



SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

**FISCAL YEAR 2018-19
ADOPTED BUDGET**

METROLINK®



**SOUTHERN CALIFORNIA
REGIONAL RAIL AUTHORITY**

**FISCAL YEAR 2018-19
BUDGET**

**Including Forecast for
FY2019-20 and FY2020-21
(Informational only)**

Adopted July 13, 2018

Los Angeles County Metropolitan Transportation Authority

Orange County Transportation Authority

Riverside County Transportation Commission

San Bernardino County Transportation Authority

Ventura County Transportation Commission

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SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

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SECTION 1: EXECUTIVE SUMMARY

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 1: Executive Summary

1.1 Introduction

In its 26th year of operation, the Southern California Regional Rail Authority (SCRRA), operating as Metrolink, is Southern California's only inter-county commuter rail provider, furnishing transportation services for over 12.5 million passenger rides per year. As the second largest transit provider in terms of passenger miles, Metrolink has one of the lowest subsidy per passenger mile of all major transit operators in Southern California. Metrolink service reduces car congestion at a fraction of the cost of expanding highways, removing approximately 8.8 million annual auto trips from our local roadways.

For over two decades, SCRRA has enhanced the quality of life in Southern California by reducing highway congestion and improving mobility throughout the region. Metrolink is governed by SCRRA, a Joint Powers Authority (JPA) made up of an 11-member board representing the transportation commissions of Los Angeles, Orange, Riverside, San Bernardino and Ventura counties. At a time when public transportation providers across the region and country continue to experience steep declines, demand for Metrolink service remains steady.

1.2 Metrolink in Perspective

Service

- Metrolink is the nation's third largest commuter rail system, with 409 unduplicated route miles.
- Metrolink is the largest transportation provider for inter-county travel in Southern California. Metrolink service encompasses 2.8 million train miles annually.
- Metrolink is the second largest transit provider in Southern California, in terms of passenger miles, servicing more than 404 million passenger miles annually.
- Each weekday, Metrolink riders travel more than 1.5 million miles, enough to cover three roundtrips to the moon.
- 81% of Metrolink weekday trips are work related.
- 60% of Metrolink riders travel across county lines constituting a truly regional system.
- 49% of all Metrolink boardings are in LA County.

- Metrolink trains reduce directional peak hour traffic volumes by up to 30% on parallel freeways.

Cost Efficiency

- Metrolink’s FY2016-17 revenue recovery ratio was 43.3%, one of the highest of any major transit system in Southern California.
- Metrolink continues to have one of the lowest subsidy per passenger mile among major transit operators in Southern California.

Regional Benefits

- 82% of Metrolink riders have access to a car. However, by taking Metrolink, they help the region avoid the following:
 - 8.8 million car trips annually
 - 299 million vehicle miles traveled (VMT) annually
 - 116,224 metric tons of greenhouse gas (GHG) emissions
 - The need for adding more freeway lane capacity on parallel freeways during peak hours (the average construction cost per mile of Metrolink track is \$8 million compared to \$30 million per mile of freeway lanes)

Performance Statistics by County

ORIGIN COUNTY	LA	OC	RV	SB	VC	TOTAL
Metrolink Passenger Miles (000's) ¹	260,714	86,445	24,595	26,922	6,268	404,944
Metrolink Passenger Miles %	64%	21%	6%	7%	2%	100%
Subsidy per Passenger Mile ²	\$ 0.26	\$ 0.29	\$ 0.64	\$ 0.49	\$ 1.48	\$ 0.35
Car trips avoided (000's) ³	3,769	2,223	1,415	1,179	251	8,838
VMT avoided (000's) ³	180,609	72,772	20,750	20,437	4,803	299,371
GHG, metric tons ⁴	70,117	28,252	8,056	7,934	1,865	116,224
Lane capacity relief on parallel freeways: (Peak Hr Lane Capacity) ⁵	1.1	0.9	1.2	0.6	0.2	n/a
Directional Peak Hr Volume relief on parallel freeways ⁵	24%	28%	16%	6%	5%	n/a

Notes:

1. FY17 Actual. Passenger Miles in San Diego County are included for Orange County.
2. FY18 Adopted Budget
3. Using % car available and 1.1 average vehicle occupancy
4. GHG expressed in CO2 equivalents (<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>)
5. Traffic data at selected Caltrans freeway postmiles , October 2017

1.3 Metrolink in Comparison

AGENCY	AVG FARE/ PASSENGER	REVENUE/ PASSENGER MILE	REVENUE/ TRAIN MILE	OPERATING COST/ TRAIN MILE	OPERATING COST/ PASSENGER	OPERATING COST/ PASSENGER	SUBSIDY/ PASSENGER	SUBSIDY/ PASSENGER MILE	FAREBOX RECOVERY RATIO
METROLINK	\$6.14	\$0.20	\$31.49	\$81.24	\$15.85	\$0.51	\$9.70	\$0.31	38.76%
COMMUTER RAIL									
Maryland Transit Administration MTA	\$5.61	\$0.19	\$41.15	\$114.20	\$15.57	\$0.52	\$9.96	\$0.34	36.03%
Massachusetts Bay Transportation Authority MBTA	\$5.86	\$0.28	\$45.22	\$92.04	\$11.93	\$0.58	\$6.07	\$0.29	49.13%
Northeast Illinois Regional Commuter Railroad METRO	\$4.73	\$0.21	\$49.51	\$104.61	\$10.00	\$0.45	\$5.27	\$0.24	47.32%
Peninsula corridor Joint Powers Board CALTRAIN	\$4.85	\$0.18	\$64.57	\$81.32	\$6.11	\$0.23	\$1.26	\$0.05	79.40%
Southeastern Pennsylvania Transportation Authority SEPTA	\$4.20	\$0.33	\$30.48	\$53.73	\$7.40	\$0.59	\$3.20	\$0.25	56.72%
Virginia Railway Express VRE	\$8.66	\$0.26	\$106.83	\$198.02	\$16.05	\$0.48	\$7.39	\$0.22	53.95%
LOCAL TRANSIT AGENCY									
Los Angeles County Metropolitan Transportation Authority METRO	\$0.79	\$0.17	--	--	\$3.64	\$0.78	\$2.84	\$0.61	21.82%
Riverside Transit Agency RTA	\$1.07	\$0.15	--	--	\$5.67	\$0.82	\$4.61	\$0.67	18.78%
OMNITRANS	\$0.99	\$0.19	--	--	\$4.83	\$0.93	\$3.84	\$0.74	20.43%
Orange County Transportation Authority OCTA	\$1.03	\$0.28	--	--	\$4.66	\$1.28	\$3.63	\$1.00	22.06%

Source: FY2016 NTD Data

Metrolink compares favorably with other forms of Southern California mass transit, as well as with the largest commuter rail organizations in the nation. As shown in the chart above, Metrolink’s operating cost per train mile and per passenger mile is lower than many of the largest rail lines.

While maintaining this level of performance, SCRRA works continuously to achieve new goals and meet new challenges to better serve our customers and the community. The leading-edge technology Metrolink brings to the service of our customers also improves our internal efficiency.

1.4 Accomplishments in FY2017-18

Below are highlights of Metrolink accomplishments during FY2017-18:

- Positive Train Control (PTC) is the centerpiece of Metrolink’s unwavering focus on safety, providing protective collision avoidance and over-speed prevention. Metrolink was the first in the nation to achieve PTC. Metrolink is one of only two commuter railroads to achieve PTC in-service on all the train lines that it services and manages.
- Continued improvements to online ticketing include the ability to use mobile device tickets to “scan-through” to Metro Rail services.
- The new San Bernardino Downtown station was added December 16, 2017 to increase regional mobility.
- The new Burbank Airport-North (AV Line) station opened for revenue service on May 14, 2018, expanding Metrolink’s train-to-plane connectivity by providing additional daily access directly to the Hollywood Burbank airport.

