

ROUTE 47M

Whitman Plaza to 7th-Spring Garden via 9th Street

KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route 47M supplements the nearby Route 47 by providing a limited number of northbound trips on 9th Street which is the only direct service to the South 9th Street Italian Market.*
- *Weekday ridership in Fall 2019 was just under 1,000 passengers. The alignment is direct between Whitman Plaza and Spring Garden Street. Service only operates during hours when the Italian Market is open. Passengers must use other service for the southbound part of any round trip.*
- *9th Street is problematic for bus operations, in part due to the outdoor market, and the street is regularly closed for festivals and other special events. Route 47M should be discontinued with resources reallocated to other nearby service, including Route 47.*

ROUTE OVERVIEW

Route 47M provides supplemental service to the nearby Route 47, with a limited number of northbound-only trips via 9th Street between Whitman Plaza and Spring Garden Street (see Figure 1). The Route 47M provides the only direct service to the outdoor Italian Market on 9th Street and only operates when the market is open. However, 9th Street is narrow and problematic for bus operations, partly because of the outdoor market, and 9th Street is sometimes closed for festivals and other special events. Route 47M service should be discontinued with its resources reallocated to other nearby service, including Route 47.

SERVICE OVERVIEW

Schedule

Route 47M only operates 4-8 hours per day and its schedule is aligned with the hours that the Italian Market is fully open. Service begins on all days between 8:45 AM and 10:00 AM and ends at approximately 5:00 PM (earlier on Sundays). Frequencies are approximately every 20 minutes on weekdays and every 30-36 minutes on weekends (see Table 1).

Figure 1 | Route Map


Table 1 | Schedule Statistics

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
Weekdays	8:48 AM to 4:41 PM		
Early AM	4:00 AM to 5:59 AM	NA	NA
AM Peak	6:00 AM to 8:59 AM	NA	NA
Midday	9:00 AM to 2:59 PM	16-31	21
PM Peak	3:00 PM to 5:59 PM	18-24	20
Evening	6:00 PM to 9:59 PM	NA	NA
Late Night	10:00 PM to 11:59 PM	NA	NA
Owl	Midnight to 3:59 AM	NA	NA
Saturdays	9:00 AM to 5:17 PM		
Day	8:00 AM to 5:59 PM	18-49	30
Night	5:59 PM to 7:59 AM	NA	NA
Sundays	9:54 AM to 2:05 PM		
Day	8:00 AM to 5:59 PM	35-39	36
Night	5:59 PM to 7:59 AM	NA	NA

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

Service Patterns

Route 47M only operates in the northbound direction and has two service patterns (see Table 2). All weekday trips use the primary pattern as do most weekend trips; a few weekend trips bypass the Whitman Plaza.

Table 2 | Service Patterns

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day		
					Wkd	Sat	Sun
Northbound							
229593	Whitman Plaza	7th Street& Spring Garden St	Primary Pattern	-	24	16	7
229594	9th Street& Oregon St	7th Street& Spring Garden St	Short-turn	0	0	2	1

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

RIDERSHIP

In Fall 2019, Route 47M carried 972 passengers on weekdays, 608 on Saturdays, and 210 on Sundays (see Table 3). Based on weekday ridership, it was SEPTA 94th highest ridership route.

Table 3 | Fall 2019 Ridership and Productivity

	Weekdays	Saturdays	Sundays
Daily Ridership	972	608	210
Rank	94	82	93
Passengers per Revenue Vehicle Hour	42.9	33.9	30.4
Rank	55	53	57

Transfer Patterns

Some of the transfers shown for Route 47 may be passengers making relatively short round trips using Route 47M northbound and Route 47 southbound. The largest transfer volumes are to and from:

- Market-Frankford Line (11.1% of all trips)
- Route 47 (Whitman Plaza to 5th Street and Godfrey Avenue) (7.2%, some may be making round trips)
- Route 79 (Columbus Commons to 29th Street and Snyder Avenue) (3.4%)
- Broad Street Line (3.1%)
- Route 29 (Pier 70 to 33rd Street and Dickinson Street) (2.6%)

Weekend transfer patterns are similar.

