

ROUTE 100

Route 100 Commuter

ROUTE OVERVIEW

Route 100 is a Commuter route that operates between Morrisville and Waterbury via Stowe. The route travels primarily along VT Route 100 and provides service to downtown Morrisville, Price Chopper, Morrisville/Stowe Airport, downtown Stowe, Waterbury Center, Waterbury Park-and-Ride, Green Mountain Coffee Roaster Visitor Center/Waterbury Train Station, and the Waterbury State Complex (see Figure 1). Transfers are available on select trips to and from Route 83 Waterbury Commuter for service to Montpelier and Route 86 Burlington -Montpelier LINK Express for service to Burlington.

Route 100 operates during peak periods on weekdays. In the AM, the route provides two inbound and one outbound trip. In the PM, the route provides three outbound and two inbound trips (see Table 1).

Route 100 operates with four different service patterns, two of which operate inbound and two of which operate outbound (see Table 2):

> Inbound, most trips operate from Price Chopper in Morrisville to the Waterbury State

Figure 1: Route Map Morrisville Stowe Waterbury



Table 1: Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (MIN)	DAILY TRIPS (OUTBOUND/INBOUND)
Monday-Friday	6:15 AM to 8:00 AM 3:41 PM to 6:45PM	40-60/—/—	4/4
Saturday	_	—/—	—/—
Sunday		—/—	—/—

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

Table 2: Service Variants

				TRIPS PER DAY		
VARIANT	ORIGIN	DESTINATION	UNIQUE FEATURE	WKD	SAT	SUN
INBOUND (S	SOUTHBOUND)			4	_	_
100-2	Price Chopper Morrisville	Waterbury State Complex		3	_	_
100-4	Stowe Town Hall	Waterbury State Complex	Truncated service, trips begin at Stowe Town Hall	1	_	_
OUTBOUND	(NORTHBOUND)			4	_	_
100-1	Waterbury State Complex	Price Chopper Morrisville	Airport and Copley Hospital are served by request only.	1	_	_
100-3	Waterbury State Complex	Price Chopper Morrisville	Via Bishop Marshall School. Airport and Copley Hospital are served by request only.	3	_	_

Complex. The first PM inbound trip is a short trip that operates from Stowe Town Hall to the Waterbury State Complex.

 Outbound, PM trips operate from the Waterbury State Complex to Price Chopper in Morrisville in the reverse of the AM inbound trips. The morning outbound trip deviates to serve the Bishop Marshall School stop before serving Morrisville. This deviation is made only during the school year only. (Inbound/southbound service at the end of the school day is provided by the Route 103 Morrisville Shopping Shuttle.)

In addition:

- Trips that connect with either Route 83 Waterbury Commuter or Route 86 Burlington Montpelier Express make scheduled stops at the Waterbury Park and Ride Lot where those connections are made. On other trips, the park and ride lot is served only upon request.
- The Morrisville-Stowe Airport and Copley Hospital are served by request on outbound trips but are not served on inbound trips.



- During the winter, one southbound trip on Tuesdays and Thursdays deviates to the front door of the Stowe Shaw's.
- The Morrisville Industrial Park is served by request on all trips.

RIDERSHIP

Route 100 carries an average of 48 passengers per weekday, and 5.6 passengers per trip.

Ridership by Stop

Only boarding data is available for Route 100. On inbound trips:

- Eight passengers board in Morrisville/Morristown two at Price Chopper, one at Morrisville Plaza, two at Pleasant Street, three at Union Bank, and one at the Morrisville-Stowe **Airport**
- 11 passengers board in Stowe 10 at Stowe Town Hall and one at Moscow Road
- Five passengers board in Waterbury three at the Waterbury Park and Ride Lot and one at the Green Mountain Coffee Roasters Visitor Center

On outbound trips:

- Eleven passengers board in Waterbury five at the Green Mountain Coffee Roasters Visitor Center, and six at the Waterbury Park and Ride
- One passenger boards in Waterbury Center
- Four passengers board in Stowe at Stowe Town Hall.
- One passenger boards in Morrisville at Pleasant Street

These ridership figures are notable in two ways. The first is the lack of ridership to the Waterbury Office Complex, where ridership would be expected. The second is a total of nine boardings at the Waterbury Park and Ride Lot, which indicates that nearly 1/3rd of passengers are transferring to service to Montpelier or Burlington.

Ridership by Trip

Route 100's ridership is mostly inbound (southbound) in the AM and outbound (northbound) in the PM. The most heavily utilized trip is the 7:08 AM inbound trip, which carries 12 passengers, followed by the 6:15 AM inbound trip, which carries eight passengers. PM outbound ridership is much lower at only three to six passengers. However, some outbound passenger are likely passengers who board at the end of inbound trips that continued on as outbound trips. When this is considered, it is more likely that outbound ridership is six to seven passengers per trip. Ridership on reverse direction trips (outbound in the AM and inbound in the PM) appears to be negligible.

SERVICE PRODUCTIVITY

Route 100 carries 48 passengers per weekday and 7.6 passenger hour at a cost of \$17.37 per passenger (see Table 3. These figures are within VTrans' productivity and cost-effectiveness thresholds.



