

# ROUTE H

## Broad-Erie to Cheltenham-Ogontz

### KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route H operates between the Cheltenham-Ogontz Loop and Erie Station on the Broad Street Line. It provides connections between the neighborhoods of Cedarbrook, Mt. Airy, Germantown and Nicetown. Service is coordinated with Route XH, which operates along the same alignment south of Walnut Lane.*
- *Route H operates frequent service during weekday peak periods and carries 5,000 riders on the average weekday. Challenges with the route include slow operating speeds, an indirect alignment, and poor on-time performance.*
- *Opportunities to improve the route include potential shortened alignments, strategies to speed up the route by consolidating stops, and transit signal priority at key locations, especially near Erie Station.*

## ROUTE OVERVIEW

Route H operates between the Cheltenham-Ogontz Loop on Cheltenham Avenue and Erie Station on the Broad Street Line (see Figure 1). The route connects people in the Cedarbrook, East Mt. Airy, Germantown, and Nicetown neighborhoods to the Broad Street Line and other SEPTA services. Together with Route XH south of Walnut Lane, it provides frequent service along Greene Street, Manheim Street, and Wissahickon Avenue. It provides similar service to nearby Route 23 on Germantown Avenue and Route 53 on Wayne Avenue.

## SERVICE OVERVIEW

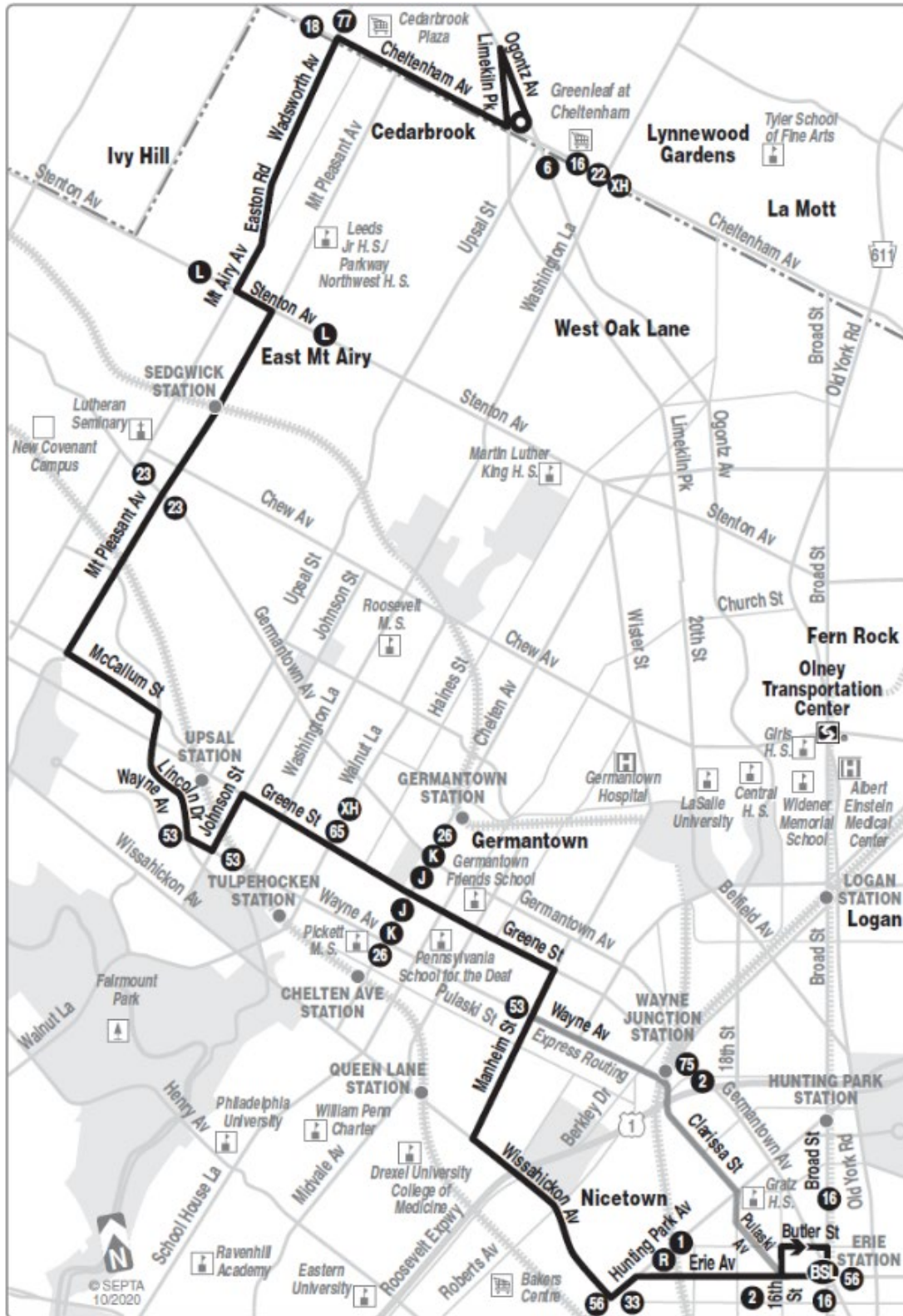
### Schedule

Route H operates seven days a week. Weekday and Saturday service begins around 6:00 AM and ends around 2:00 AM. Sunday service begins around 7:00 AM and ends around midnight (see Table 1). On weekdays:

- Average frequencies are 13 minutes during the AM peak and 11 minutes during the PM Peak.
- Average frequencies during the midday period are every 18 minutes.
- Evening frequencies average 29 minutes, dropping to every 40 minutes later at night and 47 minutes overnight.

