

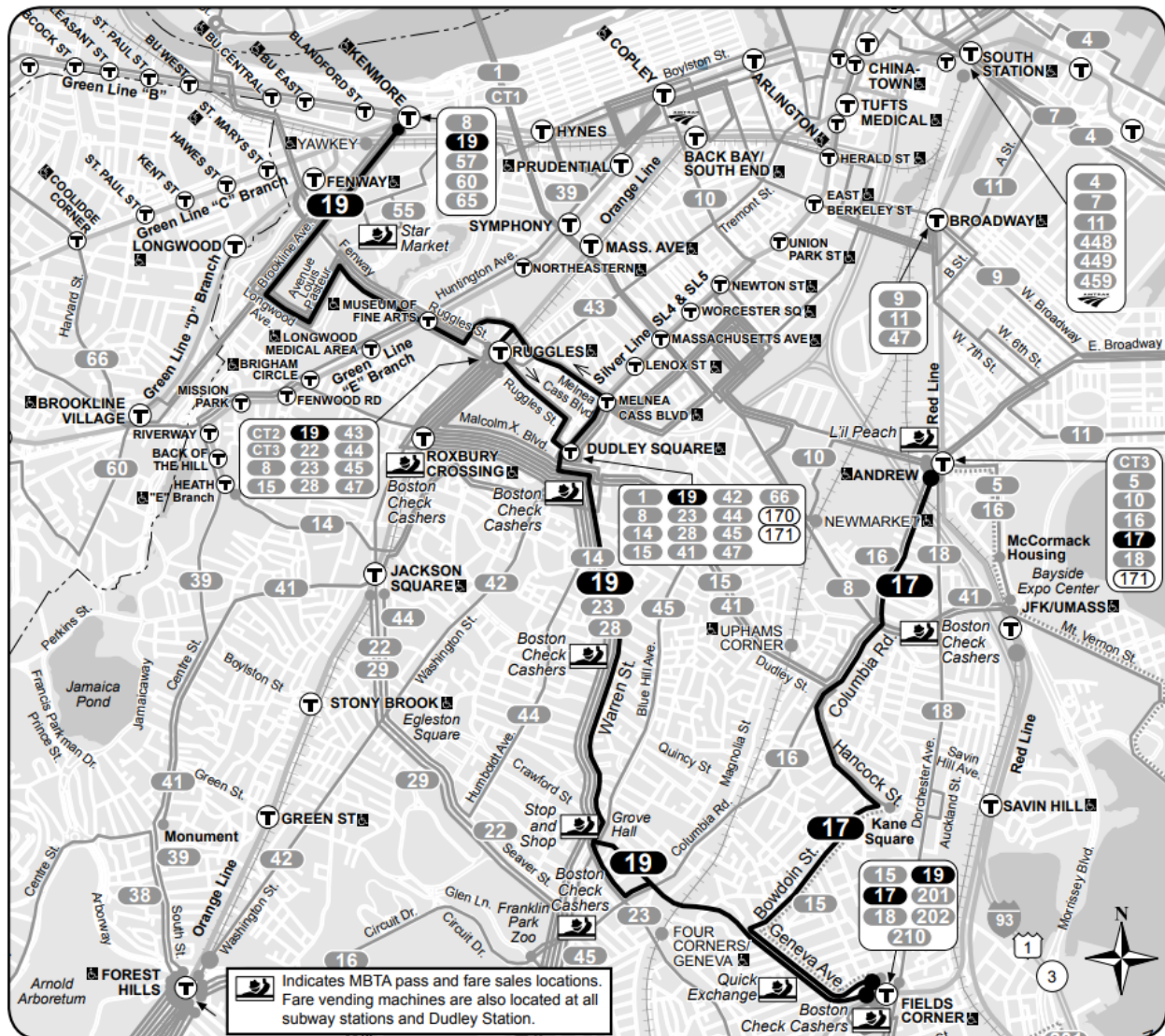
# Route 19

Fields Corner – Kenmore Station or Ruggles Station

## Route Overview

Route 19 Fields Corner – Kenmore Station or Ruggles Station is a Local route that provides crosstown service between Fields Corner and either Kenmore Station or Ruggles Station via Four Corners/Geneva, Warren Street, and Dudley Square (see Figure 1).

