

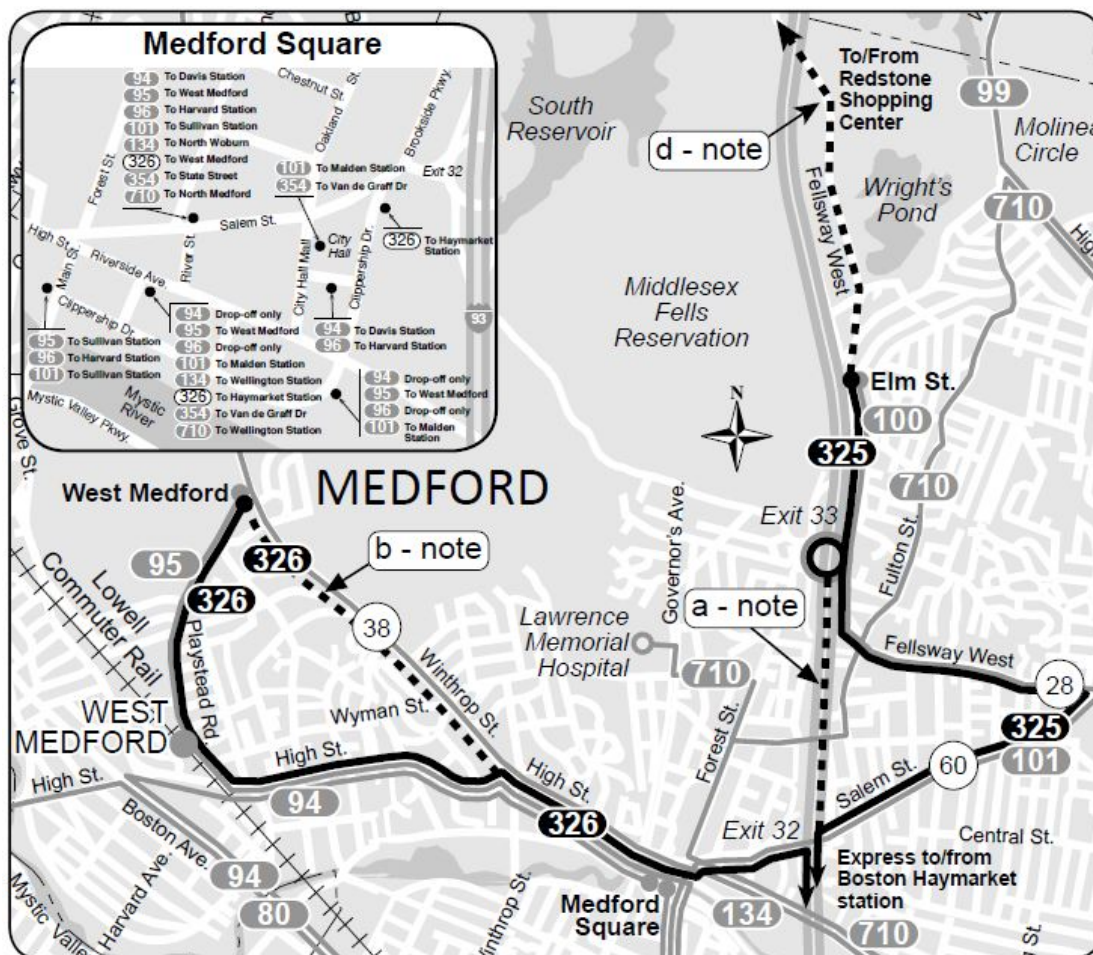
Route 325

Elm Street, Medford - Haymarket Station

Route Overview

Route 325 Elm Street, Medford - Haymarket Station is a Commuter route that operates between northeastern Medford and Haymarket Station in downtown Boston via Interstate 93 (see Figure 1). In most respects, Route 325 is an express version of Route 100 Elm Street-Wellington Station.

