

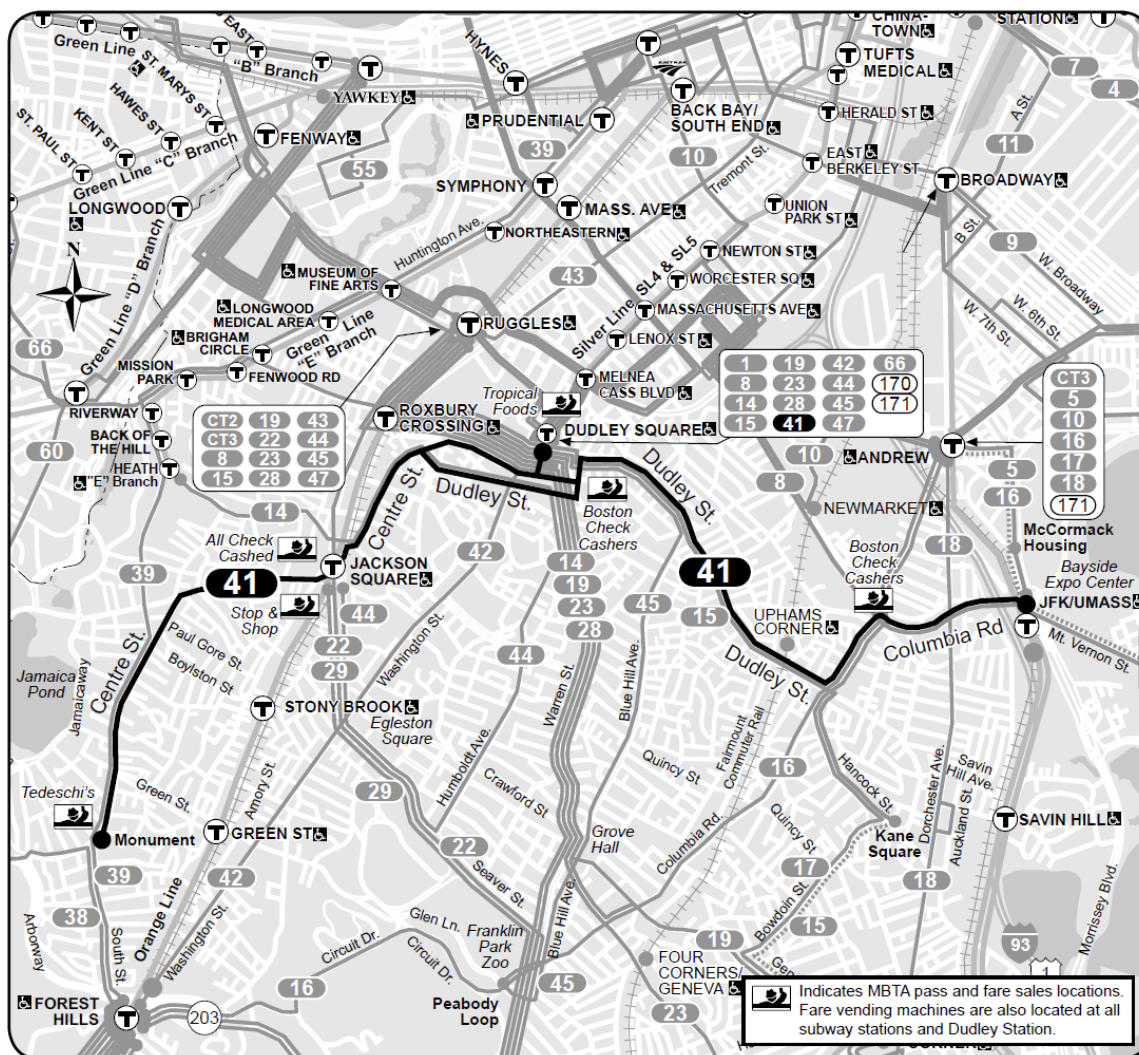
Route 41

Centre and Eliot Streets – JFK/UMass Station

Route Overview

Route 41 Centre and Eliot Streets – JFK/UMass Station is a Local route that provides crosstown service from the Monument in Jamaica Plain to JFK/UMass Station via Jackson Square Station, Dudley Square, and Uphams Corner Station (see Figure 1). The route operates seven days per week.

