

Madalyn Letellier

From: Jarred Johnson [REDACTED]
Sent: Wednesday, July 10, 2024 3:18 PM
To: Public Comments
Cc: Ben Ewen-Campen
Subject: Green Line Extension Data

Follow Up Flag: Follow up
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Dear Councilors and Staff,

I've included the supporting documentation for Councilor Ewen-Campen's resolution. Here is a [letter](#) summarizing the issue and a [PowerPoint](#) with more detail.

Best,

Jarred Johnson (he/him/his)

Executive Director



[REDACTED]

To: City of Somerville, City of Cambridge

Transit Matters writes to share passenger concerns about operational issues on the MBTA's newest rapid transit service, the Green Line Extension (GLX), and provide reasonable, cost-effective solutions/mitigations for these issues. Our aim is to support and advocate for the long term success of the GLX so that the corridor may enhance multimodal transit experiences for years to come.

Now that GLX service has been up and running for over a year, we would like to discuss recurring issues that continue to affect the service's riders. Some of these issues result from short-sighted engineering/planning choices made during design and construction of the GLX. But many more are a result of operational shortcomings.

On behalf of passengers, we are writing to you to request cooperation from the City of Somerville and the City of Cambridge, to start understanding and tackling some of the basic issues preventing the GLX from delivering high-quality light rail service.

“Express” Trains

The green line is now notorious for sending trains express to Medford/Tufts, requiring large volumes of passengers to get off at Lechmere or East Somerville and wait for a future train if they want service to Gilman Square, Magoun Square, or Ball Square.

Express trains run with great success around the world in cities like New York, Chicago, and London. However, the MBTA is not capable of running express trains because it lacks the parallel tracks that allow in-service trains to pass one another at speed. In practice, the “express train” service is skipping stops, thus depriving those who are trying to travel to those stops of needed service. The impacts are greatest for passengers with (1) low verbal English literacy that make understanding the operator messages difficult, and (2) with disabilities that make changing seats and waiting for the next train an uncomfortable or even painful experience.

The stated operational reason for express trains is to avoid trains bunching in too-close proximity. Ensuring even and appropriate spacing between trains is called headway maintenance. When opportunities for headway maintenance are missed early on for trains operating on the E and D lines west of or through downtown Boston, passengers end up paying the price at the end of the Medford/Tufts or Riverside-bound trip. But sending trains express is merely a band-aid for a much greater issue. Our data shows that 20-30% of Green Line E trains were already bunched by the time they got to East Somerville on the return trip every weekday in June.

We request that you advocate to the T that they eliminate the use of express trains except in cases of emergency, and instead make operational improvements to headway

management on the GLX. Further, we would like a timeline for those improvements to be communicated publicly.

Signage and Communication

Confusing, missing, and incomplete updated signage at numerous stations make utilizing the GLX challenging for many. Even two years after the start of GLX operations, some signs still indicate Lechmere as the end of the line, and maps have not been updated consistently across the system. Furthermore, it is not consistently communicated to riders or operators whether all stops should be made along the GLX corridor or whether passengers need to request stops as on the other end of above-ground at-grade GL branches.

This contributes to a stressful and unpleasant rider experience.

We request that you request public transparency from the T regarding the timeline for complete signage updates system-wide and a plan to monitor progress against this goal and clear education for all operators about stop requests that is translated to clear communication to riders.

Maintenance & Up-time

The GLX has had considerable functional issues from the beginning of its operations. As you are well aware from the incorrectly gauged track that led to weeks of shutdowns in the same year the extension opened, and the Lechmere viaduct slow down which reappeared as recently as this past week.

Break downs cost time for riders, students, workers, employers, and visitors. When these maintenance issues compound, we see the amount of time the line has to be closed for repairs increase quickly. However, communication with riders is often lacking, with Twitter and website alerts often being the most timely information sources on train, signal, and other malfunctions. In addition, limits in available trains or delayed maintenance requiring slow zones make using the GLX unpredictable, impacting rider experience. Clearer information for riders would create accountability and help riders plan their use of the GLX.

We ask that you advocate for active transparency from the T, ideally the creation of open access sources for examining equipment up-time and maintenance information.

We appreciate your time and advocacy on behalf of the communities served by the GLX. We hope our partnership can help urge the T toward improvements in transparency and operations so the GLX can realize its full promise.

