



REVIEW OF PREVIOUS PLANS

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REVIEW OF PREVIOUS PLANS

INTRODUCTION

Several planning studies since 2010 have either directly focused on transit service in northwest and central Vermont, or have focused on related issues that can impact GMT's services and operations. These documents provide context for the issues, challenges, and opportunities related to mobility in the GMT service area.

The study team identified and reviewed the following studies that are directly relevant to the GMT NextGen Transit Plan:

- CCTA Transit Development Plan (2010)
- GMTA Transit Development Plan (2012)
- CCTA Peer Analysis (2014)
- Statewide Public Transit Performance Review (2016)
- Customer Surveys
 - 2010 GMTA Phone Survey
 - 2012 CCTA Customer Service Survey
 - 2014 GMTA Customer Service Survey
- Chittenden County Park-and-Ride & Intercept Facility Plan (2011)
- Northwest Regional Transportation Plan (2010)

The key findings and recommendations of each study are described below. Comparing these recommendations against the existing transit network will allow the study team to understand the origins of the current service approach, as well as the persistent challenges that have kept some recurring recommendations from being implemented.

CCTA TRANSIT DEVELOPMENT PLAN (2010)

The Chittenden County Transportation Authority (CCTA) Transit Development Plan (TDP) presented a program for improving and enhancing transit in Chittenden County. Unlike previous plans, this TDP used a 10-year horizon and beyond, while still providing a framework for more detailed shorter term projects. The CCTA TDP also served as the transit element of the Chittenden County Metropolitan Planning Organization's (CCMPO) Metropolitan Transportation Plan, which is the region's long-range plan.

The TDP included an overview of existing CCTA service, market analysis, service needs assessment, and a discussion of regional coordination and planned development, followed by proposed investments and costs/funding strategies.

Key Findings

Although the existing system served most areas with high transit demand and need, many areas did not have service. There was also demand for improvements to existing services, particularly for longer service hours and more frequent service. More strategies identified to target “choice” riders, or those who may have other transportation options but choose to use transit for reasons of cost or convenience.

The major findings of the TDP included:

- The existing CCTA system serves most places with high residential density, concentrations of people with transit-dependent characteristics, and major employment areas
- Ridership has been increasing with marketing efforts, capital improvements, and enhanced institutional relationships
- Many suburban areas want more commuter routes with service to downtown Burlington
- Communities that are already served by CCTA want longer service hours and more weekend service, as well as higher service frequency
- Need for more crosstown links, notably service connecting the two parts of South Burlington
- Expanded park-and-ride lots (more suburban/rural areas to connect to bus/vanpool/etc.) and intercept/satellite parking facilities (just outside of an urban area, with frequent shuttles)
- Opportunities for TOD/coordinated development: Need to work with partner agencies/organizations and member communities to coordinate on planned development projects and to enhance pedestrian environment: make it safe, comfortable and attractive
- Enhance specialized services including senior shuttles, neighborhood specials, and programs for older adults and people with disabilities

Major capital investments included:

- **Downtown Transit Center**, a significant investment that will replace the Cherry Street Station transit hub with a modern station including an indoor climate-controlled waiting area, seating, real-time arrival information, and other amenities (Downtown Transit Center was completed in 2016)
- **Ongoing upgrades to vehicle fleet**, replacing older vehicles with cleaner, energy-efficient transit vehicles

Existing Services

Fixed Routes: As of 2010, CCTA operated 13 local fixed routes serving Burlington, South Burlington, Essex, Essex Junction, Colchester, Shelburne, Williston, and Winooski. Of all these communities, only the Town of Colchester was not a member of CCTA. Most local fixed routes operated six days a week (Monday through Saturday) with 30-minute service frequency during weekdays and hourly service on Saturday.

Commuter Routes: In addition, several new regional routes were new at the time of this TDP, including a regional commuter route between Milton and Burlington and three interregional commuter routes connecting St. Albans, Montpelier, and Middlebury to downtown Burlington.

Service Types: CCTA has several route classes – including Trunk, Local, Shuttle, and Commuter – but routes within the same class do not necessarily provide the same type or level of service. The document also includes a defined hierarchy of transit services, but these do not align with CCTA's route classes.

Paratransit: Complementary ADA paratransit service is operated by Special Services Transportation Agency (SSTA) under contract to CCTA. Service is provided within three quarters of a mile of fixed routes, and the hours and geographic area of service varies based on when fixed-route service operates.

Service Performance: As of 2009, all of CCTA's Urban routes met or exceeded the standard for acceptable productivity among Urban routes (defined as boardings per service mile) as defined by the Vermont Agency of Transportation (VTrans) 2007 Public Transportation Policy Plan, and nine of the 12 routes exceed the standard for successful productivity. All Small Town and Commuter routes exceeded acceptable standards for their route classes and several also exceeded the standard for successful productivity.

In terms of cost effectiveness (defined by VTrans as cost per passenger), all Urban routes were considered acceptable and nine exceeded the standard for successful. Both Small town routes were considered acceptable, while one commuter route was acceptable and the other two considered successful. The Montpelier LINK was measured as the most cost effective route in the state.

Market Analysis

Key market analysis findings were:

- Chittenden County is the most populous and most densely populated county in the state of Vermont. However, most of the county is fairly low density, and densities of one household per acre or higher are focused in only a few key areas in the central and western portions of the county, which is where CCTA service is focused.
- Approximately 65,000 people, or 44% of Chittenden County's population, lived within one quarter-mile of local fixed-route service; about 76,000 people, or 59% of the county's population, lived within three quarters of a mile of local service.
- Among populations that are more likely to use transit, including older adults and those residing in low-income or zero-vehicle households, most of these residents are generally focused in more urban areas in and around Burlington. Higher densities of older adults are concentrated in Williston, South Burlington, Shelburne, Burlington, and Milton. High concentrations of low-income households are located in Burlington, South Burlington, Winooski, and Colchester. Areas with 20% or more of households lacking a vehicle are focused in the core parts of Burlington and in downtown Winooski.
- Major employers for the region are focused in Burlington and Winooski, and clustered along major corridors such as I-89, US 7, US 2, and VT 15.
- Most Chittenden County residents also work within the county. A large share of residents in Grand Isle County (nearly half) and Franklin County (about one third) commute to work in Chittenden, while smaller shares of residents from Lamoille, Addison, and Washington counties commute to Chittenden County.
- Opportunities to meet demand for new transit service exist in Colchester and along the VT 15 and VT 116 corridors.

Needs Assessment

Based on the existing system, analysis of market demand, and feedback from rider surveys and data collection, the following service needs emerged:

