

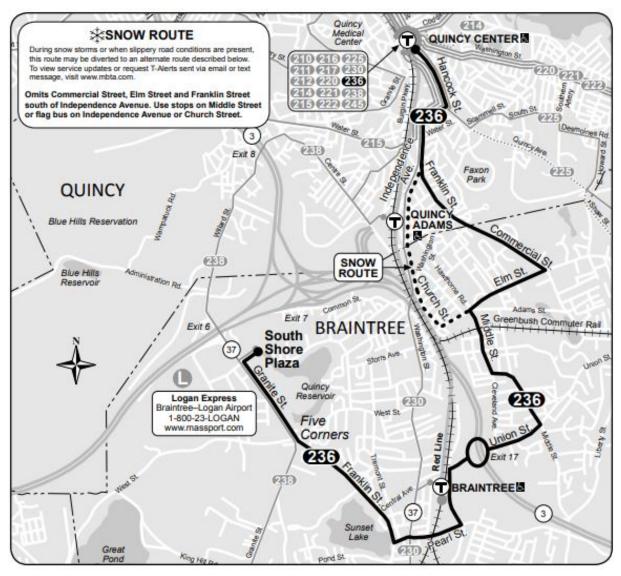
# Route 236

**South Shore Plaza – Quincy Center** 

### Route Overview

Route 236 South Shore Plaza – Quincy Center is a Local bus route that connects South Shore Plaza to Quincy Center Station, via Braintree Station (see Figure 1). The route provides access to residential neighborhoods in North Braintree and South Quincy, and operates seven days per week.

Figure 1 | Route 236 Service Map





## Network Importance

Route 236 is relatively less important within the overall MBTA bus network (see Figure 2). On a relative scale of 0 to 10, the route rates 2.1 in terms of ridership, 6.0 in terms of transit dependent ridership, and 5.9 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 3.5.

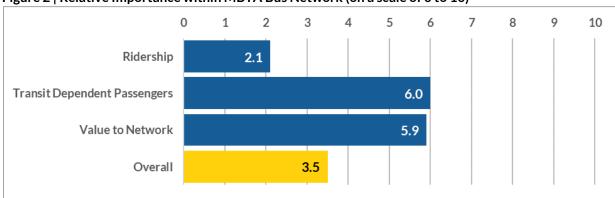


Figure 2 | Relative Importance within MBTA Bus Network (on a scale of 0 to 10)

### Service Overview

#### **Schedule**

Route 236 provides very infrequent service on both weekdays and weekends (see Table 1). On weekdays, the route operates from 6:40 AM to 8:44 PM with the following inbound service frequencies:

- The first two trips depart from Braintree Station at 7:10 AM and 8:20 AM, followed by trips running the full route from South Shore Plaza at 8:45 AM and 9:15 AM
- Midday service operates hourly between 9:15 AM and 3:15 PM
- PM peak trips run at 4:20 PM, 5:25 PM, 5:50 PM, and 6:20 PM
- Two trips run during evening service, at 7:25 PM and 8:20 PM

On Saturdays, Route 236 generally operates every 70 minutes from 7:00 AM to 10:46 PM – with the exception of the first three trips of the day in both directions, which run every 60-65 minutes. Route 236 runs hourly on Sundays from 10:05 AM to 8:02 PM.

Route 236 meets the MBTA's span of service guidelines for Local routes on both weekdays and weekends, as well as the Sunday frequency guideline. The route fails both the weekday peak and off-peak frequency guidelines, which requires 30-minute peak



frequency and 60-minute off-peak frequency. Route 236 also fails the Saturday frequency guideline, which requires at least hourly service.

