

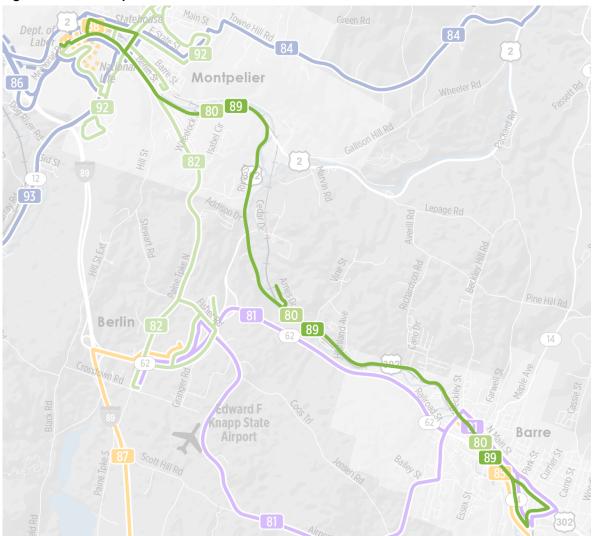
ROUTE 89

City Commuter

ROUTE OVERVIEW

Route 89 is classified as a Commuter route and provides peak period service between Montpelier and Barre along the Barre-Montpelier Road. (see Figure 1). The route is designed primarily to connect downtown Montpelier with downtown Barre, and to employment and services along the Barrie-Montpelier Road. During the midday, the same alignment is served by Route 80 City Route Mid-Day. It is effectively the same route but operates under a different name. When considered in the context of the total service that is provided, Route 89 is really much more of an Rural Local route than d Commuter route.

Figure 1: Route Map





On weekdays, Route 89 operates every 30 minutes during the morning, afternoon, and evening (see Table 1). On Saturdays, service operates every 30 minutes in the morning and late afternoon. Midday service is provided by Route 80 City Mid-Day, which is the same route but operates under a different name. No Sunday service is provided.

Table 1: Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (MIN)	DAILY TRIPS (OUTBOUND/INBOUND)
Monday-Friday	5:25 AM to 9:55 AM 3:25 PM to 8:25 PM	30/—/30	5/5
Saturday	7:55 AM to 9:55 AM 3:25 PM to 7:20 PM	30/—/30	5/5
Sunday	_	_	_

Peak frequencies are calculated for service between 6:00 am - 9:00 am & 3:00 pm - 6:00 pm. Midday service is from 9:00 am – 3:00 pm. Evening service is for service after 6:00 pm. Saturday and Sunday frequencies are shown as AM/PM.

Route 89 has four service variants, all which operate on weekdays, and two of which operate on Saturdays (see Table 2). All service operates between State Street at Bailey Street in Montpelier to Napa Auto Parts in Barre. On weekdays, alternating trips operate either into the Price Chopper/Staples Shopping Center or stay on the Barre-Montpelier Road. On Saturdays, all trips operate into the Central Vermont Shopping Center (Price Chopper and Staples.

Table 2: Service Variants

				TRIPS PER DAY		
VARIANT	ORIGIN	DESTINATION	UNIQUE FEATURE	WKD	SAT	SUN
OUTBOUND				16	10	_
89-1	State Street at Bailey	Napa Auto Parts	Operates into Prince Shopper/Staples	9	10	_
89-3	State Street at Bailey	Napa Auto Parts	Direct via Barre- Montpelier Road	7	_	_
INBOUND				16	10	_
89-2	Napa Auto Parts	State Street at Bailey	Operates into Prince Shopper/Staples	10	10	_
89-4	State Street at Bailey	Napa Auto Parts	Direct via Barre- Montpelier Road	6	_	_

RIDERSHIP

Route 89 carries 120 passengers per weekday and 67 on Saturdays. However, when Route 80 is considered in the context of Route 89, Barre-Montpelier Road service carries 205 passengers per weekday and 129 passengers per Saturday. The operation of the service under two names obscures how strong ridership actually is.



