Public Transit Route Performance Reviews

Annual Report for State Fiscal Year (SFY) 2017

February 2018

Prepared for VTrans by:

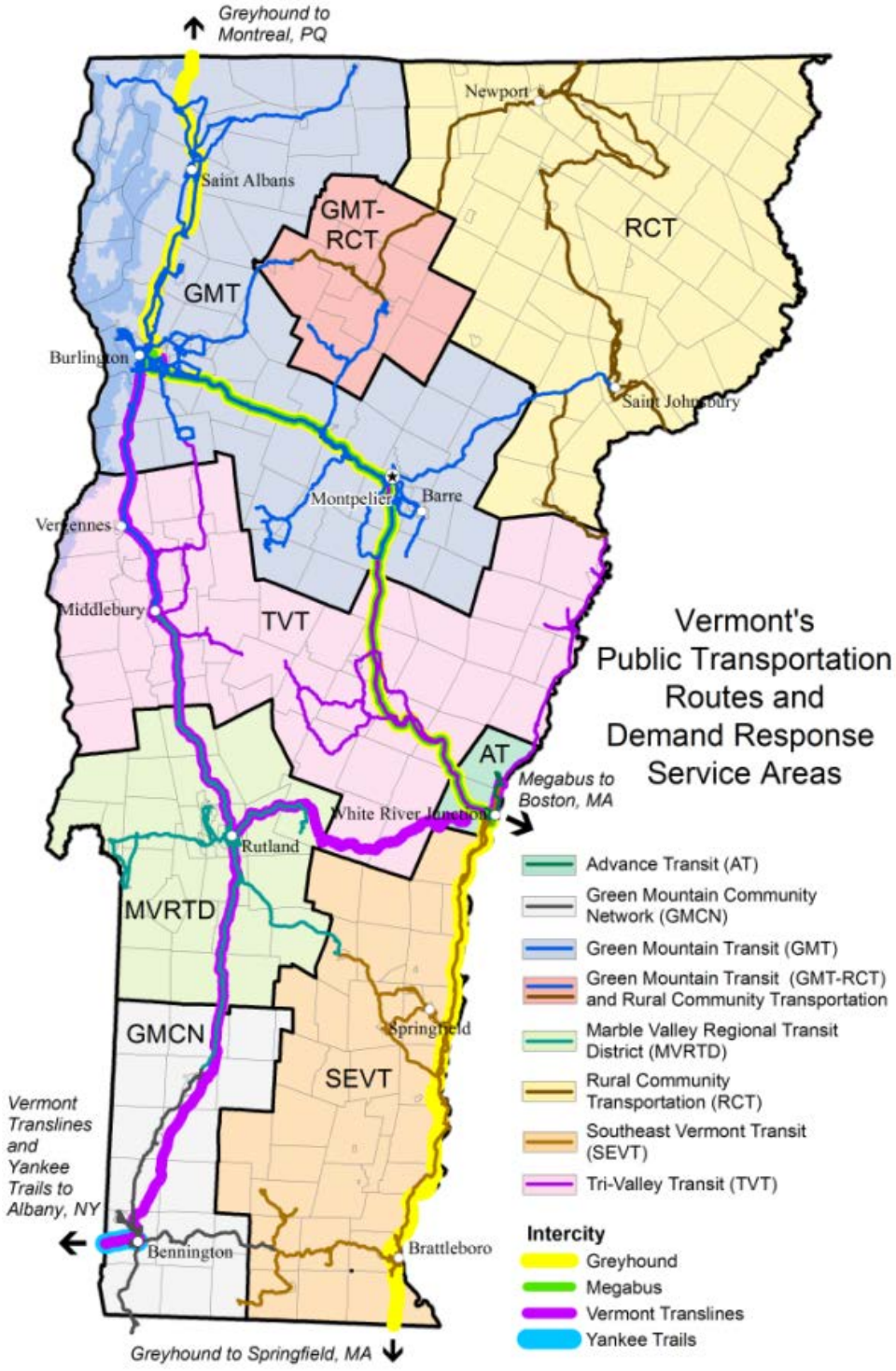
KFH GROUP

KEY OF VERMONT TRANSIT SYSTEMS AND DIVISIONS

AT	Advance Transit
GMCN	Green Mountain Community Network, Inc.
GMT-Rural	Green Mountain Transit-Rural (previously GMTA)
GMT-Urban	Green Mountain Transit-Urban (previously CCTA)
MVRTD	Marble Valley Regional Transit District
RCT	Rural Community Transportation, Inc.
SEVT-The Current	Southeast Vermont Transit-The Current (previously CRT)
SEVT-The MOOver	Southeast Vermont Transit-The MOOver (previously DVTA)
TVT-ACTR	Tri-Valley Transit, Inc. ACTR (previously ACTR)
TVT-Stagecoach	Tri-Valley Transit, Inc. Stagecoach (previously STSI)
VABVI	Vermont Association for the Blind and Visually Impaired

Figure 1 illustrates the service areas of Vermont's public transit providers. The areas previously served by ACTR and STSI are now shown as Tri-Valley Transit (TVT).

Figure 1: Service Areas of Vermont's Public Transportation Providers



Source: VTrans, December 2017

EXECUTIVE SUMMARY

This Public Transit Route Performance Report for state fiscal year (SFY) 2017 presents the results of VTrans' annual performance evaluations for public transit services across Vermont. VTrans manages Vermont's public transit program including monitoring transit performance. This report helps to ensure that public investment in transit is well spent by regularly conducting transit performance evaluations.

For this annual evaluation, VTrans grouped public transit routes and services throughout the state in like categories, such as Urban, Small Town, and Demand Response. Peer-based performance measures for each category were applied to assess the productivity of the services in terms of ridership and the cost-effectiveness in terms of cost per ride provided. VTrans also evaluated the Elders and Persons with Disabilities (E&D) Transportation Program and the local share of transit operating budgets.

In SFY 2017 Vermont's public transit systems provided 4.69 million trips. Just under half of those rides were provided in the Chittenden County region, and the other half was spread throughout the rest of the state. Statewide public transit ridership had steadily increased from SFY 2012 through SFY 2015, but in SFY 2016 experienced a 6% decrease, namely due to a poor 2015/2016 winter ski season and a modest decrease in GMT-Urban's ridership following a route redesign.

> In SFY 2017 Vermont's public transit systems provided 4.69 million trips. This past year saw a 1% decrease in ridership.

Tourism routes that saw significant declines in ridership in SFY 2016 recovered in SFY 2017. In fact, the tourism services saw a 32% increase in overall ridership from the previous year. Most tourism routes experienced double-digit percentage increases in ridership. Other types of services also showed significant increases in ridership, in particular the Volunteer and Demand Response services.

While the statewide local share percentage remained stable at 28%, six of ten transit systems/divisions increased their local share in SFY 2017. SFY 2017 was the first-year local funding for the rural providers combined, reached the statewide goal of 20% of the transit operating budget.

Policy regarding underperforming routes was established in the most recent Vermont Public Transit Policy Plan (2012). Where routes are shown to be underperforming through the analysis in this report, VTrans works proactively with the subject public transit provider to determine what, if any, strategies may result in increased performance for the route. VTrans also used the results of this performance evaluation to implement the first-year pilot of its Transit Incentive Program.

INTRODUCTION

This report is developed annually to document the results of performance evaluations for public transit services across Vermont. The results are presented to the Legislature of the State of Vermont as part of VTrans' consolidated transportation system and activities report to the House and Senate Committees on Transportation. The Vermont Agency of Transportation's Policy, Planning, and Intermodal Development (PPAID) Division, specifically the Public Transit Section, is responsible for managing the state's Public Transit Program. This report documents the Public Transit Section's monitoring efforts to ensure that public investment in transit is well spent.

Vermont's transit agencies have undergone some organizational changes in the last few years. On July 1, 2017, ACTR and STSI formally merged and now operate under the name Tri-Valley Transit (TVT). Services provided by ACTR are shown as TVT-ACTR and the services provided by STSI are shown as TVT-Stagecoach. In this report, SEVT continues to operate two divisions, The MOOver and The Current. Green Mountain Transit continues to operate two divisions; GMT-Urban and GMT-Rural.

For the purposes of this annual performance evaluation, the divisions for GMT, SEVT, and TVT are analyzed separately. Therefore, while the public recognizes seven transit systems in Vermont, this performance evaluation covers ten transit systems and divisions, plus the Volunteer Driver services provided by VABVI and the Intercity bus services provided by Greyhound and Vermont Translines. Only the Intercity routes that receive financial assistance from VTrans are reviewed in this report. Other Intercity services (e.g., Megabus and Greyhound's Montreal to Boston route) operate in Vermont and cover their costs through fare revenue, arguably making them the most productive transit routes in the state. However, the private carriers do not provide data on these routes to VTrans.

The SFY 2017 performance evaluation methodology did not include any significant revisions. This report continues to:

- Assess Vermont's transit services among nine service categories: Urban, Small Town, Demand Response, Rural, Rural Commuter, Express Commuter, Tourism, Volunteer Driver, and Intercity.
- Identify performance trends over the past five years at the state, transit agency, and route levels.
- Provide information on fare recovery and local share.
- Provide an overview of the Elders and Persons with Disabilities (E&D) Transportation Program. Trips provided with E&D funds are examined as part of the Demand Response and Volunteer Driver categories, but the overall effectiveness of the program is reviewed under a separate heading.

METHODOLOGY OVERVIEW

VTrans conducts monitoring of transit services by evaluating statewide trends as well as route-level performance. Several data sources were used to develop this annual report:

- The transit systems provide route-level performance data to VTrans in §5311 – Rural Transit Program Monthly Service Indicator Reports (SIRs).
- VTrans collects data on the E&D Programs and volunteer driver trips from the transit providers annually.
- VTrans monitors operating budget data by funding source (federal, state, and local) in its Grant Tracking spreadsheets and the transit systems provide their profit and loss statements to analyze local share.
- GMT-Urban's route statistics and budget data were provided directly by GMT.

VTrans groups public transit routes and services throughout the state in like categories, described below. Peer-based performance measures for each category are applied to assess the productivity of the services in terms of ridership and the cost-effectiveness in terms of cost per ride provided.

Transit Service Categories

The service category descriptions below serve as guidelines; some routes or services may not meet every criterion. VTrans may also consider ridership and cost data to group similar services together.

1) **Urban**: Routes operating primarily in an urbanized area with all-day, year-round service. The city served by the route has a population of at least 17,500 people and high-density development.
2) **Small Town**: Routes operating in towns with 7,500 to 17,500 people with all-day, year-round service. The route typically stays within one town or two adjoining towns and does not run through long stretches of rural areas.
3) **Demand Response**[1]: Primarily service that does not operate on a fixed schedule nor on a fixed route; also includes routes that are "rural" in nature but operate less than once a day (i.e., service operates only once a week or a few times a month).
4) **Rural**: Routes operating in towns with fewer than 7,500 people or connecting two small towns running through undeveloped areas. These routes operate year-round with all-day service, but the frequency may be low (more than one hour between trips).

[1] Excludes ADA complementary paratransit service, Medicaid transportation, and trips by human service organizations where the transit providers have no control over scheduling or the transportation provided.

5) **Rural Commuter:** Routes that are similar to the Rural category above, but operate primarily during peak commute periods. These routes usually connect several small towns or villages with intermediate stops and operate primarily on state routes in rural areas. Some routes connect outlying areas to the nearby city, with a significant portion of the mileage in rural areas.

6) **Express Commuter**: Routes that operate primarily during peak commute periods and often include express segments. These routes are characterized by one-directional ridership, longer route lengths, and serve larger cities or towns with more than 7,500 people. These routes primarily travel on interstates and provide limited stops, often serving park and ride lots and major employers (rather than other local destinations).

7) **Tourism**: Seasonal routes that serve a specific tourist trip generator, such as a ski area.

8) **Volunteer Driver**: Services provided by volunteer drivers who use their own vehicles, donate their time to transport riders, and receive reimbursement for mileage at the federal rate.

9) **Intercity**: Routes operating regularly scheduled, fixed route, and limited stop service that connects places not in close proximity and makes meaningful connections to the larger intercity network.

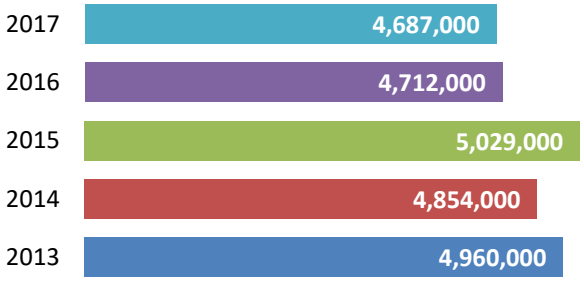
STATEWIDE TRENDS

This section describes the trends in Vermont's transit ridership and costs in recent years[2], before delving into route-level performance in the next section.

Transit Ridership

In SFY 2017 Vermont's public transit systems provided 4.69 million trips. Almost half of those rides were provided in the Chittenden County region, and the other half was spread throughout the rest of the state. Figure 2 presents Vermont's transit ridership over the past five years. Statewide public transit ridership decreased by 6% from SFY 2013 through SFY 2017.

Figure 2: Total Ridership



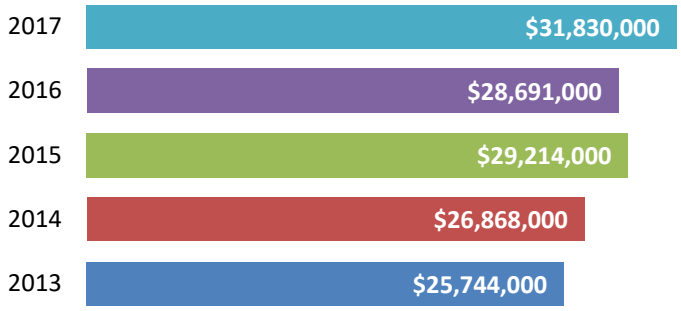
Note: The 2013-2016 numbers have been updated from past reports to account for trips provided by ACTR's sub-grantee.

While SFY 2016 proved to be a challenging year in ridership for many of the Vermont transit systems, largely attributable to a poor ski season, in SFY 2017 many systems saw a rebound in ridership. MVRTD, SEVT-The MOOver, TVT-ACTR, and TVT-Stagecoach experienced ridership increases in SFY 2017. Vermont Translines' ridership continuously increased since the Intercity category was introduced in 2015. Greyhound's ridership increased by 15% in SFY 2017. Despite a moderate decrease in overall ridership from 2013 to 2017, several of the transit systems/divisions have experienced ridership growth in the past five years. However, the loss of urban ridership has had an impact on overall ridership decline. More information on service category trends is available in the Trends by Service Category section of the report.

Transit Costs

In SFY 2017, total transit operating costs reached $31.8 million. The Chittenden County region accounted for approximately 29% of the total costs. In recent years, total transit operating costs have increased by 24%, while ridership numbers have fluctuated. Figure 3 presents

Figure 3: Total Operating Costs



[2] In 2015 data for Greyhound's White River Junction-Springfield, MA route was included in the statewide totals for the first time.

Vermont's total operating costs from SFY 2013 through SFY 2017.

Cost per Trip

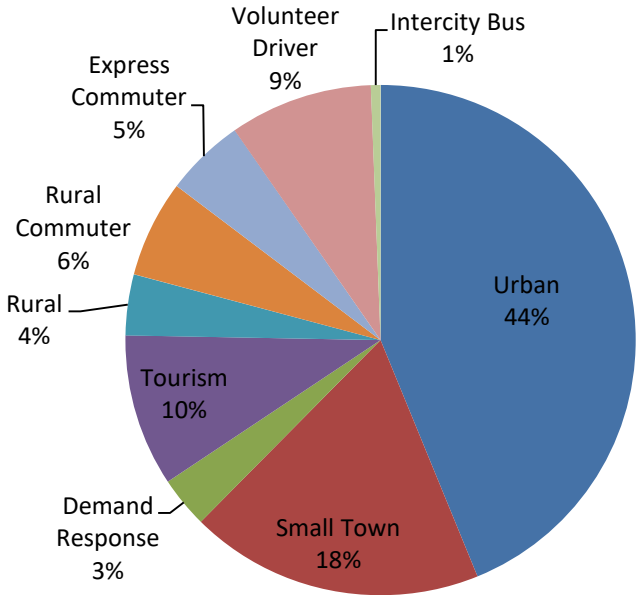
In SFY 2017 the average cost for a transit trip in Vermont was $6.79, a 12% increase from SFY 2016. Figure 4 illustrates the historical average cost per transit trip, which has increased by 31% in the last five years. The loss of ridership without the appropriate reduction in costs has led to an increase in cost per trip over the past five years.

