

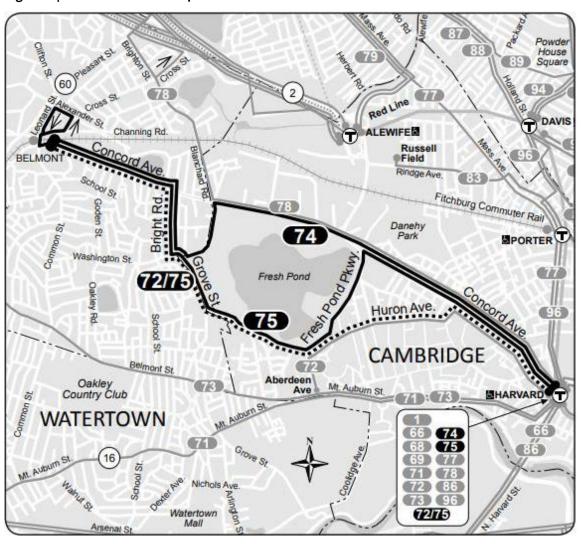
Route 75

Belmont Center – Harvard Station

Route Overview

Route 75 Belmont Center – Harvard Station is a Local route that operates between Belmont Center and Harvard Station. It operates primarily along Concord Avenue, but with a long deviation along the south side of Fresh Pond via Fresh Pond Parkway, Grove Street, and Bright Road (see Figure 1). It is very similar to Route 74 Belmont Center-Harvard Station, which operates largely along Concord Avenue, but along the north side of Fresh Pond. It also serves much of the same area as Route 78 Arlmont Village-Harvard Station.

Figure 1 | Route 75 Service Map





Network Importance

Route 75 has somewhat moderate importance within the overall system (see Figure 2). On a scale of 0 to 10, the route rates 2.0 in terms of ridership, 5.7 in terms of transit dependent ridership, and 5.8 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% weight to overall ridership and a 15% weight to both other measures, is 3.4.

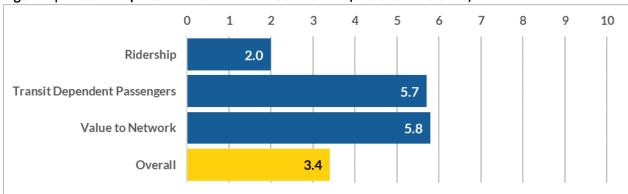


Figure 2 | Relative Importance within MBTA Bus Network (on a scale of 0 to 10)

Service Overview

Schedule

Route 75 operates Monday through Saturday. It does not operate on Sundays, but service along nearly all of Route 75's alignment is provided by a hybrid of Route 75 and Route 72 Huron Avenue-Harvard Station that is called "Route 72/75." Route 72/75 also provides service on Saturday nights.

On weekdays, Route 75 operates from 6:55 AM to 10:20 PM with infrequent service throughout the day, with headways ranging from 50 to 125 minutes (see Table 1). Most but not all trips alternate with Route 74 trips and thus average headways along Concord Avenue are half of those. However, due to the different alignments around Fresh Pond, intervals between buses are irregular along much of the route. In total, all of Route 75's alignment is served by at least two routes, and part is served by three routes. The service choices that riders must make are complex, and overall headways are very irregular.

On Saturdays, Route 75 operates from 6:55 AM to 6:25 PM, and operates every 55 to 75 minutes. From 7:00 PM to 1:20 AM, service is provided by Route 72/75, which operates every 40 minutes. Routes 72 and 74 also operate on Saturdays, and so passengers are presented with even more complex options than on weekdays.



