

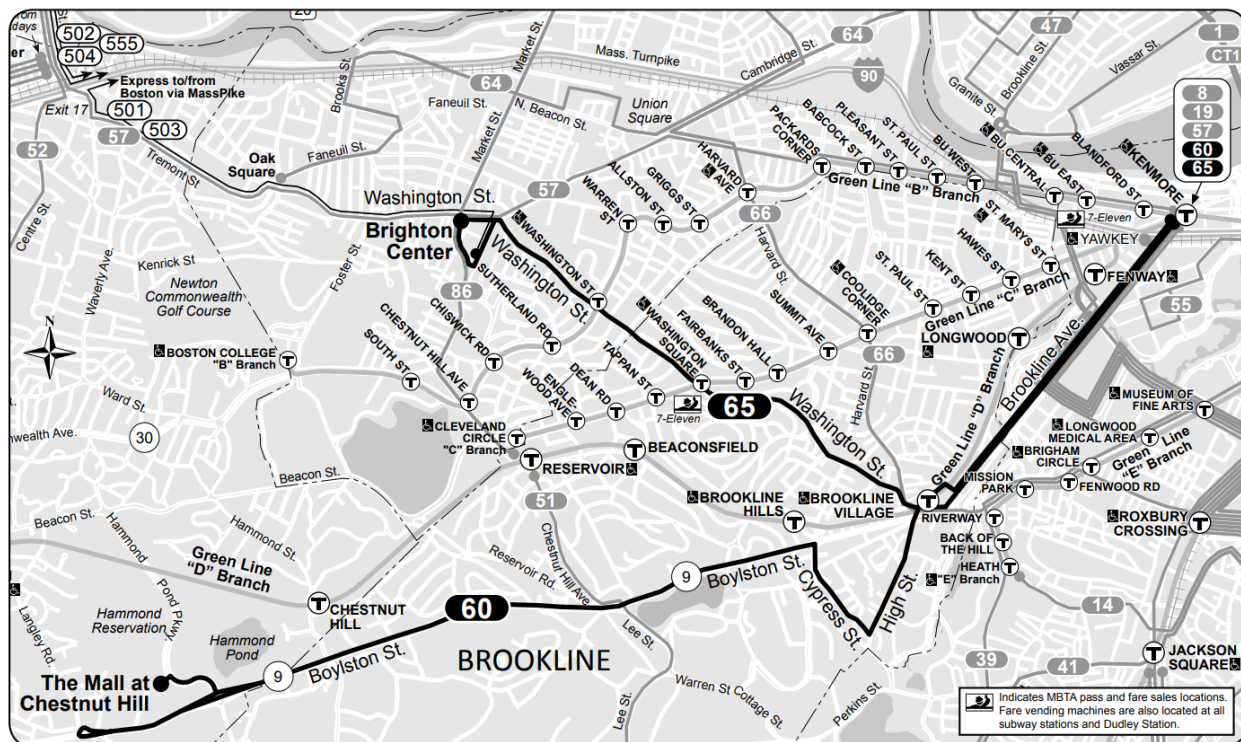
Route 60

Chestnut Hill – Kenmore Station

Route Overview

Route 60 Chestnut Hill – Kenmore Station is a Local route that operates between the Mall at Chestnut Hill and Kenmore Station via Boylston Street, Cypress Street, and the Longwood Medical Area (LMA).

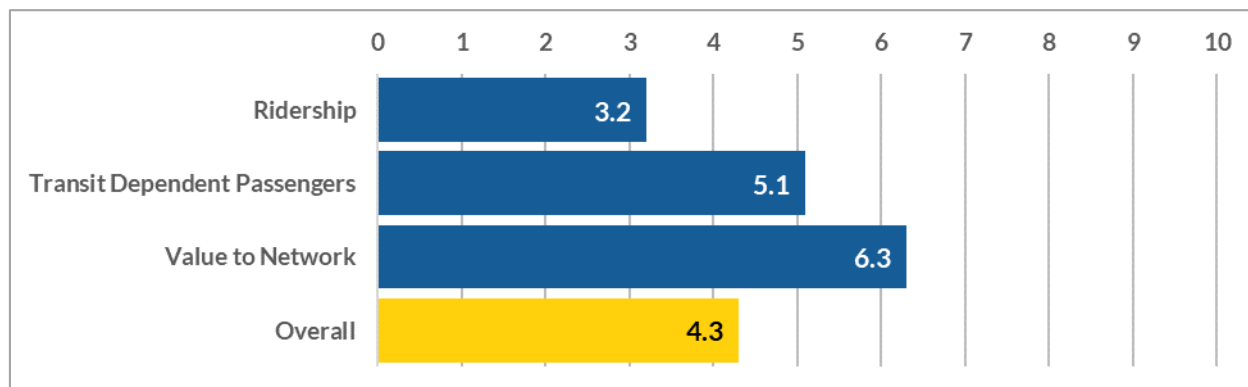
Figure 1 | Service Map



Network Importance

Route 60 is of moderately low importance within the MBTA bus network (see Figure 2). On a relative scale of 0 to 10, Route 60 rates 3.2 in terms of ridership, 5.1 in terms of transit dependent ridership, and 6.3 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

On weekdays, Route 60 operates from 4:55 AM to 12:06 AM (see Table 1), mostly:

- Every 30 to 48 minutes before 6:00 AM.
- Every 24 to 28 minutes in the early AM and AM peak periods.
- Every 25 to 35 minutes in the midday base, midday school, and PM peak periods.
- Every 20 to 60 minutes in the evening period, primarily every 30 minutes around 9:00 PM and then every 60 minutes.
- Mostly every 60 minutes after 10:00 PM.