Figure 1 | Service Map

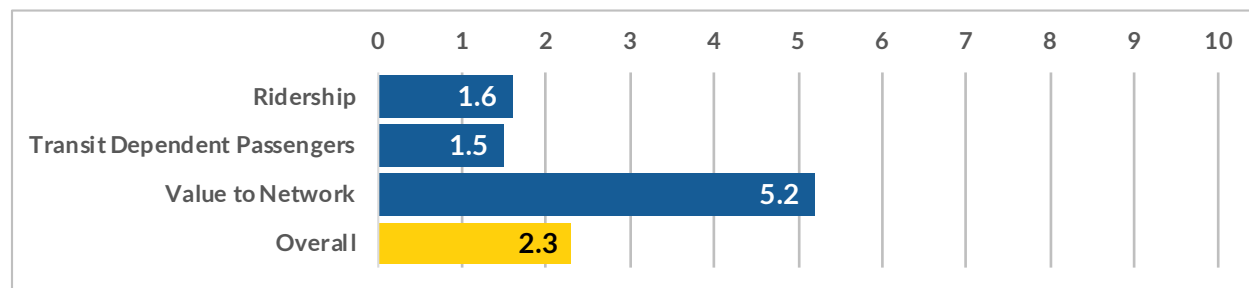


Network Importance

Route 325 has a low importance to the MBTA bus network (see Figure 2). On a relative scale of 0 to 10, the route rates 1.6 in terms of ridership, 1.5 in terms of transit dependent

ridership, and 5.2 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% weighting to overall ridership and a 15% weight to both other measures, is 2.3.

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



Service Overview

Schedule

Route 325 operates on weekdays during peak periods and shoulders of the peak: in the AM from 6:25 AM until 9:45 AM, and in the PM from 3:45 PM until 6:44 PM. During these periods, most peak direction service operates approximately every 20 minutes.

Route 325 meets the MBTA’s span of service standards and frequency standards for Commuter routes.

Table 1 | Schedule Statistics

SERVICEDAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	6:25 AM to 9:45 AM 3:45 PM to 6:44 PM			15/16
Sunrise	-	-	-	-
Early AM	6:25 AM to 6:59 AM	20 – 20	20	2/0
AM Peak	7:00 AM to 8:59 AM	20 – 40	21	6/5
Midday Base	9:00 AM to 9:45 AM	1 trip	-	1/0
Midday School	3:45 PM to 3:59 PM	1 trip	-	0/1
PM Peak	4:15 PM to 6:30 PM	15 – 30	21	6/8
Evening	6:30 PM to 6:44 PM	1 trip	-	0/1
Late Evening	-	-	-	-
Night	-	-	-	-
Saturday	-	-	-	-
Sunday	-	-	-	-

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

Service Patterns

Route 325 has four service patterns:

- Service Pattern 325.1 operates most peak direction service as shown with the solid black line in Figure 1. Inbound trips begin at Fellsway West at Elm Street and travel south on Fellsway West to west on Salem Street to I-93 to downtown Boston. Outbound trips operate in the reverse.
- Service Pattern 325.0 operates reverse direction trips to and from Elm Street via Roosevelt Circle, which is the most direct route and used to cycle buses as quickly as possible for peak direction trips.
- Service Pattern 325.3 operates one AM inbound trip beginning service at the Redstone Shopping Center in Stoneham at 7:05 AM and an one outbound trip returning there to the Redstone Shopping Center in Stoneham at 6:01 PM. The purpose of these trips is to relieve crowding on Route 132 Redstone Shopping Center – Malden Station, and provide additional express service to Stoneham in a cost effective manner.
- Service Pattern 325.1 operates the last three outbound trips to Elm Street but then makes a U-Turn on Fellsway West and officially terminates at Roosevelt Circle. The purpose of the trip is to allow passengers to ride through the layover and depart at the inbound stop at Roosevelt Circle, as some customers believe there is a pedestrian safety hazard to reach the location from the nearest outbound stop.