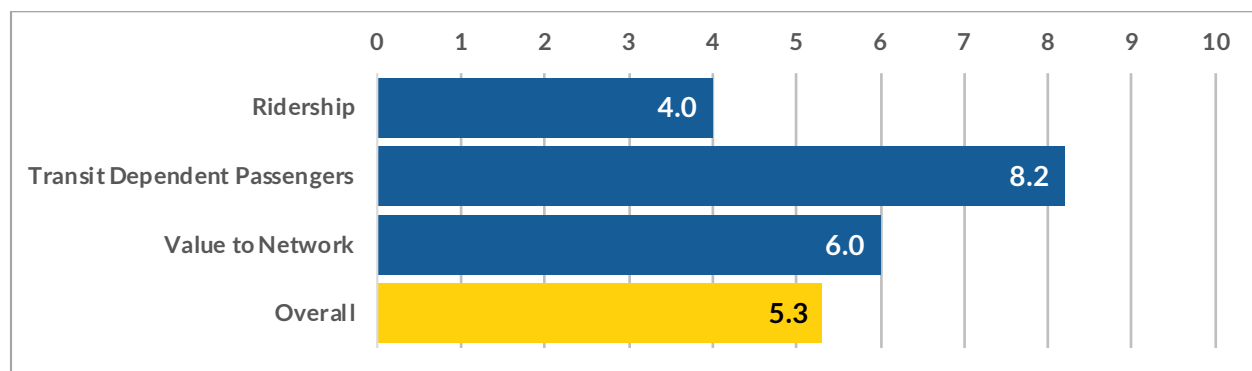
Figure 1 | Service Map



Network Importance

Route 41 is a moderately important within the overall system (see Figure 2). On a relative scale of 0 to 10, the route rates 4.0 in terms of ridership, 8.2 in terms of transit dependent ridership, and 6.0 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 5.3.

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



Service Patterns

Schedule

Route 41 operates infrequently on weekdays, and very infrequently on Saturdays and Sundays (see Table 1). On weekdays, Route 41 runs from 4:58 AM to 9:23 PM, at the following frequencies:

- Inbound trips run about every 30 minutes before 7:00 AM. Outbound trips are more irregularly scheduled before 7:00 AM, with headways ranging from seven to 32 minutes.
- Every 23 minutes from about 7:00 AM to 9:00 AM.
- About every 40 minutes from 9:00 AM to 3:00 PM.
- Every 25-35 minutes from 3:00 PM to the end of service.

On Saturdays, Route 41 operates from 7:00 AM to 8:12 PM, running every 45 minutes from the start of service to about 11:00 AM and then every 50 minutes from 11:00 AM to the end of service. On Sundays, Route 41 operates every 45 minutes from 10:00 AM to 6:45 PM.

Route 41 meets the MBTA span of service and frequency standards for local routes on weekdays and weekends.

Table 1 | Schedule Statistics

SERVICEDAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	4:58 AM to 9:23 PM			29/32
Sunrise	4:58 AM to 5:59 AM	7 – 32	25	2/4
Early AM	6:00 AM to 6:59 AM	22 – 32	24	3/2
AM Peak	7:00 AM to 8:59 AM	20 – 38	25	5/5
Midday Base	9:00 AM to 1:29 PM	31 – 42	40	6/7
Midday School	1:30 PM to 3:59 PM	30 – 42	35	5/4
PM Peak	4:00 PM to 6:29 PM	25 – 35	32	4/4
Evening	6:30 PM to 9:23 PM	25 – 35	30	4/6
Late Evening	-	-	-	-
Night	-	-	-	-
Saturday	7:00 AM to 8:12 PM	40 – 50	45	16/16
Sunday	10:00 AM to 6:45 PM	40 – 45	45	12/12

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

Service Patterns

All Route 41 trips run the route’s full alignment from the Monument in Jamaica Plain to JFK/UMass Station (Pattern 41.0), except for the first weekday outbound trip, which begins at Dudley Station (Pattern 41.1) (see Table 2).

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS per WKD	TRIPS per SAT	TRIPS per SUN
INBOUND				29	16	12
41.0	Monument (Centre Street at Eliot Street)	JFK/UMass Station	Primary service pattern	29	16	12
OUTBOUND				32	16	12
41.0	JFK/UMass Station	Monument (775 Centre Street)	Primary service pattern	31	16	12
41.1	Dudley Station	Monument (775 Centre Street)	Begins at Dudley Square	1	-	-

Ridership

Route 41 has moderate ridership. The route serves about 2,083 riders per weekday, 806 riders on Saturdays, and 510 riders on Sundays.

