

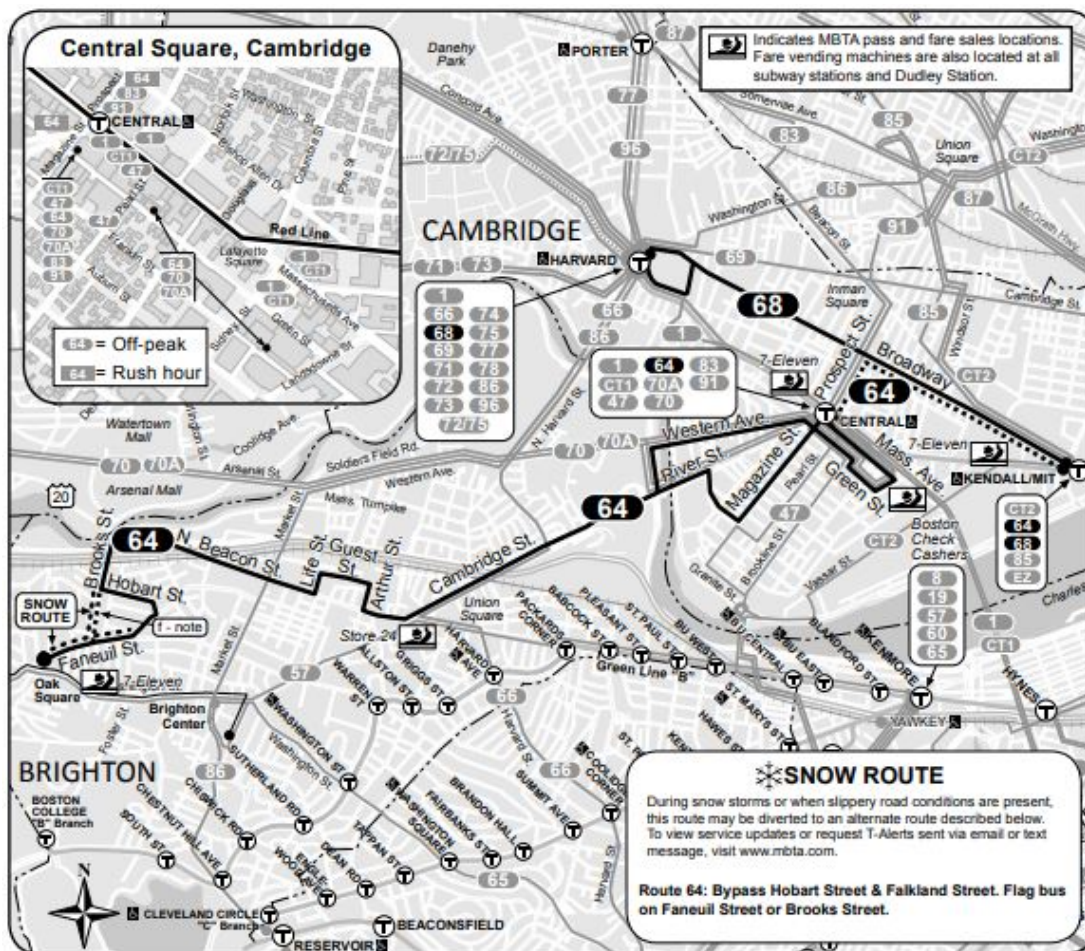
# Route 64

Oak Square – University Park or Kendall/MIT

## Route Overview

Route 64 Oak Square – University Park or Kendall/MIT is a Local route that operates between Oak Square in Brighton and University Park or Kendall Square in Cambridge via Union Square in Allston (see Figure 1). Route 64 connects with the Red Line subway at Central Square during all service hours, and Kendall/MIT during the weekday peaks.

Figure 1 | Route 64 Service Map

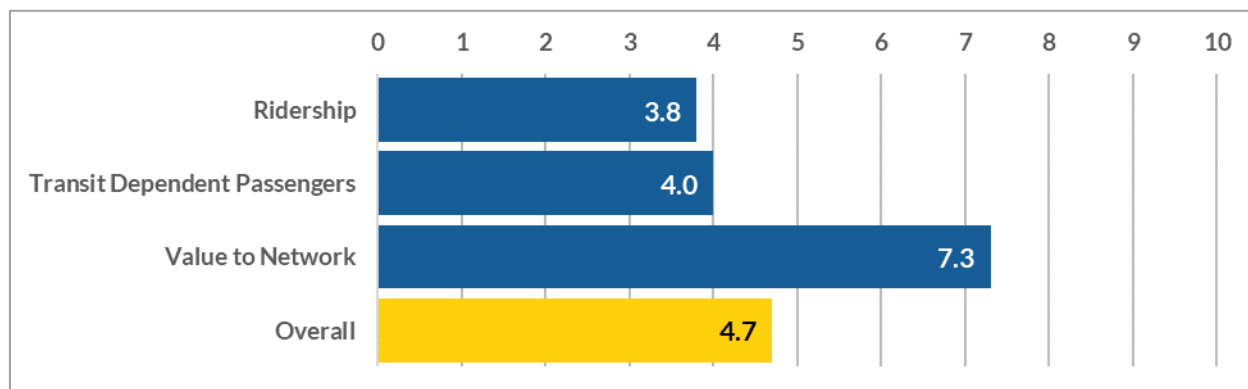


## Network Importance

Route 64 is moderately important within the overall bus network (see Figure 2). On a relative scale of 0 to 10, Route 64 rates 3.8 in terms of ridership, 4.0 in terms of transit

dependent ridership, and 7.3 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 4.7.

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



## Service Overview

### Schedule

Route 64 operates seven days a week, and provides relatively infrequent service except for weekday AM peak periods (see Table 1). On weekdays, it operates between 5:31 AM and 1:13 AM:

- Every 18 to 25 minutes before 7:00 AM, but mostly every 23 minutes before 6:00 AM and every 21 minutes between 6:00 AM and 7:00 AM.
- Every 20 to 35 minutes between 9:00 AM and 6:30 PM, but mostly every 32 minutes between 9:00 AM and 1:30 PM, every 33 minutes between 1:30 PM and 4:00 PM, and every 28 minutes between 4:00 PM and 6:30 PM.
- Every 25 to 77 minutes from 6:30 PM until the end of service, but mostly every 55 minutes.