Table 1 | Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	6:15 AM to 10:20 PM			13/13
Sunrise	-	-	-	-
Early AM	6:15 AM to 6:59 AM	50	50	1/-
AM Peak	7:00 AM to 8:59 AM	50 - 90	75	2/2
Midday Base	9:00 AM to 1:29 PM	65 - 80	70	4/4
Midday School	1:30 PM to 3:59 PM	65 - 80	70	2/2
PM Peak	4:00 PM to 6:29 PM	50 - 80	60	3/2
Evening	6:30 PM to 9:59 PM	65 - 125	90	1/2
Late Evening	10:00 PM to 10:20 PM	90 - 125	90	-/1
Night	-	-	-	-
Saturday	6:55 AM to 1:20 PM			21/21
Route 75	6:55 AM to 6:20 PM	55 - 75	56	12/12
Route 72/75	7:00 PM to 1:20 AM	40	40	9/9
Sunday				
Route 72/75	6:40 AM to 10:00 PM	35 - 45	38	24/24

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

On Sundays, all of Route 75's alignment except Fresh Pond Parkway and Concord Avenue west of Huron Avenue is served by Route 72/75, which operates every 40 minutes for most of the day.

Route 75 fails to meet many service span and frequency standards:

Span of Service

Saturday service, which ends at 6:20 PM, falls slightly short of the standard of 6:30 PM. Route 72/75 provides service after 6:20 PM until 1:00 AM along most of Route 75.

Frequency

- Weekday service frequencies fall short during all periods. Peak service operates every 50 to 80 minutes, compared to the standard of 30 minutes.
- Weekday off-peak service operates every 50 to 90 minutes, compared to the standard of every 60 minutes.
- Saturday service operates every 55 to 75 minutes compared to the standard of every 60 minutes. (However, Saturday frequencies average every 56 minutes.).

Service Patterns

Route 75 service operates consistently along the alignment on all trips (see Table 2).

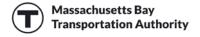




Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
INBOUND				13	12	-
75.0	Alexander Avenue at Leonard Street	Eliot Street at Bennett Street	Via Fresh Pond Parkway	13	12	-
OUTBOUND				13	12	-
75.0	Harvard Station	Alexander Avenue at Leonard Street	Via Fresh Pond Parkway	13	12	-

Ridership

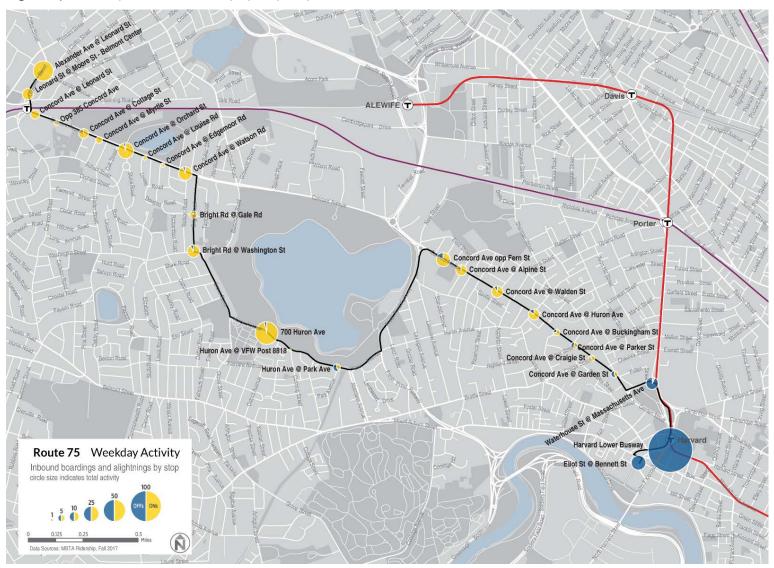
Route 75 carries 500 riders per weekday and 250 riders per Saturday. The low ridership numbers reflect duplication with Route 72 and Route 74 more than low demand in Route 75's service area. For example, on weekdays, Route 72 carries 970 riders per weekday and Route 74 carries 820. Altogether, Routes 74, 72, and 75 carry 2,300 weekday riders between Belmont Center and Harvard Station in the Concord Avenue and Huron Avenue corridors. Route 78 carries another 1,400 riders, 840 of whom both board and alight along Concord Avenue.