Figure 4 Cost per Trip

TRENDS BY SERVICE CATEGORY

Vermont's transit systems provide an array of transit services to meet various markets and needs. The Urban service category generates the highest share of ridership statewide. Figure 5 illustrates recent ridership by service category.

Figure 5: Transit Ridership by Service Category



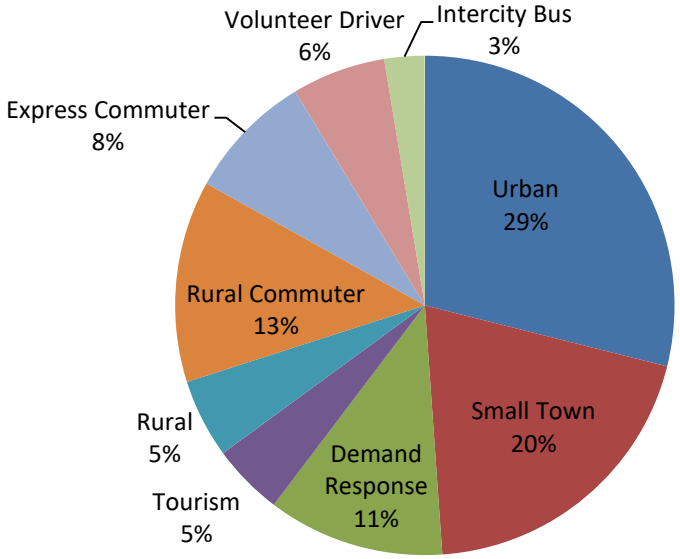
In SFY 2017 Tourism services saw the largest increase in ridership (32%), which indicates a recovery from the poor ski season in SFY 2016. Rural, Intercity, Demand Response, and

Volunteer Driver services experienced increased ridership ranging from 6% to 29%. Small Town, Rural Commuter, Express Commuter, and Urban services, experienced ridership declines ranging from -4% to -9%.

Over the past five years, the Volunteer Driver service category has experienced a considerable ridership increase (44%). Tourism, Demand Response, and Small Town services showed increased ridership up to 7%. The other service categories saw ridership decrease of up to -16%.[3]

Figure 6 shows the operating costs per service category as a percentage of statewide costs in SFY 2017. These percentages have remained steady over the past five years.[4]

Figure 6: Operating Costs by Service Category in SFY 2017

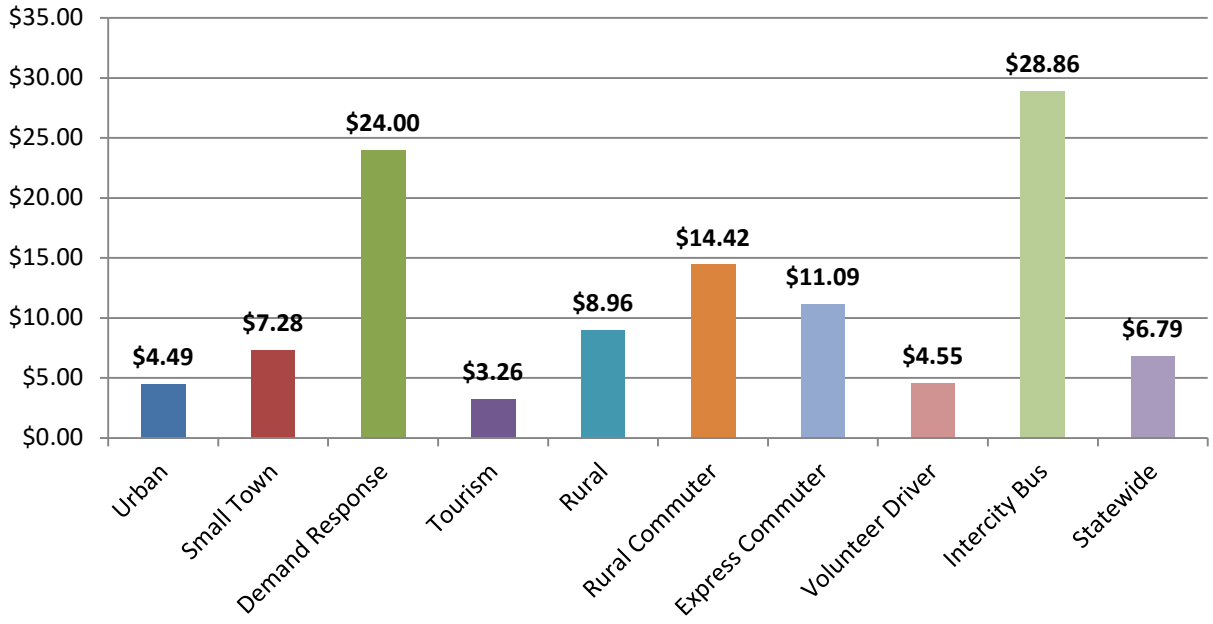


[3] Historically some ridership changes by service category were due to the addition of new routes or the reclassification of routes. For example, in SFY 2013 the Tourism category saw a boost in ridership due in part to new routes that SEVT-The MOOver reported for the first time. In SFY 2014 the GMT-Rural's St. Albans Downtown Shuttle moved from the Rural to Small Town category. There were no such service category changes in SFY 2016, so the changes shown above reflect ridership changes on existing services.

[4] Except for the Intercity Bus service category, which was introduced in SFY 2015.

Figure 7 shows the cost per trip by service category in SFY 2017. Tourism, Volunteer Driver, and Urban service categories all had a cost per trip that was lower than the statewide average. Over the past year, the Volunteer Driver, Intercity, and Tourism services reduced their cost per trip while the Demand Response, Express Commuter, Rural, Small Town, and Urban costs per trip increased. In reviewing five-year trends, every service category except the Volunteer Driver category, saw an increase in its cost per trip.

Figure 7: Cost per Trip by Service Category in SFY 2017



Local Share

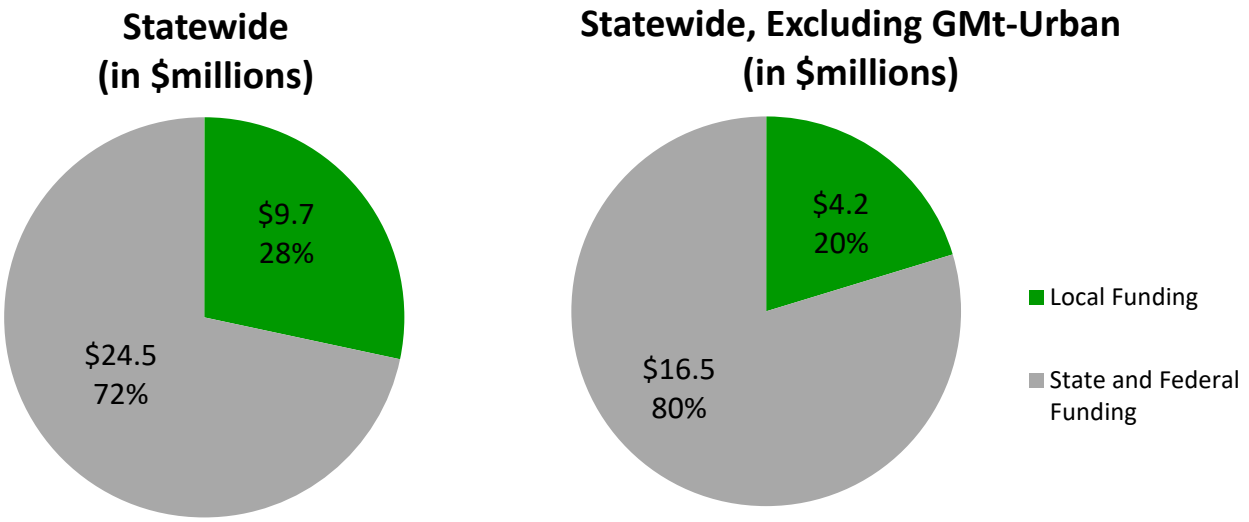
The Public Transit Section also examines the transit providers' performance in generating local revenue. The Vermont Public Transit Policy Plan establishes a statewide goal that 20% of the funds for public transportation should be generated locally. This is a broad interpretation of local funding to include fare revenue, contributions from individuals, contracts with outside agencies, and payments from cities and towns.[5] In other words, local share refers to the percentage of transit expenses that are *not* covered by the Federal Transit Administration, the Federal Highway Administration, or the state (and excludes state funding for capital, Rideshare, RTAP, JARC, and Medicaid).

In SFY 2017, the local share of transit budgets outside of Chittenden County met the 20% target for the first time.

[5] The federal definition of local match for FTA funds removes fare revenue from the calculation and includes state operating assistance.

Figure 8 displays the local share of transit operating budgets statewide in SFY 2017, based on actual operating expenses from VTrans' Grant Tracking spreadsheets. The local share analysis found that 28% of transit funding statewide comes from local sources including fares. The share of public transportation operating funds generated from local sources has remained stable in recent years. Vermont's transit providers have successfully met the statewide goal of 20% local funding. Even when excluding GMT-Urban, the largest generator of fare revenue, the local share of transit budgets outside of Chittenden County met the 20% target for the first time.

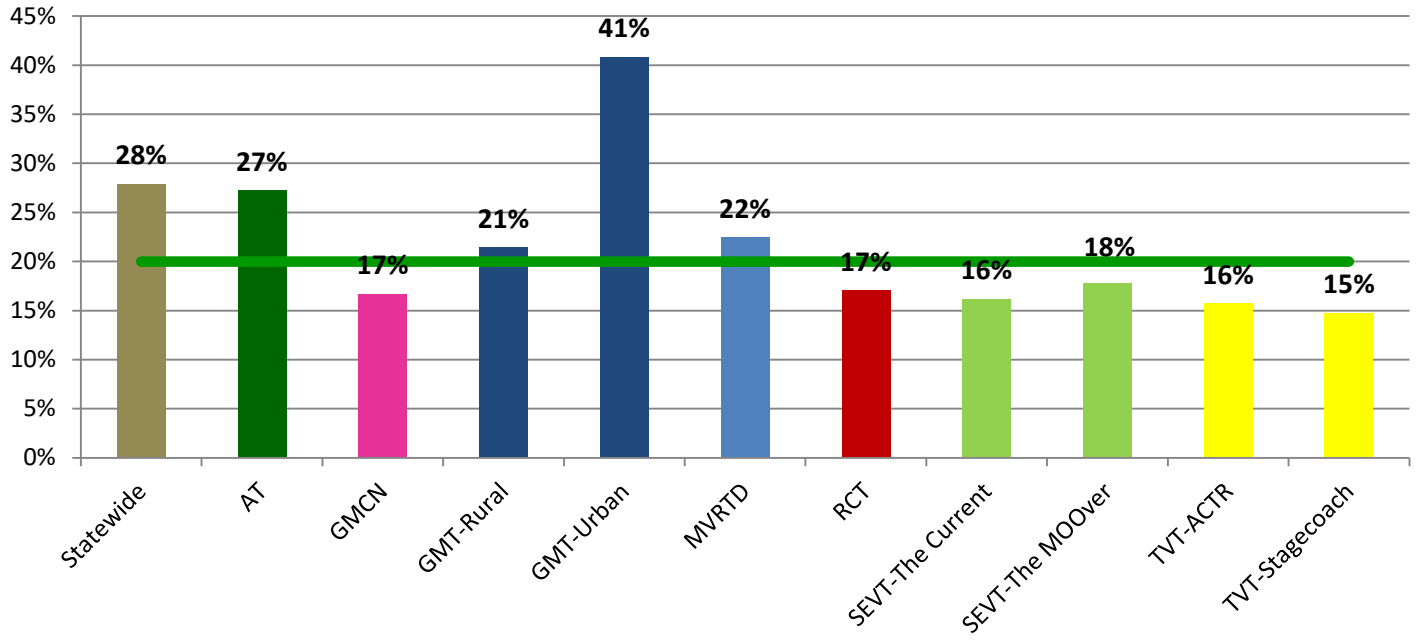
Figure 8: Local Share in SFY 2017



The available resources and partnerships that transit providers rely on for public transportation funding vary widely and include municipal contributions, business sponsors, contracts with human service agencies, in-kind match from volunteer driver programs, advertising, donations, and fares. VTrans provides flexibility to the transit providers in using various sources of local revenue to match state and federal funding.

Figure 9 illustrates the local share percentage by transit system/division in SFY 2017, in comparison with the state's 20% goal shown as the green line. Local share was calculated as the percentage of total operating costs that local funding and fare revenues comprise. AT, GMT-Rural, GMT-Urban, and MVRTD met or exceeded the 20% local share target. The local share for the other transit systems/divisions ranged from 15% to 18%. Six of ten transit systems/divisions increased their local share in SFY 2017.

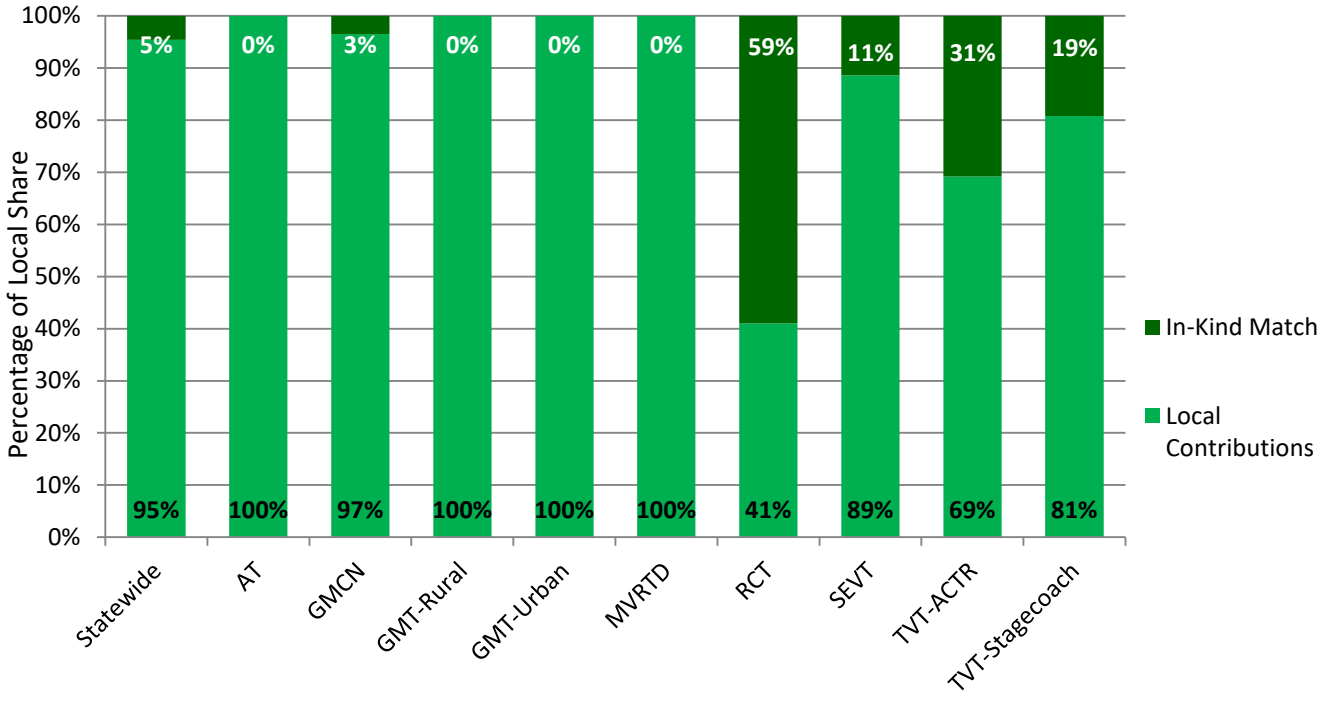
Figure 9: SFY 2017 Local Share by Transit System/Division



Note: SEVT-The MOOver's local share percentage includes some resort routes that are fully funded by local dollars.

