

# ROUTE 5

## Front-Market to Frankford Transportation Center

### KEY SERVICE CHARACTERISTICS, ISSUES, AND OPPORTUNITIES

- *Route 5 provides north-south service on 2<sup>nd</sup>/3<sup>rd</sup> Streets in Old City and Northern Liberties, as well as service on Frankford Avenue between Girard Avenue and the Frankford Transportation Center.*
- *Weekday ridership is approximately 3,700 passengers. Much of the route's alignment duplicates other bus service and/or the Market-Frankford Line which likely contributes to lower ridership on Route 5, particularly outside of peak periods.*
- *There may be opportunities to shorten the route and/or consolidate with other bus routes so that improved service can be provided on fewer corridors.*

## ROUTE OVERVIEW

Route 5 operates along Frankford Avenue from the Frankford Transportation Center to Girard Avenue in Fishtown, and then continues south on 2<sup>nd</sup>/3<sup>rd</sup> Streets through Northern Liberties and Old City. Much of the route duplicates service provided by other bus routes and the Market-Frankford Line which results in lower ridership than would otherwise be expected, especially during off-peak times.

## SERVICE OVERVIEW

### Schedule

Route 5 operates approximately 21 hours per day on all days of the week, from 5:10 AM to 1:50 AM. Frequencies vary by time of day (see Table 1):

- On weekdays, service during peak periods has average headways of 12 minutes. During middays service is every 18 minutes on average.
- On weekends, service frequencies average every 31 minutes during the day and every 48 minutes at night.

