

# ROUTE 12

## Columbus-Dock to 50<sup>th</sup>-Woodland

### KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route 12 connects Kingsessing in Southwest Philadelphia with Center City and Society Hill. Its alignment is fairly direct overall and the route carried nearly 3,000 riders per weekday in the fall of 2019.*
- *As with many SEPTA urban routes, Route 12’s service is slow, in part because stops are spaced too closely. On-time performance is relatively good, however.*
- *Route 12 duplicates east-west service in Center City with other routes. It may be possible to consolidate these services on fewer corridors and/or connect bus riders to the Market-Frankford Line for some of their journey.*

### ROUTE OVERVIEW

Route 12 operates between Society Hill and Kingsessing in Southwest Philadelphia (see Figure 1). The route passes through Center City and crosses the Schuylkill River on the Grays Ferry Avenue bridge. Route 12’s alignment is fairly direct overall, although the path through Center City is not as straight.

Figure 1 | Route Map



### SERVICE OVERVIEW

#### Schedule

Route 12 operates until approximately 1:06 AM on all days of the week. Service begins at approximately 5:00 AM on weekdays and approximately 6:00 AM on weekends. Frequencies vary by time of day (see Table 1):

- On weekdays, frequencies are consistent from the start of service until about 8:00 PM or 9:00 PM, with peak period frequencies roughly every 16-18 minutes and midday frequencies approximately every 19 minutes on average.
- On weekend days, service frequencies average every 22-30 minutes during the day and every 41-46 minutes at night.

**Table 1 | Schedule Statistics**

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
<b>Weekdays</b>	5:02 AM to 1:06 AM		
Early AM	5:02 AM to 5:59 AM	20 - 20	20
AM Peak	6:00 AM to 8:59 AM	12 - 20	16
Midday	9:00 AM to 2:59 PM	15 - 22	19
PM Peak	3:00 PM to 5:59 PM	15 - 20	18
Evening	6:00 PM to 9:59 PM	15 - 32	20
Late Night	10:00 PM to 11:59 PM	30-32	30
Owl	Midnight to 1:06 AM	30	30
<b>Saturdays</b>	5:57 AM to 1:03 AM		
Day	8:00 AM to 5:59 PM	20 - 30	22
Night	Before 8:00 AM & After 5:59 PM	20 - 70	41
<b>Sundays</b>	6:00 AM to 1:06 AM		
Day	8:00 AM to 5:59 PM	29 - 34	30
Night	Before 8:00 AM & After 5:59 PM	29 - 68	46

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

## Service Patterns

Route 12 has only two weekday service patterns, one in each direction. All trips on all days use these primary patterns (see Table 2).

**Table 2 | Service Patterns**

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day		
					Wkd	Sat	Sun
<b>Eastbound</b>							
229241	Woodland Av & 50th St	Dock St & Front St	Primary Pattern	0	61	41	32
<b>Westbound</b>							
229242	Dock St & Front St	Woodland Av & 50th St	Primary Pattern	0	61	41	32

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

## RIDERSHIP

In Fall 2019, Route 12 carried 2,696 passengers on weekdays, 1,363 on Saturdays, and 908 on Sundays (see Table 3). Based on weekday ridership, it was SEPTA's 66th highest ridership route.

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

	Weekdays	Saturdays	Sundays
<b>Daily Ridership</b>	<b>2,696</b>	<b>1,363</b>	<b>908</b>
Rank	66	60	62
<b>Passengers per Revenue Vehicle Hour</b>	<b>37.8</b>	<b>31.5</b>	<b>29.7</b>
Rank	69	64	59

### Transfer Patterns

Eight percent of trips involve a transfer to or from the Broad Street Line at Walnut-Locust Station. The Market-Frankford Line does not connect directly with Route 12 but is within two blocks and some people make that transfer as well. The largest transfer volumes are to and from:

- Broad Street Line (8% of all trips)
- Market-Frankford Line (3.9%)
- Route 52 (49<sup>th</sup> Street and Woodland Avenue to 54<sup>th</sup> Street and City Avenue or 50<sup>th</sup> Street and Parkside Avenue) (2.3%)
- Route 17 (Front Street and Market Street to 20<sup>th</sup> Street and Johnston Street and to Broad Street and Pattison Avenue) (2.1%)
- Route 21 (Penn’s Landing to 69<sup>th</sup> Street Transportation Center) (2.0%)

Weekend transfer percentages are similar to weekday.

