

ROUTE 18

Sunday Service

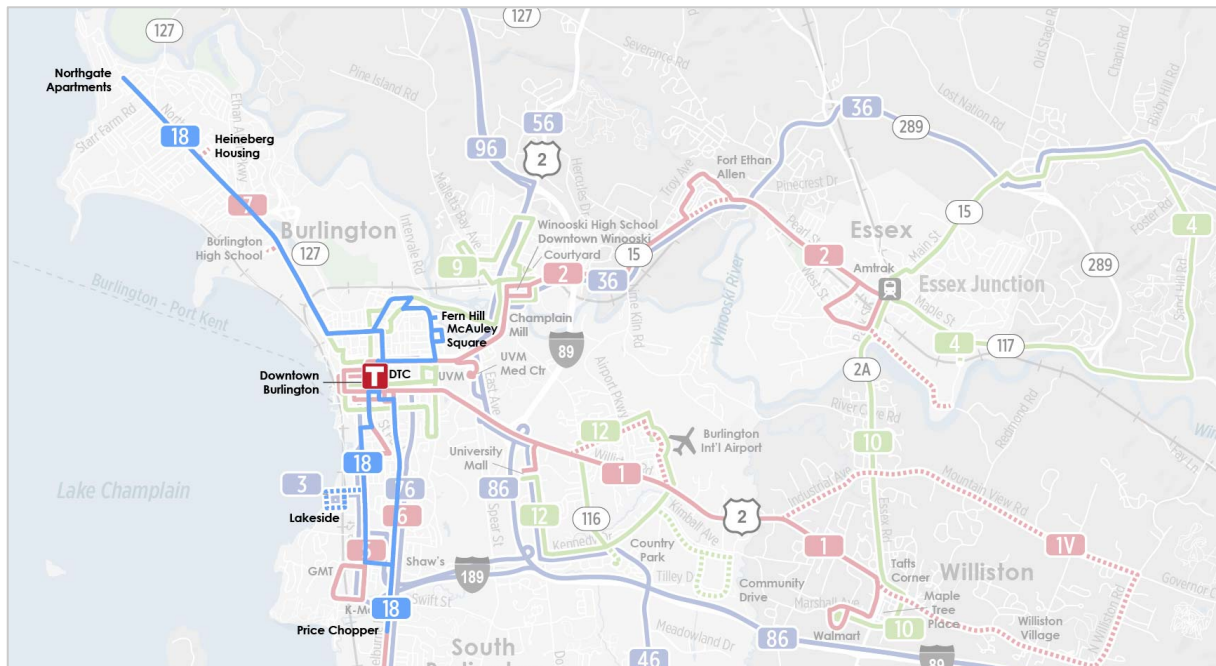
ROUTE OVERVIEW

Route 18 is an Urban Local route that provides Sunday only service to areas north and south of downtown Burlington. The route travels primarily along North Avenue, Shelburne Road, Pine Street, Pearl Street, Riverside Avenue, and through downtown Burlington (see Figure 1). In effect, it is designed to provide Sunday service in lieu of:

- Route 5 Pine Street
- Route 6 Shelburne Road
- Route 7 North Avenue
- Route 8 City Loop

Since the route combines so much service, it is long and circuitous, and has over 80 stops. Service south and northeast of downtown operates largely as counter-clockwise loops, with segments of out and back service added on.

Figure 1: Route Map



As described above, Route 18 only operates on Sundays, from 8:25 AM to 5:33 PM. The schedule is very irregular, with headways ranging from 30 minutes to 110 minutes (see Table 1). There is not apparent pattern to the schedule except during the middle of the day when three trips operate 70 minutes apart.

Table 1: Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (MIN)	DAILY TRIPS (INBOUND)
Monday-Friday	—	—/—/—	—
Saturday	—	—/—	—
Sunday	8:25 AM to 5:33 PM	30-110/—	8

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.

In addition to the irregular schedule, Route 18 eight trips operate in four different ways (see Table 2):

- Variant 18-1 provides for first trip of the day, and begins service in Lakeside instead of the DTC. This variant also provides additional circulation and more stops in and around downtown to several churches all deviations to housing complexes.
- Variant 18-3 serves Lakeside but does not provide service into McAuley Square, Fern Hill, Heineberg Housing, or 3 Cathedral Square.
- Variant 18-5 skips Lakeside but serves McAuley Square, Fern Hill, Heineberg Housing, and 3 Cathedral Square.
- Variant 18-4 provides service for the last trip of the day and only serves the southern half of the route.

