

# ROUTE 96

## Lansdale to Norristown Transportation Center

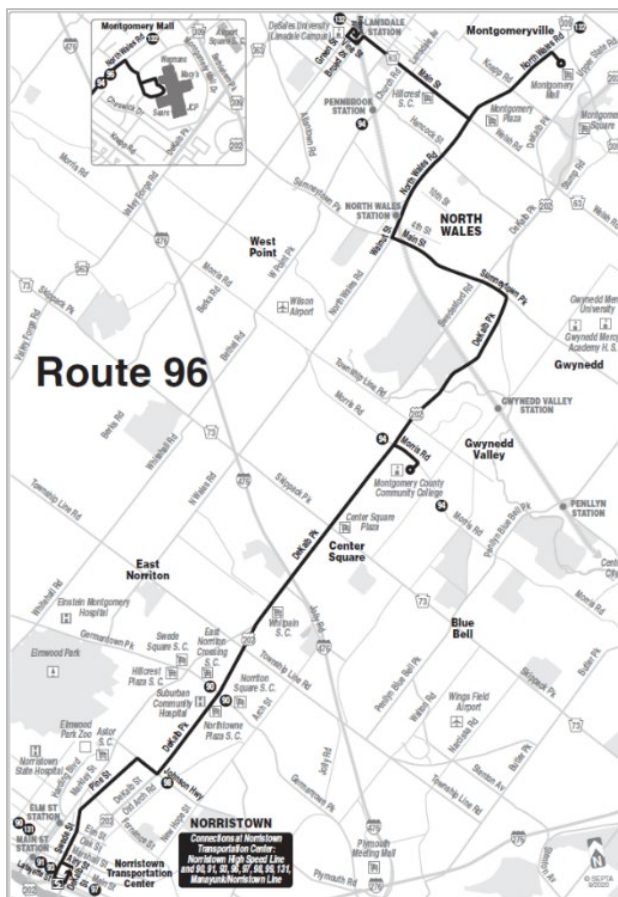
### KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route 96 provides connections from the Norristown Transportation Center to destinations just outside of Norristown, including the Montgomery County Community College and Montgomery Mall.*
- *Ridership is low on the route, but there are opportunities to straighten the alignment, improve route coordination to strengthen ridership.*

### ROUTE OVERVIEW

Route 96 operates between Norristown Transportation Center, Montgomery Mall and Lansdale Regional Rail Station. The route also serves Suburban Community Hospital, Montgomery County Community College and North Wales Regional Rail Station. The route provides a combination of local connections to SEPTA rail stations, access to regional destinations and local circulation.

Figure 1 | Route Map



## SERVICE OVERVIEW

### Schedule

On weekdays, service begins at 4:56 AM and continues until approximately 12:29 AM (see Table 1) with an average of 30-minute headways for most of the day. Evening and late-night frequencies are lower, with buses arriving approximately every 45 minutes between 6:00 PM and 9:00 PM and closer to 70 minutes after 9:00 PM.

On Saturdays, Route 96 operates from 6:15 AM until 11:56 PM. Service frequencies average about hourly during the day and 53 minutes at night.

On Sundays, Route 96 operates from 6:00 AM until 10:14 PM and operates with roughly hourly frequencies throughout the service period.

**Table 1 | Schedule Statistics**

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
<b>Weekdays</b>	4:00 AM to 12:18 AM		
Early AM	4:00 AM to 5:59 AM	22-39	31
AM Peak	6:00 AM to 8:59 AM	20-40	30
Midday	9:00 AM to 2:59 PM	23-36	30
PM Peak	3:00 PM to 5:59 PM	25-40	31
Evening	6:00 PM to 9:59 PM	25-75	46
Late Night	10:00 PM to 11:59 PM	62-75	67
Owl	Midnight to 3:59 AM		
<b>Saturdays</b>	8:00 AM to 7:59 AM		
Day	8:00 AM to 5:59 PM	58-70	61
Night	5:59 PM to 7:59 AM	22-67	53
<b>Sundays</b>	6:43 AM to 10:29 PM		
Day	8:00 AM to 5:59 PM	36-89	60
Night	5:59 PM to 7:59 AM	36-75	<b>60</b>

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

### Service Patterns

Route 96 operates with five service patterns (see Table 2). Service patterns primarily reflect whether the bus travels into the Montgomery County Community College campus.

