## Route 119

## Northgate Shopping Center - Beachmont Station

## Route Overview

Route 119 Northgate Shopping Center - Beachmont Station is a local route that connects Northgate Shopping Center to Beachmont Stationvia Revere City Hall on a NorthwestSoutheast axis through the Revere area. Route 119 is primarily a coverage route that connects residential neighborhoods in Revere to Beachmont Station. Route 119 also provides service to several schools in central Revere, and the loop at its easternend provides service to the Beachmont neighborhood.

Figure 1 |Service Map


Massachusetts Bay
Transportation Authority

## Network Importance

Route 119 is a route of average importance to the overall MBTA bus network, because despite being a low ridership route it serves a high population of transit dependent passengers (see Figure 2). On a relative scale of 0 to 10, Route 119 rates 3.0 in terms of ridership, 8.7 in terms of transit dependent ridership, and 6.4 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 Patterns

## Schedule

Route 119 provides infrequent service from early morning until late evening on weekdays and very infrequent service from morning until evening on weekends.

On weekdays, service operates from 5:00 AM to 10:45 PM with the following service frequencies:

- Roughly hourly from the beginning of service to 6:05 AM
- Every 40 minutes from 6:05 AM to 9:26 AM in the early AM and AM peak periods
- Every 56 to 60 minutes from 9:26 AM to 1:52 PM, but predominately every 60 minutes.
- Every 40 to 45 minutes from 1:52 PM to 6:52 PM in the midday school and PM peak periods.
- Every 59 to 68 minutes, but predominantly every 63 minutes, from 6:52 PM to the end of the service span at 10:25 PM.

On Saturdays, Route 119 operates from 7:00 AM to 7:40 PM with service every 60 to 77 minutes, though most headways are greater than 70 minutes. On Sundays, service operates between 9:00 AM and 7:25 PM with trips every 60 to 68 minutes, through predominantly every 68 minutes.

Route 119 shares an alignment with Route 411 Malden Station - Revere/Jack Satter House to provide higher frequency service on a northwest portion of MaldenStreet. It also shares an alignment with Route 116 and Route 117 Wonderland Station - Maverick StationVia Revere, to provide higher frequency service on Broadway in central Revere.

Route 119 meets the Span of Service and Service Frequency Standards for Local Bus routes during all service days and periods.

Table 1 |Schedule Statistics

| SERVICEDAY | SPAN OF SERVICE | FREQUENCY <br> (RANGE) | FREQUENCY <br> (AVERAGE) | DAILYTRIPS <br> (INBOUND/OUTBOUND) |
| :--- | :---: | :---: | :---: | :---: |
| Monday-Friday | 5:00 AM to 10:45 PM |  |  | $23 / 23$ |
| Sunrise | 5:00 AM to 5:35 AM | $60-60$ | 60 | $1 / 1$ |
| Early AM | 6:00 AM to 6:35 AM | $25-60$ | 30 | $2 / 1$ |
| AM Peak | 7:00 AM to 8:45 AM | $25-45$ | 32 | $4 / 4$ |
| Midday Base | 9:10 AM to 1:20 PM | $25-70$ | 70 | $4 / 5$ |
| Midday School | 1:50 PM to 3:40 PM | $30-70$ | 36 | $4 / 3$ |
| PM Peak | 4:15 PM to 6:05 PM | $35-40$ | 35 | $4 / 4$ |
| Evening | 6:40 PM to 9:50 PM | $35-70$ | 63 | $4 / 4$ |
| Late Evening | 10:25 PM to 10:45 PM | 70 | 70 | $0 / 1$ |
| Night | - | - | - | - |
| Saturday | 7:00 AM to 7:40 PM | $\mathbf{6 0 - 7 7}$ | $\mathbf{7 0}$ | $\mathbf{1 1 / 1 1}$ |
| Sunday | 9:00 AM to 7:24 PM | $\mathbf{6 0 - 6 8}$ | 68 | $\mathbf{1 1 / 1 1}$ |

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

## Service Patterns

Pattern 119.1 runs all but one all weekday and weekend trips, operating the full route from Northgate Shopping Center to Beachmont Station

Pattern 119.2 runs one trip, and is a slightly shorter version of the full route, with its origin at Lynn Street at Beach Street in the Linden Square area, instead of at Northgate Shopping Center.

Since the development of this document, midday service was modified to service the retail area on Tomasello Way and Pattern 119.2 was discontinued.

Table 2 | Service Patterns

| PATTERN | ORIGIN | DESTINATION | UNIQUE FEATURE | TRIPS per WKD | TRIPS per SAT | $\begin{gathered} \text { TRIPS } \\ \text { per } \\ \text { SUN } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INBOUND |  |  |  | 23 | 11 | 11 |
| 119.1 | Northgate Shopping Center | Winthrop Avenue at Beachmont Station | Serves Northgate Shopping Center | 22 | 11 | 11 |
| 119.2 | LynnStreet at Beach Street | Winthrop Avenue at Beachmont Station | To/from Linden Square | 1 | - | - |
| OUTBOUND |  |  |  | 23 | 11 | 11 |
| 119.1 | Winthrop Avenue at Beachmont Station | Northgate Shopping Center | Serves Northgate Shopping Center | 22 | 11 | 11 |
| 119.2 | Winthrop Avenue at Beachmont Station | LynnStreet at Beach Street | To/from Linden Square | 1 | - | - |

## Ridership

Route 119 serves about 1,150 passengers on weekdays, 450 passengers on Saturdays, and 410 passengers on Sundays. This ranks it in the bottom half of MBTA bus routes for total weekday and weekend ridership.