Sincerely,
TransitMatters Volunteers and Staff

Addendum

We collected data from the TransitMatters data dashboard on Medford/Tufts <-> Heath Street service on Wednesday, June 12th (a typical weekday). To understand how headways management falls apart, we selected 8 places of interest throughout the system. Our data showed that headways can fall apart quickly, but that the line doesn't even do well at sending trains out from the origin location on time. Altogether, the data firmly supports our proposal to find headway management solutions for the GLX that do not involve sending trains express.

Please see the powerpoint describing the data used [here](#).

Headways on the Green Line E Branch

Assessing where the biggest issues affecting GLX passengers arise, utilizing the TransitMatters Data Dashboard

Headways on Green Line E Branch

All numbers are pulled from the full day of service on Wednesday, June 12th

<u>Departing</u>	<u>Median</u>	<u>80% Spread</u>	<u>Max</u>	<u>On Time Trips</u>	<u>Bunched Trips</u>
Medford/Tufts SB	7m 23s	4m 6s -> 13m 18s	43m 34s	51%	10%
East Somerville SB	7m 9s	2m 45s -> 12m 34s	25m 50s	35%	15%
Symphony WB	7m 13s	1m 59s -> 15m 25s	20m 44s	32%	17%
Brigham Circle WB	7m 27s	2m 15s -> 14m 55s	45m 53s	23%	24%
Heath Street EB	8m 14s	3m 8s -> 16m 2s	29m 47s	34%	14%
Brigham Circle EB	7m 23s	3m 24s -> 13m 0s	30m 40s	40%	11%
Symphony EB	7m 11s	3m 27s -> 12m 50s	26m 28s	34%	10%
East Somerville NB	6m 27s	1m 42s -> 14m 53s	27m 03s	19%	23%

Key Takeaways: E Branch Headway Distribution Analysis

- Trips leave on time from Medford/Tufts 51% of the time, but that drops to 23% on time with 24% bunched by Brigham Circle WB.
 - Improving on time trips from the origin destination would likely impact passengers from Medford/Tufts to North Station, but the subway and Huntington Ave branch still have a negative impact on headways.
- Headway corrections are occurring at Heath Street and Brigham Circle EB, where the proportion of on time trips increase to 34% and 40%, respectively.
- Only 19% of trips leave East Somerville NB on time, while 23% of the trips at that location are bunched.

The Impact of Express Trains

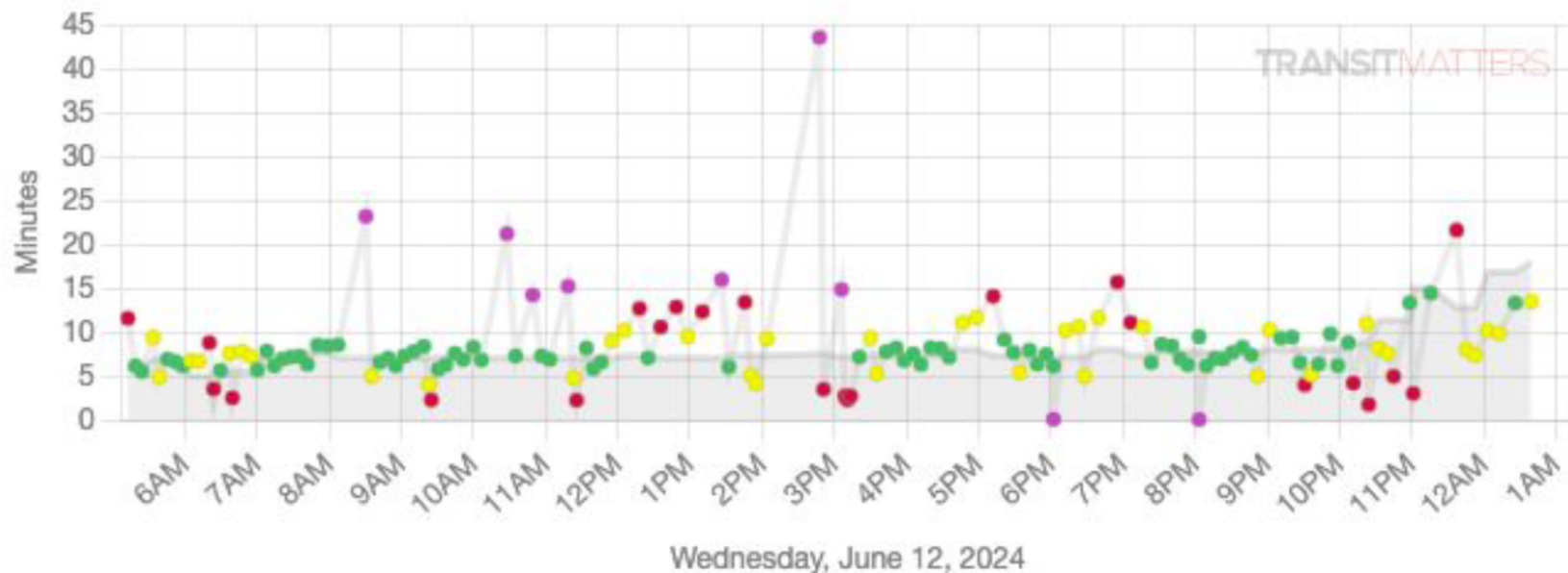
- Sending trains express from East Somerville to Medford/Tufts leads to passenger delay, confusion, and frustration.
- The impacts are greatest for passengers with low verbal english literacy and with disabilities that make changing seats and waiting for the next train an uncomfortable or even painful experience.
- Express trains are used to get trains and their operators back to the end of the line more quickly so that the southbound trip can be replenished.
- However, our data shows that these express trains do not drastically improve the timeliness of the headways throughout the line.