**Table 2 | Service Patterns**

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day		
					Wkd	Sat	Sun
<b>Inbound</b>							
230888	Norristown Transportation Center	Railroad Av & Broad St – MBNS (Lansdale)	Primary Pattern		31	15	0

230887	Norristown Transportation Center	Railroad Av & Broad St – (Lansdale)	Does not serve Montgomery County Community College	0	1	2	16
<b>Outbound</b>							
230891	Railroad Av & Broad St – (Lansdale)	Norristown Transportation Center	Primary Pattern		30	15	0
230892	Railroad Av & Broad St – (Lansdale)	Norristown Transportation Center	Does not serve Montgomery County Community College	0	3	3	16
230893	Dekalb Pk & Germantown Av (East Norriton)	Norristown Transportation Center	Short Turn	0	0	1	0

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

## RIDERSHIP

In the fall of 2019, Route 96 carried 1,488 passengers on weekdays, 777 on Saturdays, and 636 on Sundays (see Table 3). Based on weekday ridership, the route ranks 81<sup>st</sup> out of 121 routes.

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

	Weekdays	Saturdays	Sundays
<b>Daily Ridership</b>	<b>1,488</b>	<b>777</b>	<b>636</b>
Rank	81	78	76
<b>Passengers per Revenue Vehicle Hour</b>	<b>23.6</b>	<b>25.4</b>	<b>24.6</b>
Rank	104	82	75

## Transfer Patterns

Norristown Transportation Center serves as a significant transfer point for Route 96. The largest transfer volumes are to and from:

- Norristown High Speed Line (19.0% of all trips)
- Route 99 Phoenixville to Norristown Transportation Center (3.1%)
- Route 93 Pottstown to Norristown Transportation Center (2.8%)
- Route 132 Telford to Montgomery Mall (2.6%)
- Route 131 Audubon to Norristown Transportation Center (1.8%)

Weekend transfer patterns are similar but at a significantly lower volume.

## Ridership by Stop

Route 96 serves a variety of markets, including the Norristown Transportation Center, SEPTA regional rail stations (Lansdale and North Wales), Montgomery County Community College,

Montgomery Mall, and several smaller shopping areas and medical centers (see Figure 2). Stops with the highest ridership (traveling northbound) include:

- 345 boardings at the Norristown Transportation Center (21.8% of all riders)
- 41 boardings and 77 alightings at Montgomery County Community College (7.5%)
- 31 passengers board and 102 alight at Montgomery Mall (8.4%)
- 6 Boardings and 69 alightings at DeKalb Pike and Northtowne Shopping Center (4.7%)
- 77 passengers alight at Railroad Ave & Broad Street (Landsdale Station) (4.8%)

Weekend patterns are similar but with lower volumes. Montgomery County Community College has significantly fewer riders on Saturdays. Sunday has fewer riders on all segments.