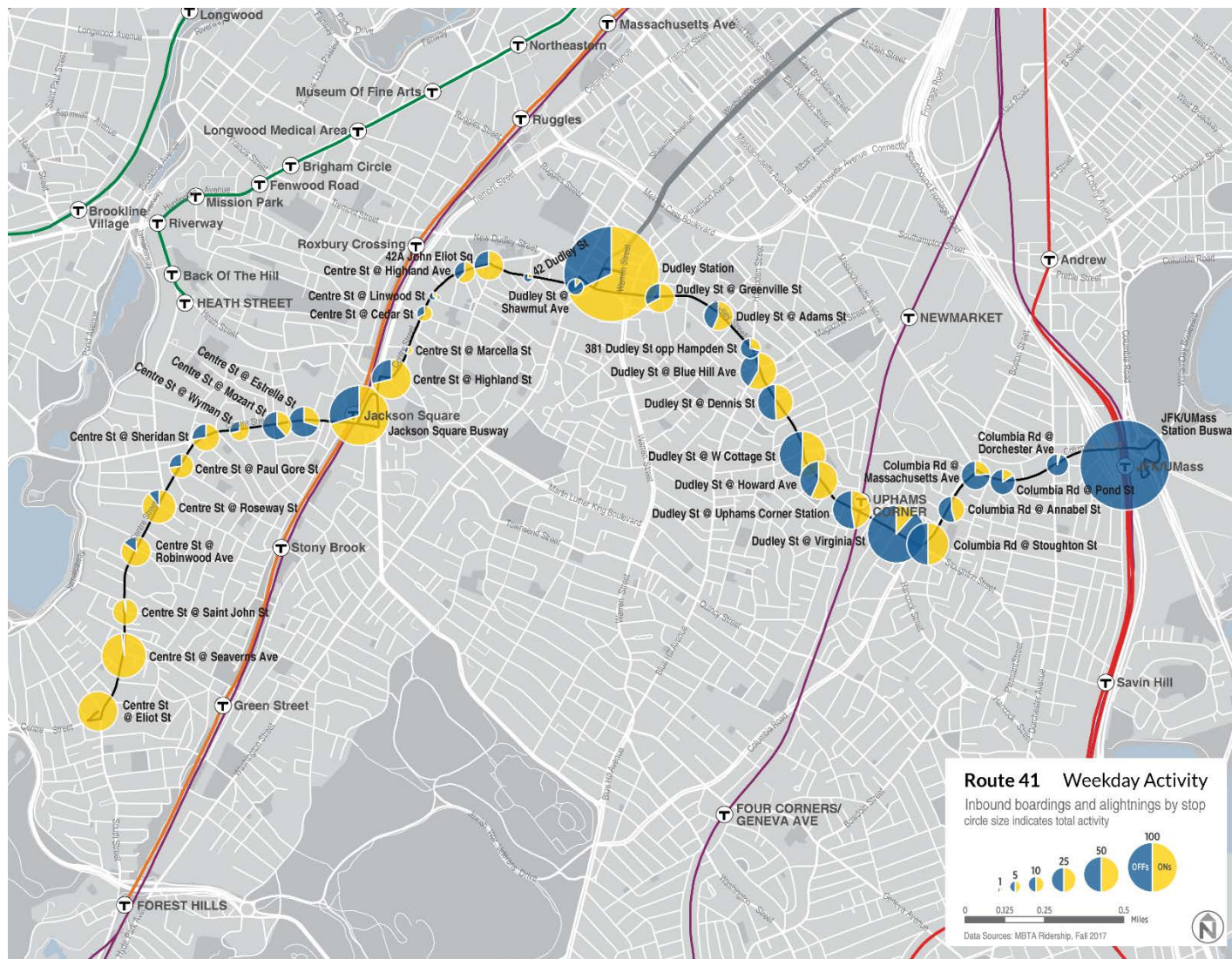
Ridership by Stop

Route 41 has moderate ridership throughout the route. On weekday inbound trips (see Figure 3):

- 310 passengers board and 78 passengers alight at the 10 stops on Centre Street from the start of the route at Monument to Jackson Square Station.
- 101 passengers board and 43 passengers alight at Jackson Square Station. Just 14% of passengers that board Route 41 in Jamaica Plain alight at Jackson Square.
- 92 passengers board and 54 passengers alight at the eight stops between Jackson Square Station and Dudley Station along Centre Street and Dudley Street. 75% of these boardings occur at Highland Street and John Eliot Square.
- 248 passengers board and 117 passengers alight at Dudley Station, which is the highest ridership stop on Route 41.
- 180 passengers board and 154 passengers alight at the seven stops between Dudley Station and Uphams Corner Station.
- 78 passengers board and 186 passengers alight at the three stops in Uphams Corner, with most alightings occurring at Dudley Street at Virginia Street.
- 26 passengers board and 82 passengers alight at the four stops between Uphams Corner and JFK/UMass Station on Columbia Road.
- 325 passengers alight at JFK/UMass Station, by far the most alightings of any Route 41 station.

Ridership patterns are similar in the outbound direction, as well as on weekends, though with lower volumes.

Figure 3 | Weekday Inbound Ridership by Stop Map



Ridership by Trip

Unlike most MBTA bus routes, Route 41 has strong ridership in both directions throughout the service day. On weekdays (see Figure 4 and Figure 5):

- The two trips before 6:00 AM serve 10 and 22 passengers.
- Ridership is strong during the early morning and AM peak, with inbound trips serving between 30 and 43 passengers and outbound trips serving between 30 and 55 passengers.
- Ridership remains strong through the midday with trips serving between 35 and 45 passengers in both directions, gradually increasing towards the PM peak.
- Late afternoon and PM peak trips have somewhat higher ridership than AM peak trips, though service operates less frequently. Trips generally serve between 45 and 55 passengers in both directions.
- Ridership declines after about 5:30 PM, particularly on outbound trips.

Ridership on Saturdays is relatively consistent in both directions, with midday trips serving between 25 and 35 passengers and morning and evening trips generally serving 10 to 20 passengers (Figure 6 and Figure 7). Sunday trips generally serve between 20 and 25 passengers, with somewhat more riders on outbound trips in the late morning and inbound trips in the early evening (Figure 8 and Figure 9).