## Ridershipby Stop

Route 119 ridership is highest at Northgate Shopping Center and along Broadway, reflecting greater levels of economic and school activity in these areas. Ridership is moderate or low along the rest of Route 119 reflecting the relatively low-density residential character of the areas served. On weekday inbound trips:

- 160 passengers board at Northgate Shopping Center.
- 4 passengers board and 3 alight at the two stops between Northgate Shopping Center and Lynn Street at Beach Street.
- 38 passengers board and 17 alight at Lynn Street at Beach Street.
- 174 passengers board and 26 alight at the 14 stops between LynnStreet at Beach Street, and Broadway.
- 119 passengers board and 94 alight at the three stops on Broadway. Each stophas approximately 30 to 50 boardings and 20 to 40 alightings.
- 127 passengers board and 63 alight at the eight stops along Winthrop Avenue and Revere Beach Parkway between Broadway and Beachmont Station.
- 147 passengers board and 347 alight at Beachmont Station.
- 46 passengers board and 57 alight at the ten stops along the Crescent Avenue/Endicott Avenue loop.
- 35 passengers alight once more at Beachmont Station after the bus completes the Crescent Avenue/Endicott Avenue loop portion of Route 119.


## Ridershipby Trip

On weekdays, Route 119 has higher ridership during peak periods, though overall ridership is much higher on inbound trips than outbound trips. On weekday inbound trips:

- The first trip at 5:00 AM carries 56 passengers, indicating a demand for earlier service.
- Ridership is high throughout the morning from 5 AM to 8 AM, when all trips carry 40 or more passengers. Three of the first four trips are overcrowded, carrying between 50 and 65 passengers.
- Between 8:00 AM and 12:00 PM ridership ranges between 25 and 30.
- Ridership increases from 1:00 PM to 2:35 PM. The 2:35 PM trip carries 45 passengers.
- Ridership fluctuates between roughly 30 and 45 passengers on trips between 3 PM and 6:05 PM.
- Ridership declines after 6:00 PM, to between 15 and 20 passengers on all trips to the end of the service spanat 9:50 PM.

On weekday outbound trips:

- The first trip at 5:35 AM carries 6 passengers.
- Ridership increases slightly from 5:35 AM to 9:25 AM. Morning ridership peaks at 16 on the 9:25 AM trip.
- Ridership fluctuates between 10 and 20 on the five trips between 9:25 AM and 2:30 PM, with most trips carrying approximately 15 passengers.
- Ridership increases from 2:30 PM to 28 passengers on 4:20 PM trip.
- On the five trips between 4:20 PM and 7:15 PM, ridership declines from the evening peak of 28 to approximately 11.
- The three remaining trips, from 8:15 PM to 10:25 PM all carry seven passengers.

On Saturdays, inbound ridership is highest on the first trip of the day, which carries approximately 35 passengers. It declines approximately 20 from 7 AM to 11 AM, but then fluctuates between 20 and 30 passengers per trip over the remainder of the service span. Outbound ridership is much lower overall, and ranges from 10 to 20 on trips between 7:30 AM and 6:00 PM. The last two trips, between 6:00 PM and 8:00 PM, carry roughly five passengers.

On Sundays, inbound ridership increases from 18 on the first trip at 9:00 AM to 40 at 4:00 PM. Most trips though, carry between 15 and 25 passengers. Outbound ridership, which declines gradually over the service span, is between 10 and 20 on trips between 9:00 AM and 5:00 PM. Trips from 5:00 PM to 8:00 PM carry five to seven passengers.

Figure 3 | Weekday Inbound Ridership by Stop Map


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 Route 119,99.5\% of passenger minutes are in comfortable conditions, which exceeds the minimum 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 | $99.5 \%$ | $100 \%$ | $100 \%$ |

## Reliability and Speed

## Reliability

Route 119's overall reliability is poor, especially on weekdays and Sundays (see Table 4). $65 \%$ of weekday trips are completed on time, while only half of Sunday trips are completed on time. Around 75\% of Saturday trips are completed on time. Because of its infrequent schedule, dropped trips are minimized on Route 119.

Table 4|Reliability
$\left.\begin{array}{lcccc} & \begin{array}{c}\text { ORIGIN/MID- } \\ \text { ROUTEON-TIME }\end{array} & \begin{array}{c}\text { DESTINATION } \\ \text { ON-TIME } \\ \text { PERFORMANCE }\end{array} & \text { OVERALL } \\ \text { RELIABILITY }\end{array} \quad \begin{array}{c}\text { DROPPED } \\ \text { SERVICEDAY } \\ \text { PERFORMANCE }\end{array}\right]$

## Running Times

Route 119's observed running times exceed scheduled running times through most of the day on weekdays (See Figure 10). Morning peak trips typically run about ten minutes behind schedule. Afternoon and evening peak trips typically operate about five to seven minutes behind schedule. These delays are the major reason that on-time performance is poor. Since the development of this document the MBTA has adjusted Route 119s scheduled running times.

Figure 10 |Scheduled \& Median Travel Time by Trip:Route 119 Inbound


Figure 11 | Scheduled \& Median Travel Time by Trip: Route 119 Outbound


## Stop Spacing

Overall, Route 119 has an average of eight stops per mile, in excess of the four to seven stops per mile recommended for urban areas under MBTAguidelines. Stops are even closer together:

- Between Cushman Avenue at Gordon Road and 104 Constitution Avenue, where there are seven stops in less than a mile of route.
- Along the Beachmont loop portion of Route 119 , where there are ten stops in 1.25 miles, or one stop on average every 660 feet.


## Summary

Route 119 provides service along a northwest-southeast route not served directly by any other bus routes, and provides a valuable connection from residential areas of Revere to Beachmont Station and the Blue Line, Northgate Shopping Center, and Broadway corridor. Route 119 has several challenges, which includes low service frequencies, unreliable service, a circuitous route, and an excessive number of stops.

