

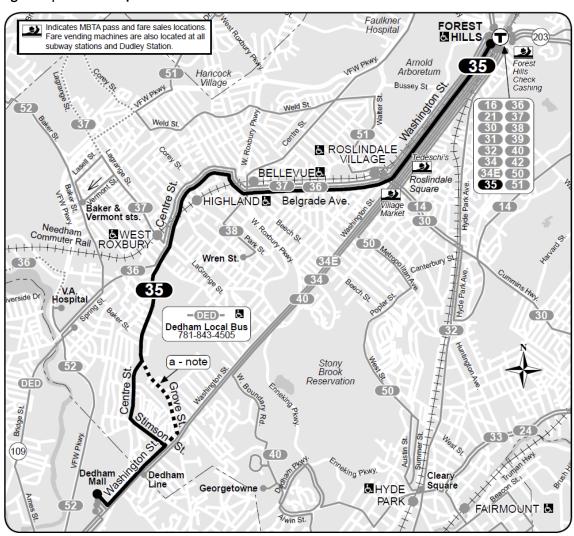
Route 35

Dedham Mall/Stimson Street - Forest Hills Station

Route Overview

Route 35 Dedham Mall/Stimson Street – Forest Hills Station is a Local route that operates between Dedham Mall and Forest Hills Station via Centre Street, Belgrade Avenue, and Washington Street (see Figure 1). The route operates along the same alignment as Route 36 Charles River Loop or VA Hospital-Forest Hills Station and Route 37 Baker and Vermont Streets-Forest Hills Station between the intersection of Lagrange Street at Centre Street and Forest Hills Station. The three routes combine to provide frequent service between Roslindale's Centre Street/Belgrade Avenue corridor and Forest Hills Station.

Figure 1 | Service Map





Network Importance

Route 35 has moderate importance within the overall system (see Figure 2). On a scale of 0 to 10, the route rates 4.1 in terms of ridership, 4.7 in terms of transit dependent ridership, and 8.7 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.

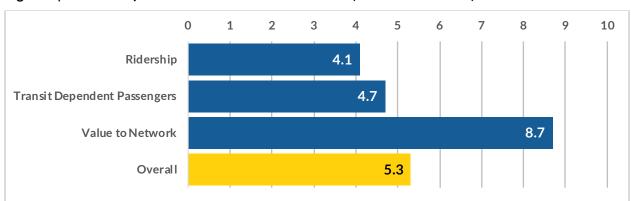


Figure 2 | Relative Importance within MBTA Bus Network (on a scale of 0 to 10)

Service Overview

Schedule

On weekdays, Route 35 generally provides frequent service during the early morning, early afternoon, and PM peak period, and infrequent service at other times (see Table 1). On weekends, it provides infrequent service.

Weekday service operates from 5:25 AM until 9:15 PM:

- Every 12 to 18 minutes from the start of service through 6:30 AM.
- Every 25 to 30 minutes during the AM Peak and until 9:30 AM.
- Every 30 to 49 minutes during the midday period from approximately 9:30 AM until 1:30 PM.
- Every 13 to 17 minutes through the afternoon and PM peak, but predominantly every 15 minutes.
- Every 60 minutes in the evening through the end of service.

On Saturdays, Route 35 runs from 5:20 AM until 9:15 PM, operating every 28 to 30 minutes before 9:00 AM, every 30 to 49 minutes during most of the service day, and every 60 minutes after 7:00 PM. Sunday service runs from 9:30 AM until 7:30 PM, with service frequencies of 65 to 70 minutes before 3:00 PM and every 60 minutes from 3:00 PM through the end of service.



Table 1 | Schedule Statistics

| SERVICE DAY | SPAN OF SERVICE | FREQUENCY (RANGE) | FREQUENCY (AVERAGE) | DAILY TRIPS (INBOUND/OUTBOUND) |
|---------------|--------------------|----------------------|------------------------|-----------------------------------|
| Monday-Friday | 5:25 AM to 9:15 PM | | | 42/41 |
| Sunrise | 5:25 AM to 5:58 AM | 20 | 20 | 1/3 |
| Early AM | 6:00 AM to 6:59 AM | 5 – 20 | 14 | 4/3 |
| AM Peak | 7:00 AM to 8:59 AM | 12 - 39 | 24 | 6/5 |
| Midday Base | 9:00 AM to 1:29 PM | 17 - 49 | 37 | 7/7 |
| Midday School | 1:30 PM to 3:59 PM | 5 - 42 | 17 | 9/10 |
| PM Peak | 4:00 PM to 6:29 PM | 12 - 17 | 15 | 10/10 |
| Evening | 6:30 PM to 9:15 PM | 12 - 60 | 40 | 5/3 |
| Saturday | 5:20 AM to 9:15 PM | 30 - 60 | 36 | 26/26 |
| Sunday | 9:30 AM to 7:30 PM | 60 - 70 | 57 | 10/10 |

