

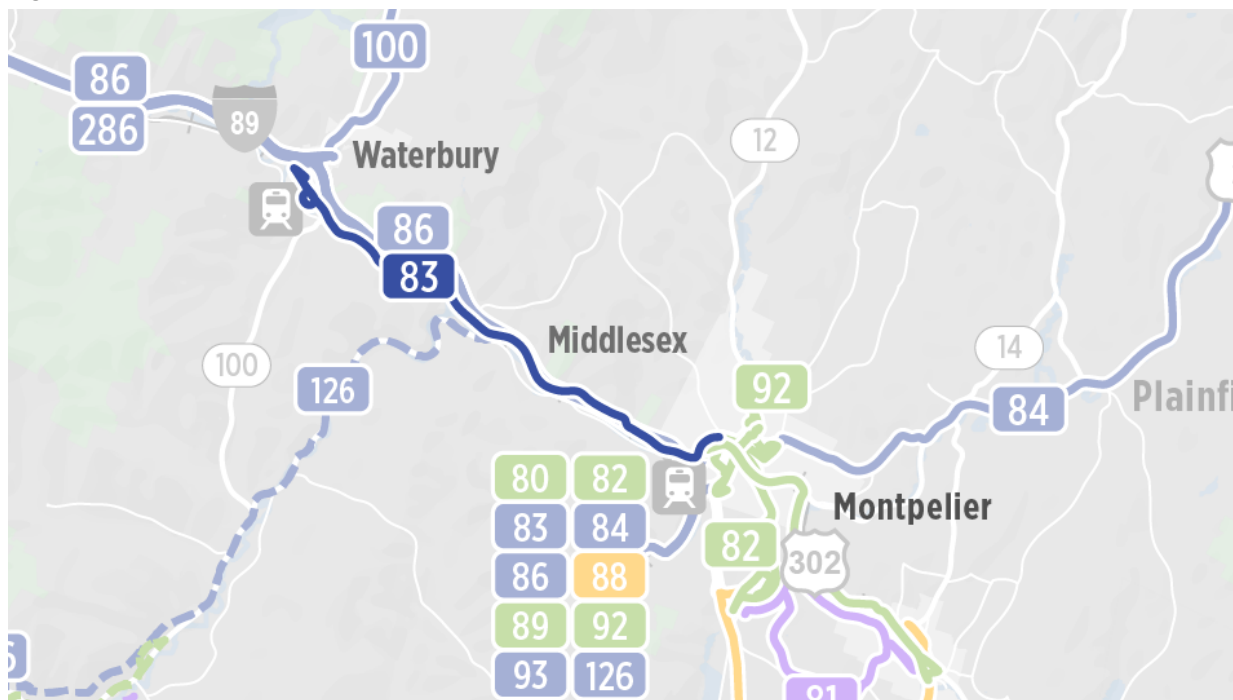
ROUTE 83

Waterbury Commuter

ROUTE OVERVIEW

Route 83 is a Commuter route that operates between Waterbury and Montpelier (see Figure 1). In Montpelier, Route 83 serves State Street, the Montpelier Shaw's, National Life, and the Department of Labor Park-and-Ride. The route travels along US Route 2, stopping at Red Hen Bakery in Middlesex, then continues on to Waterbury, where it serves the GMCR Visitor's Center/Train Station, the Waterbury Senior Center, and the Waterbury State Complex.

Figure 1: Route Map



Route 83 provides weekday service with three round trips in the AM and three round trips in the PM (see Table 1). These trips operate between 6:38 and 9:40 AM and 3:05 and 6:05 PM.

Table 1: Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (MIN)	DAILY TRIPS (OUTBOUND/INBOUND)
Monday-Friday	06:38 AM to 06:05PM	60-65/—/—	6/6
Saturday	—	—/—	—/—
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.

From Montpelier to Waterbury, in the AM, trips arrive at the Waterbury State Office Complex at 7:10, 8:17, and 9:17 AM, and in the PM, trips depart at 3:45, 4:40, and 5:40 PM. From Waterbury to Montpelier, in the AM, trips arrive at State Street/People's United Bank at 7:42 AM, 8:42 AM, and 9:42 AM. Of these trips, only the 7:42 AM arrival is well suited to commuters. In the PM, trips depart at 3:05, 4:05, and 5:05 PM. Of these trips, the 4:05 and 5:05 PM trips are well suited to commuters, but the 3:05 departure is too early for most.