Headways

Time between trains

6/12/24

Medford/Tufts southbound



Legend



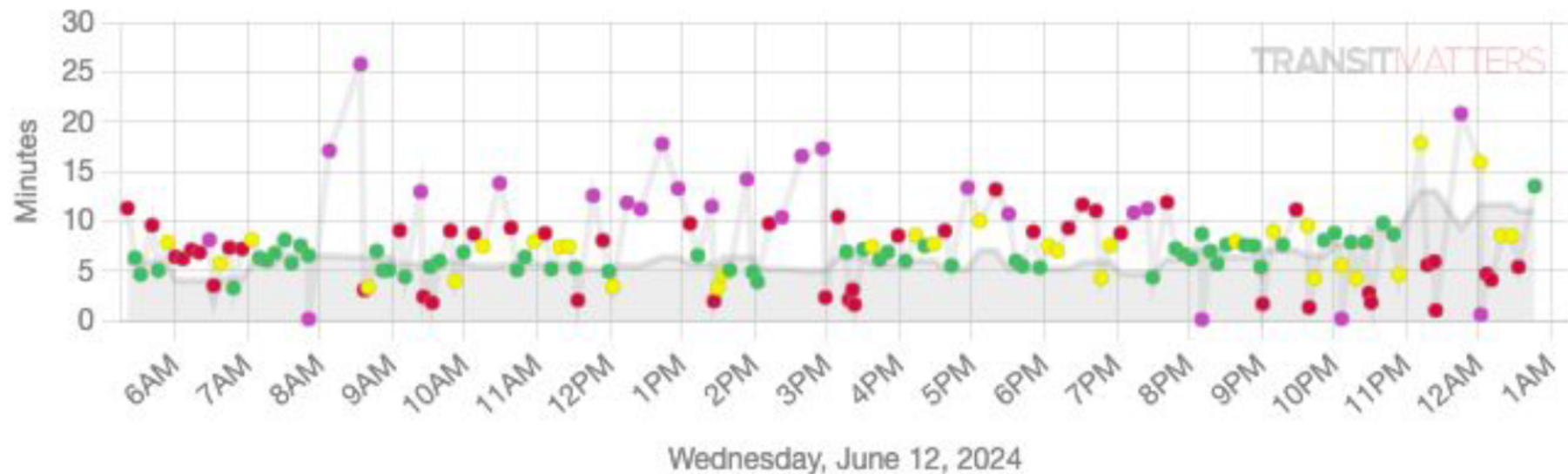
Avg	8m 14s	10%	4m 06s	Min	2s	On Time Trips	51%
Median	7m 23s	90%	13m 18s	Max	43m 34s	Bunched Trips	10%

