

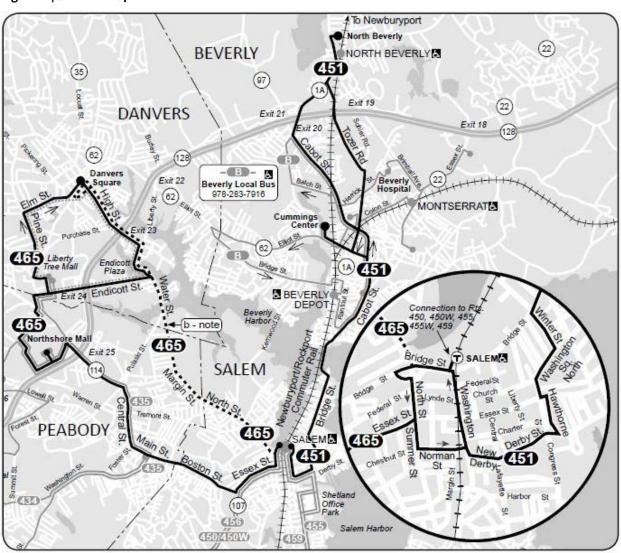
# Route 465

### **Danvers Square - Salem Depot**

### Route Overview

Route 465 Danvers Square – Salem Depot is Local route that runs between Danvers Square and the Salem Commuter Rail Station, serving Peabody, Liberty Tree Mall, and Northshore Mall.

Figure 1 | Service Map





## Network Importance

Route 465 is of moderate importance within the overall bus network (see Figure 2). On a relative scale of 0 to 10, the route rates 1.6 in terms of ridership, 9.3 in terms of transit dependent ridership, and 4.2 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 3.4.

0 1 2 3 4 5 6 7 8 9 10

Ridership

Transit Dependent Passengers

Value to Network

Overall

3.4

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

### Service Patterns

#### Schedule

Route 465 operates from 6:50 AM until 7:56 PM on weekdays, with infrequent headways. On weekdays:

- Service operates with 60 to 85 minute headways between 6:50 AM and 9:45 AM.
- After 9:45 AM, headways range between 50 and 85 minutes, but most trips operate hourly.

On Saturdays, the route operates with 120-minute headways between 8:05 AM and 7:39 PM.

Route 465 is generally within the MBTA's span of service standards (Saturday service begins five minutes after 8:00 AM). However, it fails to meet frequency standards during the week, with headways longer than 30 minutes during peak periods and longer than 60 minutes at various points throughout the day. It also fails to meet frequency standards on Saturdays, with headways that exceed 60 minutes.



Table 1 | Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
<b>Monday-Friday</b>	6:50 AM to 7:56 PM			13/12
Sunrise	-	-	-	-
Early AM	6:50 AM to 6:59 AM	80	80	1/0
AM Peak	7:00 AM to 8:59 AM	60 - 85	76	1/2
Midday Base	9:00 AM to 1:29 PM	50 - 85	58	5/4
Midday School	1:30 PM to 3:59 PM	60	61	2/3
PM Peak	4:00 PM to 6:29 PM	50 - 85	56	3/2
Evening	6:30 PM to 7:56 PM	50	62	1/1
Late Evening	-	-	-	<del>-</del>
Night	-	-	-	-
Saturday	8:05 AM to 7:39 PM	120	120	6/6
Saturday	-	-	-	-

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

#### **Service Patterns**

Route 465 has two service patterns. The primary service pattern connects Danvers Square and Salem Depot with the Northshore Mall and Liberty Tree Mall (Pattern 465.0).

- The primary alignment (465.0) operates out and back along the same alignment between the Liberty Tree Mall and Salem Depot. Service between the Liberty Tree Mall and Danvers Square, however, is a one-way loop so that inbound trips travel via High Street and Endicott Street and outbound trips travel via Pine and Elm Streets.
- The second alignment (465.1) operates on weekdays on the first two inbound and last two outbound trips. This alignment connects Danvers Square and the Salem Depot via Water Street and North Street.