### Ridership by Stop

The western terminus at 50<sup>th</sup> Street and Woodland Avenue, where Route 12 connects with the Route 11 trolley, generates significant boardings and alightings. Other stops with higher ridership are in Center City and in the Grays Ferry neighborhood. For weekday eastbound trips, some examples include:

- 224 riders board and 37 alight at the combined three stops at 27<sup>th</sup> Street, 28<sup>th</sup> Street, and 29<sup>th</sup> Street on Grays Ferry Avenue
- 79 riders board and 143 alight at Broad Street and Locust Street

Society Hill has somewhat lower ridership. Another stop with higher ridership is at 8<sup>th</sup> Street and Locust Street in Center City.

Figure 2 | Weekday Eastbound Ridership by Stop



## Ridership by Time of Day

### Ridership by Hour

In Fall 2019, weekday ridership was somewhat peaked although midday ridership per hour was more than half of peak period ridership. Ridership declined quickly after about 6:00 PM (see Figure 3). Weekend ridership was steadier throughout the day, particularly between 11:00 AM and 6:00 PM.

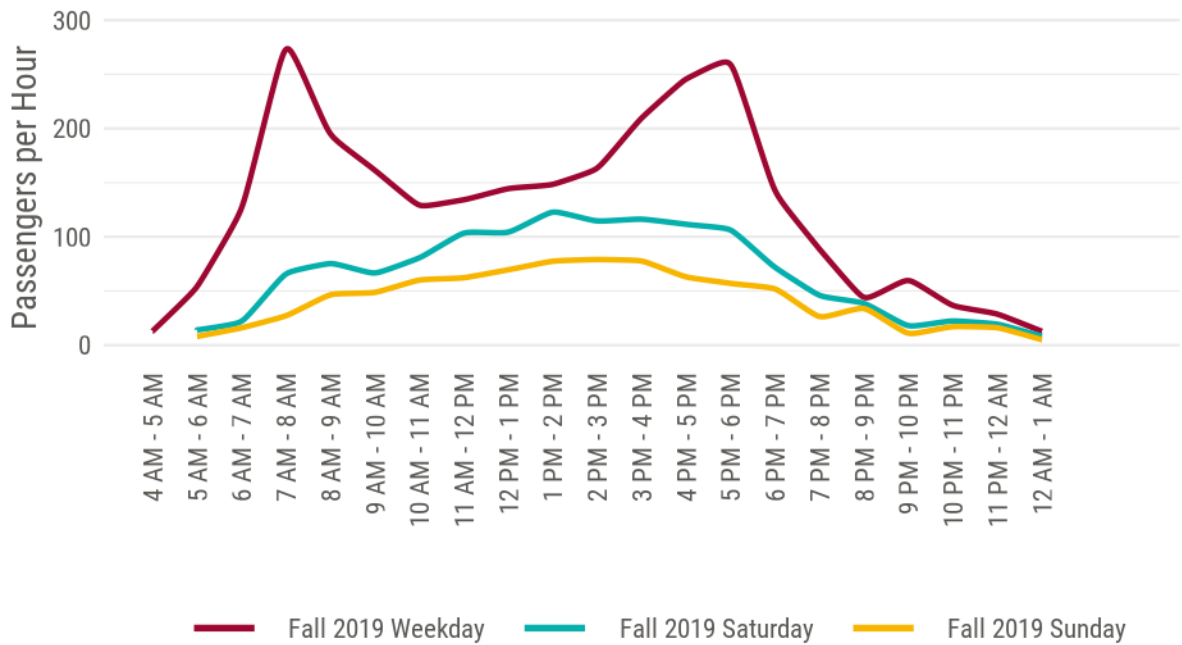
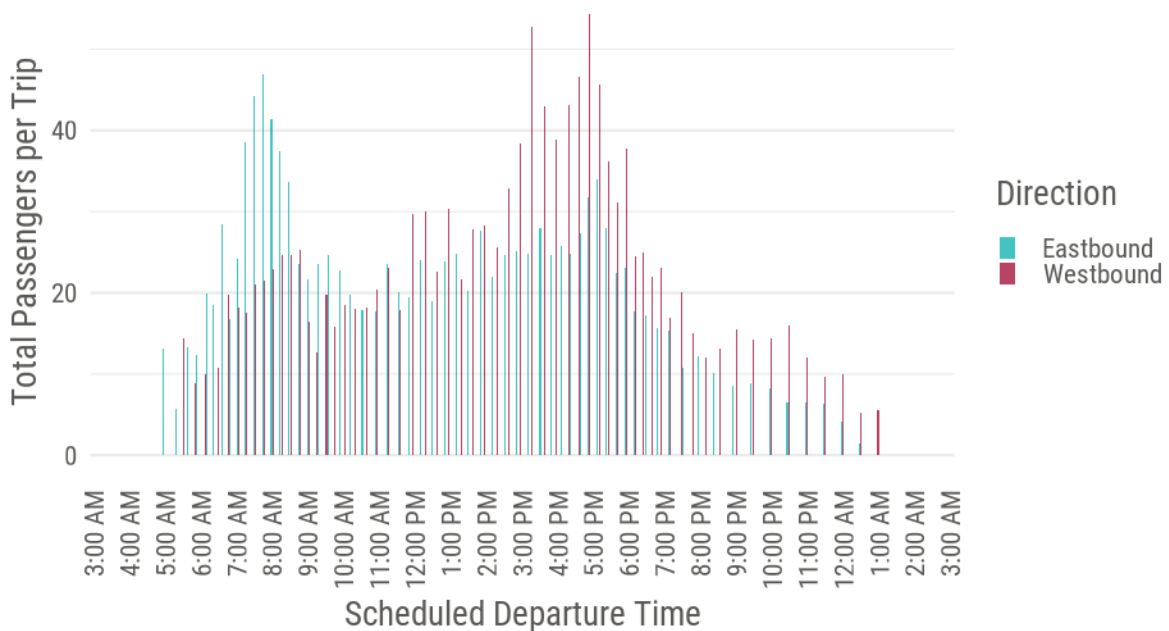
## Ridership and Maximum Loads by Trip

