ROUTE 94

Montgomery Mall to Chestnut Hill

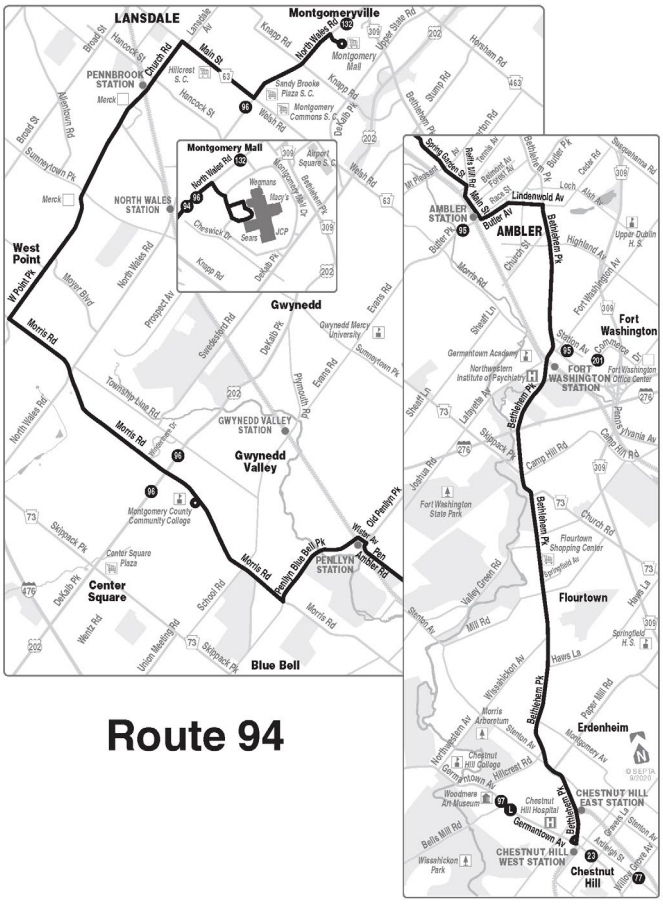
KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route 94 connects Chestnut Hill and Montgomery Mall as well as several other destinations, such as Montgomery County Community College and SEPTA regional rail stations.*
- *Ridership on Route 94 is low. Opportunities to improve the route reflect coordination with other SEPTA routes and eliminating the most unproductive segments.*

ROUTE OVERVIEW

Route 94 operates between Chestnut Hill and Montgomery Mall. It also connects with the SEPTA Regional Rail network, bringing people to Fort Washington Station, Ambler Station, Penllyn Station, Pennbrook Station and Montgomery County Community College. The stations are served by the Lansdale/Doylestown Regional Rail line.

Figure 1 | Route Map



Route 94

SERVICE OVERVIEW

Schedule

On weekdays, Route 94 operates from 6:42 AM until 10:11 PM (see Table 1). Average frequencies range from every 38 minutes in the AM peak to hourly for the rest of the day. Average frequencies during the evening are 98 minutes.

Route 94 operates 15 hours a day on Saturdays (7:30 AM to 9:34 PM) with service frequencies averaging 62 minutes during the day and 102 minutes at night. On Sundays, the span is shorter (10.5 hours) with minimal service. Average frequencies during the day are 186 minutes and 90 minutes at night.

Table 1 | Schedule Statistics

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
Weekdays	4:00 AM to 12:18 AM		
Early AM	4:00 AM to 5:59 AM		
AM Peak	6:00 AM to 8:59 AM	22-70	38
Midday	9:00 AM to 2:59 PM	2-70	54
PM Peak	3:00 PM to 5:59 PM	0-105	59
Evening	6:00 PM to 9:59 PM	60-130	98
Late Night	10:00 PM to 11:59 PM		
Owl	Midnight to 3:59 AM		
Saturdays	8:00 AM to 7:59 AM		
Day	8:00 AM to 5:59 PM	60-80	62
Night	5:59 PM to 7:59 AM	70-140	102
Sundays	6:43 AM to 10:29 PM		
Day	8:00 AM to 5:59 PM	115-245	186
Night	5:59 PM to 7:59 AM	90-90	90

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

Service Patterns

Route 94 operates 5 service patterns (see Table 2). The service patterns vary in terms of how much of the primary alignment is covered and if Montgomery County Community College is served.