**Table 2 | Service Patterns** 

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
INBOUND				13	6	-
465.0	High Street at Park Street	Salem Commuter Rail Station	Primary pattern	11	6	-
465.1	High Street at Park Street	Salem Commuter Rail Station	Direct route to Salem via High Street, Water Street, and North Street	2	-	-



PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
OUTBOUND				12	6	-
465.0	Salem Commuter Rail Station	High Street at Park Street	Primary pattern	10	6	-
465.1	Salem Commuter Rail Station	High Street at Park Street	Direct route to Danvers Square via North Street, Water Street, and High Street	2	-	-

## Ridership

Route 465 has very low ridership, with 304 weekday boardings (second lowest weekday ridership of all Local bus routes) and 168 Saturday boardings (the lowest Saturday ridership of all Local routes).

#### Ridership by Stop

Ridership is generally low along the entire alignment (see Figure 3).

- 26 passengers board at High Street at Park Street, near Danvers Square.
- Seven passengers board and six passengers alight at the eight stops along High Street and Water Street.
- 12 passengers board and eight alight at the Market Basket on Endicott Street.
- At the two stops serving the Liberty Tree Mall, three passengers board near Best Buy on the back side of the mall, and 30 passengers board and six alight near the front of the mall at Commonwealth Avenue at Endicott Street.
- 10 passengers board and two alight before between the Liberty Tree Mall and the Northshore Mall.
- 40 passengers board and seven alight at the Northshore Mall.
- Eight passengers board and 15 alight between the Northshore Mall and Main Street in Peabody.
- 11 passengers board and seven alight at 133 Main Street.
- Four passengers board and 80 alightings between 133 Main Street and Salem Commuter Rail Station.
- 30 passengers alight at the Salem Commuter Rail Station.



#### When service pattern 465.1 operates:

- Two passengers board and one alights at the 17 stops from Water Street at Broad Street to North Street Opposite Lynde Street.
- Two passengers board and 85 alight at the final three stops in Salem, from Washington Street at New Derby Street to Salem Commuter Rail Station.

Outbound ridership generally mirrors inbound ridership patterns. Saturday ridership patterns are similar but with lower passenger volumes.

#### Ridership by Trip

Ridership is low throughout the day, and no trip has more than 20 riders (see Figure 4 and Figure 5):

- The first two trips of the day serve fewer than 10 passengers (eight passengers on the 6:50 AM trip and three passengers on the 8:10 AM trip).
- Between 9:35 AM and 1:25 PM, trips carry 10 to 13 passengers.
- From 2:25 PM to 4:25 PM, three trips carry 19 to 20 passengers each. Ridership is highest with 20 passengers on the 4:25 PM trip.
- Ridership declines from 14 passengers to nine passengers during the three trips made from 5:25 PM to 7:15 PM.

#### Ridership during outbound trips:

- Ridership is highest during the first trip of the day at 7:25 AM with 20 riders.
- From 8:40 AM to 4:35 PM, trips carry 10 to 18 passengers each.
- The 6:00 PM and 6:50 PM trips carry four and two passengers, respectively.

On Saturdays, inbound trips carry 16 to 26 passengers between 1:00 PM and 7:00 PM. Ridership peaks at 5:00 PM with 26 riders (see Figure 6). Outbound ridership is highest on the first trip of the day at 8:05 AM, with 20 passengers, and declines through the rest of the day (see Figure 7).



