

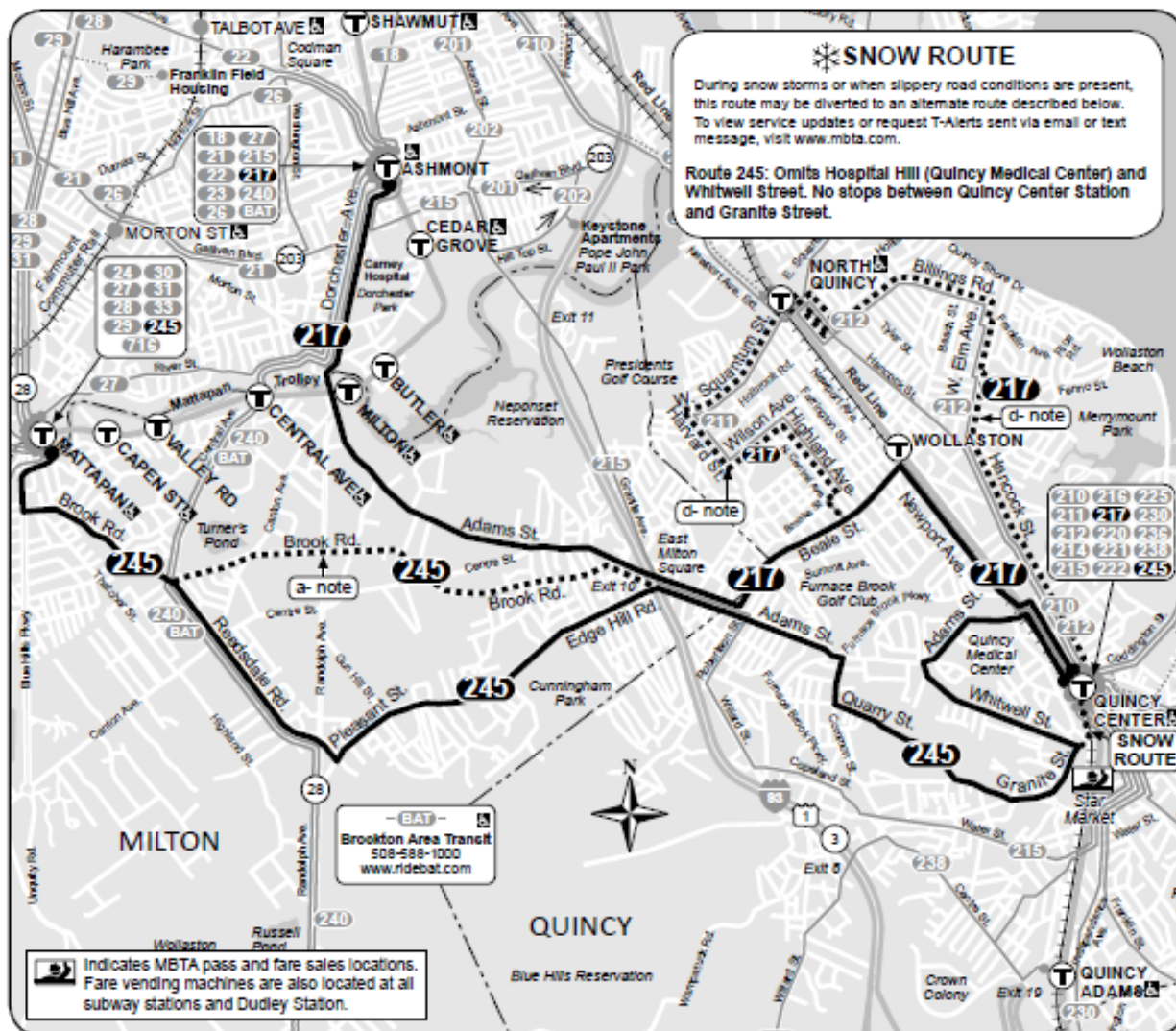
Route 217

Quincy Center Station – Ashmont Station

Route Overview

Route 217 Quincy Center Station – Ashmont Station is a commuter route that connects Quincy Center Station to Ashmont Station, via East Milton Square and Milton Station, on the Mattapan Trolley Line (see Figure 1). The route has very limited weekday service and does not operate on weekends.