Table 1 | Schedule Statistics

SERVICEDAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	4:55 AM to 12:06 AM			36/37
Sunrise	4:55 AM to 5:59 AM	30 – 48	40	1/2
Early AM	6:00 AM to 6:59 AM	24 – 28	27	3/3
AM Peak	7:00 AM to 8:59 AM	24 – 28	26	4/5
Midday Base	9:00 AM to 1:29 PM	25 – 35	34	8/8
Midday School	1:30 PM to 3:59 PM	27 – 35	31	5/5
PM Peak	4:00 PM to 6:29 PM	25 – 35	27	5/6
Evening	6:30 PM to 9:59 PM	20 – 60	31	7/6
Late Evening	10:00 PM to 11:59 PM	51 – 60	55	2/2
Night	12:00 AM to 12:06 AM	51	-	1/-
Saturday	5:05 AM to 12:50 AM	30 – 60	38	31/31
Sunday	6:00 AM to 9:30 PM	60 – 70	60	15/15

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

On Saturdays, service operates from 5:05 AM to 12:50 AM, mostly:

- Every 30 minutes until approximately 9:30 AM.
- Every 35 to 40 minutes from 9:30 AM to 7:00 PM.
- Every 30 minutes from 7:00 PM to 9:00 PM inbound and 8:30 PM outbound.
- Every 60 minutes through the end of service.

Sunday service operates from 6:00 AM to 9:30 PM, generally every 60 minutes.

On weekdays and Saturdays, Route 60 meets both the service span and service frequency standards. On Sundays, it meets the service span standards, but not the service frequency standards as some trips are spaced 70 minutes apart versus the standard of at least every 60 minutes. This could likely be resolved with minor scheduling changes.

Service Patterns

Route 60 operates with two predominant service patterns that differ in how service is provided at the outer end (see Table 2). On weekdays:

- Pattern 60.2 runs AM-only service. Outbound trips operate to the Mall at Chestnut Hill, continue westbound along Route 9 to Langley Street, then turn around and travel eastbound to Route 9 at Tully Street, which is the AM outer terminal. Inbound trips travel to Kenmore Square via Route 9 and do not serve the Mall at Chestnut Hill.
- Pattern 60.0 runs PM-only service. Outbound trips operate to the Mall at Chestnut Hill, which is the PM outer terminal. Inbound trips leave Chestnut Hill and travel westbound on Route 9 to Langley Street, then turn around and travel to Kenmore Square without serving the Mall at Chestnut Hill.

In addition:

- Pattern 60.4 starts service from Brookline Village rather than from Kenmore Station on the first AM outbound trip.
- Pattern 60.3 operates from the Mall at Chestnut Hill to Brookline Village on the last PM inbound trip.

On weekends, all service operates with the weekday PM pattern. In addition, on Saturdays, the first AM outbound trip operates from Brookline Village and the last PM inbound trip operates to Brookline Village. All Sunday service operates to and from Kenmore Station.

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
INBOUND				36	31	15
60.0	Mall at Chestnut Hill	Kenmore Station	PM service	20	30	15
60.2	Boylston Street at Tully Street	Kenmore Station	AM service; does not serve Mall at Chestnut Hill	15	-	-
60.3	Mall at Chestnut Hill	Brookline Village	Last PM trip	1	1	-
OUTBOUND				37	31	15
60.0	Kenmore Station	Mall at Chestnut Hill	PM service	21	30	15
60.2	Kenmore Station	Boylston Street at Tully Street	AM service via Mall at Chestnut Hill	15	1	-
60.4	Brookline Village	Boylston Street at Tully Street	First AM trip	1	-	-

Ridership

Route 60 serves 1,320 passengers per weekday, 650 per Saturday, and 370 per Sunday.

Ridership by Stop

Route 60 serves Brookline Village, the Longwood Medical Area and Kenmore Square (including connections with the Green Line). On weekday inbound trips (see Figure 3):

- 30 passengers board at the Mall at Chestnut Hill.
- 60 passenger board and 40 alight at the two stops on Route 9 west of the Mall at Chestnut Hill. Most of these are at the outer stop at Langley Street.
- 160 passengers board and 20 alight at the nine eastbound stops on Route 9.
- 150 passengers board and 20 alight at the seven stops on the jog along Cypress and High Streets.
- 10 passengers board and 80 alight at Washington Street at Walnut Street in Brookline Village, which connects to the Green Line at Brookline Village Station.
- 10 passengers board and 20 alight at the two stops on Brookline Avenue before Francis Street.
- 130 passengers board and 180 alight at the five stops on Brookline Avenue from Francis Street to the Fenway, which serve the Longwood Medical Area.
- 20 passengers board and 80 alight at the last four stops on Brookline Avenue.

- 310, or 41% of all inbound passengers, alight at Kenmore Station.

Outbound patterns are roughly the reverse of inbound patterns. Weekend patterns are also similar, but with lower volumes and a lower proportion of riders to and from the Longwood Medical Area.

