

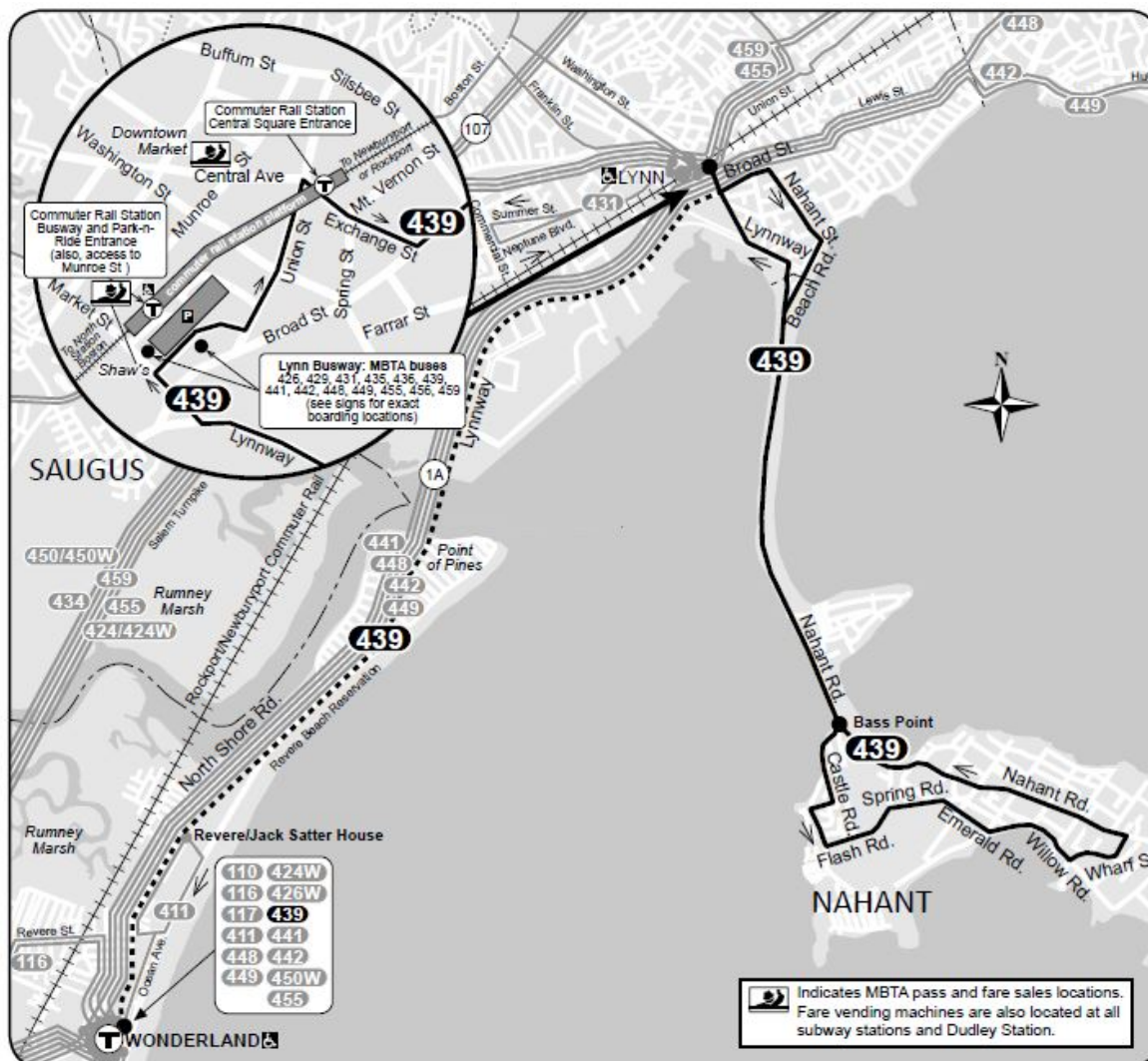
Route 439

Bass Point Nahant - Wonderland

Route Overview

Route 439 Bass Point Nahant – Wonderland is a Commuter bus route that loops through Nahant and terminates at the Central Square, Lynn Busway via Nahant Road. Some trips continue from Lynn to Wonderland Station via North Shore Road. This is the only route serving Nahant. Route 439 generally functions as a connection between Nahant and Central Square, Lynn Station.