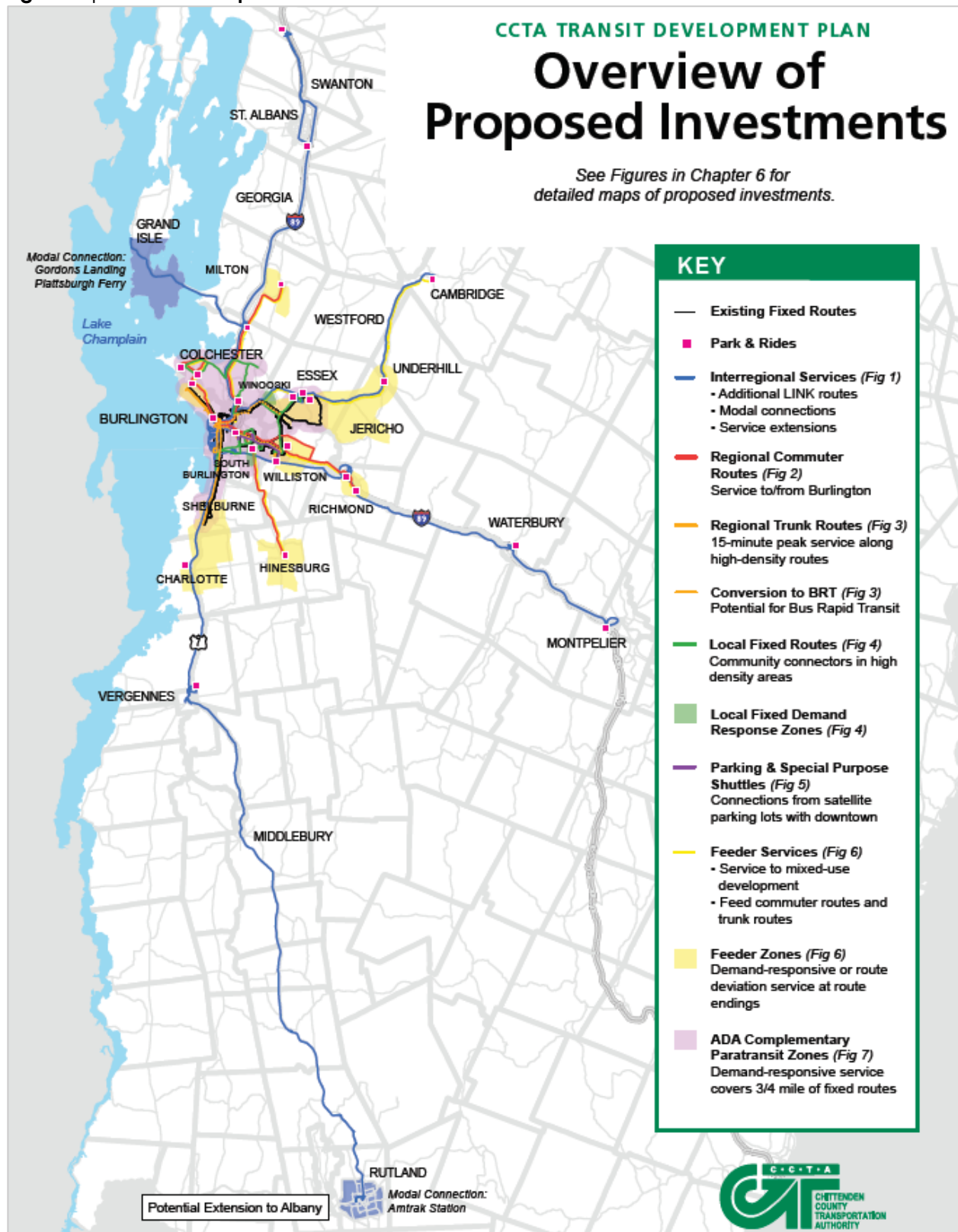
- **Service Frequency:** CCTA operates 30-minute service all day on most routes. CCTA established 15-minute peak service on the Essex Junction route and saw a 30% increase in ridership. The four major corridors into Burlington were identified as prime candidates for 15-minute peak service: North Avenue, Colchester Avenue/Pearl Street (VT 15), Williston Road/Main Street (US 2), and Shelburne Road (US 7).
- **Service Hours:** The highest priority improvements to service span include longer hours of service (14-16 hours per day, or 6 a.m. – 10 p.m.) on more routes and the addition of Sunday service on the four major corridors (starting with the Essex Junction route).
- **Service Coverage:** Additional commuter services would meet demand, particularly in Colchester and Milton, but are less cost effective and may take time to prove successful. A more robust local network could make commuter services more attractive as well.
- **Amenities and Facilities:** Public outreach feedback indicated significant demand for more passenger facilities at stops, as well as passenger information improvements like real-time information and trip planning software. The new Downtown Transit Center facility was identified as a significant investment on the horizon, projected to have a substantial impact on CCTA passengers as well as benefits for operations.
- **Park-and-Ride Facilities:** Additional park-and-ride lots and intercept facilities were identified as a need to enhance commuter service possibilities, and several locations were identified by CCTA as potential commuter facilities. The TDP also identified a park-and-ride study in progress by the CCMPO.

Future Investments

The TDP identified specific transit service investments to be implemented as funding becomes available (see Figure 1):

- **Service upgrades on trunk corridors:** North Avenue, VT 15, US 2, Pine Street, and Shelburne Road
- **Service upgrades on other local routes:** Riverside, Essex Center, City Loop, and South Burlington Circulator
- **New local services** in South Burlington, Colchester, and Essex
- **Interregional commuter routes** to Cambridge (via VT 15), Waterbury, and Swanton
- **Regional commuter routes** to Colchester, Hinesburg, and Richmond
- **Intermodal connection routes** to Grand Isle (ferry) and Rutland (Amtrak)
- **New parking shuttles** to downtown Burlington, Fletcher Allen, and the airport from intercept lots at exits 12, 14, and 16
- **Feeder services** to commuter and trunk routes in outlying towns
- **ADA complementary paratransit** service and other demand response services

Figure 1 | CCTA TDP Proposed Investments



GMTA TRANSIT DEVELOPMENT PLAN (2012)

The Green Mountain Transportation Agency (GMTA) Transit Development Plan (TDP), which was a counterpart to the CCTA TDP, presents a program for improving and enhancing transit in central and northwestern Vermont. A primary goal of the GMTA TDP was to develop a more unified transit network across the rural service area, as well as provide strong connections between these communities and CCTA urban services.

The TDP included an overview of existing GMTA service, market analysis, service needs assessment, and a discussion of regional coordination and planned development, followed by proposed investments and costs/funding strategies.

Key Findings

GMTA operates a wide variety of service types across a four-county area and connections to Chittenden County. GMTA service expanded significantly between 2003 and 2012, due to both the acquisition of existing transit services in Lamoille, Franklin, and Grand Isle counties and the introduction of new services.

- GMTA operated a wide variety of service types, including year-round local routes, regional commuter services, seasonal routes that primarily serve visitors in the Mad River Valley and Stowe, and shopping shuttles and demand-response services that provide lifeline services to more targeted populations.
- Most areas that had high residential density and major trip generators were served by GMTA, although some areas were identified that may be able to support additional commuter services or where shopping shuttles could be upgraded to regular local service.
- Feedback indicated that a large share of GMTA ridership relied on transit as a primary way to get where they need to go. GMTA had been expanding commuter services to tap into the “choice” rider market, attracting riders who can drive but choose to use transit. Balancing the needs of these two markets is critical going forward.
- Based on surveys and public outreach efforts, the most requested service improvements included longer hours of service (early morning and later in the evening), weekend service, increased frequency, and service to more areas.
- Recommendations in the TDP included the addition or enhancements of several commuter services in all three service areas, expansion of year-round local services, and new demand-response services connecting rural areas to employment centers.
- Funding is a critical issue for bringing the TDP recommendations a reality. Most of GMTA's funding came from federal funds and local community contributions. However, there is a need for new and innovative funding strategies to support expanded transit investment. The State of Vermont's Comprehensive Energy Plan (CEP) described the existing reliance on gas tax funding as insufficient to meet most future transportation funding needs.
- The TDP also noted that GMTA also lacked a “consistent and reliable mechanism to raise required local match” funding. As a regional system connecting several communities across a large area, GMTA would be challenged to grow and build on its successes if the current funding system remains unchanged.

Existing Services

GMTA operated a wide variety of service types, including year-round local routes, commuter services, seasonal routes that primarily serve visitors in the Mad River Valley and Stowe, and shopping shuttles and demand-response services that provide lifeline services to more targeted populations.