Ridership by Trip

On weekdays, ridership is highest inbound in the AM peak and outbound in the PM peak. However, there is also a significant amount of reverse commute ridership. On inbound trips (see Figure 4):

- The first two trips of the day serve 10 or fewer total passengers. The third trip at 6:30 AM attracts 17 boardings.
- Ridership is highest during the AM peak, with most trips serving 25 to 30 passengers on trips between 6:58 AM and 8:17 AM.
- Ridership low between 9:00 AM and 3:00 PM, which most trips carrying 10 to 20 passengers
- After 3:00 PM, ridership increases to 20 to 30 passengers per trip through 4:45 PM.
- It then drops to 10 or fewer passengers per trip through the end of service.

On outbound trips (see Figure 5):

- Ridership is 15 or fewer passengers per trip until 6:00 AM.
- It then increases to 20 to 30 passengers per trip through 9:00 AM.
- From 9:00 AM to 3:00 AM, ridership is generally around 20 passengers per trip.
- It then increases steadily to 40 passengers on the 5:00 PM trip.
- After 5:00, ridership declines steadily to less than 20 per trip by 7:00 PM and less than 10 passengers per trip after 8:30 PM.

On Saturdays, most inbound trips carry around 10 passengers per trip, with slightly higher ridership in the late afternoon (see Figure 6). Outbound ridership is slightly higher at around 15 passengers per trip, with lower ridership in the evening (see Figure 7).

On Sundays, when service operates less frequently, ridership per trip is higher than on Saturdays. Inbound ridership is around 20 passengers per trip between 3:00 PM and 6:30 PM and 10 per trip before and after those times (see Figure 8). Outbound ridership is highest in the early morning and lower in the afternoon and evening (see Figure 9).