Figure 4 | Weekday Ridership by Trip: Inbound

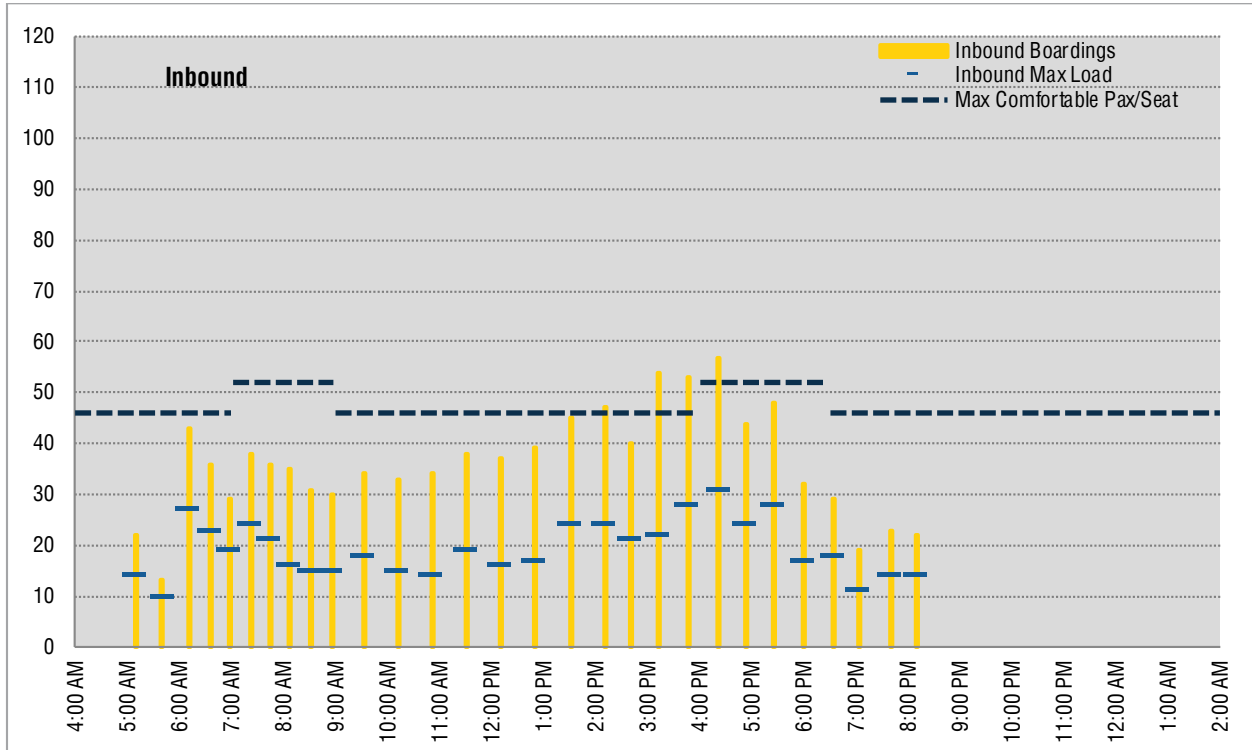


Figure 5 | Weekday Ridership by Trip: Outbound

