

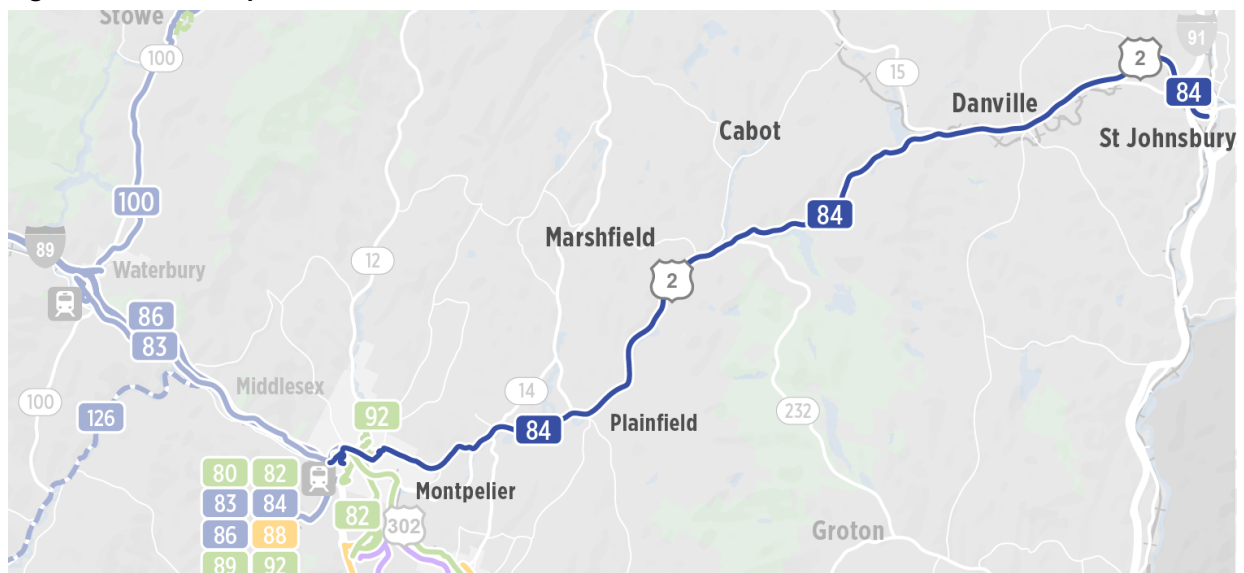
# ROUTE 84

## US 2 Commuter

### ROUTE OVERVIEW

Route 84 is a Commuter route that operates between St. Johnsbury and Montpelier, primarily along US Route 2 (see Figure 1). Major stops include the St. Johnsbury Welcome Center, the St. Johnsbury Park and Ride lot, the West Danville Park-and-Ride lot, Marshfield Old Schoolhouse Common, Twinfield School, Plainfield Park-and-Ride lot, Goddard College, the WEC Lot in East Montpelier, the Department of Labor and National Life in Montpelier, and downtown Montpelier. The route is jointly operated by GMT and Rural Community Transportation (RCT), which provides service in the Northeast Kingdom.

**Figure 1: Route Map**



Route 84 provides service on weekdays, with three inbound trips (toward Montpelier) and two outbound trips in the AM, a midday round trip between Marshfield and Montpelier, and two trips in each direction in the afternoon (see Table 1). Service is designed to serve commuters to both Montpelier and St. Johnsbury. Montpelier-oriented service arrives in Montpelier at 6:35, 7:20, and

**Table 1: Schedule Statistics**

| SERVICE DAY   | SPAN OF SERVICE    | FREQUENCY (MIN) | DAILY TRIPS (OUTBOUND/INBOUND) |
|---------------|--------------------|-----------------|--------------------------------|
| Monday-Friday | 6:00 AM to 6:40 PM | 30-55/—/—       | 5/6                            |
| Saturday      | —                  | —               | —                              |
| Sunday        | —                  | —               | —                              |

*Note: 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.*

8:50 AM, departs in the afternoon at 4:15 and 5:15 PM. St. Johnsbury service arrives at 7:30 and 8:45 AM, and afternoon service departs at 3:50 and 5:30 PM.