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

As described above, Routes 36 and 37 operate along the same alignment as Route 35 between the intersection of Lagrange Street and Washington Street. However, all three routes are scheduled independently, and as such, schedules are not coordinated (see Table 2).

Table 2 | Existing Headways on Routes 35, 36, and 37

| | RT 35 EXISTING HEADWAY | RT 36 EXISTING HEADWAY | RT 37 EXISTING HEADWAY |
|---------------|---------------------------|---------------------------|---------------------------|
| Monday-Friday | | | |
| Sunrise | 20 | 20 - 23 | 17 - 17 |
| Early AM | 5 - 20 | 11 - 15 | 6-21 |
| AM Peak | 12 - 39 | 4 - 18 | 18 - 30 |
| Midday Base | 17 - 49 | 16 - 49 | 18 - 43 |
| Midday School | 5 - 42 | 1-49 | 17 - 40 |
| PM Peak | 12 - 17 | 10 - 31 | 9 - 24 |
| Evening | 12 - 60 | 5 -30 | 9 - 26 |
| Late Evening | No service | 26 - 30 | No service |
| Night | Noservice | 25 - 40 | No service |
| Saturday | 30 - 60 | 22 -70 | 25-60 |
| Sunday | 60 - 70 | 25 - 60 | No service |

Route 35 meets the MBTA's span of service and frequency standards on weekdays and Saturdays. However, Sunday service fails to meet the MBTA's minimum frequency standard, when service operates every 65 to 70 minutes before 3:00 PM versus the minimum standard of every 60 minutes.



Service Patterns

On weekdays, nearly all service operates Pattern 35.1, which serves the full length of the route (see Table 3). Route 35 has two additional service patterns:

- On weekdays and Saturday mornings before 9:00 AM, before the Dedham Mall is open, service operates to and from Washington Street at Stimson Street (Pattern 35.0).
- On weekdays, one AM inbound school trip at 6:40 AM operates from Washington Street at Stimson Street to the Boston Latin School in the Longwood Medical Area and one PM outbound trip operates from Boston Latin School and arrives at Washington Street at Stimson Street at 3:14 PM (Pattern 35.2 inbound and 35.3 outbound). These trips are only loosely related to Route 35's regular alignment.

Table 3 | Service Patterns

| PATTERN | ORIGIN | DESTINATION | UNIQUE FEATURE | TRIPS PER WKD | TRIPS PER SAT | TRIPS PER SUN |
|----------|---|--|-----------------------------|---------------------|---------------------|---------------------|
| INBOUND | | | | 42 | 26 | 10 |
| 35.0 | Stimson Street at Washington Street | Forest Hills Station | Short turn on morning trips | 10 | 7 | - |
| 35.1 | Dedham Mall | Forest Hills Station | Primary service pattern | 31 | 19 | 10 |
| 35.2 | Stimson Street at Washington Street | Boston Latin School | AM school trip | 1 | - | - |
| OUTBOUND | | | | 41 | 26 | 10 |
| 35.0 | Forest Hills Station Upper Busway | Stimson Street at Washington Street | Short turn on morning trips | 10 | 7 | - |
| 35.1 | Forest Hills Station Upper Busway | Dedham Mall | Primary service patterns | 30 | 19 | 10 |
| 35.3 | Boston Latin School | Dedham Mall | PM school trip | 1 | - | - |

Ridership

Route 35 carries 2,160 riders on weekdays, 1,040 Saturdays, and 430 riders on Sundays. This is the second highest ridership of the three routes that serve the Centre Street/Belgrade Avenue corridor (Route 36 serves 3,000 passengers per weekday, and Route 37 serves 1,340). The differences in ridership generally reflect differences in service levels, as most riders can chose interchangeably between the three routes.