**Table 1 | Schedule Statistics** 

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
<b>Monday-Friday</b>	6:40 AM to 8:44 PM			16/16
Sunrise	-	-	-	-
Early AM	6:40 AM to 6:59 AM	1 trip	1 trip	0/1
AM Peak	7:00 AM to 8:59 AM	15 - 75	38	3/3
Midday Base	9:00 AM to 1:29 PM	30 - 60	60	5/4
Midday School	1:30 PM to 3:59 PM	60 - 65	62	2/3
PM Peak	4:00 PM to 6:29 PM	25 - 65	43	4/3
Evening	6:30 PM to 8:44 PM	55 - 65	55	2/2
Late Evening	-	-	-	-
Night	-	-	-	-
Saturday	7:00 AM to 10:46 PM	60 - 70	63	14/14
Sunday	10:05 AM to 8:02 PM	60	60	10/10

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

#### **Service Patterns**

Pattern 236.2 makes up nearly all Route 236 trips, following the primary service pattern, shown as a solid black line in Figure 1. This pattern connects South Shore Plaza to Quincy Center Station via Braintree Station, running on Granite Street, Franklin Street, Pearl Street, Union Street, Middle Street, Elm Street, Commercial Street, Franklin Street, and Hancock Street.

Pattern 236.3 makes the first two trips of the day begin at Braintree Station, omitting service to South Shore Plaza before the mall opens.

Table 2 | Service Patterns

PATTERN INBOUND	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS per WKD 16	TRIPS per SAT 14	TRIPS per SUN 10
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236.2	South Shore Plaza	Quincy Center Station	Primary pattern	14	12	10
236.3	Braintree	Quincy Center	Omits South Shore	2	2	-
	Station	Station	Plaza			
OUTBOUND				16	14	10
236.2	Quincy Center Station	South Shore Plaza	Primary pattern	14	12	10
236.3	Quincy Center Station	Braintree Station	Omits South Shore Plaza	2	2	-



## Ridership

Route 236 carries about 550 riders on weekdays, 500 riders on Saturdays, and 300 riders on Sundays. The route carries a higher proportion of its weekly ridership on weekends than most other routes in the MBTA bus network, primarily due to high demand at South Shore Plaza.

#### Ridership by Stop

Route 236 has relatively low ridership compared to other Local bus routes in the MBTA system, with the vast majority of stops serving fewer than five riders per weekday. On weekday inbound trips:

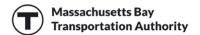
- 108 passengers board at South Shore Plaza, which is the start of the route. South Shore Plaza is the highest ridership Route 236 stop, serving 43% of weekday passengers.
- 29 passengers board at the twelve stops between South Shore Plaza and Braintree Station on Granite Street, Franklin Street, and Pearl Street. Half of these passengers board at Franklin Street and Granite Street, which serves the Five Corners neighborhood center.
- About half of passengers (66) that board before Braintree Station alight at the station. 35 passengers board at Braintree Station and ride to points north.
- 31 passengers board and 37 passengers alight at the 15 stops in East Braintree on Middle Street, Elm Street, and Commercial Street.
- 44 passengers board and 31 passengers alight at the 13 stops in South Quincy and Quincy Center on Franklin Street and Hancock Street.
- 115 passengers alight at Quincy Center Station

A significantly higher proportion of Route 236 trips begin or end at South Shore Plaza on weekends than on weekdays. About 70% on weekend trips begin or end at South Shore Plaza, compared to 43% on weekdays.

#### Ridership by Trip

Route 236 trips generally have low ridership, with most trips serving less than 30 passengers and several trips serving less than 10 passengers. On weekdays inbound (see Figure 4):

- Ridership is strongest on the first trip of the day, with 27 total passengers. This may indicate demand for earlier service.
- Ridership is very low between 8:00 AM and 1:00 PM, with all trips serving 10 or fewer passengers.





- Trips during the afternoon and evening peak have the highest ridership, with afternoon trips serving around 18 passengers and evening peak trips serving around 25 passengers.
- Ridership again declines during the last few trips in the evening, which each serve about 13 passengers.

