

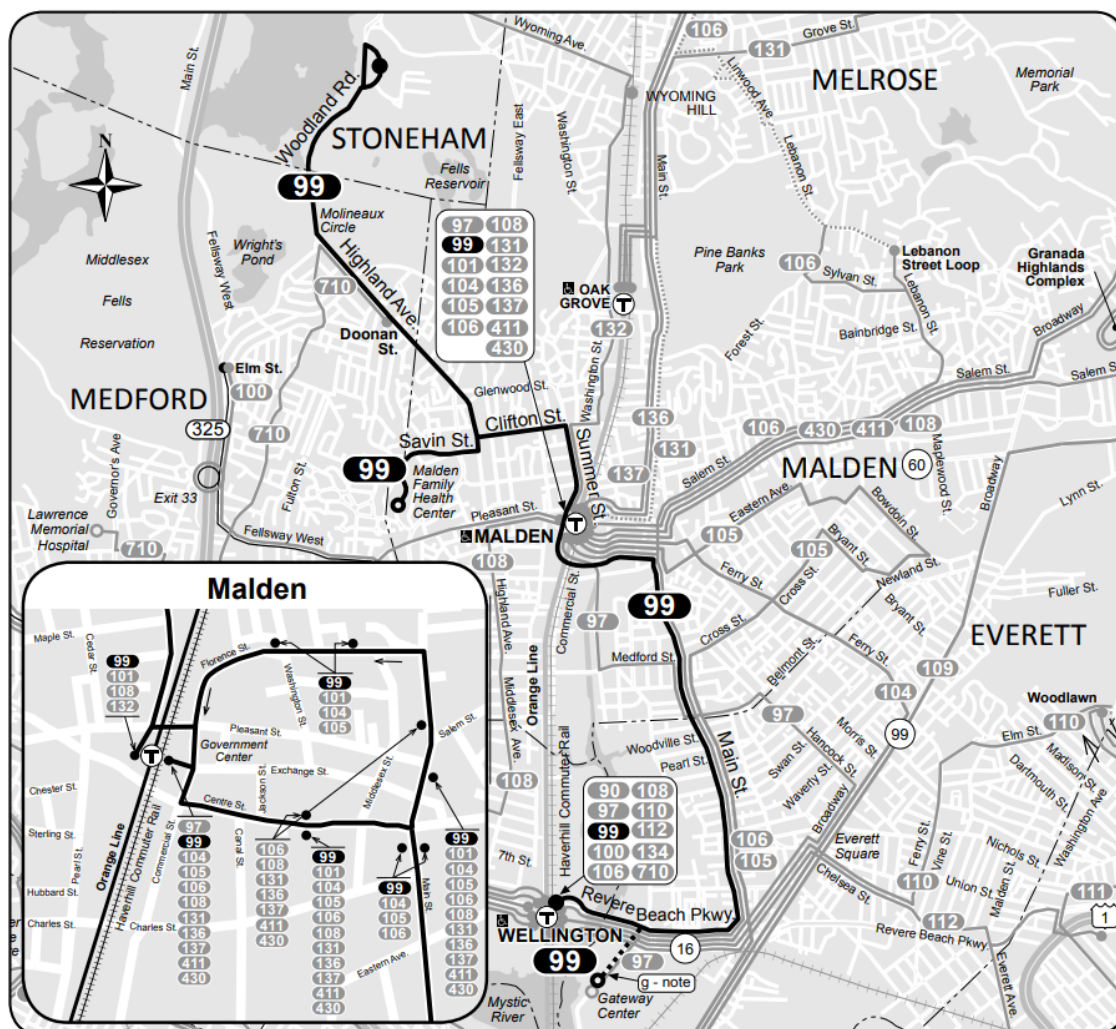
Route 99

Woodland Road – Wellington Station

Route Overview

Route 99 Woodland Road – Wellington Station is a local route that operates between the site of the former Boston Regional Medical Center on Woodland Road in Stoneham and Wellington Station (see Figure 1). The northern half of the route was extended to Boston Regional Medical Center in 1994 to provide turnaround space for the bus and serve the medical center. In 1999, the medical center closed, but service continued for operational reasons. The southern half overlaps Route 106 Lebanon Street, Malden-Wellington Station.

