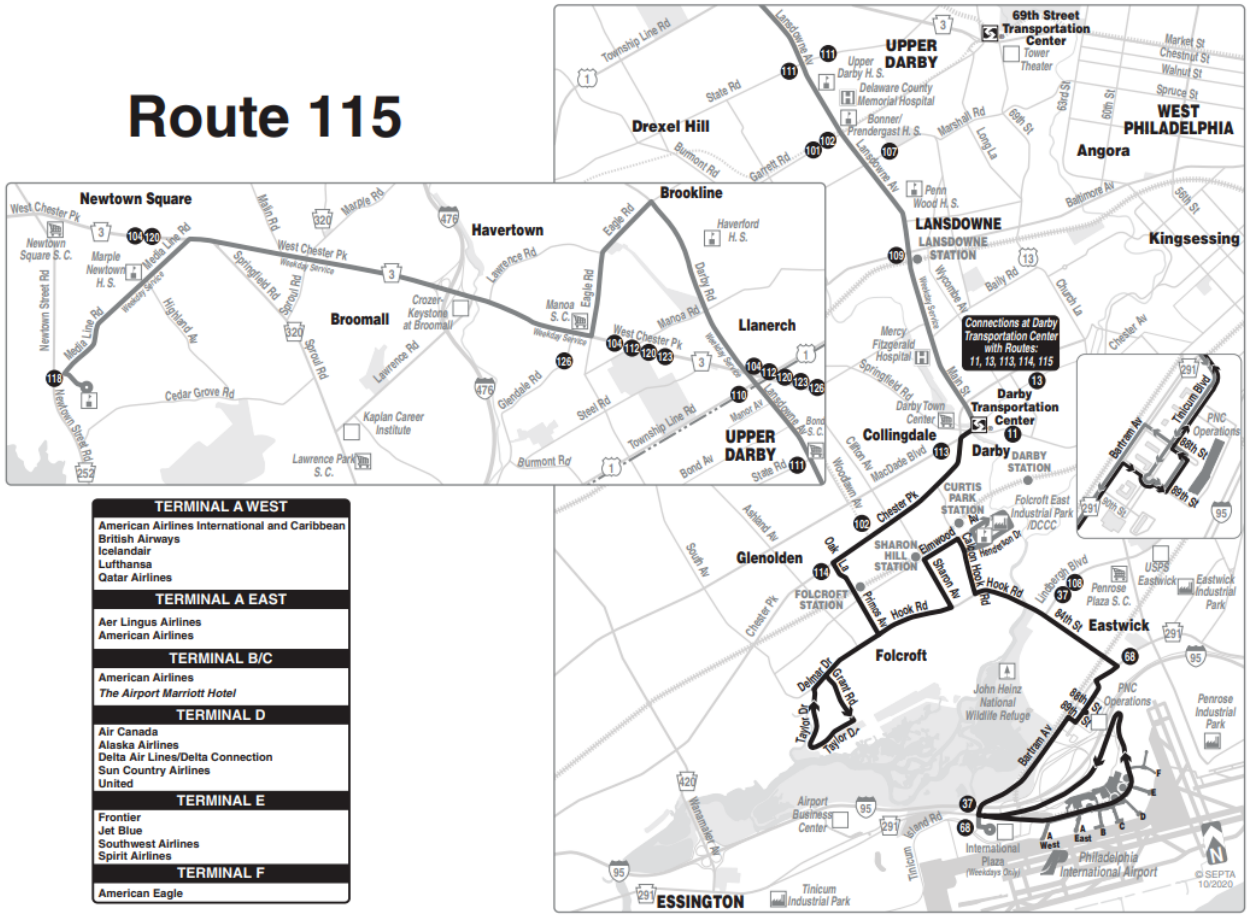
ROUTE 115

Delaware County Community College to Airport

KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route 115 operates between Philadelphia International Airport and Darby Transportation Center with occasional service beyond Darby Transportation Center to Delaware County Community College via Eagle Road.*
- *Route 115 has a long span of service; however it operates infrequently and is complicated by 10 service patterns.*
- *Opportunities to strengthen Route 115 are to simplify and shorten the route's alignment and potentially move the route's northern terminal to Ardmore.*

Figure 1 | Route Map



ROUTE OVERVIEW

Route 115 operates between the Philadelphia International Airport and either the Darby Transportation Center or Delaware Community College. The route's major function is to transport people to and from the Darby Transportation Center and to provide specialized weekday service to Delaware Community College. The route operates in a circuitous manner, especially through Folcroft and via Eagle Road in Havertown.