Route 83 operates with slightly different alignments, largely based on whether the route is operating during the AM or PM. All round trips begin and end in Montpelier:

- **AM Peak Service:** All trips begin at State Street/People's United Bank, and then operate to the Montpelier Shaw's. The first trip of the morning then operates directly to the Department of Labor Park and Ride Lot, while the next two trips first serve National Life and, by request, the Department of Labor Park and Ride lot. From there, buses travel along US Route 2, stopping at the Red Hen Bakery in Middlesex, and then on to Waterbury. Buses serve the Waterbury State Complex, the GMCR Visitor's Center/Train Station, and the Waterbury Senior Center, then return toward Montpelier along Route 2 via Middlesex/Red Hen Bakery and terminate at State Street/Bailey Avenue in Montpelier. The last trip continues on to Shaw's and, by request, to National Life.
- **PM Peak Service:** As in the AM, all trips begin at State Street/People's United Bank, and then operate to the Montpelier Shaw's. From there, they operate to National Life, and, by request, to the Department of Labor Park and Ride Lot. Buses then travel along US Route 2, stopping at the Red Hen Bakery in Middlesex, and continue on to Waterbury. In Waterbury, buses serve the GMCR Visitor's Center/Train Station, the Waterbury Senior Center, and the Waterbury State Complex (the reverse order from the AM), then return toward Montpelier along Route 2 via Middlesex/Red Hen Bakery and terminate at State Street/Bailey Avenue in Montpelier.