Figure 3 | Weekday Inbound Ridership by Stop Map

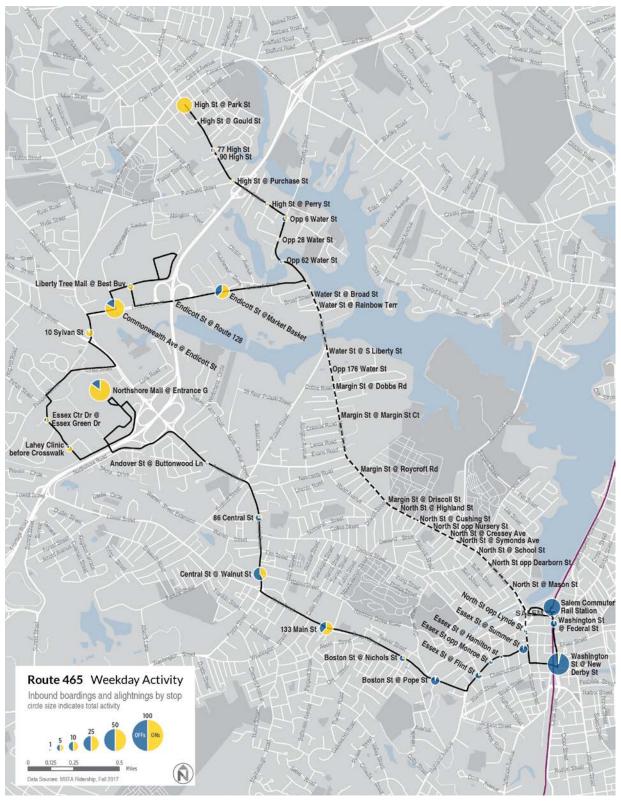




Figure 4 | Weekday Ridership by Trip: Inbound

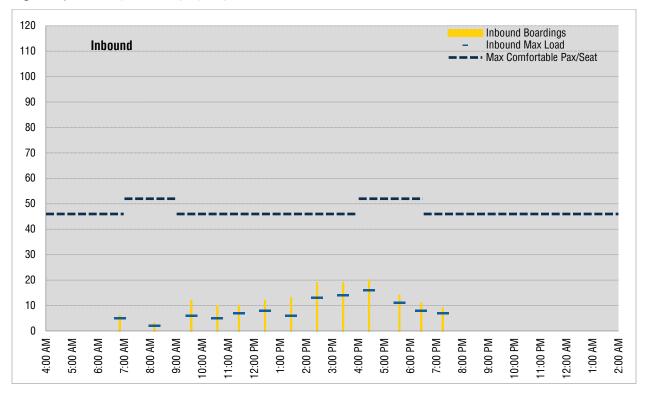


Figure 5 | Weekday Ridership by Trip: Outbound

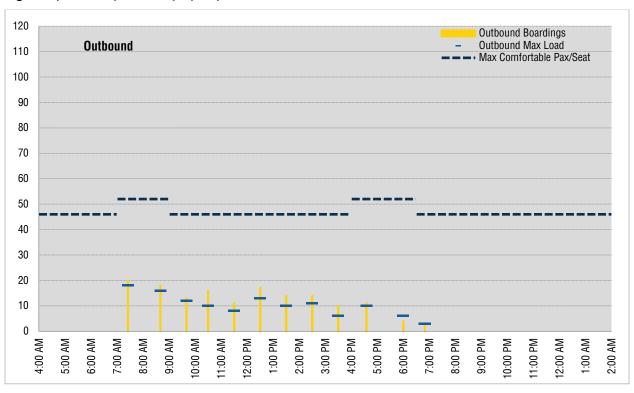




Figure 6 | Saturday Ridership by Trip: Inbound

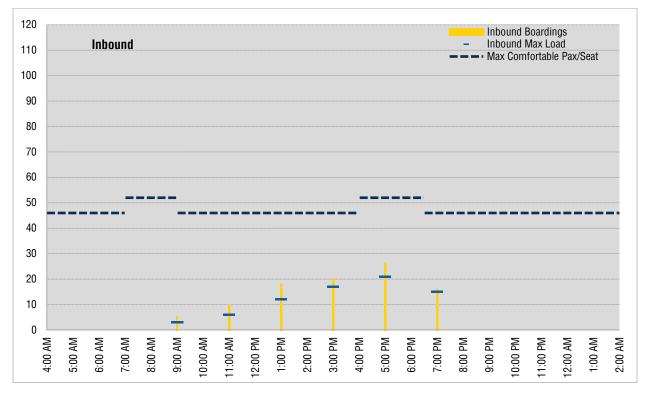
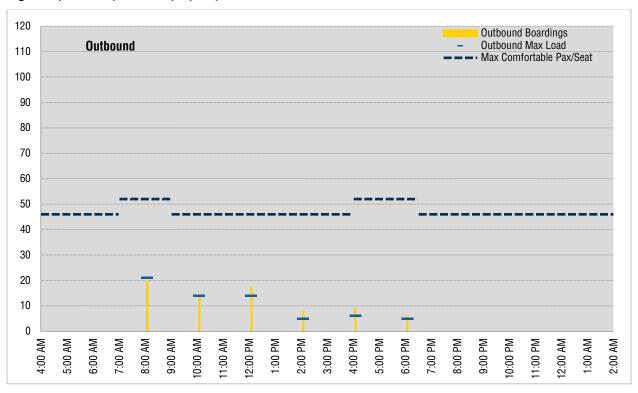
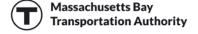