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

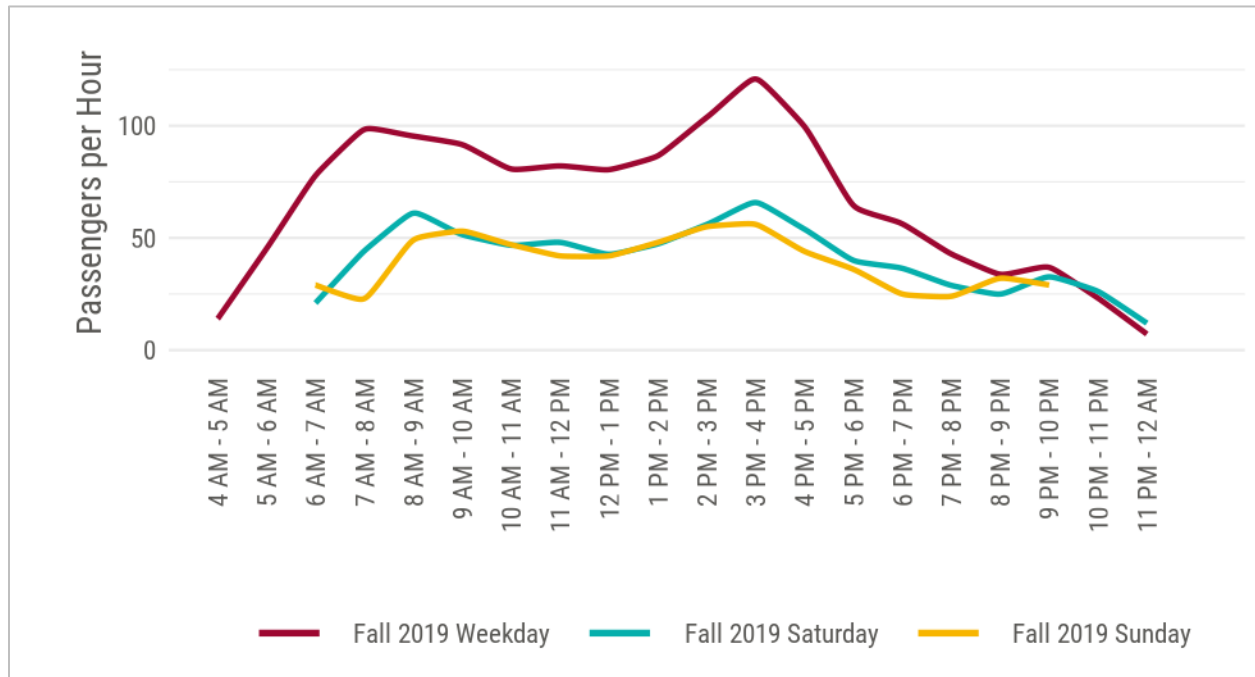


## Ridership by Time of Day

### Ridership by Hour

On weekdays, there are 100 riders per hour between 7:00 AM and 8:00 AM and much of the afternoon peak. During the PM peak, there are 125 riders per hour between 3:00 PM and 4:00 PM (see Figure 3). During the midday, Route 96 carries about 80 riders per hour.

Saturday and Sunday ridership have a similar ridership pattern with lower ridership overall and a more gradual decline in ridership after 4:00 PM.