On Saturdays, Route 64 operates between 5:20 AM and 1:15 AM, every 60 minutes except for the last trips, which are spaced 50 to 55 minutes apart. On Sundays, service operates close to hourly, but with service frequencies that are irregular and range from 58 to 70 minutes.

Route 64 meets the MBTA’s Span of Service and Frequency standards for Local routes on all days except for two round trips on weekdays and Sundays that are 70 minutes apart versus the maximum of 60 minutes (and which could be resolved with minor schedule adjustments).

Table 1 | Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
<b>Monday-Friday</b>	<b>5:31 AM to 1:13 AM</b>			<b>37/35</b>
Sunrise	5:31 AM to 5:59 AM	23	23	2/-
Early AM	6:00 AM to 6:59 AM	18 - 25	21	2/3
AM Peak	7:00 AM to 8:59 AM	13 - 23	18	8/7
Midday Base	9:00 AM to 1:29 PM	20 - 35	32	9/8
Midday School	1:30 PM to 3:59 PM	25 - 35	33	4/4
PM Peak	4:00 PM to 6:29 PM	20 - 30	28	5/5
Evening	6:30 PM to 9:59 PM	25 - 75	58	4/4
Late Evening	10:00 PM to 11:59 PM	52 - 60	57	2/2
Night	12:00 AM to 1:13 AM	52 - 55	55	1/2
<b>Saturday</b>	<b>5:20 AM to 1:15 AM</b>	<b>50 - 60</b>	<b>56</b>	<b>20/21</b>
<b>Sunday</b>	<b>8:18 AM to 6:59 PM</b>	<b>56 - 70</b>	<b>58</b>	<b>10/10</b>

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

## Service Patterns

Route 64 operates with three service patterns (see Table 2):

- Pattern 64.6 operates all weekday peak-period service, running between Oak Square and Kendall/MIT Station via Central Square, Prospect Street, and Broadway, and does not serve University Park.
- Pattern 64.0 operates all weekday off-peak service and all weekend service except for the last outbound trip on weekdays and Saturdays, running between Oak Square and University Park.
- Pattern 64.3 makes the last outbound trip on weekdays and Saturdays, operating from Central Square to Faneuil Square. Since this document was developed, this trip has been extended to Oak Square.

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
<b>INBOUND</b>				<b>37</b>	<b>20</b>	<b>10</b>
64.0	Oak Square	University Park	Primary service pattern	21	20	10
64.6	Oak Square	Kendall/MIT Station	Weekday peak period service	16	-	-
<b>OUTBOUND</b>				<b>35</b>	<b>21</b>	<b>10</b>
64.0	University Park	Oak Square	Primary Service Pattern	18	20	10
64.3	Central Square	Faneuil Square	Last outbound trip	1	1	-

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
64.6	Kendall/MIT Station	Oak Square	Weekday peak period service	16	-	-

## Ridership

Route 64 serves 1,810 passengers on weekdays, 570 on Saturdays, and 320 on Sundays. The weekend ridership levels are low relative to weekday ridership.