Ridership by Stop

Most riders use Route 35 to travel to and from Forest Hills Station. On weekday inbound trips (see Figure 3):

- 120 passengers board at the Dedham Mall.
- 80 passengers board and 20 alight along Washington Street between the Dedham Mall and Stimson Street. These stops are also served by Route 34E Walpole -Forest Hills Station.
- A total of 150 passengers board and 100 alight at the 12 stops along Stimson Street and Washington Streets before Saint Theresa Avenue, which is where Route 36 joins Route 35's alignment.
- 70 passengers board and 20 alight at Washington Street at Lagrange Avenue, where Route 37 joins Route 35's alignment. In total, 420 passengers board and 140 alight on Route 35 before it begins to operate along the same alignment as Routes 36 and 37.
- A total of 120 passengers board and 40 alight at the last five stops on Centre Street.
- A total of 160 passengers board and 50 alight at the eight stops along Belgrade Avenue before Roslindale Square.
- 160 passengers board and 60 alight at the two stops in Roslindale Square.
- 140 passengers board and 50 alight at the six stops along Washington Street. This segment is served by eight other routes as they travel to Forest Hills Station.
- 700 passengers, or 72% of all inbound riders, alight at Forest Hills Station.

Outbound patterns are generally the reverse of inbound patterns. Weekend ridership patterns are similar to weekday patterns but with lower volumes.

Ridership by Trip

Inbound trips follow a typical weekday commute pattern, with higher ridership during the AM peak and lower ridership during midday and PM peak periods (see Figure 4).

- The three highest ridership trips are during the early morning and AM peak periods, with over 40 boardings. Maximum loads on these trips also exceed 40 passengers.
- Between 8:00 AM and 4:00 PM, most trips carry between 20 and 30 passengers.
- Ridership falls below 20 riders per trip after 4:30 PM, but goes back up to 20 boardings on the last inbound trip at 9:15 PM.



Figure 3 | Weekday Inbound Ridership by Stop Map





Outbound trips have low ridership in the morning, moderate ridership during midday, and high ridership in the PM peak and evening (see Figure 5):

- From the start of service to 8:30 AM, outbound trips carry fewer than 15 passengers.
- Ridership increases later in the morning and into midday, with most trips carrying between 20 and 30 riders.
- Ridership is highest between 2:00 PM and 4:00 PM, when trips consistently have between 45 and 60 riders. However, all trips have maximum loads that are within loading standards.
- Outbound ridership remains moderate through the PM peak, with most trips carrying between 30 and 40 riders, and a 5:45 PM trip has 45 riders.
- The second to last trip at 7:45 PM has 45 riders, and the last outbound trip at 8:45 PM has 30 riders.

Saturday ridership is moderate, with only a few trips exceeding 30 total boardings (see Figure 6 and Figure 7). Inbound trips before 9:30 AM carry fewer than 20 riders, but ridership is generally higher during the middle of the day. The highest ridership inbound trips are at 11:06 AM (33 boardings) and 4:13 PM (35 boardings). Outbound ridership is highest during the midday and evening, although only three trips during the day meet or exceed 30 boardings.

Ridership is also moderate on Sundays, with most trips carrying between 15 and 28 riders (see Figure 8 and Figure 9). Only one trip (11:10 AM inbound) has over 30 boardings. The last two outbound trips at 6:00 PM and 7:00 PM are two of the highest ridership outbound trips, with 27 and 28 boardings, respectively.