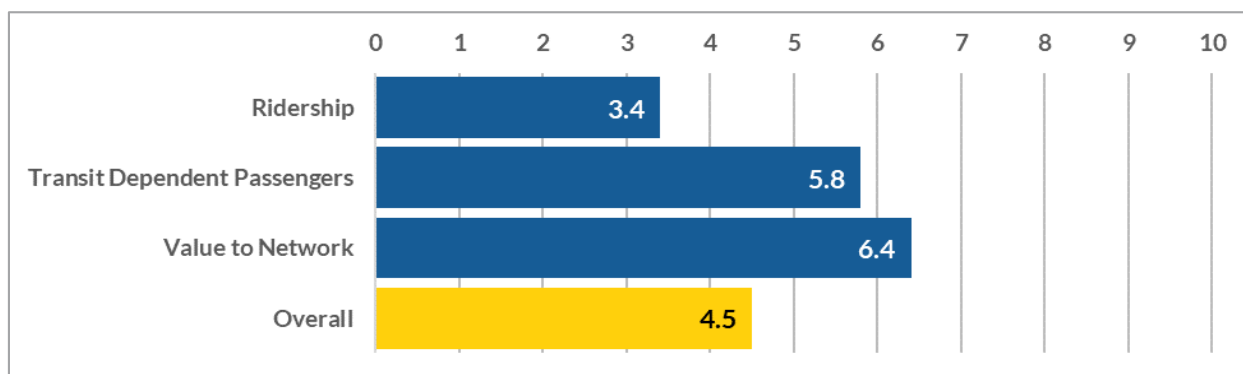
Figure 1 | Service Map



Network Importance

Route 99 has moderately low importance within the overall MBTA bus network (see Figure 2). On a relative scale of 0 to 10, the route rates 3.4 in terms of ridership, 5.8 in terms of transit dependent ridership, and 6.4 in terms of its value to the network (which reflects the number of people who are uniquely served, the number of jobs and other important destinations, and the number of transferring passengers). Its overall score, which gives a 70% weighting to overall ridership and a 15% weight to both other measures, is 4.5.

Figure 2 | Relative Importance within MBTA Bus Network (on a scale of 0 to 10)



Service Patterns

Schedule

On weekdays, Route 99 generally provides moderately frequent service during the morning and evening peak periods, and infrequent service during all other periods (see Table 1). On weekends, it provides infrequent service.

In more detail, on weekdays, Route 99 operates on weekdays from 6:00 AM to 1:00 AM:

- Every 20 minutes from the beginning of service at 6:00 AM and 10:00 AM.
- Every 40 and 45 minutes from 10:00 AM until 3:00 PM.
- Every 25 to 30 minutes from 3:00 PM until 6:05 PM, but mostly every 25 minutes.
- Every 15 to 20 minutes from 6:05 PM until 6:40 PM.
- Every 50 to 60 minutes until the end of service, but mostly hourly.

On Saturdays, Route 99 operates from 6:30 AM to 1:00 AM. It operates every 60 to 65 minutes until 10:40 AM, every 50 minutes until 6:00 PM, followed by two trips 40 minutes apart, one trip 50 minutes later, and then hourly service from 8:30 PM until 12:30 AM.

On Sundays, the route provides hourly service from 8:30 AM to 1:00 AM.

Table 1 | Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	6:00 AM to 1:00 AM			32/31
Sunrise	-	-	-	-
Early AM	6:00 AM to 6:59 AM	20	20	3/2
AM Peak	7:00 AM to 8:59 AM	20 – 40	28	5/4
Midday Base	9:00 AM to 1:29 PM	40 – 45	43	6/6
Midday School	1:30 PM to 3:59 PM	20 – 45	32	5/5
PM Peak	4:00 PM to 6:29 PM	15 – 30	24	6/6
Evening	6:30 PM to 9:59 PM	20 – 60	58	4/4
Late Evening	10:00 PM to 11:59 PM	60	60	2/2
Night	12:00 AM to 1:00 AM	60	-	1/2
Saturday	6:30 AM to 1:00 AM	40 – 70	51	31/31
Sunday	8:30 AM to 1:00 AM	60	60	17/17

Note: Span of service reflects the time the first bus begins service until the time the last bus finishes service.

Route 99 meets the minimum span of service and frequency standards on all days except on Saturdays, when a few trips are spaced more than 60 minutes apart (which is the minimum standard).

Service Patterns

Pattern 99.7 makes up most weekday trips, 10 Saturday trips, and all Sunday service, operating the full length of the route as shown in Figure 1.

Pattern 99.1 is a single weekday inbound trip at 7:40 AM that is a short-turn that only operates to Malden Center Commuter Rail Station.

Pattern 99.8 makes up most service on Saturdays, operating in and out of the Gateway Center off of Revere Beach Parkway, where there is a Target. This includes all inbound service between 10:40 AM and 11:30 PM and all outbound service between 7:00 AM and 8:00 PM.

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
INBOUND				32	31	17
99.1	Site of former Boston Regional Medical Center	Malden Center Station	AM short-turn	1	-	-
99.7	Site of former Boston Regional Medical Center	Wellington Station	Regular route; bypasses Gateway Center	31	5	17
99.8	Site of former Boston Regional Medical Center	Wellington Station	Via Gateway Center	-	16	-
OUTBOUND				31	31	17
99.7	Wellington Station	Site of former Boston Regional Medical Center	Regular route; bypasses Gateway Center	31	5	17
99.8	Wellington Station	Site of former Boston Regional Medical Center	Via Gateway Center	-	16	-