Figure 10 portrays the portions of local share provided through local cash contributions and in-kind match. This analysis is an approximation based on the local funding sources and amounts that the transit providers identified in their SFY 2017 §5311 grant applications to VTrans (as opposed to the local share percentages above, based on actual operating expenses from VTrans' Grant Tracking spreadsheets). The statewide local share is primarily comprised of local cash contributions. In SFY 2017 in-kind match accounted for 5% of the total local share, comparable to last year.

Figure 10: SFY 2017 In-Kind Match and Local Contributions by Transit System/Division



RCT, TVT-ACTR, TVT-Stagecoach, and SEVT provide notable portions of their local share through in-kind match, with RCT providing the majority of its local share (59%) through in-kind match. The other transit systems/divisions provide local match almost entirely as cash from various sources including fare revenue, advertising, service contracts, donations, and contributions from municipalities, business sponsors, institutions, and tourism destinations.

Elders and Persons with Disabilities (E&D) Transportation Program

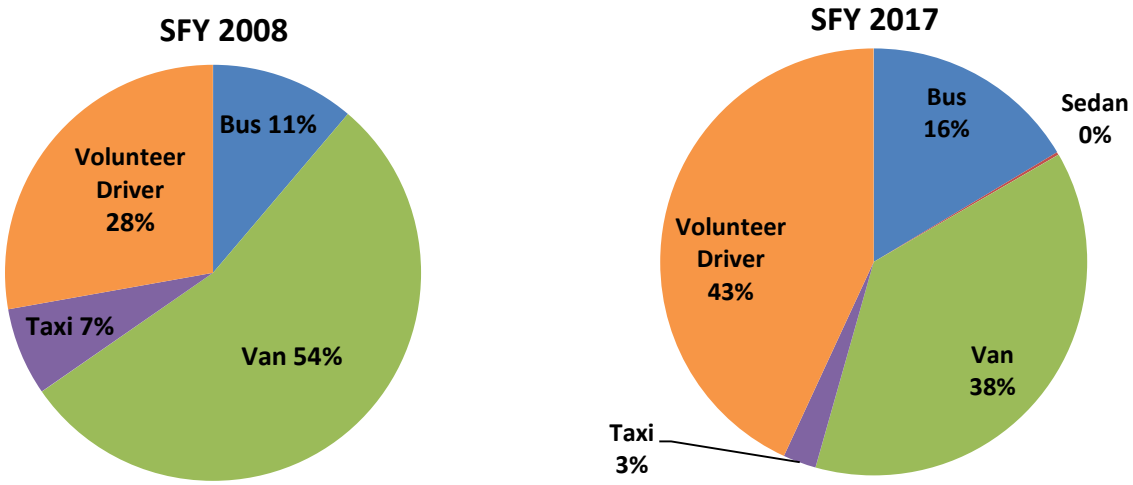
Of the numerous funding programs administered by the FTA, the §5310 program is targeted toward seniors and people with disabilities. The E&D Program, as it is commonly known, is used in most parts of the country to finance the purchase of accessible vans and buses to transport these segments of the population. In Vermont the scope of the E&D Program has been expanded to include the funding of operations by incorporating funds from the §5311

(non-urban) program. The E&D Program is structured so that the local match (using the strict federal definition—see footnote 5) for the federal §5311 funds is only 20%, as opposed to the normal 50% for §5311 operating assistance.

In SFY 2017 the total amount spent on the E&D Program in Vermont was $4.15 million, 80% of which ($3.32 million) was federal money. This funding provided 178,478 rides, for an average cost per passenger trip of $23.27.

Trips funded through the E&D Program are provided across many modes as shown in Figure 11. In SFY 2017 16% of E&D trips were provided on regular bus routes, 38% in vans, 2% in taxicabs, and most importantly, 43% in private cars operated by volunteer drivers.

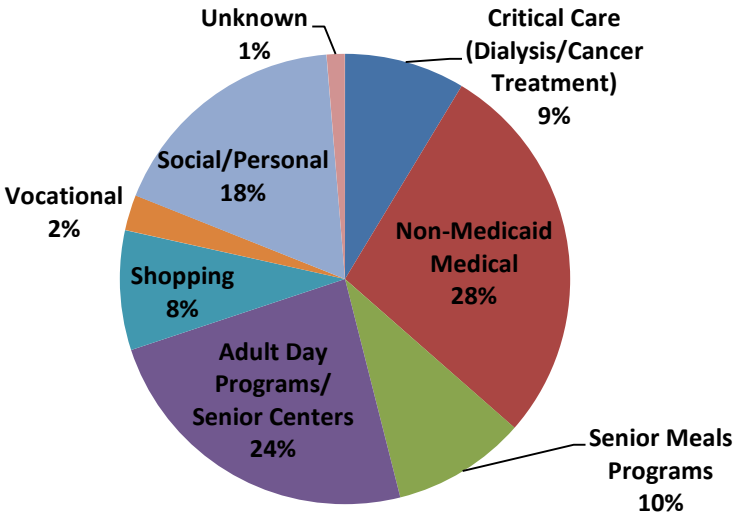
Figure 11: E&D Trips by Mode



Over the past decade, the transit providers, which also serve as E&D brokers, have increasingly used volunteer drivers to transport riders under the E&D Program. SFY 16 was the first year that more E&D trips were provided through volunteer drivers than by vans and this continued to be true in SFY 2017. Volunteer driver trips cost less per passenger trip and provide one-on-one service to seniors and persons with disabilities, some of whom are traveling long distances (including to neighboring states) for medical services and other needs. Volunteer drivers are especially important to mobility in large rural areas, where the population is thinly distributed, such as the Northeast Kingdom.

Figure 12 displays the percentages of E&D trips by trip type in SFY 2017. Thirty-seven percent of E&D trips transport seniors and persons with disabilities to medical appointments and critical care services such as dialysis and cancer treatments. Thirty-four percent of E&D trips are used to access adult day programs and senior meals. Over the past year, the portion of E&D trips for social/personal trips doubled, while the percentage of shopping and vocational trips decreased slightly.

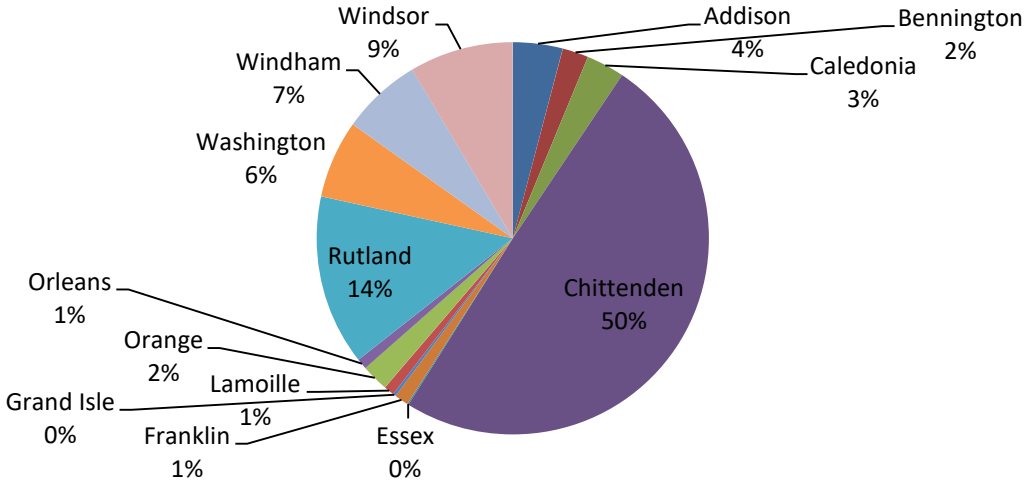
Figure 12: E&D Trip by Type in SFY 2017



COUNTY-LEVEL PERFORMANCE

Since SFY 2016, the percentage of public transit trips that originated in Chittenden County decreased by 4%. Even with the slight decrease, the majority of public transit trips still originated from Chittenden County in SFY 2017. Rutland County comprised the second largest share of public transit trip origins (14%) followed by Windsor County (9%). Less than 1% of trips originated in Grand Isle County and Essex County. The breakdown of public transit trips by county of origin in SFY 2017 is presented in Figure 13.

Figure 13: Public Transit Trips by County of Origin in SFY 2017



ROUTE-LEVEL PERFORMANCE

The Public Transit Section evaluates Vermont's transit services by their productivity and cost-effectiveness. All transit services in the state are grouped by service category and evaluated against peer-based performance measures.

The following route changes occurred in SFY 2017 and were supported by CMAQ funds:

- MVRTD expanded service on the Fair Haven Route.
- RCT added the Twin City Route (Littleton Route).

TVT-ACTR funded a portion of three existing routes through the CMAQ program. These routes are the Middlebury Shuttle, Tri-Town Shuttle, and Burlington Link Express.

Methodology for Developing Performance Standards

National Transit Database (NTD) data (Report Year 2015) was "used to develop performance benchmarks for all categories except for Intercity and Volunteer Driver. The standard for the Volunteer Driver category was based on Vermont averages. The performance standards for Intercity service were based on the performance metrics included in VTrans' intercity bus program solicitation document. The performance thresholds for Vermont's Tourism services incorporated both NTD data and data collected directly from select Tourism peers.

The "Successful" standard for most service categories was the peer average. For the Volunteer Driver category, 80% of the Vermont average was considered the Successful standard, per

guidelines in the Vermont Public Transit Policy Plan. The standards identified for VTrans' intercity bus program were used to set the Successful standard for Intercity services.

Table 1 summarizes the SFY 2017 performance standards for "Successful" services by category. The "Acceptable" standard was set at half the Successful threshold in measuring productivity, and twice the Successful threshold in measuring cost-effectiveness.

Table 1: SFY 2017 Performance Standards

Service Category	"Successful" Productivity Standard	"Successful" Cost-Effectiveness Standard (cost/passenger)[1]	"Successful" Local Share Standard
Urban	1.95 boardings/mile	$4.37	20% (evaluated on a statewide basis)
Small Town	9.71 boardings/hour	$8.13	
Demand Response	3.74 boardings/hour	$15.79	
Tourism	14.55 boardings/hour	$5.82	
Rural	7.23 boardings/hour	$14.67	
Rural Commuter	5.93 boardings/hour	$18.06	
Express Commuter	17.35 boardings/trip	$10.59	
Volunteer Driver	n/a	$3.78	
Intercity	3.28 boardings/trip	$30.00	

[1] Except Intercity standard is subsidy per passenger-trip

Route Evaluation Results

Overall, in SFY 2017 Vermont's transit services met the performance standards set by peer systems. The majority (80%) of the 117 transit services evaluated across the state met the Acceptable standards for both productivity and cost-effectiveness. Thirty-five percent of the state's transit routes were considered Successful in both measures compared to their peers.

The Tourism category had the highest rate of success with over half of it services meeting both Successful standards. The Rural Commuter and Small Town categories performed relatively well, with about 40% of its services meeting the Successful standards for both productivity and cost-effectiveness.

Improved Transit Routes

Four routes demonstrated improvements in productivity and/or cost-effectiveness since SFY 2016:

- In the Rural Commuter Category, SEVT-The Current's Okemo Seasonal improved to meet the acceptable threshold for productivity and cost-effectiveness, after several years of underperforming. Ridership more than doubled on the Okemo Seasonal route from the previous year. The increase in ridership likely contributed to improvement in productivity and cost-effectiveness.

- In the Express Commuter Category, TVT-Stagecoach's River Route met the acceptable threshold for cost-effectiveness after underperforming for two years. Ridership increased by 12% while cost remained comparable to last year.

- In the Rural Category, TVT-ACTR's Snow Bowl Route improved to meet the acceptable threshold for productivity after underperforming in productivity in SFY 16. A reduction in revenue hours with a small increase in ridership led to the Snow Bowl Route meeting the Acceptable standard for productivity.

- In the Tourism Category, SEVT-The MOOver's Greenspring route met the acceptable threshold for productivity after underperforming in SFY16. The Greenspring Route's ridership increased by 47% with only a 2% increase in revenue hours.

Underperforming Transit Services

Statewide, 20 transit services did not meet the Acceptable thresholds for productivity, cost-effectiveness, or both measures. Eight of these services underperformed for the first time:

- GMT-Urban: Sunday Service
- GMCN: Green (Saturday)
- GMT-Rural: Demand Response
- RCT: Demand Response
- TVT- Stagecoach: Demand Response
- MVRTD: Fair Haven Expansion
- RCT: Twin City Route
- GMCN: Volunteer Driver

GMT-Urban's Sunday, GMCN's Green (Saturday), and GMCN's Volunteer Driver Service underperformed due to decreased ridership and increased costs. The Fair Haven Expansion (MVRTD) and Twin City (RCT) routes are new services, which likely explain their underperformance in both productivity and cost-effectiveness in SFY 2017. Demand Response

service for GMT-Rural saw a decrease in ridership from the previous year, which led to a higher cost per passenger. RCT's Demand Response service saw an increase in ridership but it also had a significant increase in revenue hours, which attributed to lower productivity. TVT-Stagecoach's Demand Response service experienced a decrease in ridership and an increase in revenue hours causing it to underperform for the first time in SFY 2017.

Table 2 outlines the services that have been underperforming for at least two consecutive years. Nine of the routes have underperformed for three or more consecutive years. Three of the services were within 10% of the Acceptable standards for productivity and/or cost-effectiveness. Several routes improved but still fell under the Acceptable threshold for productivity and cost-effectiveness.

Table 2: Underperforming Services

Service Category	Route	Years Underperformed in:	
		Productivity	Cost-Effectiveness
Urban	GMT-Urban: Williston/Essex	2	2
Small Town	*SEVT-The Current: Springfield In-Town	3	
Rural	SEVT-The Current: Bellows Falls In-Town	3	
Rural	SEVT-The Current: Bellows Falls-Springfield	3	
Tourism	GMT-Rural: SnowCap Commuter	5	4
Tourism	*GMT-Rural: Valley Floor	4	3
Rural Commuter	TVT-Stagecoach: 89er North	5	5
Rural Commuter	SEVT-The Current: Bellows Falls-Rutland	3	
Rural Commuter	MVRTD: Bellows Falls-Rutland (Ludlow Rt.)	3	
Express Commuter	*TVT-Stagecoach: 89er	2	4
Demand Response	SEVT-The Current	2	
Demand Response	SEVT-The MOOver	2	

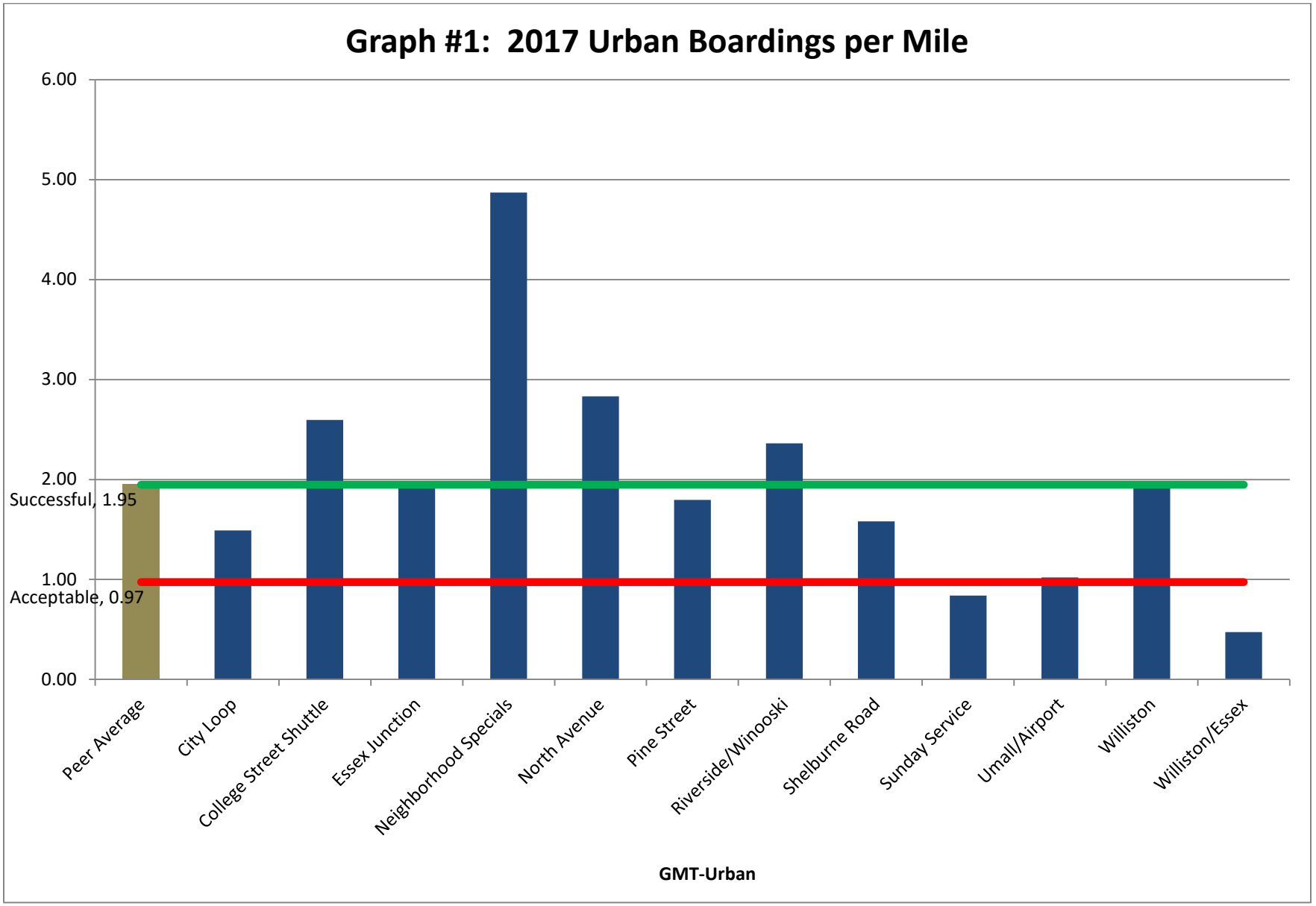
* Routes that have improved but still under Acceptable threshold.

