

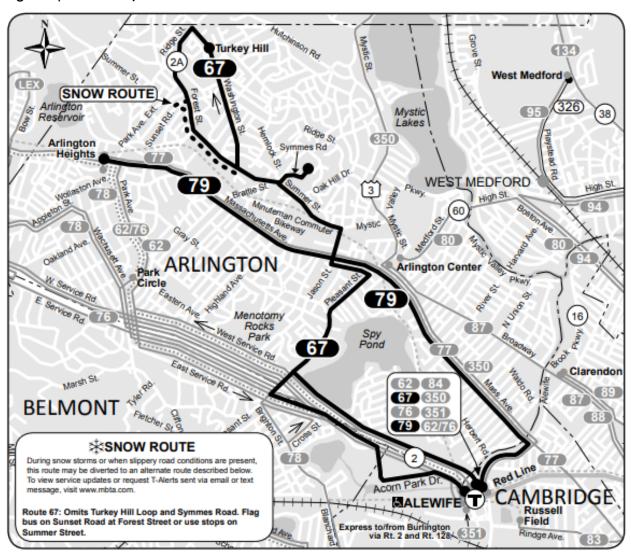
# Route 67

## **Turkey Hill - Alewife Station**

### Route Overview

Route 67 Turkey Hill - Alewife Station is a Local route that provides service between Arlington and Alewife Station via Forest Street, Summer Street, Pleasant Street, and the Concord Turnpike (see Figure 1). It operates on weekdays only, primarily serving commuters traveling between Arlington and the Red Line.

Figure 1 | Service Map





## Network Importance

Route 67 is of moderate importance within the overall bus network (see Figure 2). On a relative scale of 0 to 10, the route rates 2.2 in terms of ridership, 2.8 in terms of transit dependent ridership, and 6.7 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 3.2.

0 1 2 3 4 5 6 7 8 9 10

Ridership 2.2

Transit Dependent Passengers

Value to Network

Overall 3.2

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

### Service Patterns

#### Schedule

Route 67 generally provides infrequent service on weekdays throughout the service day (see Table 1). In more detail, weekday service operates from 5:53 AM to 8:32 PM, with the following service frequencies:

- Every 30 to 34 minutes from the beginning of service through 7:00 AM.
- Every 24 to 30 minutes in the AM Peak period.
- Every 24 to 50 minutes in the Midday Base and School periods, but predominantly every 50 minutes.
- Every 27 to 50 minutes in the PM Peak, but predominantly every 28 minutes.
- Every 25 to 43 minutes in the Evening, but predominantly every 30 minutes before 7:00 PM.

Route 67 does not operate on Saturdays or Sundays.



Table 1 | Schedule Statistics

SERVICE DAY	SPAN OF SERVICE	FREQUENCY (RANGE)	FREQUENCY (AVERAGE)	DAILY TRIPS (INBOUND/OUTBOUND)
Monday-Friday	5:53 AM to 8:32 PM			23/23
Sunrise	5:53 AM to 5:59 AM	-	-	-/1
Early AM	6:00 AM to 6:59 AM	30 - 34	32	2/2
AM Peak	7:00 AM to 8:59 AM	24 - 30	27	4/4
Midday Base	9:00 AM to 1:29 PM	24 - 50	50	6/5
Midday School	1:30 PM to 3:59 PM	50 - 50	50	3/3
PM Peak	4:00 PM to 6:29 PM	27 - 50	28	4/5
Evening	6:30 PM to 8:32 PM	25 - 43	36	4/3
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 67 operates one service pattern for inbound and outbound trips on weekdays (see Table 2). Inbound buses leave from Turkey Hill and travel north to serve Ridge Street before operating south along Forest Street and Summer Street. The route then travels via Mill Street, Massachusetts Avenue, and Pleasant Street to connect with the Concord Turnpike traveling southbound, then operates via Acorn Park Drive to serve Cambridge Discovery Park before terminating at Alewife Station.

Outbound buses operate out of Alewife Station along the Concord Turnpike, skipping Acorn Park Drive. The route then serves the reverse of the inbound pattern, until it deviates to serve Arlington 360 Apartments off Summer Street at Symmes Road. The route then continues north to Turkey Hill via Washington Street instead of Forest Street.

Table 2 | Service Patterns

PATTERN	ORIGIN	DESTINATION	UNIQUE FEATURE	TRIPS PER WKD	TRIPS PER SAT	TRIPS PER SUN
INBOUND						
67	Turkey Hill	Alewife Station	Serves Acorn Park Drive	23	-	-
OUTBOUND						
67	Alewife Station	Turkey Hill	Skips Acorn Park Drive, serves Arlington 360 Apartments	23	-	-



# Ridership

Route 67 serves 634 daily riders on weekdays.