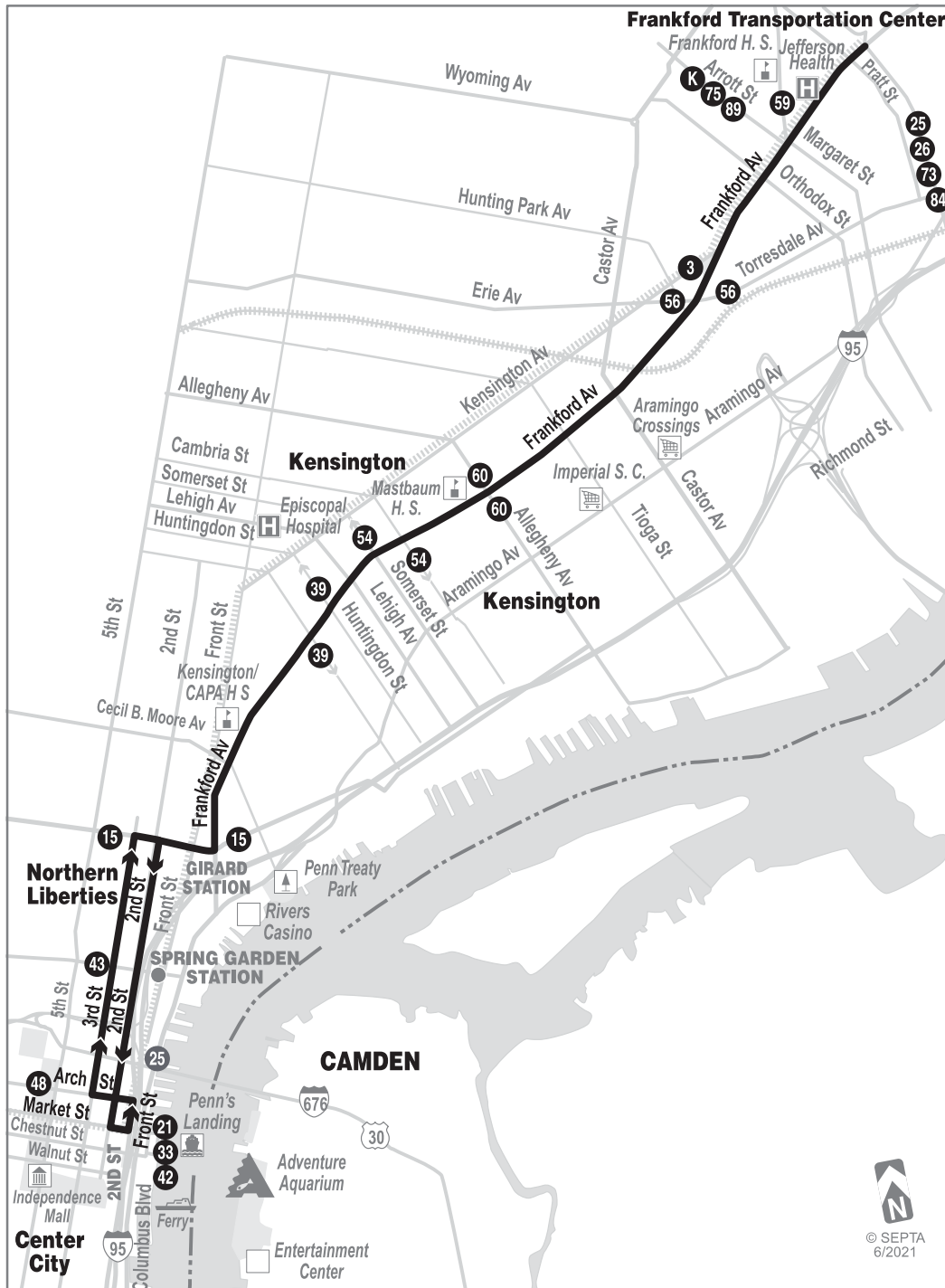
**Table 1 | Schedule Statistics**

Service Day	Span Of Service	Frequency (Range)	Frequency (Average)
<b>Weekdays</b>	5:04 AM to 1:51 AM		
Early AM	5:04 AM to 5:59 AM	10-17	14
AM Peak	6:00 AM to 8:59 AM	9-16	12
Midday	9:00 AM to 2:59 PM	10-23	18
PM Peak	3:00 PM to 5:59 PM	11-16	12
Evening	6:00 PM to 9:59 PM	14-44	25
Late Night	10:00 PM to 11:59 PM	44-46	45
Owl	Midnight to 1:51 AM	50-62	59

<b>Saturdays</b>	5:17 AM to 1:48 AM		
Day	8:00 AM to 5:59 PM	29-45	31
Night	Before 8:00 AM & After 5:59 PM	30-62	48
<b>Sundays</b>	5:17 AM to 1:48 AM		
Day	8:00 AM to 5:59 PM	29-45	31
Night	Before 8:00 AM & After 5:59 PM	30-61	48

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

Figure 1 | Route Map



## Service Patterns

Route 5 has two service patterns, one in each direction (see Table 2). All trips on all days use this primary pattern, which makes service simple and easy to use.

**Table 2 | Service Patterns**

Pattern	Origin	Destination	Unique Feature	Unique Stops	Trips Per Day		
					Wkd	Sat	Sun
<b>Southbound</b>							