Figure 7 | Saturday Ridership by Trip: Outbound







#### **Passenger Comfort**

On Route 465, 99% of passenger minutes are in comfortable conditions, which meets the minimum and target standards (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%	100%	-

# Reliability and Speed

#### Reliability

Route 465 is a generally unreliable route. Overall reliability is 55% during the week and 63% on Saturday. Dropped trips are not a major problem for Route 465.

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID- ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	54%	55%	55%	0.1%
Saturday	66%	48%	63%	-
Sunday	-	-	-	-

#### **Running Times**

The actual travel time of inbound trips regularly exceeds the scheduled running time of the trips; midday trips run as much as 20 minutes longer than scheduled. Outbound trips typically complete trips in less time than scheduled.





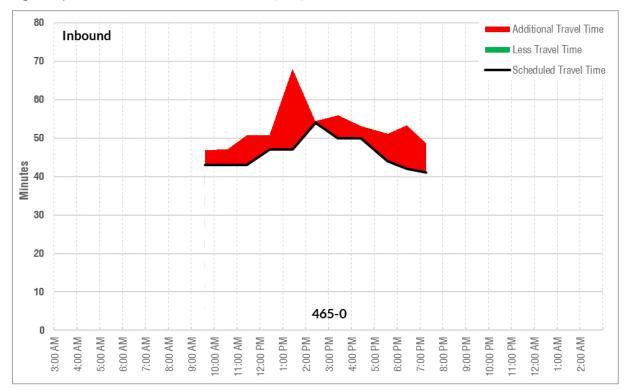
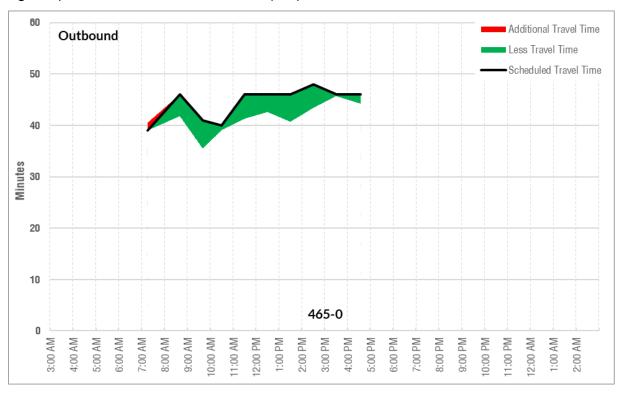


Figure 9 | Scheduled & Median Travel Time by Trip: Route 465 Outbound





#### **Stop Spacing**

Route 465 has an average of 3.4 stops per mile. However, there are areas where stops are more closely spaced together. Stops that are unique to Service Pattern 465.1 have an average spacing of approximately six stops per mile.

Some segments have particularly close stop spacing:

- Stops on High Street at 77 High Street and 90 High Street are about 200 feet apart.
- Stops on High Street at Park Street and at Gould Street are about 560 feet apart.
- Along Essex Street in Salem, stops at Flint Street and at Monroe Street are about 520 feet apart.
- There are about 340 feet between Essex Street at Monroe Street and Essex Street at Hamilton Street.

## Summary

Route 465 connects people in Danvers to Salem Depot and provides access to major shopping centers and medical facilities. It is the only bus route that connects riders in Danvers and Peabody with the Salem Depot. Although the route serves several places of interest, the route has low ridership. Service is infrequent and has poor reliability.