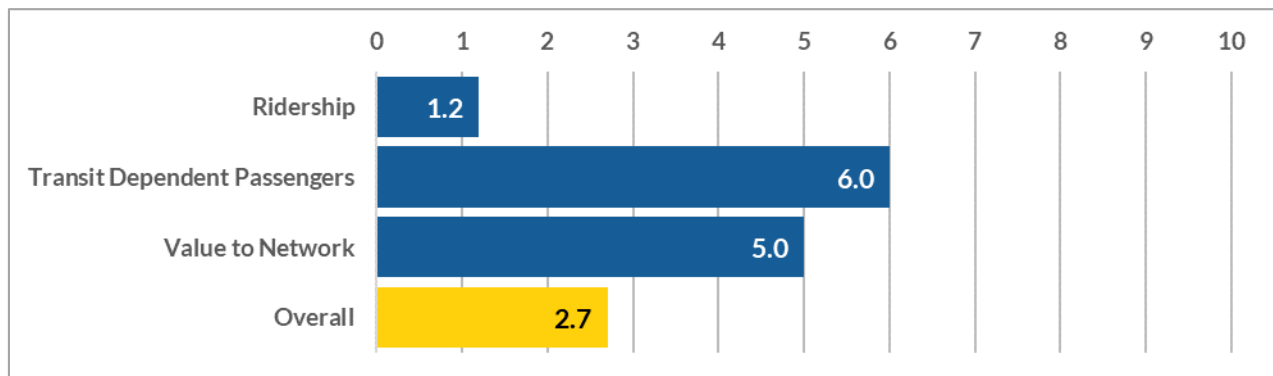
Figure 1 | Service Map



Network Importance

Route 217 is a less important route within the MBTA bus network (see Figure 2). On a relative scale of 0 to 10, the route rates 1.2 in terms of ridership, 6.0 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 2.7.

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



Service Patterns

Schedule

Route 217 provides limited commuter service on weekdays only (see Table 1). Five trips operate inbound and four trips operate outbound, though only three inbound trips and two outbound trips run the full route.

Route 217 does not meet the MBTA's span of service or service frequency guidelines for commuter routes:

- The span of service guidelines require commuter routes to operate from 7:00 AM to 9:00 AM and 4:00 PM to 6:30 PM. Route 217, however, operates only from 6:20 AM to 8:08 AM in the morning and from 2:35 PM to 6:07 PM in the afternoon.
- Route 217 provides only two trips in the peak direction in both the morning and afternoon, one trip short of the MBTA frequency guidelines.

Table 1 | Schedule Statistics

| SERVICEDAY | SPAN OF SERVICE | FREQUENCY (RANGE) | FREQUENCY (AVERAGE) | DAILY TRIPS (INBOUND/OUTBOUND) |
|----------------------|--|-------------------|---------------------|--------------------------------|
| Monday-Friday | 6:20 AM to 8:08 AM 2:35 PM to 6:07 PM | | | 5/4 |
| Sunrise | - | - | - | - |
| Early AM | 6:20 AM to 6:59 AM | 30 | 30 | 2/0 |
| AM Peak | 7:00 AM to 8:08 AM | 25 | 25 | 0/2 |
| Midday Base | - | - | - | -/- |
| Midday School | 2:35 PM to 3:59 PM | 25 | 25 | 2/1 |
| PM Peak | 4:00 PM to 6:07 PM | 1 trip | 1 trip | 1/1 |
| Evening | - | - | - | - |
| 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

Route 217 has five inbound trips and four outbound trips that together operate in six different ways (see Table 2):