Average service frequencies on Saturday are every 22 minutes during the day and 37 minutes at night. Average frequencies on Sundays are 28 minutes during the day and 38 minutes at night. During most periods and on all days, actual frequencies vary from the averages.

Figure 1 | Route Map



**Table 1 | Schedule Statistics**

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
<b>Weekdays</b>	<b>5:46 AM to 2:02 AM</b>		
Owl	Before 4:00 AM	25 - 70	47
Early AM	4:00 AM to 5:59 AM	-	-
AM Peak	6:00 AM to 8:59 AM	8 - 35	13
Midday	9:00 AM to 2:59 PM	10 - 20	18
PM Peak	3:00 PM to 5:59 PM	7 - 16	11
Evening	6:00 PM to 9:59 PM	16 - 40	29
Late Night	After 10:00 PM	40 - 41	40
<b>Saturdays</b>	<b>6:01 AM to 2:00 AM</b>		
Day	8:00 AM to 5:59 AM	20 - 40	22
Night	Before 8:00 AM and After 5:59 PM	20 - 63	37
<b>Sundays</b>	<b>6:52 AM to 12:48 AM</b>		
Day	8:00 AM to 5:59 AM	24 - 40	28
Night	Before 8:00 AM and After 5:59 PM	27 - 60	38

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

## Service Patterns

Route H operates with four service patterns (see Table 2). The primary patterns are used for most trips on weekdays and all trips on weekends. The alternative service patterns are peak-period express trips which travel between Erie Station and Manheim Street stopping only at Hunting Park Avenue. Route H operates three AM and three PM express trips.

**Table 2 | Service Patterns**

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day		
					Wkd	Sat	Sun
<b>Southbound</b>							
229999	Cheltenham Av & Ogontz Av Loop	Erie Av & Broad St	Primary Pattern	-	55	44	35
229998	Cheltenham Av & Ogontz Av Loop	Erie Av & Broad St	Streamlined Express Service	1	3	0	0
<b>Northbound</b>							
230001	Erie Av & Broad St – H FS	Cheltenham Av & Ogontz Av Loop	Primary Pattern	-	66	45	35
230000	Erie Av & Broad St – H FS	Cheltenham Av & Ogontz Av Loop	Streamlined Express Service	1	3	0	0

Note: Unique stops are those not served by the primary pattern

## RIDERSHIP

In Fall 2019, Route H carried 5,312 passengers on weekdays, 2,914 on Saturdays, and 2,152 on Sundays (see Table 3). Based on weekday ridership, it was one of SEPTA's higher ridership routes.