In Fall 2019, weekday ridership per trip was moderate on most trips (see Figure 4):

- Peak trips carried 30 to 50 passengers
- Midday trips carried 20 to 30 passengers
- After 6:00 PM, ridership decreased steadily from 25 passengers per trip to around 10.

Route 12 is short so maximum loads are relatively close to the total passengers on each trip. No trips have loads exceeding the seating capacity.

Weekend trips carry around 20-25 passengers during most of the day, with fewer during mornings and evenings. Sunday ridership is somewhat lower than Saturday.

**Figure 3 | Ridership by Hour: Fall 2019**

**Figure 4 | Fall 2019 Weekday Ridership by Trip**


## ON-TIME PERFORMANCE AND RUNNING TIMES

### On-Time Performance

In Fall 2019, Route 12's on-time performance was 78.3 percent on weekdays, 72.9 percent on Saturdays, and 84.3 percent on Sundays (see Table 4). On all days, trips are 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
<b>Goal</b>		<b>80%</b>		
<b>Fall 2019 Actual</b>				
Weekday	8.2%	78.3%	13.5%	3.7%
Saturday	8.4%	72.9%	18.7%	2.6%
Sunday	5.3%	84.3%	10.4%	3.6%

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

## AVERAGE SPEEDS AND STOP SPACING

On weekdays during the PM Peak, Route 12 travels between 8 and 10 mph outside of Center City and less than 8 mph when it travels through Center City (see Figure 5). Slow speeds are attributable to traffic congestion in Center City as well as stop spacing along the route. Route 12 has an average of 10 stops per mile over its entire length; but some segments have more than 13 per mile (see Figure 6).