SERVICE OVERVIEW

Schedule

Route 115 operates from 4:09 AM until 1:07 AM weekdays (see Table 1). On Saturdays, Route 115 operates between 6:04 AM and 1:18 AM. On Sundays, Route 115 operates between 6:01 AM and 1:17 PM. On weekdays, actual frequencies vary from the averages during all time periods. Average weekday frequencies are:

- Early morning frequencies average 58 minutes.
- AM Peak frequencies average 49 minutes.
- Midday frequencies average 70 minutes.
- PM Peak and Evening frequencies average 63 minutes.
- Late night service frequencies average 45 minutes.
- Overnight frequencies average 51 minutes.

On Saturdays and Sundays, frequencies average about 60 minutes during the day and night. On all days, actual frequencies vary from the averages.

Table 1 | Schedule Statistics

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
Weekdays	**4:09 AM to 1:07 AM**		
Early AM	4:00 AM to 5:59 AM	28 - 75	58
AM Peak	6:00 AM to 8:59 AM	29 - 66	49
Midday	9:00 AM to 2:59 PM	60 - 90	70
PM Peak	3:00 PM to 5:59 PM	59 - 70	63
Evening	6:00 PM to 9:59 PM	50 - 76	63
Late Night	After 10:00 PM	28 - 61	45
Owl	Before 4:00 AM	48 - 57	51
Saturdays	**6:04 AM to 1:18 AM**		
Day	8:00 AM to 5:59 AM	58 - 70	61
Night	Before 8:00 AM & After 5:59 PM	49 - 70	60
Sundays	**6:01 AM to 1:17 AM**		
Day	8:00 AM to 5:59 AM	59 - 62	60
Night	Before 8:00 AM & After 5:59 PM	51 - 74	61

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

Service Patterns

Route 115 operates with 10 service patterns that make service complex (see Table 2). The major differences consist of short-turns and streamlining. The route has one southern terminal, which is the Philadelphia International Airport. The route's primary northern terminal is the Delaware County Community College, and other trips short-turn at Darby Transportation Center. In between the airport and Darby Transportation Center, the route occasional makes out-and back deviations to serve the following destinations:

- Folcroft Industrial Park, which is a large industry and distribution center employment area located just east of Route 115's primary alignment. This industrial park is served by select weekday trips via a clockwise loop.
- Folcroft neighborhood, which is a dense residential neighborhood located in the southwestern corner of Folcroft. Route 115 serves this neighborhood via a counter-clockwise loop on Taylor Drive on all but one service pattern.

Route 115's primary pattern operates between the airport and Delaware Community College and serves both Folcroft Industrial Park and the Folcroft neighborhood loop. Its service patterns differ based on whether or not they short-turn at Darby Transportation Center and which out-and-back deviations they serve between the airport and Darby Transportation Center. On Saturdays and Sundays there is no service to the industrial park or Delaware Community College.

Table 2 | Service Patterns

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day		
					Wkd	Sat	Sun
Eastbound							
229051	Philadelphia Airport Terminal B	Delaware County Community College	Primary pattern (via industrial park and Folcroft loop)		13	0	0
229054	Philadelphia Airport Terminal B	Darby Transportation Center	Short-turn to Darby, skips industrial park	0	0	14	14
229056	Philadelphia Airport Terminal B	Darby Transportation Center	Short-turn to Darby, skips industrial park and Folcroft loop	0	3	5	5
229050	Philadelphia Airport Terminal B	Darby Transportation Center	Short-turn to Darby, via industrial park and Folcroft loop	0	3	0	0
229055	Philadelphia Airport Terminal B	Delaware County Community College	Skips industrial park	0	2	0	0