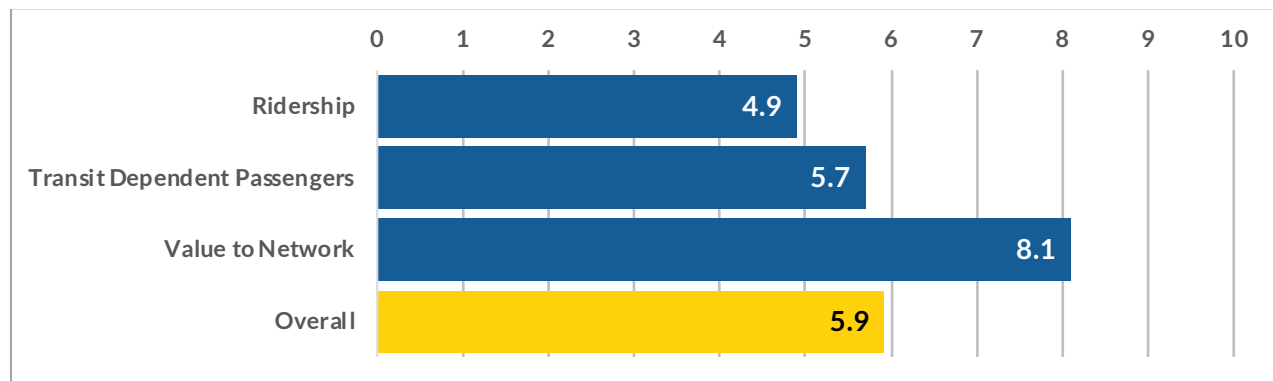
Figure 1 | Service Map



## Network Importance

Route 19 is a moderately important route within the MBTA network (see Figure 2). On a relative scale of 0 to 10, the route rates 4.9 in terms of ridership, 5.7 in terms of transit dependent ridership, and 8.1 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 5.9.

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



## Service Overview

### Schedule

Route 19 only operates on weekdays, from 6:08 AM to 7:45 PM (see Table 1). It provides mostly frequent service in the AM peak and infrequent service at other times:

Table 1 | Schedule Statistics

SERVICEDAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
<b>Monday-Friday</b>	<b>6:08 AM to 7:45 PM</b>			<b>31/34</b>
Sunrise	-	-	-	-
Early AM	6:08 AM to 6:59 AM	1 - 14	8	7/4
AM Peak	7:00 AM to 8:59 AM	11 - 19	16	8/7
Midday Base	9:00 AM to 1:29 PM	19 - 60	54	5/5
Midday School	1:30 PM to 3:59 PM	9 - 60	27	5/11
PM Peak	4:00 PM to 6:29 PM	30 - 40	34	5/5
Evening	6:30 PM to 7:45 PM	40	40	1/2
Late Evening	-	-	-	-
Night	-	-	-	-
<b>Saturday</b>	-	-	-	-
<b>Sunday</b>	-	-	-	-

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

- Every one to 14 minutes from the beginning of service at 6:08 AM until 7:00 AM.
- Every 11 to 19 minutes from 7:00 AM through 9:00 AM, plus three school trips.
- Every nine to 60 minutes after 9:00 AM, but mostly every 30 minutes inbound and very irregular headways outbound.

Since the development of this document, the MBTA has adjusted Route 19 schedules, including an additional earlier morning trip.

Route 19 meets the MBTA’s service span standards on weekdays, but not the peak period service frequency standard of service at least every 30 minutes, when some trips are 40 minutes apart. It also does not meet the days of service standards that specify that local services in urban areas should operate on weekends.

### Service Patterns

Most service operates between Fields Corner Station and either Ruggles Station or Kenmore Station (see Table 2):

- With the exception of school trips, service that operates during peak periods and shoulders of the peak operate to and from Kenmore Station (Pattern 19.3).
- Other service operates to and from Ruggles Station only (Pattern 19.0).