Performance Graphs

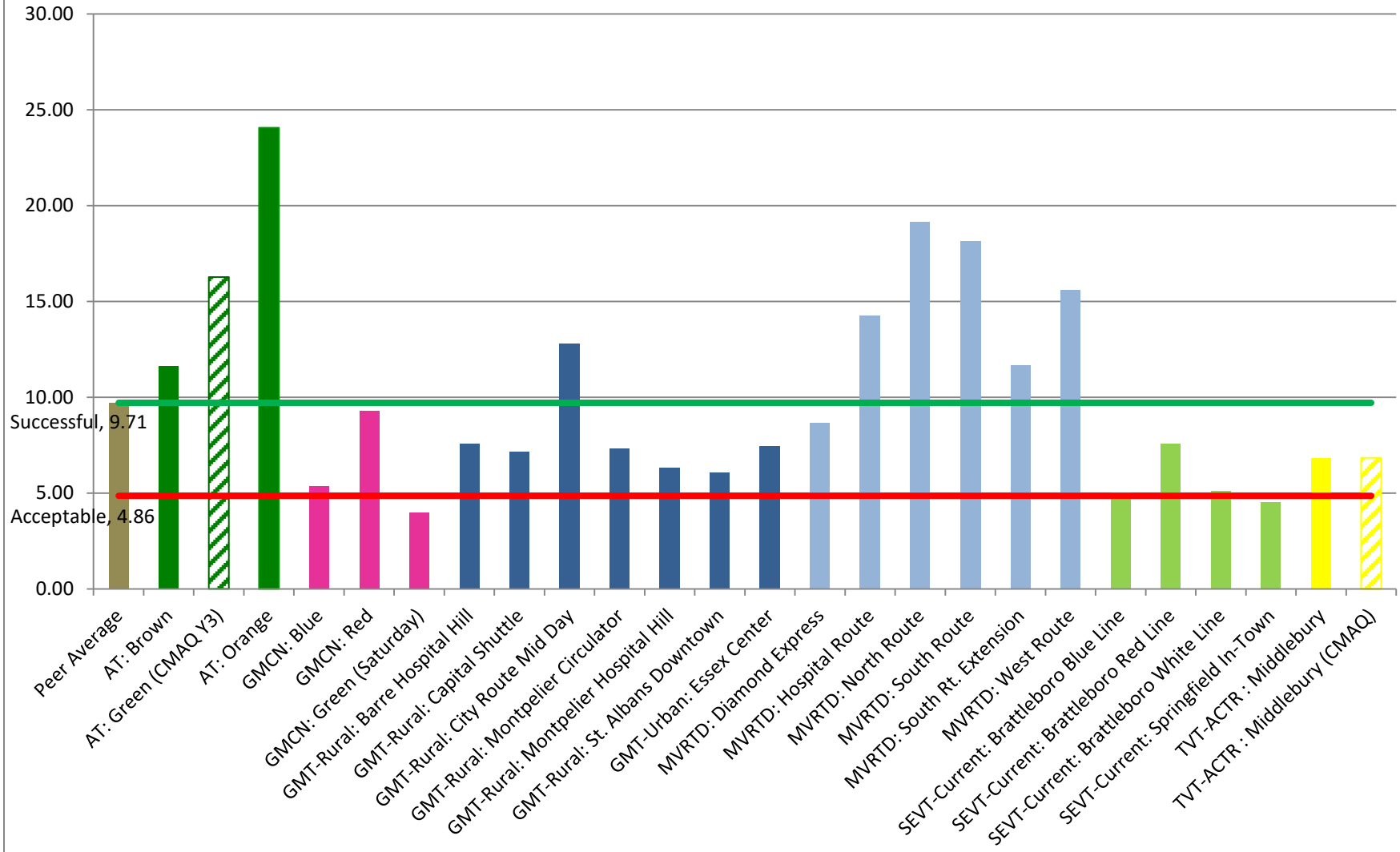
The next section of the report includes graphs depicting the performance data for all transit services in Vermont. Graphs 1 – 8 depict the SFY 2017 productivity data per service category, and Graphs 9 – 17 display the SFY 2017 cost-effectiveness data per service category. The standard for Successful services, equal to the peer average, is shown on each graph as a green line, while the standard for Acceptable services is shown as a red line. New transit services, or portions of existing services which are funded through the CMAQ Program, are distinguished by a diagonal line fill in the graphs. Each provider has a specific and consistent color used throughout all of the graphs. Appendix A includes the same performance data, for each route by service category, in a tabular format for easy reference.

Appendix B includes charts that portray historical ridership, total operating cost, and cost per trip by transit system/division from SFY 2013 through SFY 2017. Appendix C presents the historical performance for every route or service in Vermont from SFY 2013 through SFY 2017, showing the trends in productivity and cost-effectiveness.

PRODUCTIVITY PERFORMANCE BY SERVICE CATEGORY

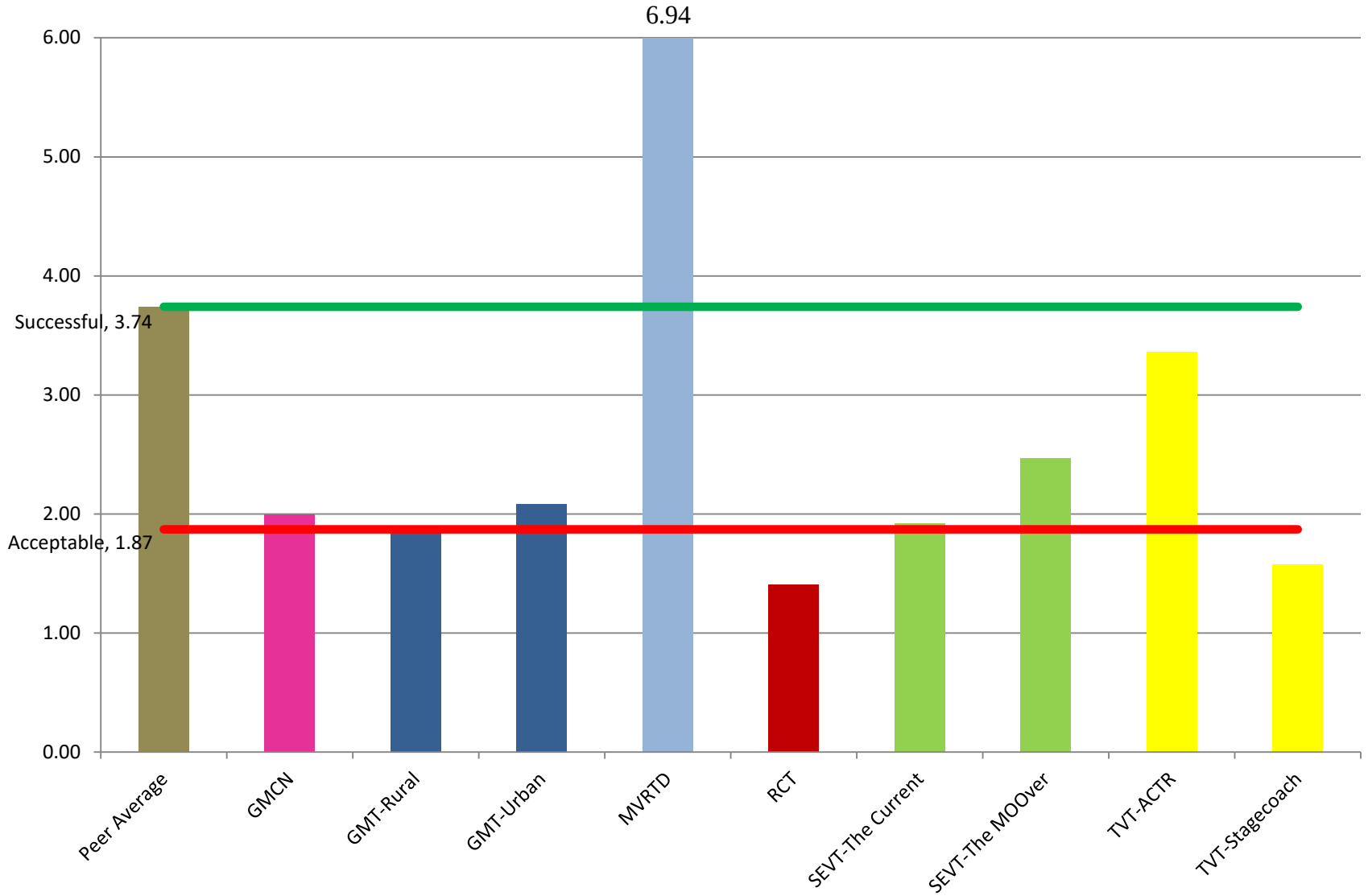

Graph #1: 2017 Urban Boardings per Mile
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Successful, 1.95
Acceptable, 0.97
Peer Average
City Loop
College Street Shuttle
Essex Junction
Neighborhood Specials
North Avenue
Pine Street
Riverside/Winooski
Shelburne Road
Sunday Service
Umall/Airport
Williston
Williston/Essex
GMT-Urban

Graph #2: 2017 Small Town Boardings per Hour



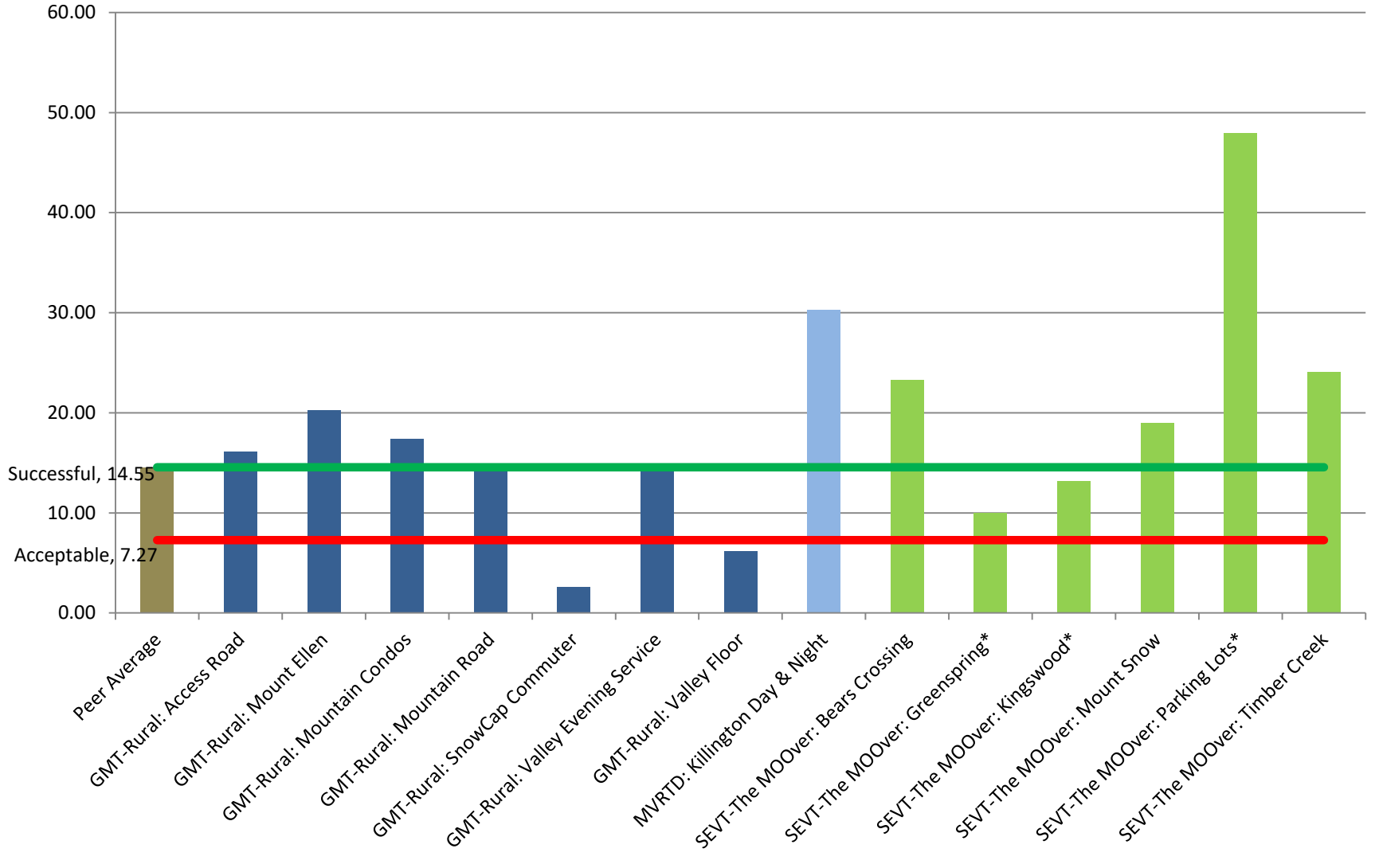
Note: Data for AT routes represent the entire route, even though a portion of the route is in New Hampshire.
The second bus on AT's Green Route was funded through CMAQ, starting in FY 2015.