- Pattern 217.9 is the primary service pattern, shown as a solid line in Figure 1, and connects Quincy Center to Ashmont via East Milton Square and Milton Station. Trips running this alignment are primarily designed for commuters. Route 217 operates on this pattern in the peak direction, with inbound trips at 6:20 AM and 6:50 AM and outbound trips at 3:20 PM and 5:50 PM. The final inbound trip each weekday, at 5:20 PM, also uses this pattern.
- Two school trips operate outbound each morning:
 - Service Pattern 217.8 makes the 7:00 AM trip, beginning at Ashmont Station and following the primary service pattern until East Milton Square (Adams Street at Hollis Street). The trip then diverges from the primary service pattern to connect residential neighborhoods in North Quincy to North Quincy High School. After serving the school, the trip then follows Route 212 Quincy Center Station – North Quincy Station service to Quincy Center Station (see the dashed line in Figure 1). Note that since the development of this document, this trip was changed to follow the Route 210 alignment.
 - Service Pattern 217.1 makes the 7:25 AM trip following the same route as the 7:00 AM Service Pattern 217.8, except for a short diversion near North Quincy High School to provide direct service to Atlantic Middle School.

- Two school trips operate inbound each afternoon:
 - Service Pattern 217.2 makes the 2:35 PM trip, serving the neighborhoods of North Quincy and North Quincy Station.
 - Service Pattern 217.3 makes the 3:00 PM trip, departing from North Quincy High School, and continuing along the same alignment through North Quincy as the morning school trips before rejoining the primary service pattern at East Milton Square, and continuing to Ashmont Station.

Table 2 | Service Patterns

| PATTERN | ORIGIN | DESTINATION | UNIQUE FEATURE | TRIPS per WKD | TRIPS per SAT | TRIPS per SUN |
|-----------------|---|-------------------------------|-----------------------------|---------------|---------------|---------------|
| INBOUND | | | | 5 | - | - |
| 217.2 | Hollis at Newbury | Bryant Avenue at Upton Street | Serves North Quincy Station | 1 | - | - |
| 217.3 | North Quincy High School (E. Squantum Street at Hancock Street) | Ashmont Station | School trip | 1 | - | - |
| 217.9 | Quincy Center Station | Ashmont Station | Primary pattern | 3 | - | - |
| OUTBOUND | | | | 4 | - | - |
| 217.1 | Ashmont Station | Quincy Center Station | School trip | 1 | - | - |
| 217.8 | Ashmont Station | Quincy Center Station | School trip | 1 | - | - |
| 217.9 | Ashmont Station | Quincy Center Station | Primary pattern | 2 | - | - |

Ridership

Route 217 carries an average of 202 passengers each day.

Ridership by Stop

Route 217 commuter trips and school trips serve different corridors for different purposes, and thus have different ridership by stop patterns.

On inbound commuter trips:

- 15 passengers board at Quincy Center Station, about one-third of total boardings.
- 13 passengers board and seven passengers alight at the 13 stops between Quincy Center Station and East Milton Square (Adams Street at Bassett Street).

- 17 passengers board and 11 passengers alight at the 19 stops between East Milton Square and Ashmont Station. Half of these alightings are at Fontbonne Academy.
- 27 passengers alight at Ashmont Station, nearly two-thirds of all alightings.

On outbound commuter trips:

- 13 passengers board at Ashmont Station.
- Six passengers board and four passengers alight at the 20 stops between Ashmont Station and East Milton Square (Adams Street at Hollis Street). Three of these boardings are at Fontbonne Academy.
- Two passengers board and seven passengers alight at the 17 stops between East Milton Square and Quincy Center Station
- Nine passengers alight at Quincy Center Station.