Table 2 | Service Patterns

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day Wkd	Sat	Sun
Inbound							
230868	Chestnut Hill Loop	Montgomery Mall	Primary Pattern	0	13	12	0
230869	Chestnut Hill Loop	Montgomery County Community College	Short Turn in AM Peak	0	2	0	0
230867	Chestnut Hill Loop	Montgomery Mall	Does not serve Montgomery County Community College	0	0	0	4
Outbound							
230871	Montgomery Mall	Chestnut Hill Loop	Primary Pattern	0	13	12	0
230872	Montgomery County Community College	Chestnut Hill Loop	Short Turn Midday/PM Peak	0	2	0	0
230870	Montgomery Mall	Chestnut Hill Loop	Does not serve Montgomery County Community College	0	0	1	4
230873	Main St & Butler Av	Chestnut Hill Loop	Short Turn from Ambler Station	0	1	0	0

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

RIDERSHIP

In the fall of 2019, Route 94 carried 552 passengers on weekdays, 265 on Saturdays, and 90 on Sundays (see Table 3). Based on weekday ridership, it was one of SEPTA's lower ridership routes.

Table 3 | Fall 2019 Ridership and Productivity

	Weekdays	Saturdays	Sundays
Daily Ridership	**552**	**265**	**90**
Rank	105	103	97
Passengers per Revenue Vehicle Hour	**22.1**	**22.3**	**15.0**
Rank	107	84	91

Transfer Patterns

Three of the top five transfers with Route 94 happen with the other routes that meet in Chestnut Hill. The largest transfer volumes are to and from:

- Route L Erdenheim or Plymouth Meeting Mall to Olney Transportation Center (17.4% of all trips)

- Route 23 Center City to Chestnut Hill (16.3%)
- Route 95 Gulph Mills to Willow Grove Park Mall (5.3%)
- Route 96 Lansdale to Norristown Transportation Center (3.9%)
- Route 77 Roosevelt-St Vincent to Chestnut Hill (2.5%)

Weekend transfer volumes are still high – 54% on Saturdays, and 50% on Sundays.