Service grew significantly over recent years: since 2003, GMTA incorporated services in Stowe and Lamoille County, Franklin County, and Grand Isle County. New routes began operation including US 2 Commuter, Montpelier Circulator, Northfield Community Shuttle, and other shopping and demand-response shuttles.

Central Vermont:

- Includes Washington County and three towns in Orange County (Orange, Washington, and Williamstown)
- Four local routes serving Montpelier, Barre, and Berlin, operating six days a week (Monday through Saturday)
- Four commuter routes extend into additional communities and connect to adjacent counties
- Eight Mad Bus routes operating in the Mad River Valley during ski season only
- Shuttles and demand-response services, including four scheduled shuttles and demand-response transportation provided with programs/agencies targeting specific populations

Lamoille County:

- One local route serving Morrisville (Morrisville Loop)
- One commuter route connecting Morrisville and Stowe to Waterbury
- Seasonal Mountain Road Shuttle serves Stowe resort area
- Daily shopping shuttle connecting Stowe Village to shopping opportunities in Morrisville
- Other demand response service operated by Rural Community Transportation

Franklin and Grand Isle Counties:

- One local route serving St. Albans City operates six days a week
- Two commuter routes serving Alburgh, St. Albans, Georgia, Highgate, Swanton, Richford, Berkshire, Enosburg Falls, and Sheldon. Commuter route terminating in Alburgh was the only fixed route operating in Grand Isle County.
- Weekly shopping shuttle connecting St. Albans City and Swanton to St. Albans Town
- GMTA provides demand-response service under contract with human service agencies in Franklin County
- Most transit service in Grand Isle County is provided by CIDER, in the form of demand-response vans and volunteer drivers.

Market Analysis

Key market analysis findings included:

- Although the GMTA service area was predominantly rural and low density, several areas served as economic centers with higher concentrations of residents and jobs, including Montpelier, Barre, Morrisville, and St. Albans.

- Some rural towns have village centers that may support commuter-oriented or local transit services, and some weekly shopping shuttles could be upgraded to regular local service.
- Central Vermont:
 - The Central Vermont area had the highest population density of the three GMTA service areas, and also had relatively fewer low-income households.
 - 53% of the population was within ¾-mile of a GMTA route
 - The largest employers and the highest concentrations of employment in the area were focused in Montpelier, Waterbury, Berlin, and Barre.
 - Barre and Montpelier had the highest concentration of low-income and zero-vehicle households, and could likely support higher levels of transit service than exist today. Montpelier also had high density of employment, offering more opportunity for more commuter services.
 - Northfield had the greatest potential for supporting regular transit service in terms of both transit-dependent populations and employment.
- Lamoille County:
 - Lamoille County had the smallest population of the three service areas, but the highest percentage of low-income households and zero-vehicle households.
 - 39% of the population was within ¾-mile of a GMTA route
 - GMTA generally served areas with high residential density and important trip generators in Morrisville.
 - Some areas, notably Johnson and Jeffersonville, were identified as potentially supportive of transit based on density, but were located outside the GMTA service area. Johnson had the greatest potential for supporting regular transit service, with a potential route connecting Johnson and Morrisville via Route 15 based on employment, commuting patterns, and the location of transit-dependent populations.
- Franklin/Grand Isle Counties:
 - 43% of Franklin County population was within ¾-mile of a GMTA route; in Grand Isle County this figure was 12%
 - GMTA provided transit access to higher-density areas and important trip generators in St. Albans. A few areas had small pockets of density and are served by limited commuter service.
 - Corridors currently served by the two commuter routes could likely support higher service levels. Swanton had high population density (second to St. Albans) and had potential to support some local service. Possible services included a commuter route along US 7 or upgrading the existing St. Albans-Swanton shopping shuttle to regular local service.

Needs Analysis

The needs analysis found that:

- Many GMTA riders rely on transit to get where they need to go. GMTA has been expanding commuter services to tap into the “choice” rider market, attracting riders who can drive but choose to use transit.
- Based on surveys and public outreach efforts, the most requested improvements include longer hours of service (early morning and later in the evening), weekend service,

increased frequency, and service to more areas. Areas and corridors that were most often requested for service included:

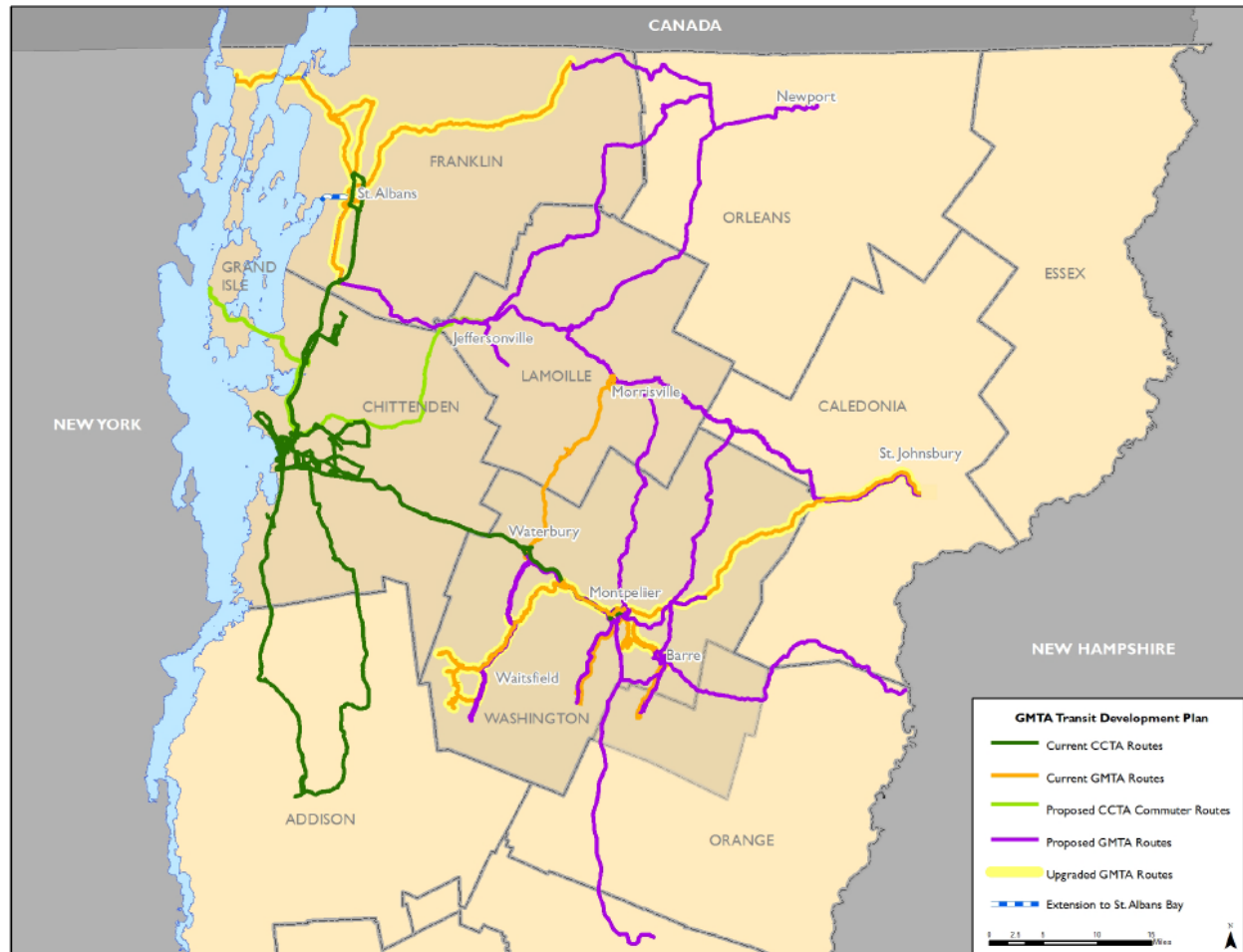
- South Barre and other parts of Barre Town
- Route 12 corridor from Montpelier south (to Northfield) and north (to Worcester)
- Route 14 corridor between Hardwick and Montpelier
- Year-round connection between Montpelier and Mad River Valley
- Commuter service into Barre on Route 14 and US 302
- Service on Route 15 in Lamoille County linking Morrisville to Johnson and Cambridge
- Year-round service on Mountain Road Shuttle in Stowe
- Increased service on commuter routes in Franklin and Grand Isle counties
- Many goals for encouraging transit use and access (with CCTA) would require coordination and cooperation with municipalities and other agencies in the GMTA service area:
 - Focus development along existing routes: consider presence of transit when contemplating future development
 - Improve the pedestrian environment of all service areas
 - Maintain sustainable and diverse funding streams
 - Rival SOV and surpass in affordability
 - Balancing transit dependent needs with those of commuters