- Metrolink has received fifteen Tier 4 locomotives, which are being phased into service. The Tier 4 technology removes particulate matter and NOx by filtering exhaust and offers 64% more horsepower when compared with the older Tier 0 technology.
- Maximized utilization of newly available Federal Preventive Maintenance funds to supplement Member Agency subsidies through inter-Agency planning.
- Favorable performance of the fuel hedging program designed to stabilize the Fuel Budget and minimize year-over-year variances.
- Recommendations from the Class and Compensation Study by Segal Waters Consulting were implemented to better align the classification structure and ensure competitive compensation, in an effort to be an Employer of Choice.
- The Metrolink Marketing Department had again garnered AdWheel (APTA) Prizes. In 2018, the wins were:
 - 1st Place – Tier 4 Kickoff (Educational – Special Event)
 - 1st Place – Bike to Work Campaign (Ridership – Social Media)
- In FY2017-18, Metrolink was awarded \$875.7 million in SB 1 Transit and Intercity Rail Capital Program (TIRCP) funding from the Southern California Optimized Rail Expansion (SCORE) Program.

1.5 Objectives for FY2018-19

The FY2018-19 Budget reflects objectives and priorities consistent with the “back to basics” approach outlined in our Strategic Plan, adopted by the SCRRA Board in March 2016. The budget provides funding in alignment with the Authority’s strategic goals, and includes the following priorities for the upcoming fiscal year:

- Continue emphasis on safe operations, with the perfected operation of PTC as the centerpiece of our efforts.
- Implementation of modernized ticket vending system.
- Enhancement of rider experience through the rehabilitation of Passenger Cars.
- Retain and grow ridership through a \$3.9 million investment in a targeted marketing program to maximize connection with potential riders within our service area.
- Implement a six-month pilot program providing a 25% discount on the San Bernardino line to increase ridership.
- Deliver the SCORE Program to transform the way people and goods move in and through Southern California. It features modernizing and integrating capacity improvements, focusing on the five-county regional rail system

including Metrolink's regional rail network and benefitting all shared-track operators, passenger and freight and connecting modes.

1.6 FY2018-19 Budget in Brief

Total SCRRA Revenues are \$100.8 million, 0.2% more than the FY2017-18 Budget. The FY2018-19

Operating Expenses Budget of \$251.4 million is an increase of 3.4% from the FY2017-18 Operating Expenses Budget.

Member Agency Subsidies are \$150.6 million, an increase of \$8.2 million or 5.7% over the FY2017-18 Budget.

The Capital Program seeks \$125.9 million in additional capital authorization: \$62.8 million in new authority for Rehabilitation Projects, \$62.0 million in new authority for Special Projects, and \$1.2 million in new authority for New Capital Projects.

1.7 Key FY2018-19 Budget Information

SCRRA is a JPA originally created to plan, design, build and operate the Metrolink commuter rail service in the Southern California region. In FY2018-19, Metrolink will provide service on 7 routes to 61 stations with over 536 route miles. The system map is provided as *Exhibit 1.1*.

During FY2018-19, Metrolink will operate 171 weekday trains and 90 weekend trains. Average weekday one-way ridership is projected at 43,852 daily. Additionally, we estimate 20,687 riders will take advantage of Saturday and Sunday services offered on the Antelope Valley, Inland Empire-Orange County, Orange County, 91, and San Bernardino lines.

Metrolink operates approximately 75% of Member Agency-owned territory. SCRRA will dispatch 171 Metrolink trains and up to 34 Amtrak and 60 freight trains per day. Metrolink is also responsible for the maintenance of right-of-way owned by SCRRA Member Agencies that span 398 track miles.

SCRRA's Capital Program includes ongoing rehabilitation of right-of-way, facilities, equipment and rolling stock, and expansion of the commuter rail system through the acquisition and construction of new assets.

1.8 The FY2018-19 Operational Budget Statistics

- Total revenue recovery is projected to equal 40.2% (a 3.1% decrease from the FY2017-18 Budget).
- Farebox recovery is projected at 34.1% (a 2.7% decrease from the FY2017-18 Budget).
- Operating Expenses per train mile is \$88.26, excluding Maintenance-of-Way (MOW) extraordinary maintenance (3.2% increase from the FY2017-18 Budget).
- Operating Expenses per passenger mile is \$0.58 (a 3.7% decrease from the FY2017-18 Budget).
- Diesel fuel costs will continue to be maintained using a fuel hedging program which is designed to stabilize the fuel budget and minimize large year-over-year variances.
- Subsidy per passenger mile equals \$0.35 (no change from the FY2017-18 Budget).
- Member Agency subsidies are estimated to provide 59.9% of the required Operating Revenues in FY2018-19.

1.9 Administrative Requirements

Under the terms of the JPA establishing SCRRRA, the Chief Executive Officer submits a Preliminary Fiscal Year Budget for the following fiscal year to the SCRRRA Board for transmittal to Member Agencies no later than May 1 of each year for review and approval. The Preliminary Budget includes projected Authority revenues, administrative and operating expenses, and capital program. The net of operating revenues and expenses represent the anticipated Member Agency subsidies required to carry out the purposes of the Authority. Decisions involving capital, operating fund allocations, and annual approval of each Member Agency's share of SCRRRA's annual budget, require approval by the Member Agencies.

The SCRRRA Board approved the transmittal of the FY2018-19 Proposed Budget on April 13, 2018, and the document was submitted to the Member Agencies on April 30, 2018. Revisions were made to the FY2018-19 Proposed Budget as transmitted to reflect the funding amounts adopted by the respective Member Agencies. The FY2018-19 Proposed Budget was offered for adoption by the SCRRRA Board on June 22, 2018. The FY2018-19 Proposed Budget was approved for adoption on July 13, 2018.

1.10 Budget Development and Assumptions

The development of SCRRA's FY2018-19 Budget was based on revenues, operating costs, and capital investment required to provide a safe, efficient and reliable commuter rail operation.

The SCRRA budget is made up of two principal components:

- Operating Budget (Train Operations, MOW, and Insurance) and,
- Capital Program (Rehabilitation Projects and New Capital Projects).

Funding for these costs is derived from SCRRA fare revenue and other income, with the balance provided by grants and subsidies paid by the five Member Agencies. Under the terms of the JPA, each Member Agency approves its individual Operating and Capital subsidies for the upcoming fiscal year. These subsidies are based on a series of formulated allocations that distribute revenue and costs across operating line segments and Member Agencies.

1.11 Summary of Operating Revenues and Subsidy Funding

SCRRA generates Operating Revenue from four sources: Fares, Dispatching, MOW, and Other Revenue.

Fare Revenues – The FY2018-19 Budget assumes ridership of 12.5 million passengers will generate Fare Revenues equal to \$85.6 million, an increase of \$0.5 million or 0.6% from the FY2017-18 Budget. The FY2018-19 Budget includes a continued 25% fare reduction on the Antelope Valley Line funded by Metro, and a 25% fare reduction on the San Bernardino Line implemented as a pilot program on July 1, 2018, funded by Metro and SBCTA. Projections of Fare Revenues include \$2.9 million anticipated from a \$3.9 million targeted investment in marketing program designed to grow ridership and revenue. (Details of this program are discussed in section 4, subsection 4.2)

Dispatching Revenue – As the operating administrator of its member-owned rights-of-way, SCRRA receives revenues from freight railroads and Amtrak Intercity Services for the right to operate in its territories. These revenues are volume-based, and individual rates are contained in existing agreements that govern rate increases. The total dispatching revenues are budgeted at \$2.1 million; no change from the FY2017-18 Budget, and consistent with FY2017-18 estimated actual revenue forecasted in the Third Quarter.

