

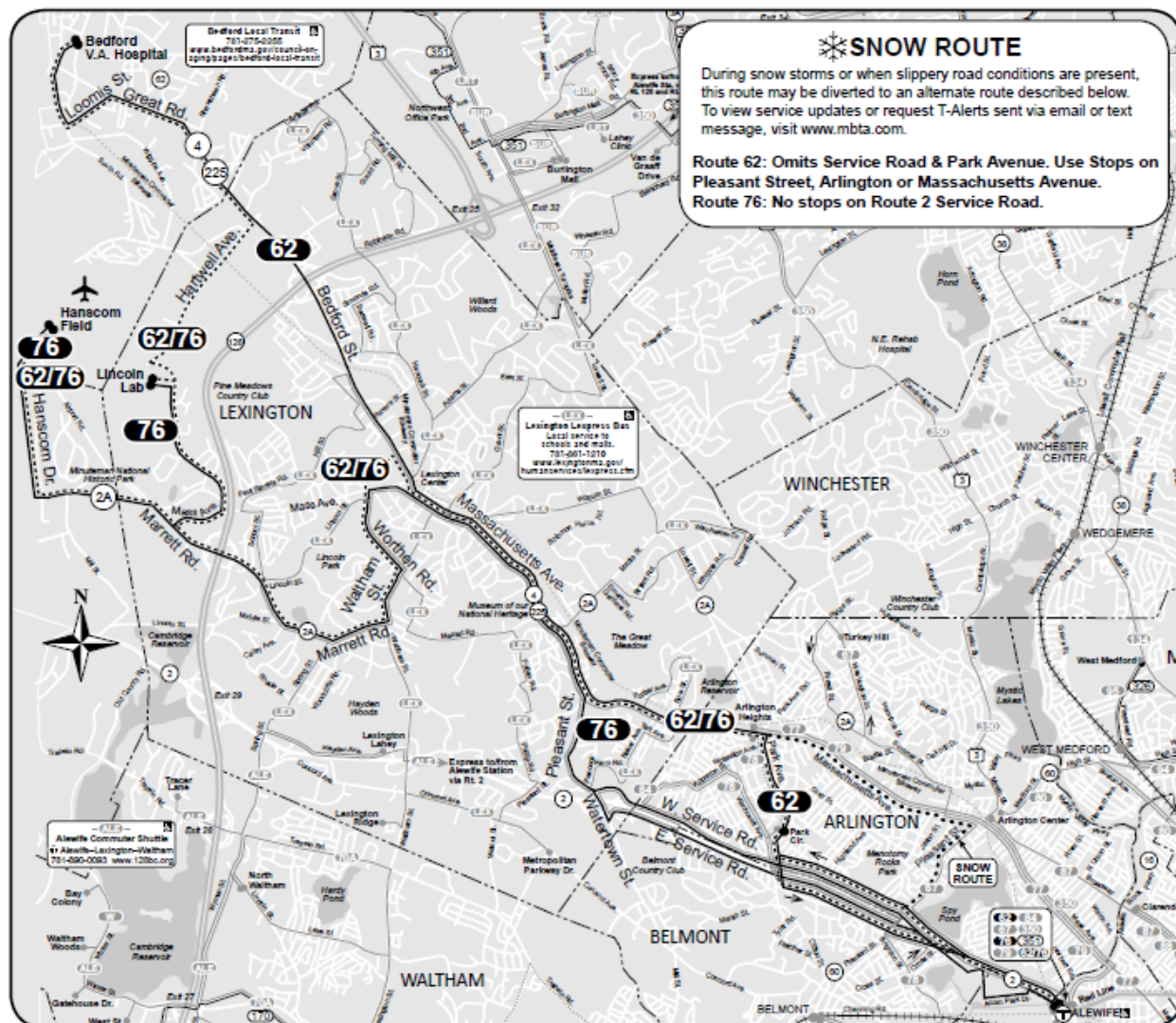
Route 62

Bedford VA Hospital – Alewife Station

Route Overview

On weekdays, Route 62 operates between the Bedford VA Hospital and Alewife Station via Lexington Center, Arlington Heights, and Arlmont (see Figure 1). On Saturdays, it operates as a hybrid of Route 62 and 76 Hanscom/Lincoln Lab-Alewife Station between the VA Hospital and Alewife Station via Hanscom Air Force Base, Lexington Center, and Route 2. It does not operate on Sundays.

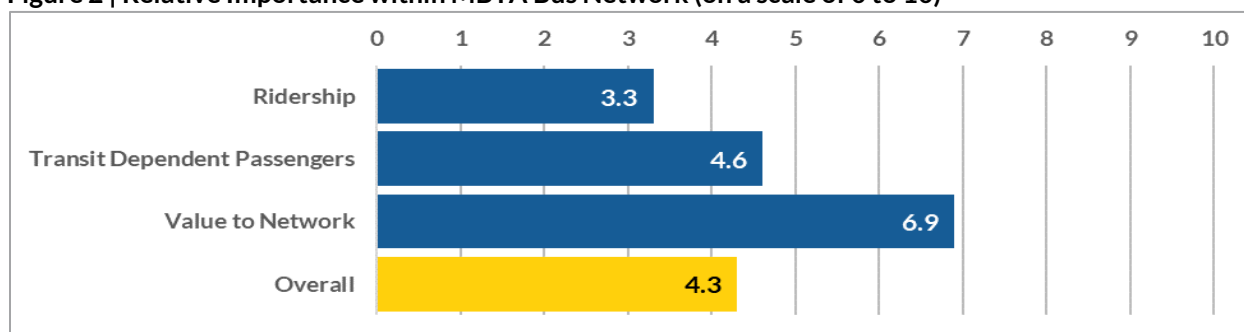
Figure 1 | Route 62 Service Map



Network Importance

Route 62 is moderately important within the overall network (see Figure 2). On a relative scale of 0 to 10, the route rates 3.3 in terms of ridership, 4.6 in terms of transit dependent ridership, and 6.9 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 4.3.