Service Strategies

The TDP identified specific transit service investments to be implemented as funding becomes available (see Figure 2):

- Commuter routes based in Central Vermont
 - Route 12 corridor from Montpelier south (to Northfield) and north (to Worcester)
 - Route 14 corridor north and south of Montpelier and into Barre City
 - US 302 corridor into Barre City, Berlin, and Montpelier
 - Warren/Waitsfield to Montpelier and Waterbury
 - Commuter routes based in Lamoille County
 - Jeffersonville to Morrisville via VT 15
 - Jeffersonville to Smugglers Notch via VT 108
 - Jeffersonville to Newport via Jay Peak (joint route with RCT)
 - Morrisville to St. Johnsbury via Hardwick (joint route with RCT)
- Commuter routes based in Franklin and Grand Isle Counties
 - Extension of Richford/St. Albans Shuttle to Jay Peak Resort
 - St. Albans to Jeffersonville via Georgia and Fairfax
 - Grand Isle to Burlington (included in CCTA TDP)
 - Additional service on the Richford/St. Albans Shuttle
 - Additional service on the Alburgh/Georgia Shuttle
 - Extension of the St. Albans LINK to Swanton via US 7
- Year-round local services
 - Circulator service in Barre City
 - Extension of City Route and City Mid-day to South Barre
 - Service to East Barre/Websterville
 - Upgrades on existing local routes in Central Vermont
 - Local route between Johnson and Morrisville via Hyde Park on VT 15
 - Year-round service on Mountain Road Shuttle and extension to Shaw's

Figure 2 | GMTA TDP Proposed Improvements



- Conversion of Morrisville Shopping Shuttle to full day local route
- Extension of St. Albans Downtown Shuttle to Walmart and 30-minute peak service
- Extension of St. Albans Downtown Shuttle to St. Albans Bay (Lake Champlain)
- Conversion of St. Albans Tuesday Shopping Shuttle to regular local route

Seasonal service

- Extended service period for Mad Bus and Stowe Mountain Road Shuttle
- Connections to LINK Express for resort employees

Demand response service

- Increased service on existing shuttles
- New shuttles from rural areas in Washington, Lamoille, Franklin, and Grand Isle to employment centers in Lamoille, Orleans, and Caledonia counties
- New shopping shuttles in Swanton/Highgate, Enosburg Falls, and Richford

CCTA PEER ANALYSIS (JUNE 2014)

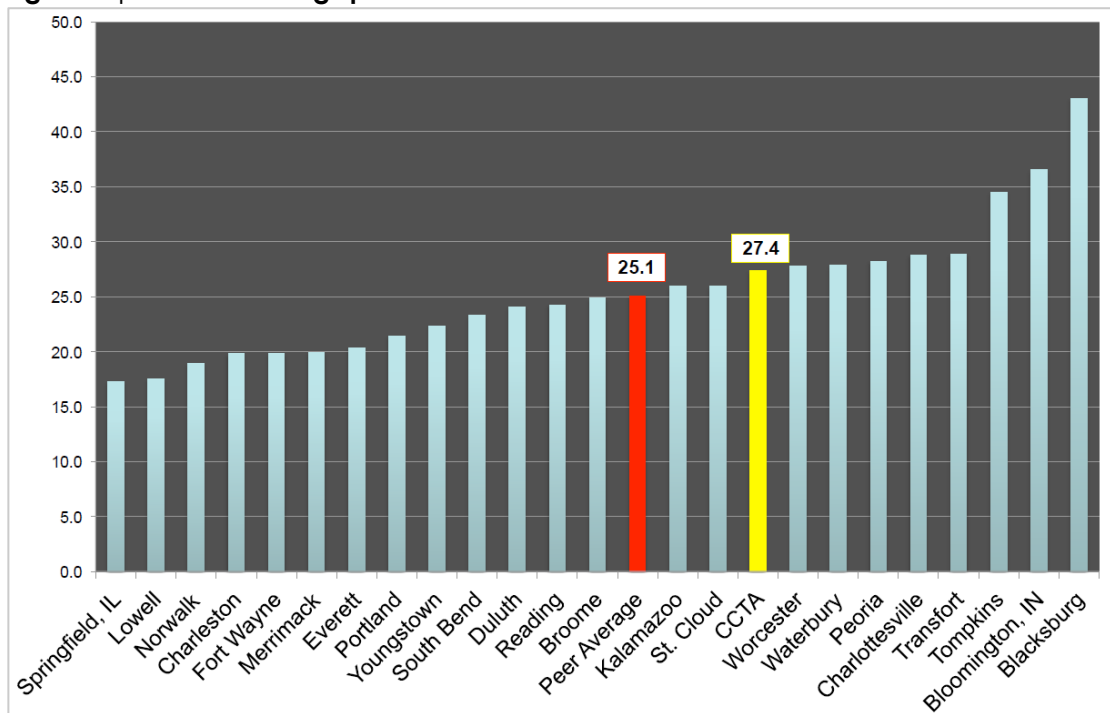
CCTA conducted a peer analysis in June 2014 to compare the agency with peer systems across the country. The analysis includes comparisons to both local and commuter services, as well as an assessment of fares, funding sources, and real-time information.

Local Bus Peers

The analysis compared CCTA local service with 23 peer systems from 14 states. This was a largely new set of peers from previous peer reviews, as CCTA service had outgrown the previous set of peers selected in 2003 (11 agencies were carried over, 12 were new). Findings were that:

- CCTA's service area population was lower than most peer agencies (5th lowest out of 23). Annual ridership was 2,530,488, ranking 11 out of 23 and just below average, while revenues are slightly below average. CCTA performs relatively well compared to its peers on several measures, including:
- Higher than average boardings per vehicle revenue mile (2.37 CCTA, average 1.95)
- Slightly higher than average boardings per vehicle revenue hour (27.4 over 25.1) (see Figure 3)
- Slightly higher than average cost per revenue mile (\$7.98 over \$7.28)
- Slightly below average cost per revenue hour (\$92.31 under 93.72)
- Close to average cost per passenger (\$3.37 under \$3.74)
- Lower than average operating subsidy per passenger trip (\$2.55 under \$3.19)
- In terms of fares, CCTA had about average base fare (\$1.25 vs \$1.24 average), while monthly passes cost above the peer average (\$50, third from highest, average = \$39.67)