**Figure 5 | Fall 2019 PM Peak Eastbound Speeds**

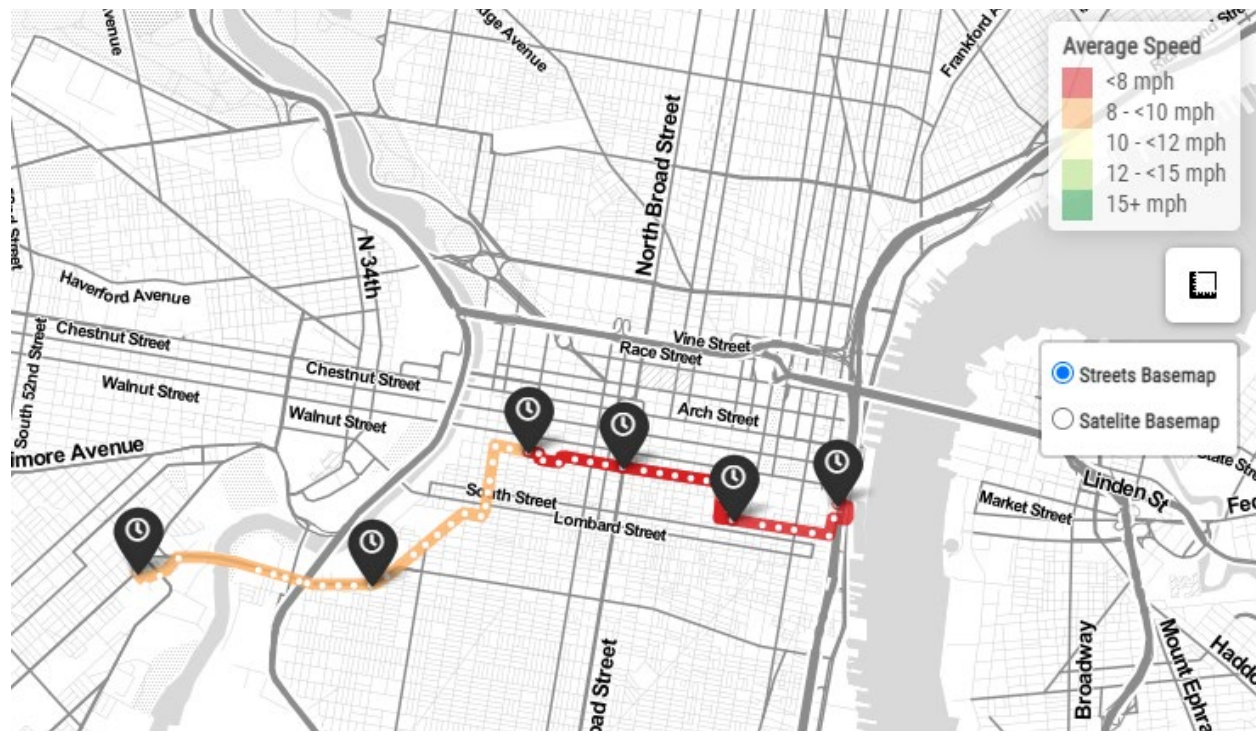
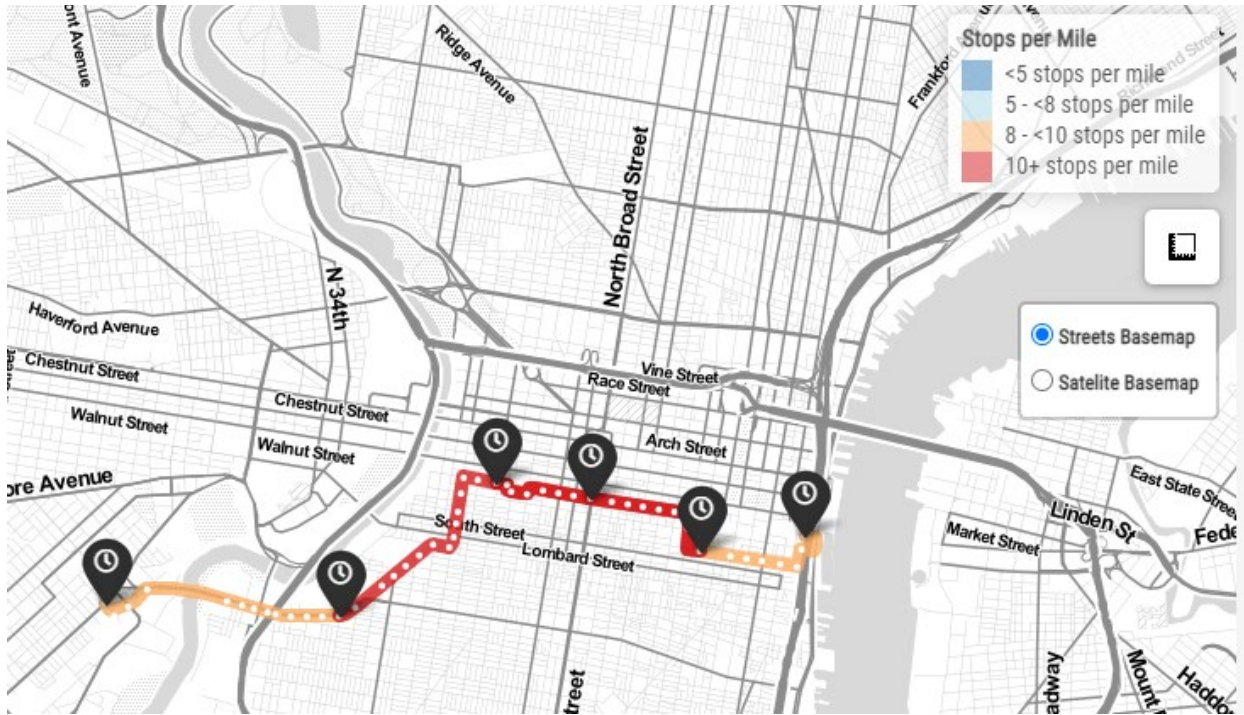