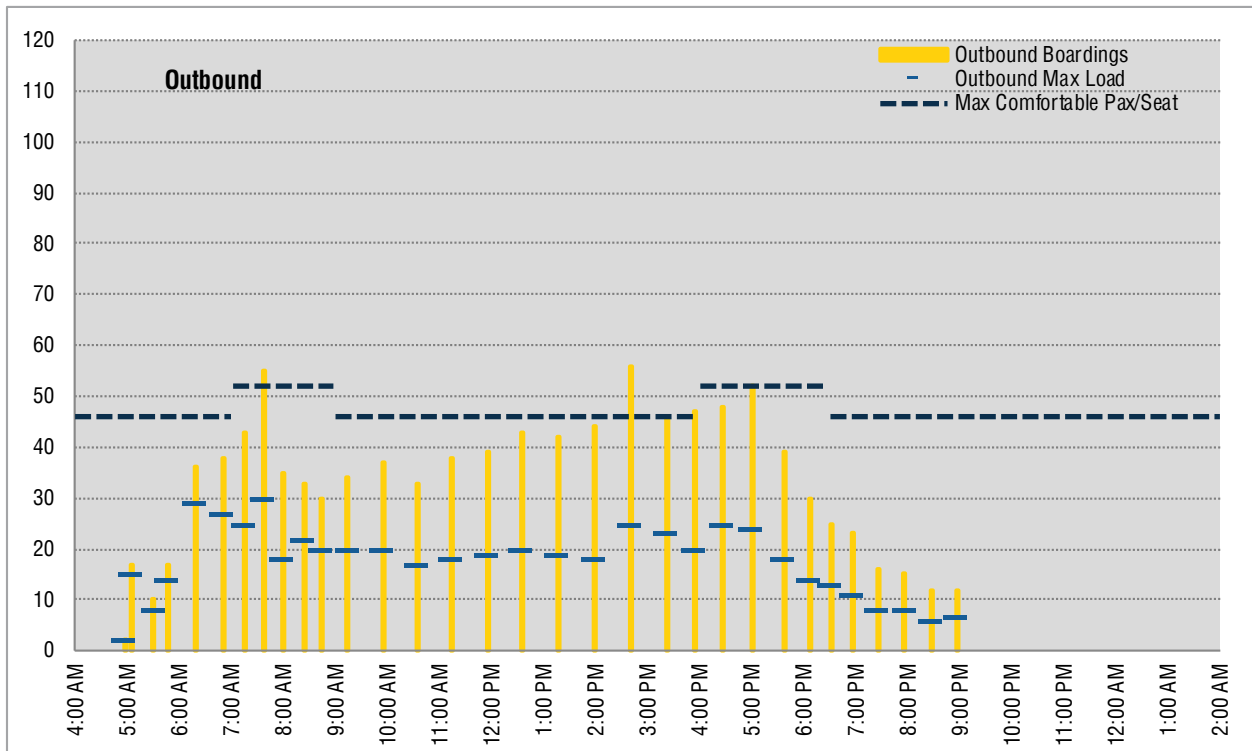


Figure 6 | Saturday Ridership by Trip: Inbound