Figure 3 | Local Boardings per Vehicle Revenue Hour

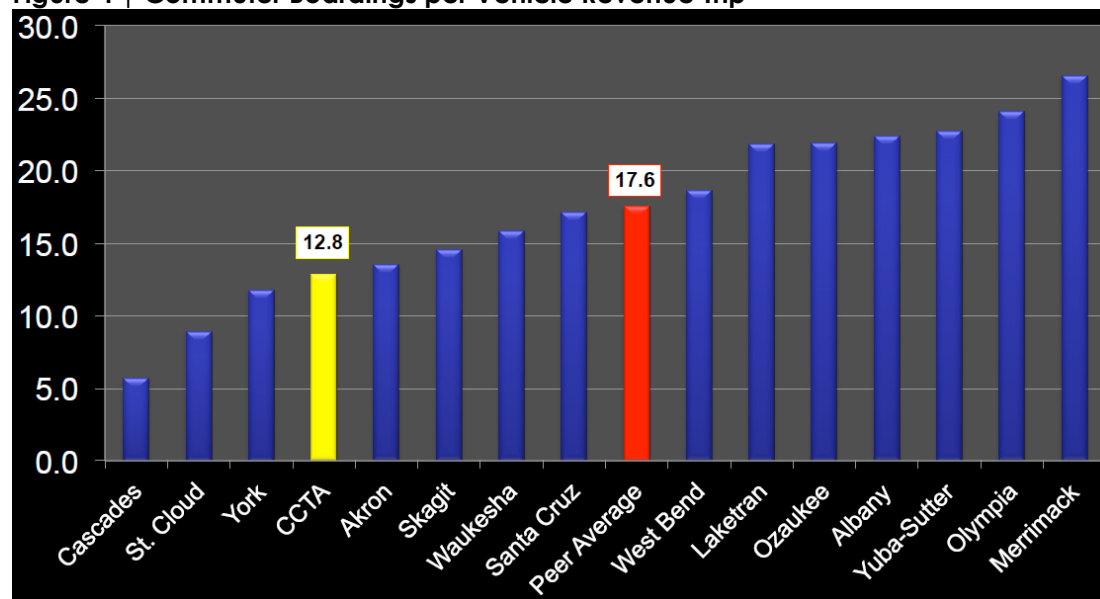


Commuter Bus Peers

The analysis compared CCTA to 14 peer agencies operating commuter bus service. Compared to these peers, GMT performed well on measures of average annual ridership (170,161, ranking 5th) and annual trips (13,260, ranking 3rd). For several performance measures, however, GMTA performs below average and ranks close to the bottom among its commuter bus peers:

- Lower than average/close to bottom boardings per vehicle revenue trip (12.8 under 17.6 average) (see Figure 4); slightly lower than average boardings per vehicle revenue trip (15.9 under 17.6 average) when excluding revenue deadheads
- Lower than average/close to bottom cost per vehicle revenue mile (\$2.87 under \$4.66 average)
- Lower than average/close to bottom cost per vehicle revenue hour (\$88.17 under \$125.08 average)
- Lower than average/close to bottom cost per passenger (\$7.39 under \$9.67 average)
- Lower than average/close to bottom operating subsidy per passenger trip (\$4.32 under \$6.84 average)
- Fares vary because of length and zone variances but typical fare and pass cost figure seems to be in line with CCTA (fare: \$3.50-5, pass: \$110-135)

Figure 4 | Commuter Boardings per Vehicle Revenue Trip



Funding

In terms of funding, fare revenue accounts for approximately 25% of GMT's funding, which is in line with peer agencies. However, GMT differs from its peers in that state funds comprise a lower percentage of its operating funds. As a result, CCTA relies more on federal funding, local contributions, and fare revenue.

Real-Time Info and Software

At the time of the peer analysis, about half of local bus peers had real-time arrival information available for riders, or were planning on implementing it soon. Very few commuter bus operations provided real-time information.

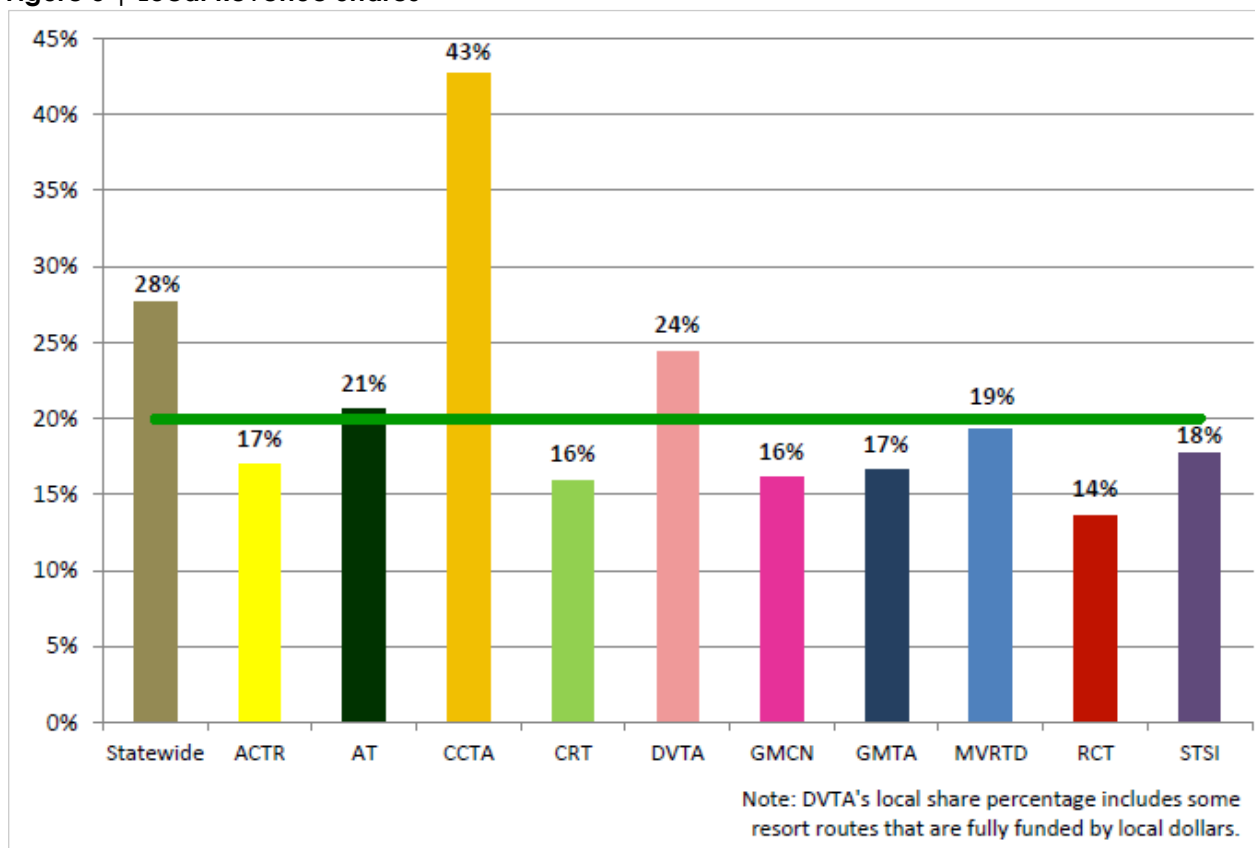
STATEWIDE PUBLIC TRANSIT PERFORMANCE REVIEW (2016)

The Vermont Agency for Transportation (VTrans) conducts an annual Public Transit Performance Review to evaluate the performance of all transit agencies across the state. In the 2016 Review (conducted for fiscal year 2015), CCTA and GMTA were evaluated as separate agencies.

CCTA represented just over half of total transit ridership in Vermont. Ridership in the county grew by 8% between 2011 and 2015, compared to 12% in all other areas.