Graph #3: 2017 Demand Response Boardings per Hour

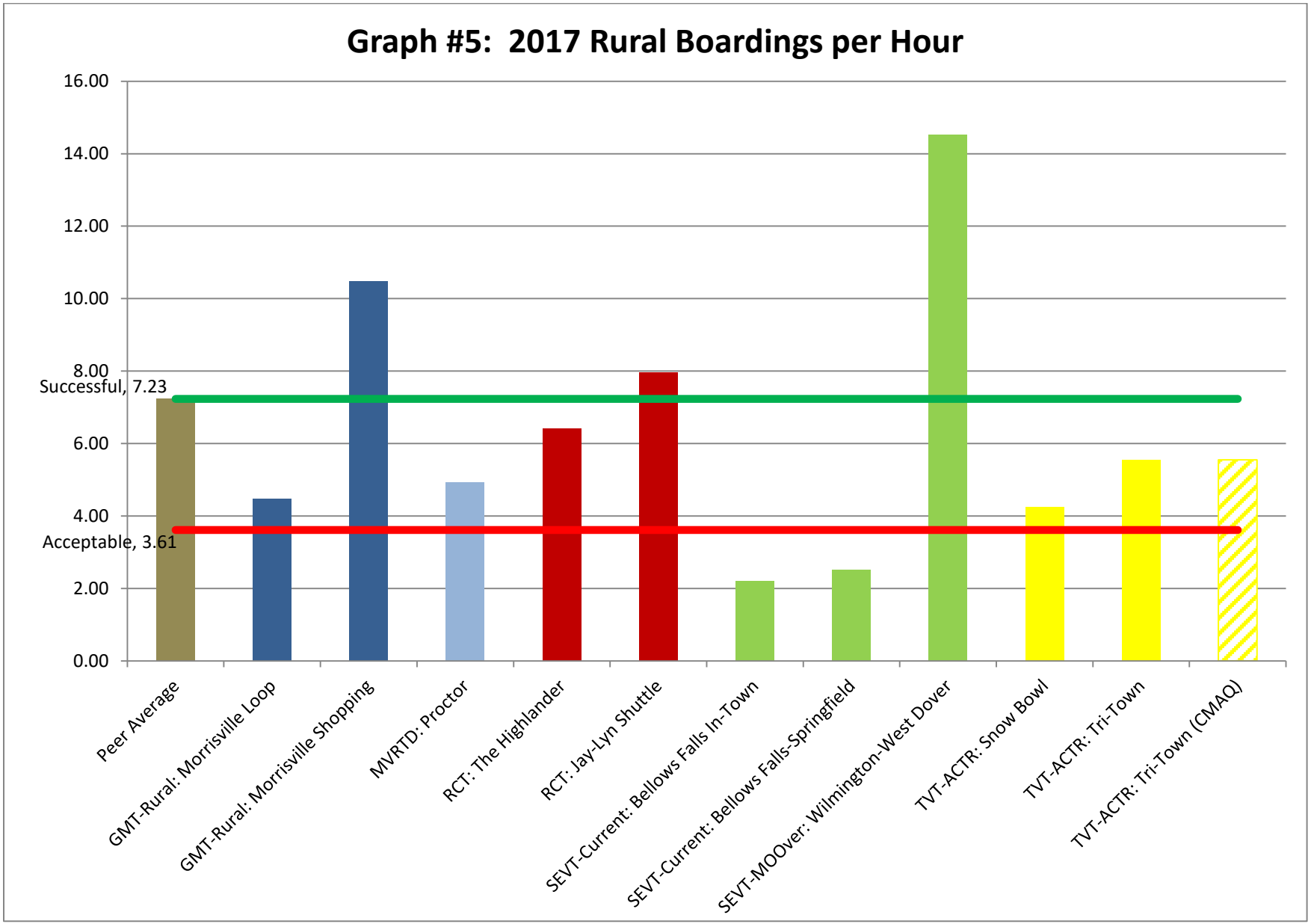


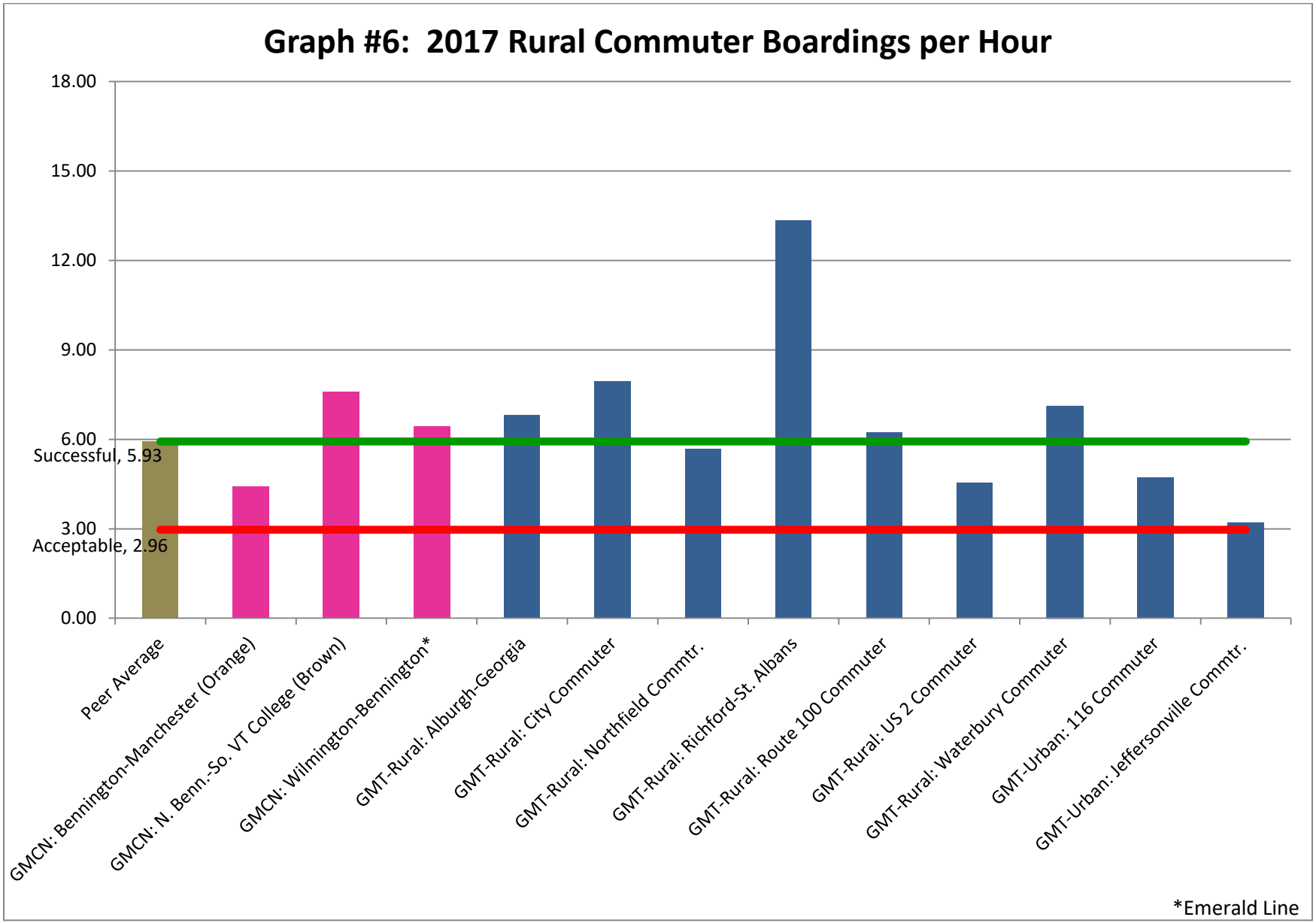
Note: TVT-ACTR's demand response data includes 14,040 E&D eligible trips provided by Elderly Services, Inc. for free with vehicles leased from TVT-ACTR.

Graph #4: 2017 Tourism Boardings per Hour

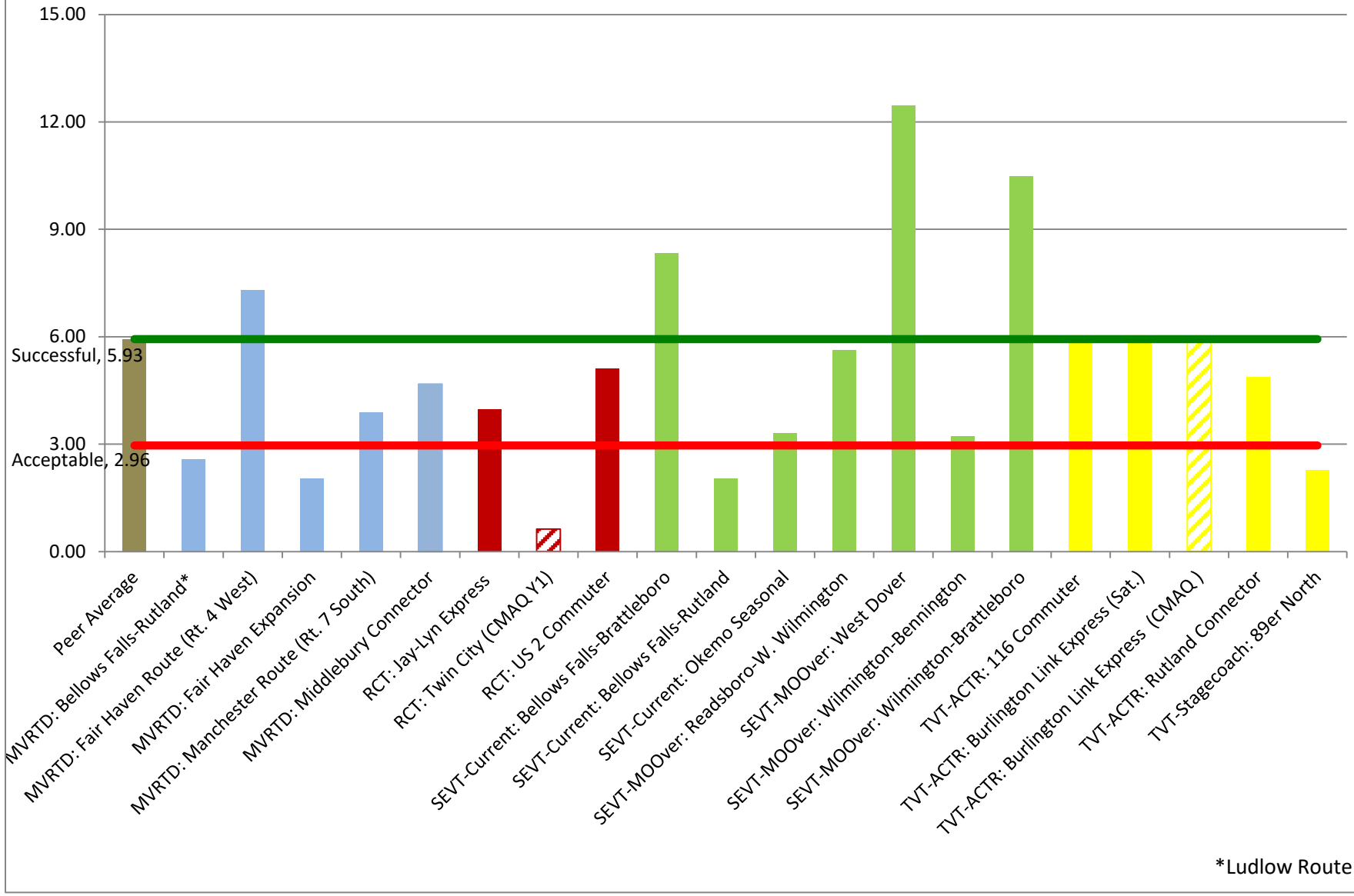


*Privately funded operations; no state or federal funds used.

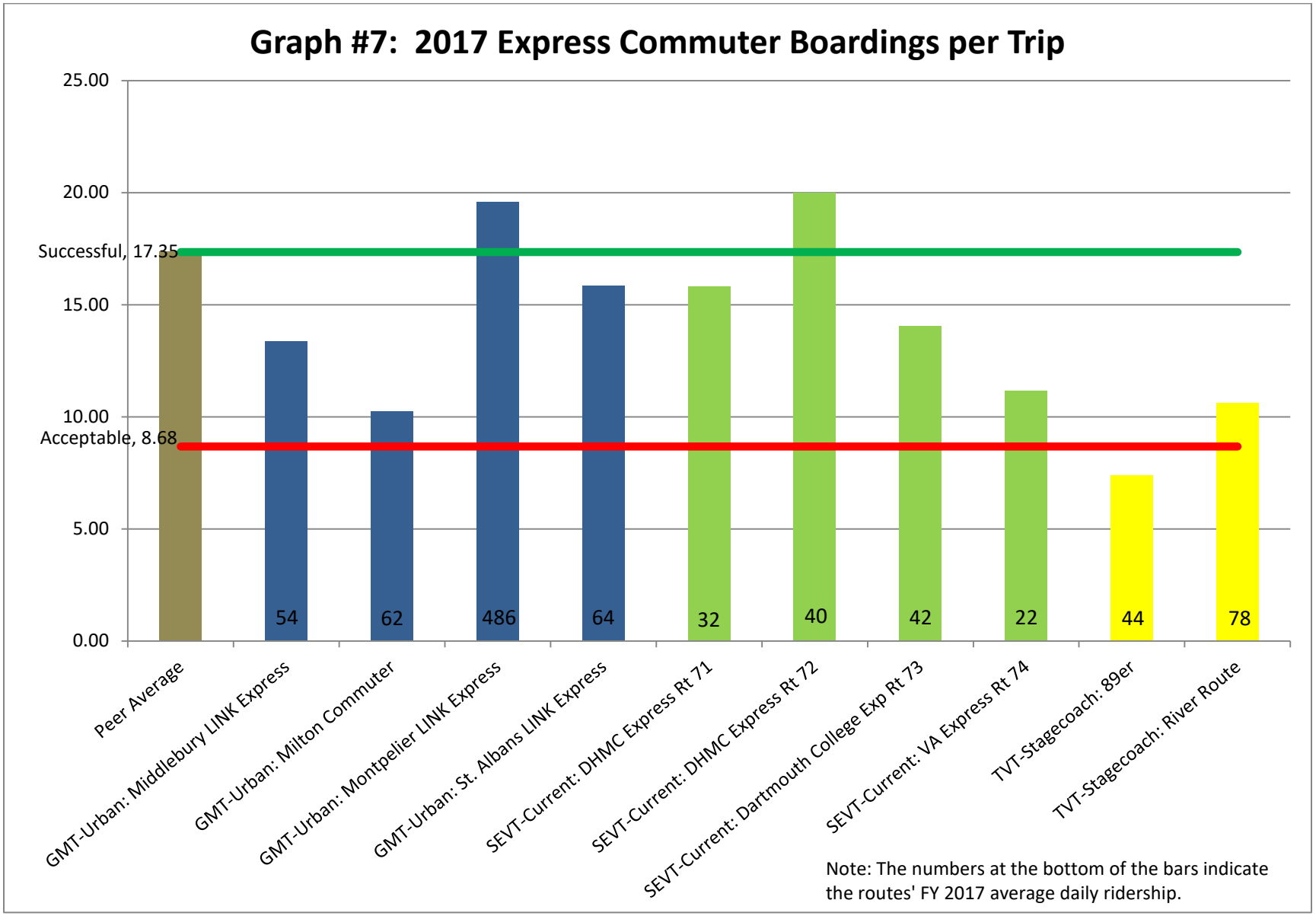

Graph #5: 2017 Rural Boardings per Hour
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Successful, 7.23
Acceptable, 3.61
Peer Average
GMT-Rural: Morrisville Loop
GMT-Rural: Morrisville Shopping
MVRTD: Proctor
RCT: The Highlander
RCT: Jay-Lyn Shuttle
SEVT-Current: Bellows Falls In-Town
SEVT-Current: Bellows Falls-Springfield
SEVT-MOOver: Wilmington-West Dover
TVT-ACTR: Snow Bowl
TVT-ACTR: Tri-Town
TVT-ACTR: Tri-Town (CMAQ)