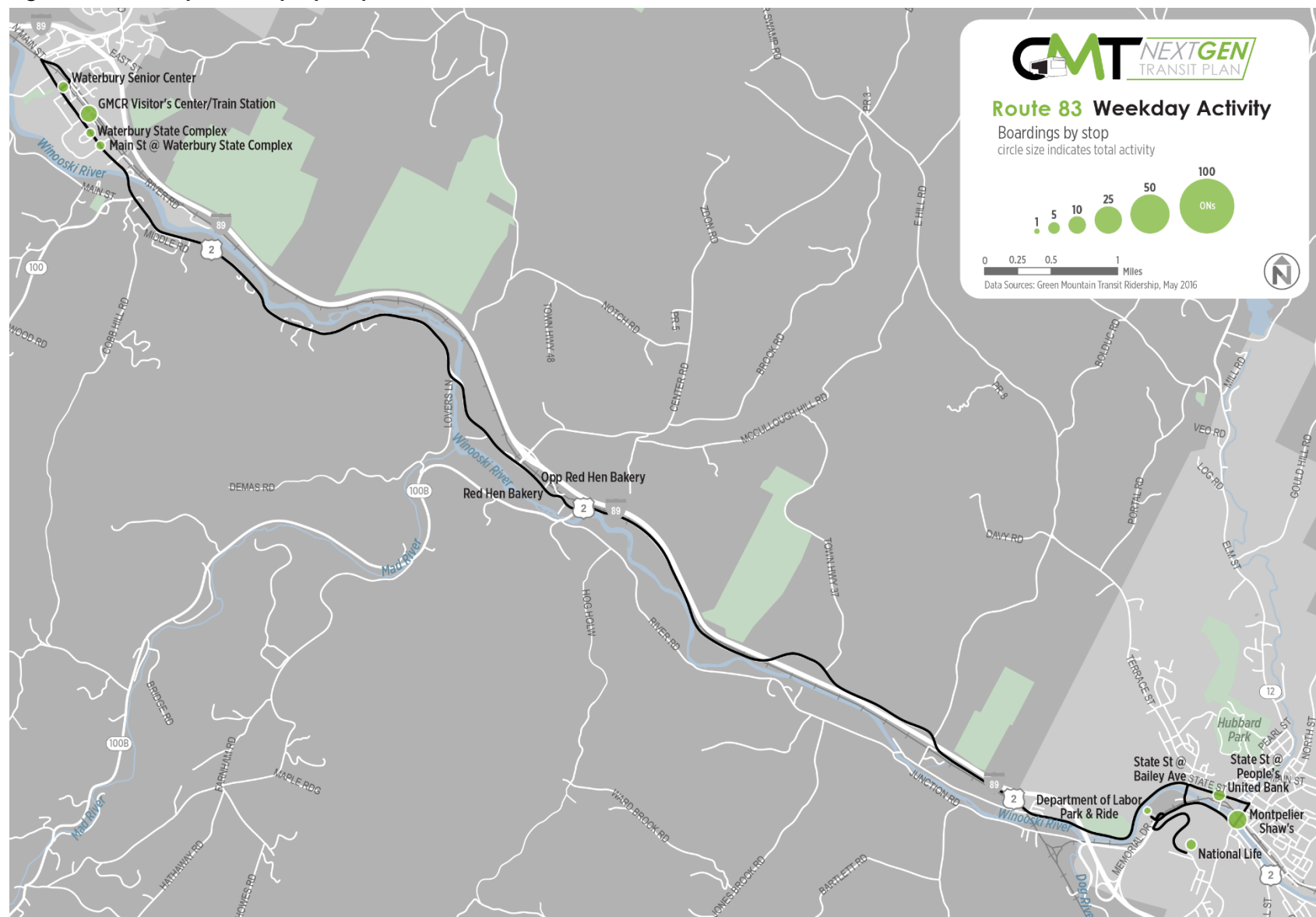
RIDERSHIP

Route 83 carries 43 passengers per weekday, and only 3.3 passengers per trip.

Ridership by Stop

The highest ridership stops on Route 83 are Shaw's in Montpelier, with 12 boardings, and Keurig Green Mountain's Visitor Center in Waterbury, with 10 boardings. Ridership to other locations, including the Waterbury State Office Complex, National Life, and the Waterbury Senior Center, all have low ridership (three to five boardings per day). A few notable stops – Red Hen Bakery and the Department of Labor Park and Ride Lot – do not have any boardings.