The Vermont Public Transit Policy Plan establishes a statewide goal that 20% of the funds for public transportation should be generated locally. Statewide, 28% of transit operating funds are from local shares, with the rest coming from state and federal funding. CCTA outperformed the VTrans goal, generating 43% of its funds from local contributions and revenues, while GMTA generated just 17% of its funds from these sources.

Figure 5 | Local Revenue Shares

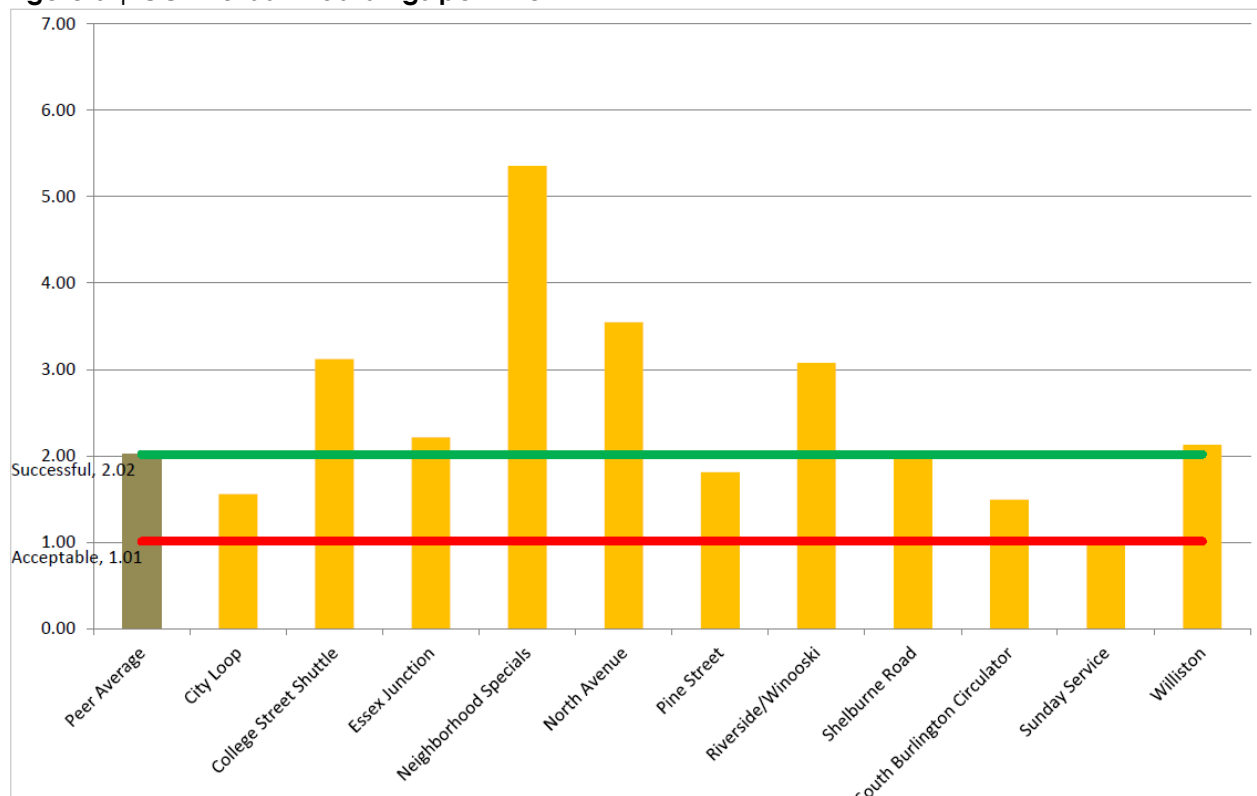


The review also evaluated route-level performance, with all routes in the state categorized by service type: Urban, Small Town, Demand Response, Tourism, Rural, Rural Commuter, Express Commuter, Volunteer Driver, and Intercity. VTrans set standards for "Acceptable" and

"Successful" performance for each performance measure, based on averages from a combination of Vermont agencies and national peers.

- **Improved Routes:** GMTA's Morrisville Loop (Rural) productivity had underperformed for two years, but improved to meet the Acceptable standard in FY 2015. Ridership increased 15% over the past year.
- **Underperforming Routes:** CCTA's Sunday Service was identified as an underperforming route in terms of productivity (boardings per mile) for the first time in FY 2015. Several GMTA routes categorized as Tourism routes (Mad River Glen, SnowCap Commuter, and Valley Floor) had underperformed for two or more years in a row in terms of productivity and/or cost effectiveness.
- **Urban Route Performance (CCTA Only):** All CCTA urban routes meet or exceed acceptable performance for boardings per mile, with six routes exceeding successful performance: College Street Shuttle, Essex Junction, Neighborhood Specials, North Avenue, Riverside/Winooski, and Williston (see Figure 6). All CCTA urban routes also exceed acceptable performance on cost per passenger, and eight of the 11 routes meet or exceed the threshold for successful performance.

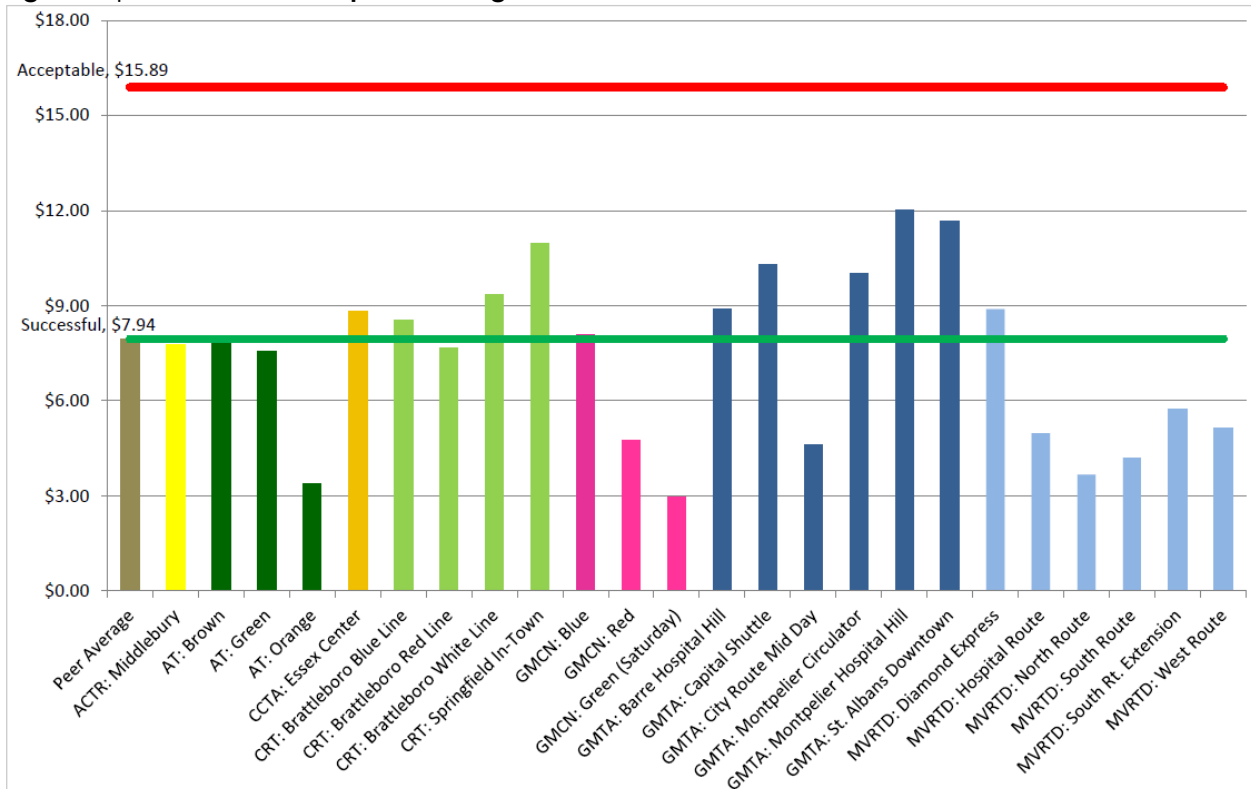
Figure 6 | CCTA Urban Boardings per Mile



- Routes that exceed successful performance on both measures are: College Street Shuttle, Essex Junction, Neighborhood Specials, North Avenue, Riverside/Winooski, and Williston.
- **Small Town Route Performance:** Essex Center was CCTA's only Small Town route. It was successful on boardings per hour, but was just short of successful on cost per passenger.