Table 2: Service Variants

VARIANT	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER DAY		
				WKD	SAT	SUN
INBOUND				—	—	8
18-1	DTC	DTC	First trip; additional circulation through downtown, service to several churches	—	—	1
18-3	DTC	DTC	Skips McAuley Square, Fern Hill, Heineberg Housing, 3 Cathedral Square	—	—	3
18-4	DTC	DTC	Last trip; serves Pine Street/ south of downtown only	—	—	1
18-5	DTC	DTC	Skips Lakeside Community	—	—	3

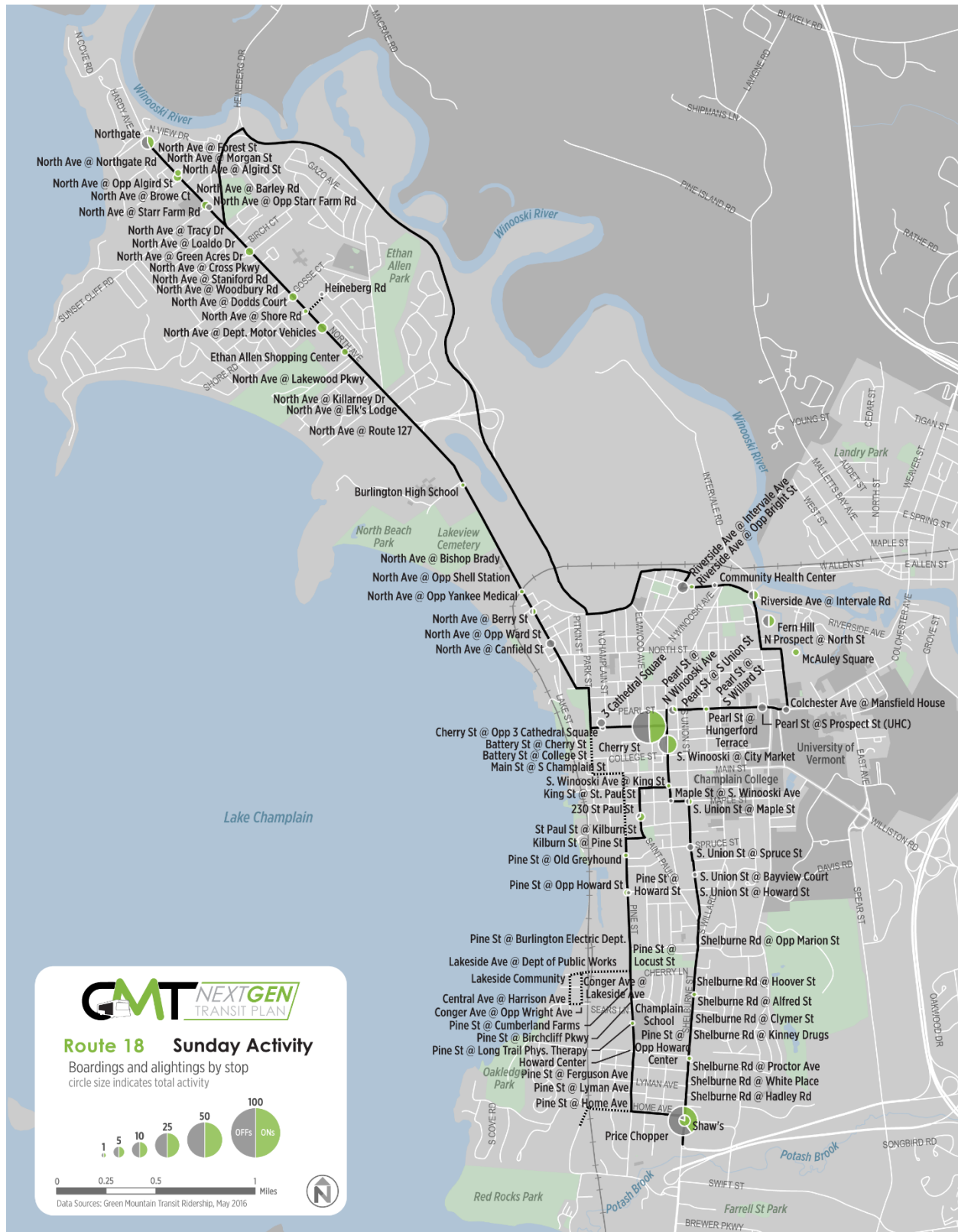
RIDERSHIP

Route 18 carries 115 passengers per day, and is GMT's lowest ridership Sunday route.

Ridership by Stop

As with all Burlington routes, the DTC is Route 18's highest ridership stop, with 45 boardings and alightings (see Figure 2). The second highest ridership locations are the Shaw's and Price Chopper on Shelburne Avenue, which serves a total of 40 boardings and alightings. These are