#### On weekdays outbound (see Figure 5):

- Ridership is strongest on the first trip of the day, with 27 total passengers. This may indicate demand for earlier service.
- Ridership is low but consistent between 7:00 AM and 1:00 PM, with trips serving between 14 and 19 passengers.
- Trips during the afternoon and even peak hours have the highest ridership, with trips serving between 19 and 25 passengers. Ridership then declines somewhat through the end of service.

Ridership by trip patterns on weekends is distinct from weekdays, with stronger ridership outbound toward South Shore Plaza in the late morning and early afternoon, and stronger ridership outbound toward the Red Line in the late afternoon and evening (see Figure 6 through Figure 9). This pattern reflects that passengers are using the route for weekend shopping trips, and is most pronounced on Saturdays, when some afternoon and evening trips serve more than 40 passengers.



Figure 3 | Weekday Inbound Ridership by Stop Map

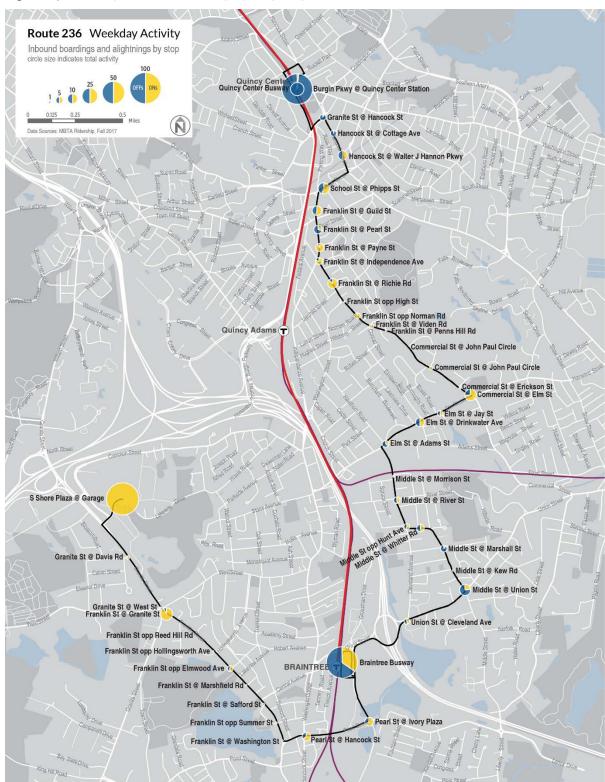




