

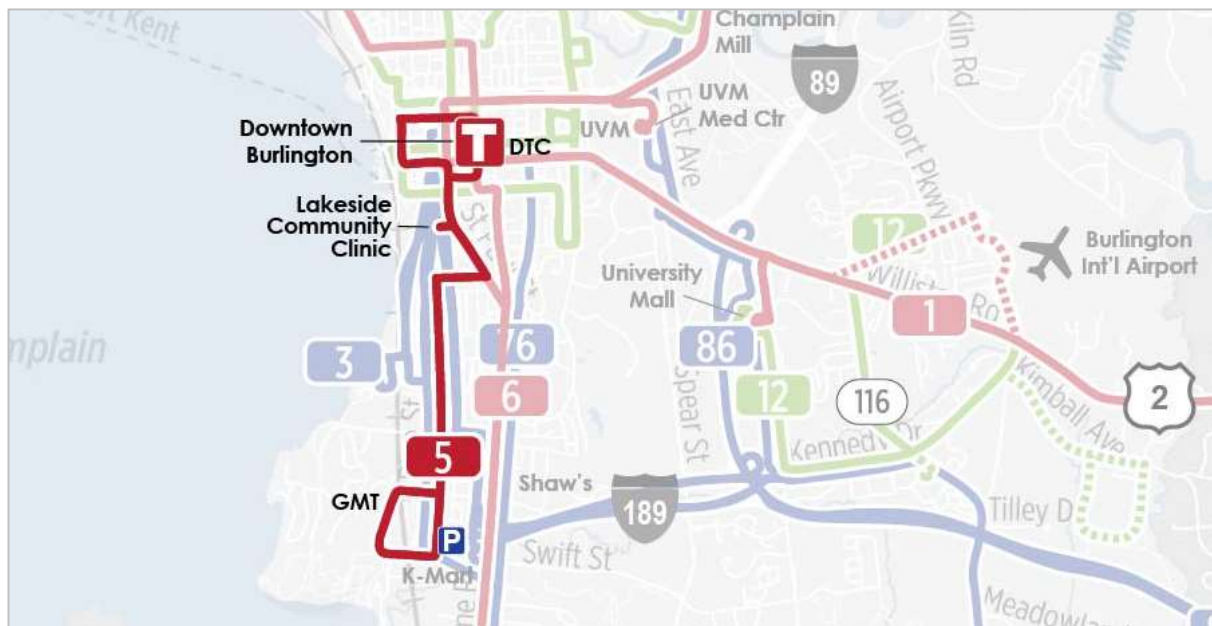
ROUTE 5

Pine Street

ROUTE OVERVIEW

Route 5 is an Urban Local route that operates between the Downtown Transit Center (DTC) and the Baird Center/Park-and-Ride (see Figure 1). The route travels primarily along Pine Street and provides service to Burlington's South End, the Champlain School, the Howard Center, GMT Administrative Offices, and the Baird Center/Park-and-Ride, as well as Lakeside Community Clinic on Saturdays. Customers can transfer between Route 5 and other services at Downtown Transit Center (DTC).

Figure 1: Route Map



On weekdays, Route 5 operates from 6:15 AM to 12:15 AM, every 15 to 30 minutes during peak periods, every 30 minutes during the midday, and every 15 to 95 minutes during the evening (see Table 1). On Saturdays, service operates from 6:15 AM to 12:15 AM, every 30 minutes during the day and every 30 to 80 minutes at night. No Sunday service is provided

Table 1: Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (MIN)	DAILY TRIPS (OUTBOUND/INBOUND)
Monday-Friday	6:15 AM to 12:15 AM	15-30/30/15-95	38/31
Saturday	6:15 AM to 12:15 AM	30/30-80	31/25
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 5 operates with single inbound and outbound patterns weekdays, plus an additional outbound pattern on Saturdays (see Table 2). The primary pattern (5-15 outbound and 5-13 inbound) operates between the DTC to the Green Mountain Transit primarily along Pine Street, but with terminal loops at the two ends, and a jog to Saint Paul Street entering and existing downtown (with the jog being longer on inbound trips than on outbound trips).