#### Ridership by Stop

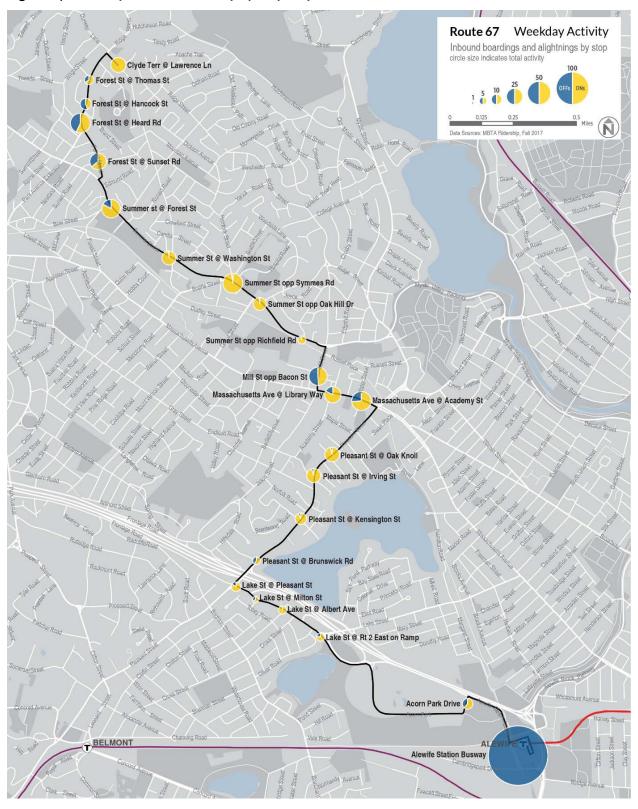
Ridership on Route 67 is low at all but the terminal stop at Alewife Station; no other stops have more than 40 combined boardings and alightings per day. On weekday inbound trips to Alewife Station (see Figure 3):

- From the beginning of the route along Forest Street, Route 67 has 70 boardings and 35 alightings.
- 78 passengers board and two passengers alight along Summer Street.
- 117 passengers board and 35 alight at stops along Mill Street, Massachusetts Avenue, and Pleasant Street before reaching the Concord Turnpike.
- 27 passengers board and eight alight along Lake Street and Acorn Park Drive, which are served on inbound trips only.
  - o The stop on Acorn Park Drive generates seven daily boardings; while this is not a high number of boardings, the main benefit to using Acorn Park Drive is that the route avoids traffic congestion on the Concord Turnpike.
- 340 passengers, or 80% of all inbound passengers, alight at Alewife Station.

Outbound ridership generally follow the same pattern in reverse. The unique outboundonly deviation to Arlington 360 Apartments generates five boardings and 14 alightings. The outbound service on Washington Street generates 17 boardings and 60 alightings, similar to Forest Street on inbound trips.



Figure 3 | Weekday Inbound Ridership by Stop Map





#### Ridership by Trip

On weekdays, Route 67 averages 23 boardings per trip, with significantly higher ridership per trip in the AM peak on inbound trips and in the PM peak on outbound trips, following a traditional commuter pattern (see Figure 4). On inbound trips:

- Ridership is high on the first five trips of the day, and the three trips between 6:30 AM and 8:00 AM range from 40 to 63 passengers per trip. Some riders are required to stand on several of these trips, but overcrowding is only an issue on the 7:22 AM trip.
  - The 7:22 AM trip reaches 63 boardings and a maximum load of 52 passengers, equal to the MBTA's peak period maximum comfortable passenger load.
- After 9:00 AM, no trip carries more than 20 passengers.
- Ridership per trip remains low throughout the service day, with no trip after 10:00 AM serving more than 10 passengers and the last two trips (at 7:35 PM and 8:18 PM) serving fewer than two passengers.

On weekday outbound trips (see Figure 5):

- No trip before 12:30 PM carries more than 10 passengers.
- Between 12:30 PM and 4:30 PM, ridership per trip ranges between 12 and 18 passengers per trip.
- Ridership then increases to 22 to 37 passengers per trip between 4:30 PM and 7:00 PM.
- Overcrowding is not an issue on any trip.