Ridership

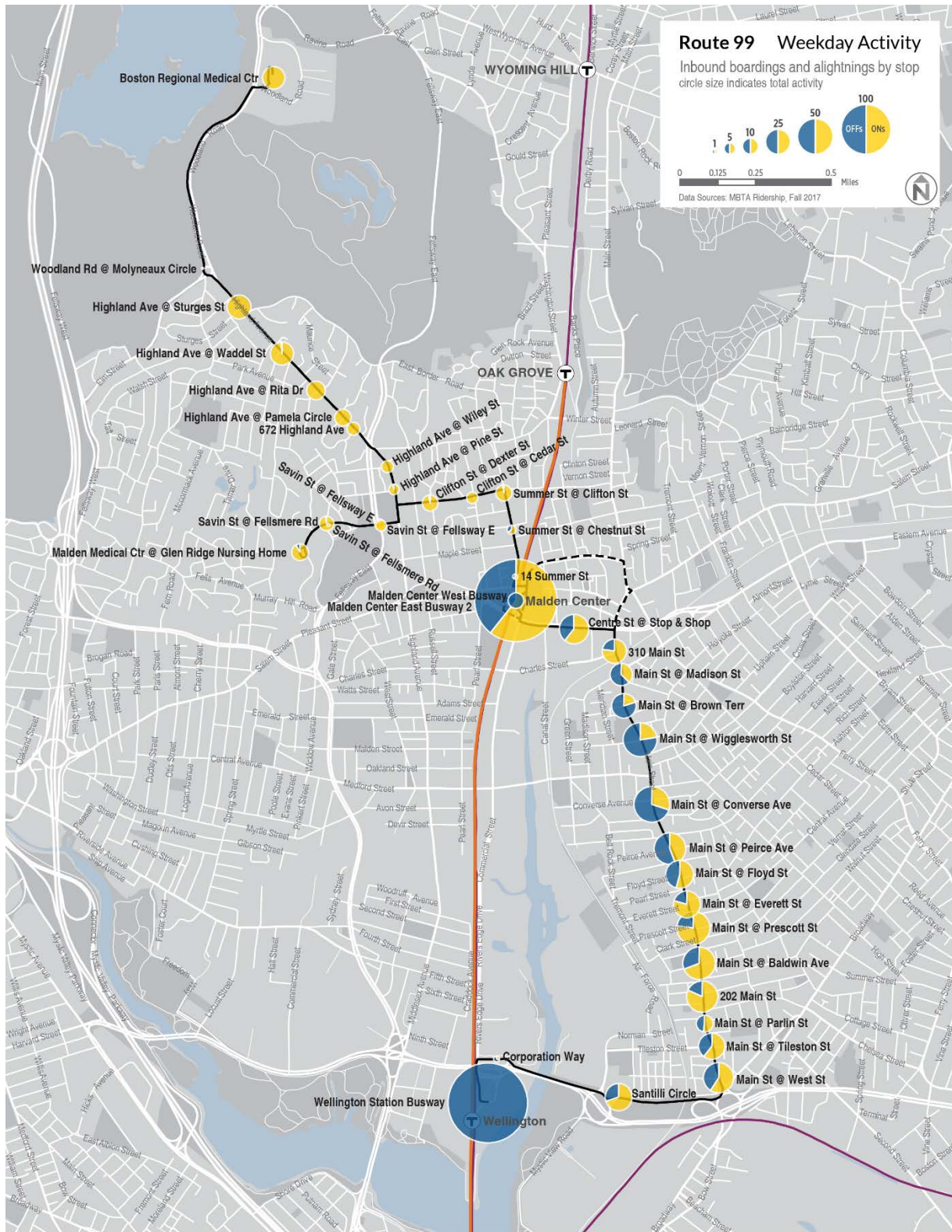
Route 99 serves 1,480 riders per weekday, 820 per Saturday, and 520 per Sunday.

Ridership by Stop

Route 99's ridership is low north of Malden Center Station and relatively good south of Malden Center Station. On weekday inbound trips (see Figure 3):

- 20 passengers board at the site of the former Boston Regional Medical Center, where there has been some redevelopment.
- 150 passengers board and five alight 18 stops between the former site of the Boston Regional Medical Center and Malden Center Station. Twenty of these boardings and one alighting are on the out and back deviation along Savin Street to the Malden Family Health Center.
- 170 passengers board and 110 alight at Malden Center Station. The 110 alighting passengers represent nearly two-thirds of all of the passengers who board north of Malden Center Station.

Figure 3 | Weekday Inbound Ridership by Stop Map



- 310 passengers board and 250 alight between Malden Center Station and Wellington Station. All of these passengers are also served by Route 106 Lebanon Street, Malden – Wellington Station.
- 270 passengers alight at Wellington Station.

In total, 170 passengers board and 117 alight on the half of the route between Boston Regional Medical Center and Malden Center. Nearly three times as many (486 passengers), board and 518 passengers alight on the southern half of the route between Malden Center and Wellington Station. This indicates that a third of the passengers boarding on the northern half of the route ride through to the southern half.

Outbound patterns are similar, but with slightly higher ridership. With one exception, weekend ridership patterns are also similar, but with lower volumes. The exception is on Saturdays, when most trips serve Gateway Center and 60 to 70 passengers travel to that location.

Ridership by Trip

On weekdays, Route 99 averages 24 boardings per trip, with higher inbound ridership between 6:20 AM and 7:00 AM and higher outbound ridership between 4:05 PM and 6:10 PM. On inbound trips, ridership is highest in the AM (see Figure 4):

- The first trip at 6:00 AM serves 21 passengers.
- Ridership ramps up quickly to 37 and 40 boardings on the 6:20 AM and 6:40 AM trips, with a maximum load of 30 passengers.
- After 7:00 AM, boardings per trip ranges between nine and 35 passengers. Only four trips serve more than 25 passengers.