On Saturdays, the 5-16 outbound variant serves the Burlington Lakeside Community Clinic. Scheduled service is provided every two hours from 8:22 AM to 4:22 PM and request service on selected trips before and after that time. Inbound riders must walk to regular stops on Pine Street.

Table 2: Service Variants

				TRIPS PER DAY		
VARIANT	ORIGIN	DESTINATION	UNIQUE FEATURE	WKD	SAT	SUN
OUTBOUND				39	28	—
5-15	DTC	GMT Administrative Offices	Primary alignment	39	18	—
5-16	DTC	GMT Administrative Offices	Saturday service via Lakeside Community Clinic	0	11	—
INBOUND				34	25	—
5-13	DTC	GMT Administrative Offices	Primary alignment	34	25	—

RIDERSHIP

Route 5 carries 450 passengers per weekday and 182 on Saturdays. By weekday ridership, it ranks 3rd out of GMT's seven Urban Local routes.

Ridership by Stop

Weekdays

As with most Burlington routes, most ridership is to and from the DTC, which is Route 5's highest ridership stop with over 250 boardings and alightings (see Figure 2). The second highest stop is the GMT offices at the outer end of the route, with 80 boardings and alightings.

Other areas with strong weekday ridership activity include:

- Pine Street opposite the Howard Center
- Pine Street at Locust Street
- 230 Paul Street
- South Winooski Avenue at Bank Street, which mainly serve the Howard Center professional and counseling service
- Callahan Park
- Decker Towers apartments
- Retail and restaurant areas in downtown Burlington).

The inbound jog along Howard Street and Saint Paul Street serves an average of 22 passengers, with the largest activity at 32 Saint Paul Street, which is just before Pearl Street and serves an

