

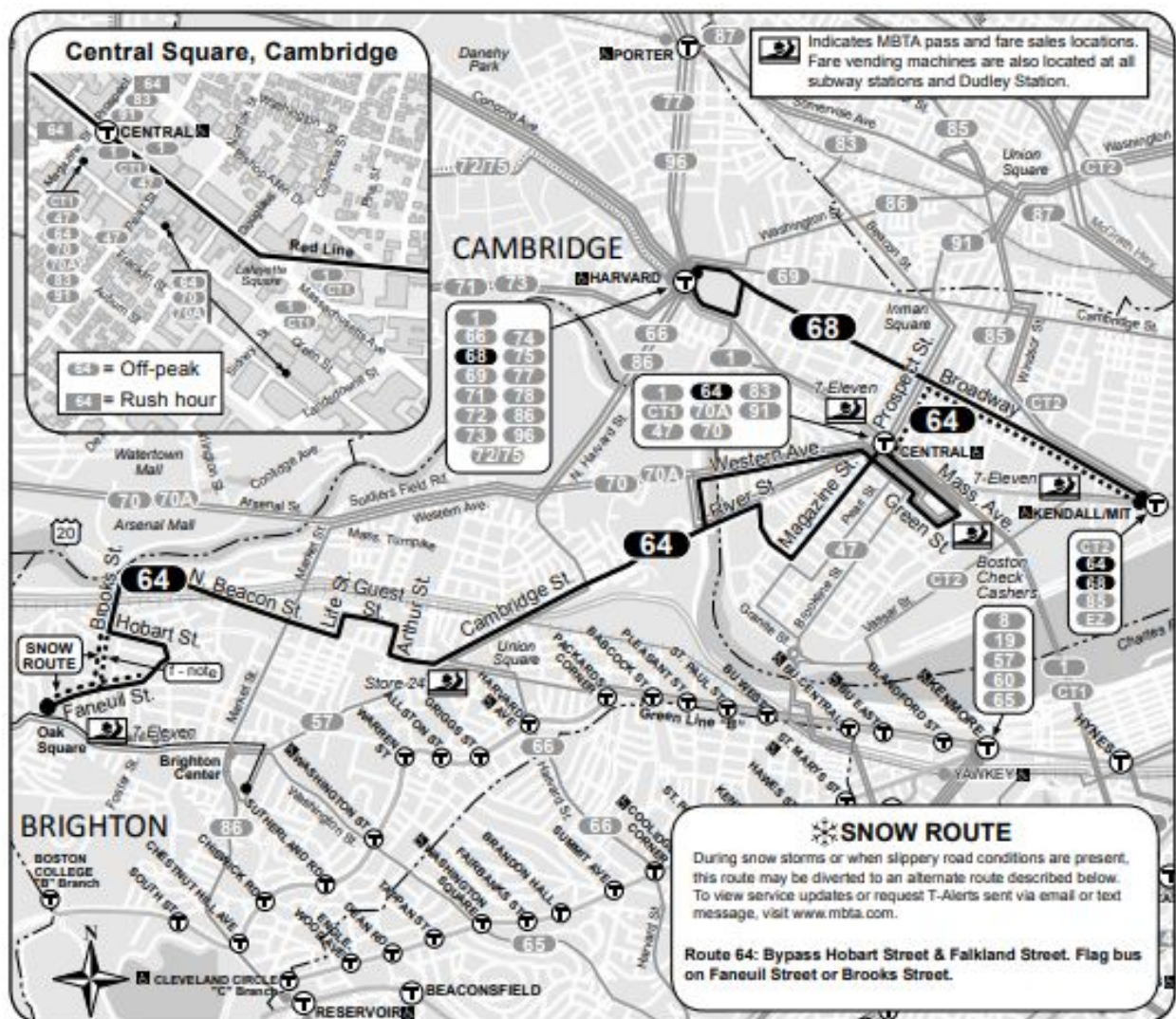
Route 68

Harvard Square – Kendall Square

Route Overview

Route 68 Harvard Square – Kendall Square is a Local route that connects Harvard Station and Kendall/MIT Station via Broadway, running through the Cambridge neighborhoods of Mid-Cambridge and The Port (see Figure 1). The route operates on weekdays only.