Outbound, Route 99 ridership is highest in the PM Peak (see Figure 5):

- Ridership is generally 20 to 30 passengers per trip through 4:00 PM. One exception is a trip at 7:10 AM trip that carries 46 passengers and has a maximum load of 34 passengers.
- Ridership per trip between 4:00 PM and 7:00 PM generally ranges from 30 to 50 passengers.
- Ridership then returns to 20 to 30 passengers per trip through 12:00 midnight, and is then less than 10 on the last trip at 1:00 AM).

On Saturdays, most trips carry around 20 passengers per trip. However, only six inbound trips exceed 20 passengers (see Figure 6), while many more outbound trips do in the afternoon (see Figure 7).

Sunday ridership is at or below 20 passengers on nearly all trips (see Figure 8 and Figure 9).

Figure 4 | Weekday Ridership by Trip: Inbound

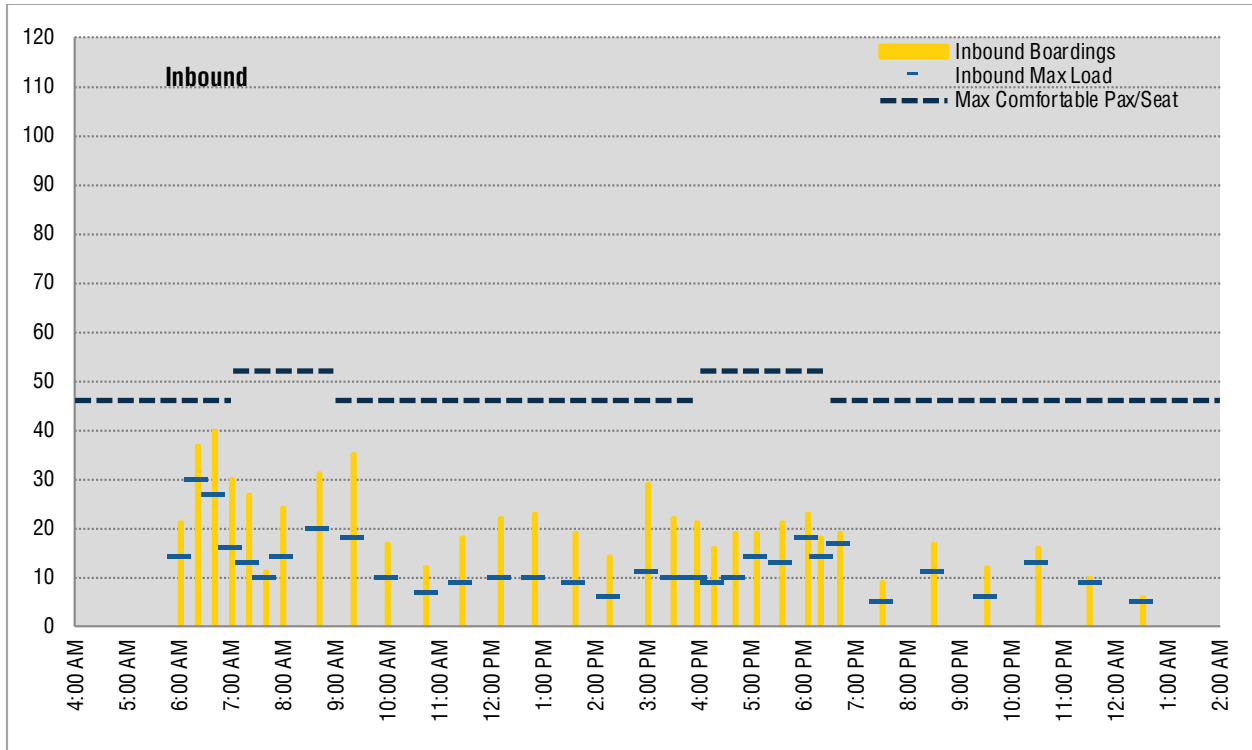


Figure 5 | Weekday Ridership by Trip: Outbound

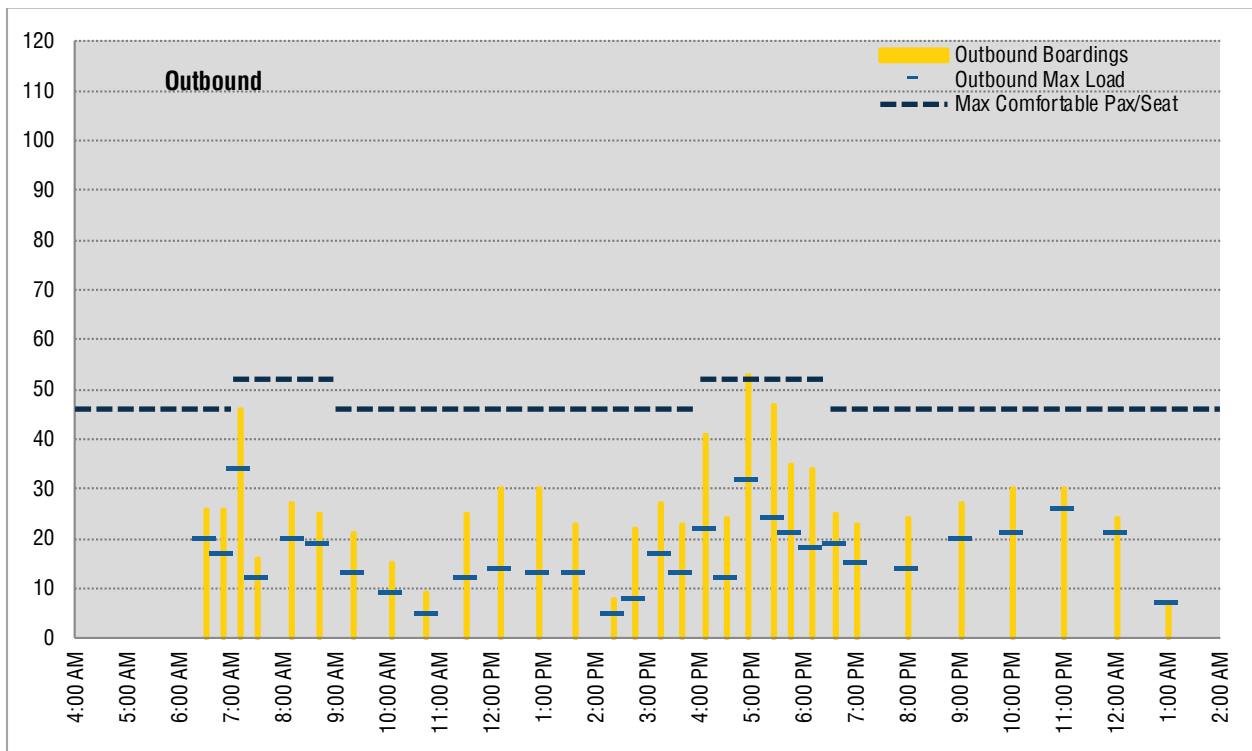


Figure 6 | Saturday Ridership by Trip: Inbound

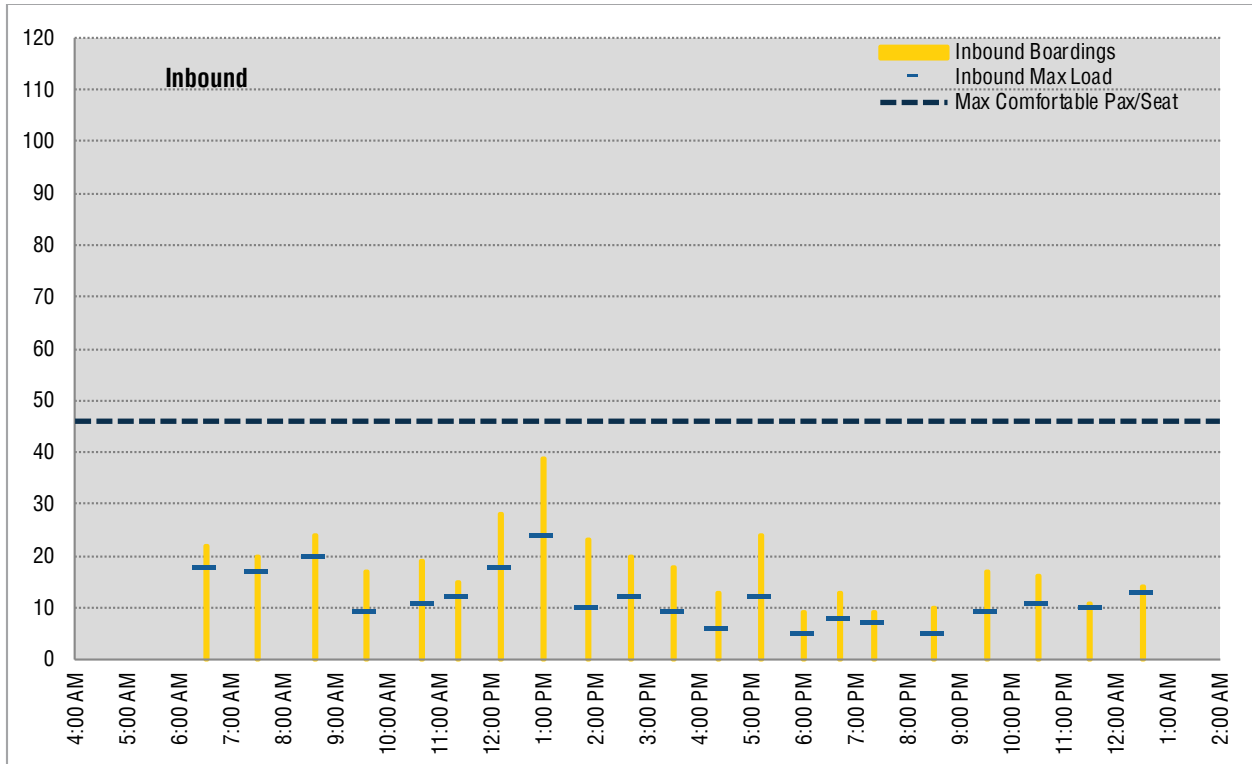


Figure 7 | Saturday Ridership by Trip: Outbound

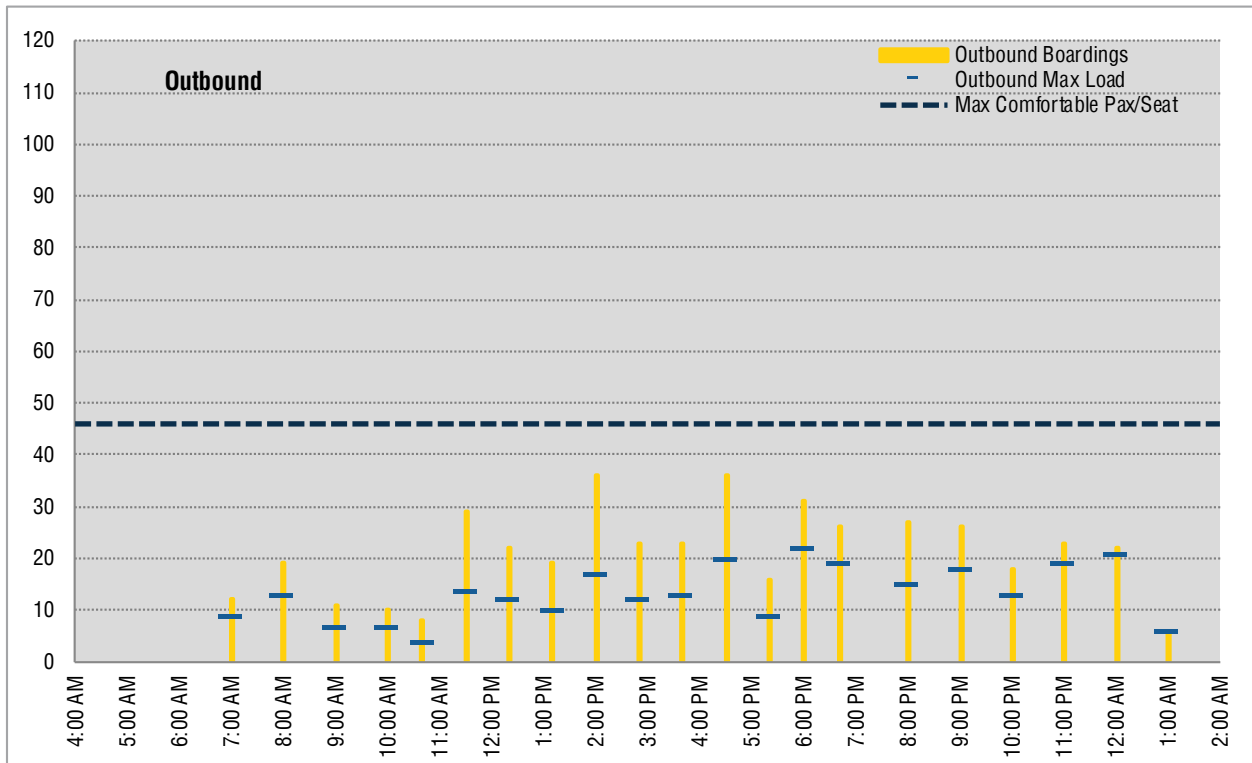


Figure 8 | Sunday Ridership by Trip: Inbound

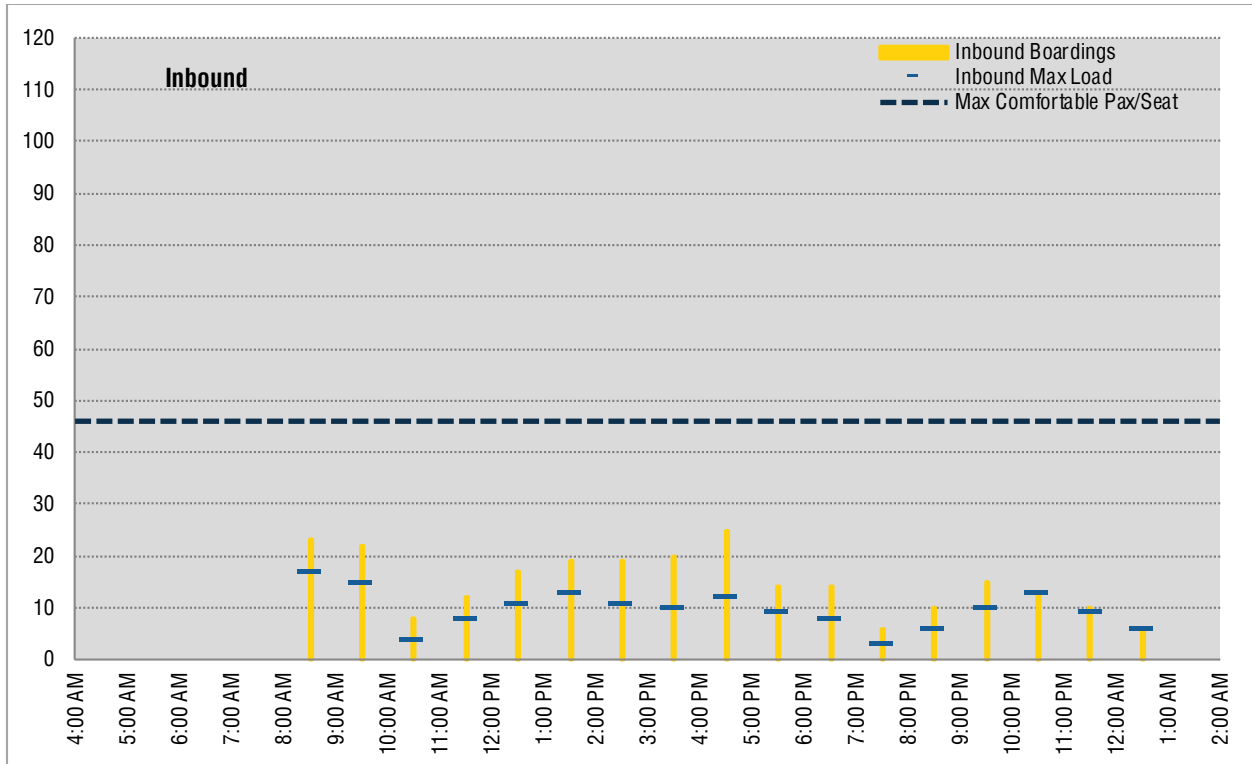
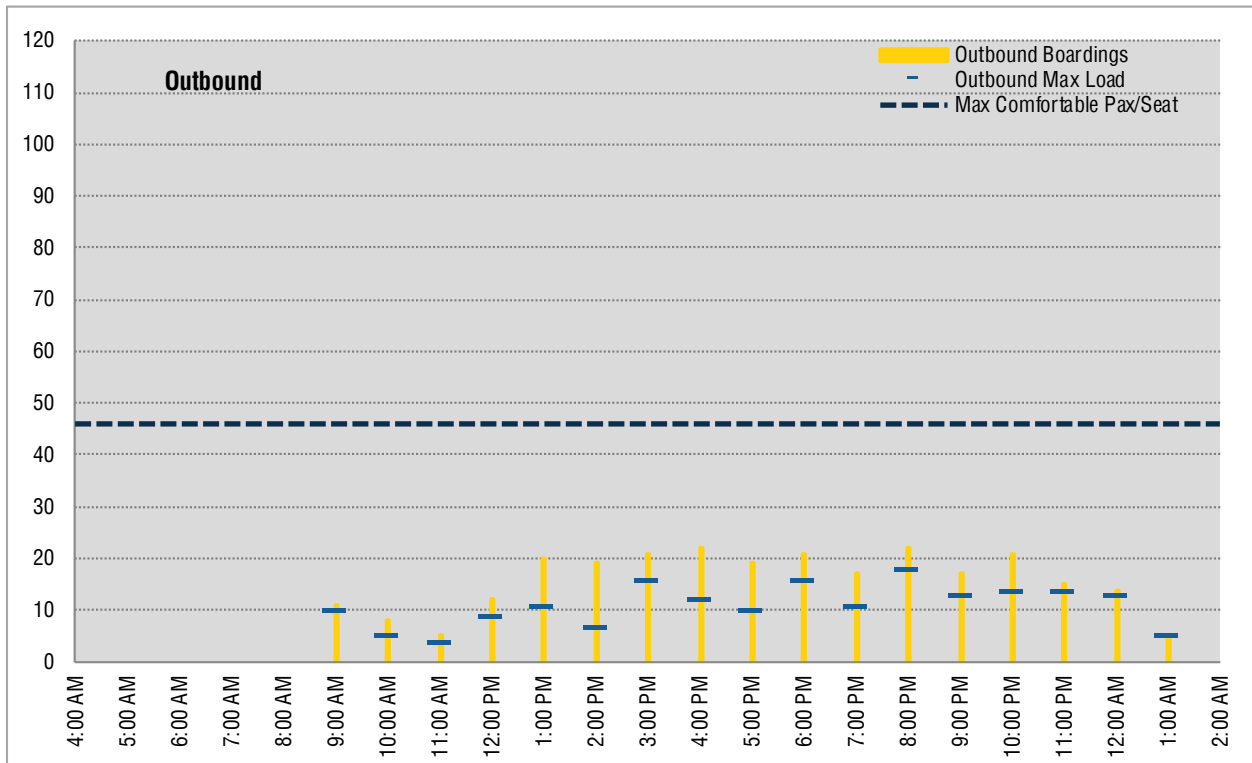


Figure 9 | Sunday Ridership by Trip: Outbound



Passenger Comfort

The MBTA desires that passengers travel in relatively comfortable conditions. At the same time, the MBTA’s definition of comfort reflects the very high volume environment in which the MBTA operates, and