Figure 2: Weekday Inbound Ridership by Stop

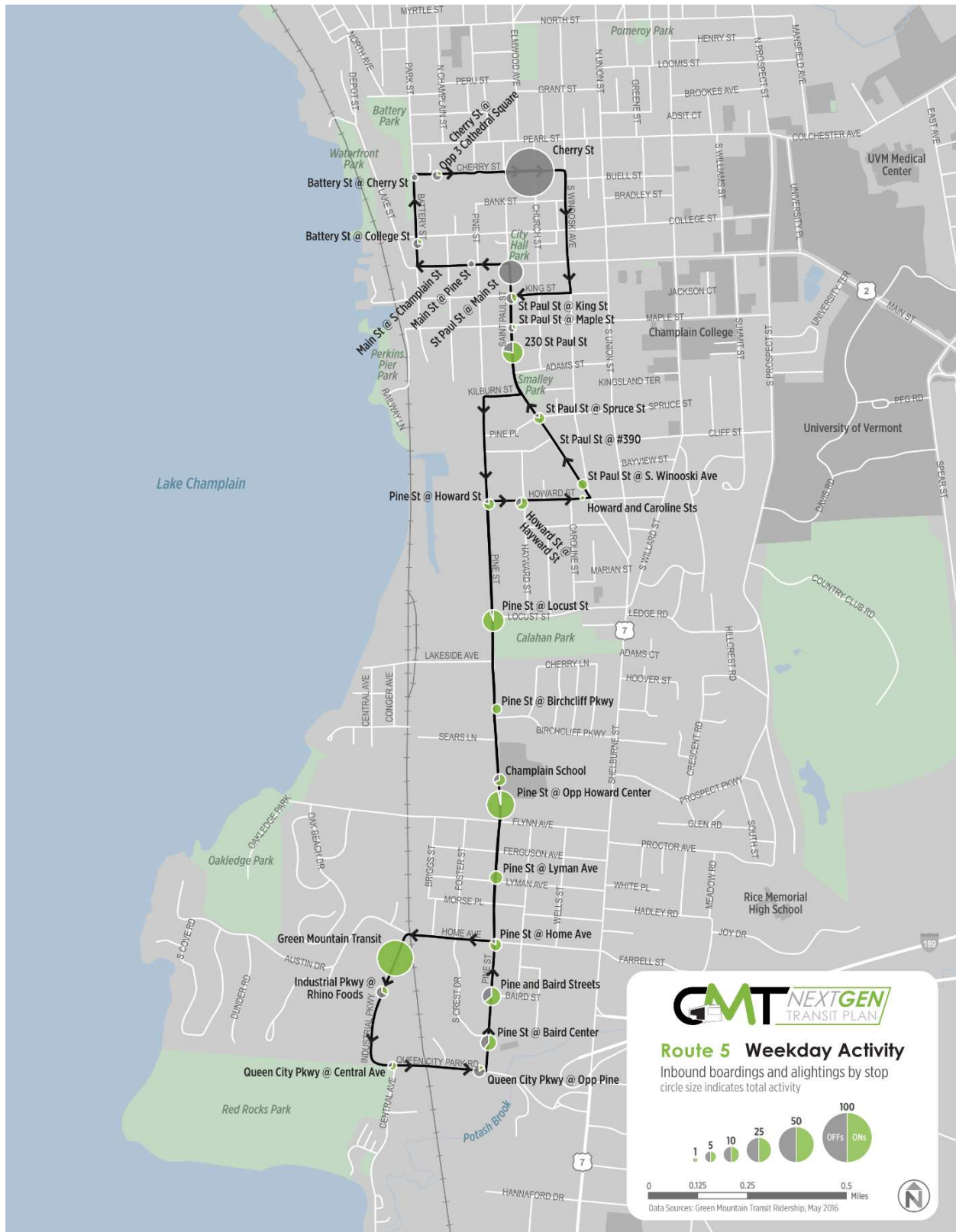
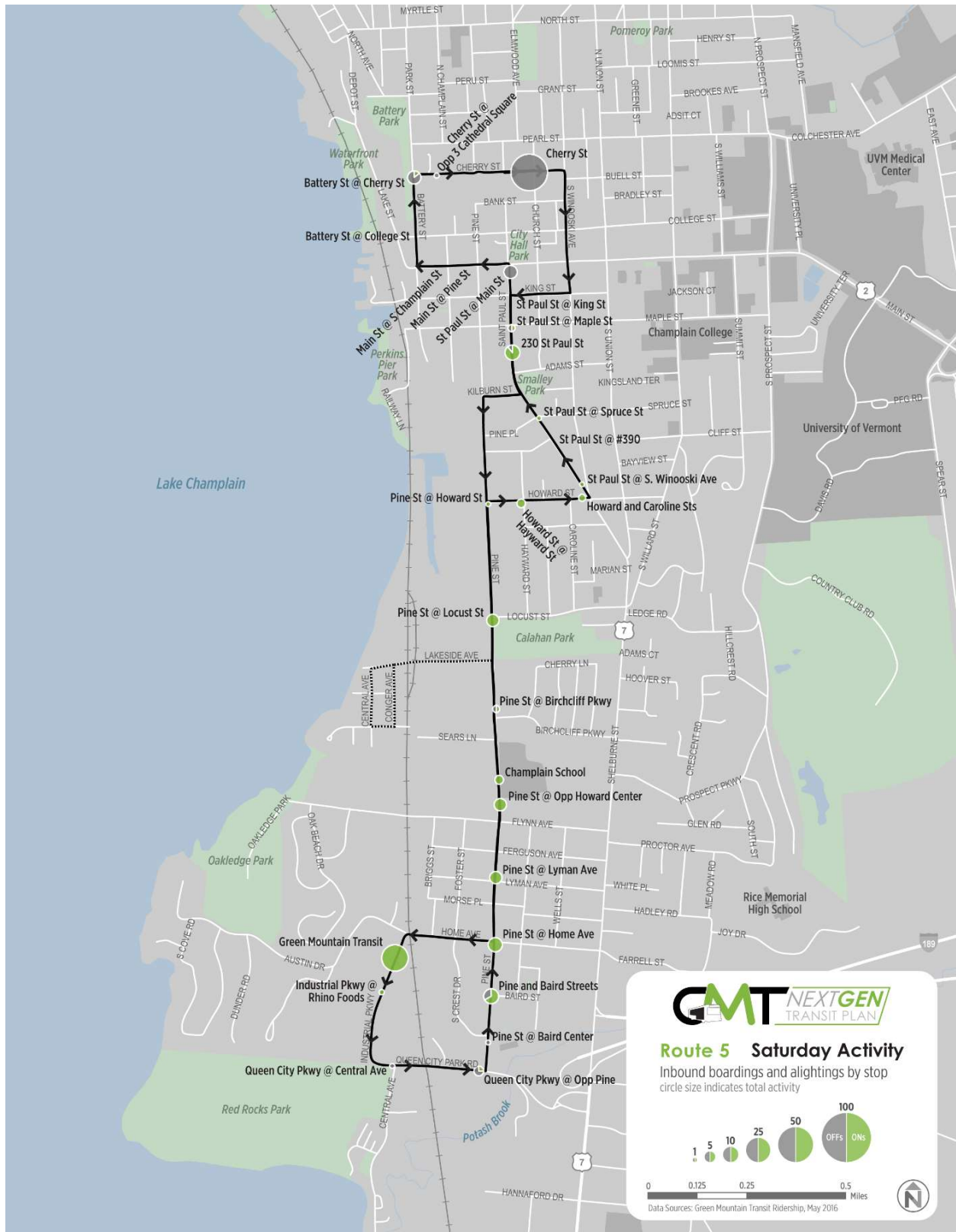