**Figure 3 | Ridership by Hour: Pre-Pandemic; Fall 2019**


### Ridership and Maximum Loads by Trip

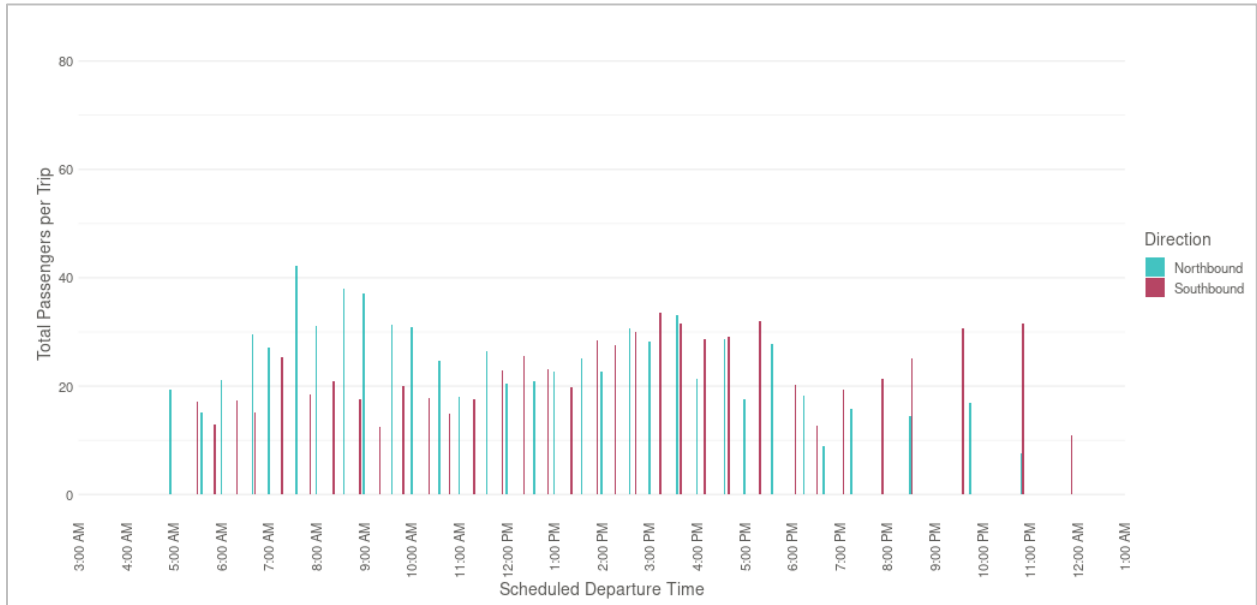
Ridership by trip shows a pattern of higher ridership on northbound trips in the morning and stronger ridership southbound in the afternoon. Overall, most trips carry between 20 and 25 riders (see Figure 4) and no trips reach the seated maximum load (see Figure 5):

- Early morning trips carry between 10 and 20 passengers; maximum loads are in the same range.
- During the AM peak, most trips carry between 20 and 40 passengers.
- During the midday, most trips have between 20 and 30 passengers.
- PM peak trips carry slightly fewer passengers (between 15 and 35).
- Ridership per trip drops in the evening and late night.

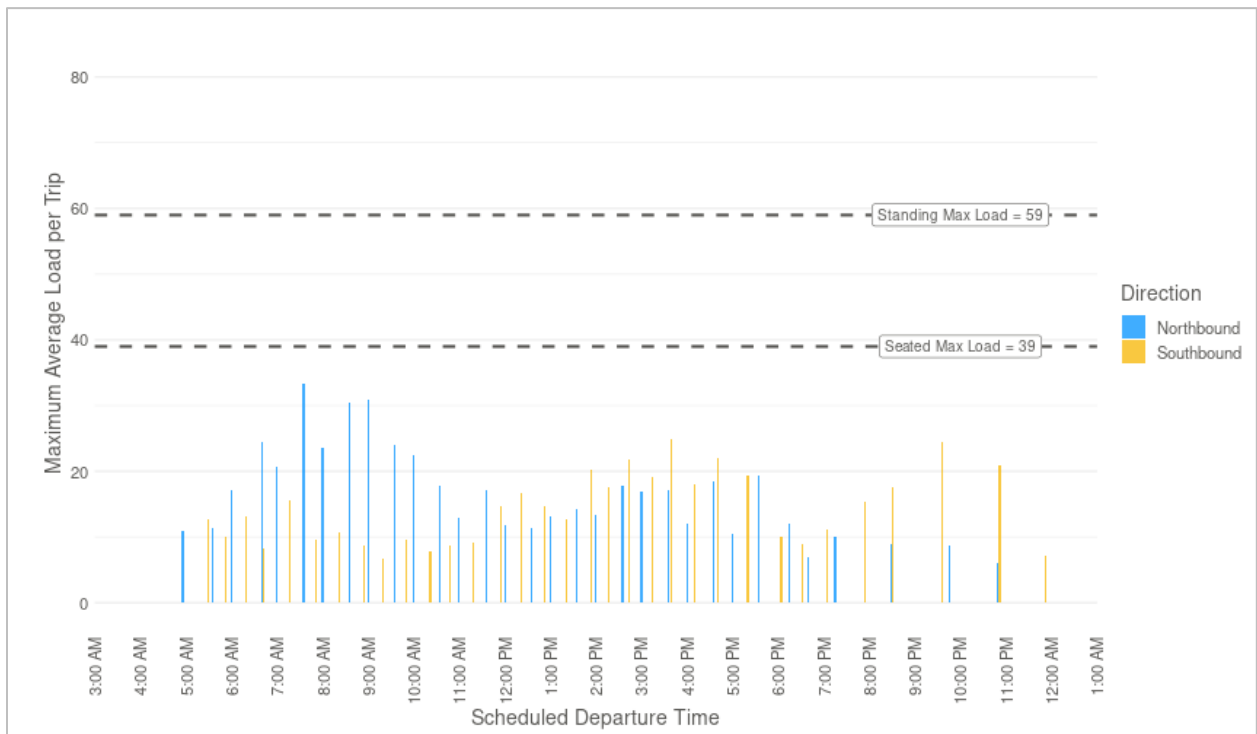
Starting around 11:00 AM, ridership evens out and after 7PM, southbound ridership becomes more noticeably greater than northbound ridership.