Route 84 has six variants on weekdays, three inbound and three outbound. Major differences are related to starting and ending points, and request stops:

- **AM Inbound:** The first inbound trip begins service in Marshfield, and serves the Twinfield School, Goddard College, the East Montpelier WEC Lot, and the Montpelier Department of Labor only by request. The second two inbound trips start in St. Johnsbury and also serve the Twinfield School, Goddard College, the East Montpelier WEC Lot by request. These two trips do not stop at the Department of Labor.
- **AM Outbound:** The first trip starts at the Department of Labor Park and Ride Lot, while the second trip starts at National Life. Otherwise, both trips operate in the same manner and serve Goddard College, Twinfield School, and the St. Johnsbury Park and Ride lot only by request.
- **Midday:** Service starts at National Life and operates outbound to Marshfield, serving the East Montpelier WEC Lot, Goddard College and Twinfield School by request. It then returns to Montpelier, serving Twinfield School, Goddard College, and National Life by request.
- **PM Inbound:** Both trips start at the St. Johnsbury Welcome Center and serve the St. Johnsbury Park and Ride Lot, Twinfield School, and Goddard College by request. The first trip operates to National Life. The second terminates at State Street, but will continue on to the Department of Labor by request.
- **PM Outbound:** Both trips operate in the same manner, beginning service at National Life, skipping the Department of Labor, serving Goddard College and Twinfield School by request, and ending service at the St. Johnsbury Welcome Center.

As described above, service is operated through a partnership between GMT and RCT. GMT provides service on seven of the route's 11 one-way trips: the first outbound trip and the first and third inbound trips in the AM, the midday round trip, the first PM outbound trip, and the last inbound trip.

## RIDERSHIP

Ridership on the seven trips that GMT operates averages 31 passengers per weekday, and 4.4 per trip.