Figure 2: Sunday Ridership by Stop

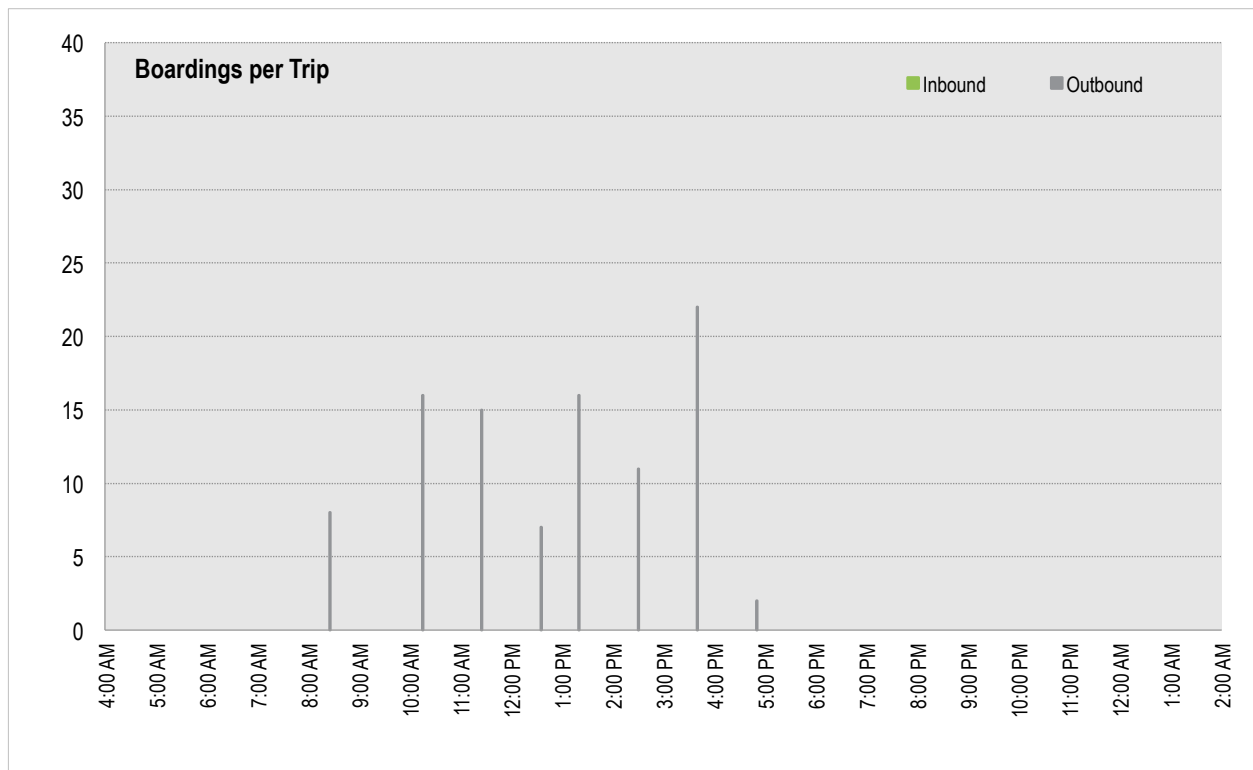


followed by City Market (14 passengers) and Northgate (seven passengers). No other stops on the route have more than five combined boardings and alightings.

Ridership by Trip

Ridership by trip ranges from two to 22 passengers per trip, with the highest ridership on the 3:40 PM trip (see Figure 3). This is the second-to-last trip of the day and the last trip to complete the entire alignment of Route 18. The 4:50 PM trip, which is the last trip and covers only the southern half of the route, serves only two riders. Three other trips carry at least 15 riders (at 10:15 AM, 11:25 AM, and 1:20 PM). The maximum load does not exceed 10 riders for any trip.

Figure 3: Sunday Ridership by Trip Chart



SERVICE PRODUCTIVITY

Route 18 ranks last among the three Urban Local routes that operate on Sunday in terms of daily ridership, and in the middle in terms of ridership per revenue hour (see Table 3). The route carries an average of 12.8 passenger per trip, 14.1 passengers per vehicle revenue hour, and 0.9 passengers per revenue vehicle mile. Route 18 does not meet the VTrans thresholds for productivity and effectiveness.

SERVICE IMPROVEMENT OPTIONS

Route 18 is a complicated route with a complex and circuitous routing, four different routing for only eight total trips, and irregular service frequencies. The route provides Sunday service in lieu of four routes that operate on weekday and Saturdays but not Sundays, and in summary, tries to do too much with too little service.

Table 3: Productivity Statistics

	MONDAY-FRIDAY	SATURDAY	SUNDAY
Average Daily Ridership	—	—	115
Pax/Vehicle Revenue Hour	—	—	14.1
Urban Local Average	21.9	13.8	14.4
Pax/One-Way Trip	—	—	12.8
Urban Local Average	6.9	4.0	12.9
Pax/Vehicle Revenue Mile	—	—	0.9
VTrans Productivity Threshold	1.95	1.95	1.95
Cost/Passenger	—	—	\$5.20
VTrans Effectiveness Threshold	\$4.37	\$4.37	\$4.37

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

Opportunities to strengthen Route 18 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Provide Sunday Service on Routes 5 Pine Street, 6 Shelburne Road, and 7 North Avenue, and Route 8 City Loop Instead of with Route 18.** Three of the four routes (Routes 5, 6, and 7) are Major Urban Local routes that have strong ridership on weekdays and Saturdays, and likely have sufficient demand for Sunday service.
- **Operate Service with Regular Service Frequencies.** Service operates at irregular frequencies throughout most of the day. The operation of service with regular frequencies would make service more convenient.
- **Discontinue the Lakeside Deviation.** Five of eight Route 18 trips operate via Lakeside and serve only two passengers who could walk to Pine Street, which would reduce delays for other passengers.