229604	Frankford Transportation Center -	Front St & Market St Loop	Primary Pattern	0	67	33	33
<b>Northbound</b>							
229605	Front St & Market St Loop	Frankford Transportation Center	Primary Pattern	0	66	33	33

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

## RIDERSHIP

In Fall 2019, Route 5 carried 3,721 passengers on weekdays, 1,302 on Saturdays, and 1,006 on Sundays (see Table 3).

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

	Weekdays	Saturdays	Sundays
<b>Daily Ridership</b>	<b>3,721</b>	<b>1,302</b>	<b>1,006</b>
Rank	54	63	58
<b>Passengers per Revenue Vehicle Hour</b>	<b>45.1</b>	<b>35.7</b>	<b>28.6</b>
Rank	51	48	65

## Transfer Patterns

The largest transfer rates on Route 5 are to and from:

- The Market-Frankford Line (12.0% of all trips)
- Route 66 Frankford- Knights to Frankford Transportation Center (3.8%)
- Route 60 35<sup>th</sup>-Allegheny to Richmond-Westmoreland (3.7%)
- Route 3 33<sup>rd</sup>- Cecil B. Moore to Frankford Transportation Center (3.5%)
- Route 56 23<sup>rd</sup>-Venango or Bakers Centre to Torresdale-Cottman (3.2%)

Weekend transfer patterns are similar but at slightly lower rates.

