September 5, 2019

To: Members of the Technical Advisory Committee

From: Jennifer L. Bergener, Managing Director

Subject: Pacific Surfliner Ridership Trend Analysis

Overview

In April and October of 2018, the Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency's Pacific Surfliner passenger rail service implemented schedule and operational adjustments necessary to facilitate the implementation of peak-period service between Los Angeles and Ventura – Santa Barbara counties. A detailed evaluation of the ridership trends since the April 2018 schedule change has been performed as requested by the Board of Directors. The results of this analysis are presented for consideration.

Recommendation

Receive and file as an information item.

Background

The Los Angeles – San Diego – San Luis Obispo (LOSSAN) Rail Corridor Agency (Agency) worked with the California State Transportation Agency, Amtrak, and in coordination with the Santa Barbara County Association of Governments (SBCAG), to develop an operating plan to provide peak-period service between Los Angeles and Ventura – Santa Barbara counties. On February 21, 2018, the LOSSAN Board of Directors (Board) approved a retimed Pacific Surfliner schedule to facilitate the implementation of peak-period service and directed staff to monitor service performance and report to the Board on that performance.

The retimed Pacific Surfliner schedule required modifications to existing Pacific Surfliner schedules, including a bifurcation of train 761 on the weekdays and other minor adjustments. In October 2018, as part of the regular biennial schedule change, additional operational and schedule adjustments were made. These additional adjustments included the bifurcation of train 769, the extension of train 567 to Goleta, as well as adjusting the southbound departures of trains 564 and 572 by approximately 25 minutes. The October 2018 adjustments,

specifically the bifurcation of train 769, were intended to support peak-period service by allowing for more time to make equipment turns in Goleta. The initial ridership, revenue, and cost projections associated with the retimed schedule reflected a modest decrease in both ridership and revenue at the onset of the peak-period service.

Discussion

As anticipated, the Pacific Surfliner has experienced an overall decrease in both ridership and revenue following the implementation of the peak-period schedule on April 1, 2018. A comparison of the 12 months preceding April 2018 and the 12 months since show an average loss of 7.5 percent, or about 19,000 riders, every month. Ridership on the new service has declined slightly since the initial introduction and is currently at approximately 90 riders per day. The summary of the ridership for the time periods mentioned is shown in Figure 1.1.

Pacific Surfliner	
Time Period	**Average Monthly Ridership**
April 2017 - March 2018	253,336
April 2018 - March 2019	234,344
Average Monthly Ridership Loss	**(18,992)**
Percent of Loss	**-7.5%**

Figure 1.1

Revenue on the Pacific Surfliner has performed slightly better than ridership during the same time period, but has still seen an overall downward trend as can be seen below. Figure 1.2 contains 24 months of performance data. The trendlines, however, are based on the performance since April 2018.

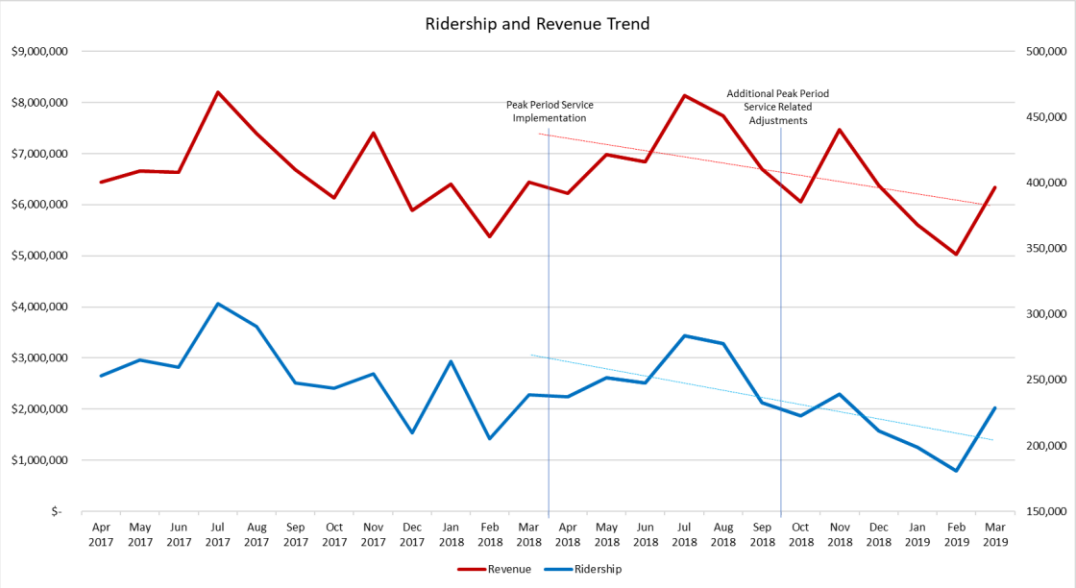

Figure 1.2

Train by Train Analysis

The LOSSAN Agency has been continually monitoring the performance of the peak-period service and performing weekly analysis of ridership patterns and OTP. With a full 12 months of data available, staff undertook a detailed system-wide analysis to evaluate the overall impact of the various schedule and other operational adjustments made to facilitate peak-period service. This involved a train by train analysis to determine what adjustments benefited the ridership trend and what adjustments did not.

