

ROUTE 39

Richmond-Cumberland to 33rd-Dauphin

KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route 39 travels east-west in North Philadelphia, providing riders with connections to both the Broad Street Line and Market-Frankford Line. Weekday ridership is less than 3,000 and both ridership and frequency of service are less than other similar routes in North Philadelphia.*
- *Operating speed on the route is very slow, and very closely spaced stops are a contributing factor. Route 39 is also slowed by its circuitous eastbound alignment.*
- *Increased frequency may be warranted since the route serves very dense residential areas similar to other more frequent routes. A contraflow bus lane on Susquehanna Avenue between 6th Street and American Street would enable a more direct alignment.*

ROUTE OVERVIEW

Route 39 travels east-west in North Philadelphia mostly along Dauphin Street and Susquehanna Avenue between Strawberry Mansion and Olde Richmond (see Figure 1). The route connects with both the Broad Street and Market-Frankford Lines.

Figure 1 | Route Map



SERVICE OVERVIEW

Schedule

Route 39 operates for approximately 20 hours a day on weekdays and weekends. Service on all days ends at 1:11 AM and begins at 4:55 AM on weekdays and 5:42 AM on weekends. Frequencies vary by time of day (see Table 1). On weekdays:

- Service during peak periods has average headways of 18 minutes during the AM peak and 15 minutes during the PM peak.

- During middays service is every 18 minutes on average.

On weekends, service frequencies average 31 minutes during the day and every 54 minutes at night.

Table 1 | Schedule Statistics

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
Weekdays	4:55 AM to 1:11 AM		
Early AM	4:55 AM to 5:59 AM	30 – 32	31
AM Peak	6:00 AM to 8:59 AM	15 – 31	18
Midday	9:00 AM to 2:59 PM	14 – 20	18
PM Peak	3:00 PM to 5:59 PM	13 – 20	15
Evening	6:00 PM to 9:59 PM	14 – 42	28
Late Night	10:00 PM to 11:59 PM	38 – 65	56
Owl	Midnight to 1:11 AM	60 – 66	64
Saturdays	5:42 AM to 1:11 AM		
Day	8:00 AM to 5:59 PM	29 – 45	31
Night	Before 8:00 AM & After 5:59 PM	42 – 65	54
Sundays	5:42 AM to 1:11 AM		
Day	8:00 AM to 5:59 PM	29 – 45	31
Night	Before 8:00 AM & After 5:59 PM	42 – 65	54

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

Service Patterns

Route 39 operates with one pattern in each direction (see Table 2), which makes service simple and understand.

Table 2 | Service Patterns

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day		
					Wkd	Sat	Sun
Eastbound							
229535	33 rd St & Dauphin St Loop	Cumberland St & Richmond St	Primary Pattern	0	55	30	30
Westbound							
229877	Cumberland St & Richmond St	33 rd St & Dauphin St Loop	Primary Pattern	0	55	30	30

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

RIDERSHIP

In Fall 2019, Route 39 carried 2,648 passengers on weekdays, 1,001 on Saturdays, and 783 on Sundays (see Table 3).

Table 3 | Fall 2019 Ridership and Productivity

	Weekdays	Saturdays	Sundays
Daily Ridership	2,648	1,001	783
Rank	67	72	68
Passengers per Revenue Vehicle Hour	47.9	33.4	26.1
Rank	41	56	71

Transfer Patterns

Many Route 39 trips involve a transfer to or from the Broad Street Line and/or Market-Frankford Line. The largest transfer rates are to and from:

- Broad Street Line (22.3% of all trips)
- Market-Frankford Line (18.3%)
- Route 33 Penn’s Landing to 23rd Street-Venango Street (3.6%)
- Route 47 Whitman Plaza to 5th Street-Godfrey Avenue (3.5%)
- Route 16 City Hall to Cheltenham Avenue-Ogontz Avenue (3.4%)