Saturdays have a similar pattern with northbound ridership stronger in the morning and southbound stronger in the afternoon. Sunday ridership patterns are like those on Saturday but with less overall ridership.

**Figure 4 | Weekday Ridership by Trip**



**Figure 5 | Weekday Maximum Loads by Trip**



## ON-TIME PERFORMANCE AND RUNNING TIMES

### On-Time Performance

In the fall of 2019, Route 96's on-time performance was 78% on weekdays, 76% on Saturdays, and 91% on Sundays (see Table 4). Off-schedule performance is more frequently early

weekdays and Sundays. Off-schedule performance is split relatively equally between early and late service on Saturdays.

Dropped trips were not a significant issue.

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

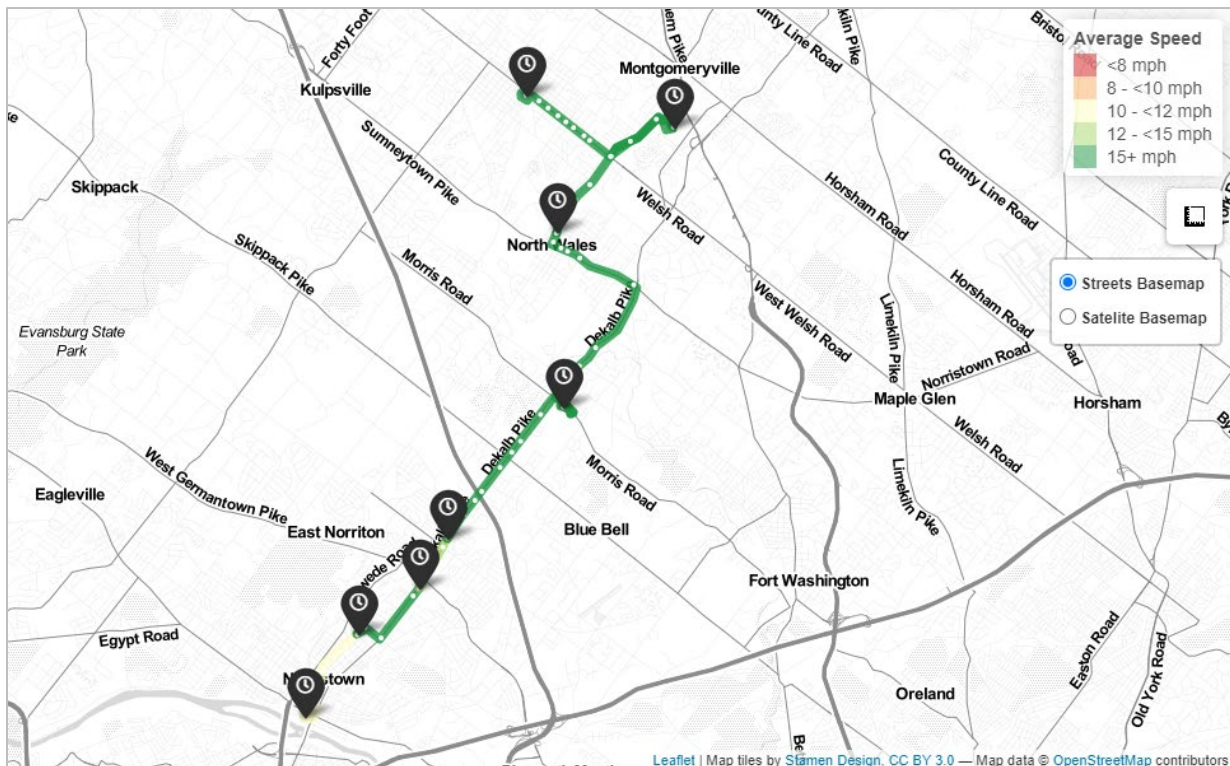
	Early (>2 Mins Early)	On Time (<2 Mins Early to 6 Mins Late)	Late (>6 Mins Late)	Missed Trips
<b>Goal</b>		<b>80%</b>		
<b>Fall 2019 Actual</b>				
Weekday	12.2%	78.4%	9.4%	0.4%
Saturday	10.2%	75.9%	13.9%	0.0%
Sunday	9.0%	91.0%		0.0%