Six GMTA routes were Small Town routes, and all exceeded acceptable performance on both measures. One route, City Route Mid Day, exceed successful performance on both measures.

Figure 7 | Small Town Cost per Passenger



- **Express Commuter (CCTA Only):** Most CCTA express commuter boardings per trip are above the successful threshold. Cost per passenger is acceptable for all four routes, and two routes (Montpelier LINK and St. Albans LINK) are successful.
- **Tourism (GMTA Only):** Two routes, Mount Ellen and Mountain Road, exceed successful performance on both metrics. Three routes perform unacceptably on both measures: Mad River Glen, SnowCap Commuter, and Valley Floor. The remaining routes – Access Road, Mountain Condos, and Valley Evening Service – are all acceptable on boardings per hour and successful on cost per passenger.
- **Rural (GMTA Only):** GMTA's two rural routes operate in Morrisville. The Morrisville Loop performs just above acceptable on boardings per hour, and is acceptable in terms of cost per passenger. The Morrisville Shopping Shuttle exceeds successful performance on both measures.
- **Rural Commuter:** Both CCTA routes (116 Commuter and Jeffersonville Commuter) meet acceptable performance standards. Almost all GMTA routes are successful on both measures. GMTA routes that exceed successful performance on both measures are Alburgh-Georgia, City Commuter, and Richford-St. Albans.
- **Demand Response:** CCTA demand-response services meet the threshold for successful performance, while GMTA just barely meets the acceptable threshold for these services on both measures.

- **Volunteer Trips:** Both CCTA and GMTA are considered successful in terms of administrative cost per trip for volunteer driver trips.

CUSTOMER SURVEYS

GMT has conducted several surveys over the years among riders and other residents regarding transit need, perceptions of service, and areas for improvement.

2010 GMTA Phone Survey

GMTA conducted a phone survey of residents in Washington County and the three towns in Orange County served by GMTA to learn more about attitudes toward public transit. Notable findings include:

- Respondents have a positive overall impression of GMTA (58%).
- 59% of respondents have never used GMTA; however, the largest share of those that have used GMTA have not used it in the past 12 months. Only 6.4% of respondents use GMTA at least once a month or more frequently, and 7.4% use service less than once a month.
- Within Washington County, the location where more service was most often requested was Montpelier. The most common answer overall was service to Chittenden County; this could reflect a lack of knowledge of the existing LINK Express route, a desire for more service on that route, or better access to that route from other Washington County communities. It could also reflect a desire to connect to other locations in Chittenden County besides Burlington.
- 71% of respondents agree or strongly agree that GMTA plays an important role in Washington County.
- Respondents indicated they would seriously consider using transit if there was increased service on GMTA routes. However, these factors are less important than if there were issues of need to rely on transit, such as if they did not have a vehicle available (83%) or the possibility of not being able to drive (79%), as well as external factors such as the price of gas (62%).
- Based on respondents' home locations and where they said they would be most likely to travel using transit, the most likely trip pairs for respondents include: Berlin and Montpelier, Montpelier and Chittenden County, Barre and Berlin, Barre City and Montpelier, Williamstown and Barre City, Williamstown and Montpelier, and Montpelier and Barre City.

2012 CCTA Customer Service Survey

CCTA conducted an intercept survey of riders during the fall of 2012 to gather input about riders' transit needs, background, and perceptions of service. Key findings are highlighted below.

- The majority of respondents either began or ended their trips within the city of Burlington, and nearly half of riders had both their origin and destination within the city limits. South Burlington is the second most common destination, followed by Winooski, Essex (including Essex Junction), Shelburne, Williston and Colchester.

- Among all routes, majority of respondents walked to the bus (79%, compared to 83% in 2010) while 4% were dropped off (2% in 2010) and 5% drove and parked (1% in 2010). 8% of respondents transferred to their current bus. For commuter routes only, 46% walked, while 32% drove and parked and 17% were dropped off.
- The average wait time for a bus was 7 minutes.
- Most respondents used transit to commute to work (48%), commute to school (20%), and to reach medical appointments.
- Respondents reported riding the bus for multiple reasons, but the most common answer was to save money (56%), because a car was not available (43%), or to save the environment (45%). 77% of respondents did not have a car available for their trip, and 41% of riders did not have a valid driver's license.
- 69% of respondents used the bus almost every day, and another 24% used it at least once a week.
- 62% of riders used CCTA buses to commute to work. The employers drawing the most riders were: University of Vermont, Fletcher Allen Hospital/Offices, State of Vermont, Howard Center, Champlain College, and City of Burlington.
- Customer satisfaction is high overall, with the exception of on-time performance. Improvements most requested by riders include Sunday service, more frequent service, and more bus shelters.
- A guaranteed ride home program and employer-subsidized bus passes were reported as the most effective ways to encourage people to drive less.

2014 GMTA Customer Service Survey

GMTA conducted an intercept survey of riders on its Capital District routes during May 2014 to gather input about riders' transit needs, background, and perceptions of service. Key findings are highlighted below.

- Respondents had overall high satisfaction with GMTA services, with slightly lower ratings for on-times performance.
- The most requested service improvements were more service on Sunday and more frequent service, followed by later service in the evening.
- Among towns that are not currently served by GMTA, service was most requested to Johnson, Williamstown, and South Barre/East Barre.
- A guaranteed ride home program and employer-subsidized bus passes were reported as the most effective ways to encourage people to drive less.
- Many respondents ride every day (40%) or 2-3 times / week (41%). Most respondents reported using the bus because there was no car available for their trip (39%) or to save money (34%). Among all respondents, 70% did not have a car available for their trip and 57% did not have a valid driver's license.
- Most respondents use transit to get to work (52%), followed by shopping and medical trips.
- Nearly all respondents (89%) believed that additional funding for transit should be a priority, and 69% reported they would be willing to pay more in state and local taxes for better public transportation.

CHITTENDEN COUNTY PARK-AND-RIDE & INTERCEPT FACILITY PLAN (2011)

The plan, prepared for the Chittenden County Metropolitan Planning Organization (CCMPO), evaluated and recommended improvements to existing park-and-rides and intercept facilities, resulting in a prioritized list of potential new facilities based on assessed needs. The plan presents a long-term vision for a regional system of park-and-ride and intercept facilities, and was developed to guide CCMPO and its members (including CCTA, VTrans, and municipalities) when making decisions about funding and planning facility projects.

Existing Conditions

Key characteristics of existing lots and usage included:

- There were 28 park-and-ride and intercept facilities in the study area, with a total of 2,129 parking spaces
- Park-and-ride and intercept facilities in the study area are owned, operated, and leased by several different entities: VTrans and municipalities own and maintain several facilities, while CCTA has arrangements with both municipalities and private landowners to utilize facilities for park-and-ride operations. CATMA owns or leases spaces at the four intercept facilities in the core area, and these facilities are for CATMA-member employees only.
- Most existing facilities are located on or close to major highways, and are accessible by low-congestion streets.
- 17 facilities are accessible by walking, 19 are accessible by bike, and 18 have some level of transit service.
- Some of the largest opportunity for expanded park-and-ride facilities was in the North Corridor area. The North Corridor contained the largest number of Chittenden County employees, and also had the highest share of commuters that carpool.
- Mode share for CATMA employees had changed over previous years: drive-alone was down from 74% to 53% from 2000 to 2008, which may indicate the success of TDM programs.

