

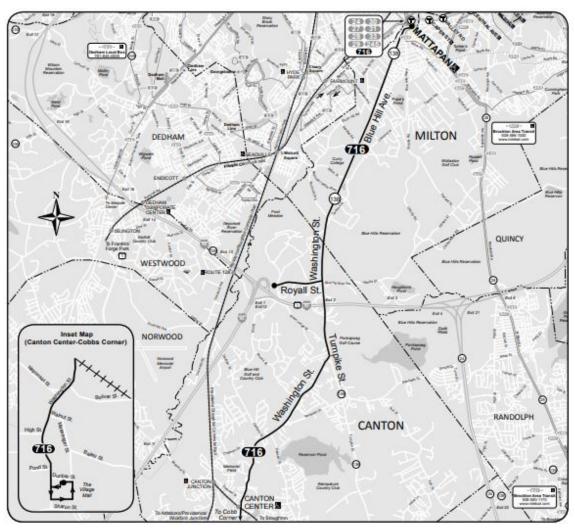
# **Route 716**

## **Cobbs Corner – Mattapan Station**

## Route Overview

Route 716 Cobbs Corner – Mattapan Station is a contracted, local route that operates between Cobbs Corner, Canton's primary commercial hub, and Mattapan Station, a Red Line rapid transit connection site (see Figure 1). Route 716 also connects to Canton Center, a second commercial area and the site of the Canton Center Commuter Rail Station. Note that all data reported in this profile, while being the most recent data available, is from 2015.

Figure 1 | Route 716 Service Map





# Network Importance

[Data not available]

### Service Overview

#### Schedule

On weekdays, Route 716 operates between 6:00 AM and 6:30 PM with the following frequencies (see Table 1):

- Every 60 minutes from the beginning of service to 9:00 AM.
- Every 60 to 135 minutes between 9:00 AM and 1:30 PM, but mostly every 77 minutes.
- Every 75 to 135 minutes between 1:30 PM and 4:00 PM, but mostly every 75 minutes.
- Every 60 to 90 minutes during the PM Peak period, but mostly every 82 minutes.
- Every 60 minutes after 6:29 PM.

On Saturday, Route 716 runs one trip every hour in either direction. Inbound trips depart from Cobbs Corner at the bottom of the hour, while outbound trips depart from Mattapan Station at the top of the hour. Saturday service operates between 8:30 AM and 12:30 PM.

For a local route, Route 716 fails to meet the MBTA's weekday Span of Service and Frequency Standards which call for 30 minute peak period service and 60 minute service during all other periods spanning between 7:00 AM and 7:00 PM. On Saturdays, Route 716 meets the Frequency Standards, but fails to meet the Span of Service Standards which requires service from 8:00 AM to 6:30 PM.

The route does not operate on Sundays.

Since this document was developed, the span of Saturday service has been improved.



Table 1 | Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
<b>Monday-Friday</b>	6:00 AM to 6:30 PM			11/11
Sunrise	-	-	-	-
Early AM	6:00 AM to 6:59 AM	60	60	1/1
AM Peak	7:00 AM to 8:59 AM	60	60	2/2
Midday Base	9:00 AM to 1:29 PM	60 - 135	77	4/4
Midday School	1:30 PM to 3:59 PM	75 - 135	75	1/2
PM Peak	4:00 PM to 6:29 PM	60 - 90	82	2/2
Evening	6:30 PM	1 trip	-	1/0
Late Evening	-	-	-	-
Night	-	-	-	-
Saturday	8:00 AM to 5:55 PM	60	60	5/5
Sunday	-	-	-	-

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

#### **Service Patterns**

Route 716 runs a single alignment between Mattapan and Cobbs Corner. Heading outbound from Mattapan, the route travels south down Blue Hill Avenue, through Milton, to Washington Street. Once in Canton, it then continues down Washington Street before heading west on Royall Street to serve an office park, hotel, and sports complex. The bus then doubles back down Royall Street before heading south on Washington Street to serve the Commuter Rail station at Canton Center. From Canton Center, Route 716 continues south to the commercial hub of Cobbs Corner.