Westbound							
229062	Delaware County Community College	Philadelphia Airport Terminal B (#1160)	Primary pattern (via Folcroft loop and industrial park)		15	0	0
229057	Darby Transportation Center	Philadelphia Airport Terminal B (#1160)	Short-turn from Darby, skips industrial park	0	3	16	16
229065	Darby Transportation Center	Philadelphia Airport Terminal B (#1160)	Short-turn from Darby, skips Folcroft loop and industrial park	0	2	4	4
229060	Darby Transportation Center	Philadelphia Airport Terminal B (#1160)	Short-turn from Darby, via Folcroft loop and industrial park	0	2	0	0
229064	Darby Transportation Center	Philadelphia Airport Terminal B (#1160)	Short-turn from Darby, skips Folcroft loop and industrial park (no apparent difference from pattern C)	0	1	0	0

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

RIDERSHIP

In Fall 2019, Route 115 carried 1,220 passengers on weekdays, 419 on Saturdays, and 310 on Sundays (see Table 3). Based on weekday ridership, it had the 89th highest ridership in the system. It was one of the least productive routes, with an average of 23.1 boardings per revenue hour on weekdays (see Table 3).

Table 3 | Fall 2019 Ridership and Productivity

	Weekdays	Saturdays	Sundays
Daily Ridership	**1,220**	**419**	**310**
Rank	89	92	87
Passengers per Revenue Vehicle Hour	**23.1**	**17.9**	**14.3**
Rank	105	97	95

Transfer Patterns

Many trips involve a transfer with trolley services. On weekdays, the largest transfer volumes are to and from:

- Trolley Route 11 13th-Market to Darby Transportation Center (10.7% of all passengers)
- Route 113 Tri State Mall and Darby Transportation Center to 69th Street Transportation Center (6.3%)
- Trolley Route 102 Sharon Hill to 69th Street Transportation Center (5.5%)

- Market-Frankford Line (3.9%)
- Route 109 Chester Transportation Center to 69th Street Transportation Center (2.5%)

Weekend transfer patterns are very similar.

Ridership by Stop

Route 115's major function is to transport people to and from the Airport, Darby Transportation Center and Delaware Community College. Its highest ridership activity occurs at these locations as well as at other transfer points with SEPTA services. On northbound trips (also see Figure 2):

- 58 passengers board and 2 alight at the three stops serving Philadelphia International Airport
- An average of 6 passengers board and 2 alight at the 49 stops from Bartram Avenue at 90th Street to Primos Avenue at Elmwood Avenue.
    - 25 board and 4 alight at Sharon Avenue at Hook Road.
- An average of 5 passengers board and 5 alight at the 28 stops from Oak Lane at Chester Pike to Lansdowne Avenue at Marshall Road. This does not include stops serving Darby Transportation Center.
    - 14 passengers board and 47 alight at Chester Pike at Brainard Boulevard. This is near the Sharon Hill Trolley Station served by Trolley Route 102.
    - Two stops serve Darby Transportation Center. This is a major regional transportation center with connection to several trolley lines and bus lines
        - 29 passengers board and 83 alight at Darby Transportation Center.
        - 29 passengers board and 36 alight at SEPTA Private Way at MacDade Boulevard.
- Up to 7 passengers board and 23 passengers alight at stops from Lansdowne Avenue at Greenhill Road to Eagle Road at Lincoln Avenue.
- Up to 3 passengers board and 11 alight at stops from West Chester Pike at Eagle Road to Media Line Road at Drew Circle.
- 87 passengers alight at Delaware County Community College.

Southbound patterns generally mirror eastbound patterns. Weekend patterns are also similar but with much lower volumes.