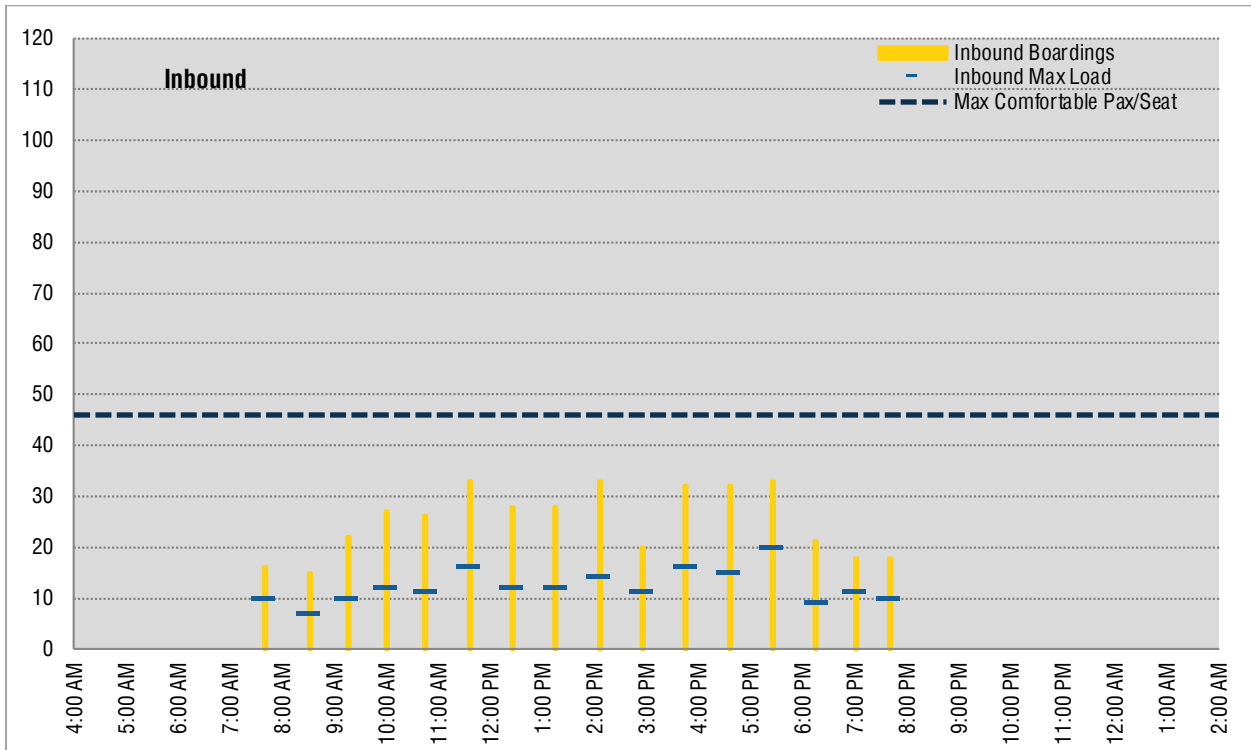


Figure 7 | Saturday Ridership by Trip: Outbound

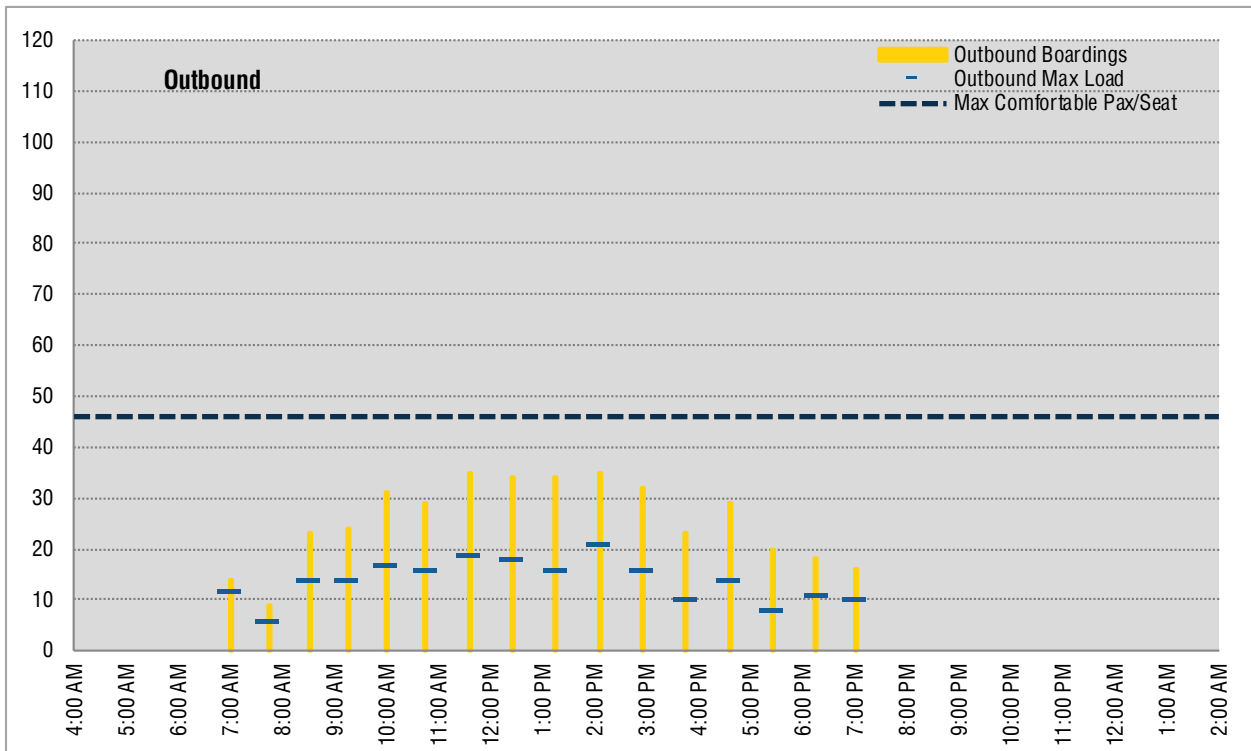