Figure 1: Saturday Inbound Ridership by Stop



average of nine passengers. Although not shown in Figure 2, ridership along the corresponding outbound segment, which only operates on Saint Paul Street within downtown, serves an average of 27 passengers. This indicates that the longer jog does not attract additional riders.

Saturdays

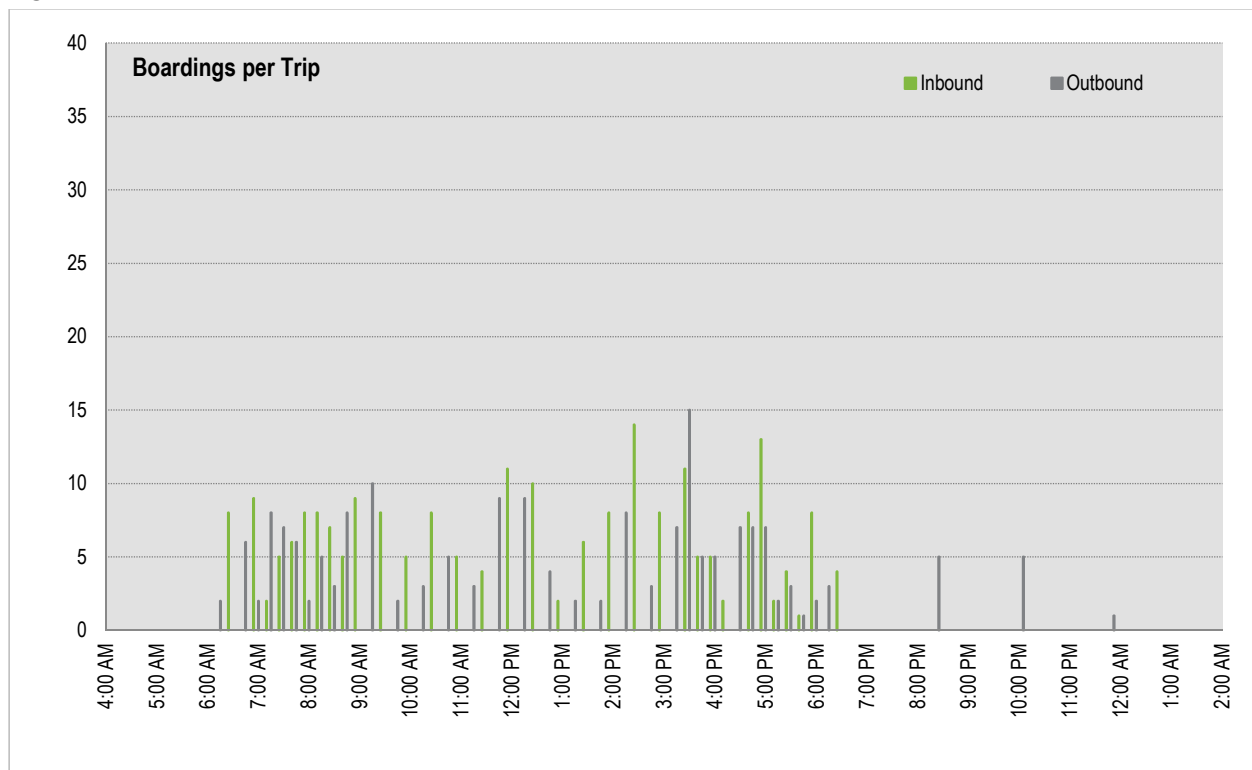
Saturday ridership patterns are similar to weekday patterns, but with significantly lower volumes (as shown in Figure 3, above). Only a total of five passengers use the Route 5-16 variant service to and from the Lakeside Community Clinic.