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS per WKD	TRIPS per SAT	TRIPS per SUN
INBOUND				15	-	-
325.0	Elm Street	Haymarket Station	PM inbound trips	6	-	-
325.1	Elm Street	Haymarket Station	Most AM inbound trips	8	-	-
325.3	Redstone Shopping Center	Haymarket Station	Begins at Redstone Shopping Center	1	-	-
OUTBOUND				15	-	-
325.0	Haymarket Station	Elm Street	Primary PM pattern	6	-	-
325.1	Haymarket Station	Elm Street	AM outbound trips	5	-	-
325.2	Haymarket Station	Roosevelt Circle	Last three PM outbound trips with extended service on way back to garage	3	-	-
325.3	Congress Street at Haymarket Station	Redstone Shopping Center	Extends to Redstone Shopping Center	1	-	-

Ridership

Route 325 carries 350 riders per weekday. It is one of the MBTA's lowest ridership routes, ranking 148 in terms of weekday ridership.

Ridership by Stop

Nearly all riders board in Medford and alight in downtown Boston (see Figure 3):

- The first inbound stop (Fellsway West at Elm Street) has the highest number of boardings, with 30 passengers. No other inbound stop along the route has more than 20 daily boardings.
- Fellsway West and Salem Street are both similar length segments along the route, but ridership is twice as high along the more commercial Salem Street (81 boardings) than along Fellsway West (40 boardings), which is largely residential. Most stops along these segments serve fewer than 10 riders, and some serve fewer than five. The highest ridership stops are at Fellsway West at Fulton Street (20), Salem Street at Paris Street (18), and Salem Street at Allen Court (19).
- In downtown Boston, almost two-thirds of alightings (103) occur at Congress Street at North Street, across from Boston City Hall. The remaining riders (59) alight at Haymarket Station.

On the inbound trip that starts at the Redstone Shopping Center, an average of only two riders board the route between the shopping center and Elm Street.

Ridership by Trip

Ridership is heavily oriented toward AM inbound trips and PM outbound trips. Inbound ridership is highest on the 8:05 AM trip with 31 boardings. All other inbound trips carry 20 or fewer passengers, and the last two serve fewer than 10 total passengers (see Figure 4).

Most outbound afternoon trips serve between 12 and 25 boardings (see Figure 5). The first three trips carry only eight, 13, and 11 passengers. Ridership highest on the 5:20 PM and the 5:05 PM trips, which carry 25 and 23 passengers, respectively. The last two trips carry fewer than 15 passengers.