**Table 3 | Fall 2019 Ridership and Productivity**

	Weekdays	Saturdays	Sundays
<b>Daily Ridership</b>	<b>5,312</b>	<b>2,914</b>	<b>2,152</b>
Rank	37	36	36
<b>Passengers per Revenue Vehicle Hour</b>	<b>58.5</b>	<b>47.1</b>	<b>47.2</b>
Rank	27	25	27

## Transfer Patterns

Many trips to and from Route H involve a transfer. The stop at Broad Street and Erie Avenue adjacent to the Broad Street Line is a major location of transfer activity. The largest transfer volumes are to and from:

- The Broad Street Line (20.5% of all trips)
- Route 33 (Penn's Landing to 23<sup>rd</sup> – Venango) (5.9%)
- Route 23 (Center City to Chestnut Hill) (4.9%)
- Route XH (Broad-Erie to Cheltenham-Ogontz) (4.5%)
- Route 65 (Germantown-Cheltenham to 69<sup>th</sup> Street Transportation Center) (3.8%)

Weekend transfer patterns are similar but at a slightly lower rate.

## Ridership by Stop

Route H operates between the Broad Street Line and the Cheltenham and Ogontz Loop via Nicetown, Germantown, and East Mt Airy. The greatest activity occurs at the route's termini (Broad Street Line and the Ogontz Loop) (see Figure 2). Notable ridership patterns on weekday northbound trips include:

- 722 board at Erie Avenue and Broad Street (13% of all riders)
- 432 riders board and 24 alight at Erie Avenue and 15<sup>th</sup> Street (8%) and another 121 riders board and 143 alight along Erie Avenue between 16<sup>th</sup> Street and 22<sup>nd</sup> Street (4%)
- 263 board and 62 alight at Hunting Park Avenue and Wissahickon Avenue (6%)
- 206 board and 248 alight at Greene Street and Cheltenham Avenue (8%)
- There is low ridership activity along Johnson Street, Lincoln Drive, McCallum Street and Mt Pleasant Avenue south of Germantown Avenue. Most of the 18 stops along this alignment see fewer than 5 boardings and 10 alightings.
- 105 board and 74 alight at Mt Pleasant Avenue and Germantown Avenue (3%)
- 75 board and 127 alight at Cheltenham Avenue and Mt Airy Avenue (4%)

- 331 passengers alight at the Ogontz Avenue Loop (5.8%)

Southbound patterns mirror northbound patterns. Weekend patterns are similar but with lower volumes.