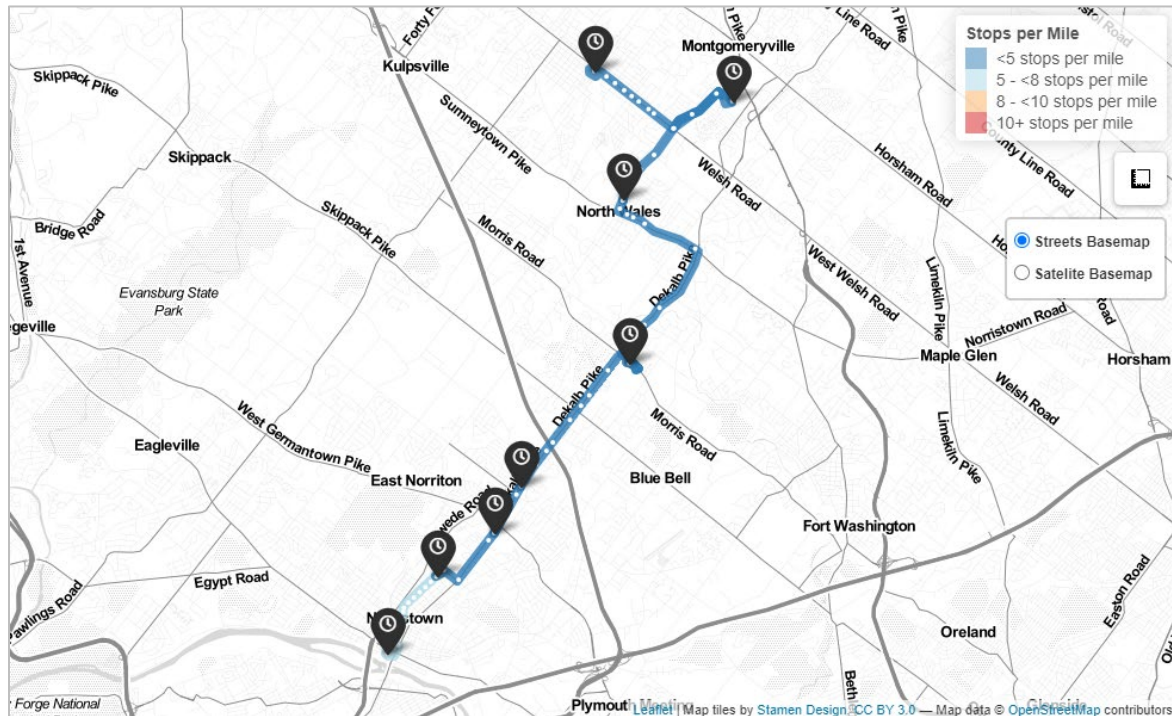
Note: On-time percentages are for trips that are run (do not include dropped trips)

