

# ROUTE 78

## Express Cornwells Heights to Center City

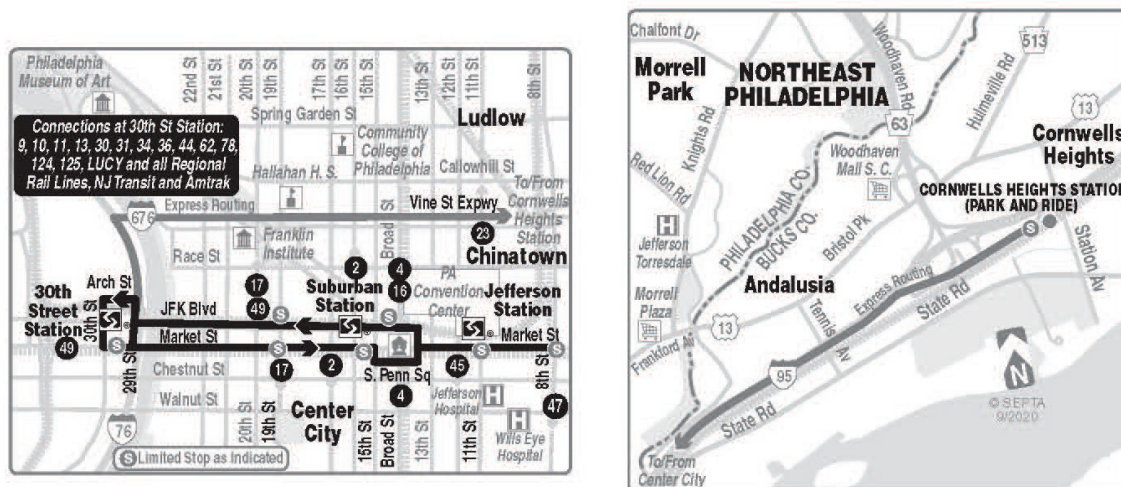
### KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route 78 is a specialized express service between Market Street in Center City and the Cornwells Heights Regional Rail Station in Bucks County. It was designed to service IRS employees when Trenton Line Regional Rail service is not operating. The IRS building is located across the street from 30<sup>th</sup> Street Station, and nearly all Center City ridership on Route 78 occurs at 30<sup>th</sup> Street Station.*
- *The route operates on weekdays only, with two inbound early AM trips and two outbound late-night trips. Its alignment is direct, fast, and simple, operating via I-95 the Vine Street Expressway during periods when congestion is minimal.*
- *Route 78 has the second lowest weekday ridership of any SEPTA route. Opportunities for 78 are to discontinue the service due to its low productivity or to shorten the route so that it operates only its early AM southbound trips to 30<sup>th</sup> Street Station.*

### ROUTE OVERVIEW

Route 78 was created in 2010 to accommodate IRS workers when their office moved near 30th Street Station (see Figure 1). It operates 4 trips per day: two early AM southbound trips and two late night northbound trips. Route 78 is unique in that it only has six total stops and directly serves Cornwell Heights Station and 30th Street Station. It serves limited stops along Market Street and provides a direct, simple, and fast routing.

Figure 1 | Route Map



### Schedule

Route 78 operates four trips between the hours of 1:30 AM and 6:00 AM on weekdays (see Table 1):

- Two weekday owl trips operate between 12:00 AM to 4:00 AM

- Two weekday Early AM trips operate between 4:00 AM to 6:00 AM
- There is no weekend service.

**Table 1 | Schedule Statistics**

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
<b>Weekdays</b>	5:52 AM to 1:40 AM		
Early AM	4:00 AM to 5:59 AM	5	5
Owl	Midnight to 3:59 AM	60	60

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

## Service Patterns

Route 78 has one southbound service pattern and one northbound service pattern (see Table 2).

**Table 2 | Service Patterns**

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day		
					Wkd	Sat	Sun
<b>Northbound</b>							
229870	Cornwells Heights Station Lot	Market St & 8th St	Primary Pattern	0	2	0	0
<b>Southbound</b>							
229871	Market St & 8th St	Cornwells Heights Station Lot	Primary Pattern	0	2	0	0

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

## RIDERSHIP

In Fall 2019, Route 78 carried 75 passengers on weekdays (see Table 3). It has the second lowest ridership of any SEPTA route.

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

	Weekdays
<b>Daily Ridership</b>	<b>75</b>
Rank	121
<b>Passengers per Revenue Vehicle Hour</b>	<b>33.3</b>
Rank	82

## Transfer Patterns

Transfer rates on Route 78 are low. The largest transfer volumes are to and from:

- The Market Frankford Line (2.20% of all trips)
- Route 14 (0.20%)

## Ridership by Stop

Route 78’s primary function is to transport people between Cornwells Heights Station and Center City, via express service. While there are six stops total in each direction, most riders are boarding and alighting at Market Street & Schuylkill Avenue & Cornwells Heights Station. In general, southbound trips during the early AM see higher daily average on board loads, boardings, and alightings than northbound Owl trips.