**Figure 2 | Weekday Southbound Ridership by Stop**



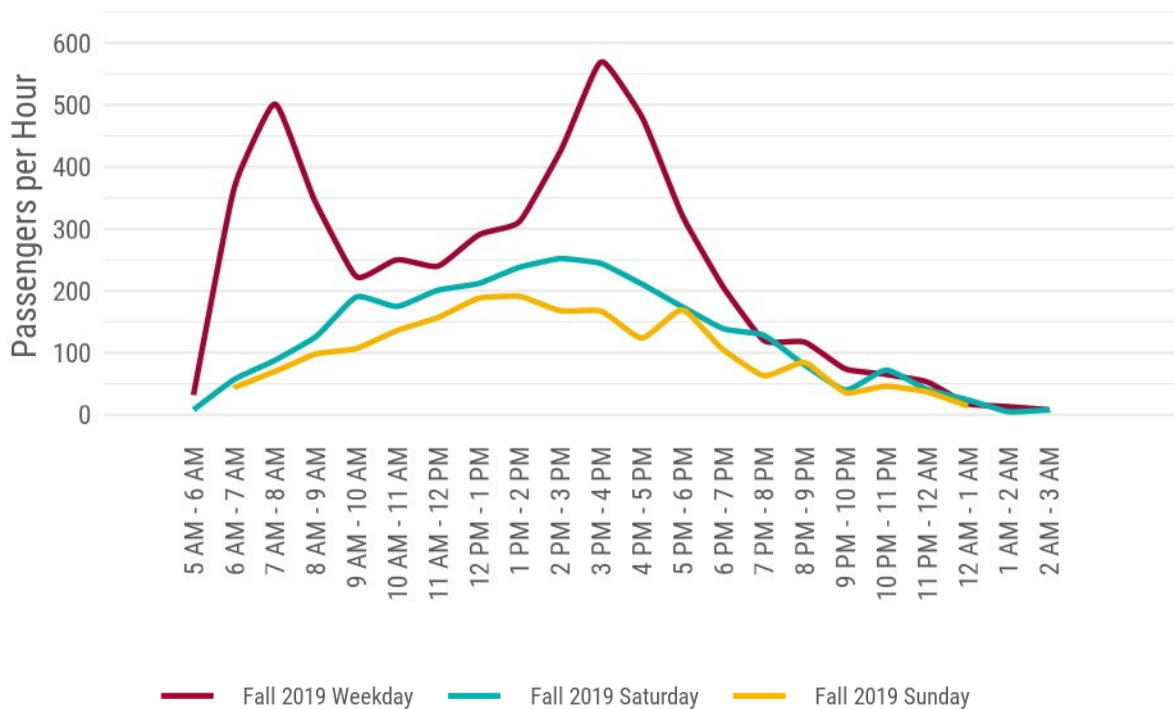
## Ridership by Time of Day

### Ridership by Hour

In Fall 2019, ridership had spikes in demand during the AM and PM peak periods (see Figure 3). On a per-hour basis, ridership is slightly higher during the PM Peak than during the AM peak. Midday ridership is about half of the peak periods. Ridership starts declining after the PM peak period, decreasing through the evening hours.

Saturday and Sunday ridership gradually increases until the afternoon and then gradually decreases.

Figure 3 | Ridership by Hour: Pre-Pandemic; Fall 2019



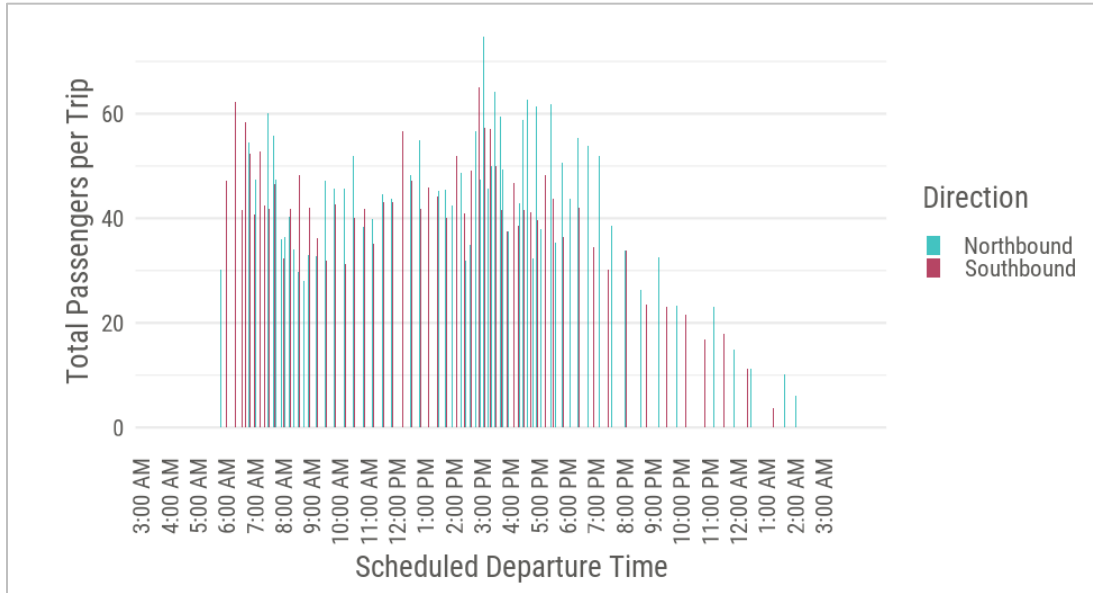
### Ridership and Maximum Loads by Trip

Fall 2019 weekday ridership per trip was generally moderate to high and no trips reach the seated maximum load suggesting there is turnover throughout the route (see Figure 4 and Figure 5):