## AVERAGE SPEEDS AND STOP SPACING

Travel speeds are good on Route 96, with buses traveling 15 miles per hour or more along much of the alignment (see Figure 6). Route 96 has an average of fewer than five stops per mile for most of its alignment. There are eight stops per mile closer to the Norristown Transportation Center (see Figure 7).

**Figure 6 | Average Speeds: PM Peak Northbound**



**Figure 7 | Stop Spacing by Route Segment**


## Rider Characteristics

Overall, the characteristics of Route 96 riders are like those throughout SEPTA's service area (see Table 5), but the route does carry fewer Black riders and other races. It also carries more riders who have access to a vehicle.

**Table 5 | Rider Characteristics**

	Route 96 Riders	Systemwide Average
Median Household Income	\$34,746	\$32,713
Share in Poverty	26%	30%
Ethnicity		
White	41%	38%
Black	31%	46%
Hispanic	12%	10%
Other	16.2%	7%
Without a Vehicle	28%	37%
Seniors	12%	15%
With a Disability	5%	2%

## SERVICE IMPROVEMENT OPPORTUNITIES

Route 96 is a relatively fast and direct service operated with a long service span and moderate frequencies. It provides connections between strong activity centers but fails to attract strong



ridership. Opportunities to strengthen Route 96 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Simplify and Coordinate Service:** Route 96 is currently designed with two termini – Montgomery Mall and SEPTA’s Lansdale Station, which complicates the route. Route 96 would be more direct if the route served one terminus and/or the route was coordinated with other SEPTA bus routes (Routes 94, 96 and 132). Routes 94 and 96 both serve Montgomery County Community College and all three routes service Montgomery Mall. Routes 96 and 132 both service Lansdale Station. A final option could be to use microtransit to serve high need, low density areas. Potential coordination strategies could include one or more of the following:
  - **Terminate Route 96 at Montgomery Mall:** Simplify Route 96 by terminating the bus at the Montgomery Mall and coordinating service with Route 132, which could travel straight along Main Street from Lansdale Station to Montgomery Mall. Advancing this opportunity would need to consider potential changes to the Montgomery Mall, which may make it a less desirable destination.
  - **Terminate Route 96 at Lansdale Station:** Simplify Route 96 by terminating the bus at Lansdale Station and coordinating service with Route 132 to travel straight along Main Street between Lansdale Station to Montgomery Mall to provide connections to the Mall.
  - **Coordinate service to Montgomery County Community College:** Montgomery County Community College is an important destination for both Routes 96 and 94. Route 94 could terminate at the community college and rely on Route 96 to provide connections to Montgomery Mall. Ridership is higher along Dekalb Pike, South Main Street and East Walnut Street than on Route 94’s route to Montgomery Mall (Morris Road, Church Road and East Main Street).
  - **Use microtransit to ensure low density, high demand areas remain accessible:** As part of coordinating services, SEPTA could consider using microtransit to provide first/last mile connections around Lansdale Station and/or access to Lansdale Hospital. Microtransit offers advantages in terms of providing on demand access to low density areas with critical destinations. It can also be useful for first/last mile connections.
- **Reduce Stops between the Norristown Transportation Center and West Johnson Highway.** Route 96 stops at every major intersection between Norristown Transportation Center and West Johnson Highway resulting in 8 stops per mile, about every 600 feet. Reducing three of the lowest ridership stops would help improve bus speed and reliability and only marginally increase the walking distance to the nearest stop.