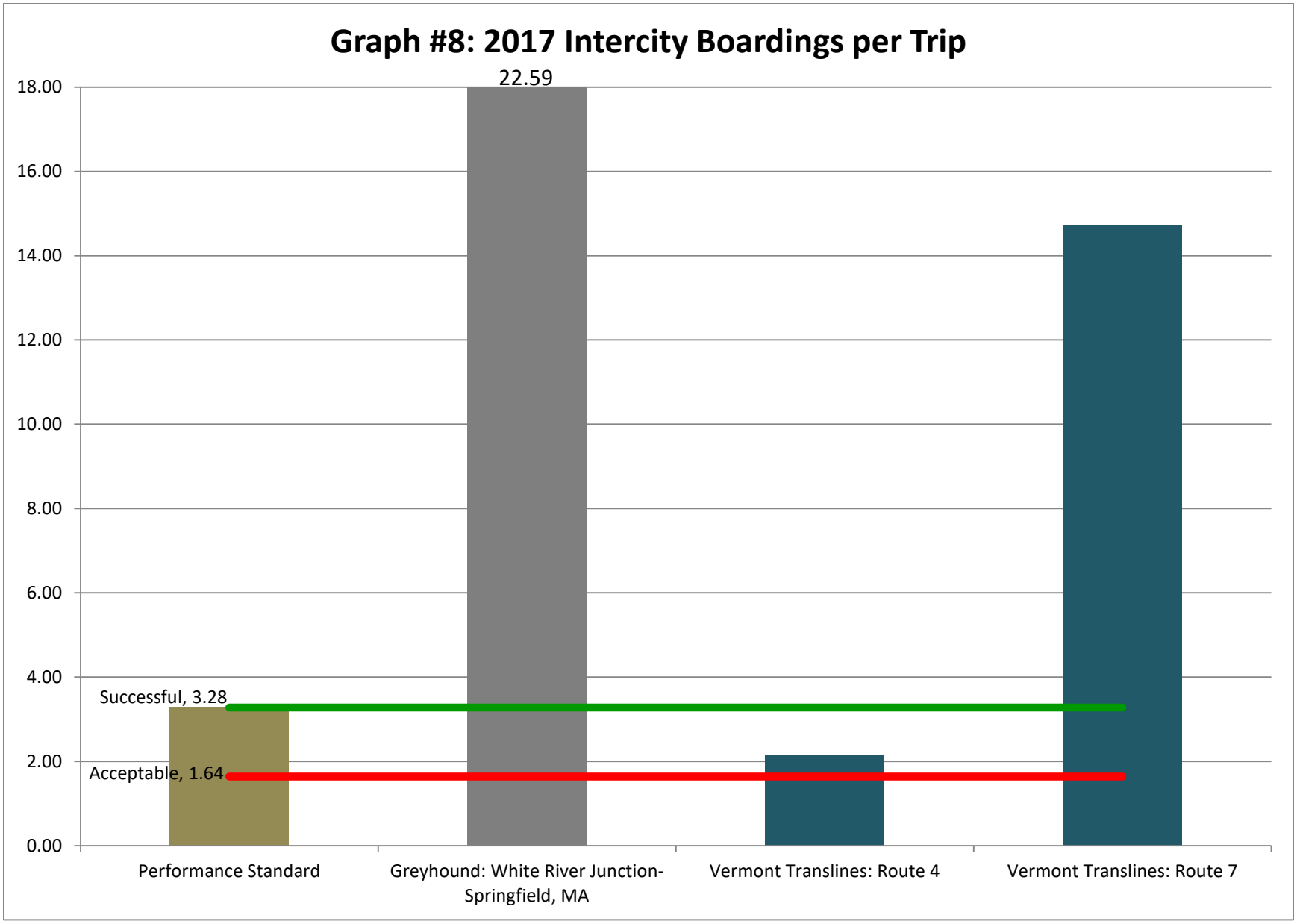

Graph #6: 2017 Rural Commuter Boardings per Hour
18.00
15.00
12.00
9.00
6.00
3.00
0.00
Successful, 5.93
Acceptable, 2.96
Peer Average
GMCN: Bennington-Manchester (Orange)
GMCN: N. Benn.-So. VT College (Brown)
GMCN: Wilmington-Bennington*
GMT-Rural: Alburgh-Georgia
GMT-Rural: City Commuter
GMT-Rural: Northfield Commtr.
GMT-Rural: Richford-St. Albans
GMT-Rural: Route 100 Commuter
GMT-Rural: US 2 Commuter
GMT-Rural: Waterbury Commuter
GMT-Urban: 116 Commuter
GMT-Urban: Jeffersonville Commtr.
*Emerald Line

Graph #6: 2017 Rural Commuter Boardings per Hour (continued)

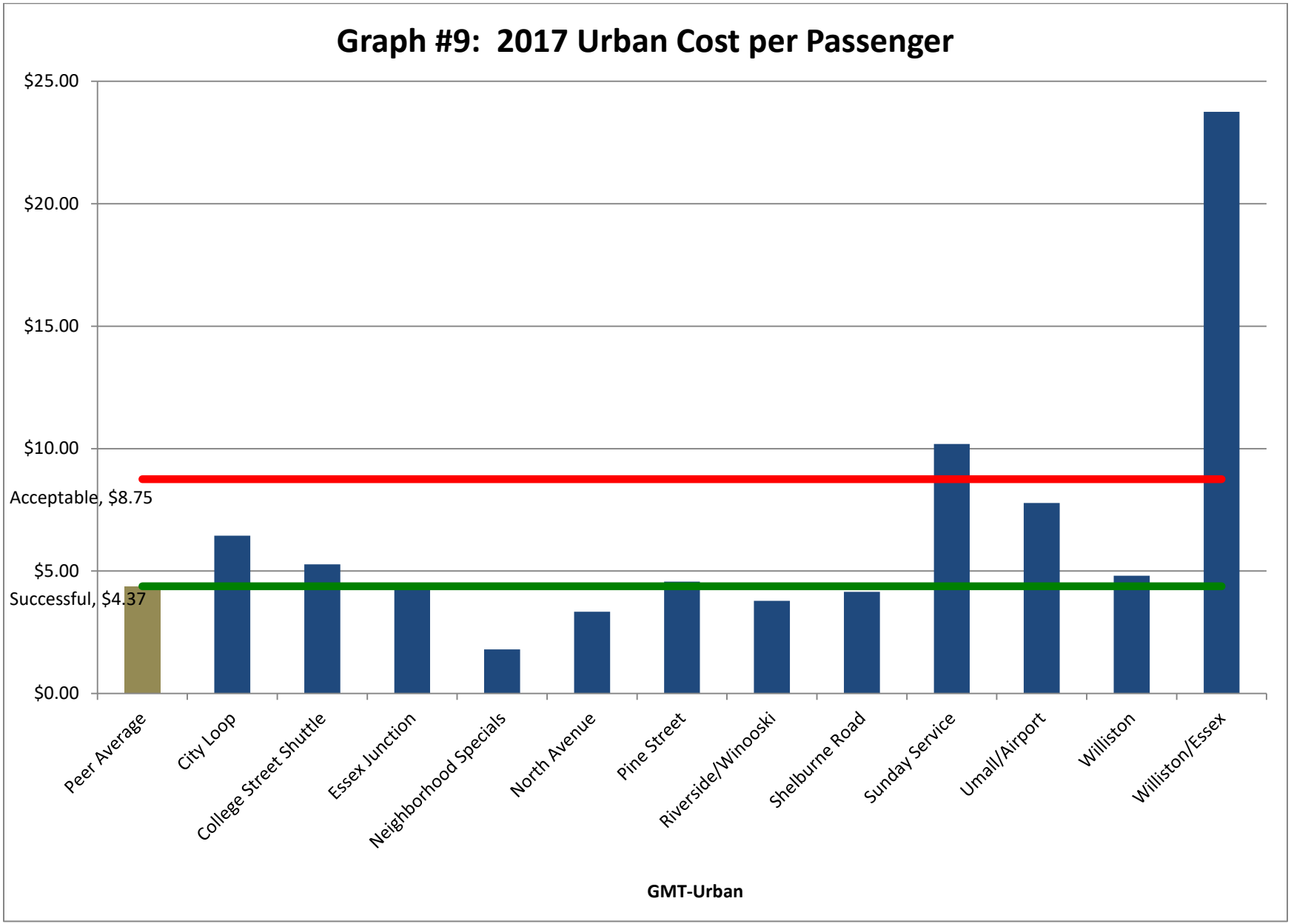


*Ludlow Route

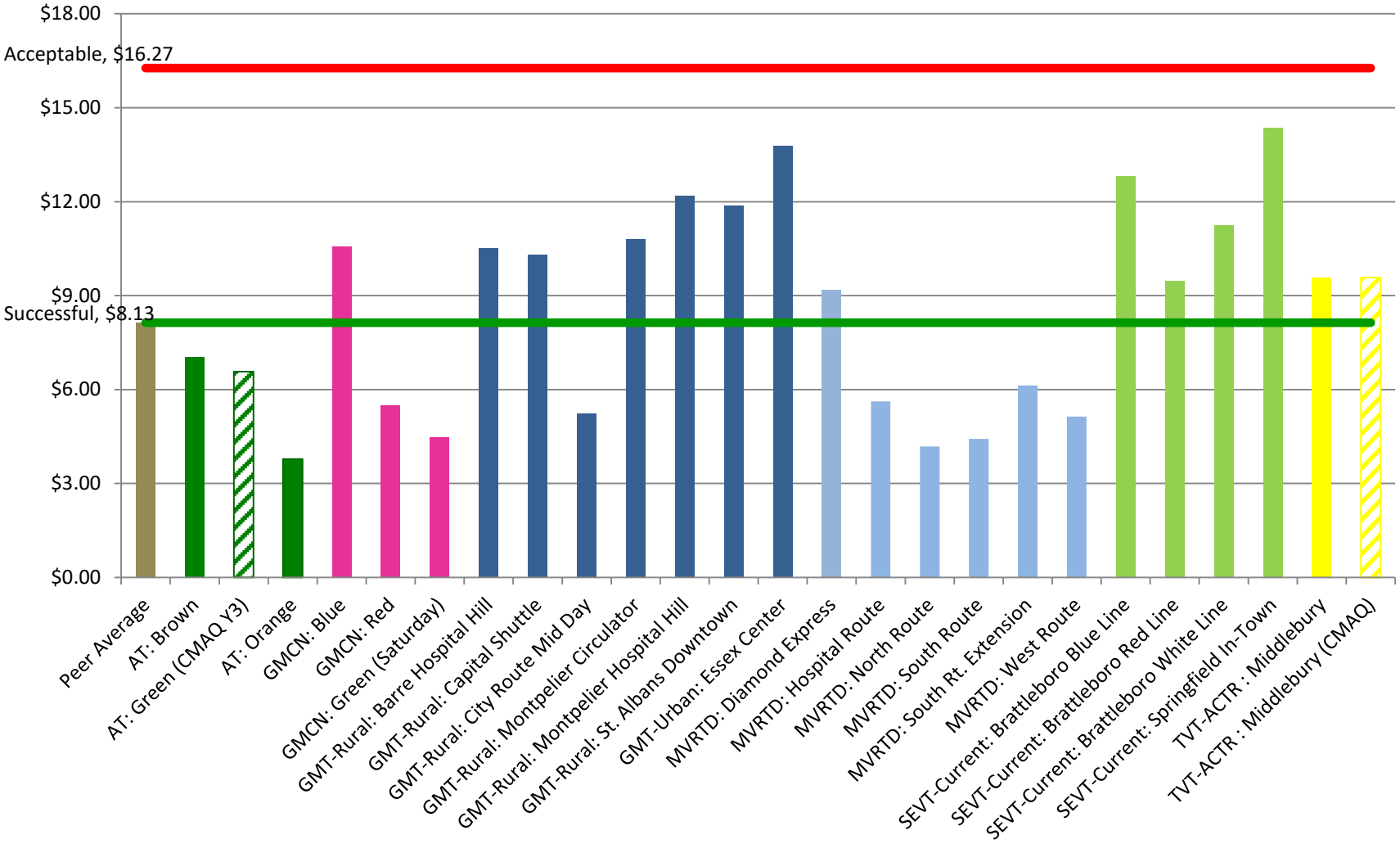

Graph #7: 2017 Express Commuter Boardings per Trip
25.00
20.00
15.00
10.00
5.00
0.00
Successful, 17.35
Acceptable, 8.68
54
62
486
64
32
40
42
22
44
78
Peer Average
GMT-Urban: Middlebury LINK Express
GMT-Urban: Milton Commuter
GMT-Urban: Montpelier LINK Express
GMT-Urban: St. Albans LINK Express
SEVT-Current: DHMC Express Rt 71
SEVT-Current: DHMC Express Rt 72
SEVT-Current: Dartmouth College Exp Rt 73
SEVT-Current: VA Express Rt 74
TVT-Stagecoach: 89er
TVT-Stagecoach: River Route
Note: The numbers at the bottom of the bars indicate the routes' FY 2017 average daily ridership.


Graph #8: 2017 Intercity Boardings per Trip
22.59
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Successful, 3.28
Acceptable, 1.64
Performance Standard
Greyhound: White River Junction-Springfield, MA
Vermont Translines: Route 4
Vermont Translines: Route 7

COST-EFFECTIVENESS PERFORMANCE BY SERVICE CATEGORY

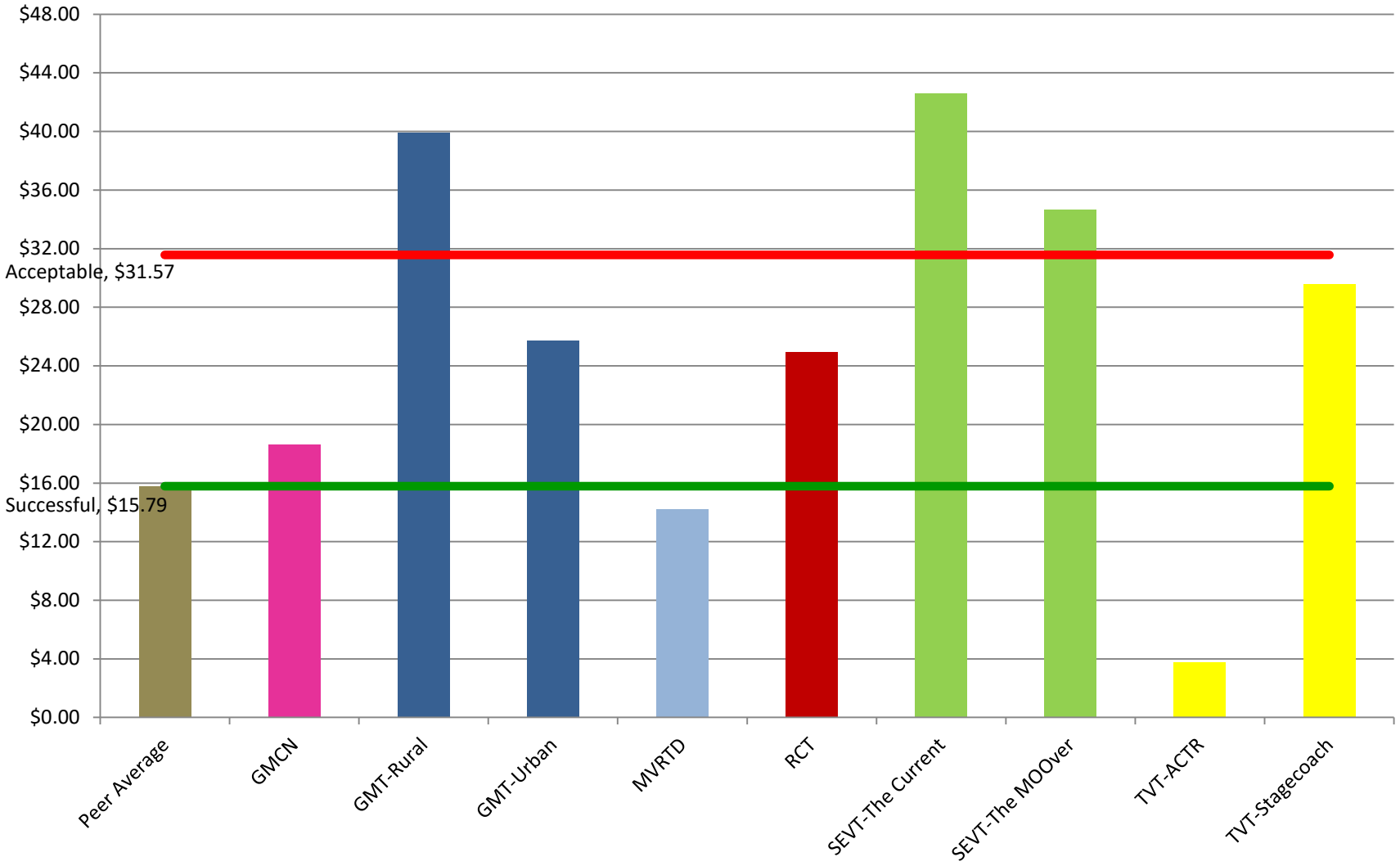

Graph #9: 2017 Urban Cost per Passenger
$25.00
$20.00
$15.00
$10.00
$5.00
$0.00
Acceptable, $8.75
Successful, $4.37
Peer Average
City Loop
College Street Shuttle
Essex Junction
Neighborhood Specials
North Avenue
Pine Street
Riverside/Winooski
Shelburne Road
Sunday Service
Umall/Airport
Williston
Williston/Essex
GMT-Urban