Table 2 | Service Patterns

PATTERN INBOUND	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS per WKD 11	TRIPS per SAT 5	TRIPS per SUN
716	Cobbs	Mattapan	Via Blue	11	5	-
	Corner	Station	Hill Avenue			
OUTBOUND				11	5	-
716	Mattapan	Cobbs	Via Blue	11	5	-
	Station	Corner	Hill Avenue			

# Ridership

Routes 716 carries 100 riders per weekday, and 25 riders on Saturdays.



#### Ridership by Stop

The majority of stops feature 0 boardings and 0 alightings. The few stops that host a combined activity of at least five riders on weekdays traveling inbound are as follows:

- Cobbs Corner: 10 boardings, zero alightings
- Washington Street at Rockland Street: four boardings, one alighting
- Washington Street at Eliot Street: six boardings
- Royall Street at Dunkin Brands Driveway: two boardings, three alightings
- Mattapan Station: zero boardings, 35 alightings

Activity between these anchor stops is as follows:

- Three total boardings and zero total alightings between Cobbs Corner and Washington Street at Rockland Street.
- Five total boardings and one total alighting between Washington Street at Rockland Street and Washington Street at Eliot Street.
- 12 total boardings and one total alighting between Washington Street at Eliot Street and Royall Street at Dunkin Brands Driveway.
- Two total boardings and three alightings between Royall Street at Dunking Brands Driveway and Mattapan Station.

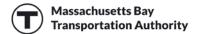
Outbound ridership by stop patterns are roughly the reverse of inbound ridership. On Saturdays, ridership by stop patterns are largely the same, albeit to a lesser magnitude.

#### Ridership by Trip

Weekday inbound ridership by trip is particularly low with no trip carrying over 11 riders.

- The first trip of the day carries six riders. The next two trips, at 7:30 AM and 8:30 AM, each carry three riders. The 9:30 AM and 10:30 AM trips carry two and one rider, respectively.
- Ridership then increases to nine riders on the 11:30 AM trip.
- Trips between 12:00 PM and 2:30 PM carry zero riders.
- The trip around 2:45 PM carry four riders while the following trip, at 4:30 PM, has the highest ridership of the day carrying 11 riders.
- The last two trips of the day, 5:30 PM and 6:30 PM, each carry four riders.

Weekday outbound ridership by trip is slightly higher with a greater number of trips carrying over 10 riders.





- The first three trips of the day at 6:00 AM, 7:00 AM, and 8:00 AM carry five, 12, and 11, riders, respectively.
- Between 9:00 AM and 4:00 PM, ridership ranges from zero to five riders per trip.
- The final two trips of the day at 4:30 PM and 6:00 PM carry seven and 11 riders, respectively.
- This pattern of volume peaks during the AM peak and PM peak with a drop during the midday suggests that outbound trips are carrying commuters who travel to Cobbs Corner for work and live north of Canton. In short, this route largely serves reverse commuters.

Saturday ridership by trip in both directions is extremely low. Inbound ridership volumes range from zero to four passengers per trip. This range in the outbound direction is zero to five passengers per trip. Though only marginally so, inbound ridership is highest on the 11:30 AM trip. Outbound ridership is highest at 8:00 AM and 10:00 AM.