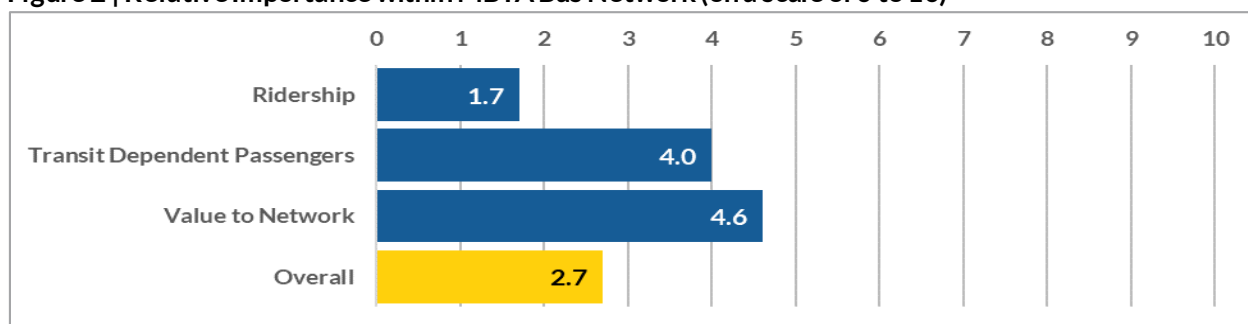
Figure 1 | Route 68 Service Map



Network Importance

Route 68 is of relatively low importance to the overall network (see Figure 2). On a relative scale of 0 to 10, the route rates 1.7 in terms of ridership, 4.0 in terms of transit dependent ridership, and 4.6 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 2.7.

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



Service Patterns

Schedule

Route 68 provides weekday service between 6:35 AM and 6:58 PM with a frequency of every 40 minutes before the PM peak, every 38 minutes during the PM peak, and every 34 minutes through the end of service (see Table 1).

Table 1 | Schedule Statistics

SERVICEDAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	6:35 AM to 6:58 PM			19/19
Sunrise	-	-	-	-
Early AM	6:35 AM to 6:59 AM	40	40	1/1
AM Peak	7:00 AM to 8:59 AM	35 - 45	40	3/3
Midday Base	9:00 AM to 1:29 PM	35 - 40	40	7/6
Midday School	1:30 PM to 3:59 PM	40	40	4/4
PM Peak	4:00 PM to 6:29 PM	33 - 45	38	4/4
Evening	6:30 PM to 6:58 PM	34	34	-/1
Late Evening	-	-	-	-
Night	-	-	-	-
Saturday	-	-	-	-
Sunday	-	-	-	-

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

Route 68 fails to meet both the span of service and frequency standards for Local routes. Route 68 is 15 minutes shy of meeting the span of service requirements, which call for weekday service between 7:00 AM and 7:00 PM. The route achieves 60 minute or better service during off-peak periods, but fails to operate 30-minute service during peak periods. The route does not operate on weekends.

Service Patterns

Route 68 operates a single service pattern in both directions, serving Harvard Square and Kendall Square, primarily traveling along Broadway.

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
INBOUND				19	-	-
68.0	Massachusetts Avenue at Holyoke Street	Main Street at Kendall Station	Via Broadway	19	-	-
OUTBOUND				19	-	-
68.0	Main Street at Kendall Station	Massachusetts Avenue at Holyoke Street	Via Broadway	19	-	-

Ridership

Route 68 carries about 387 riders on weekdays, one of the least utilized routes in the MBTA system.