Graph #10: 2017 Small Town Cost per Passenger

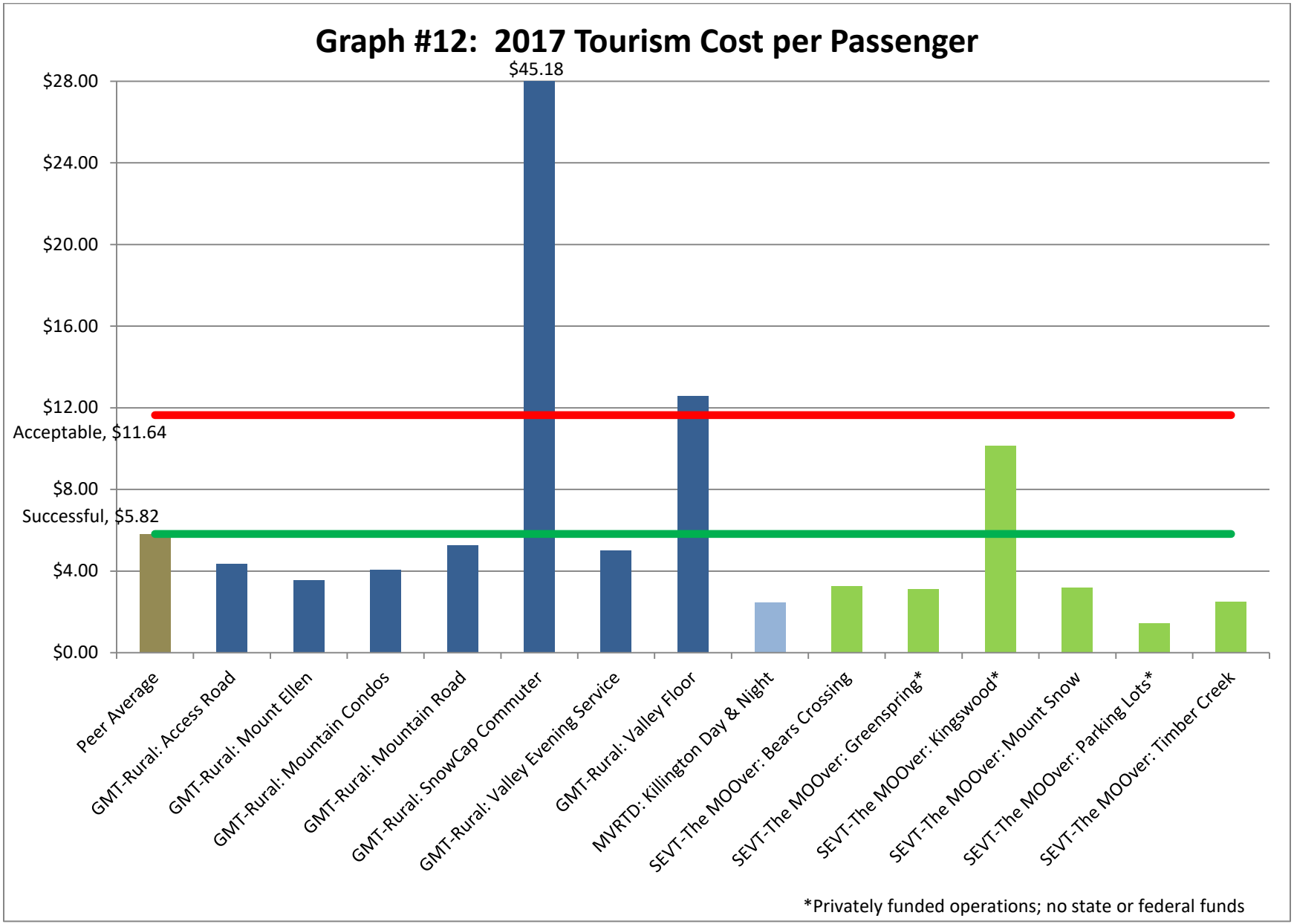


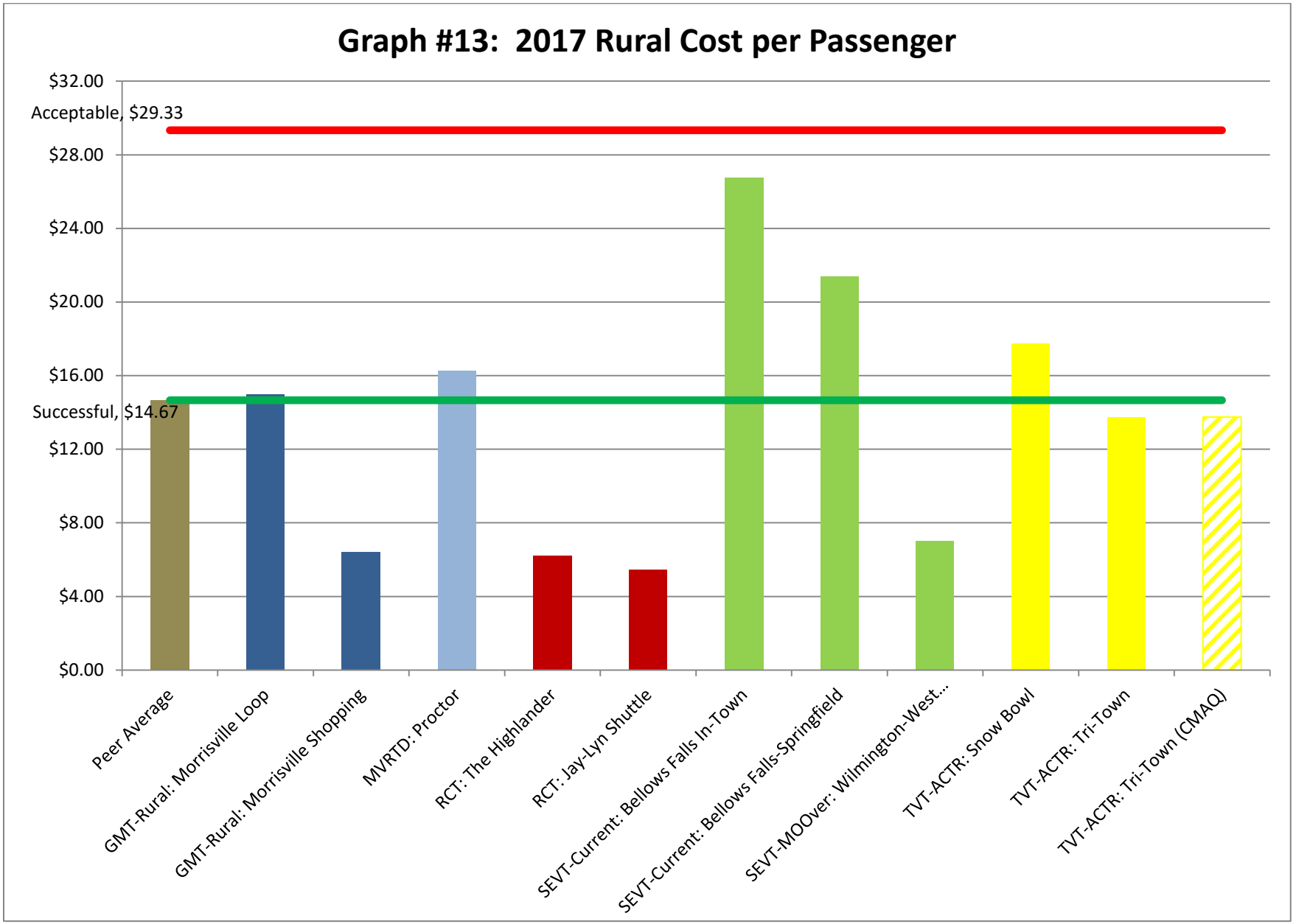
Note: Data for AT routes represent the entire route, even though a portion of the route is in New Hampshire. The second bus on AT's Green Route was funded through CMAQ, starting in FY 2015.

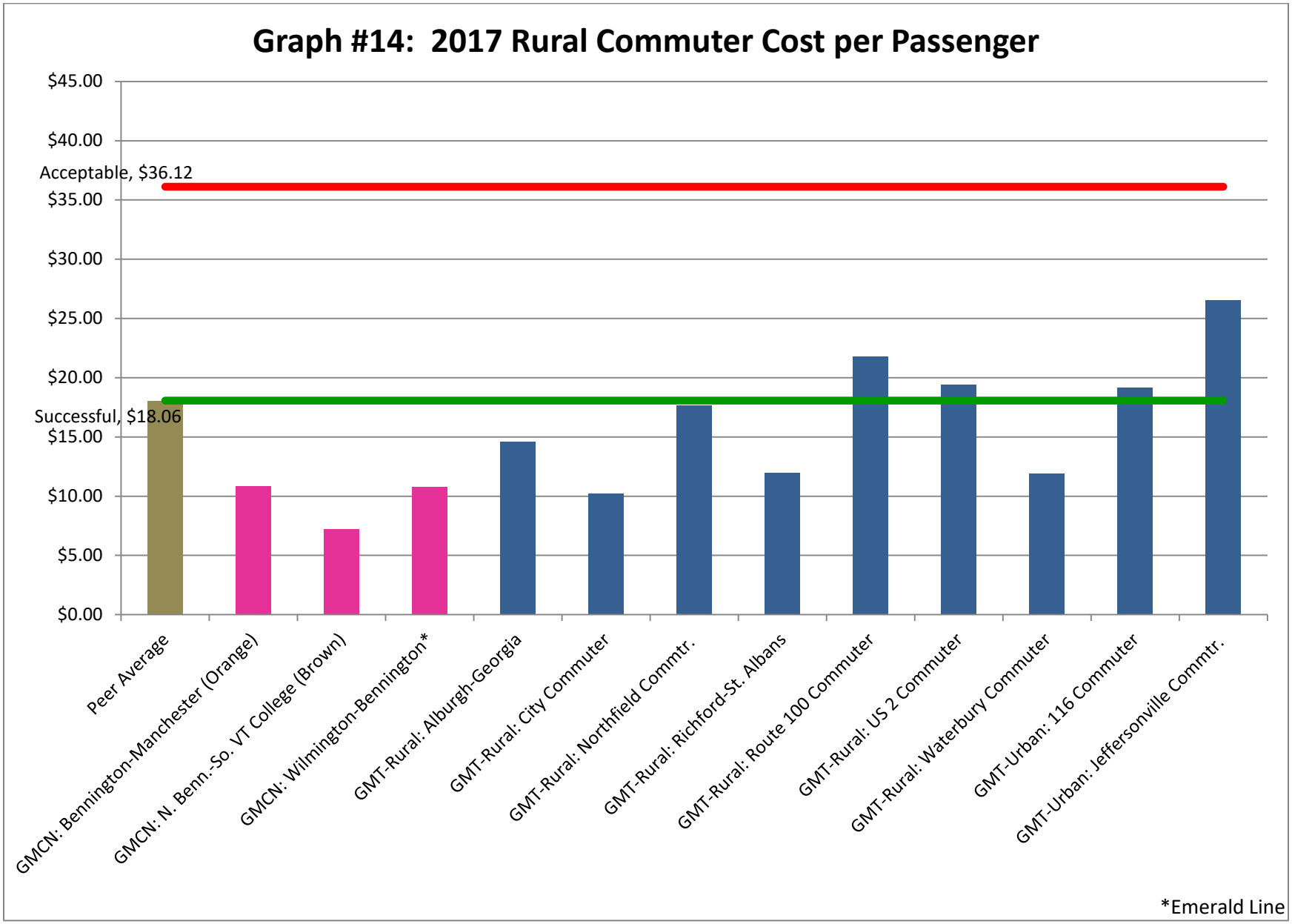
Graph #11: 2017 Demand Response Cost per Passenger