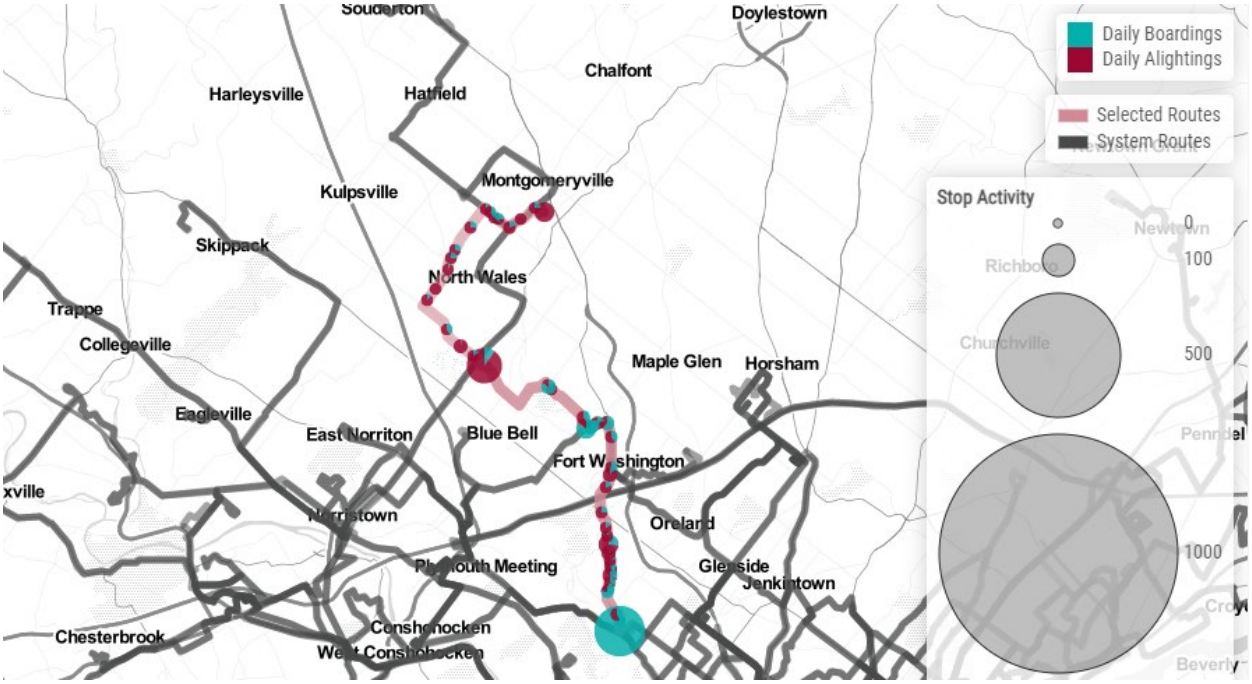
Ridership by Stop

The majority of Route 94's ridership activity takes place between Chestnut Hill Loop and Montgomery County Community College (see Figure 2). The data shows riders use the route to travel to/ from Montgomery County Community College and to get to/from SEPTA rail stations. High ridership stops northbound include:

- 169 riders (28% of all riders) boarded at Chestnut Hill Loop.
- 10 riders boarded and 28 alighted at Bethlehem Park and Springfield Avenue (6.4%)
- 33 riders boarded and 6 alighted at Butler Avenue and Main Street (6.4%)
- 10 riders boarded and 95 alighted at Montgomery County Community College (18%)
- 36 riders alighted at Montgomery Mall (6%)

Weekend ridership patterns are also similar but with lower volumes. Montgomery County Community College has much less ridership on weekends and on Sunday there is no service to the Community College.

Figure 2 | Weekday Northbound Ridership by Stop

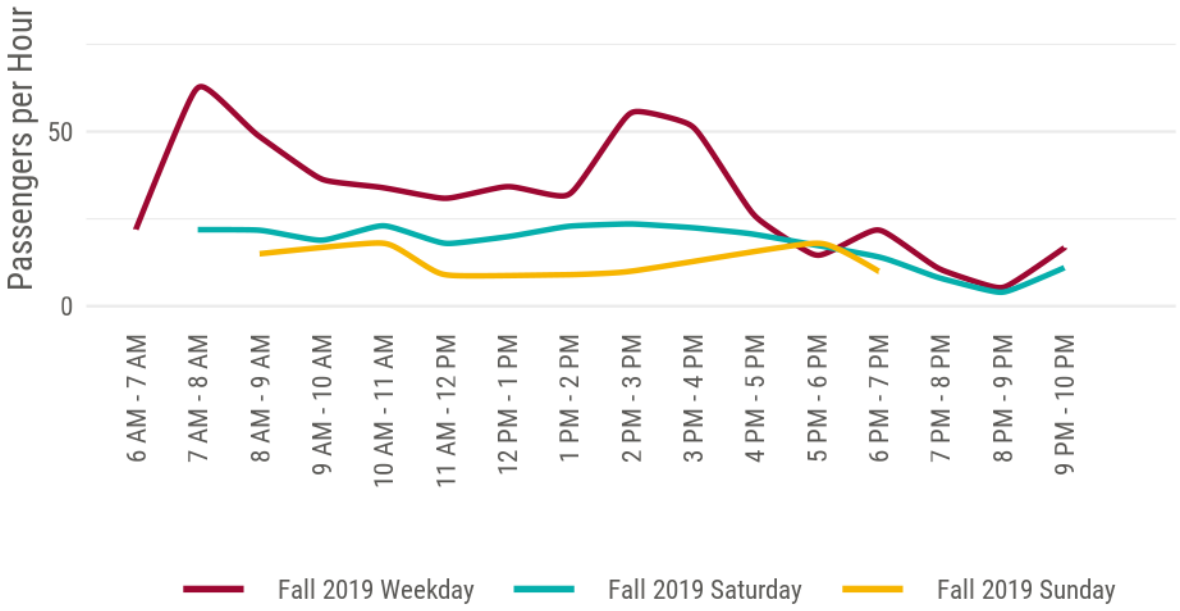


Ridership by Time of Day

Ridership by Hour

Pre-pandemic ridership peaks around 7:00 AM hour and between 2:00 PM and 4:00 PM (see Figure 3). Midday ridership is about half of the peak period. After 5:00 PM, ridership declines quickly from just over 50 to around 20 riders per hour. Ridership is at its lowest during the evening. Saturday and Sunday ridership is lower than weekdays and does not have peaking patterns.