Ridership by Trip

Weekdays

On weekdays, Route 5 ridership is highest during peak periods, when most trips carry 5 to 10 passengers and some carry up to 15 passengers (see Figure 4). Ridership during the evening, when service is very infrequent, is very low at five passengers or less.

Figure 4: Weekday Ridership by Trip



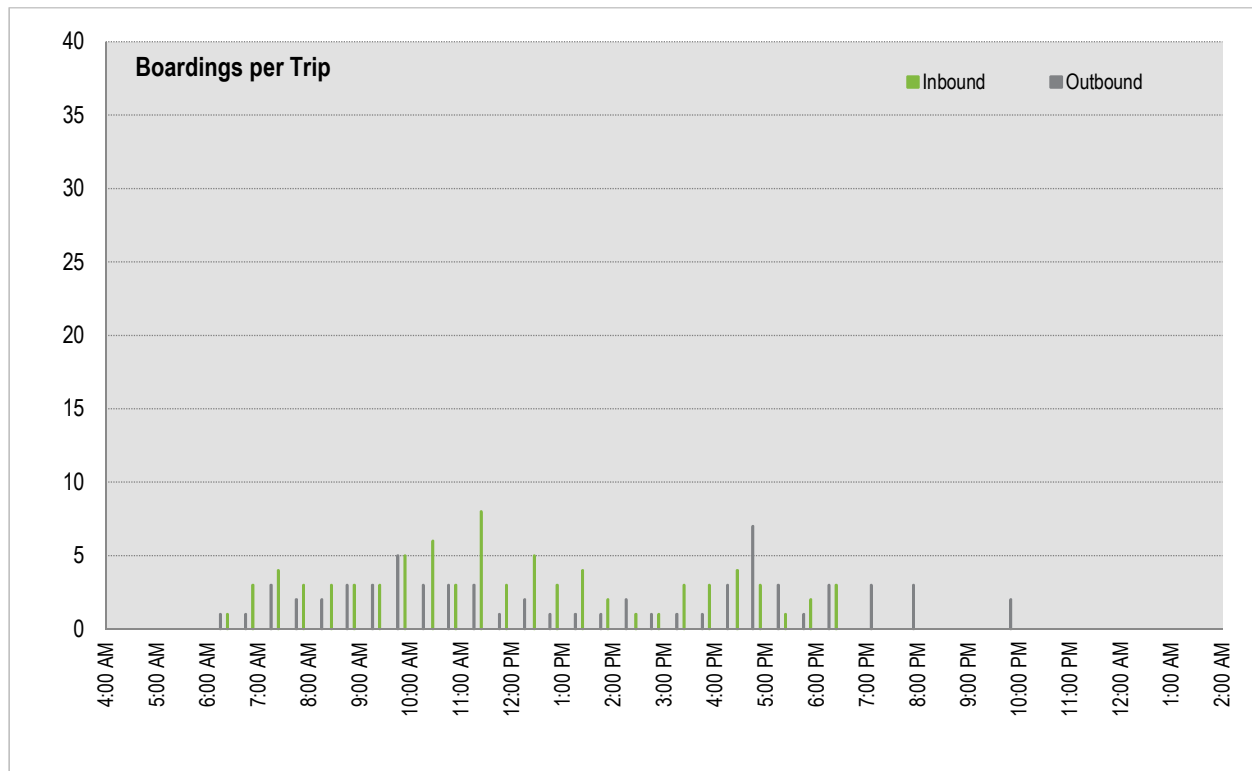
Due to ridership turnover along Route 5, maximum loads are significantly lower than total ridership per trip, at fewer than 10 passengers per trip. The highest maximum load on any single trip is 14.