that some passengers may have to stand for a portion of their trip. More specifically, at least 92% of passengers’ travel times should be in comfortable conditions, and ideally, at least 96% of travel times should be in comfortable conditions. Comfortable conditions are considered to be 140% or less of seated capacity during high volume periods and 125% or less during other periods.

On Route 99, 99.8% of passenger minutes are in comfortable conditions (see Table 3).

Table 3 | Passenger Time Spent Traveling in Comfortable Conditions

	WEEKDAYS	SATURDAYS	SUNDAYS
Minimum Standard	92%	92%	92%
Target	96%	96%	96%
Actual	99.8%	100%	100%

Reliability and Speed

Reliability

Route 99’s overall reliability is very poor at 58% on weekdays, 51% on Saturdays, and 62% on Sundays (see Table 4). This is well below the minimum standard of 70% for local routes. As described in the next section, poor on-time performance is due, in large part, to actual running times that exceed scheduled running times.

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID-ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	60%	50%	58%	0.1%
Saturday	75%	53%	51%	-
Sunday	63%	55%	62%	-

Running Times

Route 99’s observed inbound running times exceed scheduled running times throughout the day and by up to ten minutes (see Figure 10). Trips during the early AM, AM peak are faster, but still average five minutes late. Outbound trips run late for most of the day, but run up to three minutes faster between 8:30 AM and 12:00 PM (see Figure 11).