Headways

6/12/24

Time between trains

East Somerville southbound



Legend

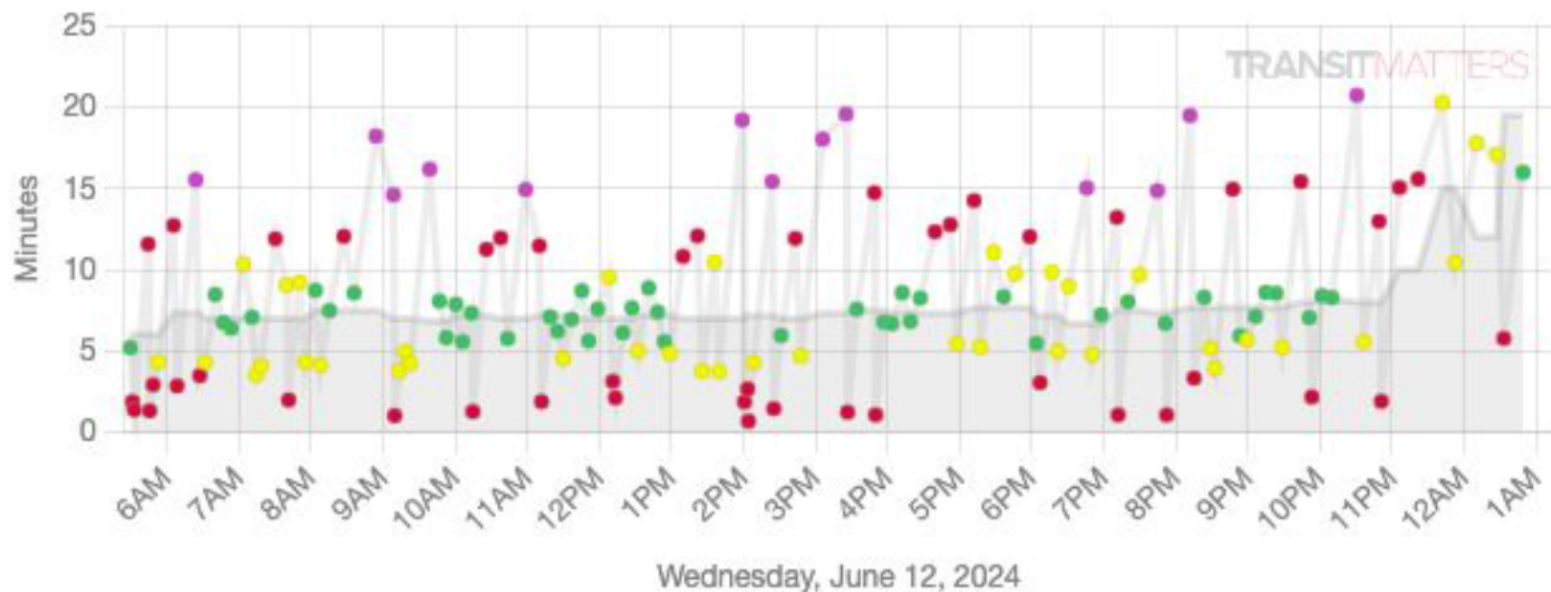
Avg	7m 27s	10%	2m 45s	Min	5s	On Time Trips	35 %
Median	7m 09s	90%	12m 34s	Max	25m 50s	Bunched Trips	15 %