Figure 4 | Weekday Ridership by Trip: Inbound

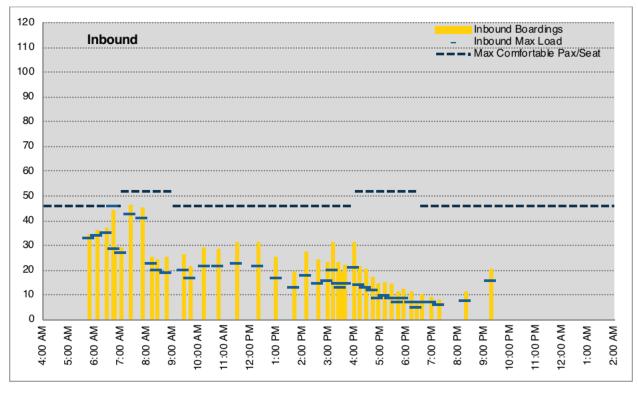


Figure 5 | Weekday Ridership by Trip: Outbound

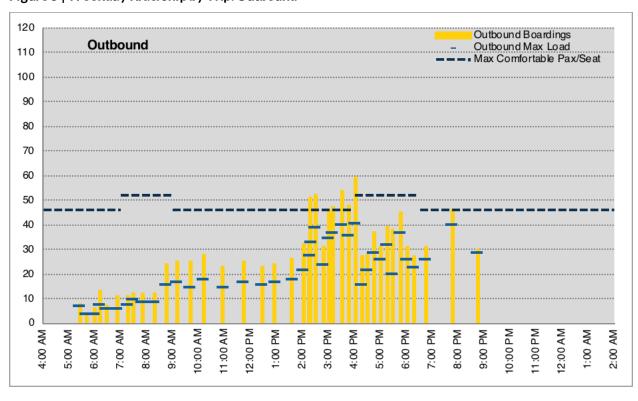




Figure 6 | Saturday Ridership by Trip: Inbound

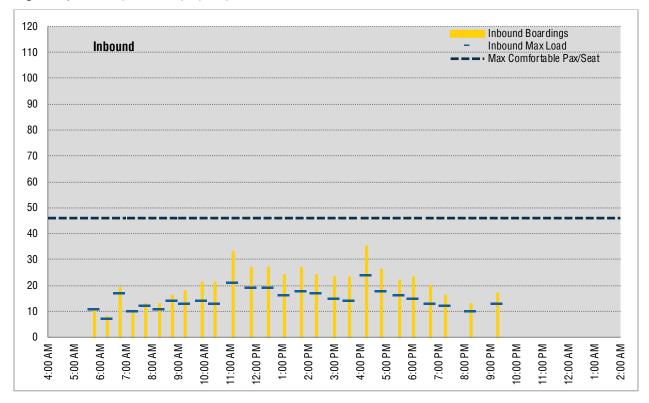


Figure 7 | Saturday Ridership by Trip: Outbound

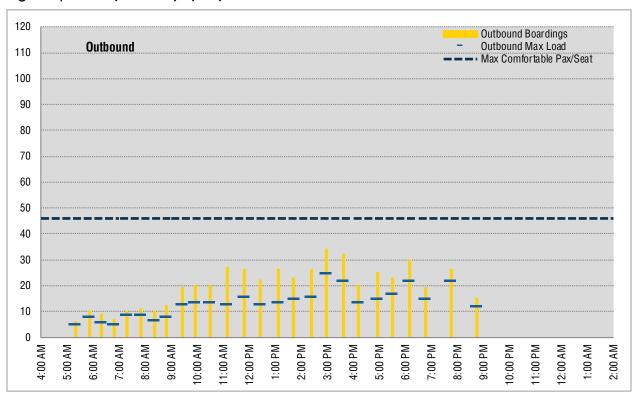




Figure 8 | Sunday Ridership by Trip: Inbound

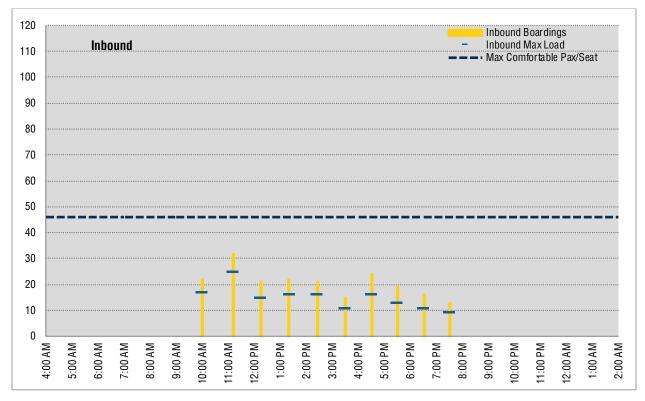
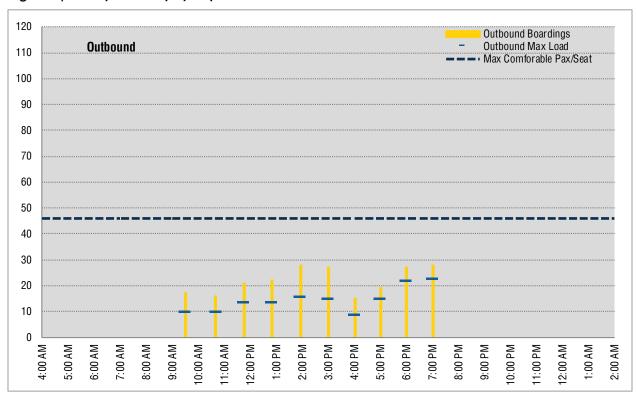


Figure 9 | Sunday Ridership by Trip: Outbound





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 35, 95.8% of passenger minutes are in comfortable conditions, which exceeds the minimum standard of 92% (see Table 4), but falls just short of the target of 96%. Nearly 100% of passenger minutes are in comfortable conditions on weekends.