Figure 8 | Sunday Ridership by Trip: Inbound

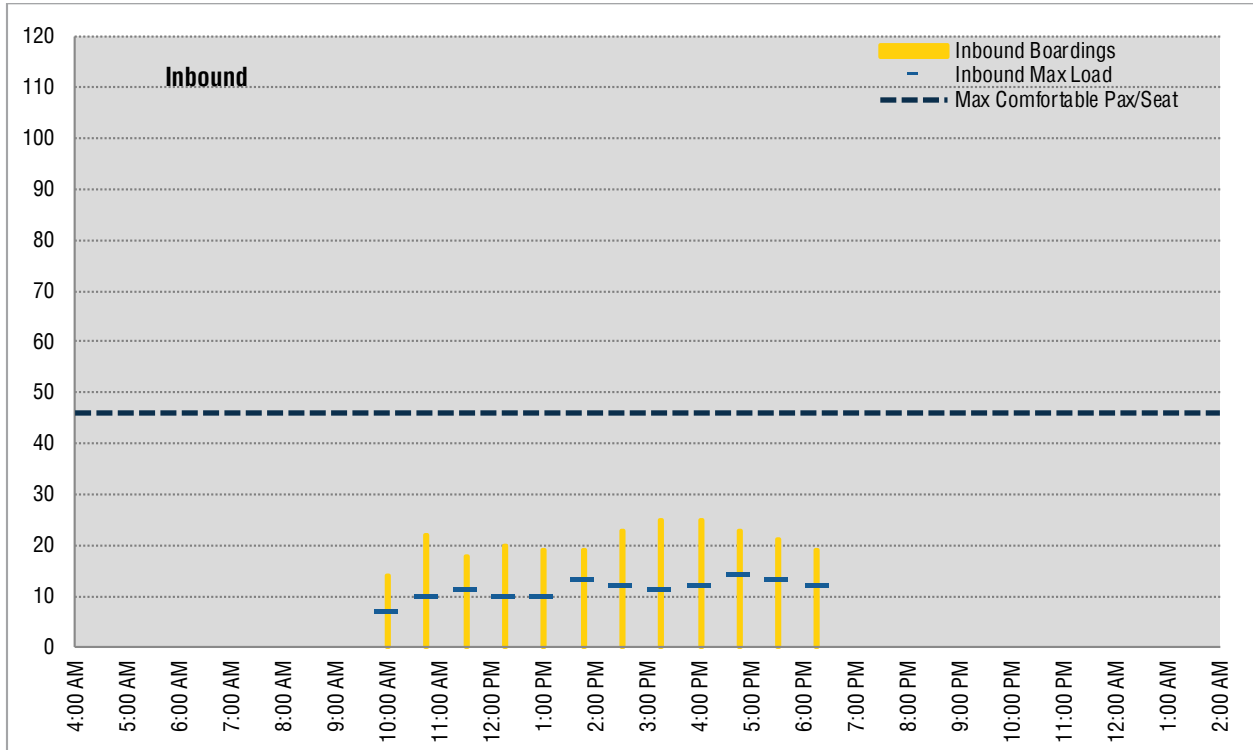
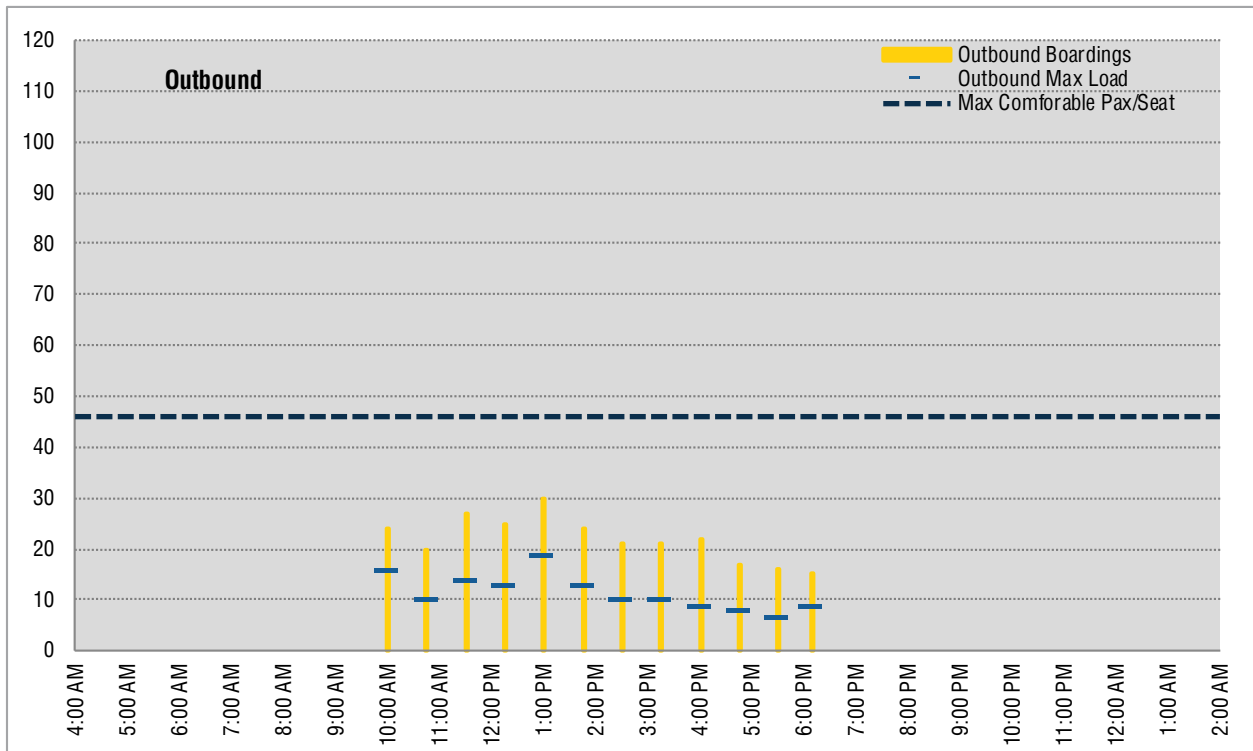