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



Service Overview

Schedule

Route 62 runs six days a week. On weekdays, service operates between 5:47 AM and 9:04 PM (see Table 1):

- Every 23 minutes before 6:00 AM.
- Every two to 30 minutes between 6:00 AM and 7:00 AM, but mostly every 25 minutes.
- Every five to 45 minutes during the AM Peak period, but mostly every 28 minutes.
- Every 33 to 60 minutes between 9:00 AM and 1:30 PM, but mostly every 57 minutes.
- Every 25 to 65 minutes between 1:30 OM and 4:00 PM, but mostly every 50 minutes.
- Every 8 to 50 minutes during the PM Peak period, but mostly every 25 minutes.
- Every 19 to 55 minutes after 6:30 PM, but mostly every 47 minutes.

On Saturday, Route 62/76 operates between 7:00 AM and 8:47 PM, every 70 minutes until mid-afternoon and every 60 minutes after that.

Route 62/76 fails to meet the minimum service frequency standard for Saturdays, when most service operates every 70 minutes, versus the standard of at least every 60 minutes.

Table 1 | Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	5:47 AM to 9:04 PM			25/23
Sunrise	5:47 AM to 5:59 AM	23	23	-/1
Early AM	6:00 AM to 6:59 AM	2 - 30	25	3/2
AM Peak	7:00 AM to 8:59 AM	5 - 45	28	5/3
Midday Base	9:00 AM to 1:29 PM	33 - 60	57	5/5
Midday School	1:30 PM to 3:59 PM	25 - 65	50	3/3
PM Peak	4:00 PM to 6:29 PM	8 - 50	25	5/7
Evening	6:30 PM to 9:04 PM	19 - 55	47	4/2
Saturday	7:00 AM to 8:47 PM	60 - 70	60	12/12
Sunday	-	-	-	-

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

Service Patterns

On weekdays, most service operates between the Bedford VA Hospital and Alewife Station as shown in Figure 1 (Pattern 62.3). Exceptions include (see Figure 1):

- In both directions, the first trip and the last two trips operate between Bedford Center and Alewife Station (Pattern 62.4).
- Inbound, three AM peak and one PM peak trip operate between Lexington Center and Alewife Station. Outbound, two PM peak trips operate between Alewife Station and Lexington Center (Pattern 62.8)

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
INBOUND				25	12	-
62.3	Bedford VA Hospital	Alewife Station	Regular weekday service	18	-	-
62.4	Bedford Center	Alewife Station	Bedford Center to Alewife short-turn	3	-	-
62.7	Bedford VA Hospital	Alewife Station	Saturday service that is a hybrid of Routes 62 and 76	-	12	-
62.8	Lexington Center	Alewife Station	Lexington Center to Alewife short-turn	4	-	-
OUTBOUND				23	12	-
62.3	Alewife Station	Bedford VA Hospital	Regular weekday service	18	-	-
62.4	Alewife Station	Bedford Center	Alewife to Bedford Center short-turn	3	-	-
62.7	Alewife Station	Bedford VA Hospital	Saturday service that is a hybrid of Routes 62 and 76	-	12	-
62.8	Alewife Station	Lexington Center	Alewife to Lexington Center short-turn	2	-	-

On Saturdays, all service operates as the Route 62/76 hybrid between the Bedford VA Hospital and Alewife Station via Hanscom Air Force Base, Lexington Center, and Route 2. The alignment is significantly different from that of either Route 62 or 76, but serves most of the same locations.