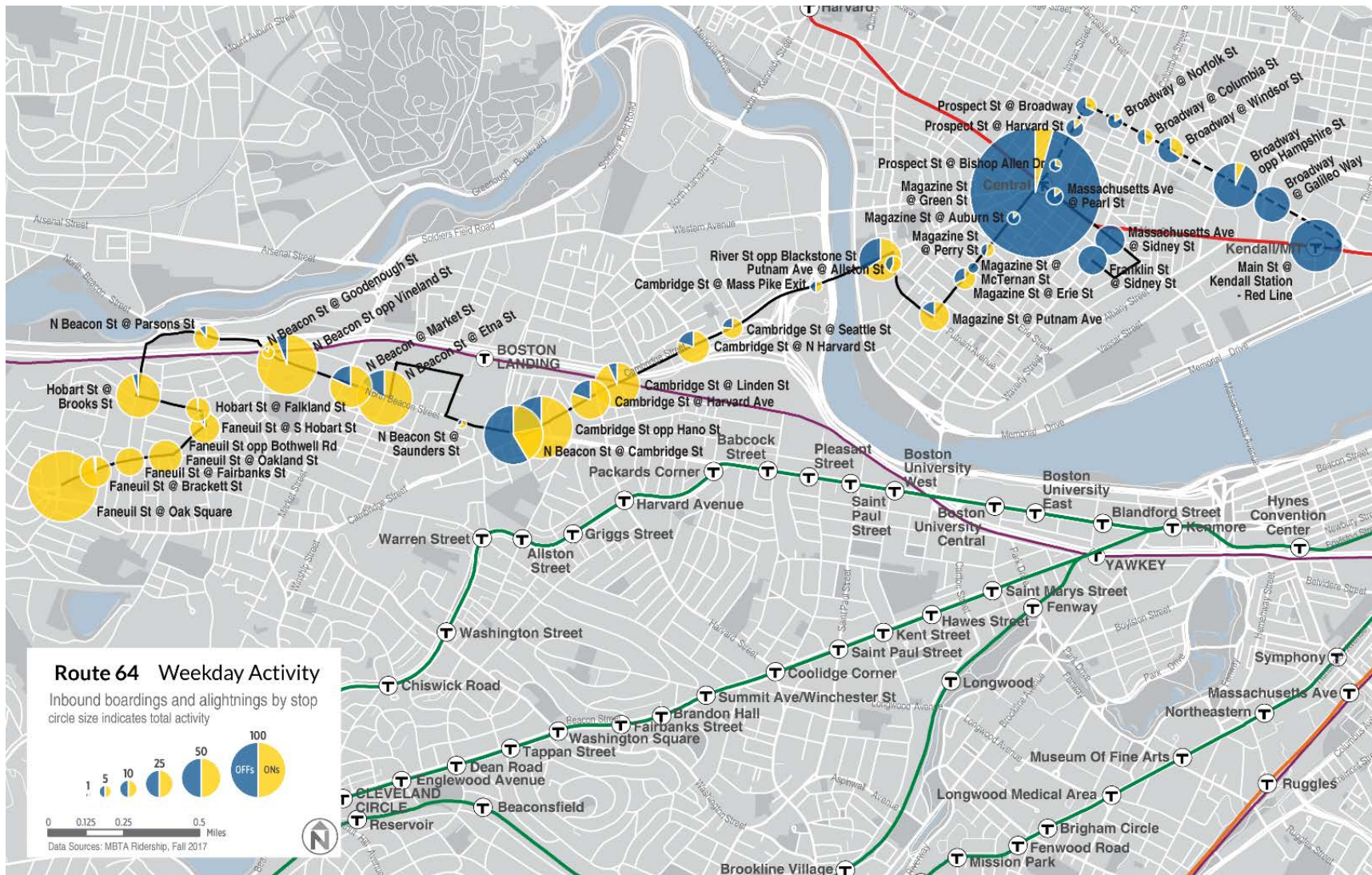
### Ridership by Stop

Route 64 riders primarily travel to and from Central Square and Kendall Square (including for transfers with the Red Line). Route 64 principally serves inhabitants of Allston/Brighton wishing to reach jobs and other activities in Central Square and Kendall Square on a convenient 1-seat ride. On weekday inbound trips (see Figure 3):

- 170 passengers board at the first stop in Oak Square.
- 210 passengers board and less than 10 alight at the seven stops between Oak Square and North Beacon Street.
- 320 passengers board and 110 alight at the seven stops on North Beacon Street.
- 240 passengers board and 60 alight at the six stops on Cambridge Street.
- 80 passengers board and 50 alight at the seven stops on River Street, Putnam Avenue, and Magazine Street before Central Square.
- 20 passengers board and 540 alight at Magazine Street at Green Street, which is the main stop for Central Square.
- 25 passengers board and 250 alight at the eight stops beyond Central Square to Kendall/MIT Station along Prospect Street and Broadway. The large majority of the alightings are at the last three stops. (This service only operates during peak periods.)
- 70 passengers alight at the three stops beyond Central Square to University Park. (This service operates during off-peak periods.)

Outbound ridership is roughly the reverse of inbound ridership on weekdays. Weekend ridership by stop mirrors weekday patterns, but with lower volumes and without ridership to and from Kendall Square (because service does not operate to or from Kendall Square on weekends).

Figure 3 | Weekday Inbound Ridership by Stop Map



## Ridership by Trip

Route 64's weekday ridership is very heavily peak-oriented. On inbound trips (see Figure 4):

- Ridership per trip quickly ramps up from nearly 30 passengers on the first trip to 50 before 7:00 AM.
- It then stays at or above 50 until nearly 9:00 AM.
- It then falls to around 20 passengers around 10:30 AM, and then ranges from 20 to 30 passengers per trip until slightly after 6:00 AM.
- It then tails off to 10 or fewer passengers through the end of service.

On outbound trips (see Figure 5):

- Except for a small bump to up to 20 passengers per trip in the AM peak, ridership per trip is close to 10 from the beginning of service until 2:00 PM.
- It is then 20 to 30 between 2:00 PM and just before 4:00 PM.
- Ridership per trip then jumps to between 40 to over 50 until about 7:00 PM.
- It then quickly declines to 30 at 7:00 PM and then to less than 10 on the last two outbound trips.

On Saturdays, inbound ridership per trip ranges from less than 10 on early and late trips to around 30 from mid-morning until early afternoon, and around 20 on other trips (see Figure 6). Outbound ridership per trip is lower, at 20 or fewer on nearly all trips, and less than 10 on many (see Figure 7). Sunday ridership per trip follows similar patterns, but with a much shorter span of service (see Figure 8 and Figure 9).