Figure 3 | Weekday Inbound Ridership by Stop Map

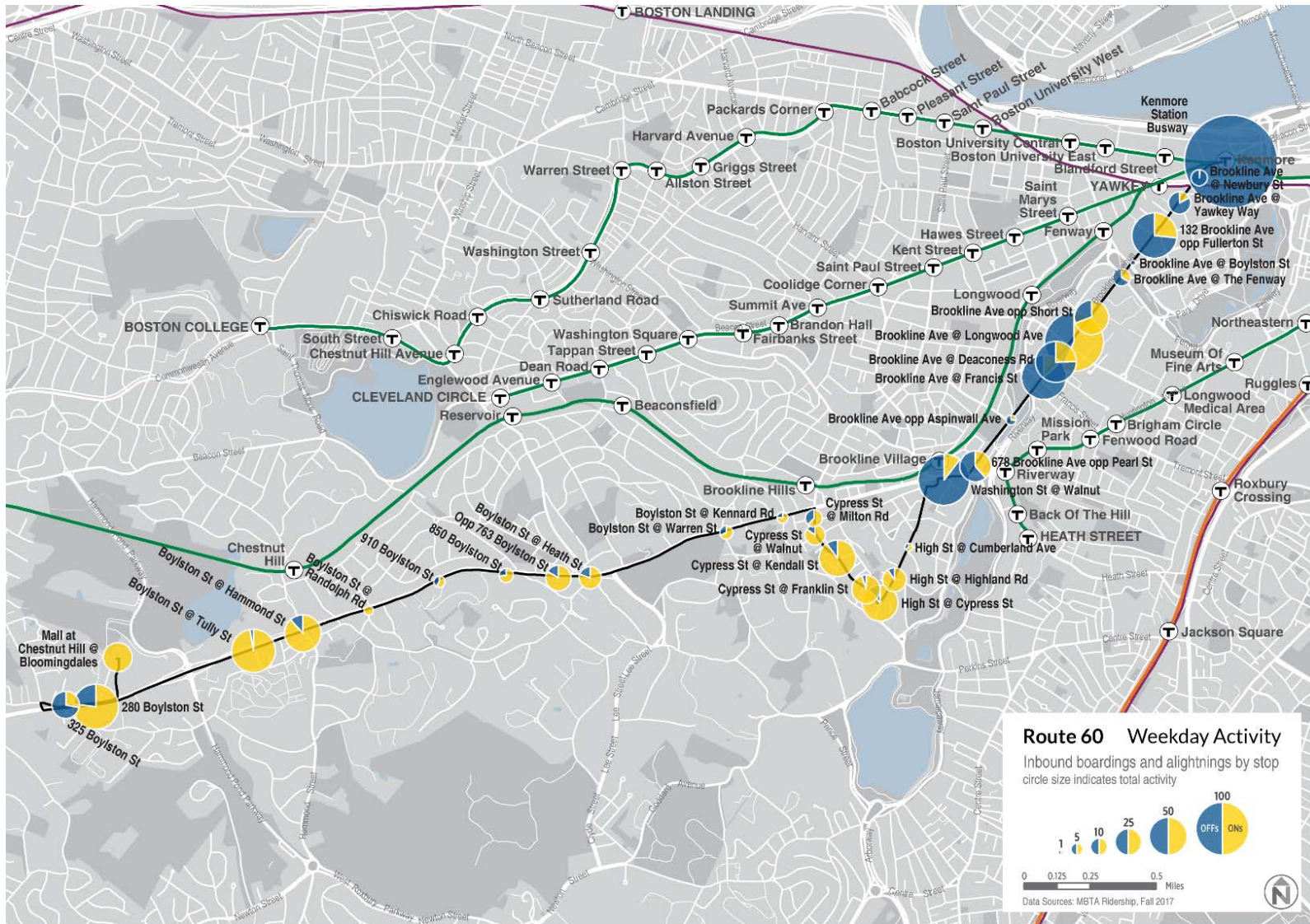


Figure 4 | Weekday Ridership by Trip: Inbound

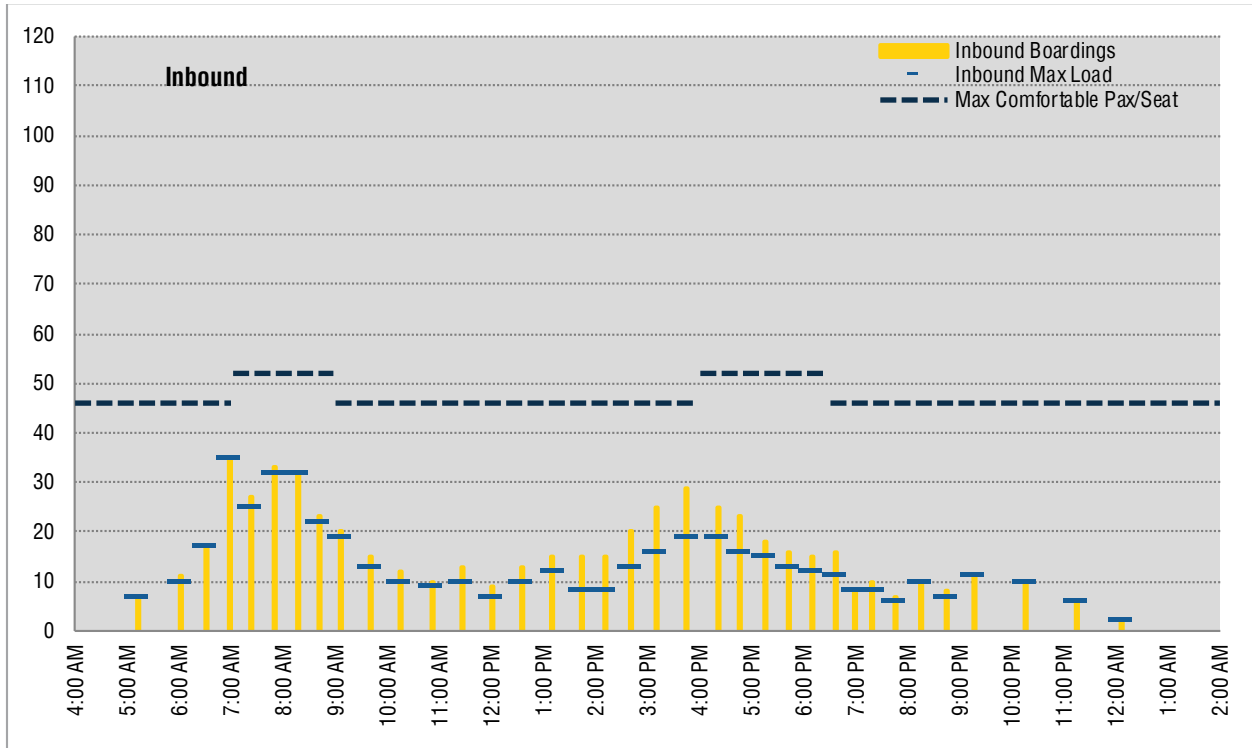


Figure 5 | Weekday Ridership by Trip: Outbound

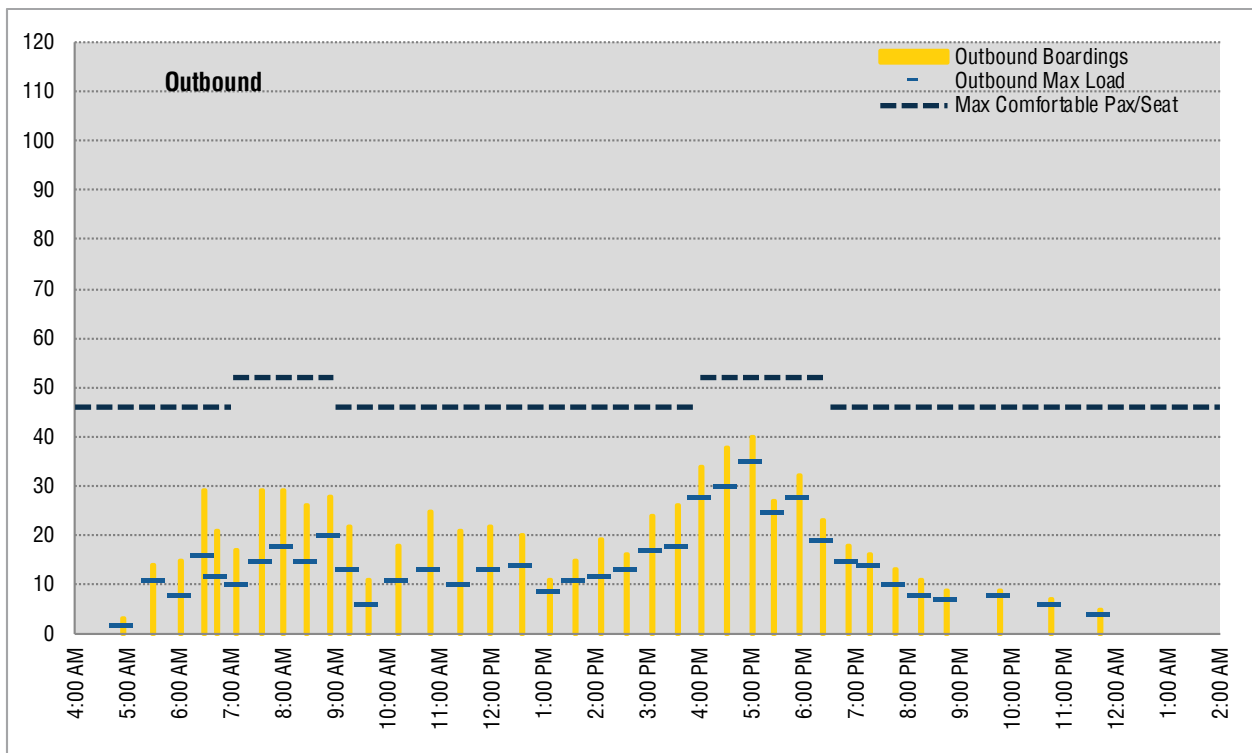


Figure 6 | Saturday Ridership by Trip: Inbound