Ridership by Stop

While the route provides a connection between the major areas of Kendall Square and Harvard Square the route’s primary purpose is to serve Broadway.

On inbound trips (see Figure 3):

- The first two stops on Massachusetts Avenue have a combined 72 boardings and one alighting.
- The stop at 454 Broadway across from Cambridge Rindge & Latin School and the Cambridge Public Library generates the most activity on the route with 48 boarding and 9 alightings.
- There are a total of 149 boardings and 32 alightings along Broadway between Ellery Street and Prospect Street.
- 22 people board and 105 people alight along Broadway between Prospect Street and Kendall Station.

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- 74 passengers alight at Kendall Station.

Outbound ridership is generally the reverse of inbound ridership.

Ridership by Trip

On inbound trips (see Figure 4):

- Ridership is highest during the AM peak and midday. The 8:00 AM and 8:30 AM trips have the highest ridership in the morning with 20 riders, and the 2:30 PM and 3:30 PM trips have the highest ridership in the afternoon with 22 and 18 riders, respectively. These afternoon trips are most likely students at Cambridge Rindge and Latin School heading home.
- Outside of these trips, ridership is generally very low, with the majority of trips carrying fewer than 10 riders.

In the outbound direction, only the 7:30 AM trip carries more than 12 riders (see Figure 5). This trip carries 35 riders, most of which are likely students at Cambridge Rindge & Latin School.