Figure 4 | Weekday Ridership by Trip: Inbound

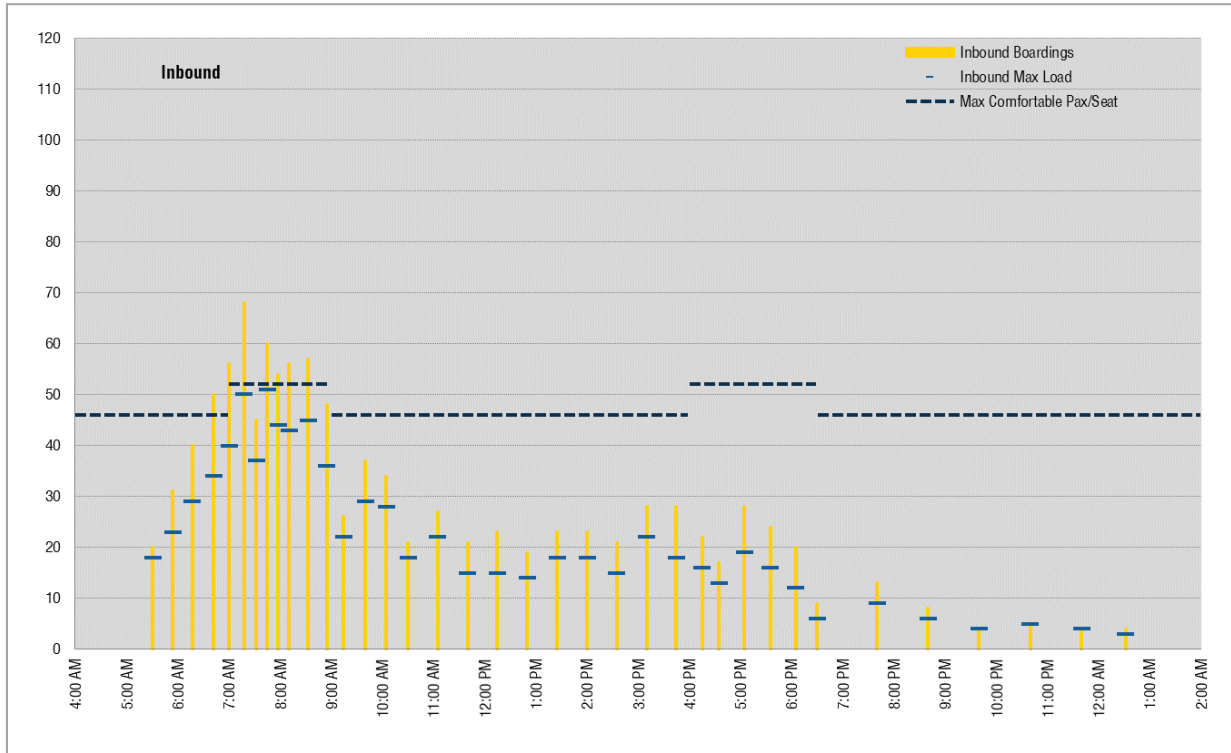


Figure 5 | Weekday Ridership by Trip: Outbound

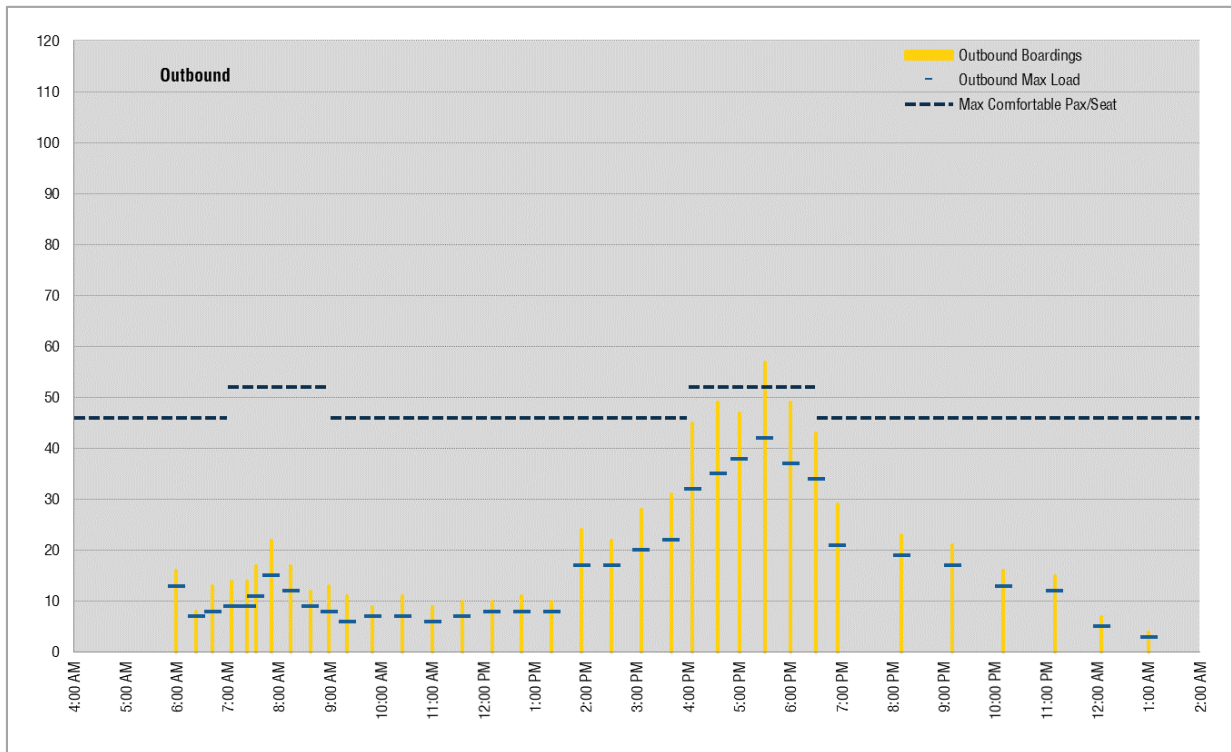


Figure 6 | Saturday Ridership by Trip: Inbound

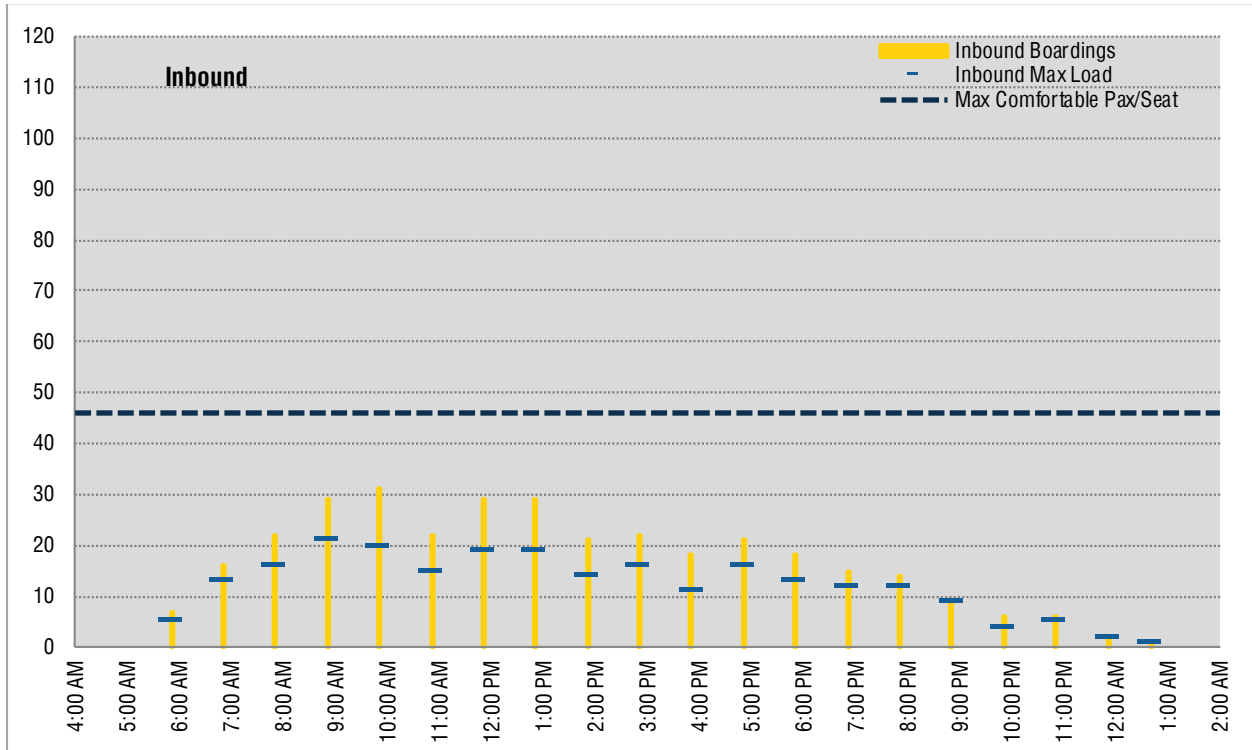


Figure 7 | Saturday Ridership by Trip: Outbound

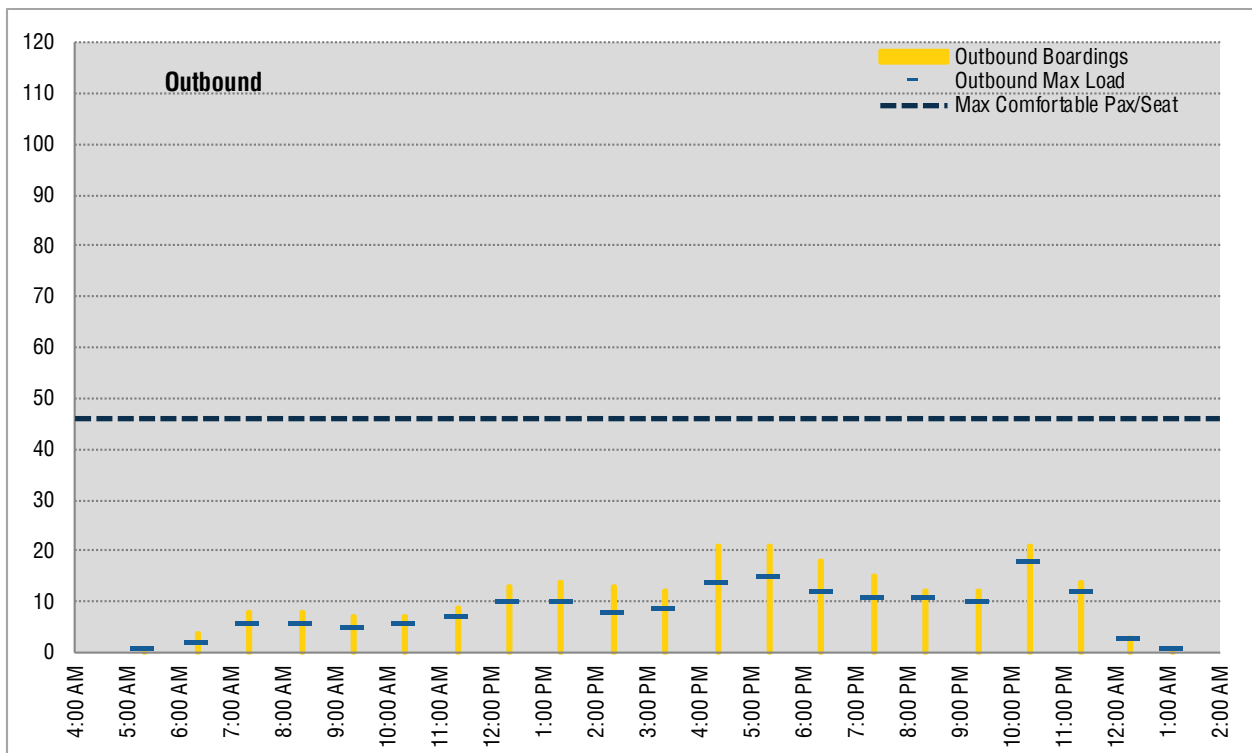




Figure 8 | Sunday Ridership by Trip: Inbound

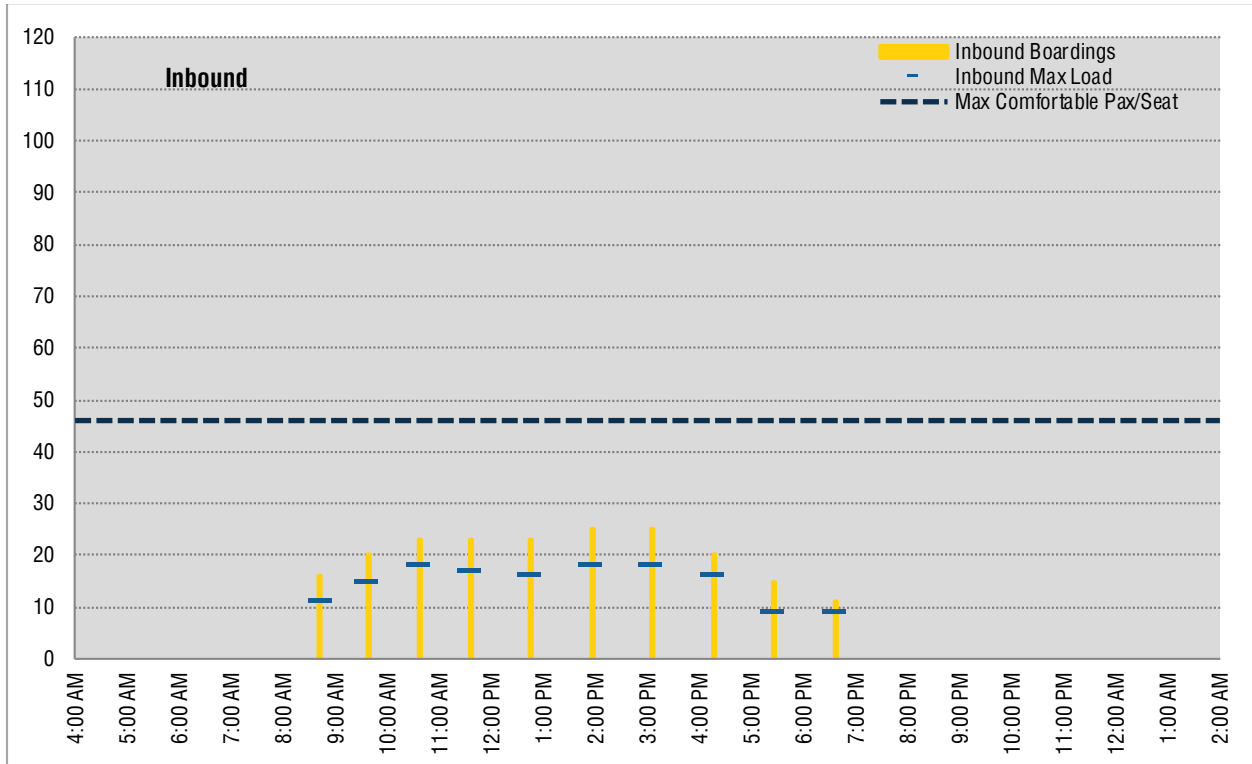
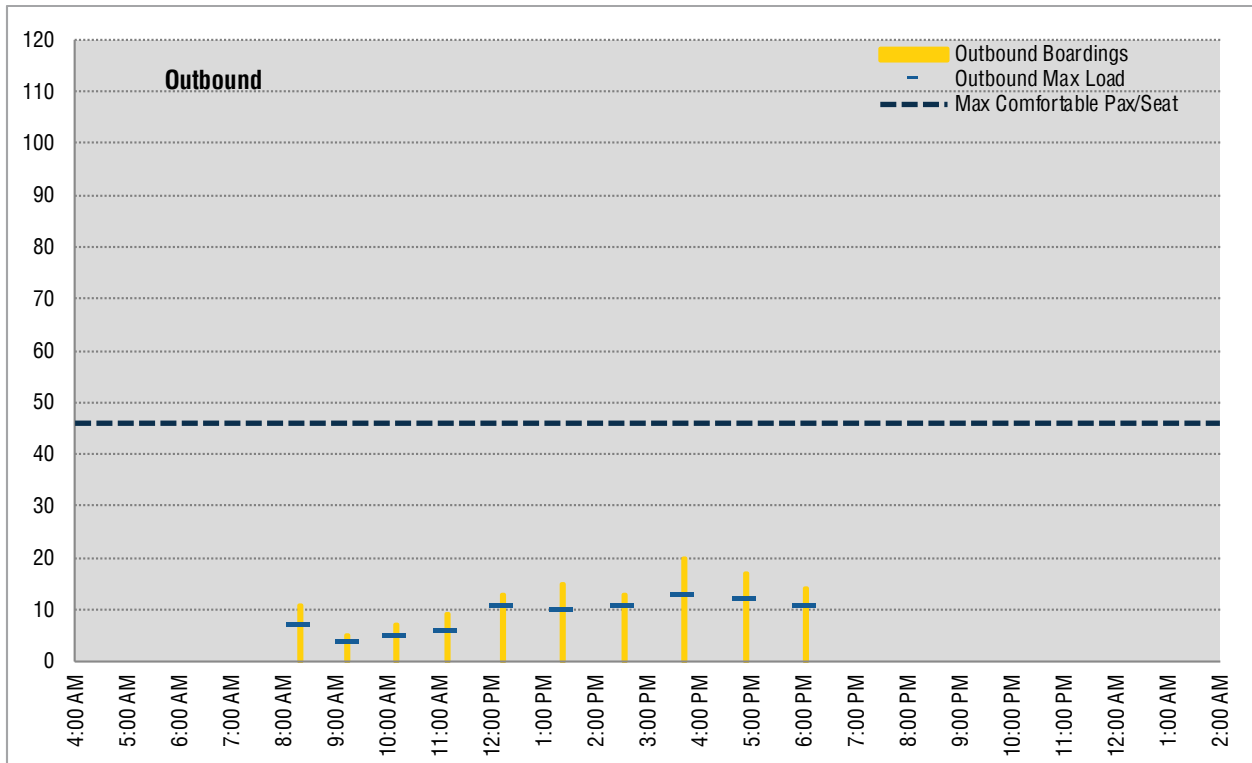


Figure 9 | Sunday Ridership by Trip: Outbound



## 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 weekdays, 90.4% of passenger minutes are in comfortable