Headways

6/12/24

Time between trains

Symphony southbound



Legend

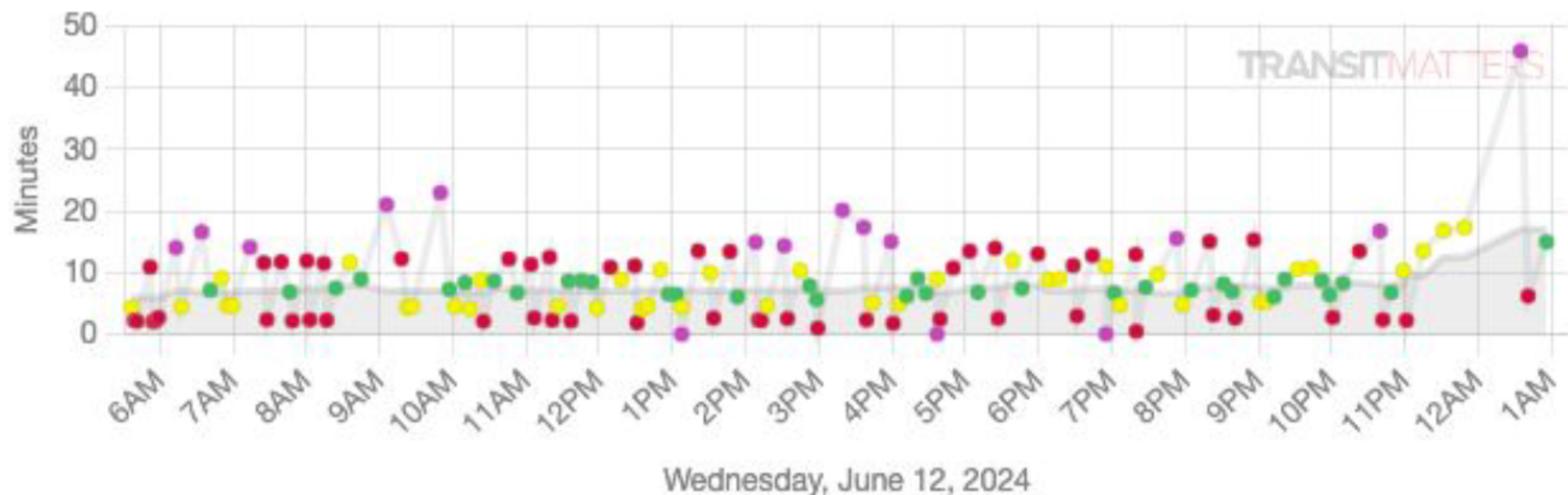
Avg	8m 05s	10%	1m 59s	Min	41s	On Time Trips	32 %
Median	7m 13s	90%	15m 25s	Max	20m 44s	Bunched Trips	17 %

Headways

6/12/24

Time between trains

Brigham Circle southbound



Legend

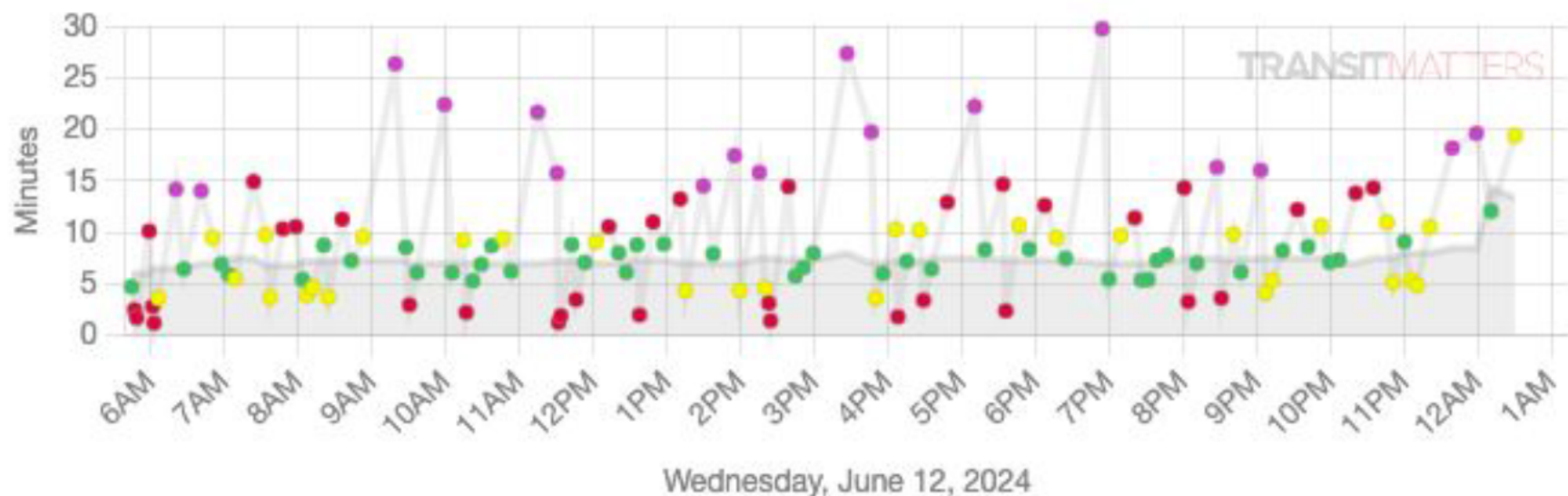
Avg	8m 12s	10%	2m 15s	Min	1s	On Time Trips	23 %
Median	7m 27s	90%	14m 55s	Max	45m 53s	Bunched Trips	24 %