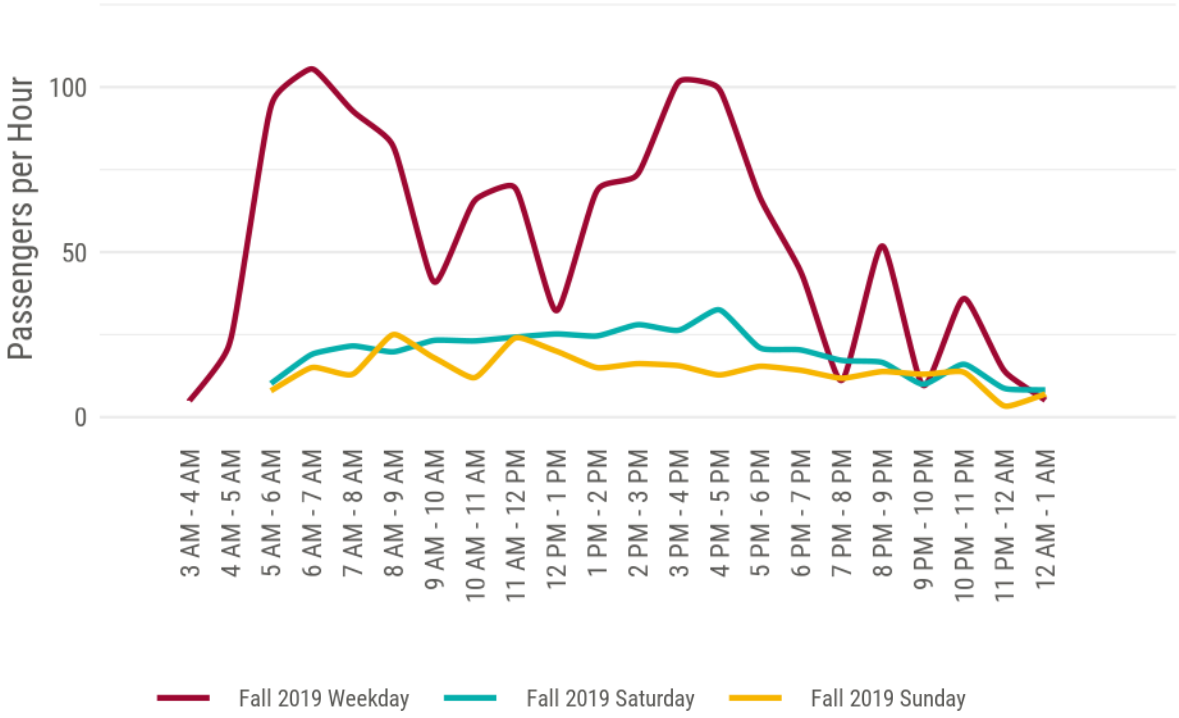
Figure 2 | Weekday Northbound Ridership by Stop

Ridership by Time of Day

Ridership by Hour

In Fall 2019, ridership was peaked, with 45% of all ridership in the AM peak and PM Peak (see Figure 3). Midday ridership, on a per hour basis, was generally about half as high as peak period ridership. Evening ridership was much lower than midday ridership and fell quickly after 6:00 PM. Saturday and Sunday ridership did not exhibit peaks and gradually increased through mid-afternoon and then gradually decreased.

Figure 3 | Ridership by Hour: Fall 2019



Ridership and Maximum Loads by Trip

Weekday ridership per trip was moderate on most trips (see Figure 4):

- Early morning trips before 6:00 AM carried 5 to 45 passengers.
- AM and PM peak trips carried approximately 25 to 60 passengers.
- Midday trips carried 25 to 40 passengers.
- After 6:00 PM, 35 or fewer passengers are served per trip.

No trips meet the seated maximum load.

On Saturdays, less than 20 passengers were served per trip. No trips met the seated maximum load. Sundays, 15 or fewer passengers were served per tip. No trips met the seated maximum load.