Figure 3 | Weekday Inbound Ridership by Stop Map

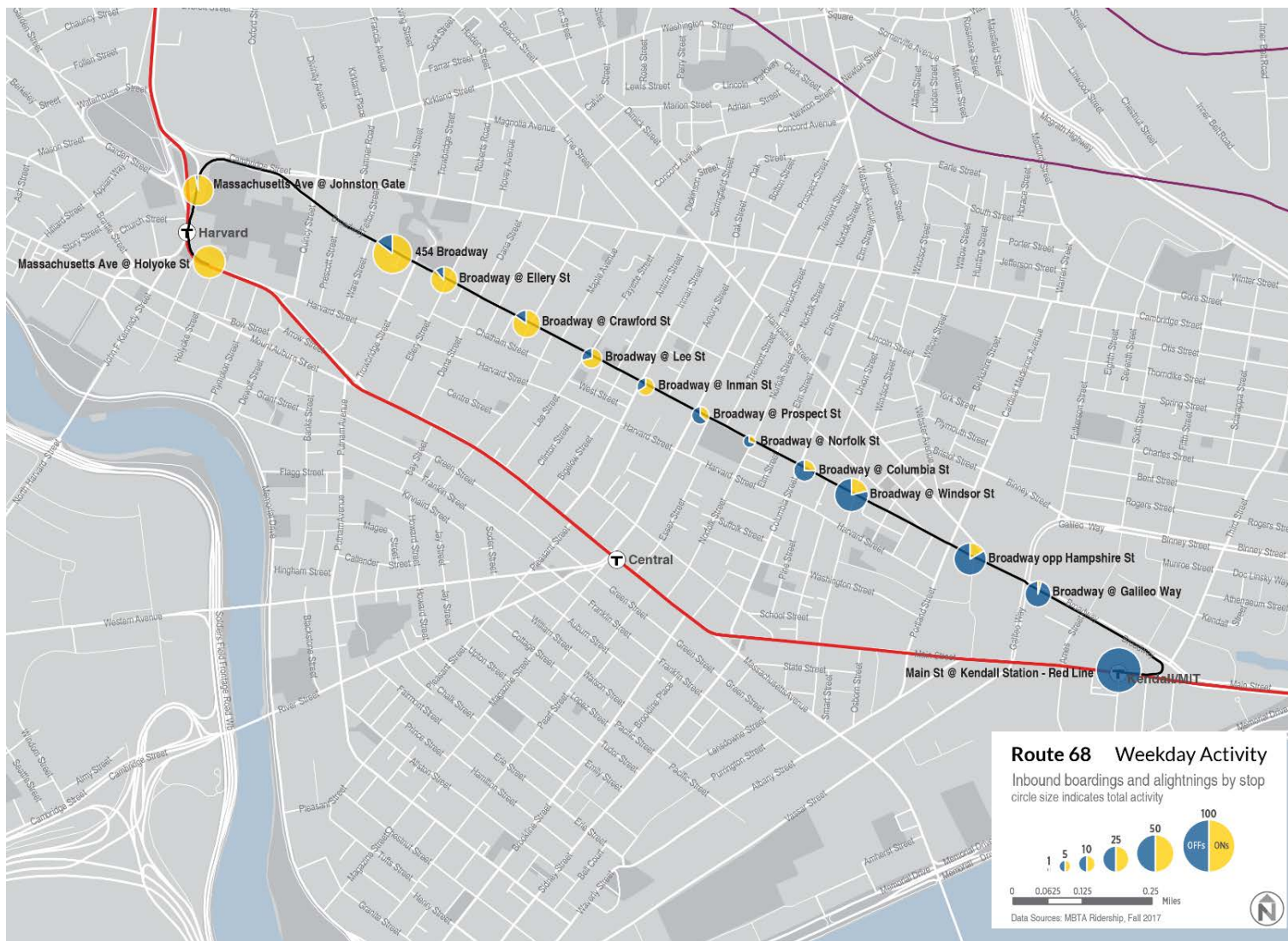


Figure 4 | Weekday Ridership by Trip: Inbound

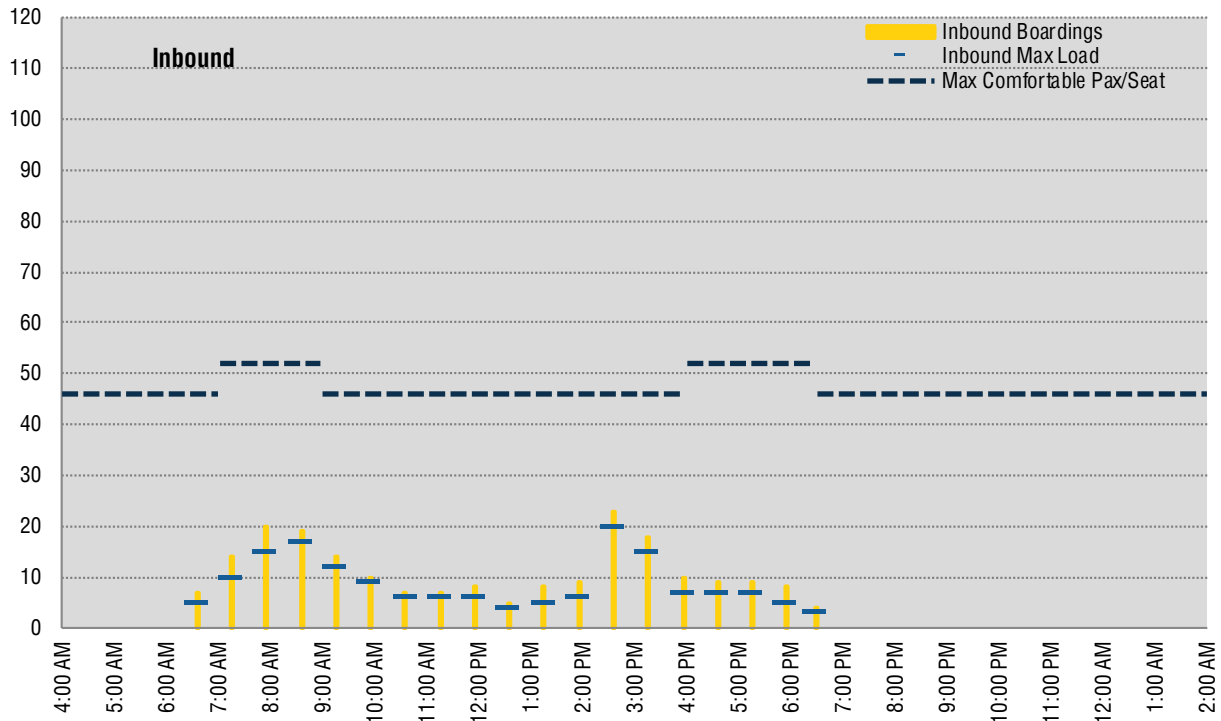
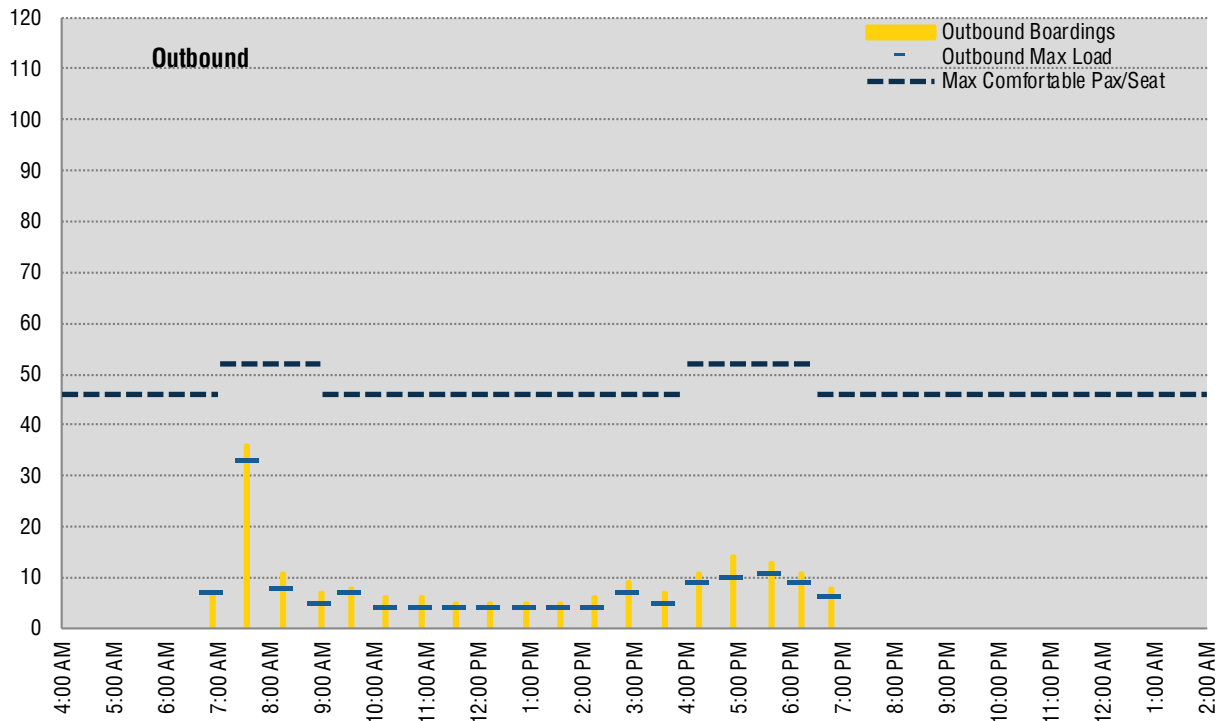


Figure 5 | Weekday Ridership by Trip: Outbound



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 68, 100% of passenger minutes are in comfortable conditions, which is above both the minimum standard of 92% and the target of 96% (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%	-	-

Reliability and Speed

Reliability

Route 68 has an overall reliability of 67%, which falls short of the 70% minimum standard for Local routes. As described in the next section, poor on-time performance is largely due 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	66%	69%	67%	0.1%
Saturday	-	-	-	-
Sunday	-	-	-	-

Running Times

Excessive travel time is a significant problem for Route 68. Nearly 100% of inbound trips exceed scheduled running times by as long as six minutes during the AM and PM peak periods (see Figure 6). About 50% of outbound trips running times, running as long as seven minutes behind schedule with the most significant delays occurring around 5:30 PM (see Figure 7).