Figure 4 | Weekday Ridership by Trip: Inbound

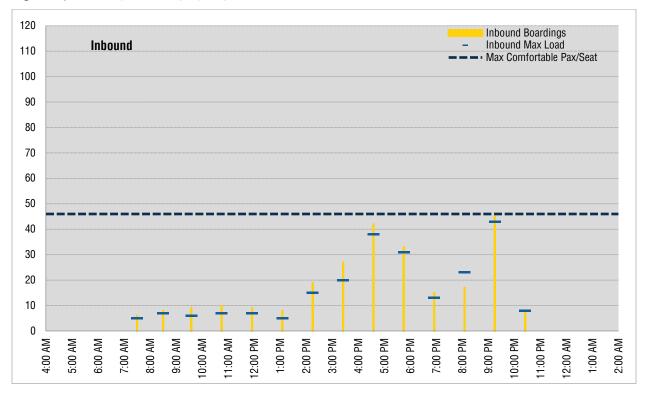


Figure 5 | Weekday Ridership by Trip: Outbound

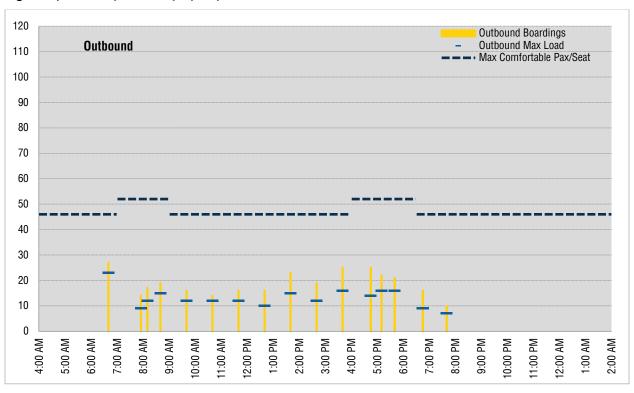




Figure 6 | Saturday Ridership by Trip: Inbound

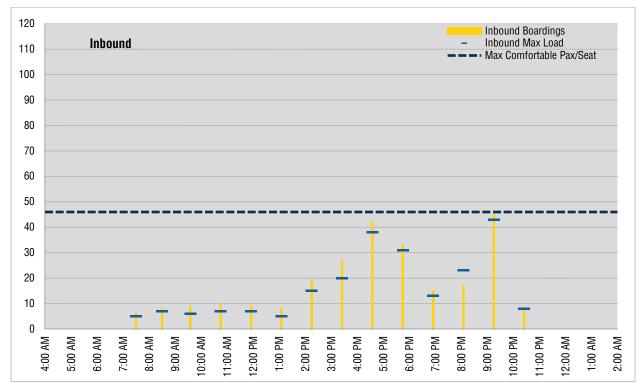


Figure 7 | Saturday Ridership by Trip: Outbound

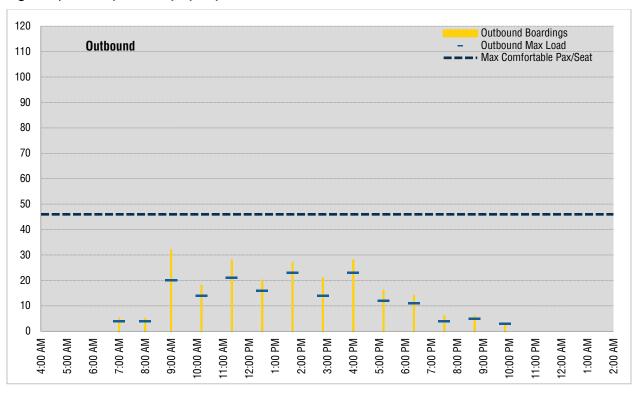




Figure 8 | Sunday Ridership by Trip: Inbound

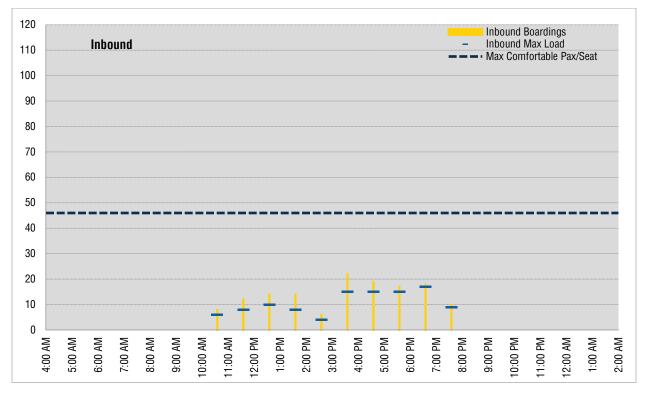
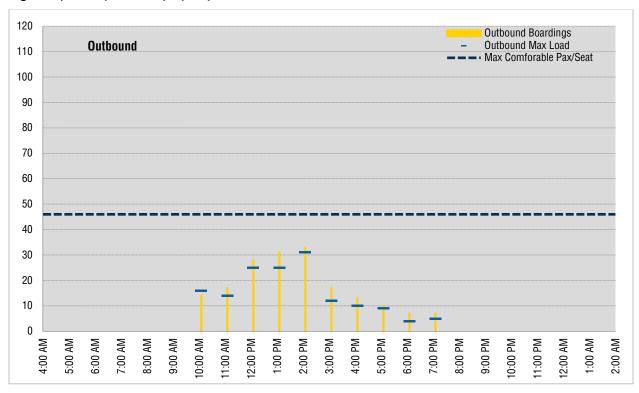


Figure 9 | Sunday Ridership by Trip: Outbound





#### **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 236, just shy of 100% of passenger minutes are in comfortable conditions, which is well above 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	100%	99%	100%

## Reliability and Speed

#### Reliability

On weekdays, Route 236's overall weekday reliability is 54%. Overall reliability improves on Saturday, rising to 60%, then worsens heavily on Sundays scoring a mere 44% (see Table 4). These scores fail to meet the MBTA minimum standard for reliability of 70%.