Figure 4 | Weekday Ridership by Trip: Fall 2019

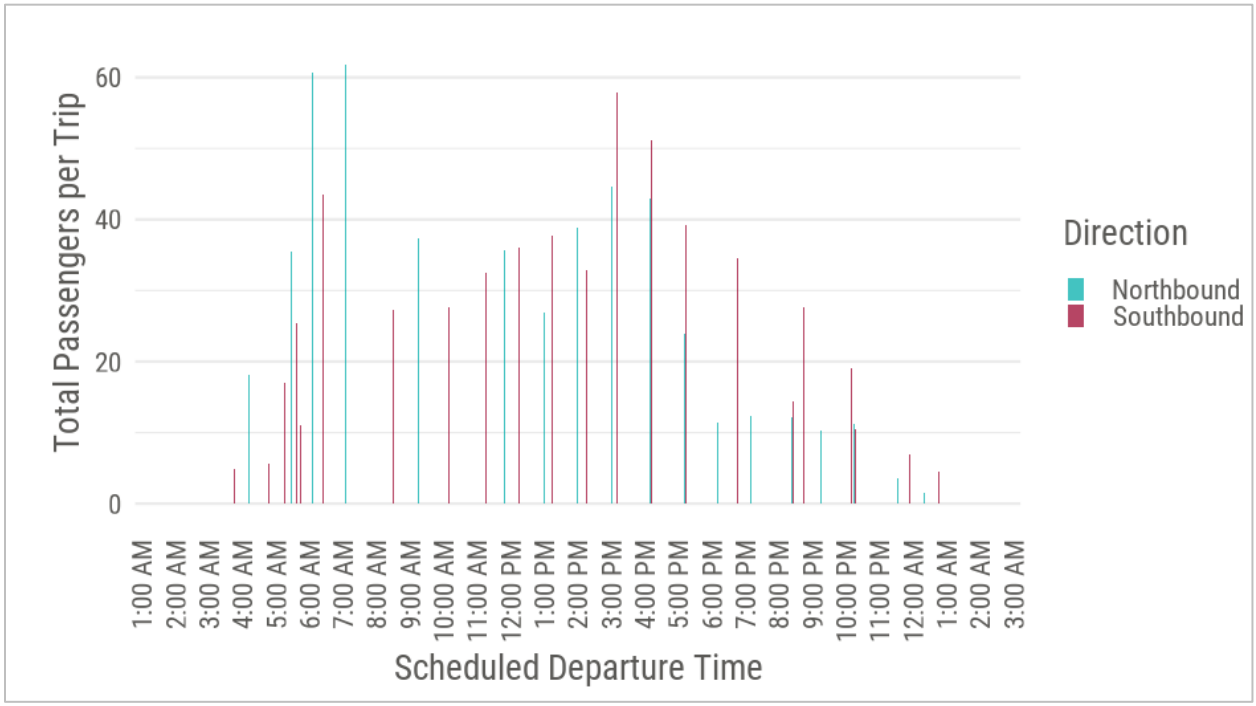
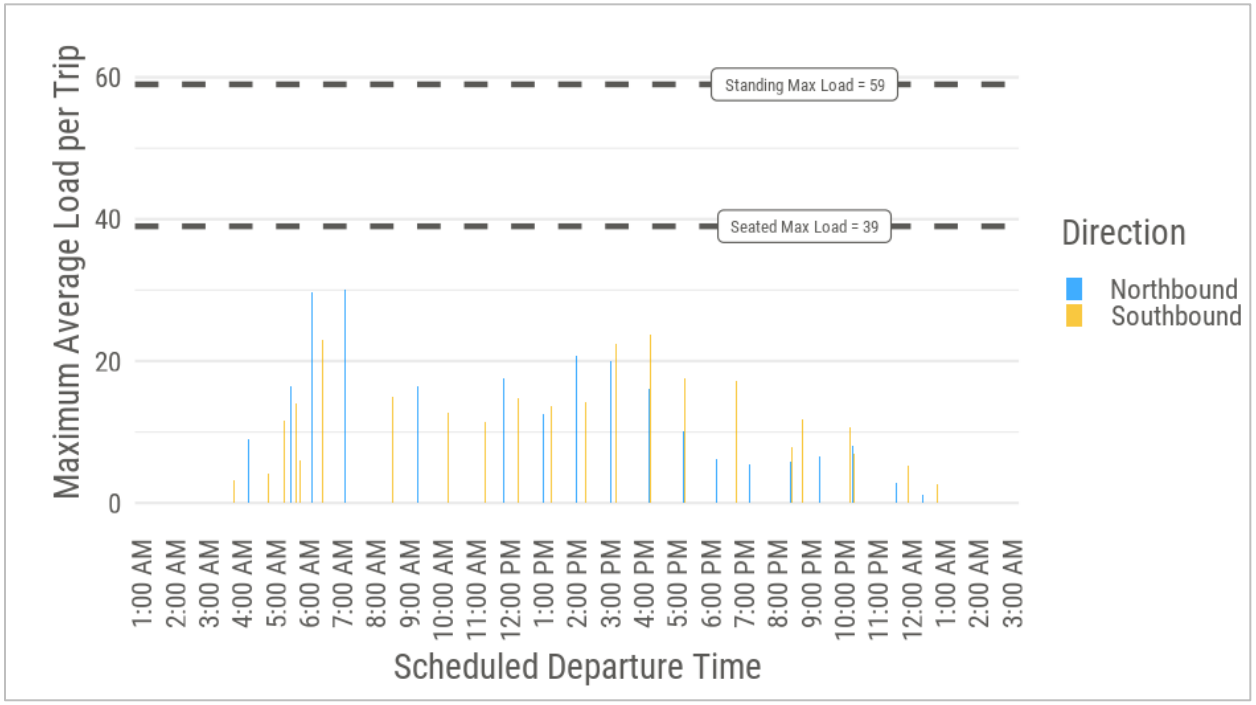