MOW Revenue – Member Agency subsidies for ordinary maintenance are partially offset by revenues received from freight railroads and Amtrak Intercity Services. Most of the MOW revenue rates were negotiated based on the historical expenditures on MOW by freight railroads prior to the purchase of these right-of-way properties by the Member Agencies. Consequently, these revenue rates do

not completely offset the escalating costs of maintaining a higher standard of quality for passenger rail service. The FY2018-19 Budget projects MOW revenues at \$12.6 million, which is \$0.8 million, or 5.9% less than the FY2017-18 Budget. The reduction is primarily related to lower revenue from Union Pacific on the Saugus line where revenues are calculated on the basis of prior year freight traffic (car miles).

Other Revenues – SCRRA will continue to offer advertising space on Metrolink trains to select organizations. We have budgeted \$50K for FY2018-19. Other sources include Third Party Agreement (TPA) earnings, disposal of assets, citations, Los Angeles World Airports (LAWA) commission, interest, and miscellaneous revenues for a total of \$440K.

1.12 Summary of Operating Expenses

In FY2018-19, SCRRA's Operating Expenses include Train Operations, MOW and Insurance. The combined total expense for the FY2018-19 Budget is \$251.4 million.

Train Operations – A variety of expenses are included in the broad category of Train Operations. These include: operating crews, dispatching, equipment maintenance, fuel, non-scheduled rolling stock repairs, operating facilities maintenance, rolling stock lease payments, sheriffs and security guards, public safety programs, passenger relations, Ticket Vending Machine maintenance, revenue collection, marketing and market research, media/external relations, utilities and leases, passenger transfers to other operators, Rail-2-Rail program, station maintenance, freight rail agreements, and general administrative costs that support the Authority's operation. Total Train Operations costs are \$193.4 million, a 5.3% increase over the FY2017-18 Budget.

MOW – Ordinary and extraordinary maintenance of Member Agency-owned track, signals, bridges, road crossings, other elements of the infrastructure, and rights-of-way totals \$41.3 million. This is a 0.7% decrease from the FY2017-18 Budget.

Insurance – Insurance expenses of \$16.6 million decreased \$1.0 million or 5.9% from the FY2017-18 Budget.

1.13 Summary of Capital Program

SCRRA's overall Capital Program Budget request totals \$481.3 million. The Rehabilitation component is comprised of \$121.6 million in carryforward from prior years, and the FY2018-19 request for additional Rehabilitation authority of \$62.8 million. The Special Projects component consists of \$62.0 million of new request for FY2018-19. The New Capital component is comprised of \$233.8 million in carryforward from prior years, and the FY2018-19 request for additional New Capital authority of \$1.2 million. Section 7 of this budget document contains a detailed listing of projects which these amounts represent.

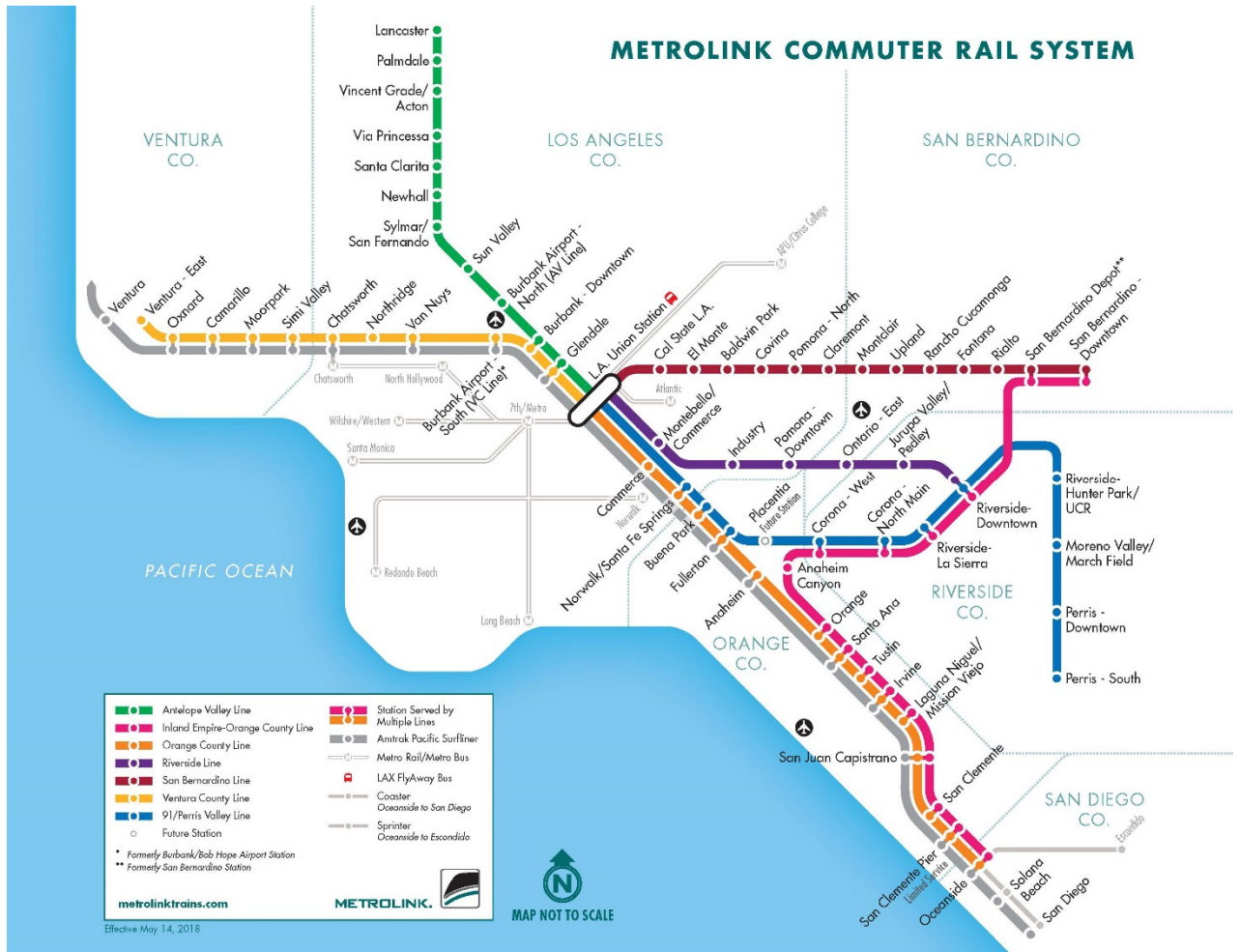
The purpose of the Capital Program is to ensure safe and reliable train operations, maintain a State of Good Repair (SOGR) and provide continued investment in our identified backlog of prior years' Deferred Maintenance as identified in the Metrolink Infrastructure Rehabilitation Plan (MIRP), and the forthcoming expanded Metrolink Rehabilitation Plan (MRP).

Rehabilitation projects within the program renovate or remanufacture worn out assets to preserve and/or extend the useful life of the asset. New Capital projects expand the railroad infrastructure, and include items such as sidings, additional track, material upgrades of the signals and communication systems and new rolling stock.

1.14 Exhibits

Exhibit 1.1: Metrolink Systemwide Map

This exhibit shows the six counties served. It displays Metrolink stations, Rail-2-Rail stations shared by Metrolink and Amtrak, as well as Union Station, which is shared by Metrolink, Amtrak and Metro.



SECTION 2: INTRODUCTION TO THE BUDGET

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 2: Introduction to the Budget

2.1 Mission Statement

Our mission is to provide safe, efficient, dependable and on-time transportation service that offers outstanding customer experience and enhances quality of life.

Metrolink is a premier regional rail system that links passengers to employment and activity centers. Metrolink accomplishes its mission by employing state-of-the-art safety operations technology for which it is known throughout the country. Metrolink is proud to provide affordable, dependable, and high-quality service to its' customers. Metrolink's strategically located network of lines and stations, and connection with other modes of transit, provide the most cost-effective method of removing cars from the Southern California freeway system. Metrolink embraces community involvement and partnerships with both public and private sectors.