Ridership

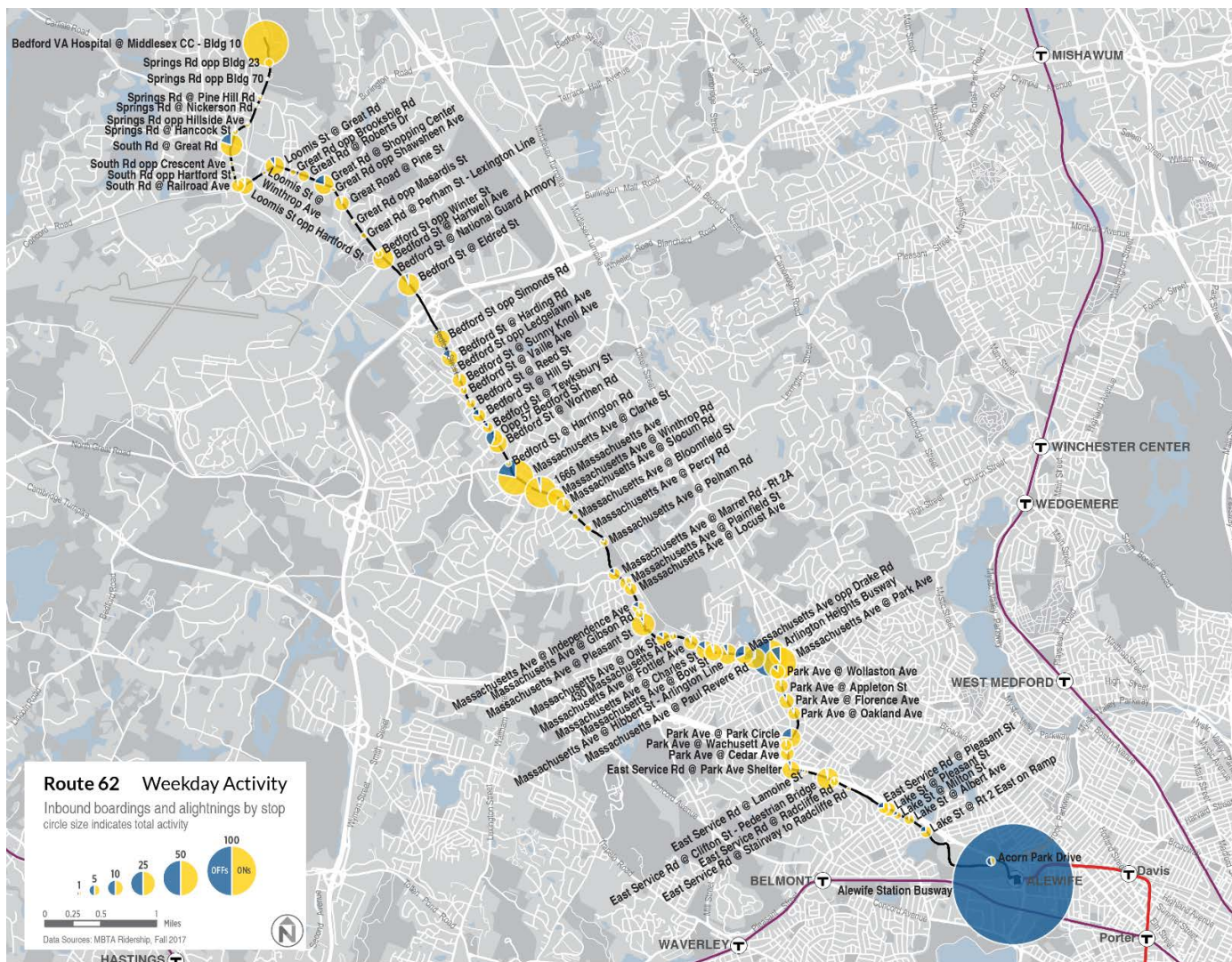
Route 62 carries 1,360 riders on weekdays and Route 62/76 carries 450 riders on Saturdays.

Ridership by Stop

On weekdays, the large majority of passengers travel to and from Alewife Station. On inbound trips (see Figure 3):

- 80 passengers board at the Bedford VA Hospital. This is the second highest ridership stop on the route (after Alewife Station).
- 10 passengers board at the six stops along Springs Road.
- 20 passengers board and less than five alight at the stop in Bedford Center.
- 30 passengers board and less than five alight at the six stops on the jog along South Road and Loomis Street.
- 30 passengers board and less than five alight at the seven stops along Great Road in Bedford.
- 110 passengers board and 10 alight at the 15 stops along Bedford Street in Lexington.
- 90 passengers board and 10 alight at the three stops in Lexington Center. These stops are also served by Route 76 Hanscom Air Force Base-Alewife Station.
- 30 passengers board and less than five alight at the 10 stops along Mass Ave between Lexington Center and Pleasant Street. These stops are also served by Route 76 and Pleasant Street is where the two routes diverge.
- 140 passengers board and 20 alight at the 18 stops along Mass Ave between Lexington Center and the Arlington Heights busway.
- 60 passengers board and 40 alight at the Arlington Heights busway and the next stop on Mass Ave at Park Avenue. Park Avenue is where Routes 62 and 76 come back together.

Figure 3 | Weekday Inbound Ridership by Stop Map



- 50 passengers board and 10 alight at the seven stops on Park Avenue. These stops are also served by Route 76.
- 40 passengers board and less than five alight at the six stops along the Route 2 East Service Road. These stops are also served by Route 76.
- 20 passengers board and less than five alight at the five stops along Lake Street and Acorn Park Drive. These stops are also served by Route 76.
- 590, or 84% of all inbound passengers, alight at Alewife Station.