Figure 4 | Weekday Ridership by Trip: Inbound

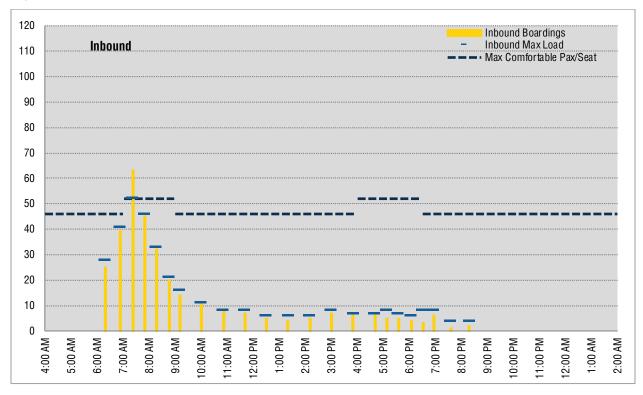
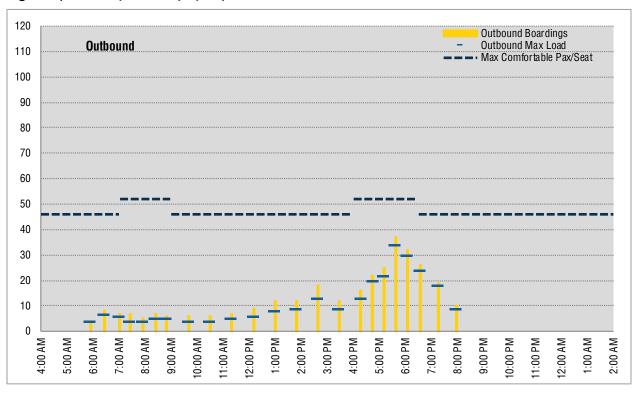


Figure 5 | Weekday Ridership by Trip: Outbound





#### **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 67, 97.7% of passenger minutes are in comfortable conditions, which is above the 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	97.7%	-	-

## Reliability and Speed

#### Reliability

Route 67's overall reliability is poor on weekdays, at only 69%, below the minimum standard of 70% for Local bus routes. As described in the next section, poor on-time performance is largely due to actual running times that exceed scheduled running times.

Table 4 | Reliability

SERVICE DAY	ORIGIN/MID- ROUTE ON-TIME PERFORMANCE	DESTINATION ON-TIME PERFORMANCE	OVERALL RELIABILITY	DROPPED TRIPS
Monday-Friday	67%	72%	69%	0.2%
Saturday	-	-	-	-
Sunday	-	-	-	-

#### **Running Times**

Route 67's observed running times routinely exceed scheduled running times throughout the day, and by up to 15 minutes during the AM peak period inbound (see Figure 6) and two to four minutes in the early AM and PM peak periods outbound (see Figure 7). This is the major reason that on-time performance is poor.

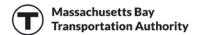




Figure 6 | Scheduled & Median Travel Time by Trip: Inbound

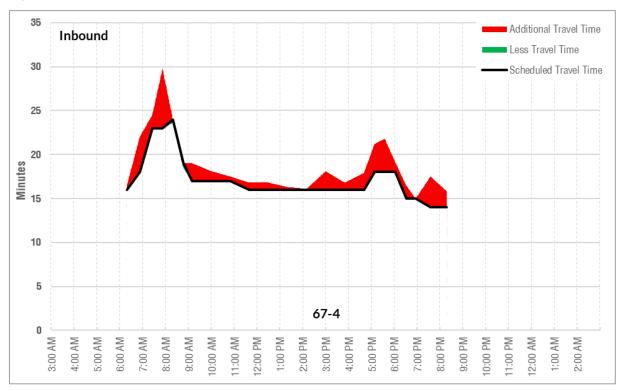
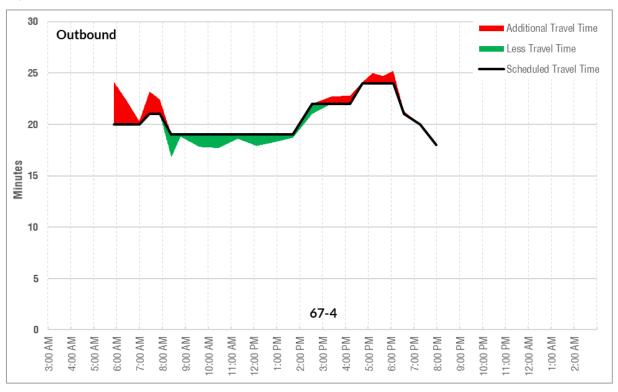


Figure 7 | Scheduled & Median Travel Time by Trip: Outbound





#### **Stop Spacing**

Route 67 has an average of 4.7 stops per mile, which falls in the middle of the four to seven stops per mile recommended for urban areas under MBTA guidelines.

## Summary

Route 67 is an underperforming route with fewer than 650 daily riders, and no stops other than Alewife Station serve more than 40 boardings and alightings a day. That said, the route has fewer than 50 trips a day and thus serves over 40 passengers per service hour; however, this level of passengers per service hour is only in the bottom third of performance for all MBTA routes. Finally, the route's alignment is not symmetrical in the inbound and outbound directions, with different approaches at the head and tail of the route and some stops that are only served in one direction.