Figure 6 | Scheduled & Median Travel Time by Trip: Route 68 Inbound

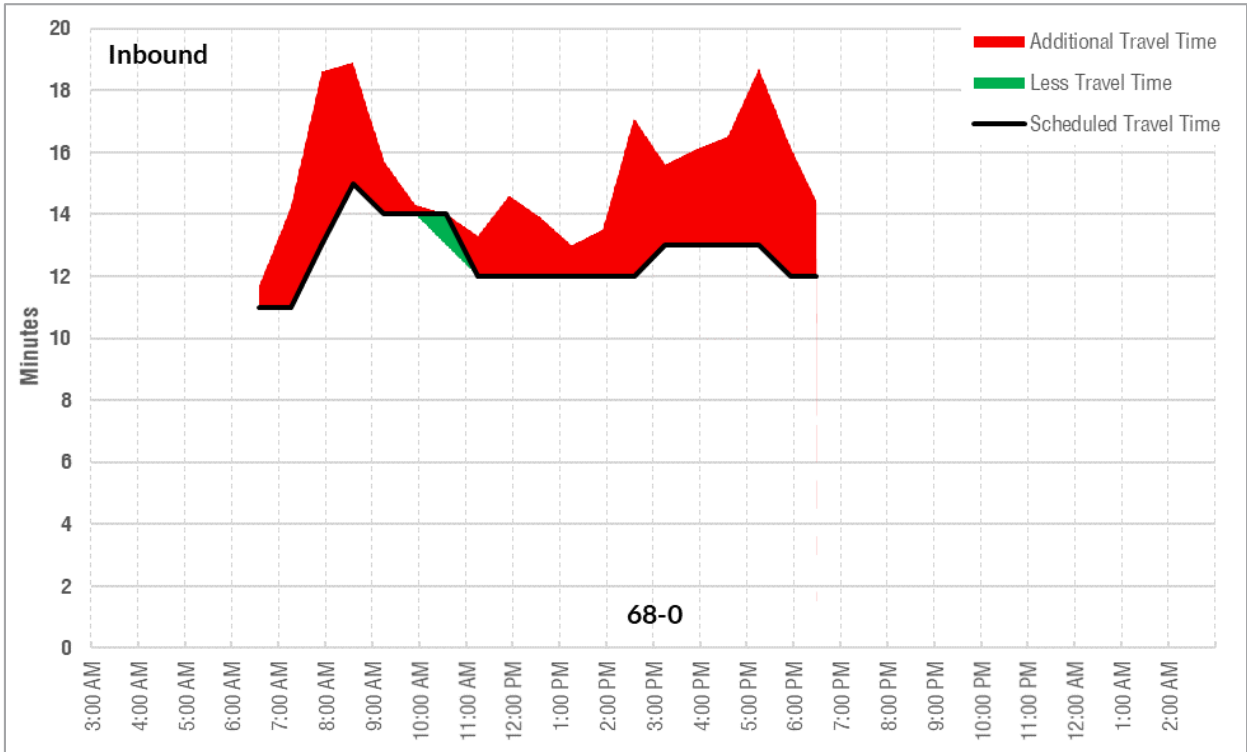
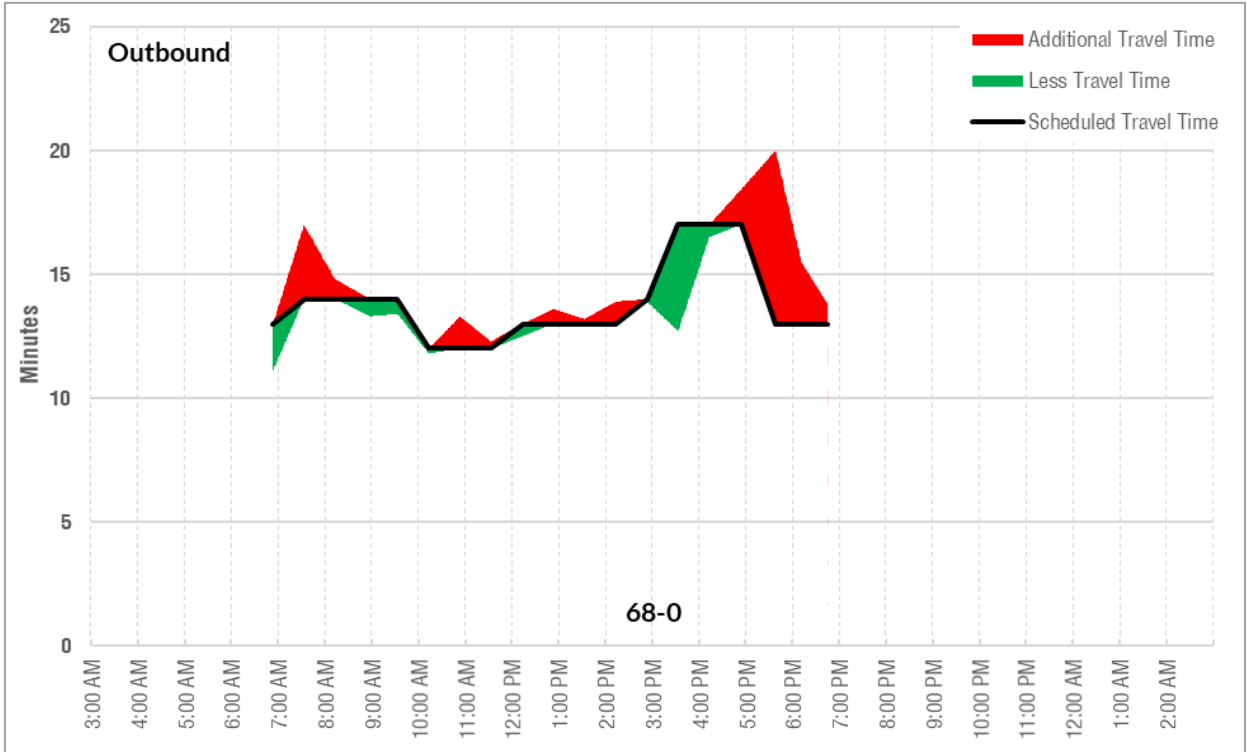


Figure 7 | Scheduled & Median Travel Time by Trip: Route 68 Outbound



Stop Spacing

Route 68 stops are spaced from 500 feet to 1,300 feet apart, or an average of 7.5 stops per mile. This is more than the four to seven stops per mile recommended for urban areas under MBTA guidance.

- Stops along Broadway between Crawford Street and Windsor Street are an average of 600 feet apart, or roughly one stop every two blocks.
- Stops at either end of the line, closer to Harvard Station and Kendall Station, are more appropriately spaced, averaging 1,200 feet between stops.

Stop consolidation could make service faster and improve reliability.

Summary

Route 68 is a very low frequency Local bus route that directly parallels the high frequency Red Line, serving Cambridge neighborhoods that are all within walking distance of a Red Line station. In addition to being an infrequent service in an area with numerous high frequency options, Route 68 is slow and unreliable. As a result, the route has very low ridership, especially for a route operating in an area that is particularly transit supportive. Students make up a large portion of the ridership. Route 68 also does not operate on weekends, as required by the Service Delivery Policy, and fails MBTA service standards for peak frequency.