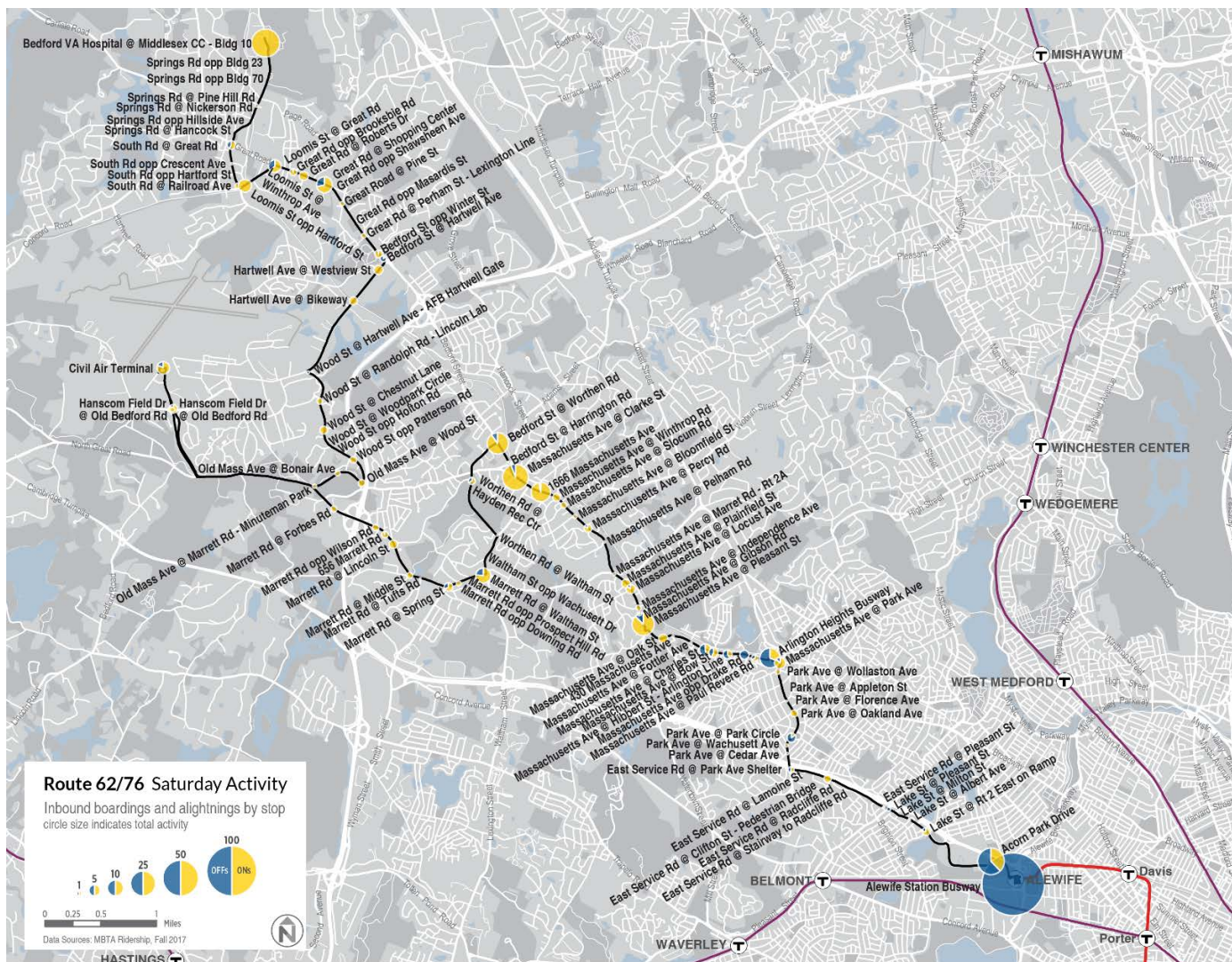
Outbound ridership is roughly the reverse of inbound ridership by stop patterns.

On Saturdays, with one exception, ridership patterns are similar as on weekdays. The exception is between the intersection of Bedford Street and Hartwell Avenue in Lexington and Lexington Center, where the Route 62/76 hybrid follows the Route 76 weekday alignment instead of the Route 62 alignment (see Figure 4):

- 30 passengers board at the Bedford VA Hospital. As on weekdays, this is the second highest ridership stop on the route (after Alewife Station).
- On average, no passengers board or alight at the six stops along Springs Road.
- Two passengers board and less than one alight at the stop in Bedford Center.
- Four passengers board and two alight at the six stops along South Road and Loomis Street.
- 20 passengers board and less than five alight at the nine stops along Great Road and Bedford Street before Hartwell Avenue.
- 45 passengers board and fewer than five alight on the portion of Route 62/76 that differs from the regular Route 62 alignment.
 - Six passengers board at the three stops on Hartwell Road and Wood Street between Hartwell Avenue and Lincoln Lab. These stops are only served on Saturdays and are not served by any routes on weekdays.
 - 12 passengers board at the nine stops along Wood Street, Old Mass Ave and Hanscom Field Drive between Lincoln Lab and the Hanscom Field Civil Air Terminal. These stops are served by Route 76 on weekdays.
 - Five passengers board and one alight at the Hanscom Field Civil Air Terminal. This stop is served by Route 76 on weekdays.
 - 20 passengers board and less than five alight at the 14 stops between the Civil Air Terminal and Bedford Street at Worthen Road, which is where Route 62/76 rejoins the regular Route 62 alignment. These stops are served by Route 76 on weekdays.

Overall, this unique segment serves a similar proportion of riders as Route 62's weekday alignment along Bedford Street. This indicates that the extra length of

Figure 4 | Saturday Inbound Ridership by Stop Map



this segment does not increase ridership; however, the longer length means that service much run every 70 minutes instead of the SDP standard of at least every 60 minutes.

- 40 passengers board and less than five alight at the two stops along Bedford Street before Lexington Center.
- 40 passengers board and less than five alight at the three stops in Lexington Center.
- 40 passengers board and 15 alight at the 18 stops along Mass Ave between Lexington Center and the Arlington Heights busway.
- 10 passengers board and 10 alight at the Arlington Heights busway and the next stop on Mass Ave at Park Avenue.
- Fewer than five passengers board at the seven stops on Park Avenue.
- 40 passengers board and less than five alight at the six stops along the Route 2 East Service Road.
- 15 passengers board and 20 alight at the five stops along Lake Street and Acorn Park Drive.
- 160, or 70% of all inbound passengers, alight at Alewife Station.