On outbound school trips, which take students to schools in the morning:

- 21 passengers board at Ashmont Station
- Three passengers board and seven passengers alight at the 12 stops on Dorchester Avenue and Adam Street between Ashmont Station and Fontbonne Academy
- Four passengers alight at Fontbonne Academy
- Zero passengers board and three passengers alight at the seven stops on Adams Street between Fontbonne Academy and East Milton Square (Adam Street at Hollis Street).
- 33 passengers board and five passengers alight at the five stops on Robertson Street
- 21 passengers board and one passenger alights at the 25 stops between Beale Street and North Quincy Station
- Zero passengers board and 18 passengers alight at the stop closest to Atlantic Middle School (Hollis Street at Newbury Street)
- Zero passengers board and 27 passengers alight at North Quincy Station, the closest stop to North Quincy High School.
- Five passengers board and six passengers alight at the 16 stops between North Quincy Station and Quincy Center Station
- Nine passengers alight at Quincy Center Station

On inbound school trips, which take students back home in the afternoon:

- 27 passengers board at stops near North Quincy High School and Atlantic Middle School

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- Five passengers board and no passengers alight at North Quincy Station
 - Four passengers board and 15 passengers alight at the 15 stops between North Quincy Station and Beal Street
 - Four passengers board and 30 passengers alight at the nine stops on Beal Street and Roberson Street served by both school trips.
 - The second outbound school trip also serves an average of 12 passengers at Fontbonne Academy, who primary ride to the end of the route at Ashmont Station.

Ridership by Trip

Route 217 commuter trips generally have lower ridership than school trips, especially running inbound. Running inbound (see Figure 3):

- The first commuter trip each day serves nine passengers, while the second trip serves 28. The single evening commuter trip serves six passengers on average.
- The afternoon inbound school trips serve more passengers, with 30 boardings on the first trip and 24 boardings on the second, but serve fewer passengers than the morning outbound school trips.

Running outbound (see Figure 4):

- The morning school trips have high ridership, with 38 boardings on the first trip and 45 boardings on the second.
- The afternoon commuter trips have very low ridership, with 14 boardings on the first trip and seven boardings on the second.