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
<b>INBOUND</b>				<b>31</b>	-	-
19.0	Fields Corner Station	Ruggles Station	-	11	-	-
19.3	Fields Corner Station	Kenmore Station	Primary pattern	18	-	-
19.4	Gallivan at Adams Street	Boston Latin School	AM school trips	2	-	-
<b>OUTBOUND</b>				<b>34</b>	-	-
19.0	Ruggles Station	Fields Corner Station	-	10	-	-
19.1	Madison Park High School	Fields Corner Station	PM school trip	1	-	-
19.3	Kenmore Station	Fields Corner Station	Primary pattern	20	-	-
19.4	Boston Latin School	Adams St at Gallivan	PM school trip	1	-	-
19.5	Boston Latin Academy	Adams St at Gallivan	PM school trip	2	-	-

There are also six school trips:

- Two AM inbound trips both depart at 6:35 AM from Adams Street at Gallivan Boulevard (about 1.5 miles south of Fields Corner Station) to the Boston Latin School in the Longwood Medical Area via Fields Corner Station (Pattern 19.4).
- One PM outbound trip operates from the Boston Latin School to Adams Street at Gallivan Boulevard via Fields Corner Station (Pattern 19.4).
- Two PM outbound trips leave Boston Latin Academy in Roxbury at 1:40 PM and operate to Adams Street at Gallivan Boulevard.
- One PM outbound trip leaves from Madison Park High School and operates to Fields Corner Station.

## Ridership

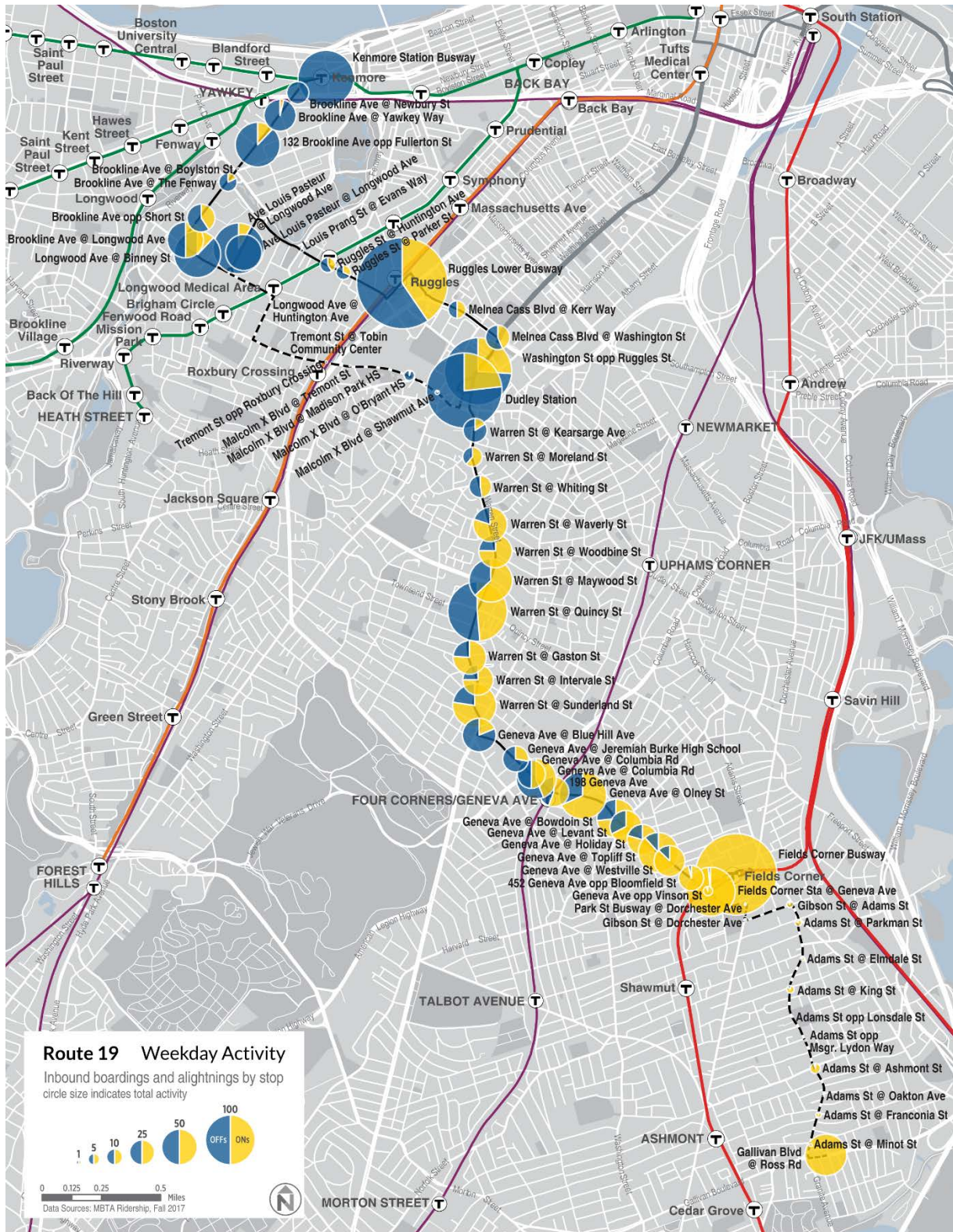
Route 19 carries 3,130 passengers per weekday. It is one of only a few high ridership routes that do not provide weekend service.