Ridership by Trip

On weekdays, the highest ridership is inbound in the AM and outbound in the PM, with a slight reverse commute peak and low to moderate off-peak ridership. On inbound trips (see Figure 5):

- Morning ridership is high with trips between 6:00 AM and 9:00 AM carrying 35 to 55 passengers each.
- Between 9:00 AM and 2:30 PM, ridership drops significantly with trips carrying between 18 and 26 passengers each.
- Ridership increases to 42 riders and 46 riders on the 2:50 PM and 3:50 PM trip, respectively.
- Trips between 4:00 PM and 6:00 PM carry eight to 28 riders each.
- After 6:30 PM, trips carry between 5 and 12 riders each.

On outbound trips (see Figure 6):

- Before 6:30 AM, trips carry five to 12 riders each.
- The five trips between 6:30 AM and 9:00 AM carry between 20 and 34 riders each.
- Between 9:00 AM to 3:00 PM, ridership per trip ranges between 16 and 26 riders.

Figure 5 | Weekday Ridership by Trip: Inbound

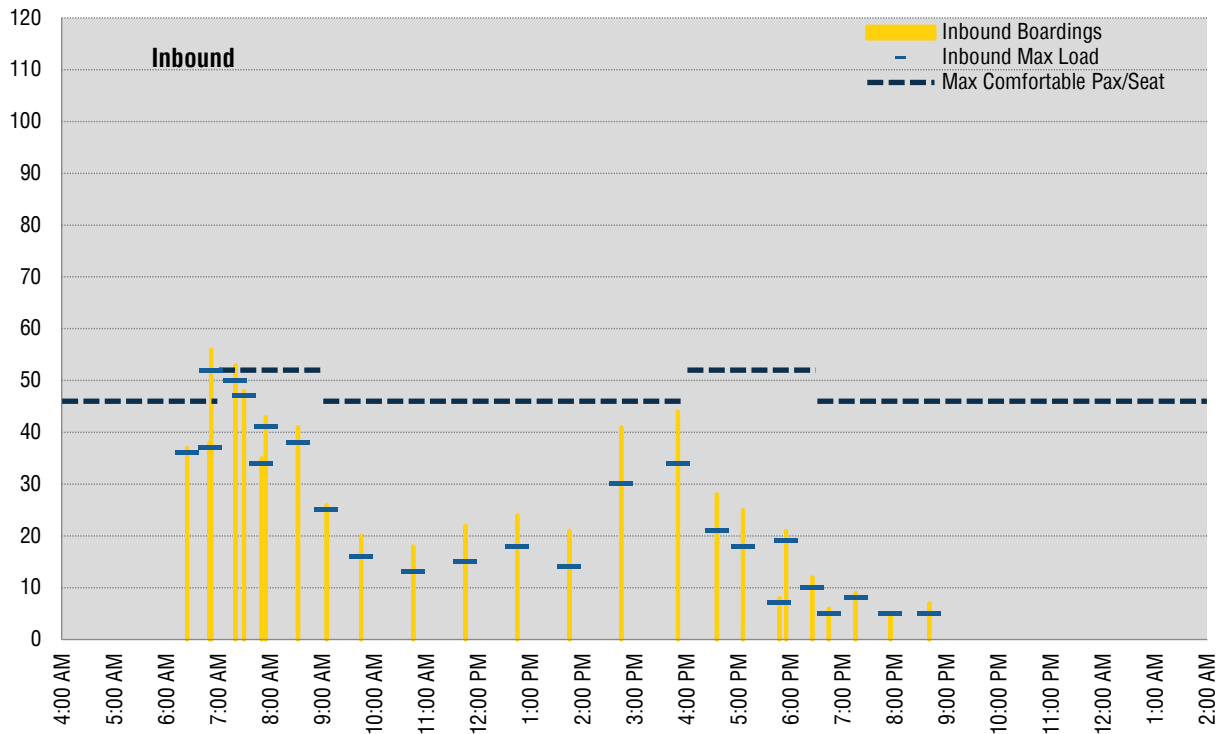


Figure 6 | Weekday Ridership by Trip: Outbound

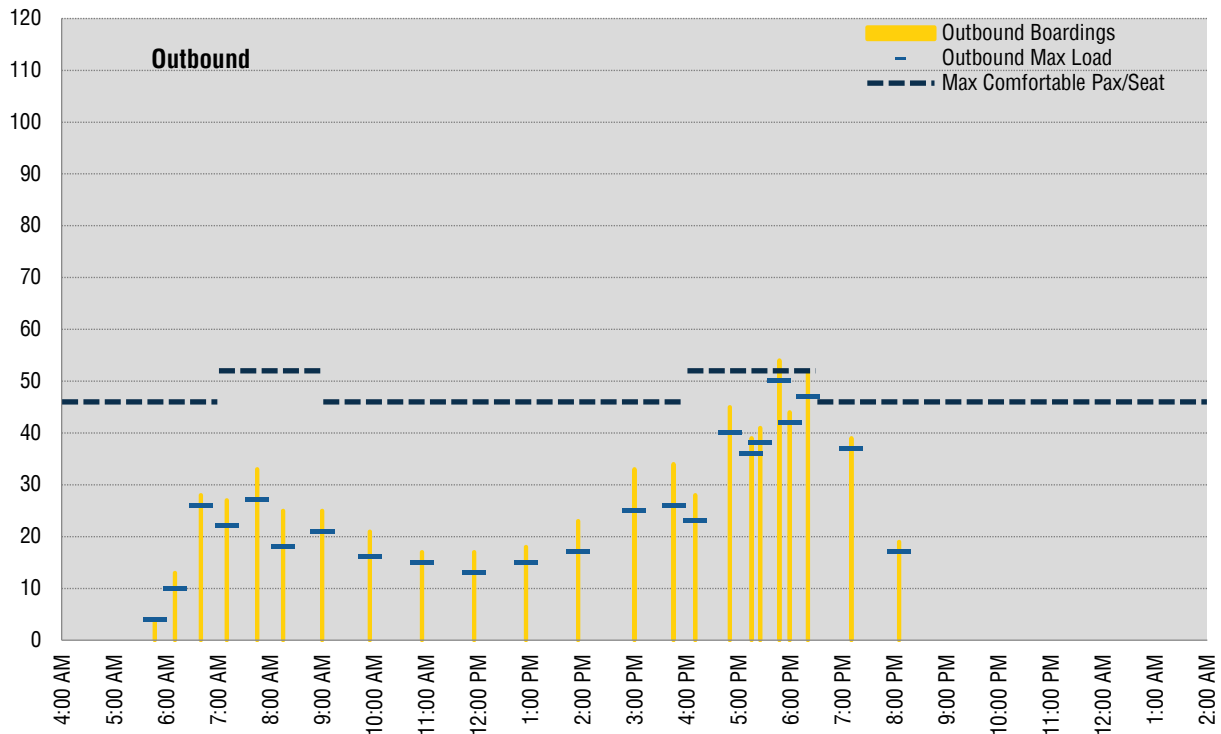


Figure 7 | Saturday Ridership by Trip: Inbound

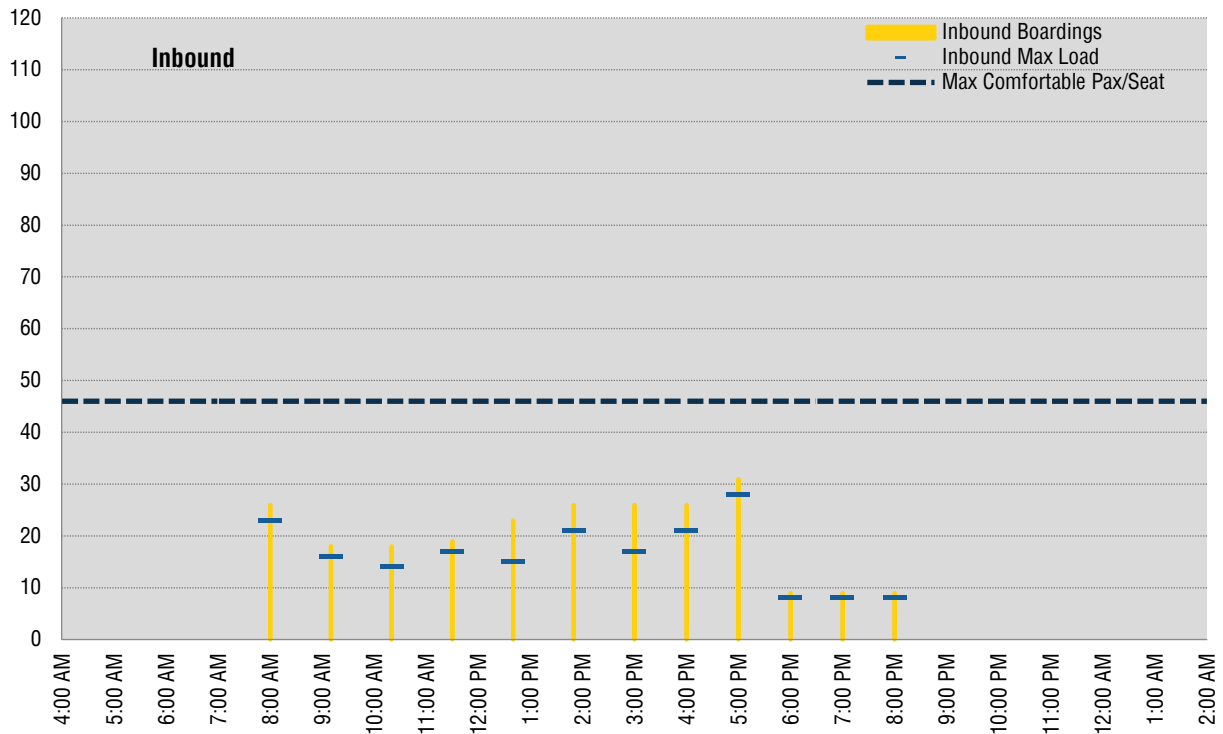
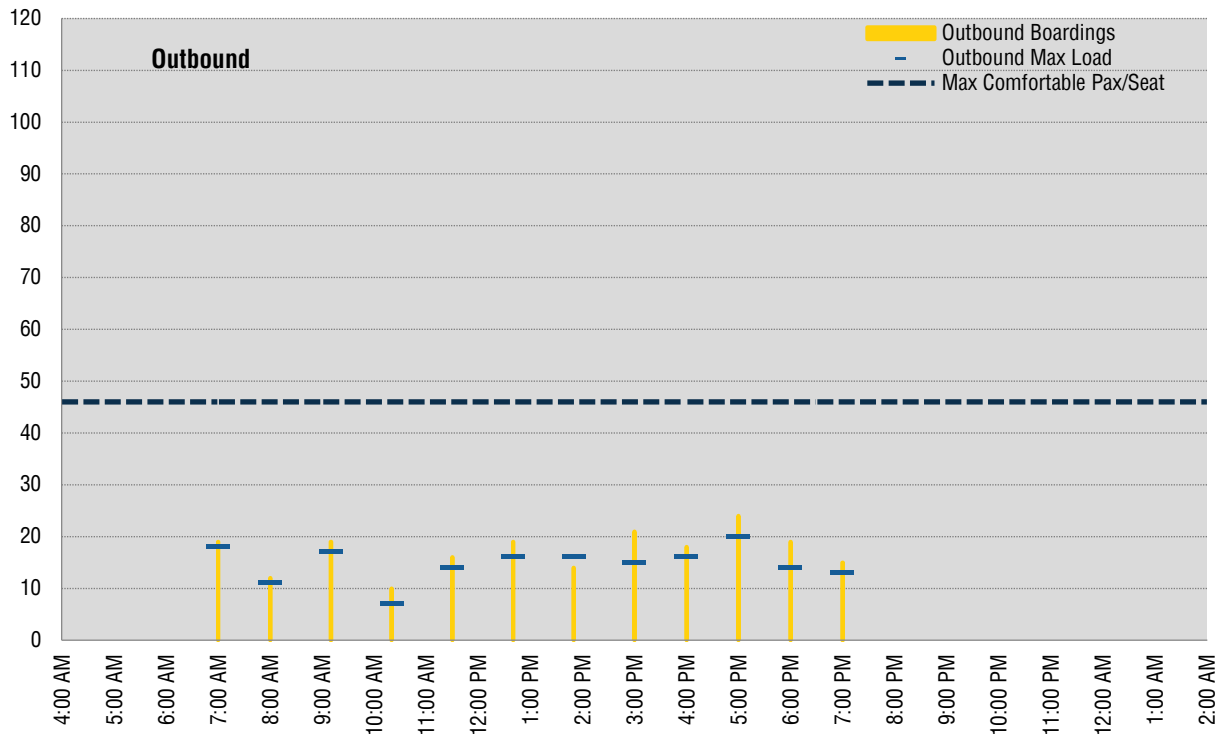