Ridership by Stop

Only boarding data is available for Route 89, which somewhat obscures ridership patterns. However, based on this data, it is clear that the highest ridership locations on the routes are in downtown Montpelier, Twin City Plaza, the Price Chopper/Staples Shopping Center, and downtown Barre.

Weekdays

On inbound trips toward Montpelier, the highest number of boarding are in downtown Barre at the beginning of the routes in front of NAPA Auto Parts (19 passengers) and Key Bank (24 passengers (see Figure 2). On the Barre-Montpelier Road, the highest ridership stops are the Price Chopper/Staples Plaza (three passengers) and Twin City Plaza (two passengers).

On outbound trips, the highest ridership stops in downtown Montpelier are State Street at Baily Street (seven passengers), Shaw's (38 passengers), and River Street at Berlin Street (five passengers) (see Figure 3). On the Barre-Montpelier Road, the highest ridership stops are Twin City Plaza (four passengers) and the Price Chopper/Staple Shopping Center (five passengers). There are also 14 boardings in front of the American Legion in Barre.

Saturdays

Saturday ridership patterns are similar to weekday patterns, but with lower volumes (see Figure 4 and Figure 5).

Ridership by Trip

Weekdays

Weekday Route 89 ridership per trip is relatively low. For most of the day, ridership per trip ranges from three to five passengers, with eight passengers at 3:30 PM (see Figure 6). On early morning trips and evening trips, ridership is lower – as low as one passenger per trip. While the 30 minute service is desirable from a passenger convenience perspective, low ridership per trip numbers indicate that, at a minimum, service operates every 30 minutes for longer than it should.

Boardings are somewhat higher in the outbound direction, but passenger activity is mostly balanced in both directions. Similar boarding numbers in both directions throughout the day is an indication that this route is being utilized to access jobs and activity centers to and from both Montpelier and Barre.

Saturdays

Saturday Route 89 ridership per trip is similar as on weekdays, albeit slightly lower (see Figure 7). As on weekdays, the peak boarding time is 3:30 PM. Ridership is balanced between directions and ranges from two to seven boardings per tip.