Headways

6/12/24

Time between trains

Heath Street northbound



Legend



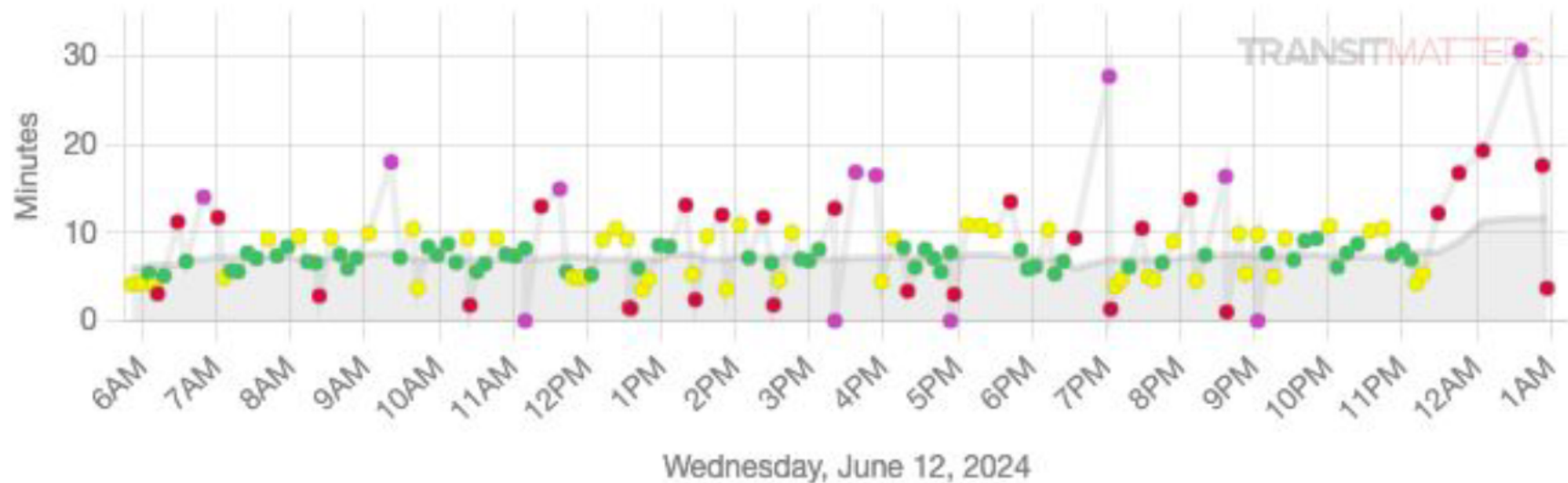
Avg	9m 03s	10%	3m 08s	Min	72s	On Time Trips	34 %
Median	8m 14s	90%	16m 02s	Max	29m 47s	Bunched Trips	14 %

Headways

Time between trains

6/12/24

Brigham Circle northbound



Wednesday, June 12, 2024

Legend

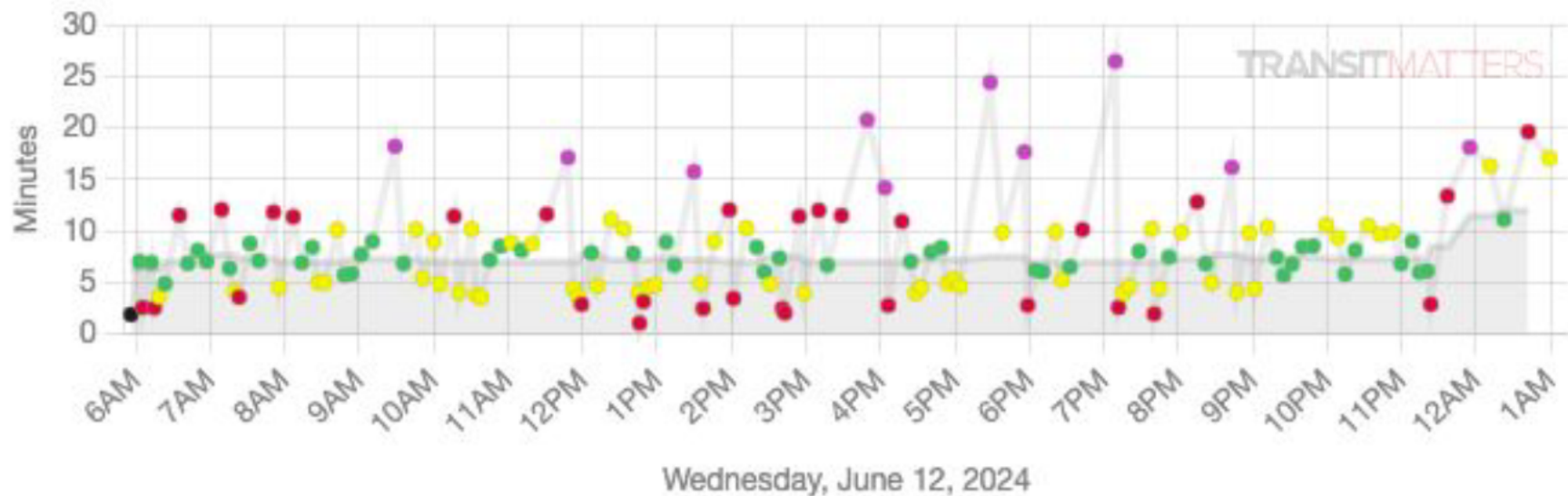
Avg	7m 53s	10%	3m 24s	Min	1s	On Time Trips	40 %
Median	7m 23s	90%	13m 00s	Max	30m 40s	Bunched Trips	11 %