Figure 3 | Weekday Inbound Ridership by Stop Map

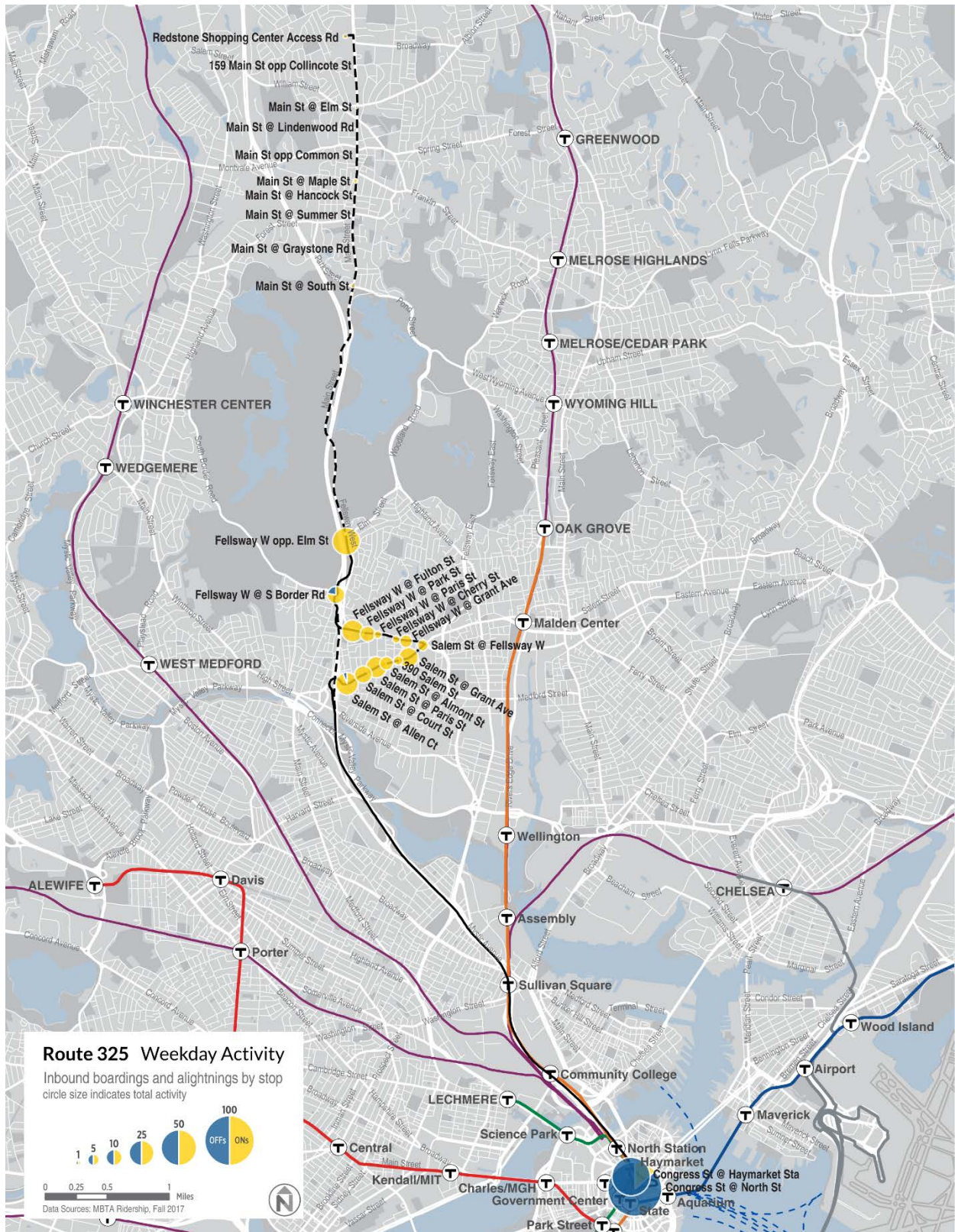


Figure 4 | Weekday Ridership by Trip: Inbound

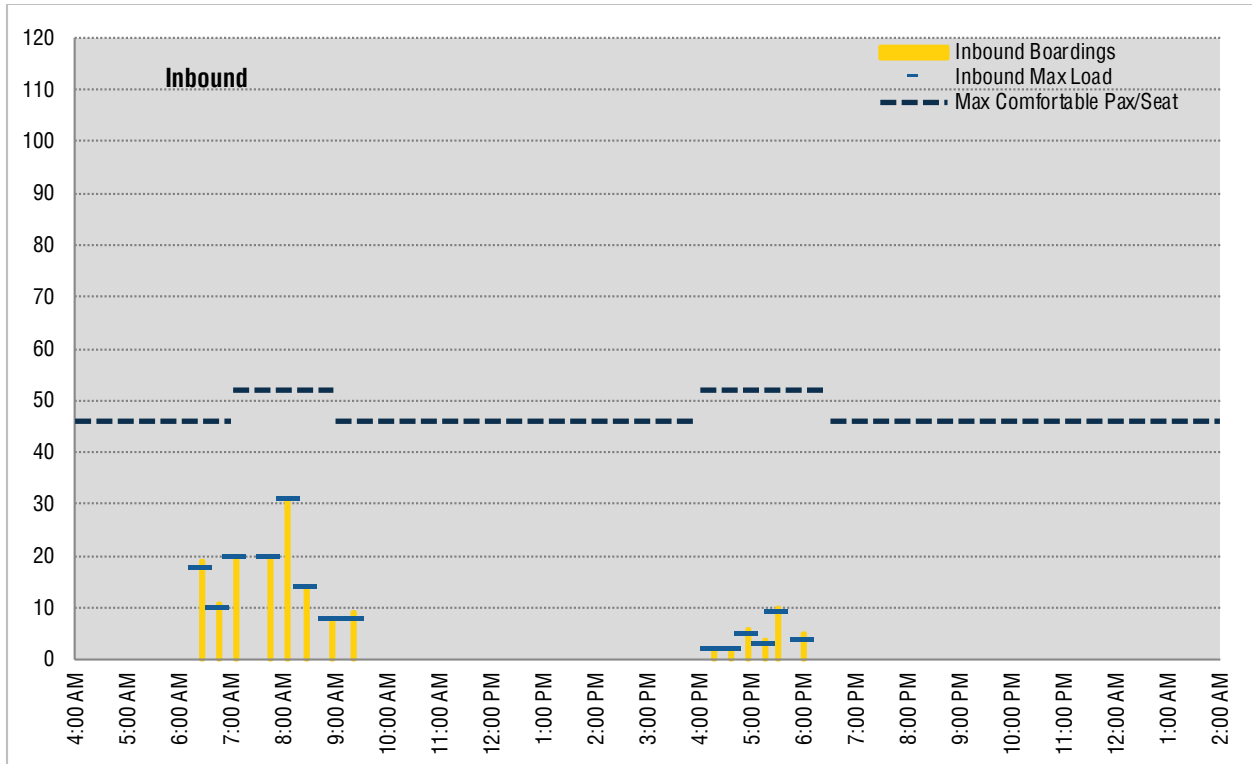
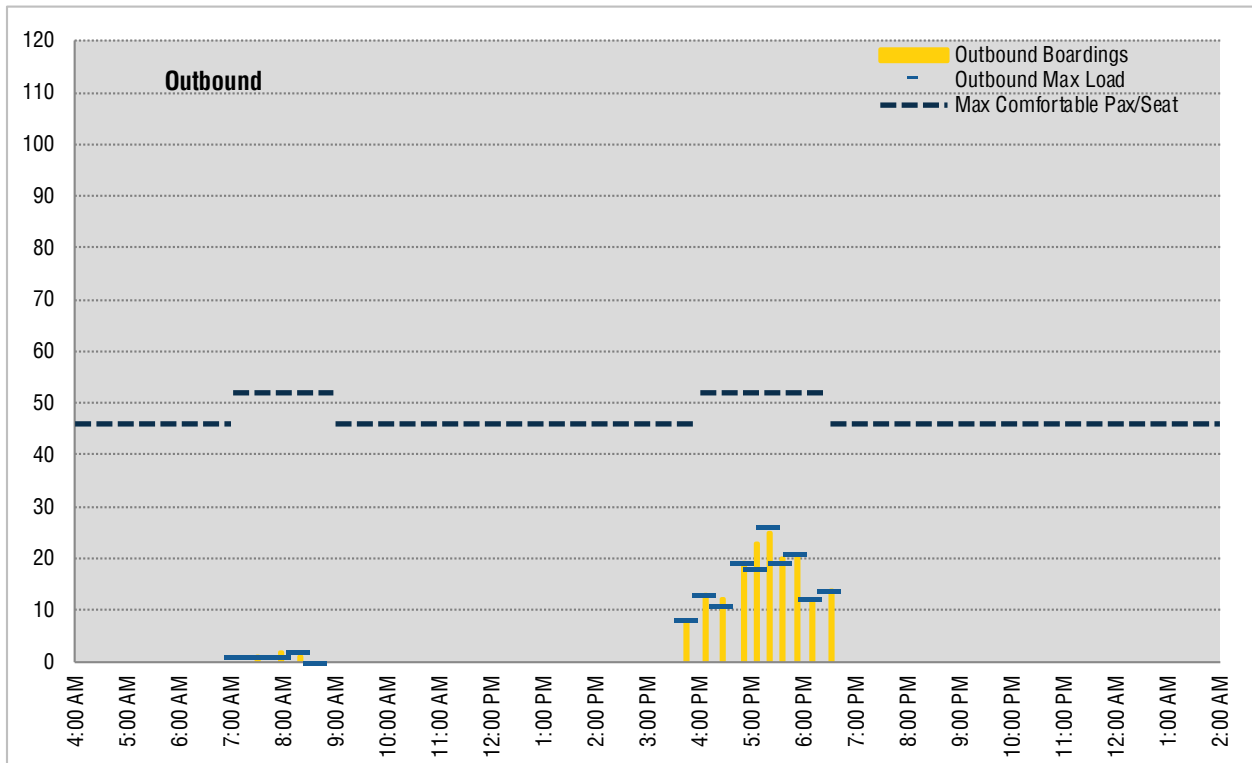


Figure 5 | Weekday Ridership by Trip: Outbound



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 325, 99% of passenger minutes are in comfortable conditions, which is 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	99%	-	-

Reliability and Speed

Reliability

Route 325 on-time performance is very poor, and only 40% of trips depart on-time, and only 38% arrive on time (see Table 4). Most of the problems are due to actual running times that are longer than scheduled times, in large part due to increasing congestion on I-93. As a result, many trips arrive at the end of the route after they should have already departed on the next trip.