Figure 2 | Weekday Ridership by Trip: Inbound

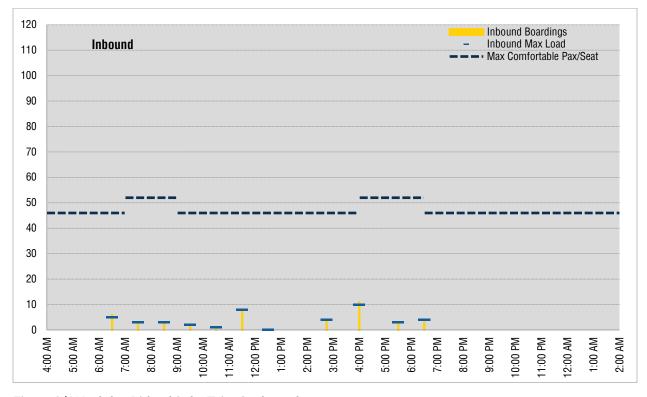


Figure 3 | Weekday Ridership by Trip: Outbound

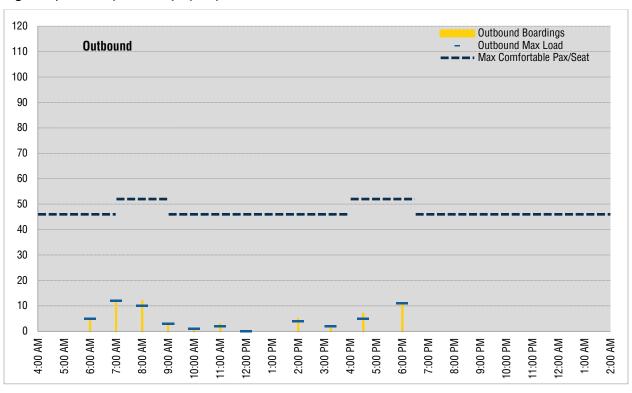




Figure 4 | Saturday Ridership by Trip: Inbound

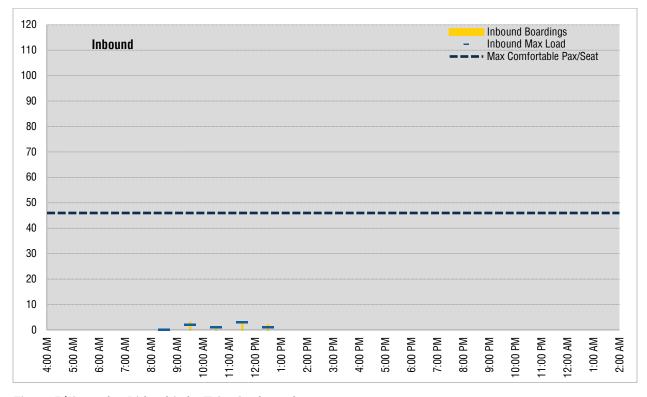
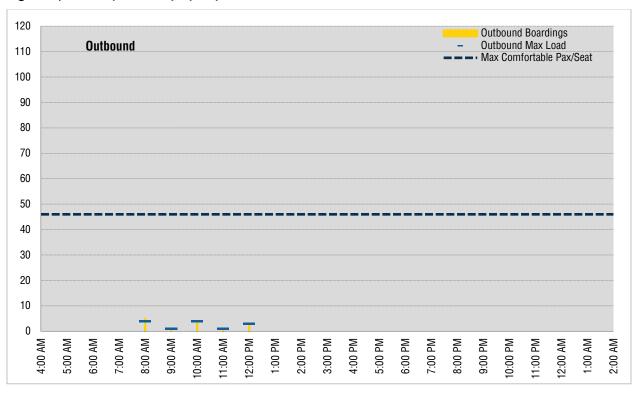


Figure 5 | Saturday Ridership by Trip: Outbound





#### **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 716, 100% of passenger minutes are in comfortable conditions, which is above both the minimum standard of 92% and the MBTA target of 96% (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%	100%	-

# Reliability and Speed

### Reliability

[Data not available]

#### **Stop Spacing**

The two major segments of Route 716's alignment are Blue Hill Avenue and Washington Street. Along Blue Hill Avenue, stops are 1700 to 4350 feet apart – mostly 2500 feet apart, or 2.1 stops per mile. Along Washington Street, stops are 800 to 5000 feet apart – mostly 2200 feet apart, or 2.4 stops per mile. Though it allows for flag stops, Route 716 is a limited stop service. Such a service calls for a recommended two to four stops per mile. Therefore, stop spacing along Route 716 is appropriate and falls within this recommended range.

## Summary

Route 716 is a local, contracted route that runs between Cobbs Corner and Mattapan serving the areas of Milton and Canton. The route runs on weekdays and Saturdays. This flag stop route hosts extremely low ridership rarely hosting as many as 10 passengers per trip.