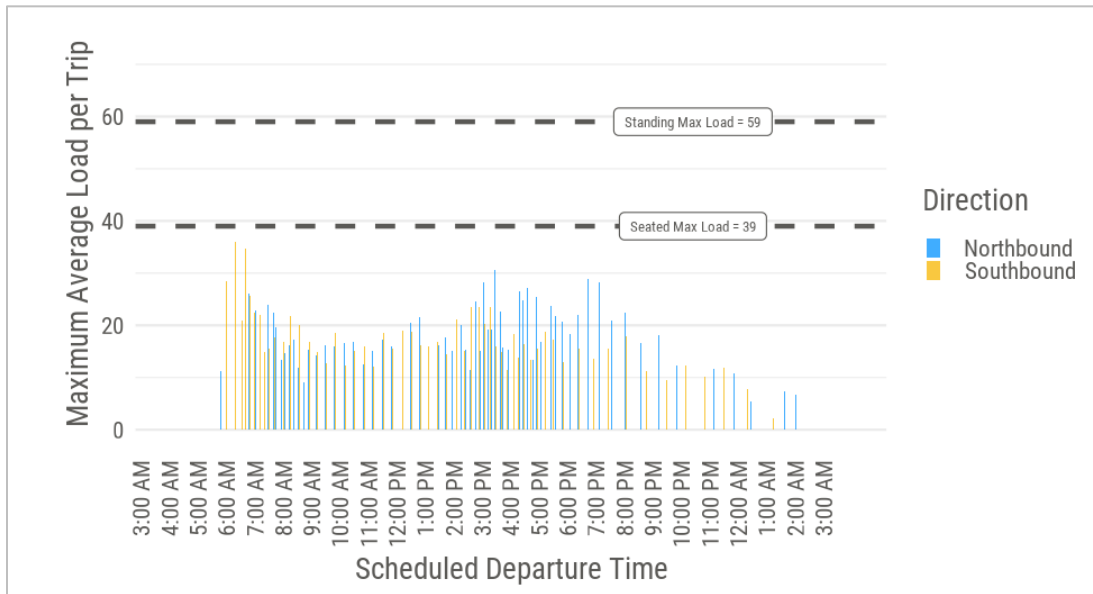
- During the AM peak period, most trips carried between 40 and 60 riders. The first few trips had high ridership, indicating unmet demand for service starting earlier in the day.
- Demand softened somewhat in the midday, with most trips carrying between 35 and 50 riders
- Starting around 2 PM, demand increases with several trips carrying more than 60 riders. Most trips carried between 25 and 60 riders.
- Ridership starts to decline after 7:00 PM and ranges from 20 to 30 riders.
- After 11:00 PM, trips carried 15 or fewer passengers.

Most trips on Saturdays and Sundays carried between 20 and 50 riders, without strong peaking patterns. Saturday midday demand was nearly as high as weekday midday demand. Demand on Sundays was slightly lower than Saturdays.

**Figure 4 | Weekday Ridership by Trip**



**Figure 5 | Weekday Maximum Loads by Trip**



## ON-TIME PERFORMANCE

In Fall 2019, Route H's on-time performance was 70% on weekdays, 76% on Saturdays, and 82% on Sundays (see Table 4), with off-schedule performance largely due to late service.