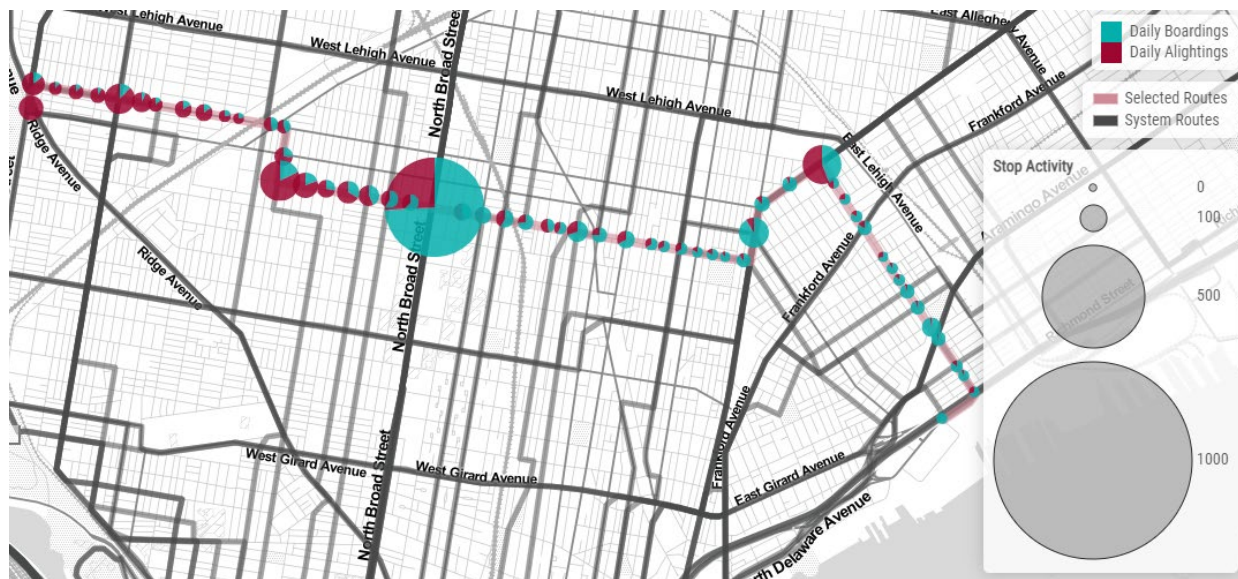
Weekend transfer rates and patterns are similar.

Ridership by Stop

There is more consistent ridership activity at the stops west of Broad Street. For westbound trips on weekdays, some highlights include:

- 21 passengers board at the first three stops on Cumberland and Huntingdon Streets
- 68 passengers board and 87 alight at Huntingdon-Kensington
- 98 passengers board and 9 alight at Front-Dauphin
- There are 351 boardings and 122 alightings at Broad-Susquehanna
- There are 29 boardings and 133 alightings at 21st-Susquehanna
- 13 passengers board and 95 alight at 29th-York
- 79 passengers alight at the last stop in the 33rd-Dauphin Loop

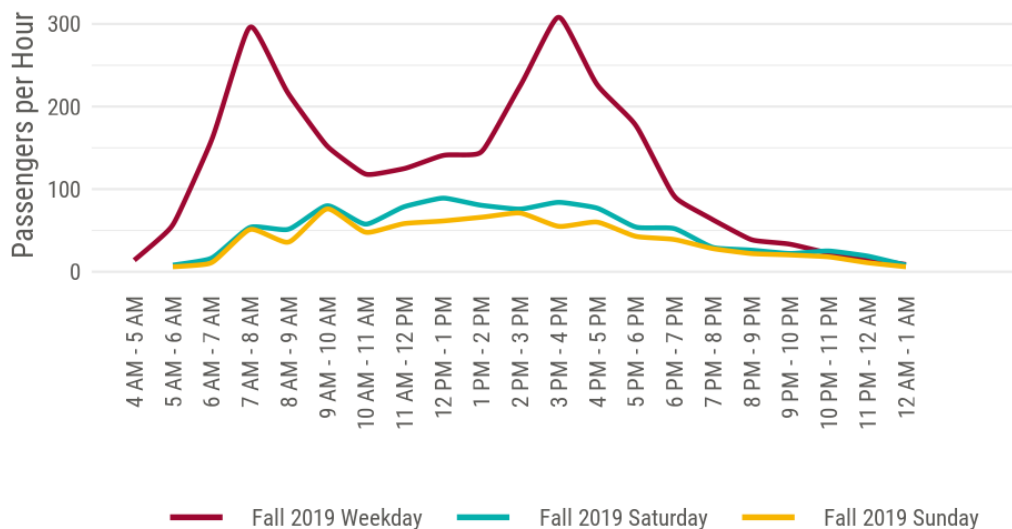
Figure 2 | Weekday Westbound Ridership by Stop



Ridership by Time of Day

Ridership by Hour

In Fall 2019, weekday ridership was strongest during the peak periods, when ridership was approximately 300 riders per hour (see Figure 3). Midday ridership was about half of typical peak ridership. Ridership dropped significantly after 4:00 PM, with less than 40 riders per hour by 8:00 PM. Weekend ridership is less peaked than weekdays, with the greatest demand between 9:00 AM and 4:00 PM.