Figure 5 | Weekday Maximum Loads by Trip: Fall 2019



ON-TIME PERFORMANCE AND RUNNING TIMES

On-Time Performance

In Fall 2019, Route 115's on-time performance was well below SEPTA's goal at 67% on weekdays, 76% on Saturdays, and 77% on Sundays (see Table 4), with off-schedule performance occurring largely due to late trips on weekdays and early trips on Saturdays. On weekdays, nearly 30% of trips were late. On Sundays, off-schedule performance was split nearly evenly between early and late trips. Dropped trips were a minor issue on weekdays.

Table 4 | On-Time Performance: Fall 2019

	Early	On Time	Late	Missed Trips
	(>2 Mins Early)	(<2 Mins Early to 6 Mins Late)	(>6 Mins Late))	
Goal		80%		
Fall 2019 Actual				
Weekday	4%	66.6%	29.0%	1.5%
Saturday	17%	75.7%	7.2%	0.0%
Sunday	12%	76.8%	11.0%	0.0%

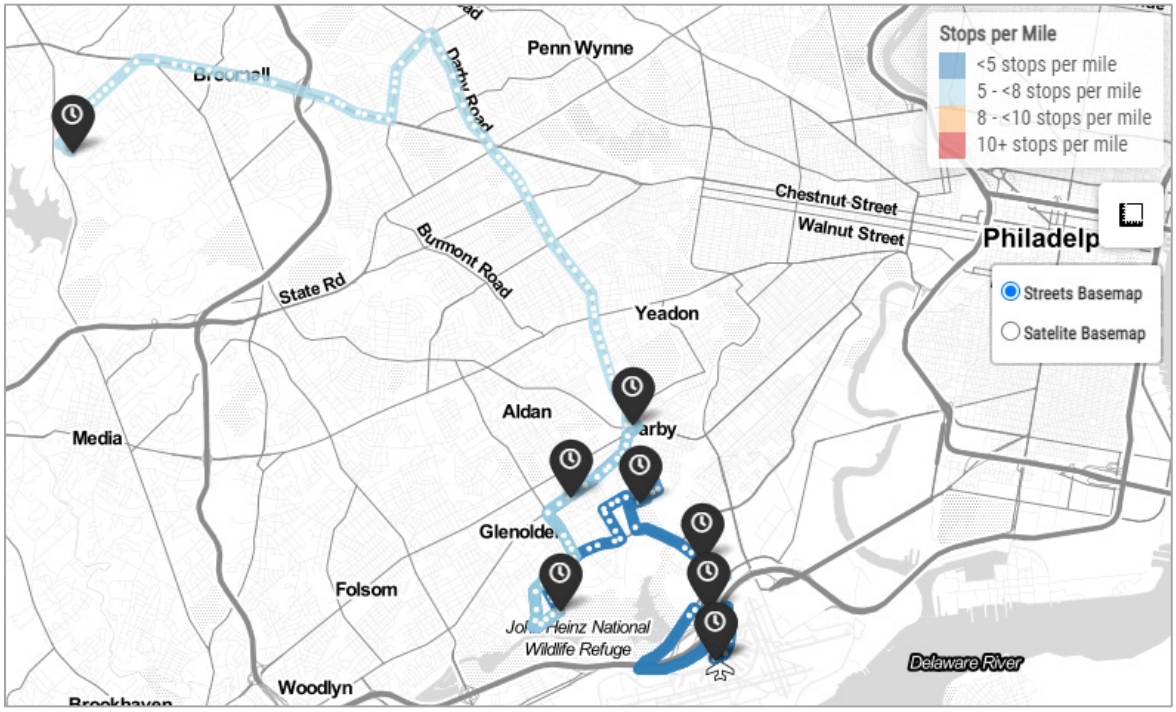
Note: On-time percentages are for trips that are run (do not include dropped trips)