2.2 Board Governance

The SCRRA Board Roster, as of June 30, 2018, consists of 11 voting members and 11 alternates:

County	Votes	Members	Alternates
Riverside County	2	<p>Andrew Kotyuk (Chair) Council Member City of San Jacinto RCTC Board</p> <p>Debbie Franklin Mayor Pro Tem At Large City of Banning RCTC Board</p>	<p>Brian Berkson¹ Mayor Pro Tem City of Jurupa Valley RCTC Board</p> <p>Adam Rush¹ Council Member City of Eastvale RCTC Board</p>
Ventura County	1	<p>Brian Humphrey (<i>Vice-Chair</i>) Citizen Representative VCTC Board</p>	<p>Ginger Gherardi Mayor City of Santa Paula VCTC Board</p>
Los Angeles County	4	<p>Ara Najarian (<i>2nd Vice-Chair</i>) Councilmember City of Glendale Metro Board</p> <p>Kathryn Barger Supervisor, 5th District County of Los Angeles Metro Board</p> <p>Paul Krekorian Councilmember, 2nd District City of Los Angeles Metro Board</p> <p>Hilda Solis Supervisor, 1st District County of Los Angeles Metro Board</p>	<p>Walter Allen, III Mayor Pro Tem City of Covina Metro Appointee</p> <p>Roxana Martinez Metro Appointee</p> <p>Borja Leon Metro Appointee</p> <p>Vivian Romero Councilmember City of Montebello Metro Appointee</p>

San Bernardino County	2	<p>Larry McCallon Mayor Pro Tem City of Highland SBCTA Board</p> <p>Alan D. Wapner Mayor Pro Tem City of Ontario SBCTA Board</p>	<p>R. Carey Davis¹ Mayor City of San Bernardino SBCTA Board</p> <p>Ray Marquez¹ Council Member City of Chino Hills SBCTA Board</p>
Orange County	2	<p>Shawn Nelson Supervisor, 4th District County of Orange OCTA Board</p> <p>Gregory T. Winterbottom Public Member OCTA Board</p>	<p>Laurie Davies¹ Council Member City of Laguna Niguel OCTA Board</p> <p>Richard D. Murphy¹ Council Member City of Los Alamitos OCTA Board</p>

Ex-officio members of SCRRA:

Agency	Ex – Officio Members
Southern California Association of Governments (SCAG)	Art Brown Council Member, City of Buena Park
San Diego Association of Governments (SANDAG)	<i>Currently awaiting appointment</i> Contact: Linda Culp Principal Planner – Rail
State of California: Department of Transportation (Caltrans)	Carrie Bowen District Director, Caltrans District 7 Alternate: Paul Marquez Deputy District Director for Planning – Caltrans, District 7

¹ Alternates represent either member

SCRRA has organized the Authority into cost centers under business units to support core functionalities, institute best practices and increase overall efficiency. These business units include:

Executive Office	Arthur T. Leahy, Chief Executive Officer Elissa K. Konove, Deputy Chief Executive Officer
External Affairs	Patricia Bruno, Chief of External Affairs
Financial Office	Ronnie Campbell, Chief Financial Officer
Internal Audit	Elisabeth Lazuardi, Senior Manager, Audit
Legal	Don O. Del Rio, General Counsel Geoffrey Forgione, Associate General Counsel
Operations Office	Gary Lettengarver, Chief Operating Officer Rod Bailey, Deputy Chief Operating Officer (Dispatch and Operator Services) Darrell Maxey, Deputy Chief Operating Officer (PTC and Engineering) Kimberly Yu, Deputy Chief Operating Officer (Planning and Project Delivery)

The FY2018-19 Budget includes 275 authorized positions, an addition of 2 positions from the FY2017-18 Budget.

2.3 SCRRA Background

In June 1990, the California Legislature enacted Senate Bill 1402, Chapter 4 of Division 12 of the Public Utilities Code. This bill required each transportation commission of the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura to jointly develop a plan for regional transit services within the multi-county region.

In August 1991, the SCRRA, a regional Joint Powers Authority (JPA), was formed. Voting members with their respective number of votes are: Los Angeles County Metropolitan Transportation Authority (Metro), four votes; Orange County Transportation Authority (OCTA), two votes; Riverside County Transportation Commission (RCTC), two votes; San Bernardino County Transportation Authority (SBCTA), two votes; and Ventura County Transportation Commission (VCTC), one vote. These five county transportation commissions are defined as SCRRA's Member Agencies. Ex-officio members of SCRRA include the Southern California

Association of Governments (SCAG), the San Diego Association of Governments (SANDAG) and the State of California Department of Transportation (Caltrans).

The purpose of the newly formed SCRRA was to plan, design, construct and administer the operation of regional passenger rail lines serving the counties of Los Angeles, Orange, Riverside, San Bernardino and Ventura. The Board named the regional commuter rail system "Metrolink". Metrolink has grown from just three lines in 1992 to seven lines today. The first three lines - San Bernardino, Santa Clarita (now Antelope Valley) and Ventura County - began operation in October 1992. The Riverside Line was added in June 1993, and the Orange County Line (which extends 19 miles into northern San Diego County) was added in April 1994. The sixth line, Inland Empire-Orange County, the nation's first suburb-to-suburb commuter rail line, was added in October 1995. In May of 2002, the 91 Line was added to provide an alternative to Inland Empire and western Orange County commuters traveling through Fullerton. In June 2016, the 91 Line was extended to Perris Valley to provide service to an additional section of the Inland Empire.

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SECTION 3: BUDGET SUMMARY

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 3: Budget Summary

3.1 Budget Policy

3.1.1 Budget Authorization

The primary objective of the SCRRA Budget is to provide the financial road map to achieve the Authority's priorities and objectives as presented in the SCRRA 10-Year Strategic Plan. The objective is consistent with the provision of safe, reliable, and high-quality commuter rail service under the Metrolink banner. The Operating Budget provides funds to enable the provision of such rail service and the associated administrative functions to manage that service, for the period of a single fiscal year. The Capital Program budget approves multi-year individual projects that may proceed within the approved funding level. As required, the FY2018-19 Proposed Budget was offered for adoption by the SCRRA Board on June 22, 2018. The FY2018-19 Proposed Budget was approved for adoption on July 13, 2018.

The Budget shall contain a financial plan that includes the following:

- Goals and objectives for the new fiscal year
- Assumptions underlying revenue and expense projections
- Planned service for the following fiscal year
- Summarized Revenue Budget
- Summarized Operating Budget
- Revenue sources by line item
- Expenses by summary line item
- Authorized headcount roster

In adopting the budget and any Board-initiated amendments, the Board authorizes SCRRA to expend funds under the direction of the Chief Executive Officer consistent with the following:

- Total amount appropriated for Train Operations, Maintenance-of-Way (MOW) and Insurance
- Total amount appropriated for each Rehabilitation and New Capital project
- Individual Member Agency funding commitments
- Total number of authorized positions

3.1.2 Budgetary Control and Reporting

Budgetary control refers to SCRRRA's approved procedures for monitoring actual expenses against planned expenditures as adopted in the annual budget. The introduction of controls by the project and task elements were installed coincident with the Oracle R12 implementation in 2013. Absolute budgetary controls with respect to project and task elements are maintained in the financial information system. The system is designed to prevent spending which exceeds the approved budget with regard to these elements without specific documented approval.

By adopting an annual budget, the SCRRRA Board delegates to the Chief Executive Officer the authority to manage the annual budget within the total expenditures and Capital Program approved by the Board.

Under this authority, budgeted expenditures may be moved between line items within or across departments in the budget. The Office of Finance shall review the impact of any requested budget transfer to ensure no amount above the approved subsidy level will accrue to any individual member as a result of the transfer. Transfers must be approved by the Chiefs of all business units involved in the transfer. Documentation of approved transfers are maintained by the Office of Finance.