Figure 9 | Sunday Ridership by Trip: Outbound



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.

Route 41 exceeds the minimum and target standards for passenger minutes spent in comfortable conditions on all days (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	99.7%	100%	100%

Reliability and Speed

Reliability

On weekdays, Route 41 trips leave on time 33% of the time and arrive on time 80% of the time. Route 41 has an overall reliability of 39%, which makes it the second-least reliable of all MBTA bus routes, and the least reliable of all non-supplemental routes. Dropped trips are not an issue on this route with 0.3% of trips not operated, which meets MBTA service standards. On weekends, trips leave on time more frequently than on weekdays, but arrive at their destination on time less frequently than on weekdays. (See Table 4)

Table 4 | Reliability

SERVICEDAY	ORIGIN/MID-ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	33%	80%	39%	0.3
Saturday	56%	39%	54%	-
Sunday	65%	51%	64%	-

Running Times

Reliability issues may be due to differences between actual running time and scheduled running time. In the inbound direction, trips run five to 12 minutes ahead of schedule for

most of the day. (See Figure 10) In the outbound direction, trips run five to 15 minutes behind schedule for much of the day (see Figure 11).

Figure 10 | Scheduled & Median Travel Time by Trip: Route 41 Inbound

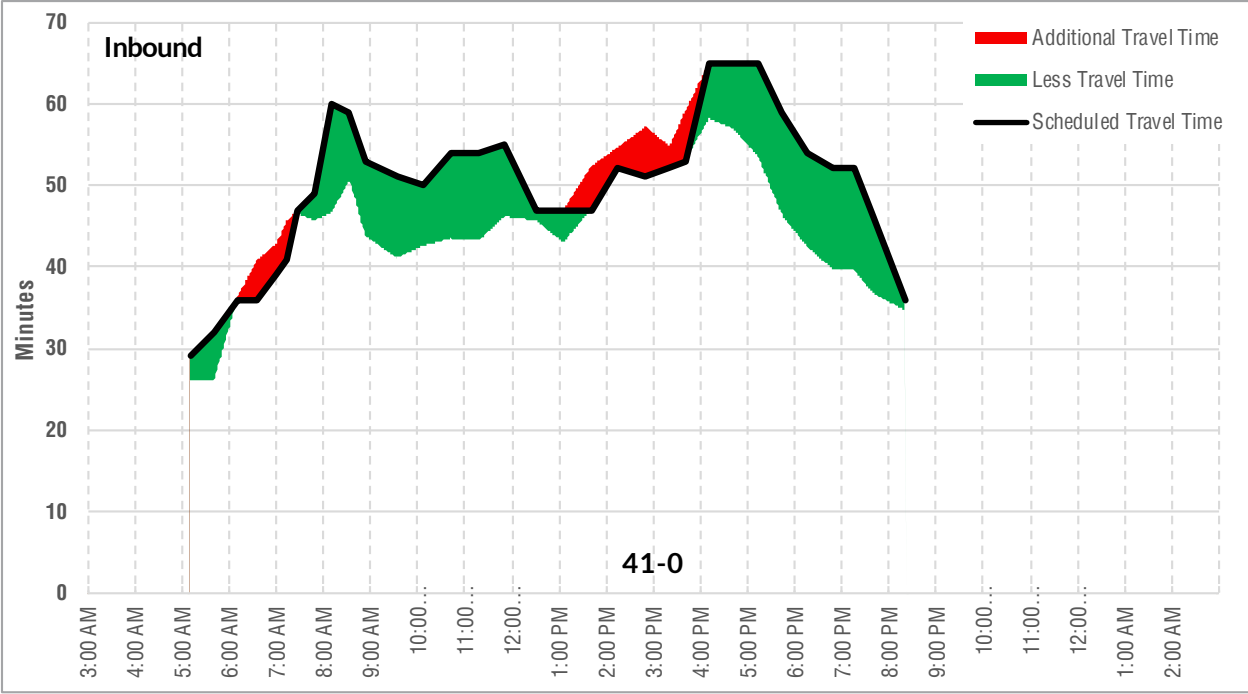
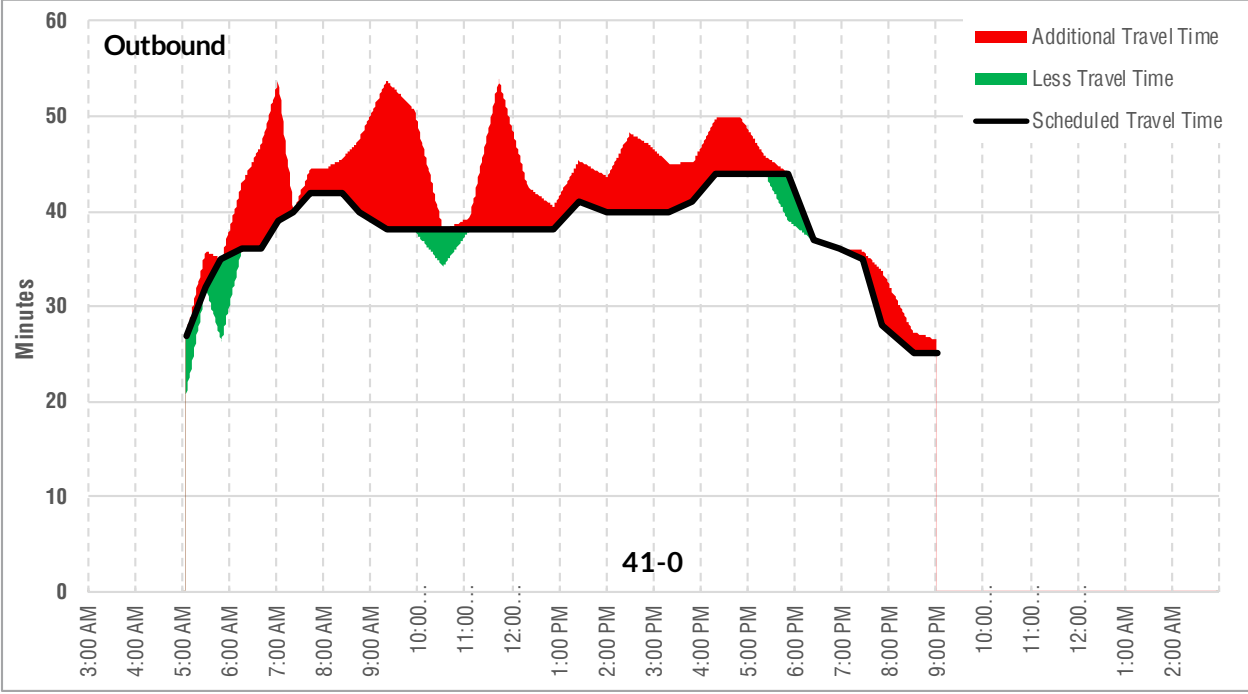


Figure 11 | Scheduled & Median Travel Time by Trip: Route 41 Outbound



Stop Spacing

The average stop spacing along the primary route is about 755 feet, which is too close together according to MBTA's standard of about 800-1300 feet between stops. This indicates that some stops could be consolidated, particularly those with low ridership.

Summary

Route 41 is one of the few crosstown bus routes in the MBTA network, providing direct connections between Jamaica Plain, Jackson Square, Dudley Square, Uphams Corner, and JFK/UMass. While the route overlaps other services on nearly its entire alignment, it provides unique connections between neighborhoods and between rapid transit lines. As a result Route 41 has strong ridership, especially on weekdays, despite relatively infrequent service and extremely poor reliability.