## Ridership by Stop

Ridership is consistent along the route, with more activity at stops north of Lehigh Avenue. For northbound weekday trips, some highlights include:

- 222 passengers boarded at the origin (Front Street at Market Street)
- 108 passengers boarded and 32 alighted at Front Street at Girard Avenue

- There were 151 boardings and 101 alightings at Frankford Avenue at Allegheny Street
- 72 passengers boarded and 148 alighted at Frankford Avenue at Margaret Street
- 526 passengers alighted at the last stop, Frankford Transportation Center

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

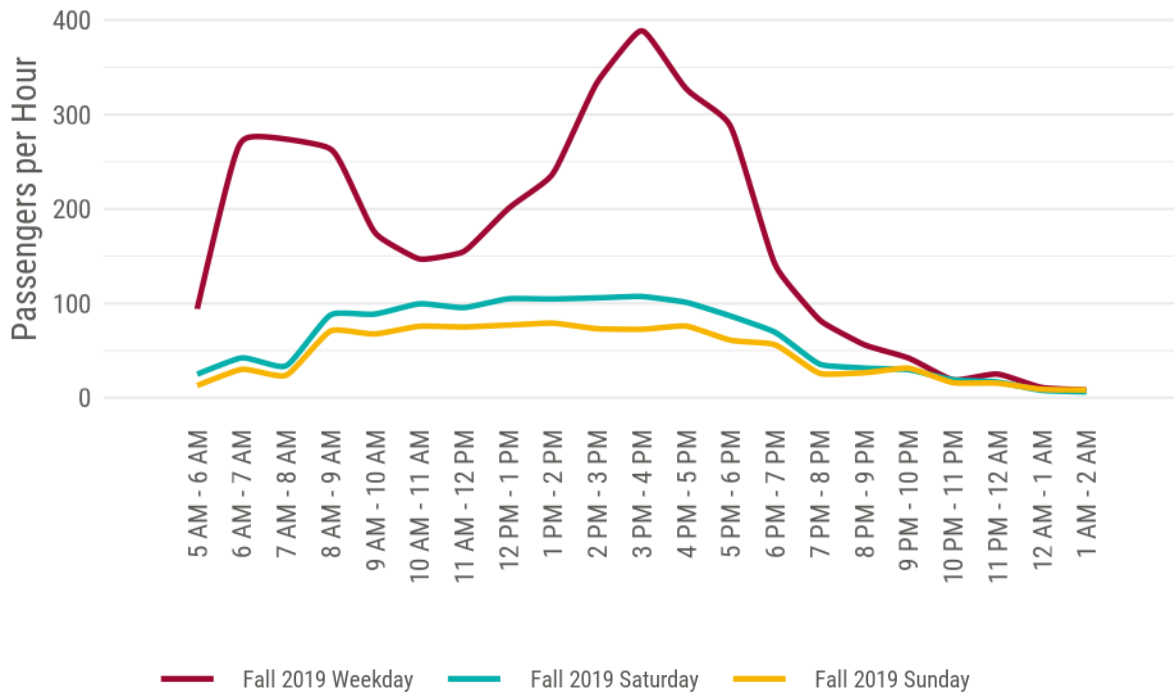

## Ridership by Time of Day

### Ridership by Hour

In Fall 2019, weekday ridership was highest during the afternoon peak (see Figure 3). Demand was more dispersed during the morning peak and less overall than in the afternoon. This may indicate that some riders are using the Market-Frankford Line (or other bus service) for their AM trip. Midday ridership was less than half of the PM peak. Ridership decreases quickly after 6:00 PM.

Weekend ridership was steadier throughout the day and much less than on weekdays, with most ridership between about 9:00 AM and 6:00 PM.

