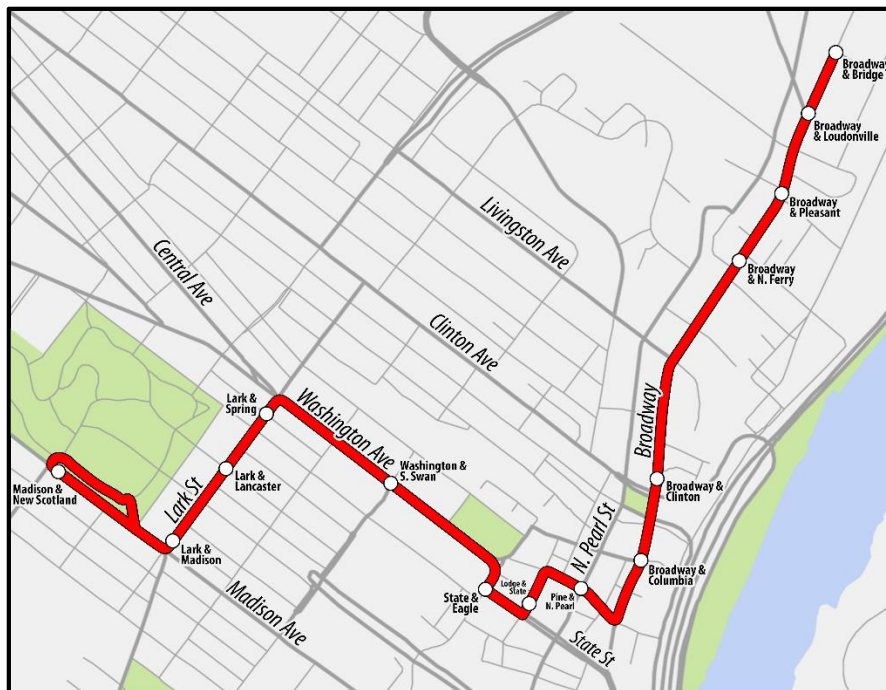
May 2017 Service Changes

In late May 2017, CDTA will implement targeted service changes to improve efficiency. Most of these changes are minor, with service frequencies increased or decreased by 5-10 minutes based on demand. These changes will also take place during off-peak periods of the day (early morning, midday, and after 6:00 pm). For example, changes to Route 6 will decrease the weekday frequency in the midday from 20 minutes to 25 minutes, from 30 to 35 in the evening, and from 30 to 40 late at night. During these hours, demand for transit is generally lower and buses less full. In the coming year, CDTA will monitor these changes and determine whether additional adjustments are warranted.

Downtowners

CDTA is in the process of developing a unique service design for urban areas. Known as “Downtowners”, these routes would 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 the uptick in development over the past several years, many of these destinations (e.g. the Albany Capital Center, Rivers Casino) have been built very recently, with more to come later this decade.

A major intent of Downtowner routes is to attract a share of 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. In FY17-18, CDTA will continue to progress Downtowner route and schedule designs, and develop a framework with stakeholders to fund and implement the service.



Potential Routing of Albany Downtowner.