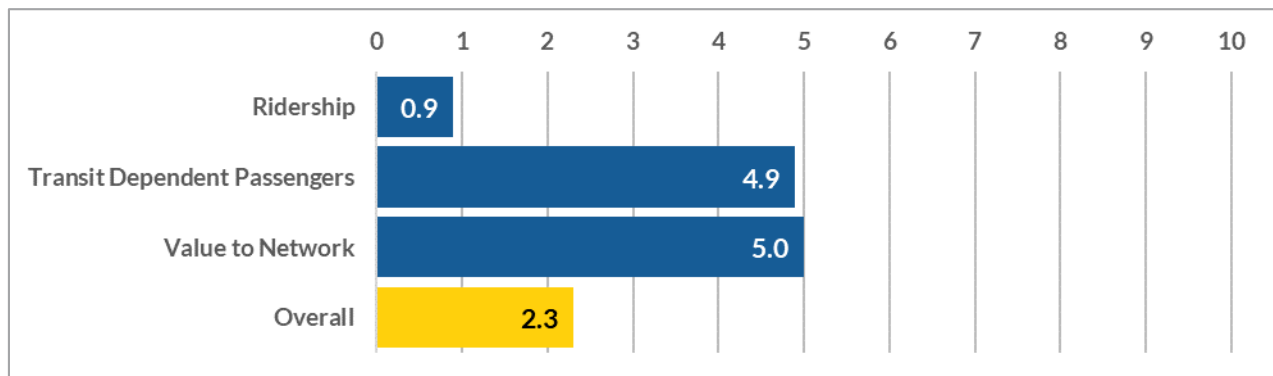
Figure 1 | Service Map



Network Importance

Route 439 is not an important route when compared to other MBTA routes (see Figure 2). On a relative scale of 0 to 10, the route rates 0.9 in terms of ridership, 4.9 in terms of transit dependent ridership, and 5.0 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% weighting to overall ridership and a 15% weight to both other measures, is 2.3.

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



Service Patterns

Schedule

Route 439 operates Monday through Friday between 6:15 AM and 7:08 PM. It provides five inbound and five outbound trips, with infrequent service.

- Inbound trips operate at 6:30 AM, 7:45 AM, 2:25 PM, 6:05 PM, and 6:52 PM.
- Outbound trips operate at 6:15 AM, 7:15 AM, 2:08 PM, 5:30 PM, and 6:17 PM.

The route does not meet the MBTA's Commuter route span of service standard or frequency, because AM service ends before the specified 9:00 hour and there are only two AM trips in the peak direction, less than the specified three peak direction trips.

Table 1 | Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	6:15 AM to 7:45 AM 2:08 PM to 6:52 PM			5/5
Sunrise	-	-	-	-
Early AM	6:15 AM to 6:59 AM	1 trip	-	1/1
AM Peak	7:00 AM to 7:45 AM	1 trip	-	1/1
Midday Base	-	-	-	-
Midday School	2:08 PM to 3:59 PM	1 trip	-	1/1
PM Peak	4:00 PM to 6:29 PM	47	47	1/2
Evening	6:30 PM to 6:52 PM	1 trip	-	1/0
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.

Service Patterns

Pattern 439.0 begins in Nahant, circulating through the peninsula, before continuing to the Central Square, Lynn.

Pattern 439.3 makes one AM inbound trip and two PM outbound trips, extending to Wonderland Station.

Pattern 439.2 makes one outbound school trip to the Johnson School.

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS per WKD	TRIPS per SAT	TRIPS per SUN
INBOUND				5	-	-
439.0	50 Castle Road	Central Square, Lynn	Primary pattern	4	-	-
439.3	50 Castle Road	Wonderland West Busway	Extension to Wonderland	1	-	-
OUTBOUND				5	-	-
439.0	Central Square, Lynn	50 Castle Road	Primary pattern	2	-	-
439.2	Central Square, Lynn	Castle Road at Range Road	Stops at Johnson School. Skips 2 stops.	1	-	-
439.3	Wonderland West Busway	50 Castle Road	Extension from Wonderland	2	-	-

Ridership

Route 439 has very low ridership, serving 106 passengers on weekdays, the second lowest number of boarding for any commuter route in the MBTA system.

Ridership by Stop

Stops along the route generate relatively low activity. The majority of riders are commuting from Nahant to Central-Square, Lynn where they can connect with other services. On weekday inbound trips:

- At the beginning of the route at Opposite 50 Castle Road, 24 passengers board and nine passengers alight.
- Along the southern portion of the loop in Nahant, seven passengers board and six alight.
- As the route turns towards Lynn, along Nahant Road, the northern portion of the loop, nine passengers board and five alight.
- Six passengers board and zero alight along Lynnway.
- At the Central Square, Lynn busway, nine passengers board and 19 alight.
- On trips that serve Wonderland Station:
 - Three passengers board along Lynnway and zero alight
 - Five passengers board along North Shore Road and one alight
 - At Wonderland West Busway 20 people alight.