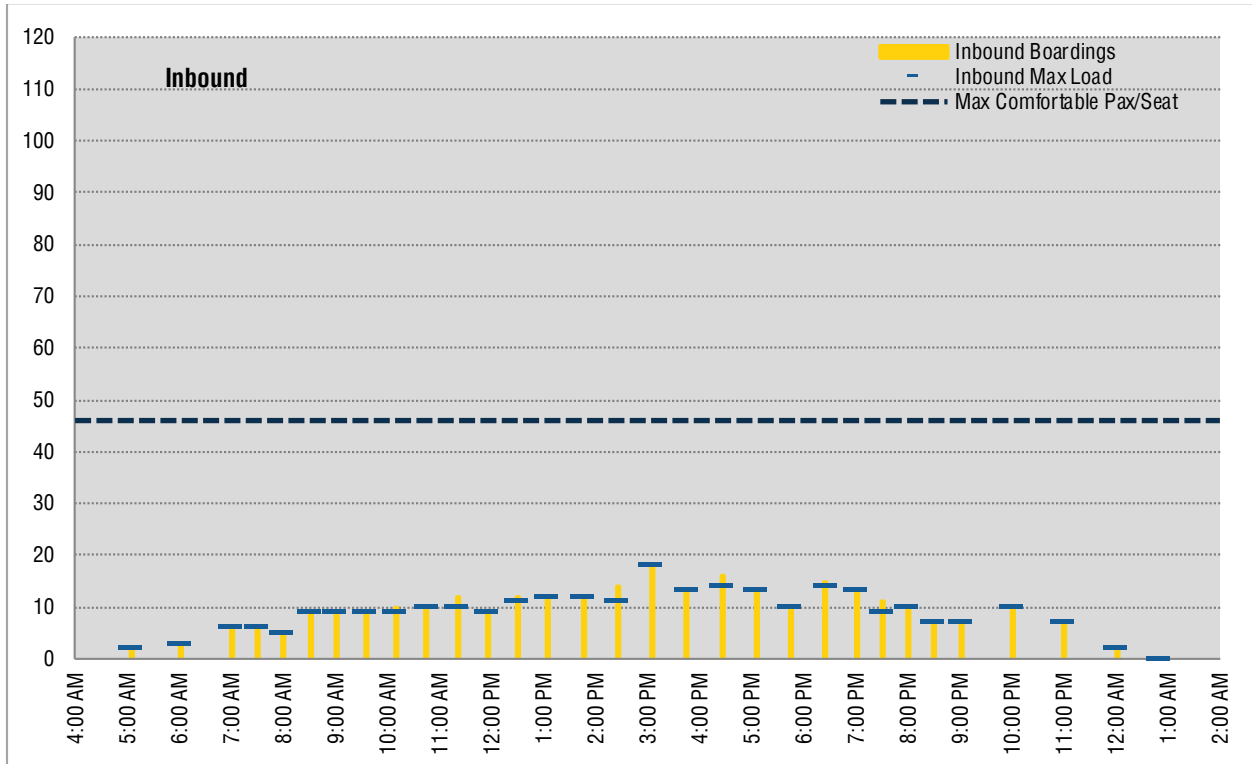


Figure 7 | Saturday Ridership by Trip: Outbound

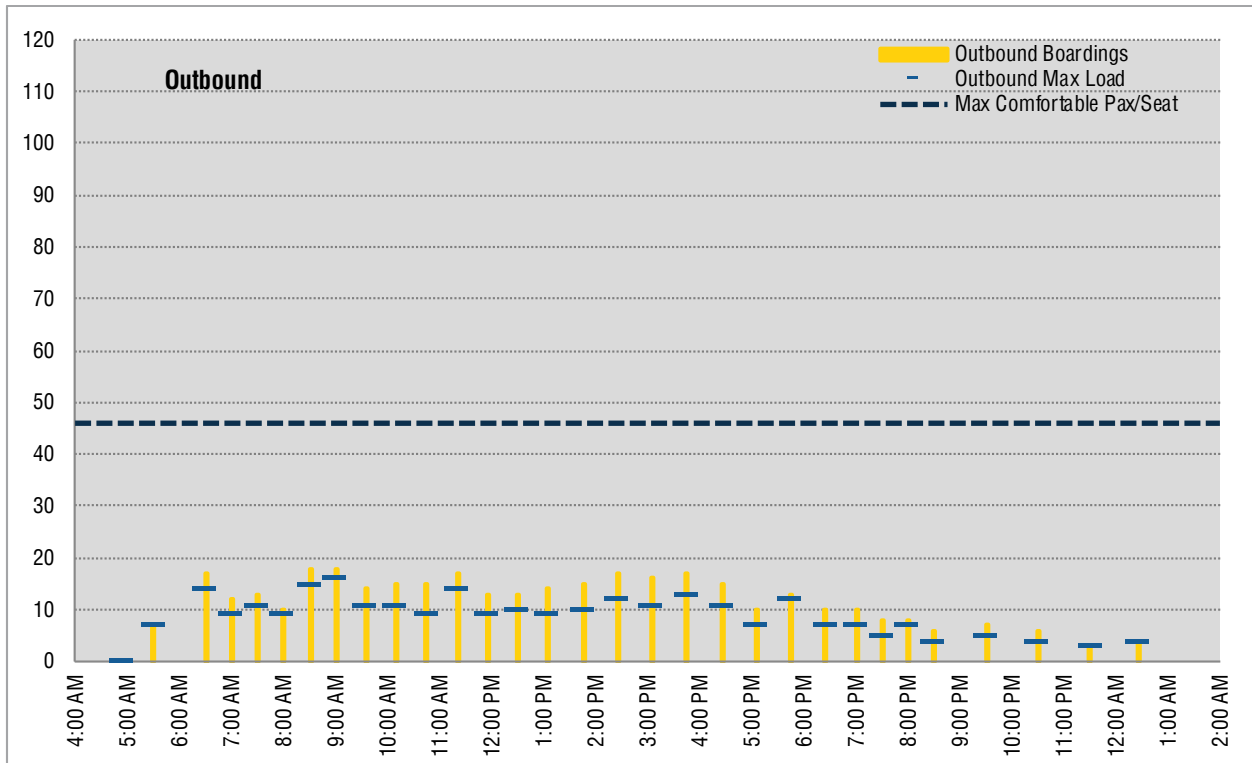


Figure 8 | Sunday Ridership by Trip: Inbound

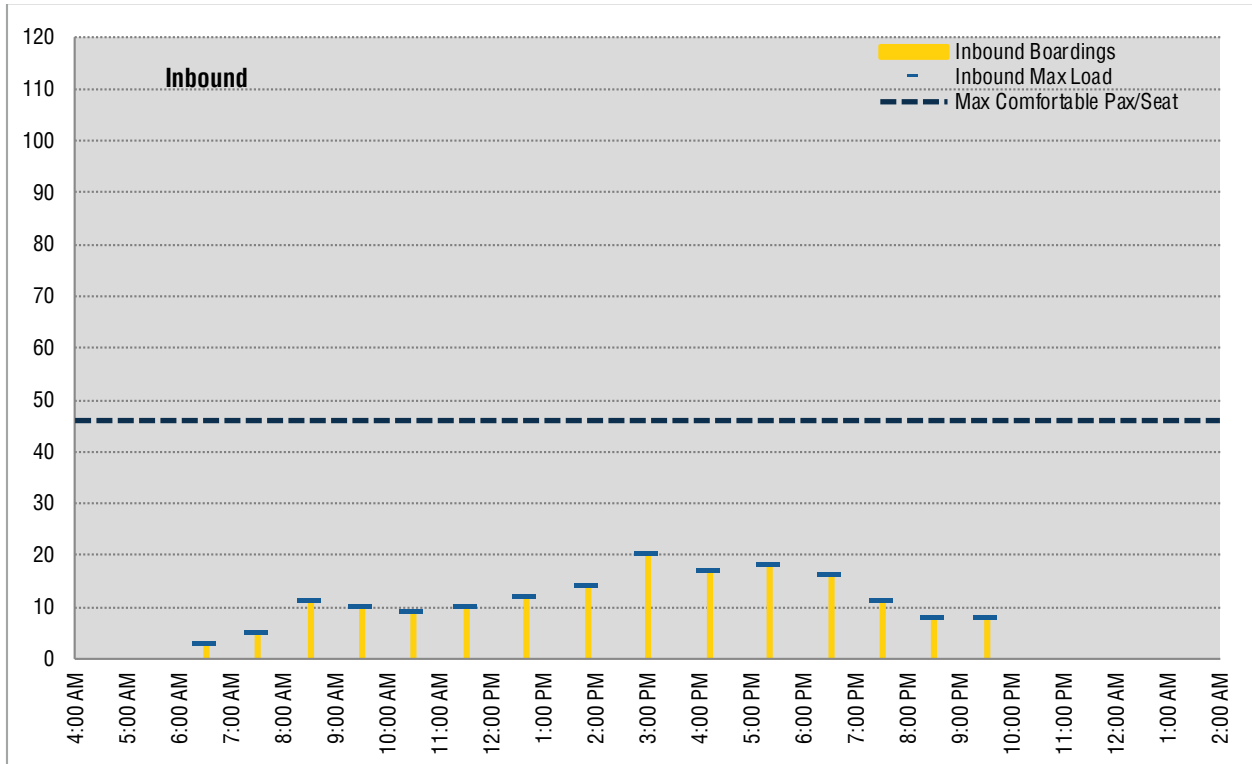
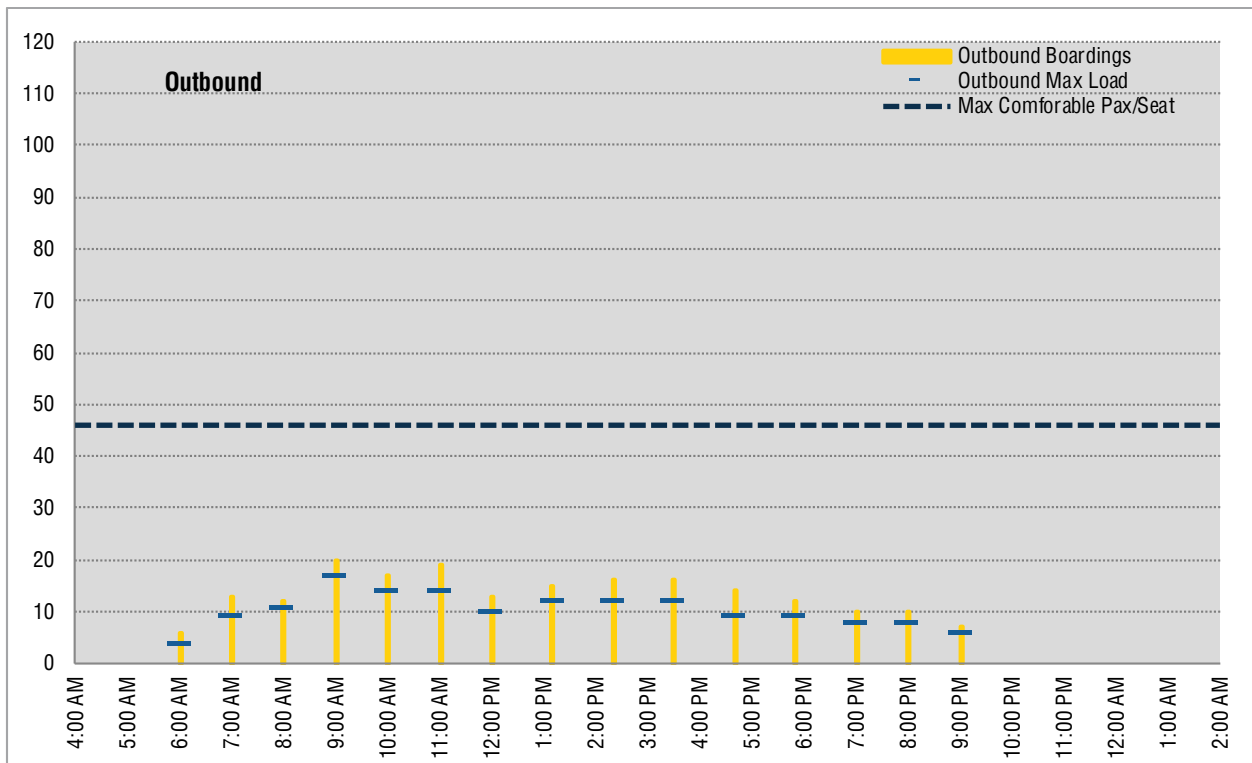


Figure 9 | Sunday Ridership by Trip: Outbound



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 all days 100% 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	100%	100%	100%

Reliability and Speed

Reliability

Route 60's overall reliability is 64% on weekdays, 76% on Saturdays, and 81% on Sundays. The weekday level is below the MBTA's minimum standard of 70%, but the Saturday and Sunday levels are 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	64%	62%	64%	0.1%
Saturday	77%	66%	76%	-
Sunday	81%	77%	81%	-

Running Times

Route 60 trips generally run longer than scheduled; with difference of up to five minutes during peak periods (see Figure 10 and Figure 11).