### Ridership by Stop

Route 19 has high ridership to and from many locations along its length. These include Fields Corner Station, Dudley Square, Ruggles Station, the Longwood Medical Area, and Kenmore Station. On weekday inbound trips (to Kenmore Station) (see Figure 3):

- 270 passengers board at Fields Corner Station.
- 470 passengers board and 210 alight at the 13 stops along Geneva Avenue between Fields Corner Station and Warren Street. This is the only segment along which Route 19 provides mostly unique service.
- 340 passengers board and 200 alight along Warren Street between Geneva Avenue and Dudley Station. Three other routes also serve this segment as they funnel into Dudley Station.
- 50 passengers board and 180 alight at Dudley Station.
- 70 passengers board and 160 alight at the three stops between Dudley Station and Ruggles Station.
- 140 passengers board and 200 alight at Ruggles Station.
- 60 passengers board and 230 alight at the six stops in the Longwood Medical Area.
- 10 passengers board and 150 alight at the five stops between the Longwood Medical Area and Kenmore Station.
- 130 passengers alight at Kenmore Station.

Figure 3 | Weekday Inbound Ridership by Stop Map



On the extra stops served by the school trips:

- 70 passengers board at Gallivan Boulevard and Ross Road.
- 15 passengers board at the 13 stops along Adams Street and Gibson Street between Gallivan Boulevard at Ross Road and Fields Corner Station.
- 60 passengers alight at the eight stops between Dudley Station and Boston Latin School, nearly all of whom alight at Boston Latin School.

Outbound patterns are similar but in the reverse.

### **Ridership by Trip**

On weekday inbound trips (see Figure 4):

- From the start of service at 6:08 AM until 7:38 AM, all trips except one carry more than 60 passengers, and many are at or close to capacity (see Figure 5). The one exception is a school trip at 6:55 AM that carries 34 passengers.
- Ridership per trip declines from 54 at 7:54 AM to 28 at 8:56 AM.
- Trips carry around 30 passengers until close to 2:00 PM. Service is infrequent during this time.
- Ridership increases to 46 passengers per trip at 1:45 PM, and is between 46 and 56 passengers per trip until 5:02 PM.
- Ridership then declines steadily to 17 passengers on the last trip at 6:50 PM.

On outbound trips (see Figure 5):

- Ridership per trip generally ranges from 35 to 50 passengers from the beginning of service until 8:30 AM.
- Trips carry about 20 passengers between 8:30 AM and 1:30 PM.
- After 1:30 PM, ridership increases rapidly to nearly 80 passengers at 2:18 PM and stays at over 70 passengers per trip until just after 5:00 PM.
- Ridership declines to 22 on the last trip at 7:20 PM.