Ridership by Stop

The large majority of Route 75 passengers travel to and from Harvard Station. On weekday inbound trips (see Figure 3):

- 60 passengers board in Belmont Center before Concord Avenue.
- 90 passengers board and fewer than 10 alight at the 10 stops along Concord Avenue and Bright Road until Blanchard Street, which is where Route 74 diverges.
- 50 passengers board and less than 10 alight at the three stops on Huron Avenue between there and Fresh Pond Parkway, which is where Route 72 diverges. This segment includes the highest boarding stop on the route, which is 700 Huron Avenue, with approximately 50 boardings.
- No passengers board or alight along Fresh Pond Parkway, which is the only segment uniquely served by Route 75.
- 25 passengers board and 25 alight at the six stops between Fresh Pond Parkway and Harvard Station. This segment is served by Routes 72, 74, and 75.
- 210, or 78%, of all riders, alight at Harvard Station.

Figure 3 | Weekday Inbound Ridership by Stop Map





Ridership by Trip

Weekday ridership by trip is highest inbound between 7:00 AM and 9:00 AM, with maximum loads of about 45 riders, and outbound between 4:30 PM and 6:00 PM, with maximum loads of about 30 riders (see Figure 4 and Figure 5). Ridership on other weekday trips is much lower at eight to 20 passengers per trip. No trips exceed the maximum loading standards.

Saturday ridership by trip ranges from two to 18 riders per trip (see Figure 6 and Figure 7). The highest passenger loads are on the 12:15 PM and 5:15 PM inbound trips and the 8:30 AM and 3:30 PM outbound trips. (After 6:20 PM, service is provided by Route 72/75. See the Route 72 profile for information on that service.)



Figure 4 | Weekday Ridership by Trip: Inbound

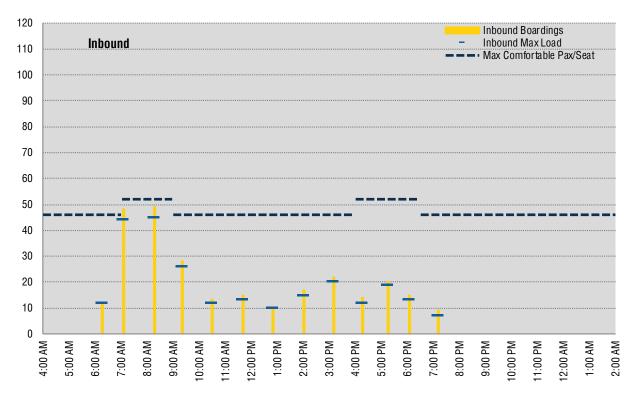


Figure 5 | Weekday Ridership by Trip: Outbound

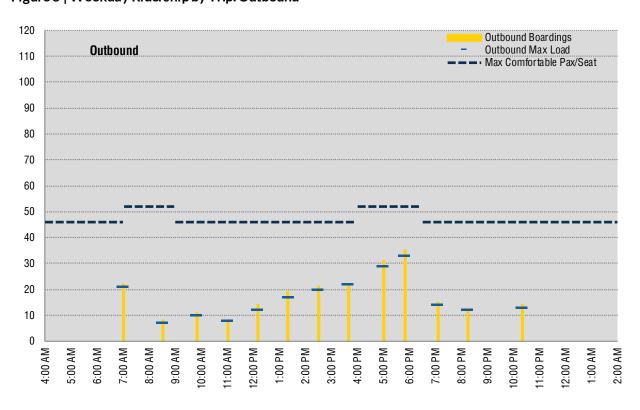




Figure 6 | Saturday Ridership by Trip: Inbound

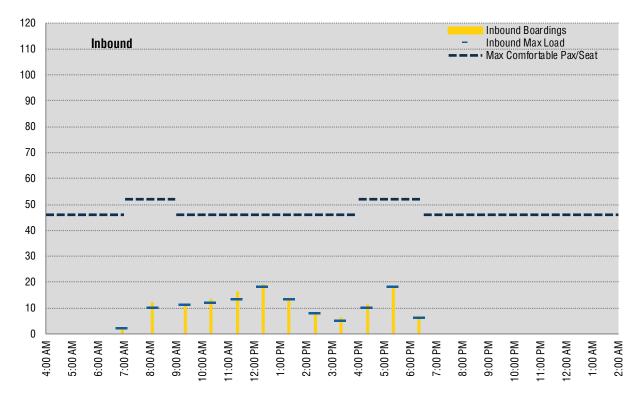
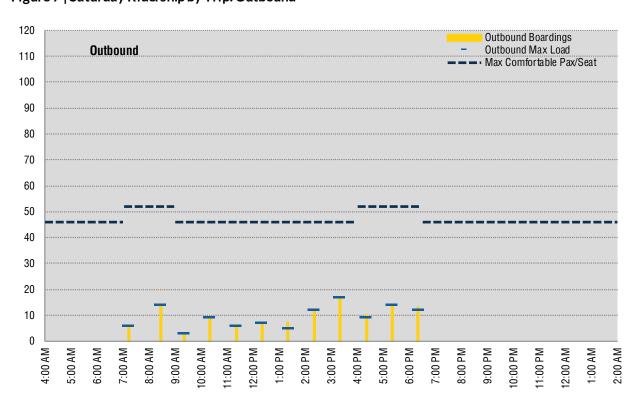