Figure 3 | Weekday Ridership by Trip: Inbound

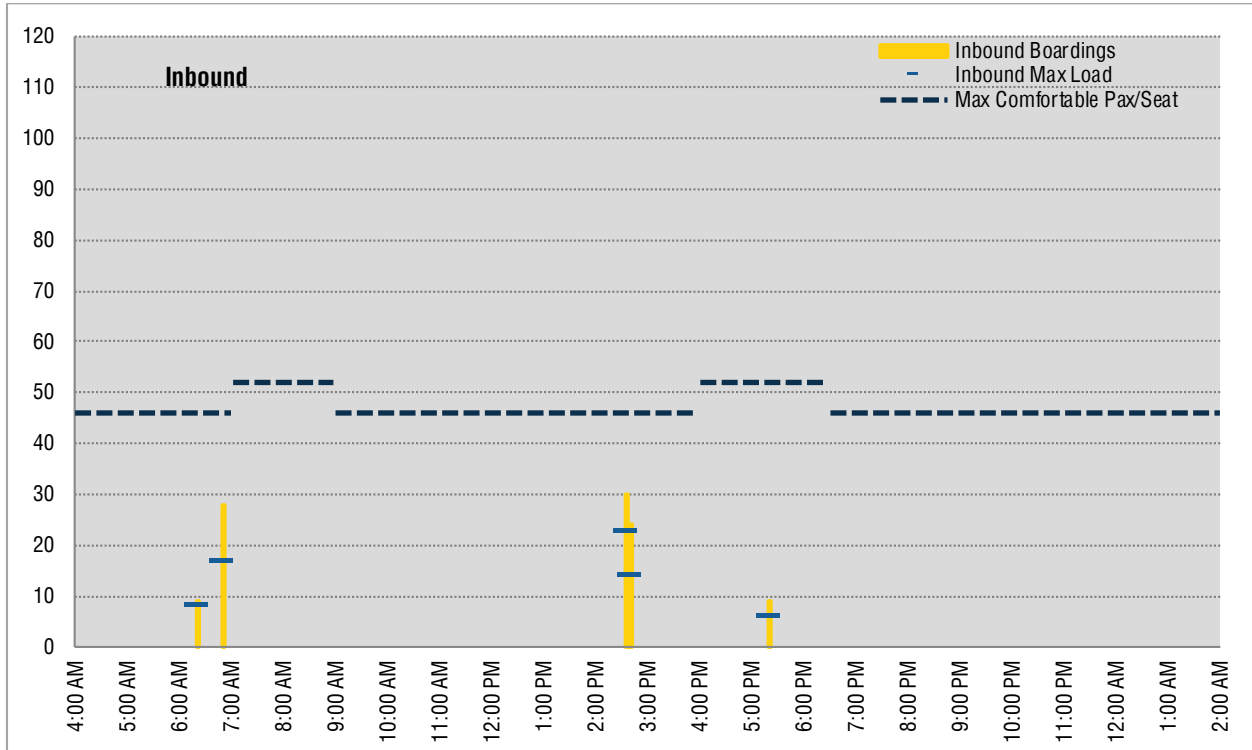
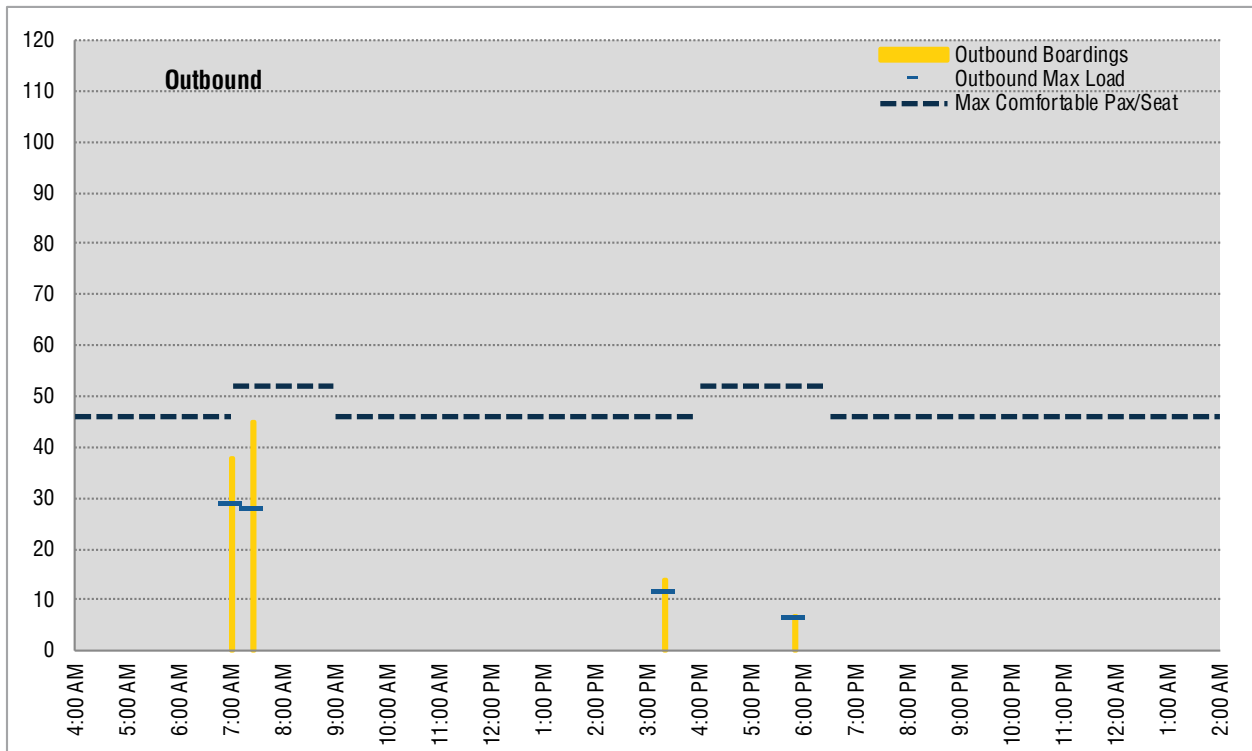


Figure 4 | Weekday Ridership by Trip: Outbound



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 217, 98.8% of passenger minutes are in comfortable conditions, which is above the minimum standard and the target standard (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 | 98.8% | - | - |

Reliability and Speed

Reliability

Passengers using lower frequency services like Route 217 typically use published schedules to plan their trip. For these services, the MBTA measures reliability based how each trip runs compared to the schedule. Trips must depart within three minutes of their scheduled departure time, leave designated stops (known as timepoints) no more than one minute ahead or six minutes behind schedule, and arrive at their destination no more than five minutes behind its scheduled arrival time.