Figure 6 | Stop Spacing by Route Segment



## RIDER CHARACTERISTICS

Route 12’s rider demographics differ in some ways from SEPTA’s entire service area (see Table 5). Route 12 riders have a higher median income and are more likely to be white. Route 12 also serves a higher percentage of seniors and people without a vehicle.

Table 5 | Rider Characteristics

	Route 12 Riders	Systemwide Average
Median Household Income	\$40,982	\$32,713
Share in Poverty	27%	30%
Ethnicity		
White	51%	38%
Black	37%	46%
Hispanic	7%	10%
Other	5%	7%
Without a Vehicle	50%	37%
Seniors	27%	15%
With a Disability	2%	2%

## SERVICE IMPROVEMENT OPPORTUNITIES

Opportunities to strengthen Route 12 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Move Eastern Terminus to Market-Frankford Line:** Connecting the route with the MFL directly may enable the route to be shortened with improved frequency. This change would also alleviate concerns about the existing end-of-line in Society Hill which is problematic.
- **Combine with Route 64 in West Philadelphia:** Extending Route 12 on the western end may allow Route 64 to be shortened or consolidated. The two routes overlap in the Grays Ferry neighborhood.
- **Serve New Bellwether District:** Route 12 currently passes near the northern edge of the very large, proposed Bellwether District redevelopment of the former PES refinery, and development is planned to begin in that area of the district first. The employees who will be employed at the new logistics hub within the development will be traveling from throughout the region and ensuring there is a transfer opportunity between Route 12 and the Market-Frankford Line is crucial. If the development proceeds as planned, Route 12 service and routing should take this into consideration as a longer-term concept.
- **Straighten Center City Alignment:** Consolidating Center City east-west bus service on fewer corridors with priority treatments can improve speed and on-time performance, including Route 12.
- **Discontinue Service:** Discontinue Route 12 to provide additional service investment to Route 40. Route 40 is presently a short walk from Route 12 but more frequent.