Survey

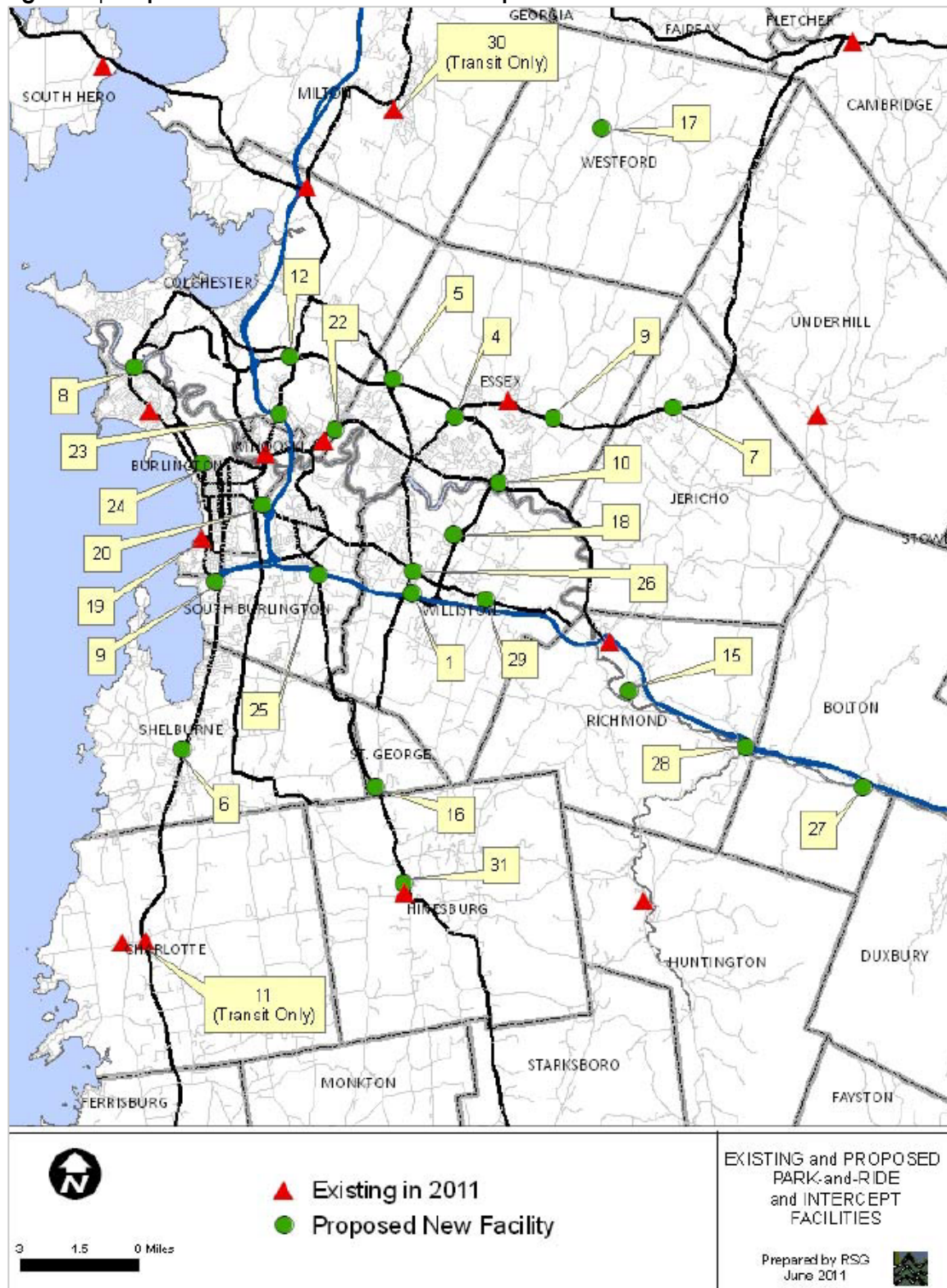
The survey of existing users reported the following usage characteristics:

- Respondents reported using park-and-ride lots for several trip purposes, beyond just commuting to work or work-related travel, including social, recreational, and other personal trips.
- More than 75% of facility users reported using an unofficial lot.
- The most requested improvements included additional spaces at several facilities, more frequent transit service and service to new areas, and more safety enhancements at facilities such as lighting.
- The two most common requests for new/improved facilities were a new facility in Williston near Exit 12 and additional spaces near the Exit 11 lot in Richmond.

Recommendations

The plan's recommendations included 22 proposed new park-and-ride facilities and 5 new intercept facilities. The plan ranked these facilities based on their priority, and provided action steps for planning and implementation. Improvements to existing facilities were also identified based on a prioritization methodology, including nine park-and-ride lots in Chittenden County and fourteen in surrounding counties (see Figure 8):

Figure 8 | Proposed Park-and-Ride and Intercept Facilities



Chittenden County:

- Highest priority is I-89 Exit 11 park-and-ride lot in Richmond: issues include parking capacity, traffic congestion, safety, transit vehicle access
- In addition to upgrades at Exit 11, add new facilities in Jericho and Essex near VT 15 and along VT 117, Exit 12 and Taft Corners in Williston, Exit 14 in South Burlington and Richmond Village

Surrounding Counties:

- St. Albans at Exit 19 (parking capacity and transit vehicle access)
- I-89 Exit 18 in Georgia (parking capacity and transit vehicle access)
- Montpelier at Department of Motor Vehicles building on Memorial Drive (parking capacity)
- VT 15 in Cambridge (parking capacity)

NORTHWEST REGIONAL TRANSPORTATION PLAN (2010)

The Northwest Regional Transportation Plan for 2010-2015 was prepared by the Northwest Regional Planning Commission (NRPC) and served as the long-range transportation plan for Franklin and Grand Isle counties. The plan presents priorities and identifies improvements for several corridors in the Northwest Region.

At the time of the plan, the Northwest Region was served by three GMTA routes (St. Albans Downtown Shuttle, Alburgh/Georgia Commuter, and Richford/St. Albans Commuter) and one CCTA route (St. Albans LINK Express), in addition to demand-response services in the region operated by GMTA (in Franklin County) and CIDER (in Grand Isle County). The plan made the following transit and ridesharing-related recommendations:

US Route 2

The plan identified US Route 2 as a corridor for potential fixed-route transit services. The only transit service available around the corridor is demand-response service provided by CIDER; the GMTA Alburgh/Georgia Commuter travels via Route 78 and US Route 7 to St. Albans and Georgia. US Route 2 is the only roadway that connects all five towns in Grand Isle County, providing a critical transportation link. It also connects Chittenden County to Canada and New York State to Vermont. The plan recommended that NRPC to “work with GMTA to evaluate potential fixed route services through the US Route 2 corridor.” The plan also recommended the identification of suitable park-and-ride lots in the corridor.

VT Route 78 Corridor

The plan recommended the identification of a potential park-and-ride facility along the VT Route 78 Corridor to serve “a high number of Swanton and Highgate residents commute who Chittenden County for work.”

VT Route 105 Corridor

The plan recommended the evaluation of demand for and potential location of a park-and-ride facility along the VT Route 105 corridor. A facility was already planned for Enosburg Falls, and potential additional facilities could be located in Sheldon or East Berkshire.