Figure 4 | Weekday Ridership by Trip: Inbound

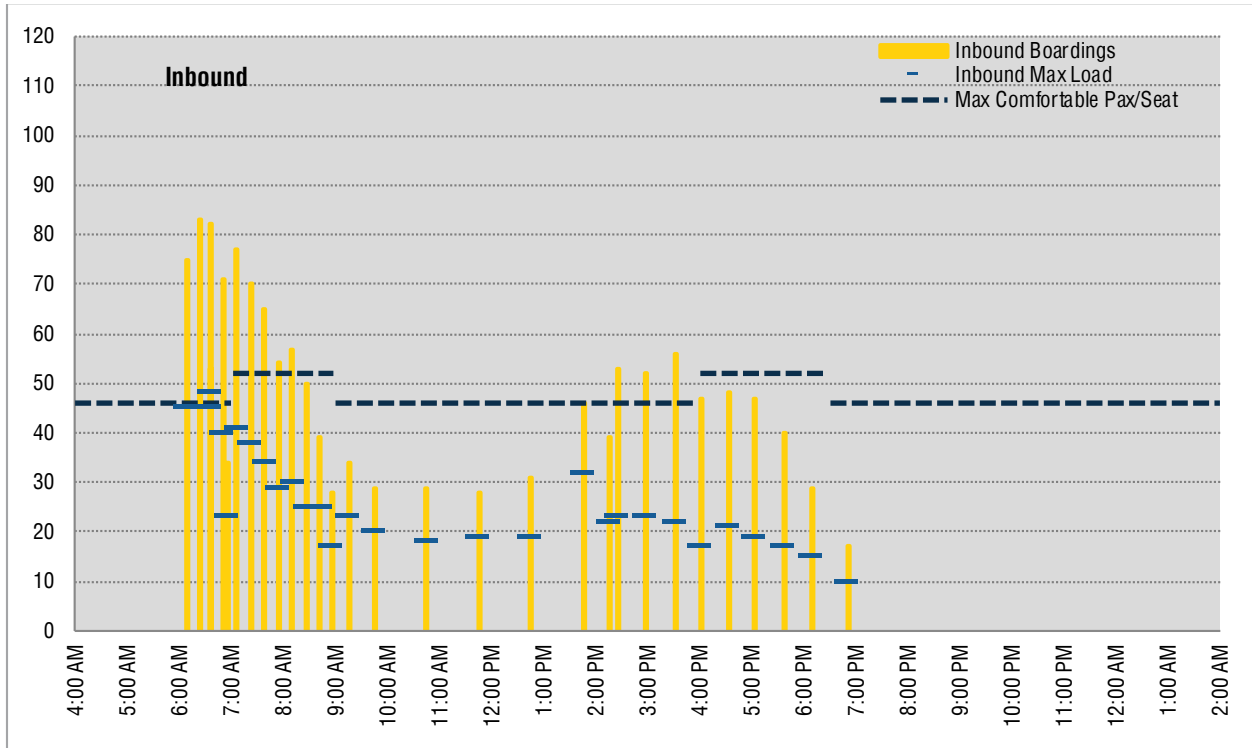
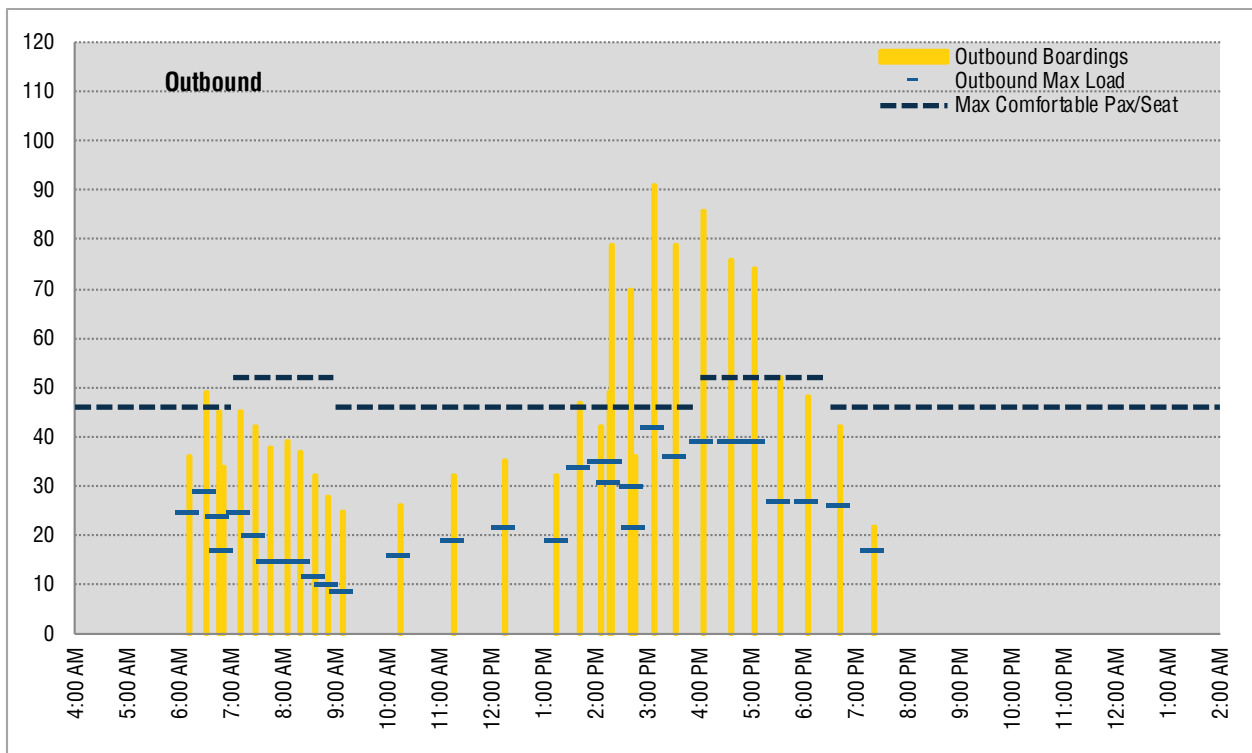