Headways

Time between trains

6/12/24

Symphony northbound



Legend

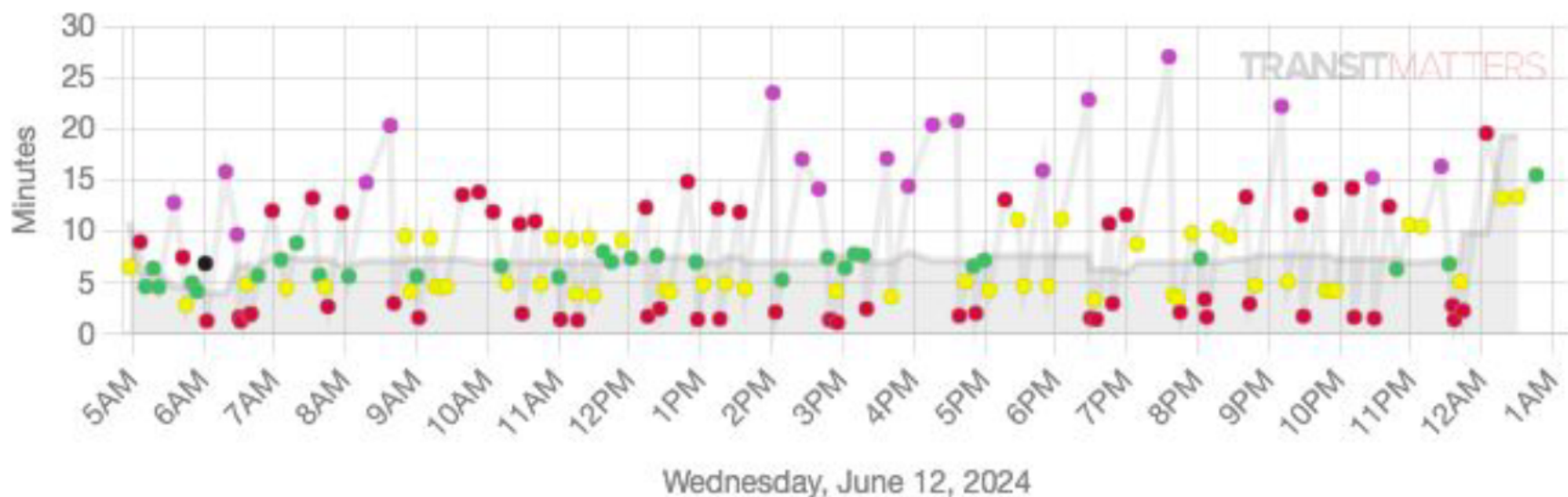
Avg	8m 00s	10%	3m 27s	Min	63s	On Time Trips	34 %
Median	7m 11s	90%	12m 50s	Max	26m 28s	Bunched Trips	10 %

Headways

6/12/24

Time between trains

East Somerville northbound



Legend

Avg	7m 43s	10%	1m 42s	Min	69s	On Time Trips	19 %
Median	6m 27s	90%	14m 53s	Max	27m 03s	Bunched Trips	23 %