Route 217’s reliability is low, at 61% overall due in part to its circuitous routing as well as its alignment along Newport Avenue, a congested corridor during the AM peak. Dropped trips are a problem on this trip, with 0.3% of trips dropped.

Table 4 | Reliability

| SERVICE DAY | ORIGIN/MID-ROUTE ON-TIME PERFORMANCE | DESTINATION ON-TIME PERFORMANCE | OVERALL RELIABILITY | DROPPED TRIPS |
|----------------------|--------------------------------------|---------------------------------|---------------------|---------------|
| Monday-Friday | 60% | 63% | 61% | 0.3% |
| Saturday | - | - | - | - |
| Sunday | - | - | - | - |

Running Times

Route 217's AM trips take up to 3 minutes longer than scheduled during the AM peak and up to 9 minutes longer than scheduled during the PM peak.

Figure 5 | Scheduled & Median Travel Time by Trip: Route 217 Inbound

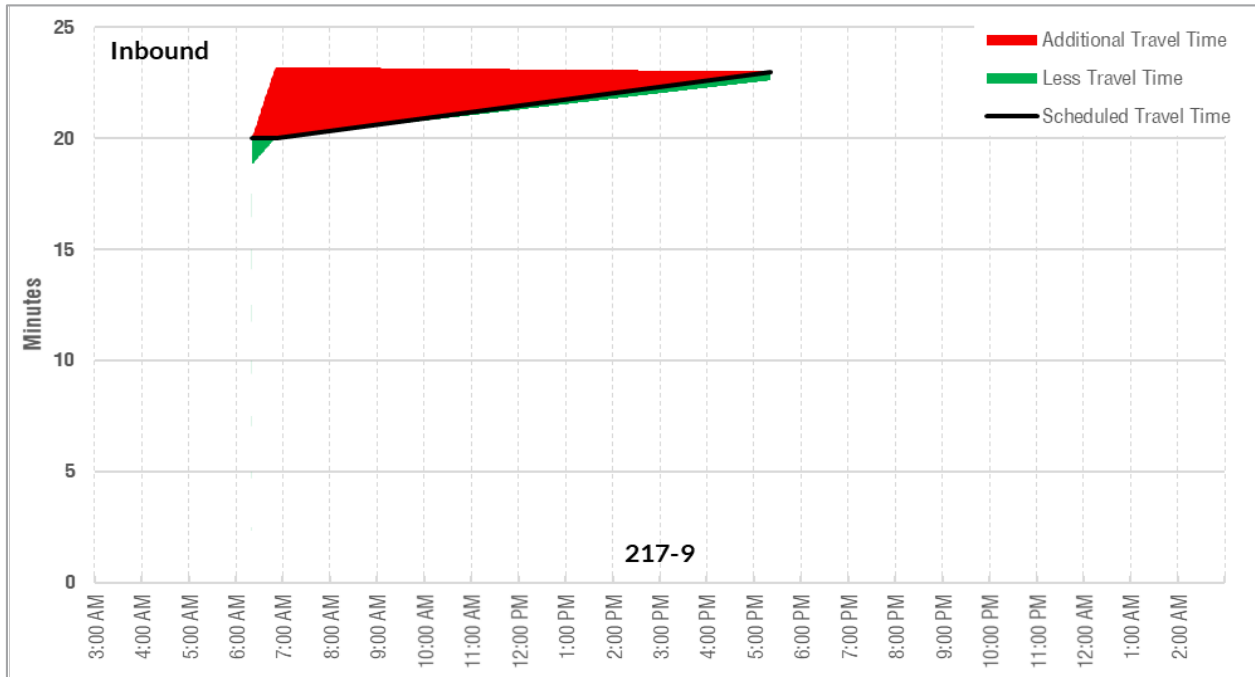
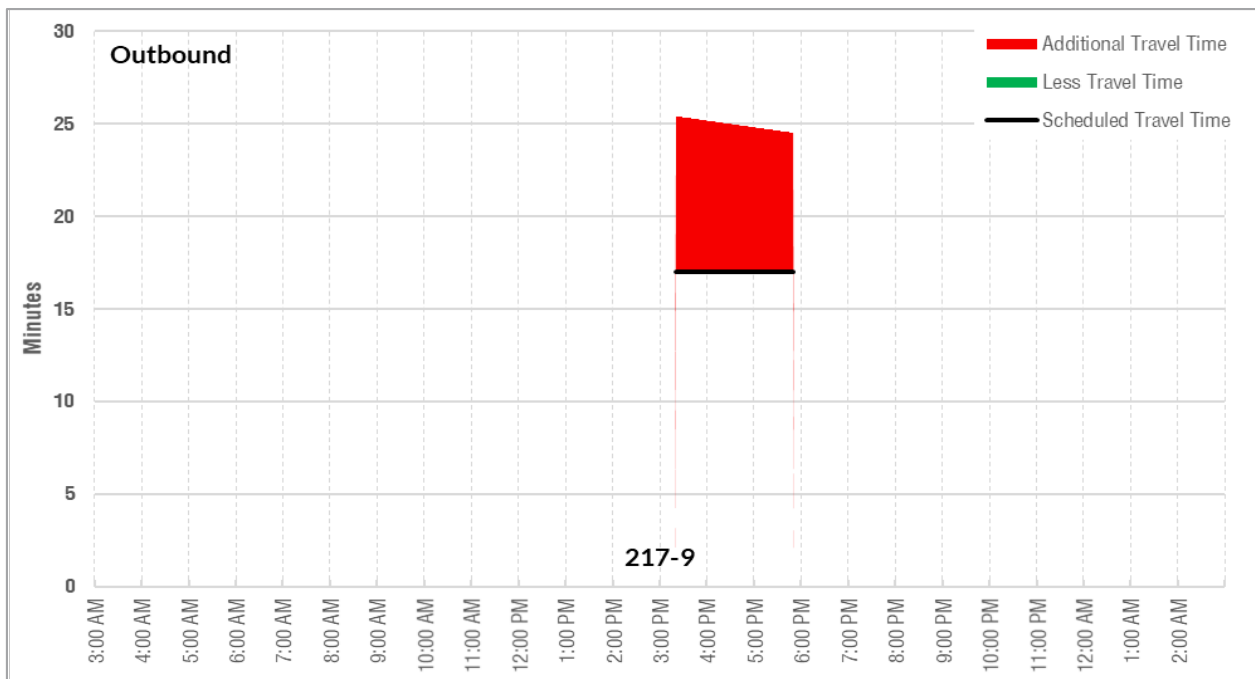


Figure 6 | Scheduled & Median Travel Time by Trip: Route 217 Outbound



Stop Spacing

Route 217's stops in North Quincy are too closely spaced, with an average of 600 feet between the 16 stops between North Quincy Station and Beale Street. Stop spacing is generally good along the other portions of Route 217's alignment.

Summary

Route 217 provides very limited weekday-only commuter service, the route has five inbound trips and four outbound trips that together operate in six different ways. Half of these trips are designed primarily to serve students at North Quincy High School and Atlantic Middle School, and are also used by some students at Fontbonne Academy. The other half serve commuters traveling from Milton and Quincy to the Red Line. The school trips are well utilized, while the commuter trips have very low ridership. Overall, the service is likely too infrequent to provide utility for most riders.