Outbound ridership by stop mirrors inbound ridership, with the exclusion of the unique service pattern that serves the Johnson School at Range road, where one passenger boards.

Ridership by Trip

Ridership during individual Route 439 trips is generally very low with clear peak trips. No trip reaches or exceeds the maximum comfortable capacity of the buses. On inbound trips (See Figure 4):

- Ridership does not exceed five passengers for all but one Route 439 trip.
- Ridership peaks at 7:30 AM with 28 passengers.

On outbound trips (See Figure 5):

- Ridership by trip does not surpass two passengers until after 5:00 PM.
- The 5:30 PM trip carries 35 passengers.
- The 6:17 PM trip carries 26 passengers.

Figure 3 | Weekday Inbound Ridership by Stop Map



Figure 4 | Weekday Ridership by Trip: Inbound

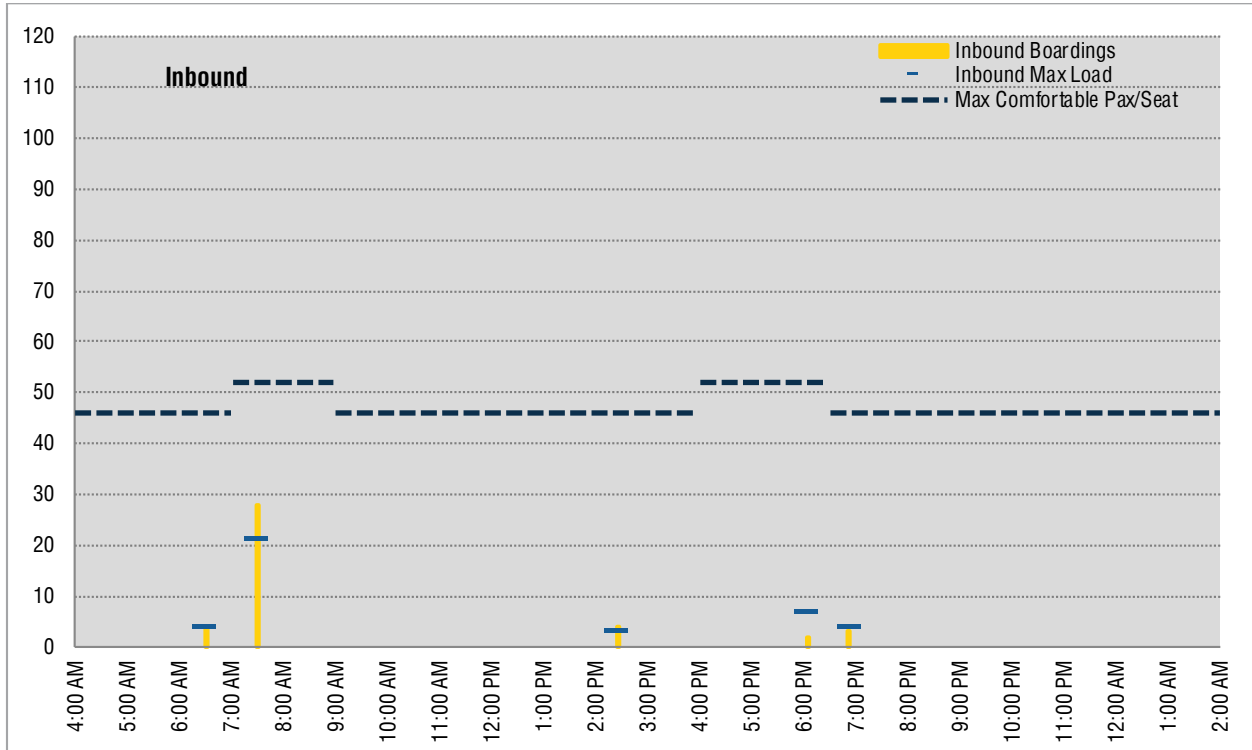
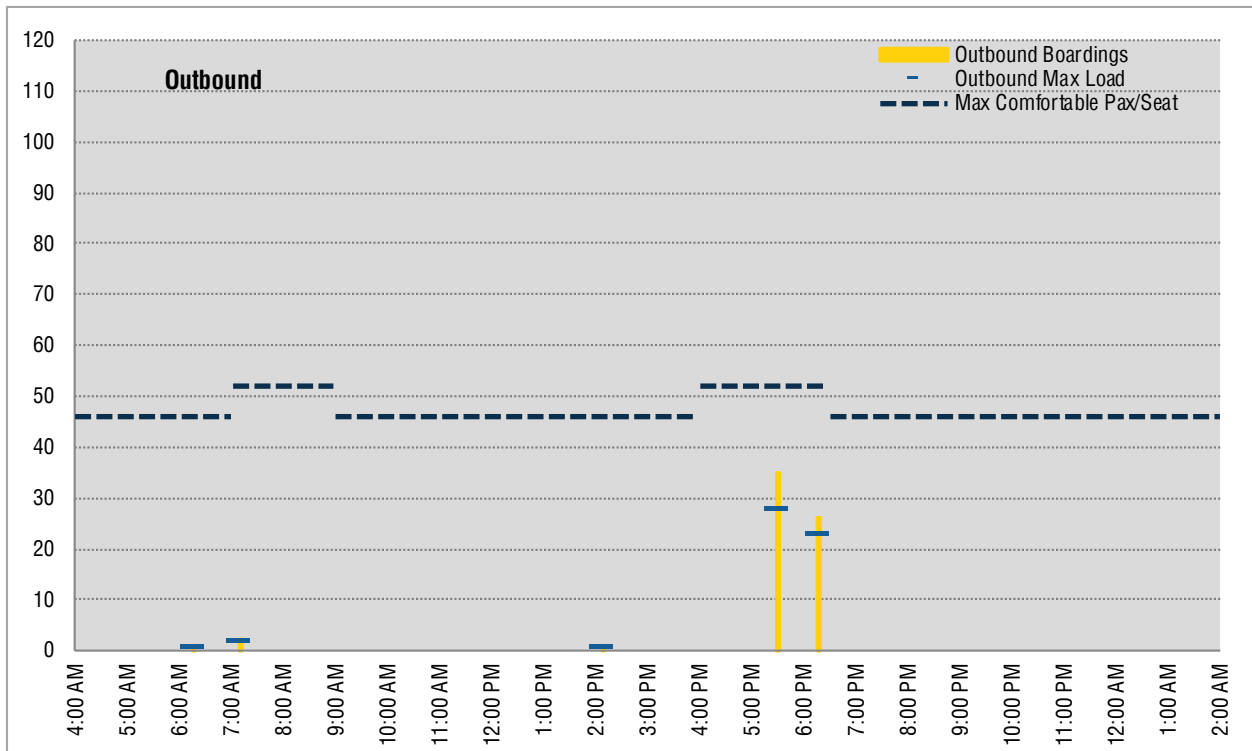