**Table 4 | On-Time Performance**

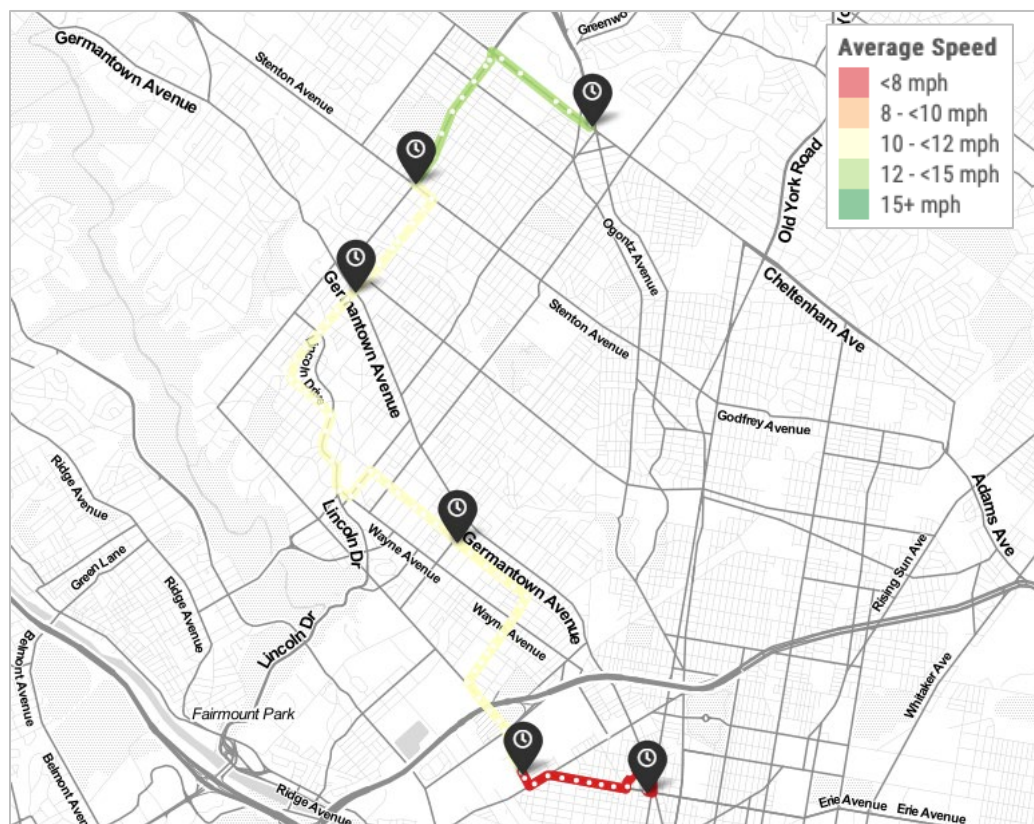
	Early (>2 Mins Early)	On Time (<2 Mins Early to 6 Mins Late)	Late (>6 Mins Late )	Missed Trips
<b>Goal</b>		80%		
<b>Fall 2019 Actual</b>				
Weekday	4.9%	70.2%	24.9%	0.0%
Saturday	6.3%	75.5%	18.2%	0.0%
Sunday	5.6%	81.5%	12.8%	0.0%

Note: On-time percentages are for trips that are run (do not include dropped trips)