Table 4 | Passenger Time Spent Traveling in Comfortable Conditions

| | WEEKDAYS | SATURDAYS | SUNDAYS |
|------------------|----------|-----------|---------|
| Minimum Standard | 92% | 92% | 92% |
| Target | 96% | 96% | 96% |
| Actual | 95.8% | 99.9% | 99.8% |

Reliability and Speed

Reliability

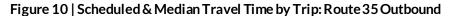
Weekday and Saturday on-time performance is very poor, at 59% and 61% respectively, and well below the minimum standard of 70% and the target of 75% (see Table 5). Sunday on-time performance, at 77%, exceeds the target.

Table 5 | Reliability

| SERVICE DAY | ORIGIN/MID- ROUTE ON-TIME PERFORMANCE | DESTINATION ON-TIME PERFORMANCE | OVERALL RELIABILITY | DROPPED TRIPS |
|---------------|---|---------------------------------------|------------------------|------------------|
| Monday-Friday | 60% | 56% | 59% | 0.6% |
| Saturday | 61% | 63 | 61% | - |
| Sunday | 77% | 75% | 77% | - |

Running Times

Poor on-time performance is due, in large part, to outbound running times that exceed scheduled running times by up to 10 minutes (see Figure 10). These difference are partially offset by inbound running times that, in Fall 2017, were slightly shorter than scheduled for most of the day (see Figure 11). With the implementation of the AM inbound bus lanes on Washington Street, these differences are now greater.



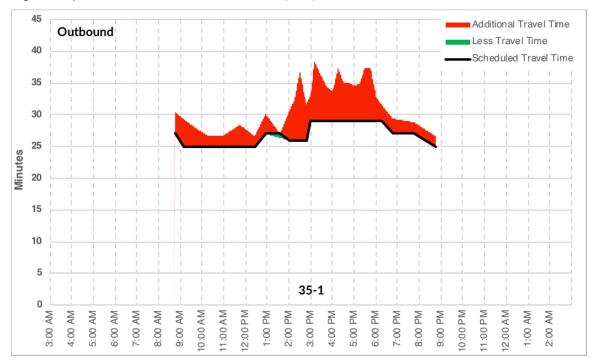
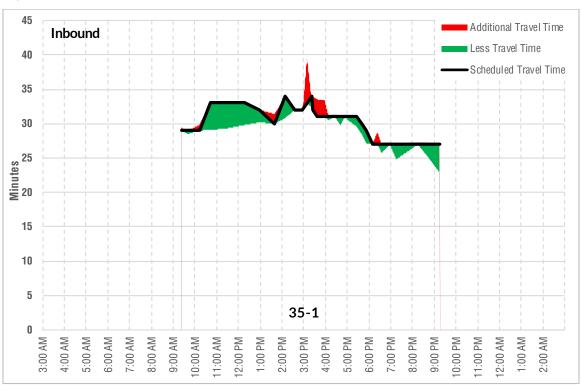


Figure 11 | Scheduled & Median Travel Time by Trip: Route 35 Inbound





Stop Spacing

Route 35 has an average of 7.9 stops per mile, which is more than the four to seven stops per mile specified by the MBTA's bus stop guidelines. In addition, many of the closely spaced stops serve fewer than 10 weekday boardings. The consolidation of stops would speed service and improve on-time performance by reducing running time variability.

Summary

Route 35, along with Route 36 Charles River Loop or VA Hospital - Forest Hills Station and Route 37 Baker and Vermont Streets - Forest Hills Station, is one of three routes that serve Roslindale's Centre Street/Belgrade Avenue corridor. Together, the three routes carry a total of 6,500 passengers per weekday. The large majority - 5,480, or 84% - ride entirely within the common segments of the three routes along Centre Street, Belgrade Avenue, and Washington Street.

The route is important largely in terms of the service it provides in the Centre Street/Belgrade Avenue corridor, and to a lesser extent for its outer end service. Areas in need of improvement include:

- Very poor on-time performance
- Lack of consistent schedule coordination with Routes 36 and 37
- Very irregular schedules