Figure 2: Weekday Inbound Ridership by Stop

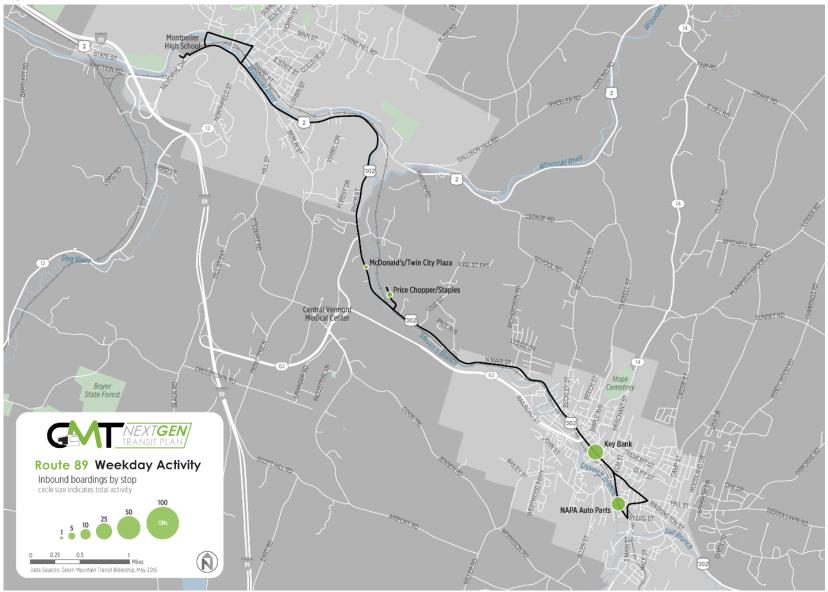




Figure 3: Weekday Outbound Ridership by Stop

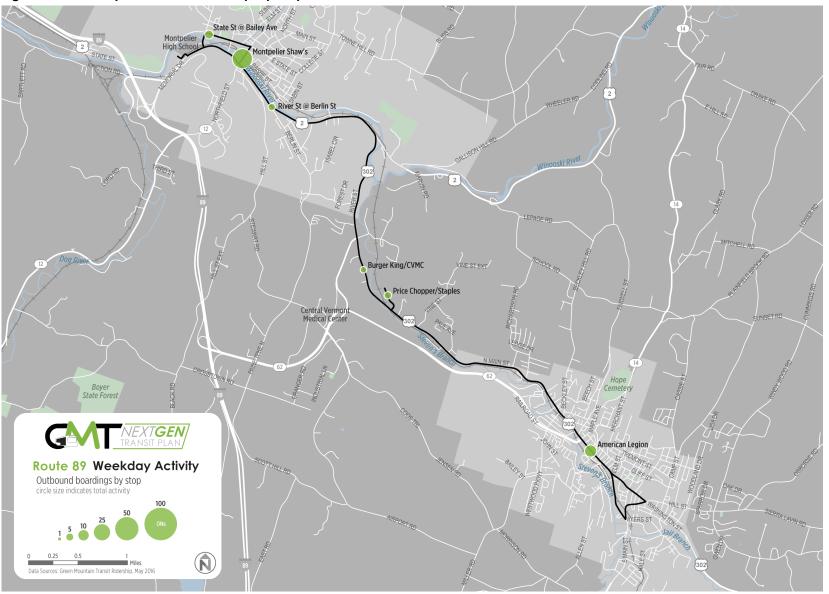




Figure 4: Saturday Inbound Ridership by Stop

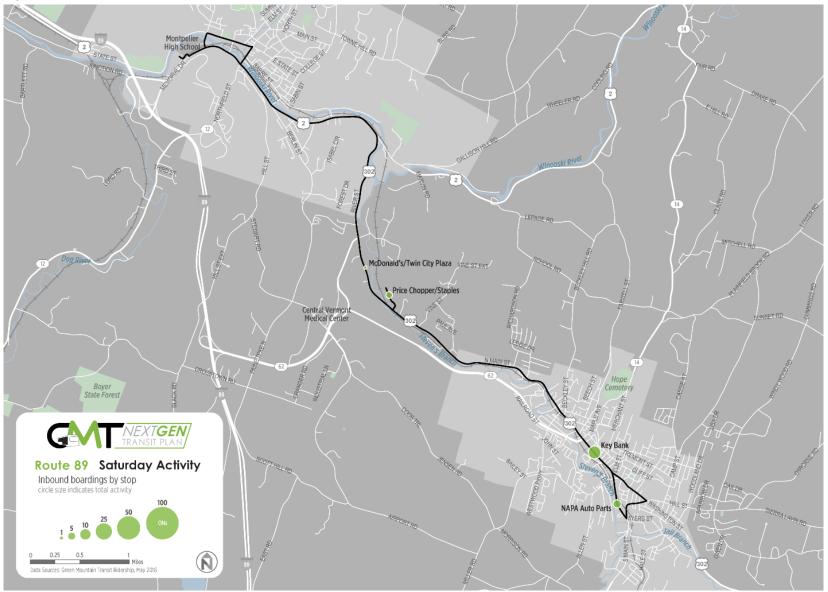
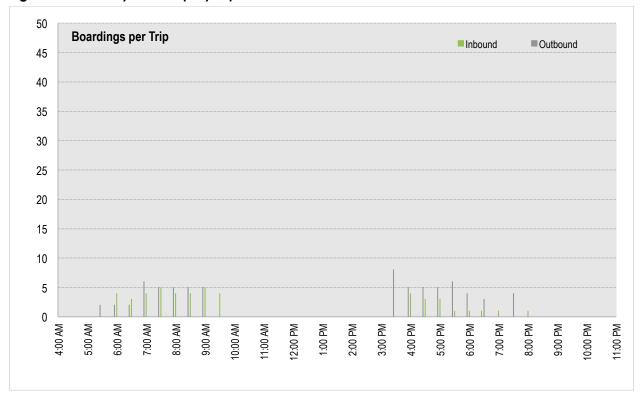