Certain budget transfers may require Board approval and result in Budget Amendments. Budget Amendments will be submitted to the Board, as required, when a budget transfer:

- Negatively impacts Member Agency funding commitments
- Negatively impacts the total Operating Budget or individual Capital Projects
- Increases the total authorized level of personnel

The SCRRRA Board, by approving a Budget Amendment, amends the Adopted Budget for the fiscal year. Budget Amendments that require an increase in a Member Agency's funding commitment additionally requires the approval of that Member Agency.

The Adopted Budget, or subsequently Amended Adopted Budget, is the baseline for all comparisons to actual revenue and expenditures during a fiscal year. Operational Statements with accompanying reports, comparing budget to actual for the year-to-date are presented to the SCRRRA Board each quarter. Forecasts to the end of the current fiscal year are provided with the reporting of actual operating results for the third quarter. Internal performance reporting, periodic forecasting and the preparation of the Comprehensive Annual Financial Report (CAFR) also provide tools for managing and reporting Authority activities compared to the budget plan.

3.1.3 Accounting Methodology

SCRRA reports its financial position and activities as a special-purpose governmental entity engaged in business-type activities and presents financial statements required for enterprise funds. The accrual basis of accounting is utilized. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

SCRRA, as part of its implementation of Government Accounting Standards Board Pronouncement 34 (GASB-34), has elected to use the Modified Approach for the Metrolink Railroad Infrastructure. Under the Modified Approach, infrastructure assets that are part of a network, or subsystem of a network, are not required to be depreciated as long as two requirements are met:

- 1) The government manages the eligible infrastructure assets using a qualified asset management system.
- 2) The government documents that the eligible infrastructure assets are being preserved approximately at (or above) a condition level established and disclosed by the government.

The SCRRA Board adopted a condition rating of 75 points (of a maximum of 100) as the minimum acceptable Railroad Condition Index (RCI) for the entire railroad network, including all subsystems. The actual index value of the condition of SCRRA's infrastructure network was 81 as of June 30, 2015, as determined by a systemwide assessment. In accordance with GASB-34, the next systemwide condition assessment is due for the year ending June 30, 2018. As an approved alternative to conducting a systemwide assessment every three years, SCRRA has chosen to perform annual assessments of a third of its infrastructure so that all assets will have been reviewed over the three-year period. For a complete description of the rating values and their meanings, please see Section 10.5 – Appendix.

3.1.4 Budget Assumptions

- Ridership has remained virtually unchanged for several years. The increase shown in FY2018-19 is the result of a \$3.9 million targeted investment in marketing designed to increase ridership and revenue.
- No fare increase is included in the FY2018-19 Budget.
- No new service has been added.
- The approach for budgeting was a zero base.
- Equipment Maintenance is comprised of the contract with Bombardier for providing equipment maintenance. This category also includes cost of parts

for the repair of rolling stock which are projected based on Fleet Maintenance plans.

- The budget for fuel purchases has been calculated using an assumption of 9 million gallons of diesel fuel consumption, with fuel prices managed through a hedging program.

3.2 Total Operating Budget

SCRRA's FY2018-19 Operating Revenues are projected to total \$100.8 million, \$0.2 million more than the FY2017-18 Budget, an increase of 0.2%.

FY2018-19 budgeted Operating Expense totals \$251.4 million, an increase of \$8.3 million, or 3.4% more than the FY2017-18 Budget.

Member Agency operating subsidies for the FY2018-19 Budget are an estimated \$150.6 million, an increase of \$8.2 million, or 5.7% over the FY2017-18 Budget.

3.3 Operating Revenues and Subsidy Funding

The Authority's Operating Revenue is derived from three principal sources: Fares, Dispatching and MOW. In order to minimize the impact to Member Agency subsidy requirements, the Authority continues to pursue, where available, other potential revenue enhancements. One revenue source currently under consideration is a fee for the provision of our Positive Train Control (PTC) expertise to other entities.

Average weekday ridership is projected to total 43,852. Total ridership, including all weekend services, is expected to equal 12.5 million passenger trips.

Fare revenues are assigned to the operating line segment using Origin/Destination pairs, passenger and train counts (shared stations and weekends). Farebox Revenue is projected to equal \$85.6 million, an increase of \$0.5 million or 0.6% more than the FY2017-18 Budget. No fare increase is included in the FY2018-19 Budget.

Freight railroads and Amtrak Intercity Services operating over territory owned by SCRRA Member Agencies provide dispatching and MOW revenues, based upon existing agreements. Dispatching Revenues are estimated to equal approximately \$2.1 million, a decrease of 0.2% from the FY2017-18 Budget.

MOW revenues are estimated at \$12.6 million, a decrease of 5.9% from the FY2017-18 Budget, as a result of reduced freight traffic.

3.4 Operating Expenses

Total Operating Expenses include Train Operations, Maintenance of Member Agency-owned Rights-of-Way and Insurance. The FY2018-19 Budget includes a

Train Operations budget of \$193.4 million, MOW budget of \$41.3 million, and Insurance budget of \$16.6 million. The total of \$251.4 million is an increase of \$8.3 million or 3.4% more than the FY2017-18 Budget.

3.5 Capital Program

SCRRA is responsible for the safety and performance of the railroad system and right-of-way, including the passengers and equipment utilizing the system. Capital projects are selected based on the principle of minimizing and managing the risk of failure among system components. For FY2018-19, Rehabilitation projects were evaluated and ranked based on this principle. The resulting list of potential projects was then prioritized according to project delivery capacity. The amount for new Rehabilitation and Special projects in FY2018-19 totals \$124.8 million. New Capital projects are reflective of increased infrastructure needs. The amount for New Capital projects in FY2018-19 totals \$1.2 million.

Capital funding revenues consist of federal, state and local agency funds, as well as contributions from Third Parties, namely freight railroads, in the form of direct grants and participation in specific projects. Funding for the Capital Budget is provided by the following sources:

Funding Sources for Estimated Capital Program		
Expenditures in Fiscal Year 2018-19		
(000s)		
Federal Funds	\$	4,428
State Funds		2,748
Member Agency Local Funds		2,365
Carryover from prior year		168,878
Other Funds		26
	<u>\$</u>	<u>178,445</u>

3.6 Summary of the Total FY2018-19 Budget

The FY2018-19 Budget totals \$732.7 million and consists of an Operating Budget of \$251.4 million and a Capital Program of \$481.3 million. The Operating Budget includes Train Operations of \$193.4 million, MOW budget of \$41.3 million, and \$16.6 million covering Insurance. The Capital Program Budget contains a \$246.4 million Rehabilitation component, which includes \$124.8 million of New Authority and \$121.6 million of Carryover; and a \$234.9 million New Capital component, which includes \$1.2 million of New Authority and \$233.8 million of Carryover.

3.7 Exhibits

Exhibits 3.1a – 3.1d: Summary of FY2016-17 to FY2018-19 Statistics by Line provides the estimated operating statistics by line for FY2018-19 and the calculation of various performance ratios. Revenues and expenses are allocated to lines using formulae that associate rail operational statistics to achieve an equitable distribution. Detailed listings of allocation categories and the methodology of their use is detailed in Sections 8 - General and Administrative Budget. Section 10 – Appendix, *Exhibit 10.2* details the percentages utilized to allocate by operating line.

Average trip length for FY2018-19 is projected at 33.0 miles. Dependent on ridership and revenues received, individual line operating statistics vary considerably. The Orange County Line (including MSEP) has the highest revenue recovery rate at 69.8%. The San Bernardino revenue recovery is estimated at 45.6%, the Riverside Line at 42.1%, the IEOC Line at 31.9%, the Antelope Valley Line at 33.0%, the Ventura County Line at 28.5%, and the 91 Line at 27.7%.

Exhibits 3.2 – 3.5: Performance Data (FY2009-10 to FY2018-19) provide a summary of the projected annual operating performance data as represented in the FY2018-19 Budget compared to the FY2017-18 Budget and 8 years of historical actuals since FY2009-10. *Exhibit 3.2 through 3.5*, displays this information in an expanded and graphic form to provide illustrative and trending prospective.