conditions, which is below the minimum standard of 92%. On weekends, passengers spend 100% of time in comfortable conditions, when loads on all buses are very low (see Table 3).

Table 3 | Passenger Time Spent Traveling in Comfortable Conditions

	WEEKDAYS	SATURDAYS	SUNDAYS
<b>Minimum Standard</b>	92.0%	92.0%	92.0%
<b>Target</b>	96.0%	96.0%	96.0%
<b>Actual</b>	90.4%	100.0%	100.0%

## Reliability and Speed

### Reliability

Route 64's overall reliability is 59% on weekdays, 67% on Saturdays, and 77% on Sundays (see Table 4). Weekday and Saturday performance is below the MBTA's minimum standard of 70%, while Sunday performance exceeds the target of 75%.

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID-ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
<b>Monday-Friday</b>	60%	54%	59%	0.3%
<b>Saturday</b>	66%	69%	67%	-
<b>Sunday</b>	80%	63%	77%	-

### Running Times

Inbound trips are late throughout the day and take up to 10 minutes longer than scheduled (see Figure 10). Outbound trips run faster than scheduled before 11:00 AM, but up to nine minutes longer after 12:30 PM (see Figure 11). Route 64 is one of the most delayed routes in the system, with weekday on-time performance of 59%. This is attributable to congestion through Central Square, near the Charles River crossings and I-90 ramps in Allston.