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



Ridership and Maximum Loads by Trip

Ridership on Route 94 is low with demand oriented around a peak direction and peak periods, so that northbound trips have stronger demand during morning and southbound trips are stronger in the afternoon. Ridership patterns show:

- During the AM peak, most trips carry between 20 and 40 passengers (see Figure 4)
- Midday trips generally carry 10 to 35 passengers with maximum loads under 20 passengers. One trip carries over 45 passengers.
- In the evening, trips carry under 30 passengers and maximum loads are under 20 passengers.

All trips have seats for all riders (see Figure 5 | Fall 2019 Weekday Maximum Loads by Trip.

On Saturdays and Sundays, ridership is generally under 20 riders except for a Saturday trip made between 3:00 PM and 4:00 PM with 30 passengers.

Figure 4 | Weekday Ridership by Trip

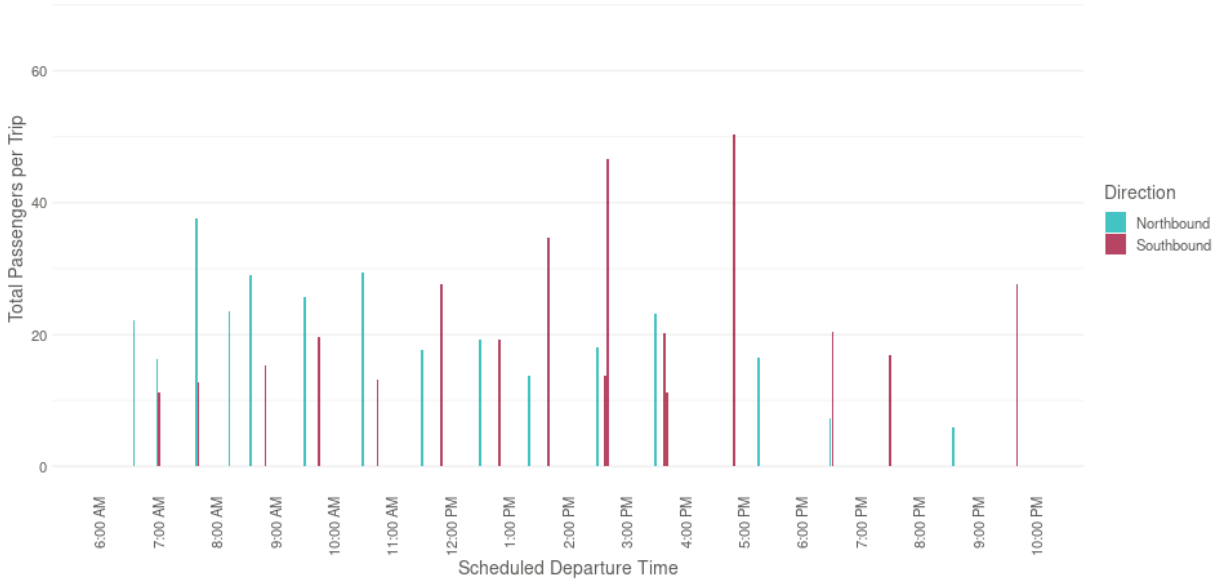
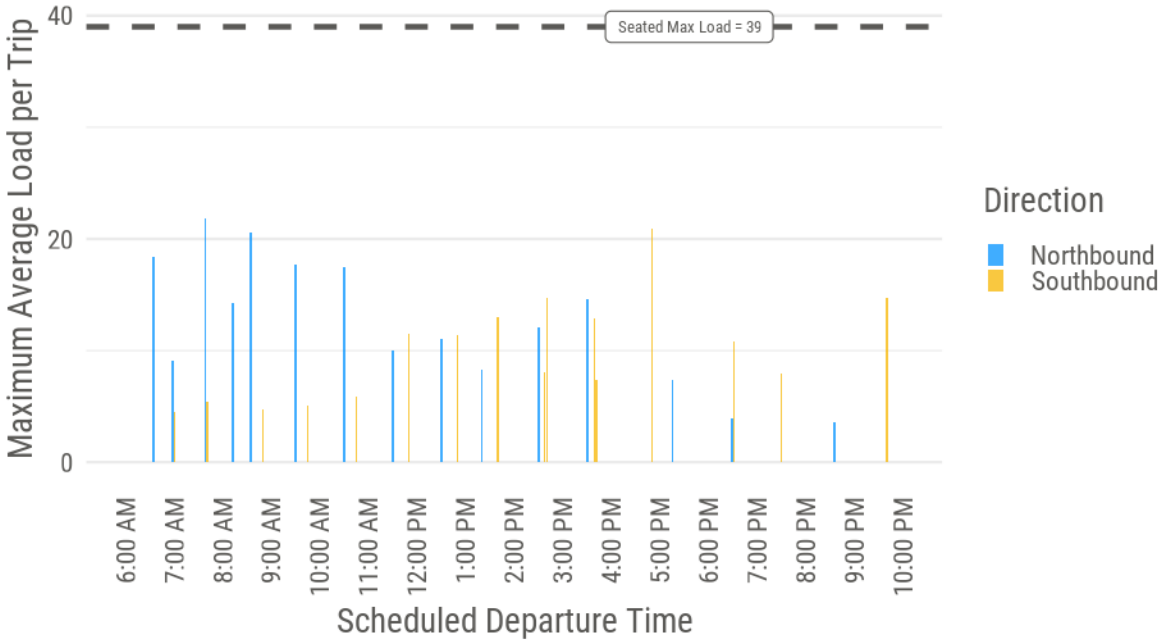