Figure 5 | Weekday Ridership by Trip: Outbound



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 439, 97% of passenger minutes are in comfortable conditions, which meets the MBTA’s target (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	97%	-	-

Reliability and Speed

Reliability

Route 439 is not a reliable bus route. Overall reliability of the route is 61%. The Route is much better at reaching its destination on-time (85%), than reaching intermediate stops and the origin on-time (51%). The route rarely drops trips, so challenges with on-time performance are not associated with dropped trips.

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID-ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	51%	85%	61%	0%
Saturday	-	-	-	-
Sunday	-	-	-	-

Running Times

Route 439’s running times are generally within five minutes of the Route’s scheduled running time and trips are often completed in less time than scheduled. Running times notably exceed scheduled times in the evening, particularly during inbound trips.

Since the development of this document, the MBTA has revised the Route 439 scheduled to improve running times.

Figure 6 | Scheduled & Median Travel Time by Trip: Route 439 Inbound

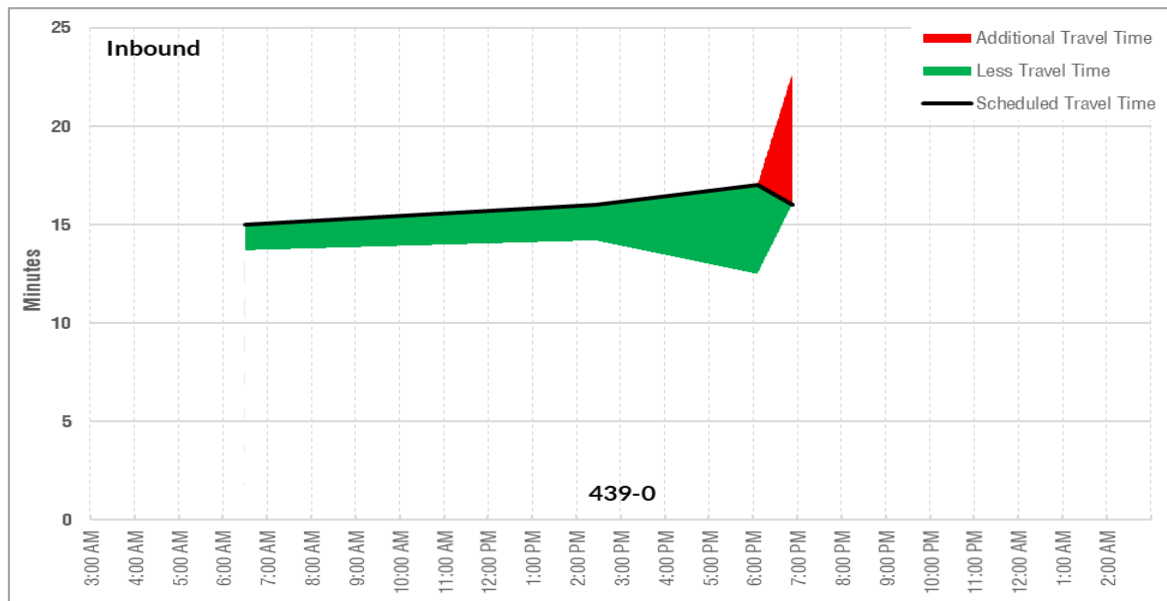
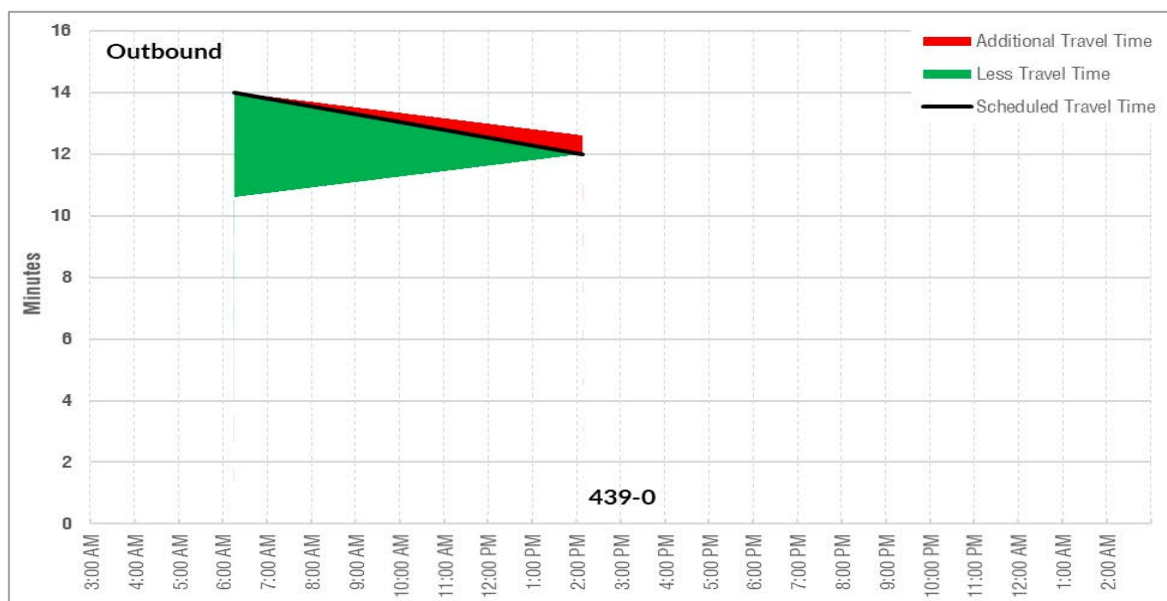


Figure 7 | Scheduled & Median Travel Time by Trip: Route 439 Outbound



Stop Spacing

On average there are 4.7 stops per mile along Route 439. Stop spacing along the route is not consistent. In Nahant, there are approximately nine stops per mile. This is close to 600 feet between stops, meaning the stops are very close together. Stops are more widely spaced throughout the rest of the route, with around 900 feet separating them, though some stops are spaced as close as 600 feet

Summary

Route 439 is the only bus route serving the Nahant community. The route provides access to Central Square, Lynn and Wonderland Station during peak commute times. Route 439 has very low ridership with 106 daily passengers. Many of the route's stops are close together and serve few or no passengers. The route only operates five trips in either direction and fails to meet the MBTA's span of service or frequency standards. The route has some running time challenges, with the bus reaching the final destination on-time 85% of the time, yet 49% of the time failing to be on-time to the origin and intermediate stops.