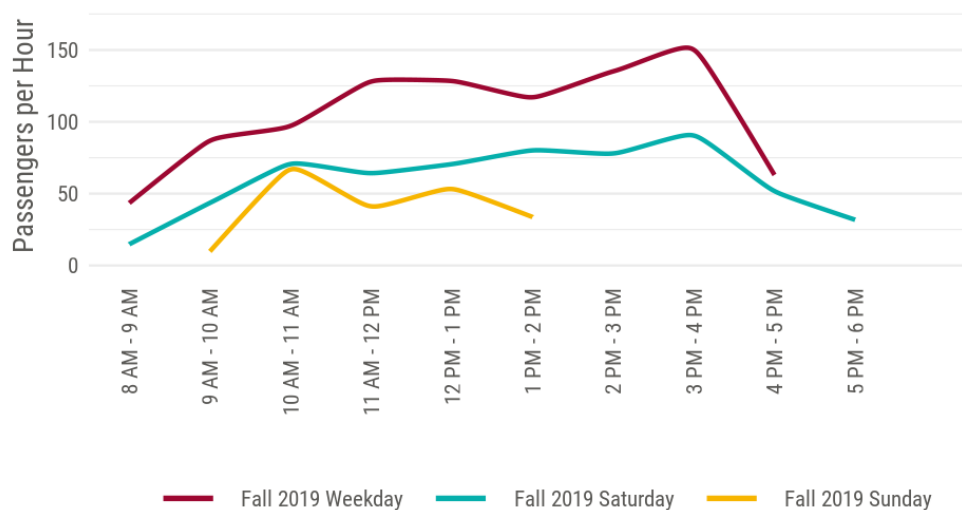
Ridership by Stop

Demand is relatively low at each stop for Route 47M but consistent throughout the route. The Center City stops have the highest activity. For weekday trips (which only operate northbound) some highlights:

- The largest number of boardings (60) was at the origin at Whitman Plaza; no other stop had more than 25 boardings
- The five consecutive Center City stops between Walnut Street and Race Street were the only stops with more than 30 alightings
- Specific to the Italian Market, there were a total of 25 boardings and 9 alightings in the northbound direction at the two stops adjacent to the market and 11 boardings and 21 alightings in the southbound direction, indicating there is relatively low demand for this destination.

Ridership by Time of Day

Figure 2 | Ridership by Hour: Fall 2019



Ridership by Hour

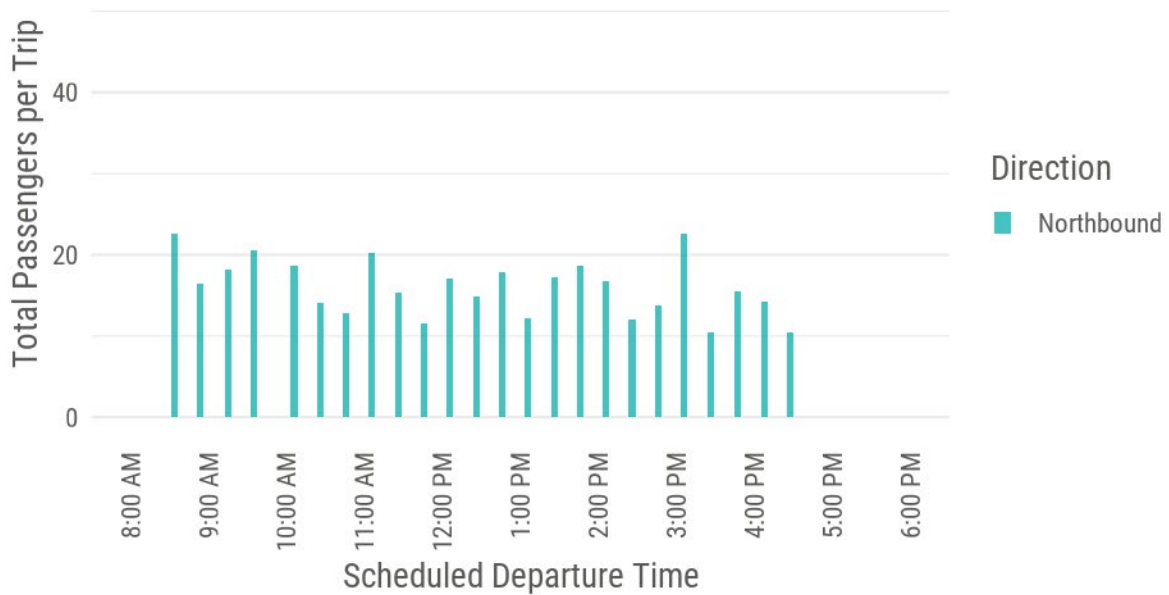
In Fall 2019, ridership on all days was fairly consistent throughout the limited service hours each day (see Figure 2). The first and last hours of service each day had somewhat lower ridership.



Ridership and Maximum Loads by Trip

Most trips on weekdays carried between 15-25 passengers (see Figure 4). There is some turnover along the route, which made the maximum loads on each trip less than 20. Weekend trips had similar loads and ridership.

Figure 4 | Fall 2019 Weekday Ridership by Trip



ON-TIME PERFORMANCE AND RUNNING TIMES

On-Time Performance

In Fall 2019, Route 47M's on-time performance was 67.4 percent on weekdays, 71.7 percent on Saturdays, and 78.3 percent on Sundays (see Table 4). Weekday trips were more likely to be late than early, while weekend trips were more likely to be early than late.