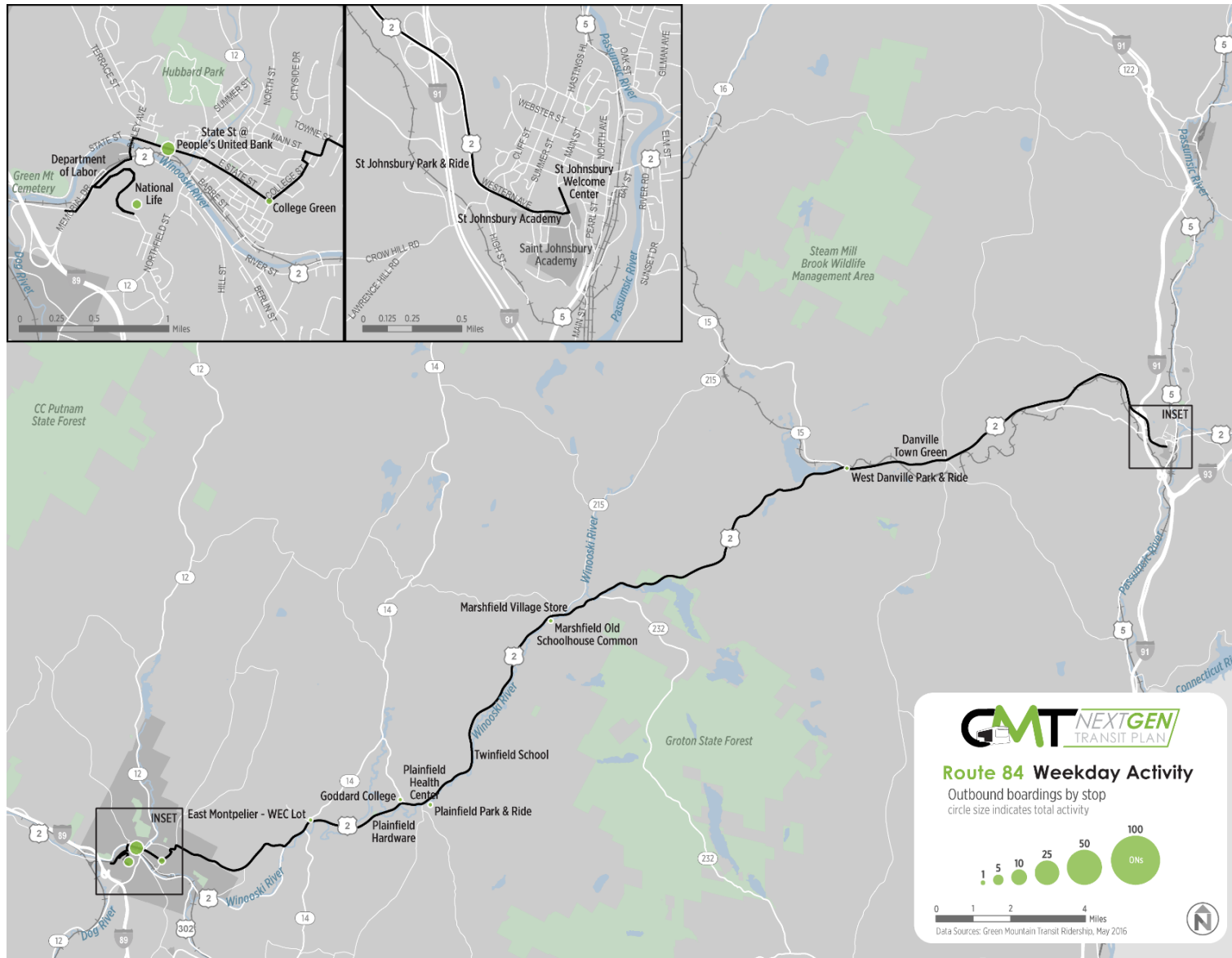
### Ridership by Stop

Ridership is low at all stops. On inbound trips, the highest number of boardings is four at the Plainfield Park and Ride Lot, followed by three at the St. Johnsbury Welcome Center, and two at the Marshfield Old Schoolhouse Common (see Figure 2). A few other stops have one boarding, but most have none, and notably, none of the request stops have any ridership.

Outbound, there are eight boardings at State Street at People's United Bank, four at National Life, and two at College Green (see Figure 3). A few other stops have one rider, but most have none. Of the request stops, Goddard College has a single daily boarding, but the other request stops have none.



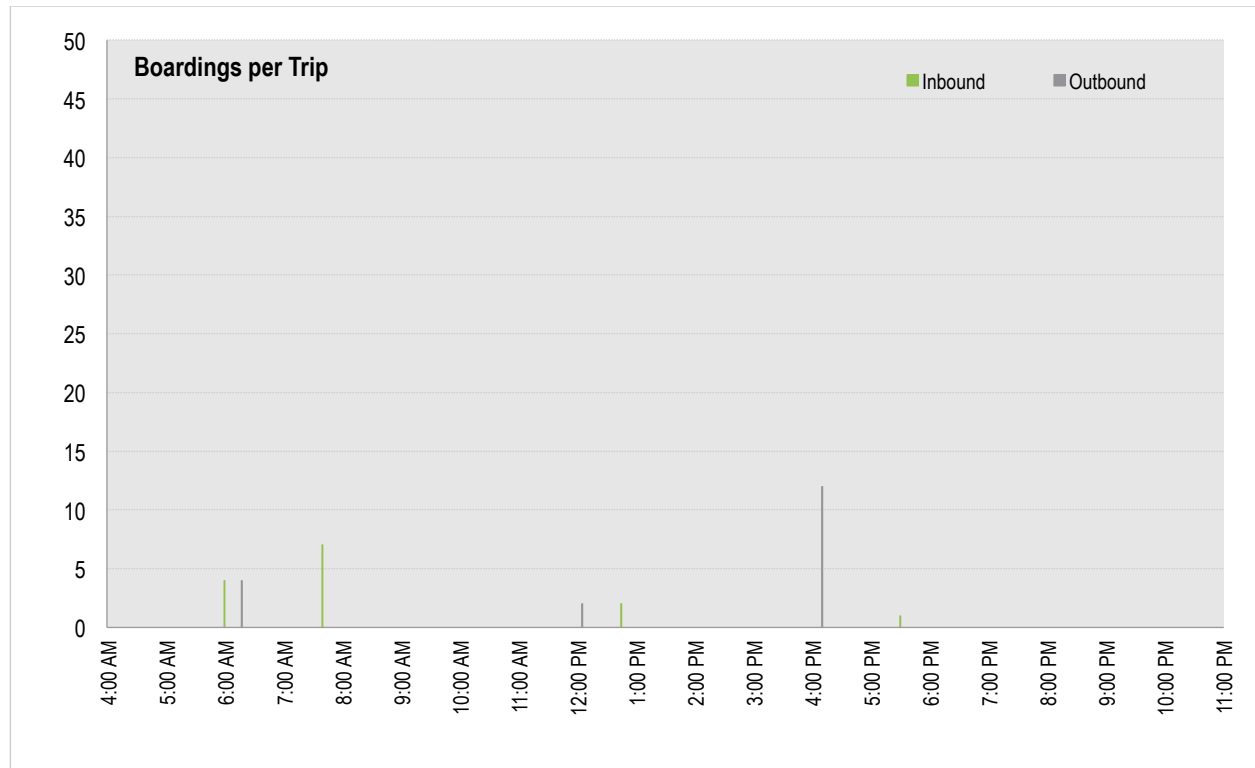
**Figure 3: Weekday Outbound Ridership by Stop**