Figure 10 | Scheduled & Median Travel Time by Trip: Route 60 Inbound

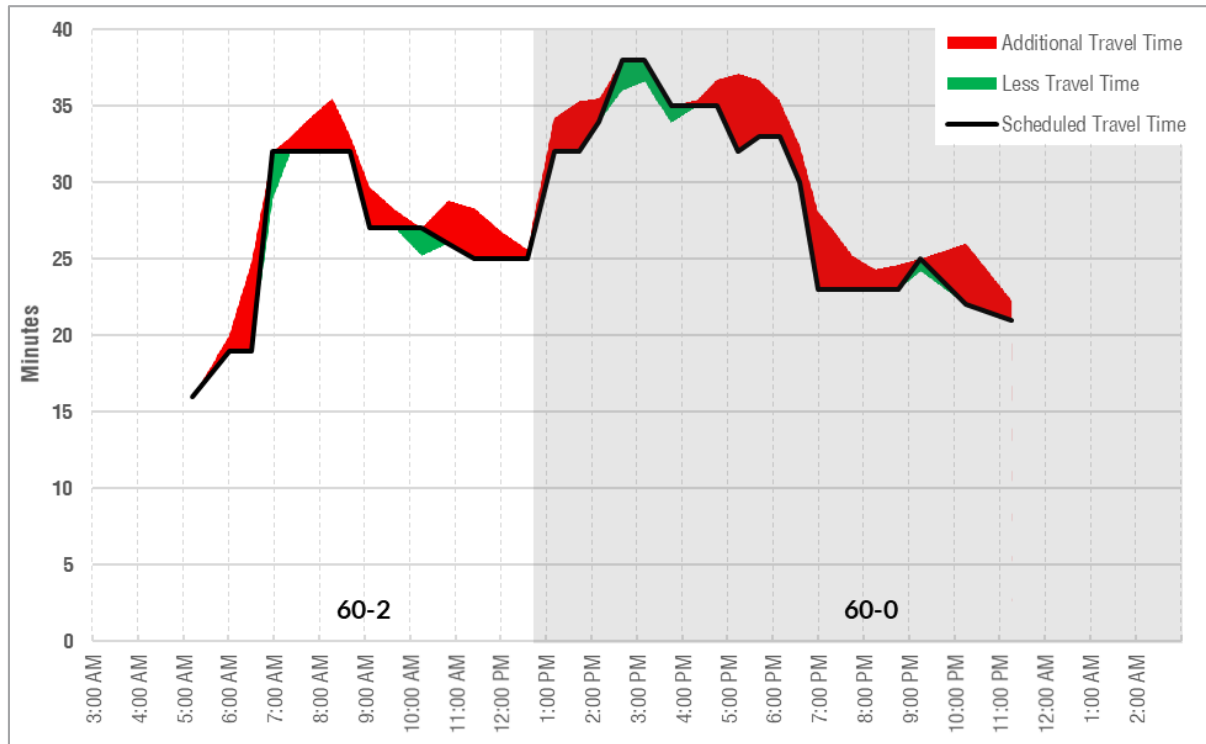
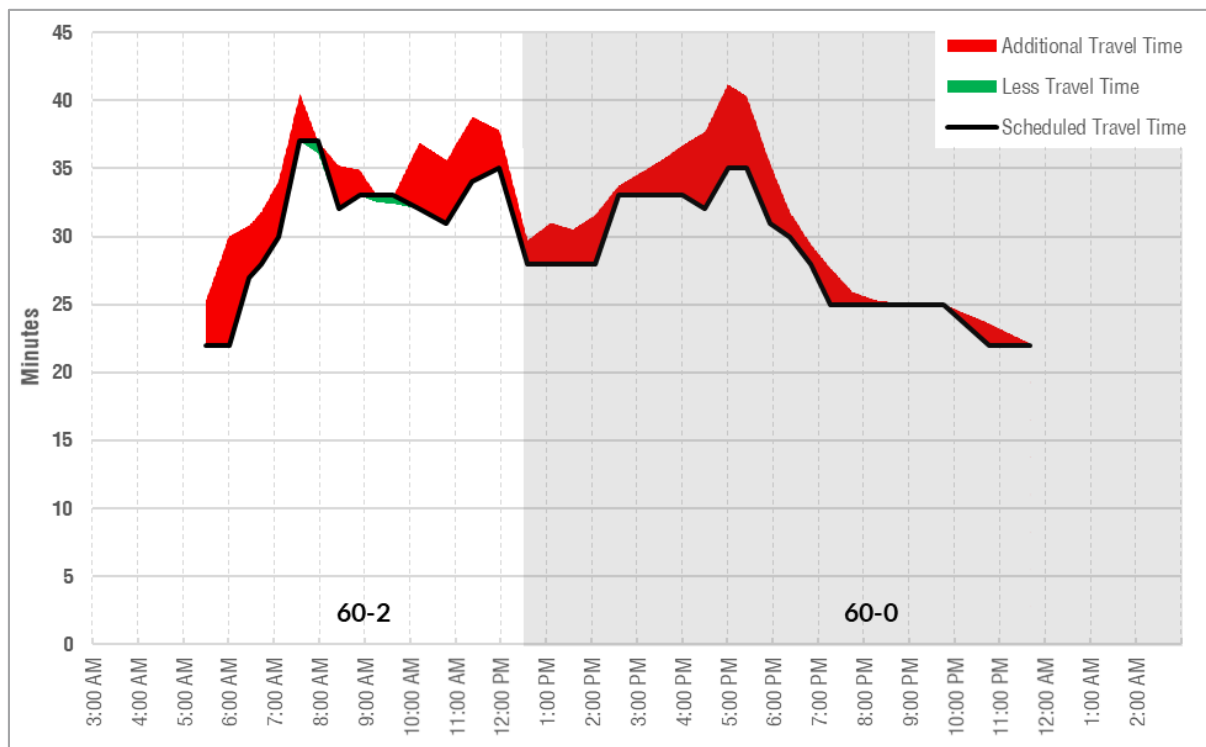


Figure 11 | Scheduled & Median Travel Time by Trip: Route 60 Outbound



Stop Spacing

Route 60 has an average of 5.4 stops per mile, which is within the MBTA's standard of four to seven stops per mile. There are a few instances of more closely spaced stops, however, including through the Longwood Medical Area.

Summary

Route 60 provides a unique service to the Route 9/Boylston Street corridor west of Brookline Village that connects that area with the rapid transit system, Brookline Village, the Longwood Medical Area, and Kenmore Square. Route 60 performs reasonably well, with its major issue being below standard weekday on-time performance. There are also opportunities to make schedules more regular.