In more detail, and on southbound trips (see also Figure 2):

- The highest number of average daily boards is 58 passengers boarding at Cornwells Heights Station Lot, the first stop in the southbound direction.
  - Most alightings are at Market Street & Schuylkill Avenue (30<sup>th</sup> Street Station)
- Market Street stops at Schuylkill Ave, 19<sup>th</sup> Street, 15<sup>th</sup> Street, 11<sup>th</sup> Street, and 8<sup>th</sup> Street see far few passengers boardings and alightings – all with averages less than 4 passengers.

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



## Ridership by Time of Day

### Ridership by Hour

Since there are only two trips per day, ridership is highest at those two times: southbound at 5:15 AM and northbound between 12:45 AM and 1:45 AM. The early morning hours see around 60 riders while overnight sees less than 20 (see Figure 3).

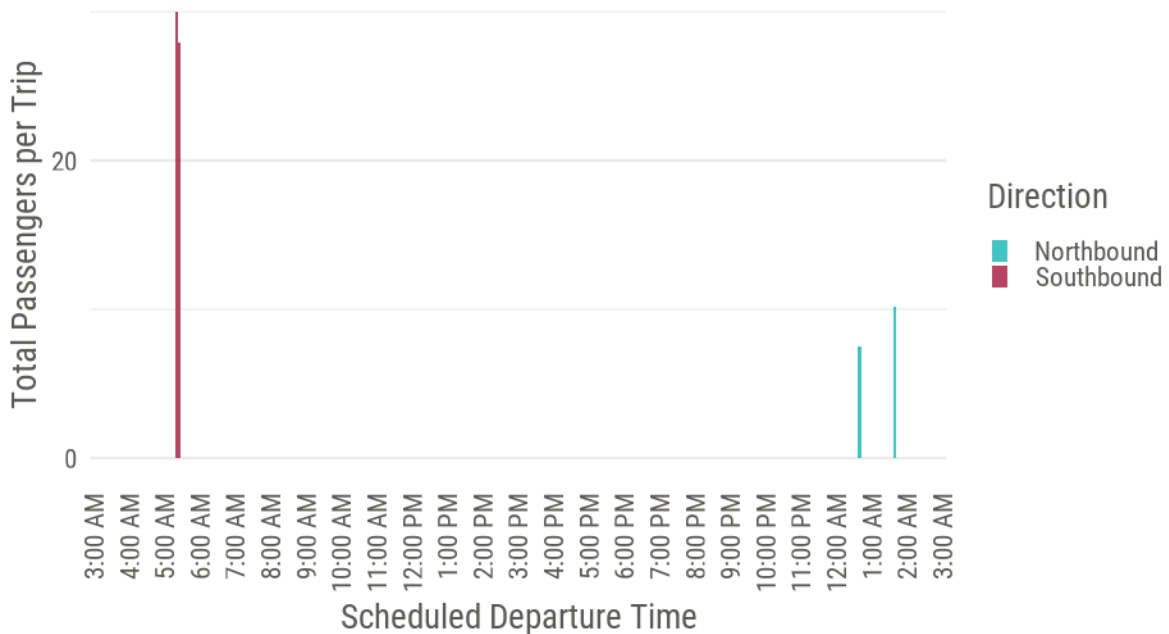
Figure 3 | Ridership by Hour: Fall 2019



### Ridership and Maximum Loads by Trip

Weekday ridership reaches around 30 passengers southbound and only around 10 passengers max northbound (see Figure 4). This could potentially be explained by passengers returning to Cornwells Heights Station via Regional Rail or another method. All trips operate well below the maximum seated load.

Figure 4 | Fall 2019 Weekday Ridership by Trip



# ON-TIME PERFORMANCE AND RUNNING TIMES

## On-Time Performance

In Fall 2019, Route 78’s on-time performance was 91%, with more trips arriving late than early (see Table 4).