Saturdays

On Saturdays, Route 5 ridership is highest inbound in the morning and outbound later in the afternoon (see Figure 5). Most Saturday trips carry fewer than 10 passengers, which is approximately half of weekday ridership levels.

Maximum loads are well below seated capacity on all trips during Saturday.

Figure 5: Saturday Ridership by Trip



SERVICE PRODUCTIVITY

Route 5 ranks third of the seven Urban Local routes in terms of weekday ridership and second in terms of ridership per revenue hour (see Table 3). On weekdays, the route carries an average of 450 passengers, or 29.9 passengers per revenue hour. On Saturdays, Route 5 carries 182 passengers, or 17.3 passengers per revenue hour.

Route 5 meets VTrans performance thresholds for weekdays but not for Saturdays. This is largely because Saturday service is similar to weekday service but ridership is much lower.

SERVICE IMPROVEMENT OPTIONS

Opportunities to strengthen Route 5 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Provide Service that is More Direct:** Close to downtown, inbound service deviates from Pine Street to travel to downtown via Howard Street and Saint Paul Street. While outbound service joins Pine Street farther north at Kilburn Street. Route 5 also loops

Table 3: Productivity Statistics

	MONDAY-FRIDAY	SATURDAY	SUNDAY
Average Daily Ridership	450	182	—
Pax/Revenue Service Hour	29.9	17.3	—
Urban Local Average	21.9	13.8	14.4
Pax/One-Way Trip	6.4	3.3	—
Urban Local Average	6.9	4.0	12.9
Pax/Revenue Mile	1.8	1.0	—
VTrans Productivity Threshold	1.95	1.95	1.95
Cost/Passenger	\$3.22	\$5.46	—
VTrans Effectiveness Threshold	\$4.37	\$4.37	\$4.37

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

around downtown to directly serve areas that are in easy walking distance of the DTC. Service could be simplified and made faster by routing Route 5 along the same downtown alignment used by LINK and commuter routes that serve Pine Street.

- **Operate Weekday Daytime Service Every 30 Minutes:** A few weekday AM and PM peak trips are spaced 15 minutes apart, which provides more frequent service than is warranted by demand. The operation of service every 30 minutes throughout the day could provide resources to improve evening service or improve service elsewhere.
- **Improve Weekday Evening Service:** Weekday evening service operates every 80 minutes, which is far too infrequent for most potential riders. It is also a likely reason why evening ridership is so low. To provide a basic level of convenience, service could be improved to every 60 minutes.
- **Operate Saturday Service Every 60 Minutes:** Route 5 ridership is low on Saturdays. However, a similar level of service is provided as on weekdays, and as a result, most trips carry fewer than five passengers. A reduction in service frequencies to every 60 minutes could provide resources to add Saturday service on other routes.
- **Improve Weekday Evening Service:** Saturday evening service operates every 95 minutes, which in the same manner as weekday service, is far too infrequent for most potential riders. To provide a basic level of convenience, service could be improved to every 60 minutes.
- **Discontinue Service to Lakeside Community Clinic:** The Saturday Lakeside deviation serves only five passengers per day and degrades service for other passengers by adding four minutes to travel times and producing out of sequence service between there and downtown (every 27 to 33 minutes, rather than an even every 30 minutes). It also only operates outbound and passengers could walk to Pine Street in the same manner that they do for inbound service.