Table 4 | Reliability

SERVICEDAY	ORIGIN/MID-ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	42%	38%	40%	-
Saturday	-	-	-	-
Sunday	-	-	-	-

Running Times

In the AM peak, actual inbound running times are as much as four minutes longer than scheduled, and in the PM peak, outbound trips average as much as five minutes longer (see Figure 6 and Figure 7). Most of the delays occur on I-93, which is has become increasingly congested.

Figure 6 | Scheduled & Median Travel Time by Trip: Route 325 Inbound

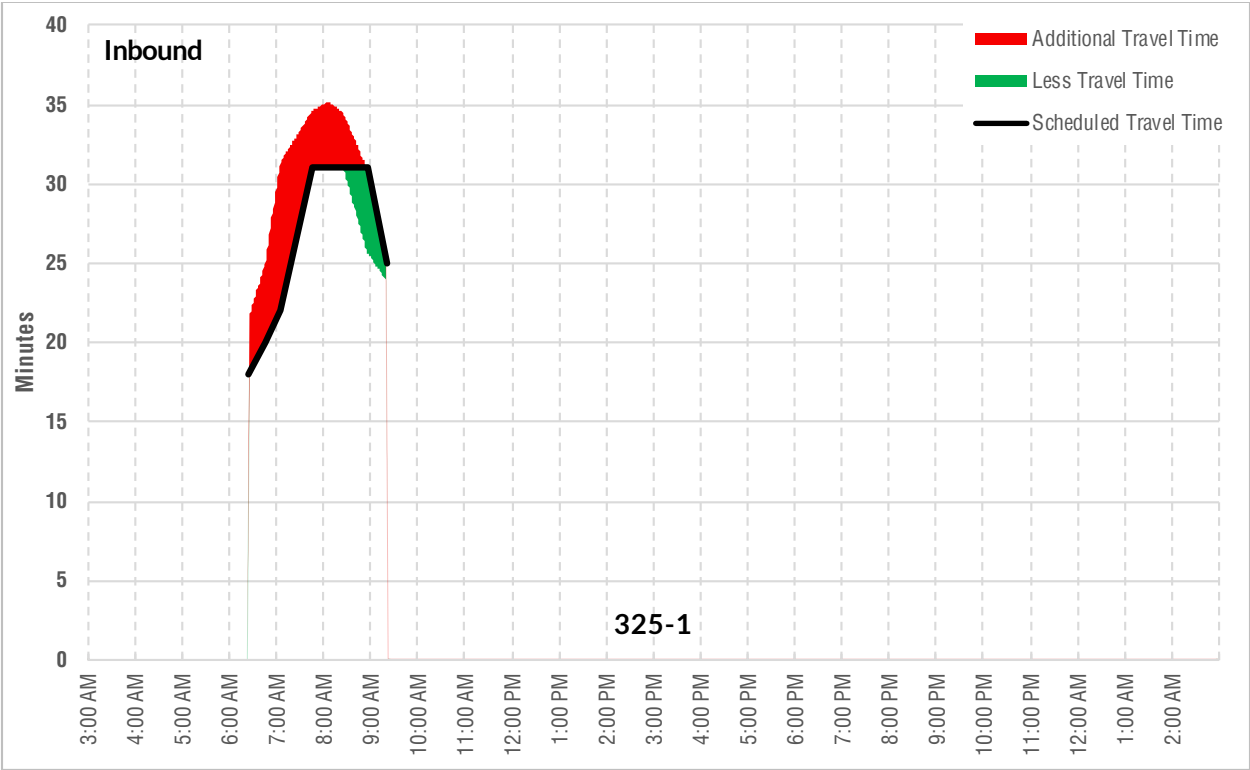
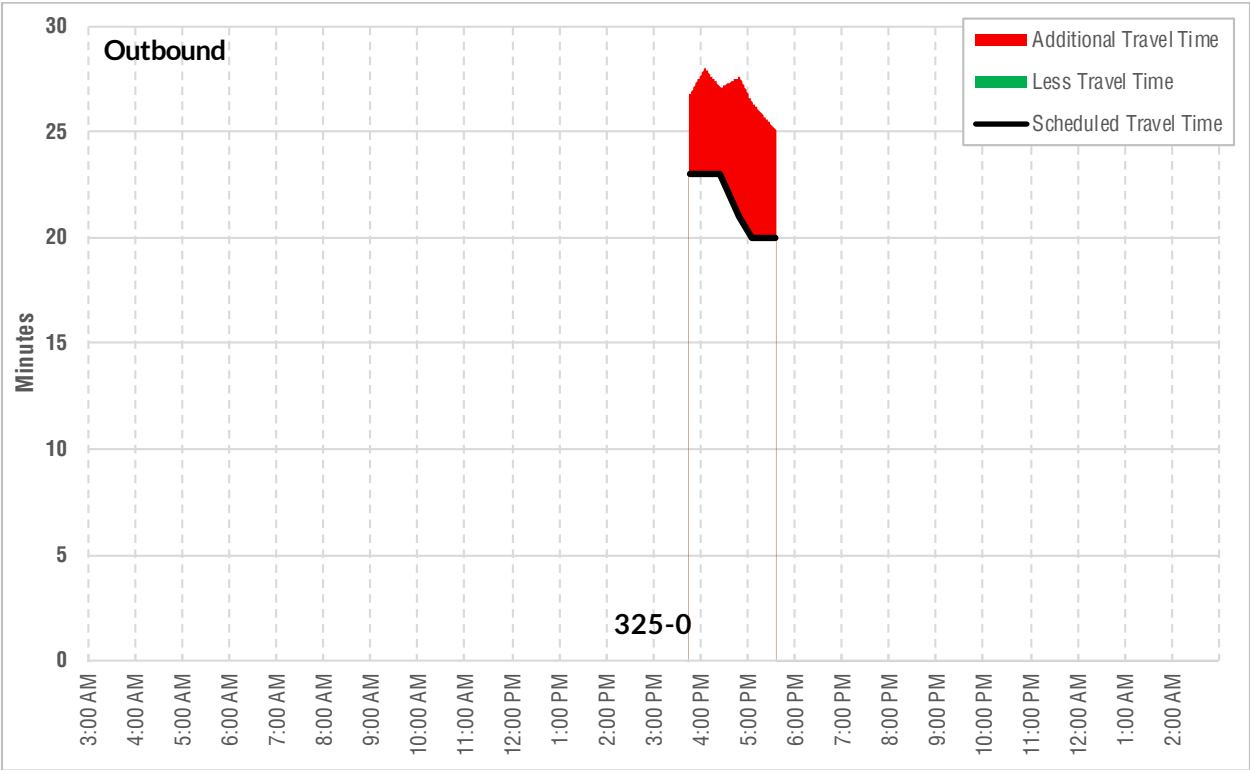


Figure 7 | Scheduled & Median Travel Time by Trip: Route 325 Outbound



Stop Spacing

In Medford, Route 325 stops five times along Fellsway West, a total distance of about one-half mile. Stop spacing is similar along Salem Street, with six stops located within about one-half mile.

Along Fellsway West, the stops at Cherry Street and Grant Avenue are particularly close together (420 feet apart). These stops have only two and six daily boardings, respectively. Along Salem Street, stops at Paris Street and Almont Street are approximately 460 feet apart, and respectively have eighteen and seven daily passengers. Stop consolidation would make service faster and improve reliability.

Summary

Route 325 is a Commuter route that provides direct service from Medford to downtown Boston. However, the route serves a very small area and has very low ridership, and provides redundant service with a Local route that offer connections to rapid transit service to downtown Boston. The route also experiences significant reliability issues.