Ridership and Maximum Loads by Trip

In Fall 2019, Route 39 showed a weekday average of 24 riders per trip, with ridership greatest on those trips made during the peak periods (see Figure 4):

- AM Peak trips carried 20 to 55 riders per trip
- Midday trips carried 15 to 25 riders per trip
- PM Peak trips carried 30 to 55 riders per trip

There is consistent ridership turnover along Route 39 due to connections with rapid transit lines, with the greatest loads observed in both directions between 15th Street and 17th Street. Maximum loads are below seating capacity on all trips (see Figure 5).

Ridership on weekends was steady between 8:00 AM and 11:00 PM with most trips carrying between 10 and 30 riders, and Sunday ridership slightly lower than Saturdays. On both days, late night ridership was low with most trips carrying fewer than 10 riders.

Figure 4 | Fall 2019 Weekday Ridership by Trip

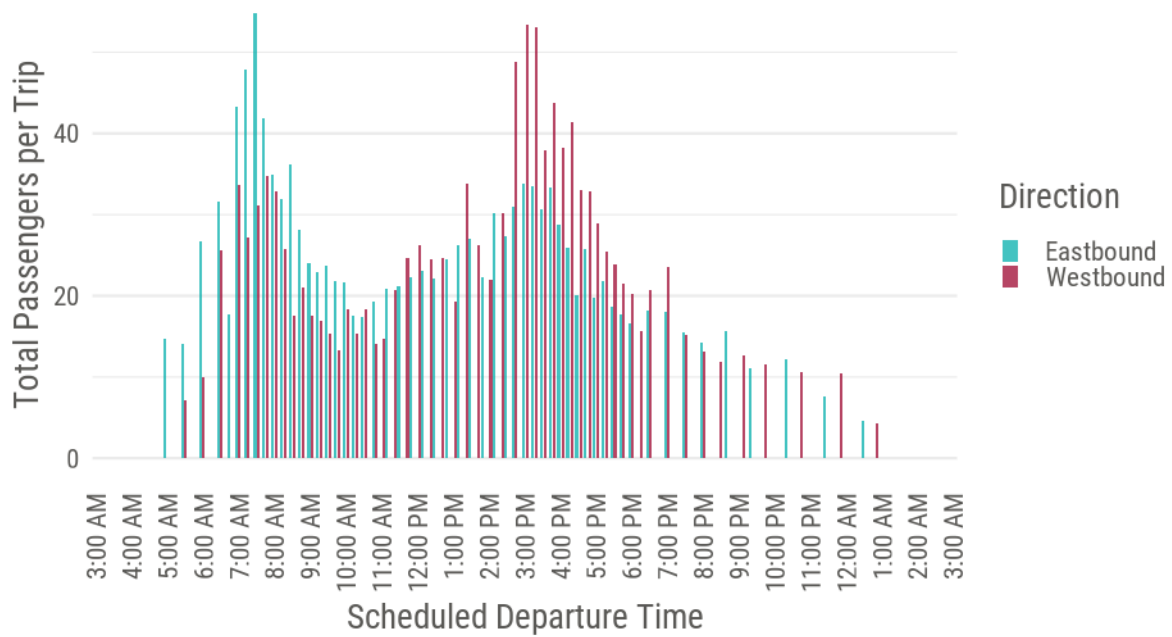
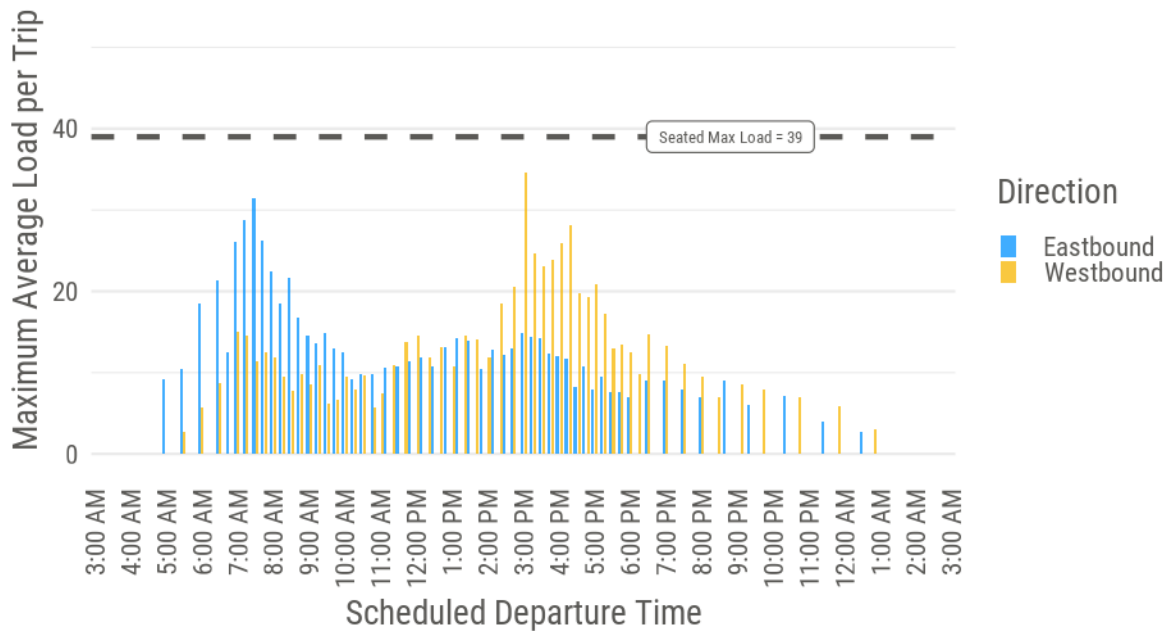