Figure 8 | Saturday Ridership by Trip: Outbound



Evening ridership ranges from 28 to 54 riders per trip between 3:00 PM and 8:00 PM.

- The final trip at 8:05 PM carries 18 passengers.

On Saturday inbound trips, Route 62/76 carries around 20 riders per trip between 8:00 AM and 5:00 PM with a drop to about nine riders per trip after 5:00 PM (see Figure 7). Outbound, apart from a drop in volume to eight riders per trip around 10:20 AM, ridership is fairly constant throughout the day with volumes of about 18 riders per trip (see Figure 8).

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 weekdays, 90% of weekday passenger minutes are in comfortable conditions, which is below the minimum standard or 92% (see Table 4). Many peak period trips, on average, run with loads that are very close to the MBTA's maximum load standards, and on these trips, off-schedule performance leads to overcrowding. On Saturdays, 96% of passenger minutes are in comfortable conditions, which meets the target standard.

Table 3 | Passenger Time Spent Traveling in Comfortable Conditions

	WEEKDAYS	SATURDAYS	SUNDAYS
Minimum Standard	92%	92%	92%
Target	96%	96%	96%
Actual	90%	-	-

Reliability and Speed

Reliability

Weekday overall on-time performance is poor at only 58%, and well below the MBTA's minimum target of 70% (see Table 5).

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID-ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	57%	62%	58%	0.3%
Saturday	-	-	-	-
Sunday	-	-	-	-

Running Times

For most of the day on weekdays, Route 62's actual running times are fairly close to scheduled times (see Figures 9 and 10). However there are some significant exceptions:

- Inbound at around 7:00 AM and 6:00 PM, when trips can take up to six minutes longer than scheduled.
- Outbound between 4:00 PM and 6:00 PM when trips can take up to 15 minutes longer than scheduled.

Stop Spacing

There are up to 13 stops per mile along much of Route 62, which is far in excess of the MBTA's guidelines of four to five stops per mile for suburban areas. Stops are particularly close:

- Along Park Street, where stop spacing averages 13.2 stops per mile.
- Along Massachusetts Avenue, where there are also up to 13.2 stops per mile

Stop consolidation could make service faster and more reliable.