Figure 10 | Scheduled & Median Travel Time by Trip: Route 99 Inbound

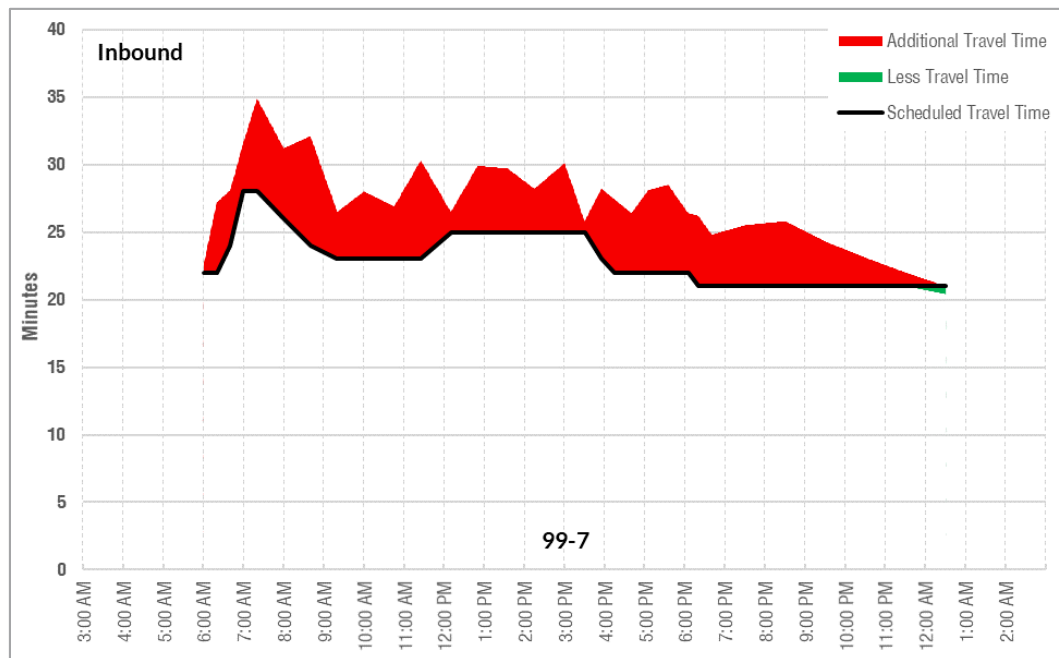
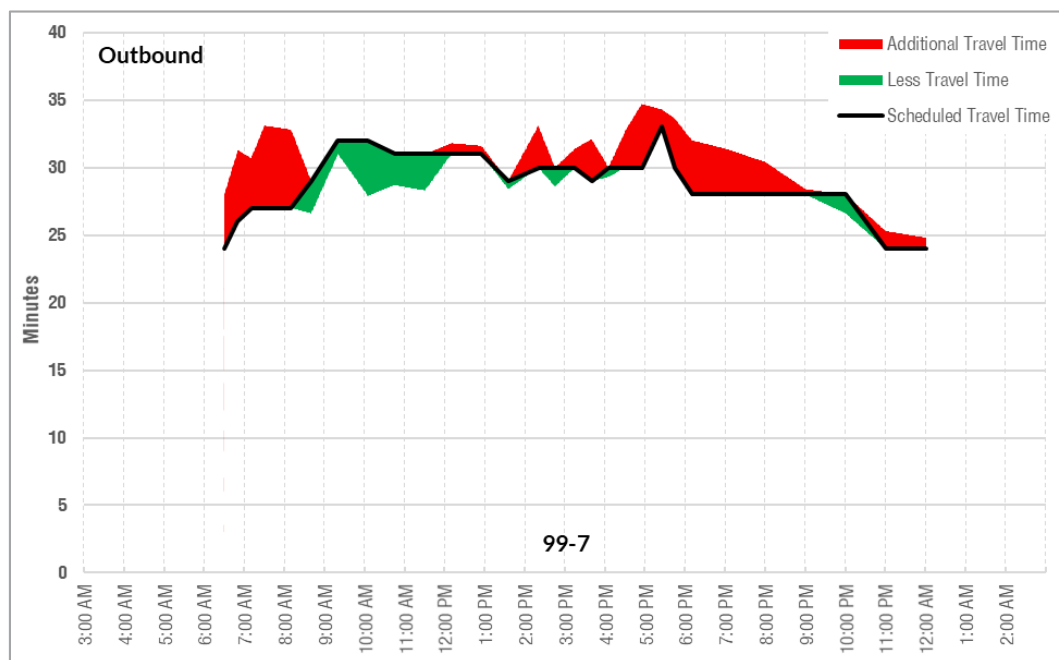


Figure 11 | Scheduled & Median Travel Time by Trip: Route 99 Outbound



Stop Spacing

Route 99 has an average of 6.2 stops per mile. This is within the four to seven stops per mile recommended for urban areas under MBTA guidelines.

Summary

Route 99 is of moderately low importance to the MBTA network. It serves residential neighborhoods in Malden and Melrose to the north of Malden Center station and compliments Route 106 to the south, but is not well coordinated with Route 106. The route has poor reliability.