Figure 5 | Weekday Ridership by Trip: Outbound



## 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. 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 19, 95.8% of passenger minutes are in comfortable conditions. This is above the minimum standard of 92% and close to the target of 96% (see Table 3).

Table 3 | Passenger Time Spent Traveling in Comfortable Conditions

	WEEKDAYS	SATURDAYS	SUNDAYS
<b>Minimum Standard</b>	92%	92%	92%
<b>Target</b>	96%	96%	96%
<b>Actual</b>	95.8%	-	-

## Reliability and Speed

### Reliability

Route 19's overall reliability is very poor at only 48% and well below the minimum standard of 70%.

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID-ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
<b>Monday-Friday</b>	48%	55%	48%	1.4%
<b>Saturday</b>	-	-	-	-
<b>Sunday</b>	-	-	-	-

### Running Times

Actual running times are longer than scheduled running times on nearly all trips, with differences mostly ranging from two to seven minutes (see Figure 6 and Figure 7). This is one cause of poor on-time performance.



Figure 6 | Scheduled & Median Travel Time by Trip: Route 19 Inbound

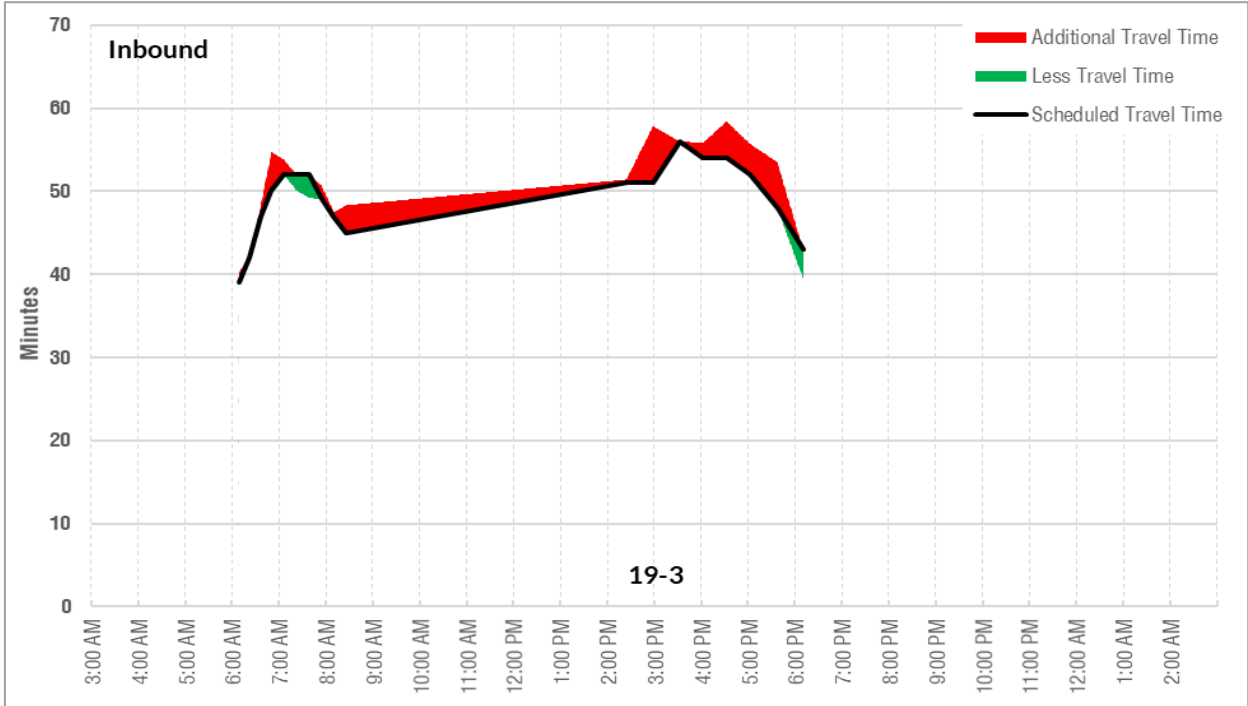