Figure 5 | Fall 2019 Weekday Maximum Loads by Trip



ON-TIME PERFORMANCE AND RUNNING TIMES

In the fall of 2019, Route 94's on-time performance was 84% on weekdays, 77% on Saturdays, and 80% on Sundays (see Table 4). On weekdays and Saturdays, Route 94 was more likely to be late than early, but on Sundays, problems with on-time performance reflect early arrivals.

Dropped trips are not a significant issue.

Table 4 | On-Time Performance

	Early (>2 Mins Early)	On Time (<2 Mins Early to 6 Mins Late)	Late (>6 Mins Late))	Missed Trips
Goal		**80%**		
Fall 2019 Actual				
Weekday	3.8%	84.0%	12.1%	0.1%
Saturday	1.3%	77.1%	21.6%	0.0%
Sunday	17.1%	80.0%	2.9%	0.0%

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

AVERAGE SPEEDS AND STOP SPACING

Route 94 generally operates with speeds of at least 15 MPH (see Figure 6). There are five stops per mile or fewer along much of Route 94 (see Figure 7), spacing that effectively balances speed and accessibility.

Figure 6 | Average Speeds: PM Peak Northbound

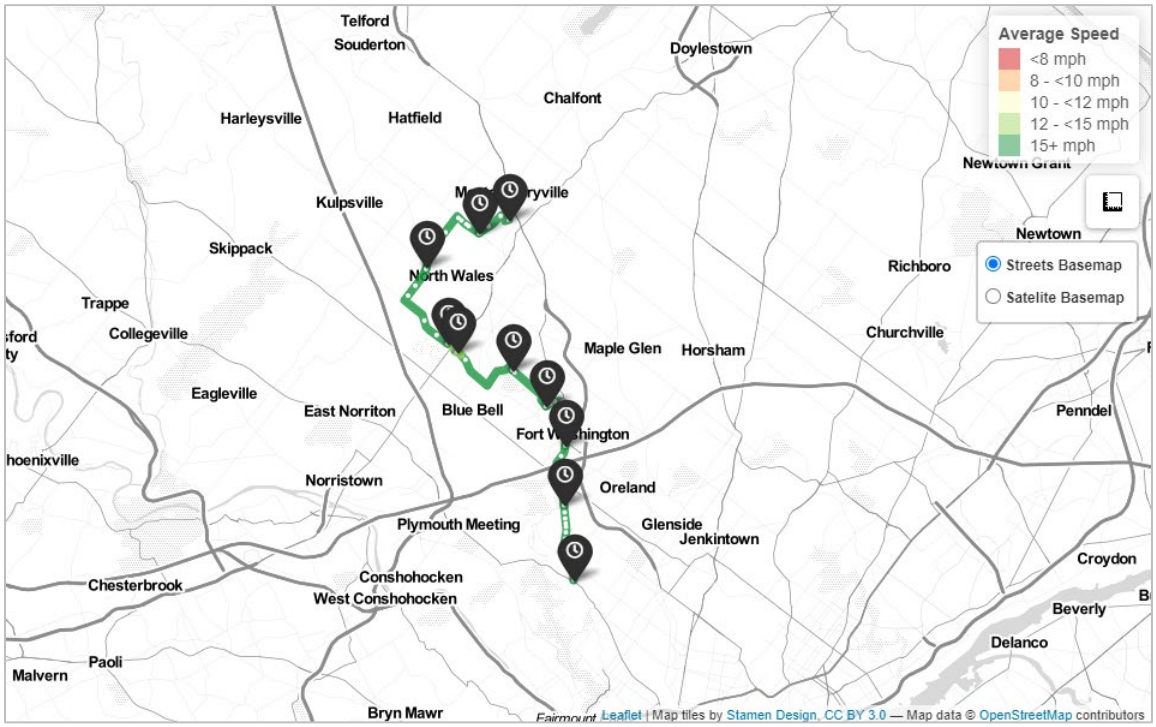
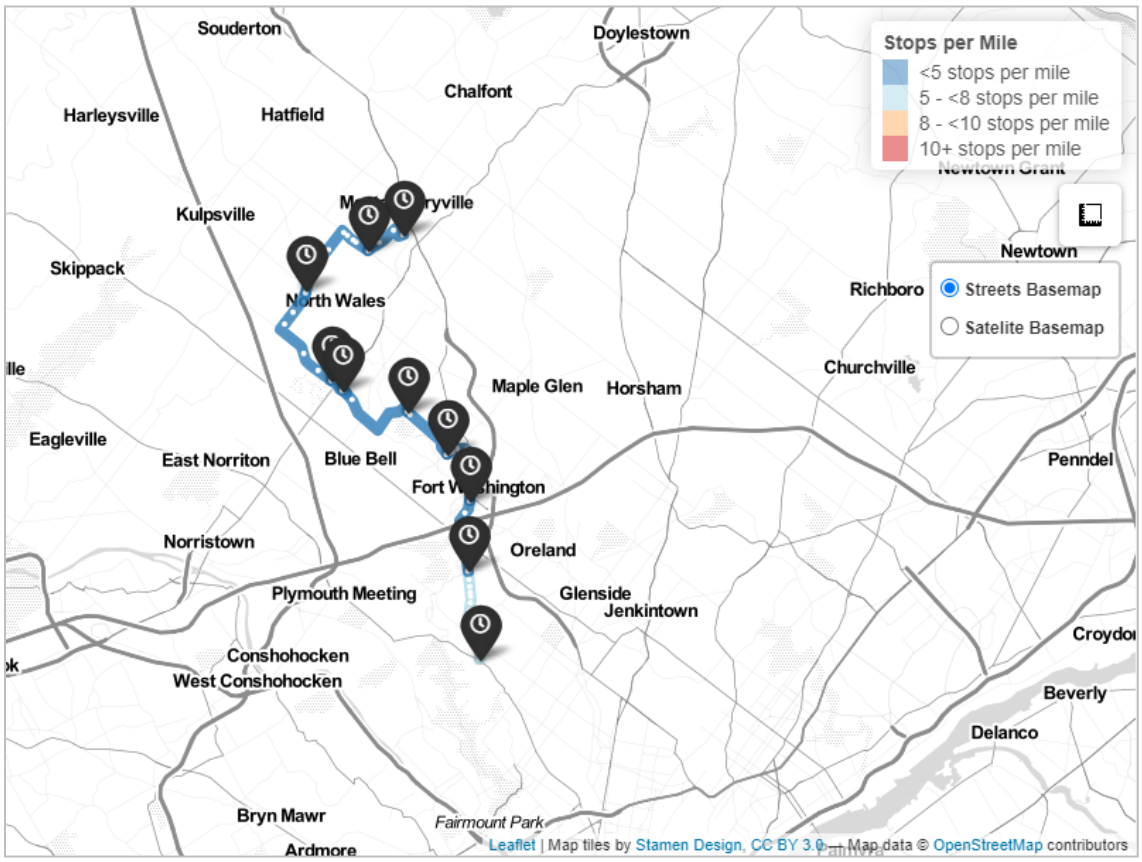