Figure 3 | Ridership by Hour: Fall 2019



### Ridership and Maximum Loads by Trip

In Fall 2019, weekday ridership per trip was moderate with higher ridership during peak periods (see Figure 4):

- AM peak trips carried 40 to 60 passengers
- Midday trips carried 20 to 40 passengers
- PM peak trips carried 40 to 50 passengers with two afternoon trips carrying greater volumes which likely includes many students
- After 6:00 PM, ridership decreased from 40 passengers to about 10 riders per trip
- After midnight ridership was 10 or fewer riders per trip

There is significant turnover along Route 5 so maximum loads are below seating capacity on all trips. Many Fall 2019 trips outside the peak periods have maximum loads of 20 or less (see Figure 5).

Ridership on weekends was lower with most trips carrying between 20 and 30 riders, and maximum loads of only about 10-15 passengers.

Figure 4 | Fall 2019 Weekday Ridership by Trip

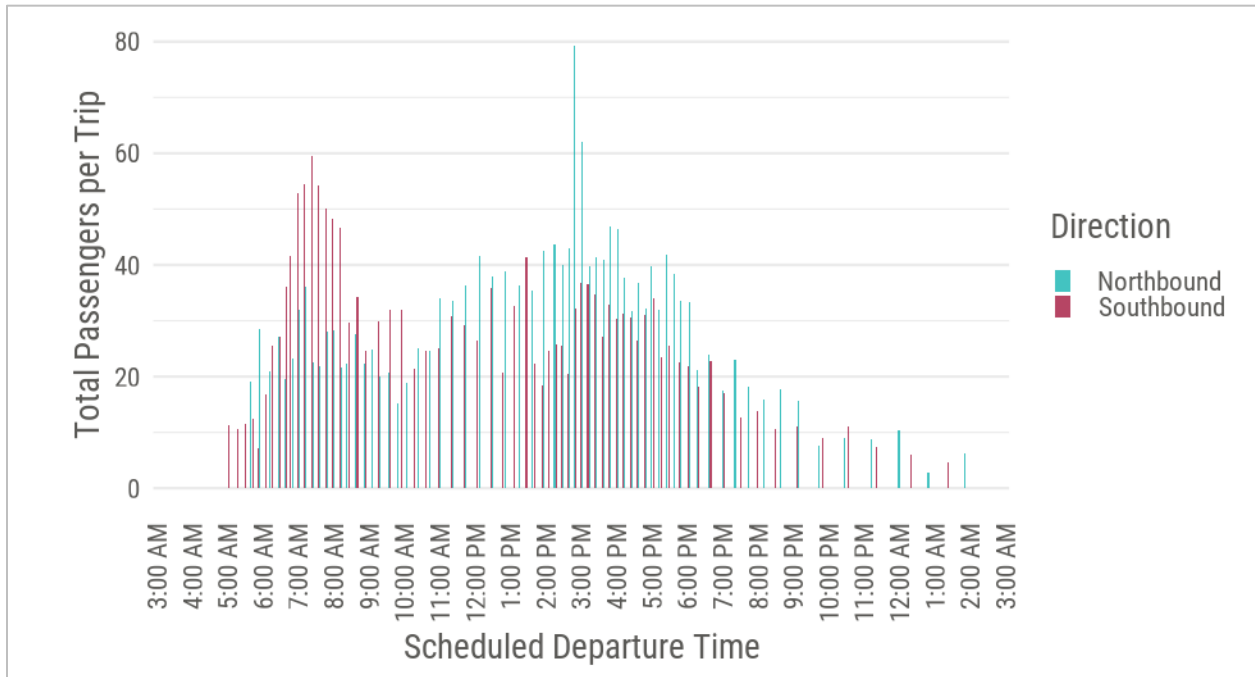
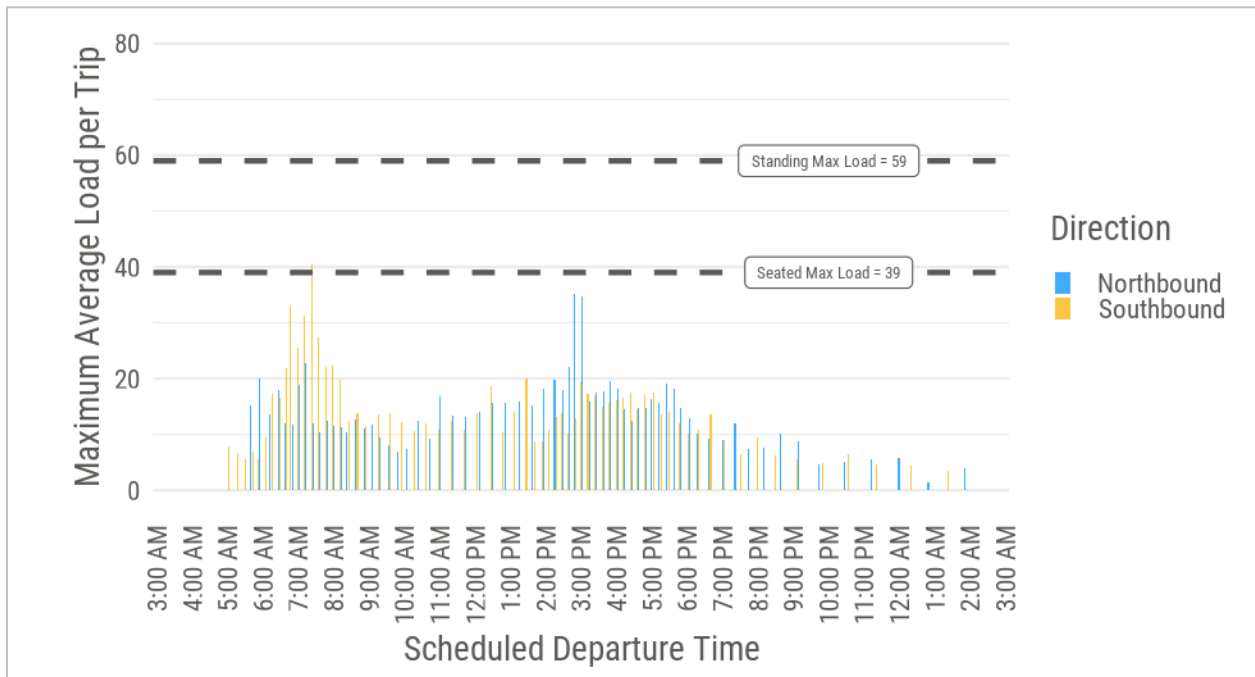


