

# ROUTE 7

## North Avenue

### SERVICE DESIGN

Route 7 is a Major Local route that operates between Downtown Burlington and Northgate Apartments. The route travels primarily along North Avenue (see Figure 1). Route 7 provides service to Burlington High School, Ethan Allen Shopping Center, and multiple housing complexes. Customers can transfer between Route 7 and other services at the Downtown Transfer Center (DTC).

On weekdays, Route 1 operates every 15 minutes during peak periods, every 30 minutes during the midday, and every 60 to 75 minutes during the evening (see Table 2.. On Saturdays, service operates every 60 minutes early and late, and every 30 minutes for most of the day. No Sunday service is provided.

Figure 1: Route Map



Table 2: Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (MIN)	DAILY TRIPS (OUTBOUND/INBOUND)
<b>Weekday</b>	5:35 a.m. to 10:15 p.m.	30/30/60-75	34/34
<b>Saturday</b>	6:15 a.m. to 7:55 p.m.	30-60/30-60	23/23
<b>Sunday</b>	—	—	—/—

*Note: Frequencies shown are lowest frequencies during Peak/Midday/Evening service times for weekdays. 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 7 operates with three variants for weekday and Saturday service (see Table 2). The primary alignment (7-12 outbound and 7-10 inbound) runs from the DTC to the Northgate Apartments. Variant 7-13 operates outbound via the Heineberg Senior Housing complex.

Table 2: Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER DAY		
				WKD	SAT	SUN

<b>OUTBOUND</b>				<b>34</b>	<b>23</b>	<b>—</b>
7-12	DTC	Northgate		18	8	—
7-13	DTC	Northgate	Via Heineberg	16	15	—
<b>INBOUND</b>				<b>34</b>	<b>23</b>	<b>—</b>
7-10	Northgate	DTC		34	23	—

## RIDERSHIP BY STOP

The Downtown Transfer Center has the most passenger activity on Route 7. Other high activity stops on Route 7 are located at Northgate Apartments, Burlington High School, and the Ethan Allen Shopping Center. The two paired stops at Burlington High School have just over 80 boardings per weekday, while the Ethan Allen Shopping Center has just under 70 boardings. Most other stops have about 10-30 boardings per day. These other stops serve mostly residential areas in both the Old North End and the New North End. As expected, there is little ridership in the low density section of North Avenue between Berry Street and Killarney Drive (see Figure 2). Passenger loads indicate passengers are boarding the bus in the outbound direction and riding through the layover to complete a trip in the inbound direction.

Weekend ridership patterns are similar to weekday patterns, but with significantly lower volumes (see Figure 3). After the Downtown Transfer Center, the Ethan Allen Shopping Center is the second highest ridership stop on Saturdays with 46 boardings on an average Saturday. Ridership on Route 7 is much lower partially due to the lack of ridership to the high school on Saturdays.

## RIDERSHIP BY TRIP

On weekdays, Route 7 ridership is highest during typical commuting peaks in the morning and evening (see Figure 6 and Figure 7). During these periods, boardings are typically between 25 and 35 boardings per trip. However, four trips have more than 40 boardings per trip with the highest ridership trip having 55 passengers at 8:15 AM in the outbound direction. This is also the only trip on the schedule that pulls into Burlington High School on request, meaning that high ridership is mostly trips to Burlington High School. This trip also has the highest maximum load of any trip with 44 passengers on the bus at one point. This trip and the 7:33 AM inbound trip (max load of 39) most likely exceed the total seating capacity of the bus. Additionally, maximum loads are fairly high compared to boardings on some trips, indicating that many people are getting on the bus to ride all the way to the Downtown Transfer Center.

On Saturdays, Route 7 ridership is highest during the mid-morning for inbound trips and in the evening for outbound trips (see Figure 8 and Figure 9). The sustained ridership throughout the day is typical for shopping trips or for workers with service jobs or irregular hours. Additionally, ridership in the outbound direction is still relatively high for the last trip on Saturday, possibly indicating demand for later service on Saturday.

Maximum loads are well below seated capacity on all trips (see Figure 7 and Figure 9).

### Figure 2: Weekday Inbound Ridership by Stop Map