## Ridership by Trip

Ridership per trip is also low on most trips (see Figure 4). On GMT operated trips, the highest ridership is on the 4:10 PM outbound trip, which serves 12 passengers, and the 7:40 AM inbound trip which serves seven passengers. The other trips carry one to four passengers.

**Figure 4: Weekday Ridership by Trip**



## SERVICE PRODUCTIVITY

GMT's Route 84 trips carry 31 passengers per day, 4.5 passengers per revenue service hour, and \$18.87 per passenger (see Table 2). This is below VTrans' threshold of 5.93 passengers per revenue service hour, and slightly above the cost per passenger threshold of \$18.06.

## SERVICE IMPROVEMENT OPTIONS

Route 84 is a long route that carries relatively few riders. This is because few people commute between Saint Johnsbury and Montpelier (only eight people per day). In addition, the other communities that are served are small, and as a result, also have low work trip travel flows to Montpelier.

Potential change to Route 84 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Shorten Route to Operate Between Marshfield and Montpelier:** As few as three people per day ride to and from Saint Johnsbury, and the route could be shorted to operate

between Marshfield and Montpelier to improve productivity and cost-effectiveness and to provide resources to provide service where there is greater demand.

**Table 2: Productivity Statistics**

|                                 | MONDAY-FRIDAY  | SATURDAY | SUNDAY  |
|---------------------------------|----------------|----------|---------|
| <b>Average Daily Ridership</b>  | <b>31</b>      | —        | —       |
| <b>Pax/Revenue Service Hour</b> | <b>4.5</b>     | —        | —       |
| VTrans Productivity Threshold   | 5.93           | 5.93     | 5.93    |
| <b>Pax/One-Way Trip</b>         | <b>2.8</b>     | —        | —       |
| Commuter Average                | 7.3            | —        | —       |
| <b>Pax/Revenue Mile</b>         | <b>0.2</b>     | —        | —       |
| Commuter Average                | 0.4            | —        | —       |
| <b>Cost/Passenger</b>           | <b>\$18.87</b> | —        | —       |
| VTrans Effectiveness Threshold  | \$18.06        | \$18.06  | \$18.06 |

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

- **Discontinue Midday Service:** The two midday trips only carry two passengers each. These trips could be discontinued, also to improve productivity and cost-effectiveness and to provide resources to provide service where there is greater demand.
- **Discontinue Service to Request Stops:** These stops introduce complexity into the route and are used by only one passenger per day. The discontinuation of service to these off-route stops would simplify service.
- **Serve the Montpelier Shaw's Stop:** Nearly all GMT routes serving Montpelier stop at this central hub, and which is one of the highest ridership stops on those routes. Serving this stop would also increase opportunities for riders to connect to and from Route 84 and other GMT routes.
- **Adjust Schedules to Better Serve Work Trips:** Route 84's schedule generally serves Montpelier work schedules, but it may be possible to refine the schedule to provide better matches.