Figure 7 | Stop Spacing by Route Segment



RIDER CHARACTERISTICS

Route 94 riders are more likely to have a vehicle as compared to riders in the system overall. The route also has more white riders and fewer Black riders than the system average (see Table 5).

Table 5 | Rider Characteristics

	Route 94 Riders	Systemwide Average
Median Household Income	$41,003	$32,713
Share in Poverty	21%	30%
Ethnicity		
White	49%	38%
Black	38%	46%
Hispanic	7%	10%
Other	7%	7%
Without a Vehicle	23%	37%
Seniors	10%	15%
With a Disability	3%	2%

SERVICE IMPROVEMENT OPPORTUNITIES

Opportunities to strengthen Route 94 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Shorten Route.** The most productive segment of Route 94 is between the Chestnut Hill Loop and Montgomery County Community College. The route could be shortened to only serve this segment and be focused on times when the college is in session. Riders would still have access to Montgomery Mall through Route 96 (see below). Terminating the route at Montgomery County Community College, however, would require identifying a layover location either on campus or close to the campus.
- **Simplify and Coordinate Service:** Route 94 could also be improved through coordination with Routes 95 and 96. Routes 94 and 96 both provide service to Montgomery County Community College and Montgomery Mall. Route 95 shares some similar geography with Route 94 in Ambler. Potential coordination strategies include:
    - **Terminate Route 94 at Montgomery County Community College and rely on Route 96 to provide connections to Montgomery Mall:** Coordinating and condensing service between Montgomery County Community College and Montgomery Mall could create a faster and more direct connection between the community college and Montgomery Mall. This option would eliminate Route 94's service to Lansdale Station, but Route 132 could continue to serve it, or SEPTA could consider alternative options (see next page). Considerations associated with this opportunity include SEPTA's ongoing use of Montgomery Mall as a transfer center and (as noted) would require identifying a layover location at or close to the community college. This change would also require conversations with Montgomery County Community College.
    - **Terminate Route 94 at Montgomery Mall and terminate Route 96 at Lansdale Station:** Alternatively, Route 94 could provide the connection between Montgomery County Community College, and Montgomery Mall and Route 96 could serve Lansdale Station. This alternative would likely require realigning Route 94 to take a shorter and more direct path. Realignments, however, should not travel on Bethlehem Pike due to a lack of crossing facilities.
- **Restructure Weekend Service:** Ridership and service levels on Saturdays and Sundays are low. Service could be reorganized or restructured, potentially only traveling between Chestnut Hill and Fort Washington (or potentially Ambler) to serve the densest and most productive parts of the route only.
- **Consider alternative service models for regional rail connections.** Several suburban routes, including Route 94 are aligned to serve multiple regional rail stations. These alignments prioritize stops at rail stations over providing bus riders direct access to suburban destinations. A clear, explicit strategy for linking suburban bus routes and regional rail routes would strengthen the bus network and improve service effectiveness and productivity. Potential opportunities include:
    - **Prioritize regional rail stations for bus service.** SEPTA could prioritize a handful of stations based on connections to suburban destinations and rail service plus potentially station area density and demographics. These stations could be prioritized for connections to the bus network.
    - **Use microtransit for first mile/last mile connections.** SEPTA could provide access to regional rail stations using on demand microtransit type services.

SEPTA is already implementing microtransit in some parts of the service area, although station access would be a different application of the technology. Advancing this recommendation would also require prioritization of where (which regional rail stations) to serve.

- **Develop alternative service models.** Another opportunity would be to consider different ways to provide access to regional rail stations, including potentially by creating multimodal hubs with different options like car share, bike share and/or scooter share and/or partnerships with taxis and transportation network companies.