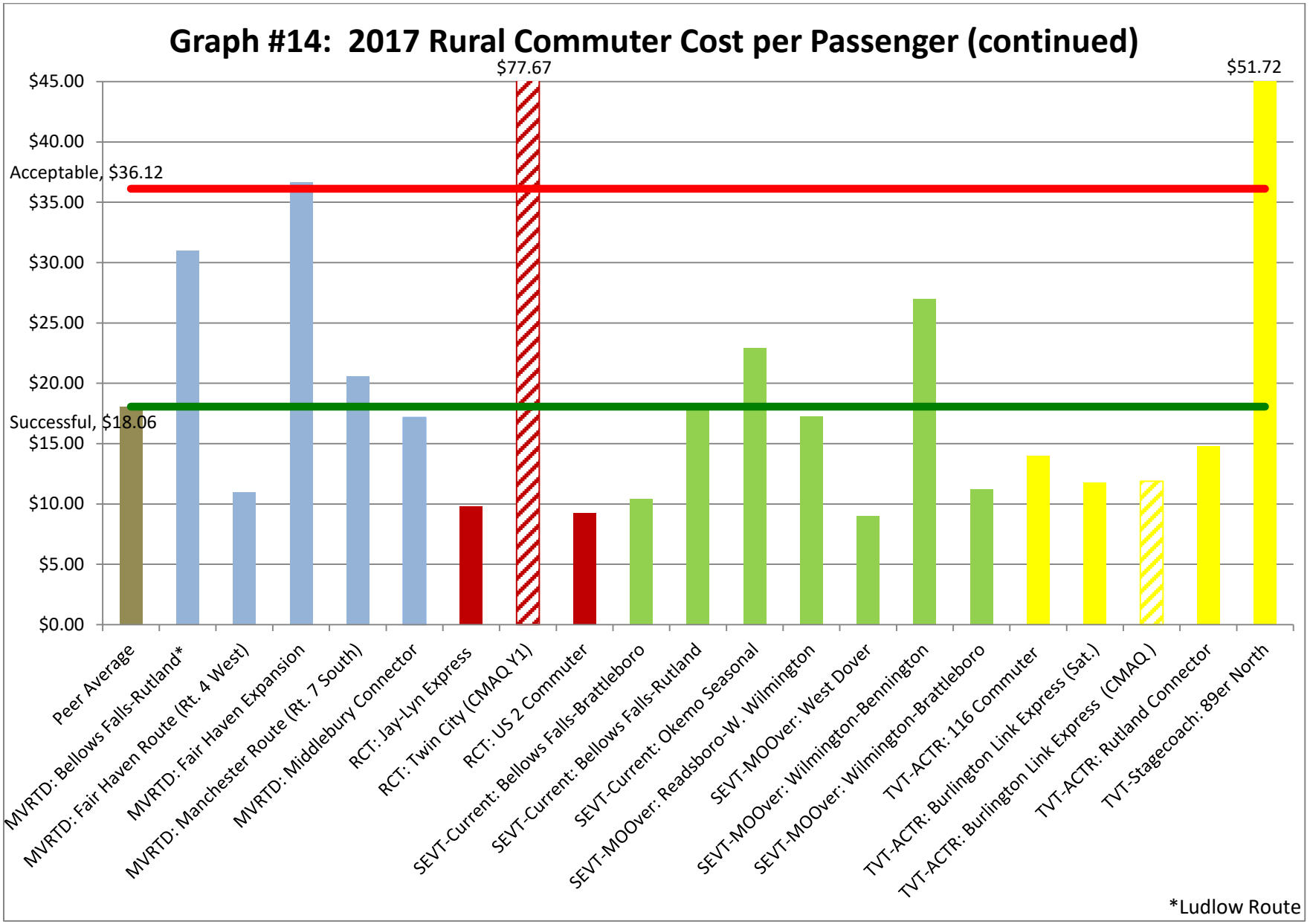


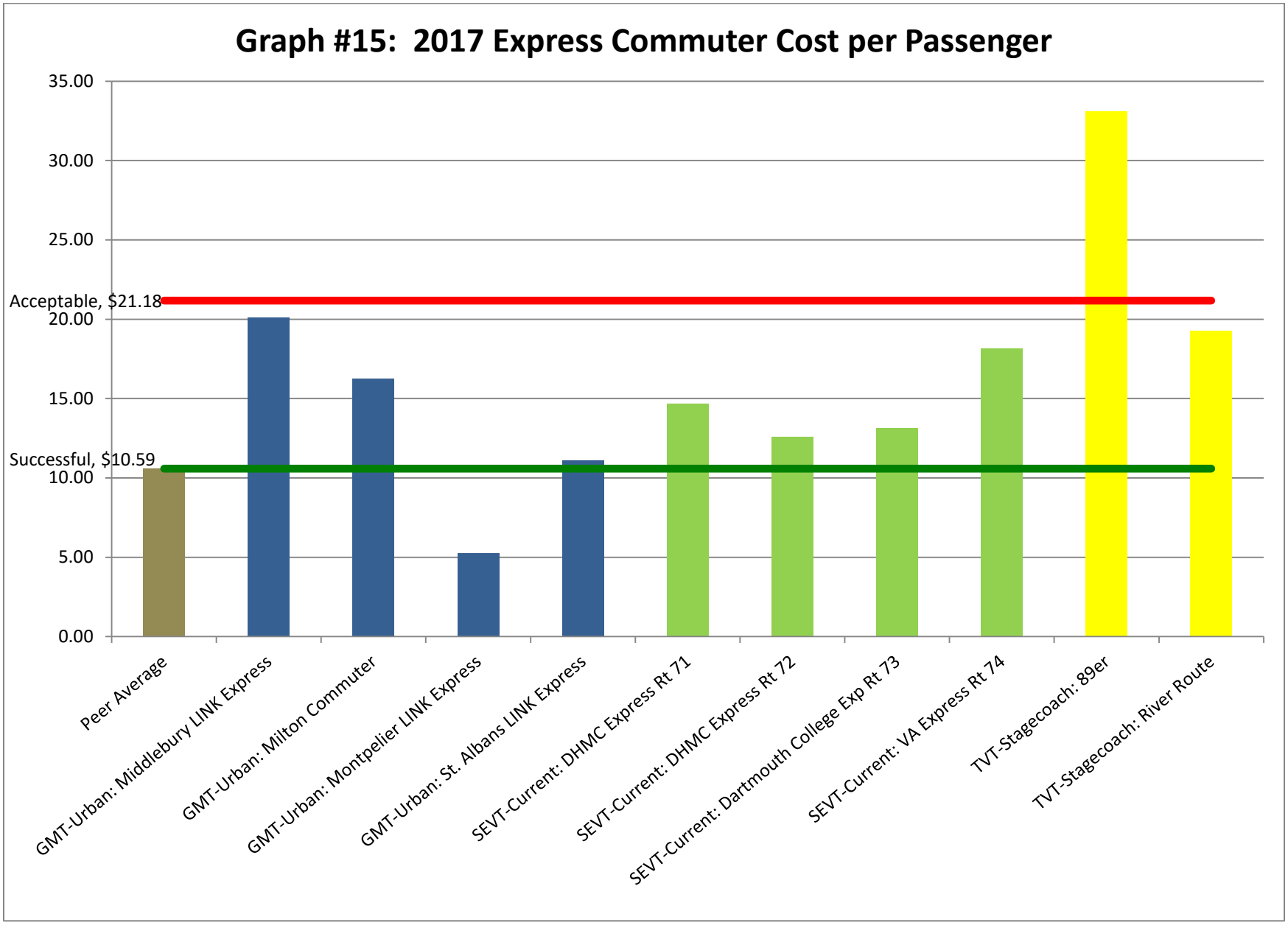
Note: TVT-ACTR's demand response data includes 14,400 E&D eligible trips provided by Elderly Services, Inc. for free with vehicles leased from TVT-ACTR.

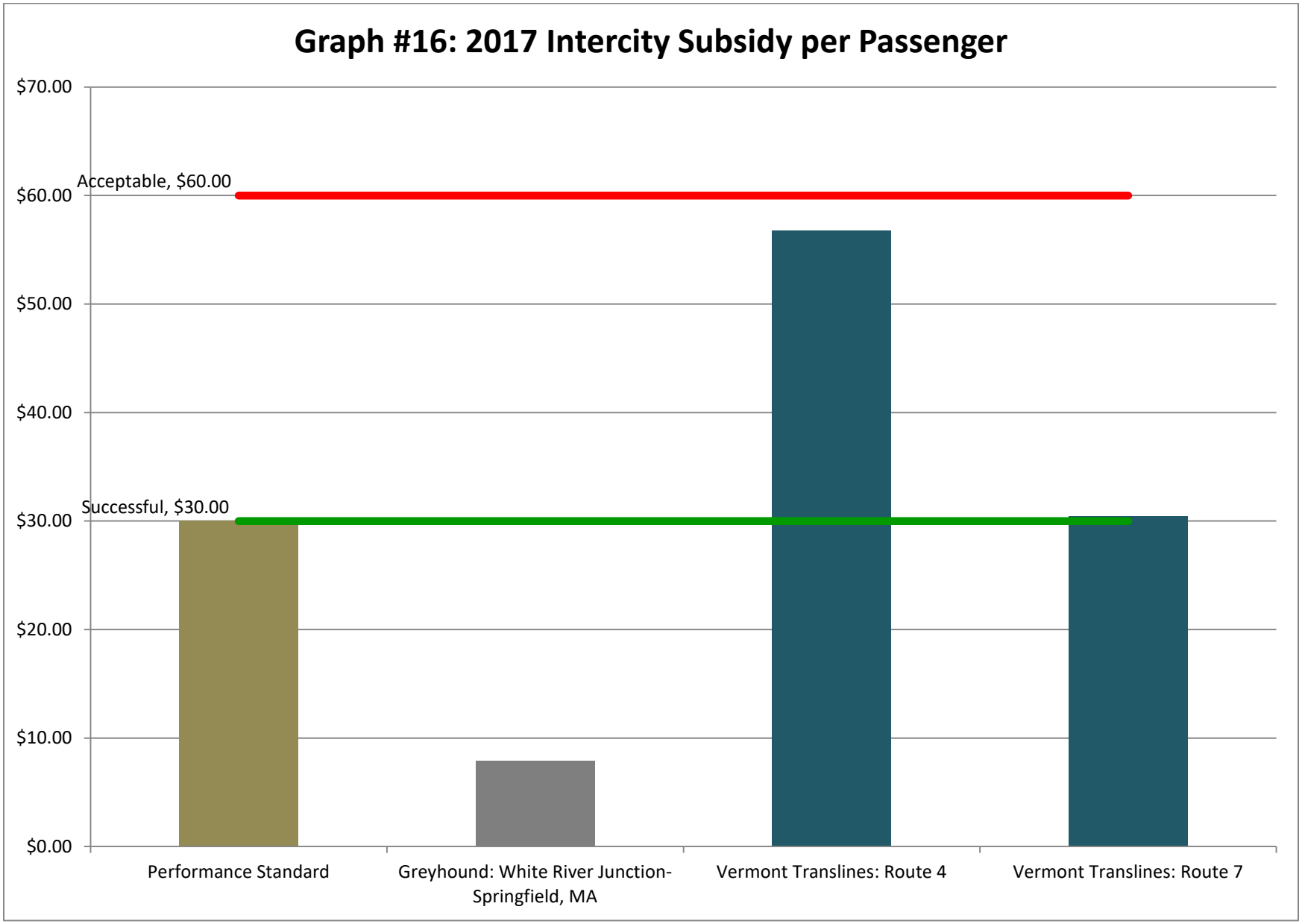

Graph #12: 2017 Tourism Cost per Passenger
$45.18
$28.00
$24.00
$20.00
$16.00
$12.00
Acceptable, $11.64
$8.00
Successful, $5.82
$4.00
$0.00
Peer Average
GMT-Rural: Access Road
GMT-Rural: Mount Ellen
GMT-Rural: Mountain Condos
GMT-Rural: Mountain Road
GMT-Rural: SnowCap Commuter
GMT-Rural: Valley Evening Service
GMT-Rural: Valley Floor
MVRTD: Killington Day & Night
SEVT-The MOOver: Bears Crossing
SEVT-The MOOver: Greenspring*
SEVT-The MOOver: Kingswood*
SEVT-The MOOver: Mount Snow
SEVT-The MOOver: Parking Lots*
SEVT-The MOOver: Timber Creek
*Privately funded operations; no state or federal funds

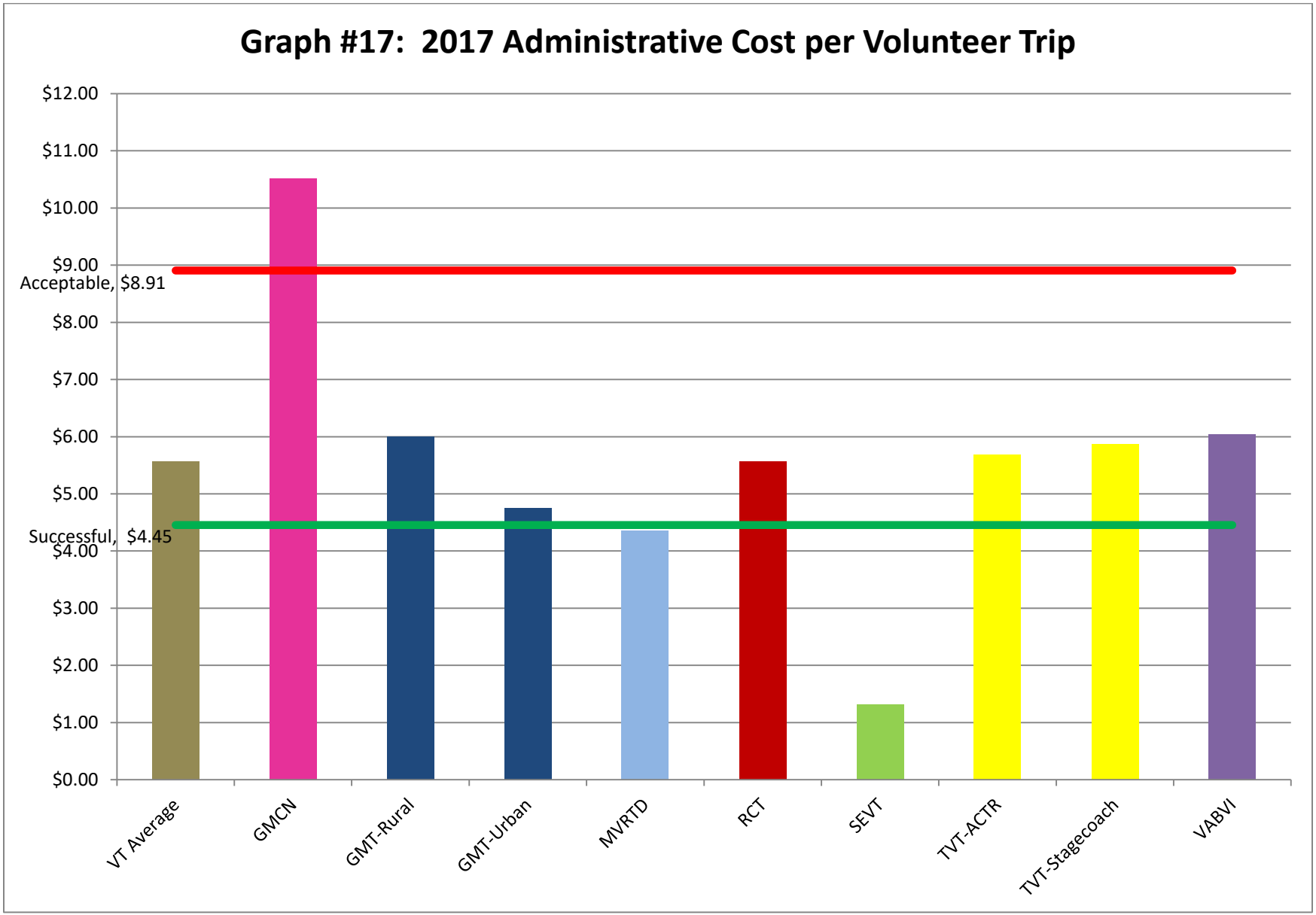

Graph #13: 2017 Rural Cost per Passenger
$32.00
Acceptable, $29.33
$28.00
$24.00
$20.00
$16.00
Successful, $14.67
$12.00
$8.00
$4.00
$0.00
Peer Average
GMT-Rural: Morrisville Loop
GMT-Rural: Morrisville Shopping
MVRTD: Proctor
RCT: The Highlander
RCT: Jay-Lyn Shuttle
SEVT-Current: Bellows Falls In-Town
SEVT-Current: Bellows Falls-Springfield
SEVT-MOOver: Wilmington-West...
TVT-ACTR: Snow Bowl
TVT-ACTR: Tri-Town
TVT-ACTR: Tri-Town (CMAQ)


Graph #14: 2017 Rural Commuter Cost per Passenger
$45.00
$40.00
Acceptable, $36.12
$35.00
$30.00
$25.00
$20.00
Successful, $18.06
$15.00
$10.00
$5.00
$0.00
Peer Average
GMCN: Bennington-Manchester (Orange)
GMCN: N. Benn.-So. VT College (Brown)
GMCN: Wilmington-Bennington*
GMT-Rural: Alburgh-Georgia
GMT-Rural: City Commuter
GMT-Rural: Northfield Commtr.
GMT-Rural: Richford-St. Albans
GMT-Rural: Route 100 Commuter
GMT-Rural: US 2 Commuter
GMT-Rural: Waterbury Commuter
GMT-Urban: 116 Commuter
GMT-Urban: Jeffersonville Commtr.
*Emerald Line


Graph #14: 2017 Rural Commuter Cost per Passenger (continued)
$77.67
$51.72
$45.00
$40.00
Acceptable, $36.12
$35.00
$30.00
$25.00
$20.00
Successful, $18.06
$15.00
$10.00
$5.00
$0.00
Peer Average
MVRTD: Bellows Falls-Rutland*
MVRTD: Fair Haven Route (Rt. 4 West)
MVRTD: Fair Haven Expansion
MVRTD: Manchester Route (Rt. 7 South)
MVRTD: Middlebury Connector
RCT: Jay-Lyn Express
RCT: Twin City (CMAQ Y1)
RCT: US 2 Commuter
SEVT-Current: Bellows Falls-Brattleboro
SEVT-Current: Bellows Falls-Rutland
SEVT-Current: Okemo Seasonal
SEVT-MOOver: Readsboro-W. Wilmington
SEVT-MOOver: West Dover
SEVT-MOOver: Wilmington-Bennington
SEVT-MOOver: Wilmington-Brattleboro
TVT-ACTR: 116 Commuter
TVT-ACTR: Burlington Link Express (Sat.)
TVT-ACTR: Burlington Link Express (CMAQ)
TVT-ACTR: Rutland Connector
TVT-Stagecoach: 89er North
*Ludlow Route


Graph #15: 2017 Express Commuter Cost per Passenger
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Acceptable, $21.18
Successful, $10.59
Peer Average
GMT-Urban: Middlebury LINK Express
GMT-Urban: Milton Commuter
GMT-Urban: Montpelier LINK Express
GMT-Urban: St. Albans LINK Express
SEVT-Current: DHMC Express Rt 71
SEVT-Current: DHMC Express Rt 72
SEVT-Current: Dartmouth College Exp Rt 73
SEVT-Current: VA Express Rt 74
TVT-Stagecoach: 89er
TVT-Stagecoach: River Route


Graph #16: 2017 Intercity Subsidy per Passenger
$70.00
$60.00
$50.00
$40.00
$30.00
$20.00
$10.00
$0.00
Acceptable, $60.00
Successful, $30.00
Performance Standard
Greyhound: White River Junction-Springfield, MA
Vermont Translines: Route 4
Vermont Translines: Route 7


Graph #17: 2017 Administrative Cost per Volunteer Trip
$12.00
$11.00
$10.00
$9.00
Acceptable, $8.91
$8.00
$7.00
$6.00
$5.00
Successful, $4.45
$4.00
$3.00
$2.00
$1.00
$0.00
VT Average
GMCN
GMT-Rural
GMT-Urban
MVRTD
RCT
SEVT
TVT-ACTR
TVT-Stagecoach
VABVI