**Table 4 | Fall 2019 On-Time Performance**

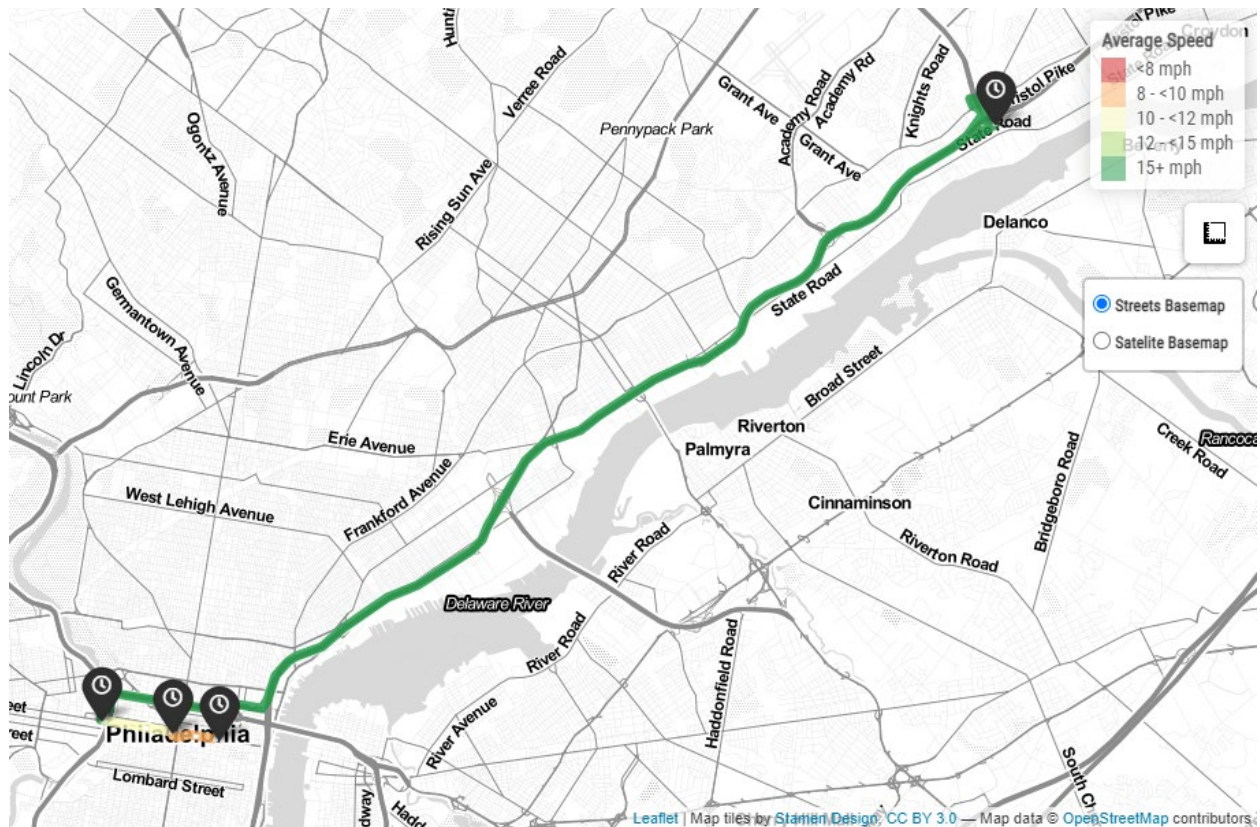
	Early (>2 Mins Early)	On Time (<2 Mins Early to 6 Mins Late)	Late (>6 Mins Late )	Missed Trips
<b>Goal</b>		80%		
<b>Fall 2019 Actual</b>				
Weekday	2.1%	90.6%	7.3%	5.1%

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

## AVERAGE SPEEDS AND STOP SPACING

Route 78’s average speed is 33.4 mph. Route 78 enjoys high speeds due to its express routing and travel during times when congestion is low (see Figure 5). Route 78 only has 6 stops total, making the average less than 5 stops per mile.

**Figure 5 | Fall 2019 PM Peak Southbound**



## RIDER CHARACTERISTICS

Compared to SEPTA's service area overall, Route 78 serves a much higher share of White passengers, and the share of passengers without a vehicle, seniors, and those with a disability are also lower (see Table 5).

**Table 5 | Rider Characteristics**

	Route 78 Riders	Systemwide Average
Median Household Income	\$30,644	\$32,713
Share in Poverty	15.20%	30%
Ethnicity		
White	71 %	38%
Black	7%	46%
Hispanic	10%	10%
Other	12%	7%
Without a Vehicle	21%	37%
Seniors	7%	15%
With a Disability	>1%	2%

## SERVICE IMPROVEMENT OPPORTUNITIES

Opportunities to strengthen Route 78 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Discontinue Service:** Route 78 provides specialized service to a single employer and carries the second lowest ridership of any weekday SEPTA route. Additionally, its northbound trips have very low ridership, likely due to the fact that the route duplicates Trenton Line Regional Rail service. Route 78 could be discontinued, and its services reinvested into more productive service.
- Operate as a Shuttle between 30<sup>th</sup> Street Station and Cornwells Heights Station:** Route 78's Market Street & JFK Boulevard stops have extremely low boarding activity. Since the route is designed to serve IRS employees, Route 78 could operate as a shuttle service to and from 30<sup>th</sup> Street Station only and discontinue local service east of 30<sup>th</sup> Street Station in Center City.