Exhibit 3.2: Operating Expense, Revenues and Operating Subsidy

Exhibit 3.3: Train Miles, Fares and Average Weekday Ridership

Exhibit 3.4: Revenue Recovery, Farebox Recovery and Operating Expense per Train Mile

Exhibit 3.5: Operating Expense per Passenger Mile, Operating Subsidy per Rider and Operating Subsidy per Passenger Mile

Exhibit 3.6: FY2014-15 to FY2018-19 Annual Operating Budget by Cost Component by Fiscal Year displays the line items that comprise the FY2018-19 Operating Budget and includes both Revenues and Expenses, with each line broken out by key components. This exhibit breaks down projected expenses for SCRRA's FY2018-19 Budget and compares these with actual expenses for the fiscal years FY2014-15 to FY2016-17 and the FY2017-18 Budget. Operating Expenses include all costs required to operate the Metrolink system including Train Operations, maintenance of equipment, fuel, security, utilities, transfer payments to other transit operators, revenue collection, payments to freight railroads for dispatching, station maintenance, passenger services, MOW, general and administrative expenses, professional services and insurance. For FY2015-16 and FY2016-17, these expenses included the Burlington Northern Santa Fe Railway (BNSF) Lease Locomotive costs.

Exhibit 3.7: FY2018-19 Annual Operating Budget by Cost Component by Member Agency and **Exhibit 3.8 FY2018-19 Annual Operating Budget by Cost Component by Line** include the line items that comprise the FY2018-19 Budget (both Revenues and Expenses) with each line broken out by key components and distributed across the five Member Agencies.

Expenses as shown in *Exhibits 3.6 and 3.7*, offset by Revenues, determine the annual member subsidy contribution. FY2018-19 total Member Agency subsidy of \$150.6 million represents a \$8.2 million, or 5.7%, increase over the FY2017-18 Budget.

Operation Subsidy Contribution by Member Agency

(000's)	FY2017-18 BUDGET	FY2018-19 BUDGET	VARIANCE	% CHANGE
METRO	\$ 71,659	\$ 75,120	\$ 3,461	4.8%
OCTA	28,239	29,403	1,164	4.1%
RCTC	17,705	19,660	1,954	11.0%
SBCTA	14,960	16,111	1,151	7.7%
VCTC	9,836	10,256	420	4.3%
Total	\$ 142,399	\$ 150,550	\$ 8,151	5.7%

Numbers may not foot due to rounding.

Exhibit 3.9: FY2015-16 to FY2018-19 Revenue Sources Trend provides a summary of the FY2018-19 Budget Revenue to provide funding for Operating Expenses of \$251.4 million and for that portion of the Capital Program authority which will be expended in FY2018-19, is estimated at \$178.4 million. Operating Budget expenses represent only the single year of authorized expenditures, while the Capital Program expenditure amounts include portions of the Program authorized in both current year and approved authority carryover from prior years.

With respect to Operating Revenues:

- Over the past five years, actual farebox revenues have been virtually flat, failing to keep pace with rising operating costs. The FY2018-19 farebox revenue of \$85.6 million, reflecting an increase of \$0.5 million or 0.6% over the FY2017-18 Budget is the result of an addition of \$2.9 million in farebox revenues anticipated to be provided by a targeted marketing program specifically designed to increase ridership and revenue, offsetting the downward trend.
- Dispatching Revenues include fees for dispatching freight and Amtrak Intercity Services.
- MOW revenues rates were negotiated based on the historical expenditures on MOW by the freight railroads prior to the purchase of these rights-of-way by the Member Agencies.

- Local funds from the five Member Agencies for the Operating Budget vary from year-to-year, depending on SCRRA estimated revenue sources and Operating Expenses. The FY2018-19 Budget assumes Member Agency subsidies at \$150.6 million, a 5.7% increase over the FY2017-18 Budget.

With respect to Capital Revenues:

The amounts shown can be traced to the Cash Flows shown in *Exhibit 7.8.1* of \$9.6 million added to the Carryover spending of \$168.9 million. Total dollars are separated into funding categories, including state and federal grants, interest on lease proceeds, freight railroad and local funds. The FY2018-19 Budget detailed allocations are compared to budgeted or actual funding sources for FY2015-16 through FY2018-19.

Exhibit 3.10: FY2018-19 Budget Revenue Sources and Use by Member Agency provides a summary by Member Agency of the FY2018-19 Budget Revenue Source and Use to cover Operating Expenses of \$251.4 million and expected expenditures on the Capital Program of \$178.4 million. Operating Budget expenses represent only FY2018-19 expenditures, while the Capital Program includes expenditures on both current year and carryover Board approved authority. Total dollars are separated into funding categories including state and federal grants, interest on lease proceeds, freight railroad participation and local funds.

Exhibit 3.1a Summary of FY2016-17 to FY2018-19 Statistics by Line

LINE	San Bernardino	Ventura County ¹	Antelope Valley	Riverside	Orange County	Orange Co MSEP	IEOC	91/PVL Line ²	Total
Service Levels									
Weekday Train Trips - FY 17 Actual	38	31	30	12	19	10	16	15	171
Weekend Train Trips - FY 17 Actual	34	0	24	0	16	0	8	8	90
Total Train Trips - FY 17 Actual	72	31	54	12	35	10	24	23	261
Weekday Train Trips - FY 18 Budget	38	31	30	12	19	10	16	15	171
Weekend Train Trips - FY 18 Budget	34	0	24	0	16	0	8	8	90
Total Train Trips - FY 18 Budget	72	31	54	12	35	10	24	23	261
Weekday Train Trips - FY 19 Budget	38	31	30	12	19	10	16	15	171
Weekend Train Trips - FY 19 Budget	34	0	24	0	16	0	8	8	90
Total Train Trips - FY 19 Budget	72	31	54	12	35	10	24	23	261
Passenger Boardings (000s) ³									
FY17 Actual	2,745,469	1,085,453	1,719,251	1,004,402	2,717,177	114,434	1,372,287	881,795	11,640,268
FY18 Budget	2,731,308	1,056,752	1,635,241	986,769	2,689,140	87,620	1,458,133	847,324	11,492,287
FY19 Budget	3,177,827	1,152,285	1,897,438	967,476	2,848,380	114,056	1,362,807	956,934	12,477,203
% Change-FY19 Budget to FY17 Actual	15.7%	6.2%	10.4%	(3.7%)	4.8%	(0.3%)	(0.7%)	8.5%	7.2%
% Change-FY19 Budget to FY18 Budget	16.3%	9.0%	16.0%	(2.0%)	5.9%	30.2%	(6.5%)	12.9%	8.6%
Service Train Miles (000s)									
FY17 Actual	645,992	285,343	573,958	179,781	413,596	89,432	324,388	240,192	2,752,681
FY18 Budget	663,919	252,772	611,437	195,111	440,750	93,704	342,623	229,353	2,829,668
FY19 Budget	675,567	252,772	611,437	195,111	440,750	93,704	342,493	229,353	2,841,186
% Change-FY19 Budget to FY17 Actual	4.6%	(11.4%)	6.5%	8.5%	6.6%	4.8%	5.6%	(4.5%)	3.2%
% Change-FY19 Budget to FY18 Budget	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	(0.0%)	0.0%	0.4%
Passenger Miles (000s) ⁴									
FY17 Actual	98,673	28,343	65,362	34,960	94,969	1,978	45,737	34,922	404,944
FY18 Budget	98,714	27,651	62,518	34,384	93,867	1,490	50,089	33,525	402,238
FY19 Budget	114,181	29,959	71,749	33,571	99,302	1,939	46,091	35,097	431,890
% Change-FY19 Budget to FY17 Actual	15.7%	5.7%	9.8%	(4.0%)	4.6%	(2.0%)	0.8%	0.5%	6.7%
% Change-FY19 Budget to FY18 Budget	15.7%	8.3%	14.8%	(2.4%)	5.8%	30.2%	(8.0%)	4.7%	7.4%
Average Weekday Ridership									
FY17 Actual	9,721	4,377	6,044	4,050	10,118	461	4,900	3,258	42,928
FY18 Budget	9,104	4,064	5,421	3,795	9,509	468	4,599	2,925	39,885
FY19 Budget	10,774	4,432	6,453	3,721	10,080	439	4,624	3,330	43,852
% Change-FY19 Budget to FY17 Actual	10.8%	1.3%	6.8%	(8.1%)	(0.4%)	(4.9%)	(5.6%)	2.2%	2.2%
% Change-FY19 Budget to FY18 Budget	18.3%	9.1%	19.0%	(1.9%)	6.0%	(6.3%)	0.5%	13.8%	9.9%
Average Trip Length (Miles) ⁵									
	34.2	26.0	36.1	34.7	33.6	N/A	31.3	35.4	33.0

Numbers may not foot due to rounding.