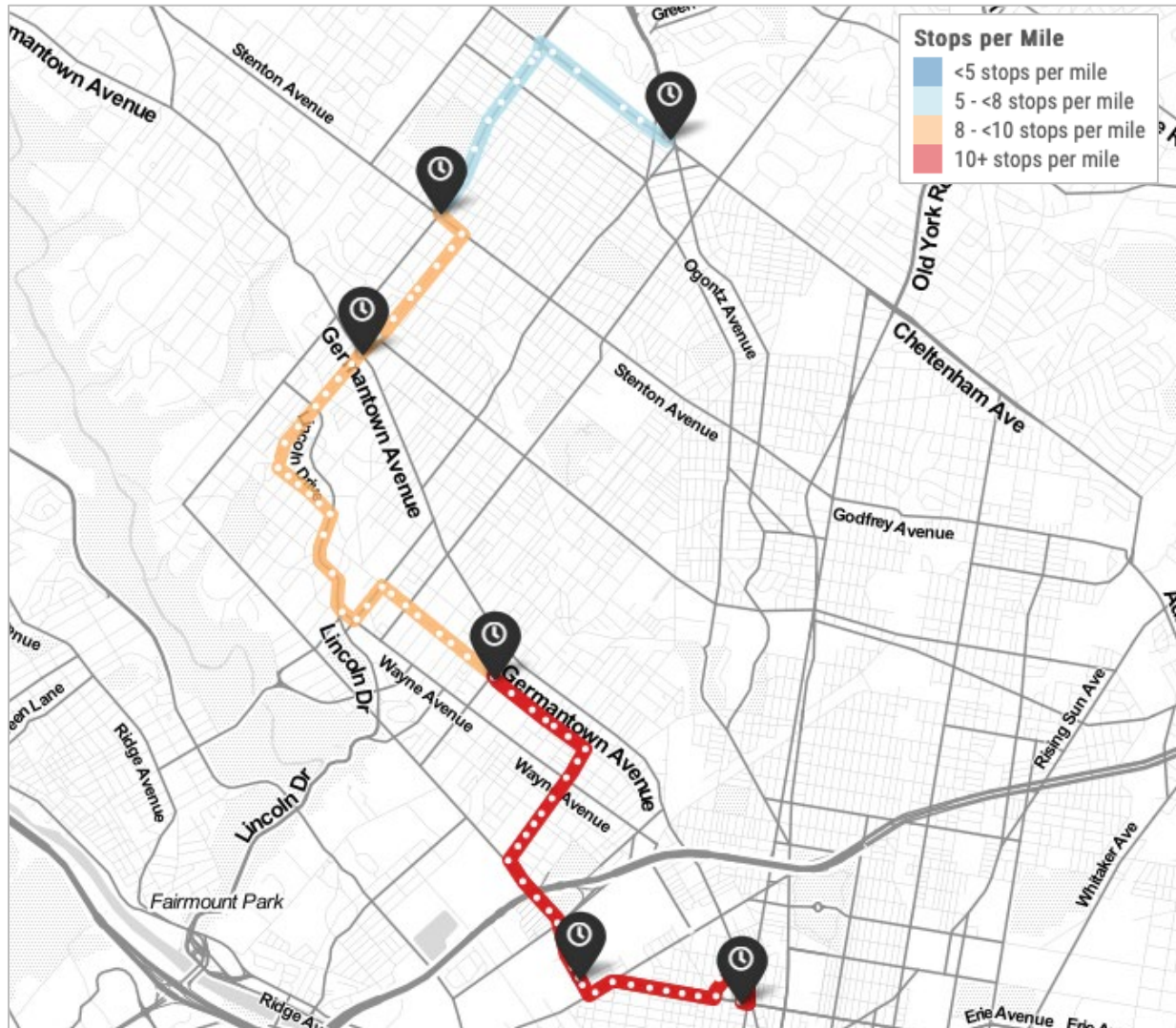
## AVERAGE SPEEDS AND STOP SPACING

Route H's average weekday operating speed is 12.5 miles per hour. However, Route H travels at slow speeds along much of its southern alignment during peak periods (see Figure 6). Close stop spacing, circuitous routing, and traffic congestion contribute to Route H's slow speeds during some periods.

Stop spacing on Route H varies by segment. The southern portion of the route (south of Greene Street and West Cheltenham Avenue) has more than 10 stops per mile. Stops are spaced slightly further apart northwest of West Cheltenham Avenue while the last leg (Cheltenham Avenue to Ogontz) has stops spaced between 5 and 8 per mile (see Figure 7).

**Figure 6 | Average Speeds: PM Peak Southbound**




**Figure 7 | Stop Spacing by Route Segment**


## RIDER CHARACTERISTICS

In many respects, Route H riders are typical of SEPTA's service area (see Table 5). The most significant differences are that Route H serves a greater share of black riders and smaller share of white riders.

**Table 5 | Rider Characteristics**

	Route H Riders	Systemwide Average
Median Household Income	\$33,508	\$32,713
Share in Poverty	30%	30%
Ethnicity		
White	24%	38%
Black	67%	46%
Hispanic	6%	10%
Other	3%	7%
Without a Vehicle	39%	37%
Seniors	20%	15%
With a Disability	3%	2%

## SERVICE IMPROVEMENT OPPORTUNITIES

Opportunities to strengthen Route H are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Operate via Wayne Street with Route XH:** To simplify the route's alignment and reduce service density, Route H could operate via Wayne Street and Mount Pleasant Avenue instead of its existing duplicitous routing via Green Street.
- Begin Operating Service Earlier:** Route H's first few trips of the day have high ridership, indicating that there exists unmet demand for service beginning earlier in the day. Consider extending Route H's service span so that it begins operating at 5 AM.
- Shorten Route H at New SEPTA bus transfer facility in Germantown.** Several SEPTA bus routes including Route H converge in Germantown. A suitable site in Germantown would need to be identified by SEPTA, but a new transfer facility in this neighborhood could serve a useful function of organizing and coordinating bus routes outside of the congested transportation centers at Erie Station and Olney.
- Discontinue Express Service:** Route H's 6 daily express trips provide significantly different service from its local alignment and make service difficult for passengers to understand. These trips also do not result in significant time savings; express trips are scheduled to take only 5 minutes less than regular trips. To simplify service, consider discontinuing Route H's express trips.