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID- ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	56%	39%	54%	0.1%
Saturday	62%	42%	60%	-
Sunday	43%	57%	44%	-

#### **Running Times**

Nearly 100% of trips made by Route 236's primary pattern, 236.2, feature excess travel time beyond their scheduled travel time. This excess reaches as many as 10 minutes for inbound travel and 8 minutes for outbound travel. Inbound additional travel time is worst around 5:30 PM (see Figure 10), while outbound additional travel time is worst around 4:45 PM (see Figure 11).

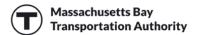




Figure 10 | Scheduled & Median Travel Time by Trip: Inbound

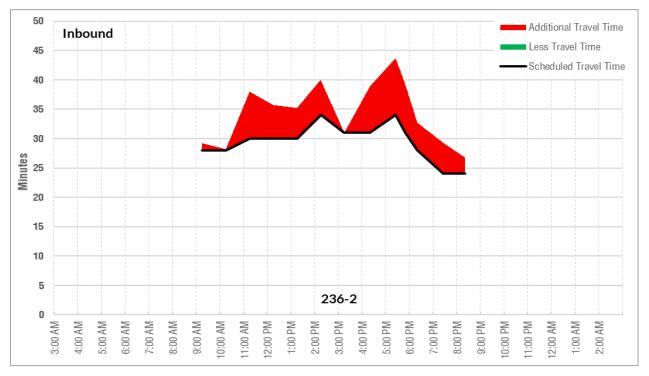
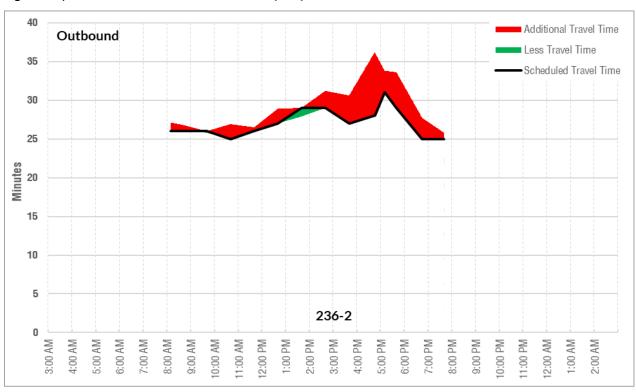


Figure 11 | Scheduled & Median Travel Time by Trip: Outbound





### **Stop Spacing**

Stop spacing along Route 236 ranges from one stop ever 400 feet to one stop every 1100 feet. The average stop spacing along this route is 800 feet, 6.6 stops per mile, which is within the range of four to seven stops per mile recommended for urban areas under MBTA guidelines. However, for just how low the volume of boardings and alightings along this route are, stop spacing should be stretched beyond what would generally suit urban areas to better match actual demand.

The following segment features particularly close spacing:

 School Street at Phipps Street to Franklin Street at Penns Hill Road, with 10 stops an average of 500 feet apart.

### Summary

Route 236 is relatively simple route, providing direct service between South Shore Plaza and Braintree Station, and unique, through somewhat circuitous, service to residential areas in East Braintree and South Quincy. These residential areas are relatively low density and thus have limited transit demand, resulting in very low overall ridership. Limited frequency on Route 236 may reduce demand for service between South Shore Plaza and Braintree. Service reliability is also quite low, potentially indicating a need to adjust schedules to reflect actual running times.