Southbound	
Train	Average Monthly Impact
562	(375)
564/1564	(1,138)
566	240
1566	(36)
768	(902)
572/1572	(585)
774	(347)
580	(63)
582/782	1,551
784/584/1584	(7,596)
590/790	(2,651)
592/792	5,960
796	(355)
Net Impact	(6,297)

Northbound	
Train	Average Monthly Impact
761/561	(7,070)
565/1565	(692)
567/1567/767/1767	632
769/569/1569	(4,772)
573/1573	(1,121)
579/1579	203
583	(567)
591	(141)
595	(420)
759	2,644
763	1,611
777	216
785	(2,004)
1761	(797)
Net Impact	(12,278)

Figure 1.3

A summary of the average monthly impacts by train, separated into northbound and southbound trains is shown in Figure 1.3.

This is a comparison of the average monthly ridership for the 12 months prior to the implementation of peak period service with the 12 months following. The details of the significant findings are discussed below. This data excludes any special service trains. Weekend service was combined with weekday service ridership numbers where necessary to have an accurate comparison from year to year.

Metrolink Rail 2 Rail Ridership

Although Pacific Surfliner ridership for April 2018 through March 2019 declined by 7.5 percent, the decline in Metrolink Rail 2 Rail (R2R) ridership has been nearly double that for the same period. As is demonstrated in Figure 1.4, average weekday R2R ridership for April 2018

	Average Monthly R2R Ridership		
	April 2017 - March 2018	April 2018 - March 2019	% Change
South	22,767	20,943	-8%
North	3,256	1,711	-47%
Total	**26,023**	**22,655**	**-13%**

Figure 1.4

through March 2019 decreased by 13 percent. However, as can be seen, the loss is particularly significant north of Los Angeles. This is a direct result of the bifurcation of trains 761 and 769. These were previous heavily utilized R2R trains. With the loss of these through connections, R2R passengers have shifted back to Metrolink or to other forms of transportation. The overall ridership trend can be seen in Figure 1.5.

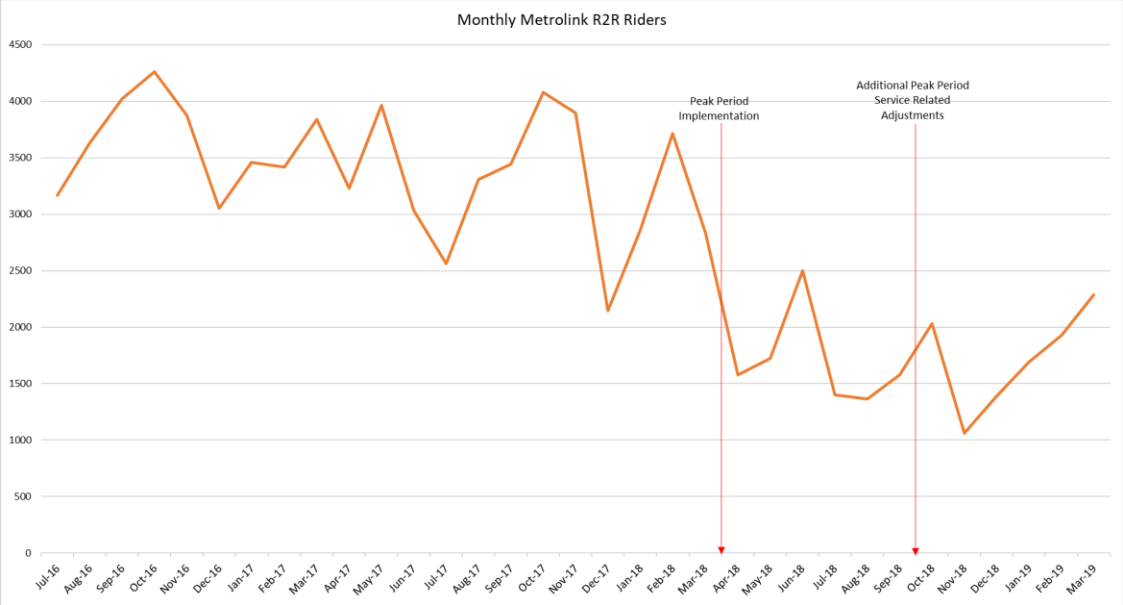

Figure 1.5

April 2018 vs. October 2018

One important finding of the analysis was that the impact to ridership throughout the year was not linear. As previously discussed, the adjustments in April 2018 had serious impacts on overall system ridership. However, ridership loss increased significantly in the time period following the October 2018 schedule change.