Notes:

1. Includes LAUS - Burbank Bob Hope Airport Trains.
2. Includes PVL Services
3. Passenger Boardings are based on ticket sales and unlinked trips
4. Passenger is calculated based on ticket sales with origin and destination
5. Average trip length is calculated based on ticket sales

Exhibit 3.1b Summary of FY2016-17 to FY2018-19 Statistics by Line

LINE	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	Orange Co MSEP	IEOC	91/PVL Line	Total
Operating Cost (w/ MOW) (000s) ⁽¹⁾									
FY17 Actual	49,399	28,158	46,854	18,466	32,221	5,821	25,584	21,529	228,032
FY18 Budget	52,441	28,914	49,562	20,339	34,905	6,261	27,282	23,341	243,045
FY19 Budget	54,279	30,580	50,306	20,737	35,957	6,218	28,047	25,232	251,356
% Change-FY19 Budget to FY17 Actual	9.9%	8.6%	7.4%	12.3%	11.6%	6.8%	9.6%	17.2%	10.2%
% Change-FY19 Budget to FY18 Budget	3.5%	5.8%	1.5%	2.0%	3.0%	(0.7%)	2.8%	8.1%	3.4%
Operating Cost (w/o MOW Extraordinary Maint) (000s) ¹									
FY17 Actual	49,077	27,917	46,447	18,458	32,118	5,821	25,523	21,412	226,773
FY18 Budget	52,215	28,757	49,377	20,221	34,750	6,261	27,161	23,302	242,044
FY19 Budget	54,148	30,489	50,204	20,661	35,861	6,218	27,972	25,212	250,765
% Change-FY19 Budget to FY17 Actual	10.3%	9.2%	8.1%	11.9%	11.7%	6.8%	9.6%	17.7%	10.6%
% Change-FY19 Budget to FY18 Budget	3.7%	6.0%	1.7%	2.2%	3.2%	(0.7%)	3.0%	8.2%	3.6%
Operating Cost (w/o MOW) (000s)									
FY17 Actual	38,402	22,094	37,949	17,525	27,529	5,065	21,991	18,862	189,418
FY18 Budget	40,696	22,454	40,439	19,152	29,922	5,477	23,335	19,963	201,438
FY19 Budget	42,230	24,052	41,789	19,530	30,984	5,431	24,035	22,005	210,055
% Change-FY19 Budget to FY17 Actual	10.0%	8.9%	10.1%	11.4%	12.5%	7.2%	9.3%	16.7%	10.9%
% Change-FY19 Budget to FY18 Budget	3.8%	7.1%	3.3%	2.0%	3.5%	(0.8%)	3.0%	10.2%	4.3%
Subsidy (w/MOW) (000s)									
FY17 Actual	24,842	19,719	31,048	9,411	7,997	5,144	16,276	15,060	129,498
FY18 Budget	27,327	20,547	32,511	11,332	10,670	5,050	17,950	17,013	142,399
FY19 Budget	29,564	21,883	33,730	12,028	10,910	5,060	19,128	18,247	150,550
% Change-FY19 Budget to FY17 Actual	19.0%	11.0%	8.6%	27.8%	36.4%	(1.6%)	17.5%	21.2%	16.3%
% Change-FY19 Budget to FY18 Budget	8.2%	6.5%	3.7%	6.1%	2.3%	0.2%	6.6%	7.3%	5.7%
Farebox Revenue (000s) ²									
FY17 Actual	21,048	6,230	11,539	8,705	21,626	410	8,117	5,699	83,373
FY18 Budget	21,493	6,230	12,122	8,780	21,837	943	8,173	5,580	85,159
FY19 Budget	21,148	6,613	12,200	8,386	22,505	885	7,704	6,196	85,636
% Change-FY19 Budget to FY17 Actual	0.5%	6.1%	5.7%	(3.7%)	4.1%	116.0%	(5.1%)	8.7%	2.7%
% Change-FY19 Budget to FY18 Budget	(1.6%)	6.2%	0.6%	(4.5%)	3.1%	(6.2%)	(5.7%)	11.0%	0.6%
Other Revenues (000s) ³									
FY17 Actual	3,509	2,209	4,268	350	2,598	268	1,191	770	15,162
FY18 Budget	3,621	2,138	4,929	227	2,398	268	1,159	747	15,487
FY19 Budget	3,567	2,083	4,376	323	2,542	274	1,215	789	15,171
% Change-FY19 Budget to FY17 Actual	1.7%	(5.7%)	2.5%	(7.7%)	(2.1%)	2.3%	2.1%	2.5%	0.1%
% Change-FY19 Budget to FY18 Budget	(1.5%)	(2.6%)	(11.2%)	42.4%	6.0%	2.4%	4.9%	5.6%	(2.0%)

Numbers may not foot due to rounding.

Notes:

1. Costs include all expenses for Metrolink and MOW on operating and non-operating lines
2. Includes fare reduction subsidies for Antelope Valley Line (FY17, FY18) and San Bernardino Line (FY19).
3. Other revenues include dispatching fees and MOW revenues from freight and Amtrak due to individual member agencies.