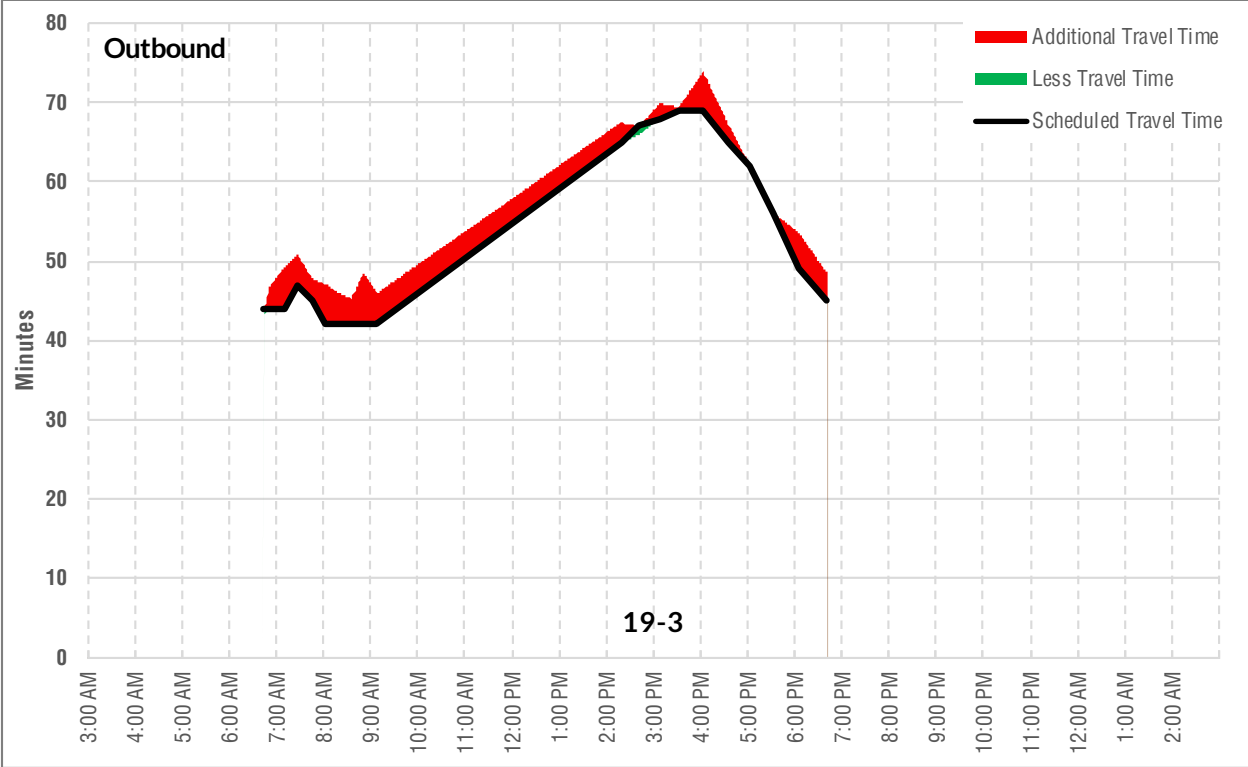


Figure 7 | Scheduled & Median Travel Time by Trip: Route 19 Outbound



## Stop Spacing

Route 19 has 7.1 stops per mile, which is slightly higher than the four to seven stops per mile specified in the MBTA's bus stop spacing guidelines. Consolidating stops would speed service and improve reliability.

## Summary

Route 19 weekday ridership is high at 3,130 passengers per weekday. However, it provides little unique service, largely to Geneva Avenue between Fields Corner Station and Dudley Station. The duplicate service along Warren Street is necessary as this is a natural funnel to Dudley Square and a large proportion of Route 19's riders travel there and to Ruggles Station.

Service beyond Ruggles Station to Kenmore Station via the Longwood Medical Area directly duplicates Route 8 Harbor Point-Kenmore Station. With the service split between the two routes, both provide infrequent service except in the AM peak, and schedules are not coordinated except for outbound PM peak trips. Finally, Route 19's schedule is very irregular and on-time performance is very poor, and no weekend service is provided.