Figure 7 | Saturday Ridership by Trip: Outbound





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 75,96% of weekday passenger minutes are in comfortable conditions, which meets the target (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	96%	-	-

Reliability and Speed

Reliability

Route 75's weekday overall reliability of 67% is below the MBTA's minimum standard of 70%. Saturday overall reliability of 80% is above the target of 75% (see Table 4).

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID- ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	65%	77%	67%	0.1%
Saturday	79%	87%	80%	-

Running Times

Below standard weekday reliability is caused in large part by actual running times that are longer than scheduled times, especially during peak periods (see Figure 8). Inbound running times vary most during the AM peak around 7:00 AM and during the PM peak between 4:30 PM and 6:00 PM. Actual outbound running times vary significantly from the schedule, running two to six minutes shorter than scheduled running times during the morning, midday, and early evening, and up to 10 minutes longer than scheduled during the PM peak (see Figure 9).



Figure 8 | Scheduled & Median Travel Time by Trip: Route 75 Inbound

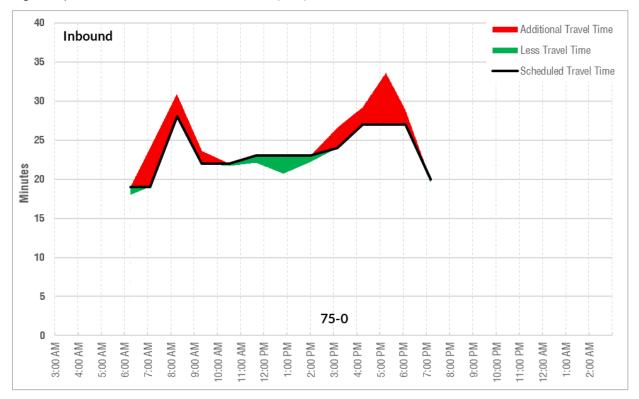
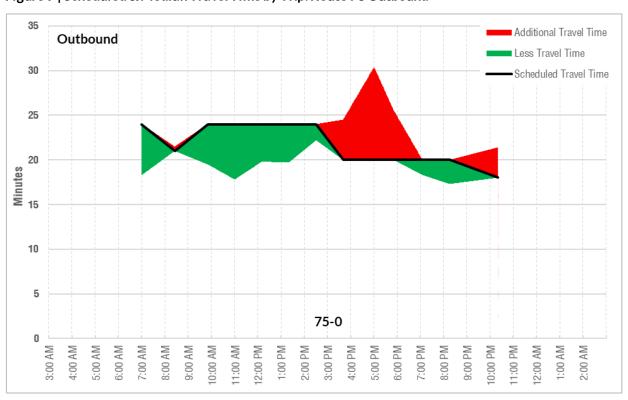


Figure 9 | Scheduled & Median Travel Time by Trip: Route 75 Outbound





Stop Spacing

Although there are some exceptions, stop spacing on Route 75 is generally appropriate and mostly consistent with the MBTA's stop spacing guidelines.

Summary

Route 75 is one of three routes that serve the Concord Avenue and Huron Avenue corridors between Belmont Center and Harvard Station. Of the three routes (Route 75, Route 72 Huron Avenue-Harvard Station, and 74 Belmont Center-Harvard Station), Route 75 has the lowest ridership and greatest delays.