AVERAGE SPEEDS AND STOP SPACING

Route 115's average weekday speed is 16.5 mph. Speeds can be slower along parts of the route such as through Philadelphia International Airport (see Figure 6). Route 115 has an average of 5.6 stops per mile, with stops spaced closer together along Chester Pike (see Figure 7).

Figure 6 | Average Speeds: PM Peak Southbound

Figure 7 | Stop Spacing by Route Segment



RIDER CHARACTERISTICS

Compared to SEPTA's service area as a whole, Route 115 carries a higher share of Black residents, and a lower share of Hispanic residents, riders without a vehicle, riders in poverty, and seniors. In other respects – median household income and share of residents with a disability– Route 115's service area is very typical of SEPTA's service area as a whole (see Table 5).

Table 5 | Rider Characteristics

	Route 115 Riders	Systemwide Average
Median Household Income	$32,522	$32,713
Share in Poverty	24%	30%
Ethnicity		
White	37%	38%
Black	53%	46%
Hispanic	5%	10%
Other	5%	7%
Without a Vehicle	27%	37%
Seniors	9%	15%
With a Disability	3%	2%

SERVICE IMPROVEMENT OPPORTUNITIES

Opportunities to strengthen Route 115 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Simplify Service:** Simpler service will nearly always attract more riders than complicated service. Potential ways to simplify service include:
    - **Discontinue Service to the Folcroft Industrial Park and Folcroft neighborhood loop:** There is consistently low ridership along these deviations. Consider discontinuing service to the industrial park and neighborhood, and if necessary, replacing it with Microtransit.
    - **Streamline Service on West Chester Pike:** Route 115 deviates to Darby Road and Eagle Road to serve the small commercial area located there. This service duplicates Route 103 service which also operates along Darby Route. Consider operating more streamlined service between Delaware Community College and Lansdowne Avenue to shorten the route length and reduce service duplication.
- **Redesign Service to Terminate at Ardmore, Replacing Route 103 Service:** Route 103 largely operates duplicitous service, except for between Ardmore Junction and Ardmore. Consider discontinuing Route 103 and instead providing similar service with a redesigned Route 115 which terminates at Ardmore instead of Delaware County Community College and a more frequent Route 106 that can handle the demand for travel between Overbrook Park and the 69th Street Transportation Center. Delaware County Community College is also served by Route 112, so transit access would not be reduced.
- **Split Route 115 into Two Routes:** Route 115 is extremely long, at 24.5 miles and with one-way running times that approach two hours during peak periods. The route could be split at Derby Transportation Center to create two shorter routes which would limits delays at one end from carrying through to the other. (A downside of this approach is that some riders do ride through Darby Transportation Center, and transfers would be imposed on these riders.)

- **Provide Service At Least Every 30 Minutes South of Darby Transportation Center:** Route 115 can operate very infrequently during some periods. Consider improving transit access and making Route 115 more convenient by increasing frequencies on the route to every 30 minutes throughout the day south of Darby Transportation Center.