This continuing drop in ridership post-October 2018 is even more significant when taken on a train by train basis. Below are summary comparisons of the average monthly ridership impact broken down by train. This shows a side by side comparison of the averages for the six months before the October 2018 adjustments, and the six months after.

For southbound trains, those that saw significant changes, whether an adjustment in departure time or bifurcation, saw a corresponding drop in ridership as can be seen in Figure 1.6. Even the relatively minor timing adjustments to trains 564 and 572 resulted in considerable ridership loss.

The bottom-line number does not appear to increase significantly, but that is primarily due to the artificially high numbers associated with train 784. Train 784 was bifurcated in October 2017, so its ridership loss in the time period pre-October 2018 is inflated. Removing that outlier, the impact would be much more significant.

Southbound			
Train	**Pre-October 2018 Average Monthly Impact**	**Post-October 2018 Average Monthly Impact**	**Comments**
562	**(352)**	**(398)**	
564/1564	**(794)**	**(1,482)**	*Departs 23 minutes earlier*
566	213	268	
1566	**(243)**	171	
768	**(1,392)**	**(411)**	
572/1572	**(64)**	**(1,106)**	*Departs 26 minutes earlier*
774	**(786)**	92	
580	227	**(353)**	
582/782	4,287	**(1,185)**	*Possible shift to 584*
784/584/1584	**(13,388)**	**(1,805)**	*Bifurcation in October 2017.*
590/790	**(5,084)**	**(219)**	*Possible shift from 792*
592/792	10,855	1,066	*Extension to Goleta October 2017.*
796	608	**(1,319)**	
Net Impact	**(5,912)**	**(6,681)**	

Figure 1.6

For northbound trains, the impact of the October 2018 changes is much more significant as can be seen in Figure 1.7. As with the southbound, the trains that saw significant changes saw a corresponding drop in ridership. However, even those trains that saw increases in service, such as extensions beyond Los Angeles, did not see anticipated ridership growth.

Of note are trains 569 and 567. Train 569 saw the biggest adjustment with a bifurcation at Los Angeles, and an adjustment to a later departure time. This change has resulted in a significant ridership loss, equivalent to approximately 6,500 riders a month on average. Train 567 saw an increase in service, with an extension from Los Angeles up to Goleta. However, this only resulted in a ridership increase of a little over 1,000 passengers per month on average, or

fewer than 40 riders per day. This would indicate that the ridership demand does not exist to merit the costs of operating the extension.

Northbound			
Train	**Pre-October 2018 Average Monthly Impact**	**Post-October 2018 Average Monthly Impact**	**Comments**
759	2,982	2,306	
761/561	**(7,649)**	**(6,492)**	
565/1565	**(311)**	**(1,072)**	
567/1567/767/1767	90	1,173	*Extension to Goleta*
769/569/1569	**(1,508)**	**(8,036)**	*Bifurcation. Departs 23 minutes later*
573/1573	**(524)**	**(1,718)**	
579/1579	121	286	
583	**(537)**	**(596)**	
591	44	**(325)**	
595	**(206)**	**(634)**	
763	3,067	155	
777	955	**(522)**	
785	**(1,836)**	**(2,172)**	
1761	**(1,025)**	**(570)**	
Net Impact	**(6,337)**	**(18,218)**	

Figure 1.7

Next steps

Staff will continue to closely monitor the performance of the Pacific Surfliner Service on a train by train basis. Upcoming adjustments to the schedule in October 2019 associated with the implementation of the 13th roundtrip will no doubt cause additional impacts to ridership patterns. This increase in service brings the potential for the restoration of some of the previous ridership losses. Once sufficient data is available, another analysis will be performed to assess the impact of the 13th roundtrip and will be brought before the Board for consideration in advance of the planned April 2020 schedule change.

Summary

In April and October of 2018, regularly planned schedule changes for the Pacific Surfliner intercity passenger rail services were implemented to facilitate peak-period service between Los Angeles and Ventura – Santa Barbara counties. A detailed operational analysis has been performed as requested by the Board of Directors to consider the impacts of the operational adjustments necessary to support the implementation of peak-period service. Impacts for the first year include a significant decrease in overall ridership. Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency staff will return to the Board of Directors in Spring 2020 with further analysis following the implementation of the 13th roundtrip.

Attachment

None.

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