Figure 10 | Scheduled & Median Travel Time by Trip: Pattern 64.0 Inbound

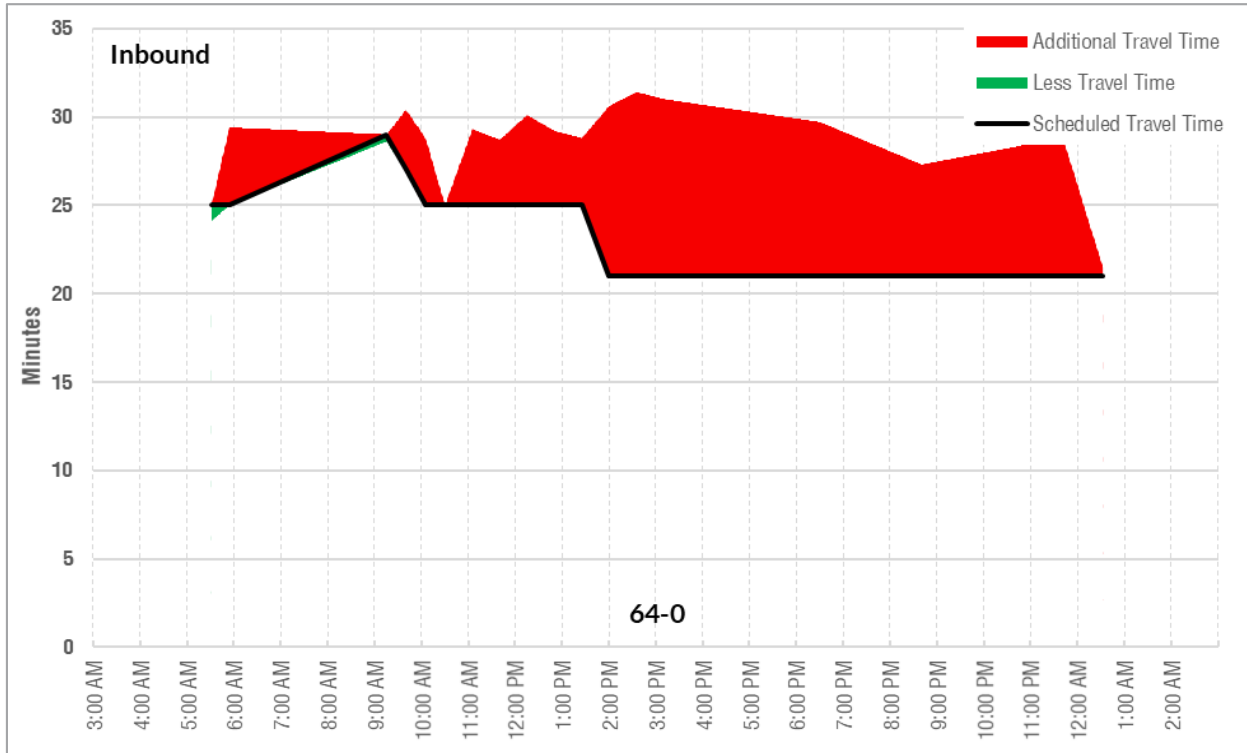


Figure 11 | Scheduled & Median Travel Time by Trip: Pattern 64.6 Inbound

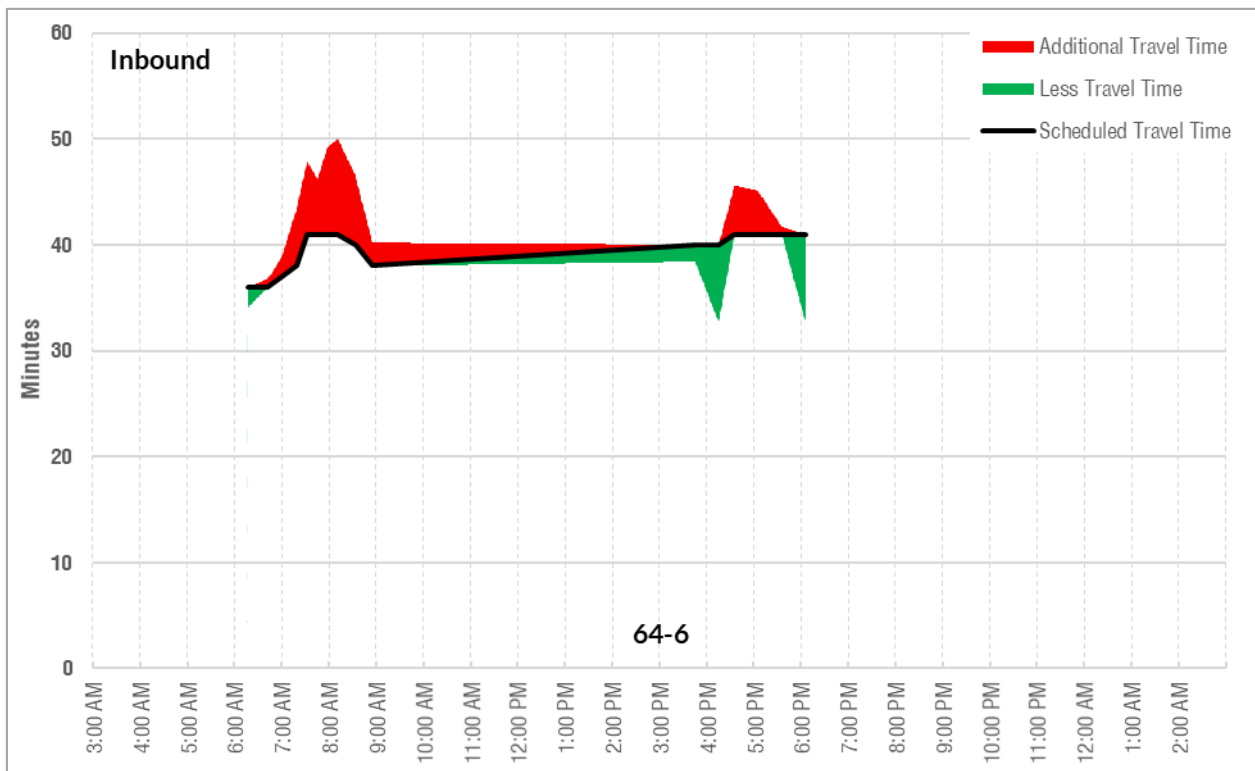


Figure 12 | Scheduled & Median Travel Time by Trip: Pattern 64.0 Outbound

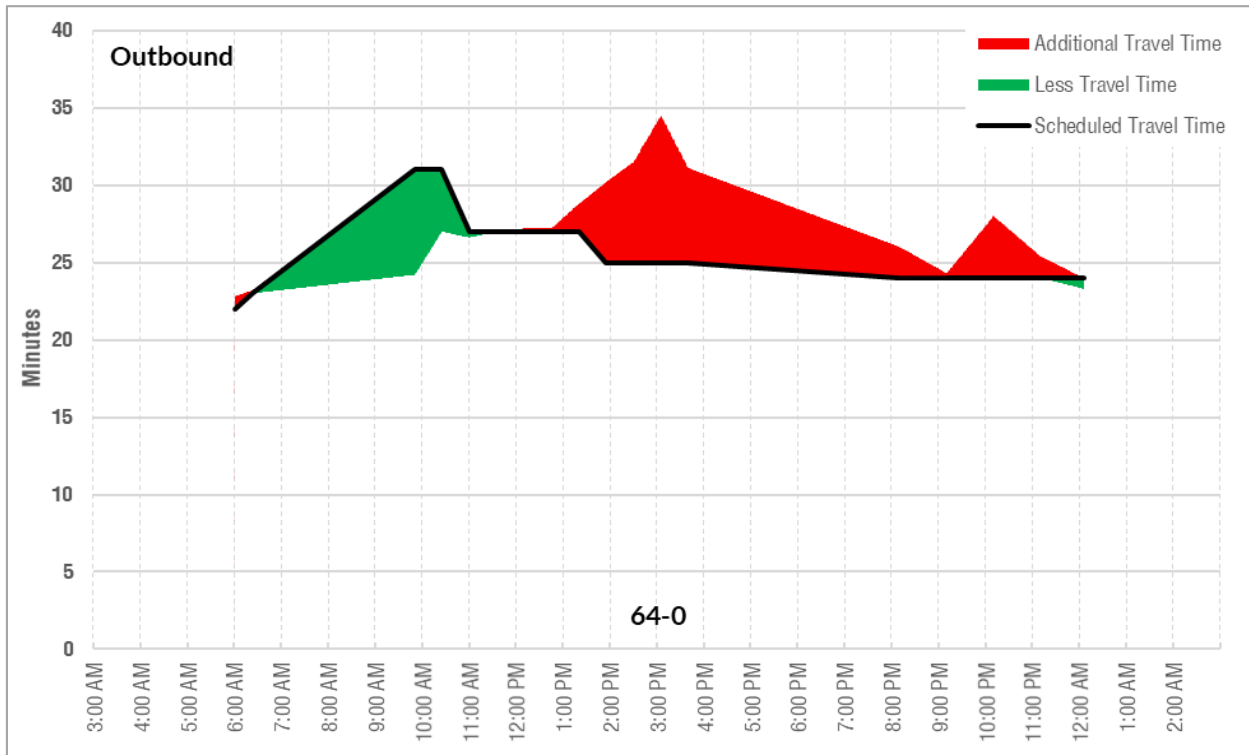
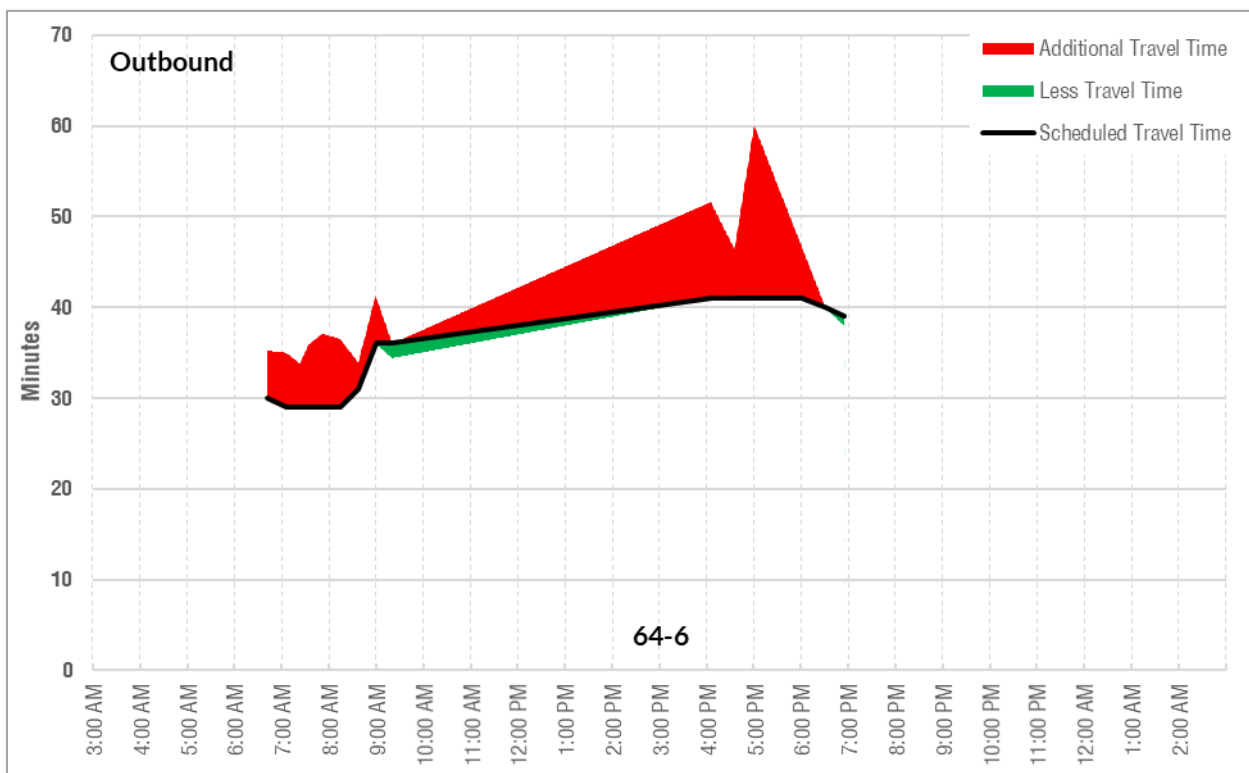


Figure 13 | Scheduled & Median Travel Time by Trip: Pattern 64.6 Outbound



## Stop Spacing

Route 64's stop spacing range from four per mile to nine per mile. Stops along Faneuil Street, the southwestern portion of Cambridge Street, and Magazine Street are particularly close. Stop consolidation in these areas could make service faster and more reliable.

## Summary

Route 64 provides unique service that connects Oak Square and Union Square and areas in between with Central Square, University Park, and Kendall Square. Based on weekday ridership levels, it is moderately successful. Its major shortcomings are its circuitous alignment, split inner ends, and below standard on-time performance.

Route 64 had operated middays to Kendall close to 30 years ago and was cut back to peak periods because of low demand.

Minor scheduling adjustment could make weekday and Sunday schedules much more regular.