Figure 5 | Fall 2019 Weekday Maximum Loads by Trip



ON-TIME PERFORMANCE

In Fall 2019, Route 39 showed substandard on-time performance with 70 percent of weekday trips meeting SEPTA’s standard. Weekends displayed stronger reliability, with 78 percent of Saturday trips and 81 percent of Sunday trips meeting SEPTA’s standard (see Table 4). On weekdays, trips are much more likely to be late than early.

Table 4 | Fall 2019 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	7.0%	69.5%	23.4%	1.8%
Saturday	8.9%	77.8%	13.3%	0.8%
Sunday	10.3%	81.1%	8.6%	6.2%

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

AVERAGE SPEEDS AND STOP SPACING

Weekday speeds on Route 39 are slow, with buses traveling between 8 and 10 mph for most of the route during the PM Peak and even slower just west of Broad Street (see Figure 6).

Slow speeds result in part from stop spacing along the entire travel corridor. Stops on Route 39 are spaced at a rate of between 10 and 15 stops per mile (see Figure 7). The overall average is 12 stops per mile which is higher than almost any other SEPTA route. Speeds on Route 39’s eastbound alignment are also slowed by its circuitous alignment east of Broad Street.

Figure 6 | Fall 2019 PM Peak Eastbound Speeds

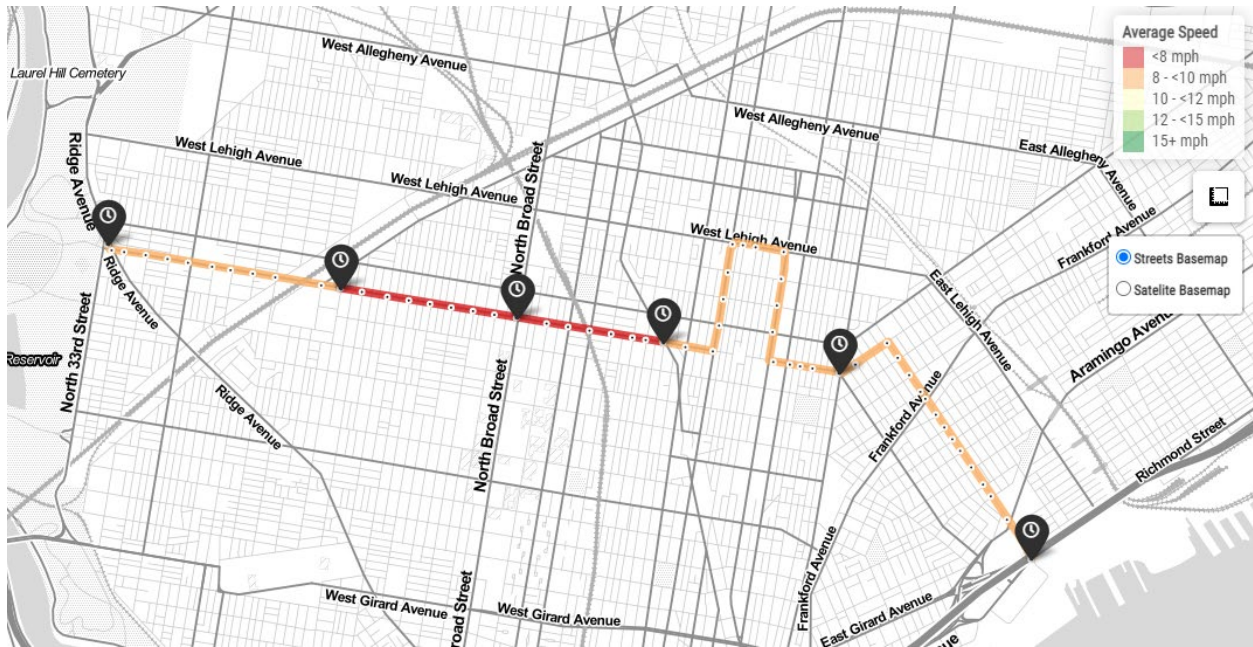
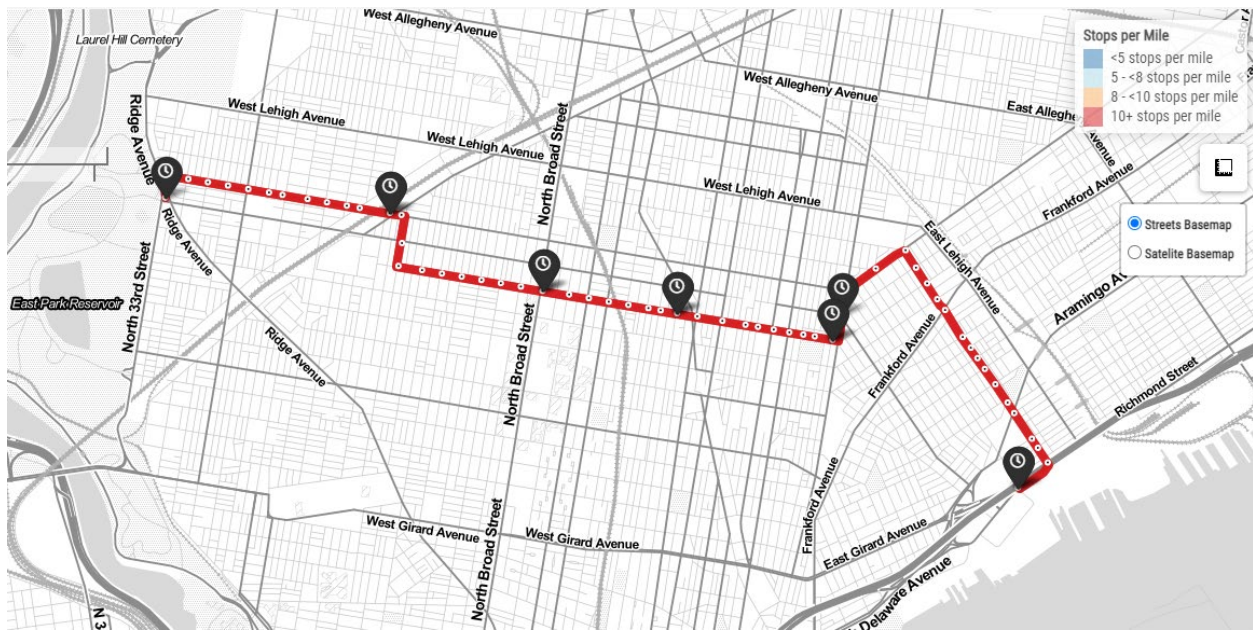


Figure 7 | Stop Spacing by Route Segment



RIDER CHARACTERISTICS

As compared with SEPTA’s entire service area, Route 39 riders are more likely to have low incomes, to be Black, and to lack access to a vehicle (see Table 5).