Figure 2: Weekday Ridership by Stop

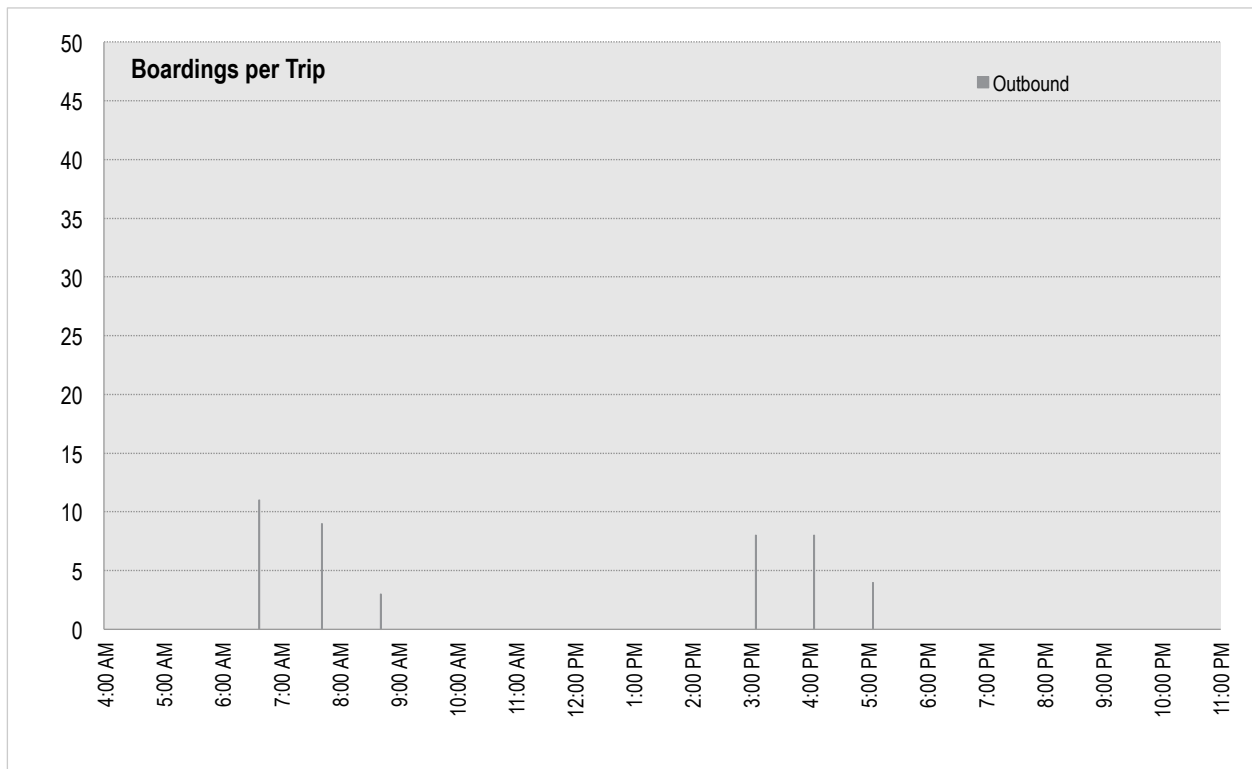


Ridership by Trip

Weekdays

Ridership is only available on a round trip basis, which prevents a full understanding of inbound and outbound ridership by trip. On a round trip basis, ridership is highest on the first trip at 6:38 AM, with 11 riders (see Figure 3). Generally, ridership declines over the course of each period; the third AM peak trip and third PM peak trip each carry fewer than five riders.

Figure 3: Weekday Ridership by Trip



Although ridership is not available by direction, some inferences can be made. On the Route 86 Montpelier – Burlington LINK Express, ridership is highest on AM trips that arrive close to 8:00 AM and on PM trips that depart between approximately 4:00 and 5:00 PM. If these patterns hold for Route 83, then the predominate flows are from Waterbury to Montpelier in the AM and back in the PM, with lower ridership to and from Waterbury.

SERVICE PRODUCTIVITY

Route 83 carries 43 passengers per weekday, and 7.1 passengers per revenue service hour, at a cost of \$11.59 per passenger (see Table 2). The route meets VTrans' productivity and cost-effectiveness thresholds.

Table 2: Productivity Statistics

	MONDAY-FRIDAY	SATURDAY	SUNDAY
Average Daily Ridership	43	—	—
Pax/Revenue Service Hour	7.1	—	—
VTrans Productivity Threshold	5.93	5.93	5.93
Pax/One-Way Trip	3.3	—	—
Commuter Average	7.5	—	—
Pax/Revenue Mile	0.3	—	—
Commuter Average	0.4	—	—
Cost/Passenger	\$11.59	—	—
VTrans Effectiveness Threshold	\$18.06	\$18.06	\$18.06

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

SERVICE IMPROVEMENT OPTIONS

Opportunities to strengthen Route 83 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Compress Schedule:** Route 83 service is provided with a single vehicle and a round trip takes 60 minutes. As a result, the three AM and three PM trips are spaced one hour apart with trip times – especially on the last trips – that do not match work schedules particularly well. A better approach, which would require the deployment of an additional bus, would be to compress AM and PM service into a shorter timeframe, for example, three departures spaced 30 minutes apart.
- **Operate on I-89 Instead of Route 2:** Route 83 operates via US Route 2 instead of I-89, presumably to service locations along Route 2, including the Red Hen Bakery complex in Middlesex. However, no riders board or alight along Route 2, and faster service could be provided by operating service along I-89.
- **Serve Department of Labor Park and Ride Lot on All Trips:** Route 83 serves the Department of Labor Park and Ride in Montpelier on its first trip at 6:45 AM as a scheduled stop, but on all other trips by request only. With schedules that better match Waterbury work times, there could be park and ride demand from this location.
- **Provide Service to Waterbury Park-and-Ride Lot:** There is currently no AM service between the Waterbury Park and Ride Lot, or PM service back out (Route 86 Montpelier LINK express provides AM service outbound from Montpelier and PM service inbound to Montpelier, but this service is designed to serve Burlington-bound commuters and is not useful to Montpelier-bound commuters. Service to the Waterbury Park and Ride Lot on all trips would serve a new park and ride market.
- **Provide Service to the Middlesex Park and Ride Lot:** Service to the Middlesex Park and Ride Lot at I-89 Exit 10 could also serve a new park and ride market.