Figure 2: Weekday Inbound Ridership by Stop Morrisville Plaza (Big Lots) Price Chopper Morrisville INSET Pleasant St Gazebo at Union Bank Morrisville-Stowe Airport Stowe Town Hall Mt Mansfield State Forest Route 100 @ Moscow Rd CC Putnam State Forest Waterbury Center @ Emery's Store **Route 100 Weekday Activity** Inbound boardings by stop circle size indicates total activity Waterbury Park & Ride GMCR Visitor's Center/Train Station Waterbury State Complex



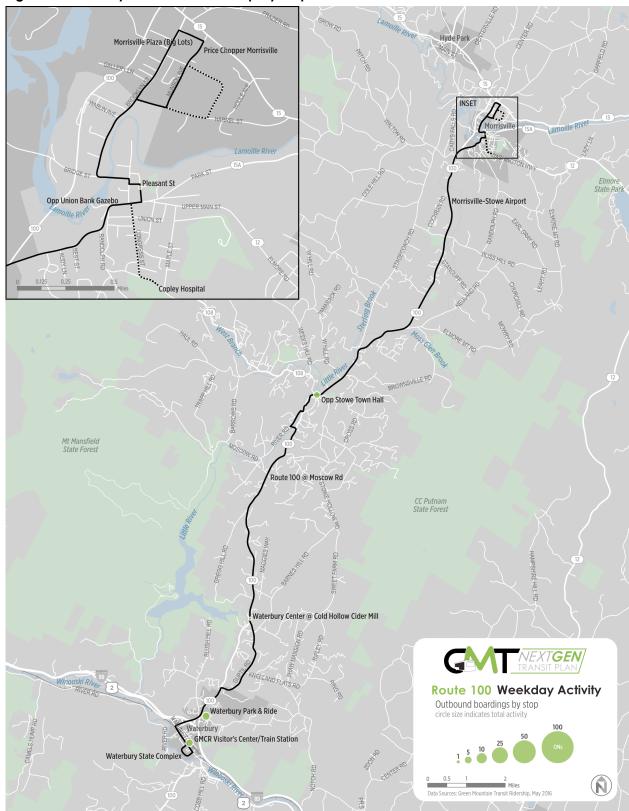


Figure 3: Weekday Outbound Ridership by Stop



Figure 4: Weekday Ridership by Trip

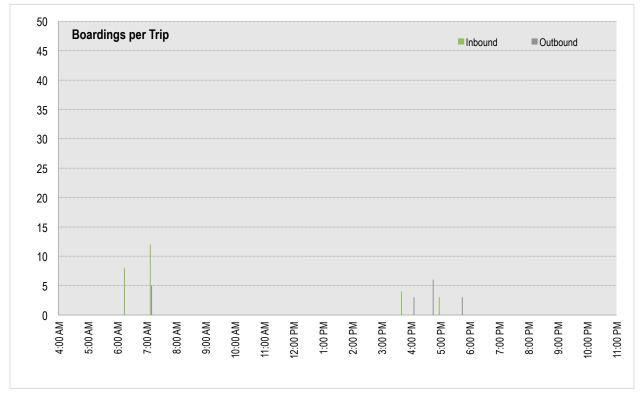


Table 3: Productivity Statistics

	MONDAY-FRIDAY	SATURDAY	SUNDAY
Average Daily Ridership	48	_	_
Pax/Revenue Service Hour	7.6	_	_
VTrans Productivity Threshold	5.93	5.93	5.93
Pax/One-Way Trip	5.3	_	_
Commuter Average	7.3		_
Pax/Revenue Mile	0.3	_	_
Commuter Average	0.4	_	_
Cost/Passenger	\$17.37	_	_
VTrans Effectiveness Threshold	\$18.06	\$18.06	\$18.06

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

SERVICE IMPROVEMENT OPTIONS

Route 100 provide important connections but is overly complex, with request stops and deviations that are not used. The route should be simplified to make it understandable to more people. Options for accomplishing this, and other improvement options, are as follows:

Combine Route 100 with Route 83 Waterbury Commuter: A number of Route 100 trips provide timed-transfers with Route 83 to serve work trips to and from Montpelier. This service could be made much more convenient by combining the two routes.



- **Discontinue Reverse Direction Trips:** Reverse direction trips (AM northbound and PM southbound) have very low ridership, and could be discontinued to enable through service between Morrisville and Montpelier via Waterbury.
- Discontinue Request Services that are Not Used: No riders use the request service to Copley Hospital and the Morrisville Industrial Park, and the discontinuation of these options would make service more understandable to those who may be now put off by the route's complexity and more predictable for those who now use the route.
- Better Publicize Connections with Routes 83 Waterbury Commuter and 86 Burlington Montpelier LINK: The connections are currently noted on the schedule, but in a confusing manner (for example, the schedule notes that connections are available to "the LINK bus," but does not specify which LINK route.
- Add Outbound Stop on Route 100 at Morrisville/Stowe Airport: Inbound trips pull into the parking lot at the Morrisville-Stowe Airport, which allows those who desire to use the airport as an unofficial park and ride lot to wait in their cars. Outbound trips only pull into the airport upon request. Adding a stop on Route 100 in front of the airport would allow passengers to travel between the airport and Morrisville without making a reservation. Since the parking lot is directly adjacent to Route 100, that stop would also provide convenient service to those who park at the airport.
- Work with the Morrisville-Stowe Airport to Designate the Airport as an Official Park and Ride lot: It appears that one riders uses this location as an unofficial park and ride lot. Designating it and publicizing it as an official lots could generate some additional ridership.
- Discontinue Front Door Service to Shaw's: During the winter on Tuesdays and Thursdays, one southbound trip operates to the front door of Shaw's (other trips stay on Route 100). However, Route 103 Morrisville Shopping Shuttle already serves Shaw's five days a week year-round, with connections in downtown Stowe to Route 108 Mountain Road. Thus, the Route 100 service does not provide clear benefits but makes service inconsistent and more confusing.