Table 5 | Rider Characteristics

	Route 39 Riders	Systemwide Average
Median Household Income	\$24,873	\$32,713
Share in Poverty	46%	30%
Ethnicity		
White	22%	38%
Black	61%	46%
Hispanic	15%	10%
Other	2%	7%
Without a Vehicle	51%	37%
Seniors	17%	15%
With a Disability	3%	2%

SERVICE IMPROVEMENT OPPORTUNITIES

Route 39 is a simple route that carries moderate ridership. Opportunities to strengthen it are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Consolidate Bus Stops:** Stop spacing along Route 39 is close, contributing to slow speeds on the corridor. There are opportunities to consolidate stops without significantly decreasing walk access along the route.
- Streamline Route Alignment:** Route 39 deviates to serve Lehigh Avenue in the eastbound direction due to a large recreational field which disrupts the street network. By streamlining this route segment, Route 39 would operate in a more simple, direct way and would reflect a similar alignment to its westbound route pattern. However, a contraflow bus lane on Susquehanna Avenue between 6th and American Streets would be required.
- Improve Service Frequencies:** Route 39 serves relatively high population densities and would likely benefit from increased service frequencies that would be similar to other east-west routes in North Philadelphia. Weekday frequencies could be increased to provide 15-minute or better all-day service.