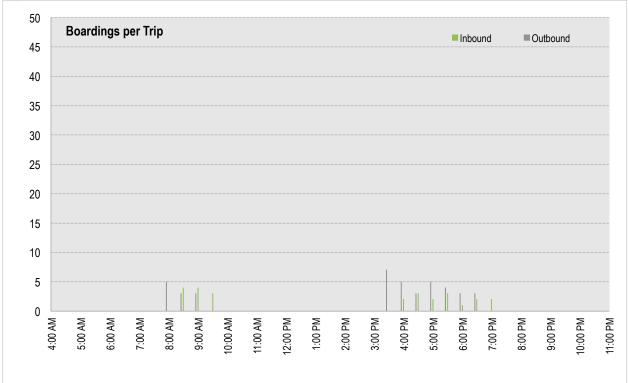
Figure 5: Saturday Outbound Ridership by Stop McDonald's/Twin City Plaza VINESTEXT Price Chopper/Staples Central Vermont Medical Center Route 89 Saturday Activity Inbound boardings by stop circle size indicates total activity Data Sources: Green Mountain Transit Ridership, May 2016



Figure 6: Weekday Ridership by Trip









SERVICE PRODUCTIVITY

On weekdays, Route 89 carries 120 passengers per weekday and 7.5 passengers per vehicle service hour at a cost of \$10.11 per passenger (see Table 3). On Saturdays, Route 89 carries 67 passengers and 6.7 passengers per vehicle service hour at a cost of \$11.71 per passenger. Performance meets VTrans' service thresholds. However, this is because the route is classified as a Commuter route. If it were classified as a Rural Local route, which would be more accurate, it would not meet the thresholds.

Table 3: Productivity Statistics

	MONDAY-FRIDAY	SATURDAY	SUNDAY
Average Daily Ridership	120	67	_
Pax/Revenue Service Hour	7.5	6.7	_
VTrans Productivity Threshold	5.93	5.93	5.93
Pax/One-Way Trip	3.8	3.4	_
Commuter Average	7.3	3.4	_
Pax/Revenue Mile	0.4	0.4	_
Commuter Average	0.4	0.4	_
Cost/Passenger	\$10.11	\$11.71	
VTrans Effectiveness Threshold	\$18.06	\$18.06	\$18.06

Source: Green Mountain Transit, May 2016; VTrans Performance Reviews (2016)

SERVICE IMPROVEMENT OPTIONS

Route 89, when viewed in isolation, performs moderately well – it carries a relatively large number of passengers but more service is provided that warranted by demand. When viewed in the context that it and Route 80 City Mid-Day are really the same route, it performs better. The most important improvement for the Barre-Montpelier corridor will be to consolidate Routes 80 and 89 into a single route that provides more clearly understandable service.

This and other opportunities to strengthen Route 89 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Consolidate Route 89 with Route 80 City Mid-Day: The two routes vary in name only, and the presentation of peak period and midday service under different names is confusing, likely suppresses ridership, and provides no customer benefits.
- Shift to a Mix of 30 Minute and 60 Minute Service: Nearly all service operates every 30 minutes. As indicated by low ridership per trip, this is more than warranted by demand. The continuation of 30 minute peak service is desirable, but service outside of the peaks could be reduced to every 60 minutes, in part to meet VTrans' productivity and costeffectiveness thresholds.
- Operate All Service into Central Vermont Shopping Center (Price Chopper & Staples): On weekdays, trips alternate between operating into the shopping center or stay on the Barre-Montpelier Road. This is one of the higher ridership stops on the route, which argues for operating all service into the shopping center.



- Discontinue Service into Vermont Shopping Center: On a typical day, no riders use Route 80 to travel to the Vermont Shopping Center. The elimination of this deviation would provide faster and direct service to through passengers.
- **Develop Paired Stops:** Numerous stops along Route 80 are only accessible in a single direction. Stop locations should be adjusted so that all locations have both an inbound and outbound stop. (Stops should be located in safe locations. This is particularly important on US Routes 2 and 302, where crosswalks and waiting pads are needed to accommodate pedestrian travel and waiting.)