Figure 9 | Scheduled & Median Travel Time by Trip: Route 62 Inbound

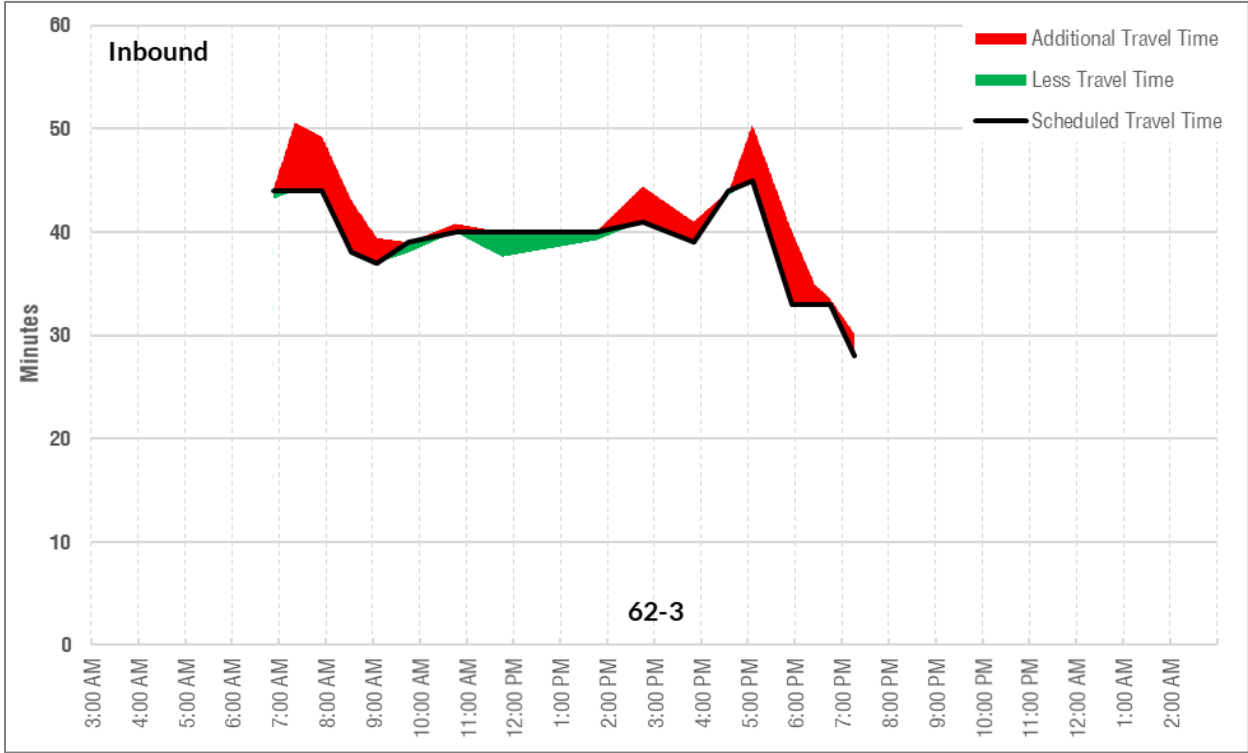
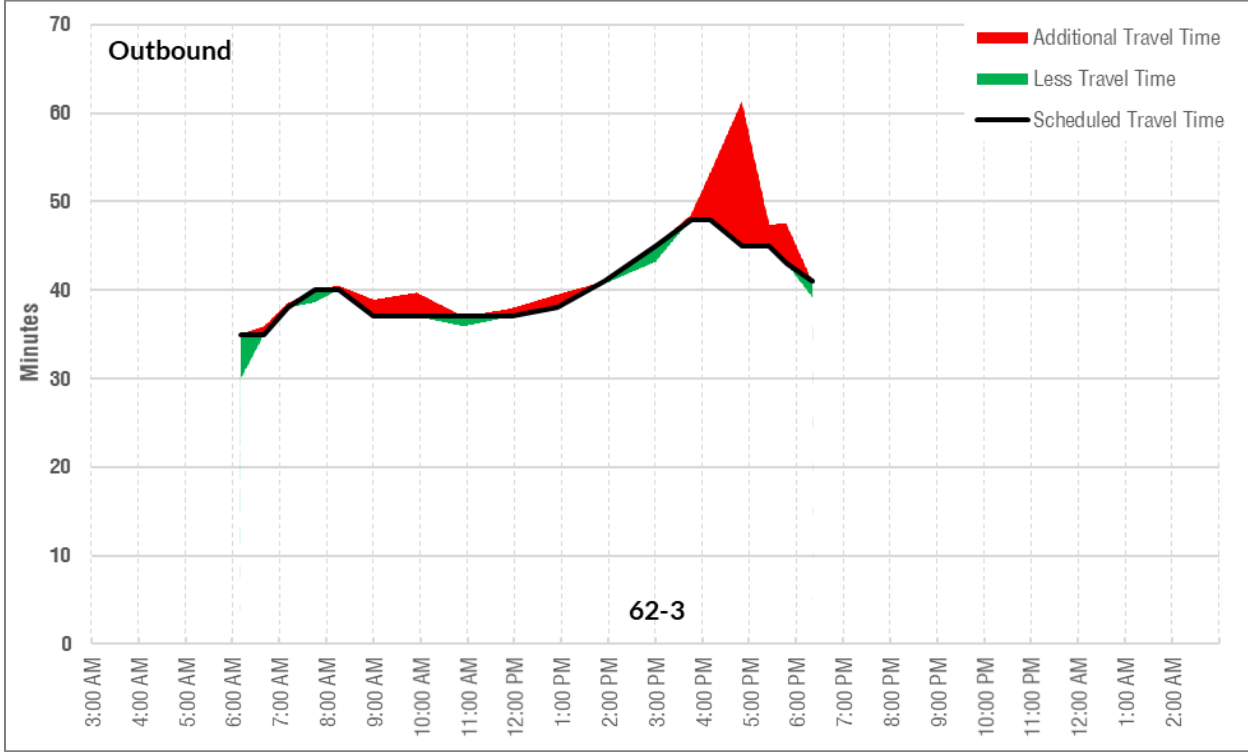


Figure 10 | Scheduled & Median Travel Time by Trip: Route 62 Outbound



Summary

Route 62 is a long route that primarily connects residents of Bedford, Lexington, and Arlington with the Red Line at Alewife Station. It also connects residents of those communities with the Bedford VA Hospital. The route has several significant performance issues, including:

- On-time performance is very poor, largely due to peak period running times that are longer than scheduled times.
- The route's round trip running time is slightly too long to achieve a 60 minute cycle time, which produces inconvenient headways on weekdays and substandard frequencies for much of the day on Saturdays.
- The Saturday Route 62/76 hybrid is complex and further increases running times but does not appear to serve more riders than regular Saturday service would (it largely substitutes service for a segment of Route 62 with a segment of Route 76).
- Proper coordination with Route 76 Hanscom Air Force Base-Alewife Station. Although there are alignment differences at the outer ends and middle of the routes, most riders are served by both.