Figure 5 | Fall 2019 Weekday Maximum Loads by Trip



## ON-TIME PERFORMANCE AND RUNNING TIMES

### On-Time Performance

In Fall 2019, Route 5 had substandard on-time performance with approximately 70% of weekday and Saturday trips meeting SEPTA’s standard. Sundays had much better on-time



performance with 83% of trips meeting the standard (see Table 4). Trips were more likely to be late than early on weekdays and Saturdays, but more likely to be early on Sundays.

**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%	71%	17%	2%
Saturday	5%	70%	24%	0%
Sunday	12%	83%	5%	0%

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

## AVERAGE SPEEDS AND STOP SPACING

Weekday speeds on Route 5 are slow, with buses traveling both ends of the route at less than 10 mph during the PM peak but somewhat faster on the middle of the route (see Figure 6).

Slow speeds result in part from stop spacing. There are more than 9 per mile along the entire route but some segments have more than 11 stops per mile (see Figure 7).

**Figure 6 | Fall 2019 PM Peak Northbound Speeds**

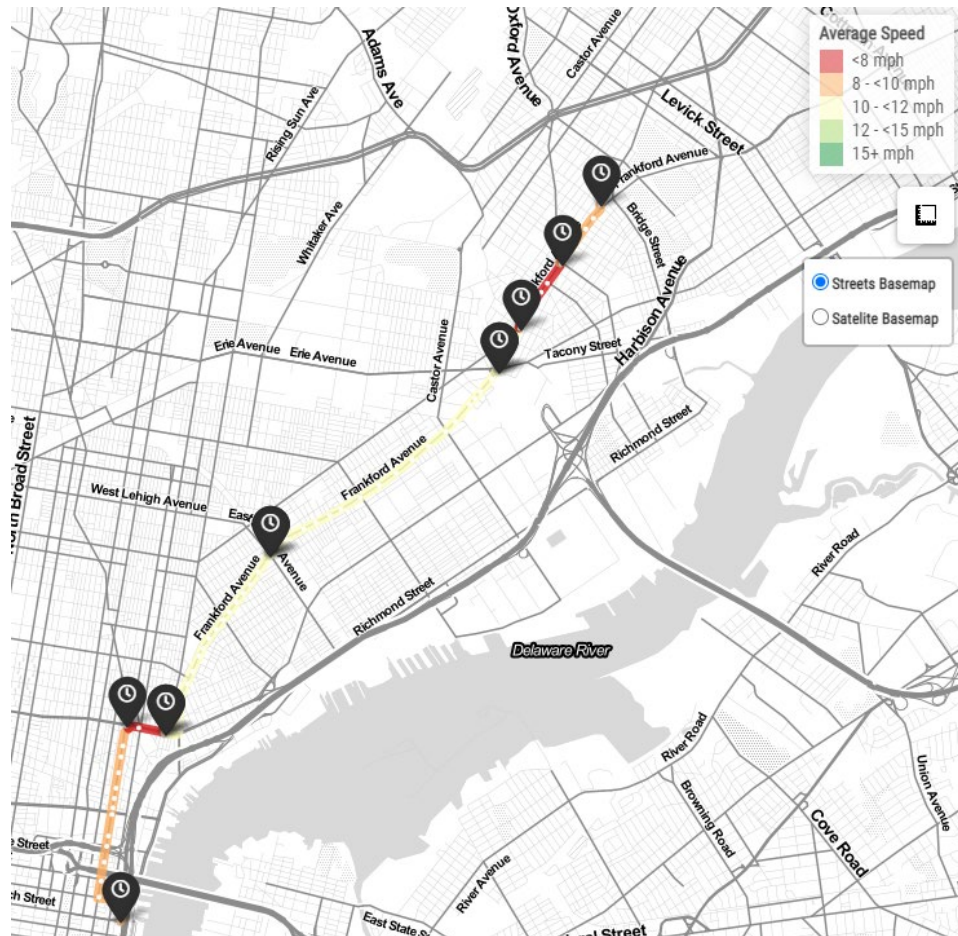


Figure 7 | Stop Spacing by Route Segment



## RIDER CHARACTERISTICS

As compared with SEPTA’s entire service area, Route 5 riders are more likely to behave low incomes, to be Hispanic and to have a disability (see Table 5).

Table 5 | Rider Characteristics

	Route 5 Riders	Systemwide Average
Median Household Income	\$29,787	\$32,713
Share in Poverty	39%	30%
Ethnicity		
White	37%	38%
Black	35%	46%
Hispanic	26%	10%
Other	8%	7%
Without a Vehicle	41%	37%
Seniors	18%	15%
With a Disability	4%	2%



## SERVICE IMPROVEMENT OPPORTUNITIES

Opportunities to strengthen Route 5 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- **Consolidate Routes 3, 5, 25, and 73:** These three routes provide similar service between Frankford Transportation Center and Berks Station. The Market-Frankford Line also provides service through this entire area. There may be opportunities to consolidate bus service into fewer corridors and reallocate resources to increase service on remaining routes.
- **Eliminate Segment South of Girard Avenue:** Route 5's service in Old City and Northern Liberties on 2<sup>nd</sup>/3<sup>rd</sup> Streets is close to Route 57 and the Market-Frankford Line. Moving the southern terminus to Girard Avenue would still allow connections to the Route 15 Trolley and would eliminate the most congested segment of the route. A suitable end-of-line location would need to be found.
- **Reduce Off-Peak Frequency:** Maximum loads on off-peak trips were generally less than half of seating capacity during Fall 2019. Frequency has been reduced during COVID and returning to pre-COVID service levels may not be justified.