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	8.6%	67.4%	24.0%	4.2%
Saturday	18.2%	71.7%	10.1%	1.4%
Sunday	13.5%	78.3%	8.2%	9.2%

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

AVERAGE SPEEDS AND STOP SPACING

On weekdays, Route 47M travels between 8 and 10 mph south of Washington Avenue (see Figure 5) with slower speeds north of Washington Avenue. Slow speeds are attributable to

traffic congestion, the effects of the outdoor market on 9th Street, as well as stop spacing along the route. Route 47M has an average of almost 12 stops per mile over its entire length which makes it the SEPTA bus route with the 2nd-highest number of stops per mile (see Figure 6).

Figure 5 | Fall 2019 PM Peak Northbound Speeds

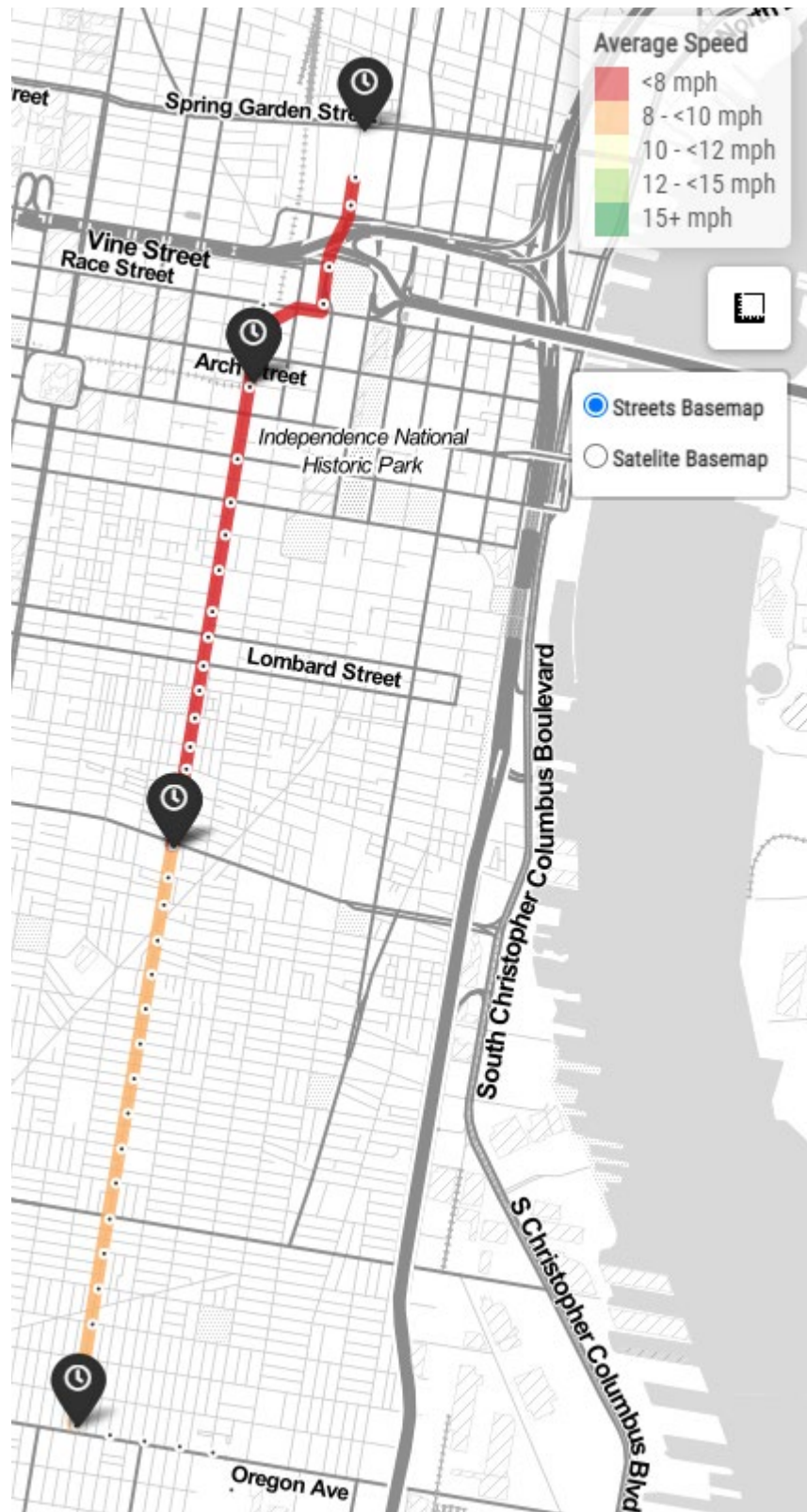
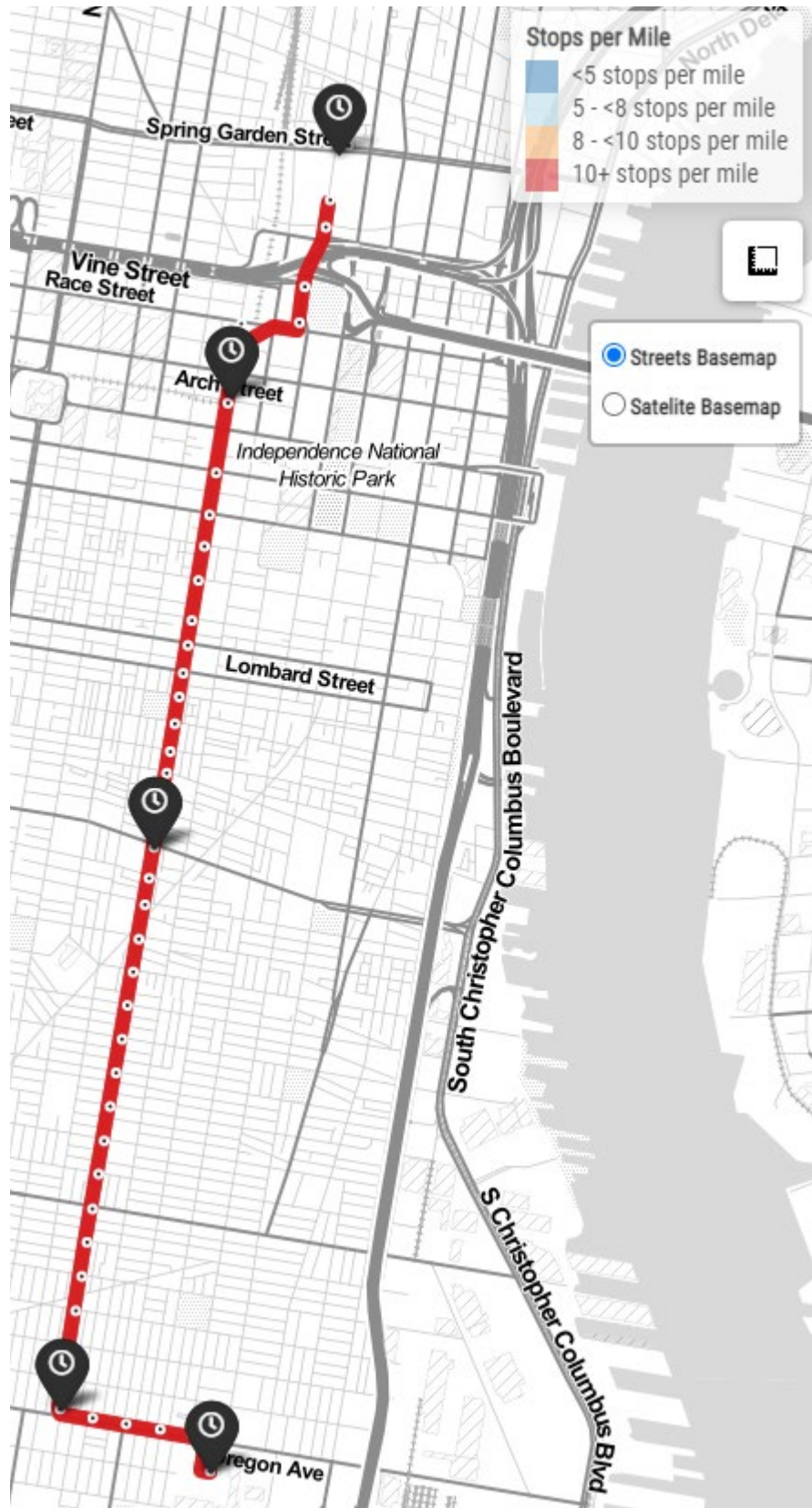


Figure 6 | Stop Spacing by Route Segment



RIDER CHARACTERISTICS

There was not enough available data to compare the demographics of Route 47M riders with the riders of the overall SEPTA system.

SERVICE IMPROVEMENT OPPORTUNITIES

Discontinue Service: Route 47M should be discontinued with its resources reallocated to other nearby service, including Route 47. Providing bus service on 9th Street is difficult, in part due to the outdoor Italian Market. The street is also closed regularly for festivals and other special events.

Route 47 service is within easy walking distance on 7th and 8th Streets, and passengers already must find other service for the southbound leg of their round trip since Route 47M only operates northbound. Route 47M is competing with Route 47 more than complementing it, and the resources would be better used to improve service on other routes in the area.