Exhibit 3.1c Summary of FY2016-17 to FY2018-19 Statistics by Line

LINE	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	Orange Co MSEP	IEOC	91 Line ¹	Total
Average Fare/Passenger									
FY17 Actual	\$7.67	\$5.74	\$6.71	\$8.67	\$7.96	\$3.58	\$5.92	\$6.46	\$7.16
FY18 Budget	\$7.87	\$5.89	\$7.41	\$8.90	\$8.12	\$10.77	\$5.61	\$6.59	\$7.41
FY19 Budget	\$6.65	\$5.74	\$6.43	\$8.67	\$7.90	\$7.75	\$5.65	\$6.48	\$6.86
% Change-FY19 Budget to FY17 Actual	(13.2%)	(0.0%)	(4.2%)	0.0%	(0.7%)	116.7%	(4.4%)	0.2%	(4.2%)
% Change-FY19 Budget to FY18 Budget	(15.4%)	(2.6%)	(13.3%)	(2.6%)	(2.7%)	(28.0%)	0.9%	(1.7%)	(7.4%)
Op Cost/Passenger (w/o MOW Extraordinary Maint)									
FY17 Actual	\$17.88	\$25.72	\$27.02	\$18.38	\$11.82	N/A	\$18.60	\$24.28	\$19.48
FY18 Budget	\$19.12	\$27.21	\$30.20	\$20.49	\$12.92	N/A	\$18.63	\$27.50	\$21.06
FY19 Budget	\$17.04	\$26.46	\$26.46	\$21.36	\$12.59	N/A	\$20.53	\$26.35	\$20.10
% Change-FY19 Budget to FY17 Actual	(4.7%)	2.9%	(2.1%)	16.2%	6.5%	N/A	10.4%	8.5%	3.2%
% Change-FY19 Budget to FY18 Budget	(10.9%)	(2.8%)	(12.4%)	4.2%	(2.6%)	N/A	10.2%	(4.2%)	(4.6%)
Op Cost/Passenger Mile (w/o MOW Extraordinary Maint)									
FY17 Actual	\$0.50	\$0.98	\$0.71	\$0.53	\$0.34	N/A	\$0.56	\$0.61	\$0.56
FY18 Budget	\$0.53	\$1.04	\$0.79	\$0.59	\$0.37	N/A	\$0.54	\$0.70	\$0.60
FY19 Budget	\$0.47	\$1.02	\$0.70	\$0.62	\$0.36	N/A	\$0.61	\$0.72	\$0.58
% Change-FY19 Budget to FY17 Actual	(4.7%)	3.3%	(1.5%)	16.6%	6.8%	N/A	8.8%	17.2%	3.7%
% Change-FY19 Budget to FY18 Budget	(10.3%)	(2.1%)	(11.4%)	4.7%	(2.5%)	N/A	11.9%	3.4%	(3.5%)
Subsidy/Passenger									
FY17 Actual	\$9.05	\$18.17	\$18.06	\$9.37	\$2.94	N/A	\$11.86	\$17.08	\$11.12
FY18 Budget	\$10.01	\$19.44	\$19.88	\$11.48	\$3.97	N/A	\$12.31	\$20.08	\$12.39
FY19 Budget	\$9.30	\$18.99	\$17.78	\$12.43	\$3.83	N/A	\$14.04	\$19.07	\$12.07
% Change-FY19 Budget to FY17 Actual	2.8%	4.5%	(1.6%)	32.7%	30.1%	N/A	18.3%	11.6%	8.5%
% Change-FY19 Budget to FY18 Budget	(7.0%)	(2.3%)	(10.6%)	8.3%	(3.5%)	N/A	14.0%	(5.0%)	(2.6%)
Subsidy/Passenger Mile									
FY17 Actual	\$0.25	\$0.70	\$0.48	\$0.27	\$0.08	N/A	\$0.36	\$0.43	\$0.32
FY18 Budget	\$0.28	\$0.74	\$0.52	\$0.33	\$0.11	N/A	\$0.36	\$0.51	\$0.35
FY19 Budget	\$0.26	\$0.73	\$0.47	\$0.36	\$0.11	N/A	\$0.42	\$0.52	\$0.35
% Change-FY19 Budget to FY17 Actual	2.8%	5.0%	(1.0%)	33.1%	30.5%	N/A	16.6%	20.6%	9.0%
% Change-FY19 Budget to FY18 Budget	(6.5%)	(1.7%)	(9.6%)	8.7%	(3.3%)	N/A	15.8%	2.4%	(1.5%)
Op Cost/Service Train Mile (w/o MOW Extraordinary Maint)									
FY17 Actual	\$75.97	\$97.84	\$80.92	\$102.67	\$77.65	\$65.09	\$78.68	\$89.15	\$82.38
FY18 Budget	\$78.65	\$113.77	\$80.76	\$103.64	\$78.84	\$66.81	\$79.27	\$101.60	\$85.54
FY19 Budget	\$80.15	\$120.62	\$82.11	\$105.89	\$81.36	\$66.36	\$81.67	\$109.93	\$88.26
% Change-FY19 Budget to FY17 Actual	5.5%	23.3%	1.5%	3.1%	4.8%	2.0%	3.8%	23.3%	7.1%
% Change-FY19 Budget to FY18 Budget	1.9%	6.0%	1.7%	2.2%	3.2%	(0.7%)	3.0%	8.2%	3.2%

Numbers may not foot due to rounding.

Notes:

1. Includes PVL Services

Exhibit 3.1d Summary of FY2016-17 to FY2018-19 Statistics by Line

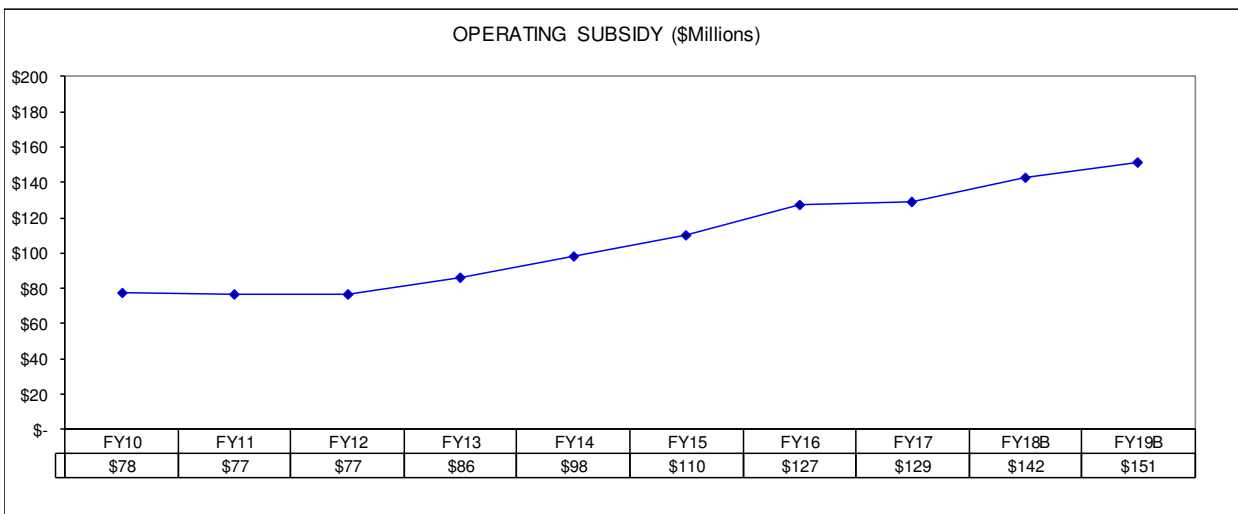
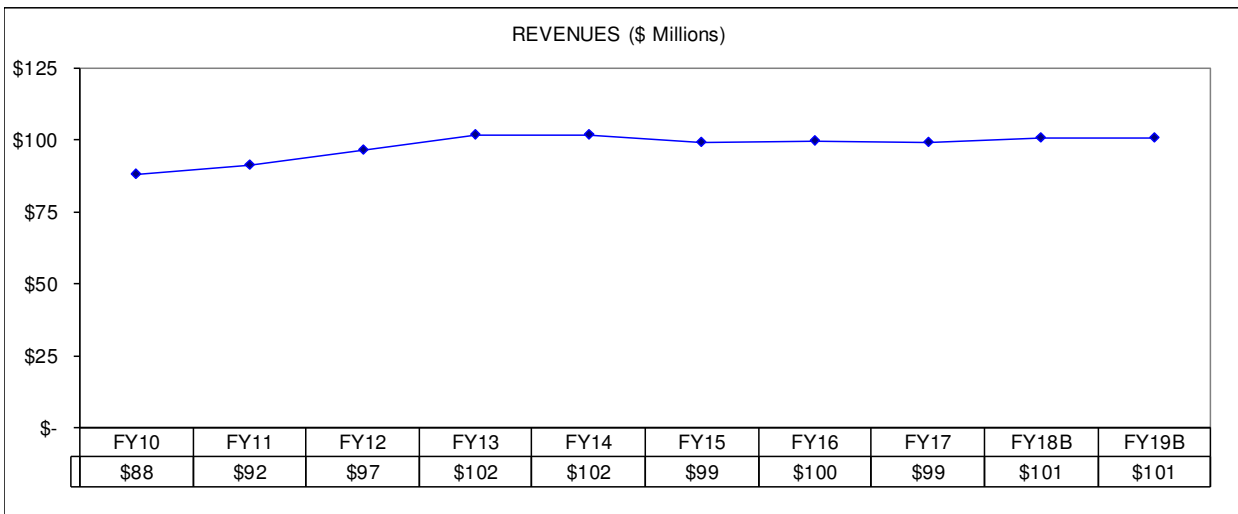
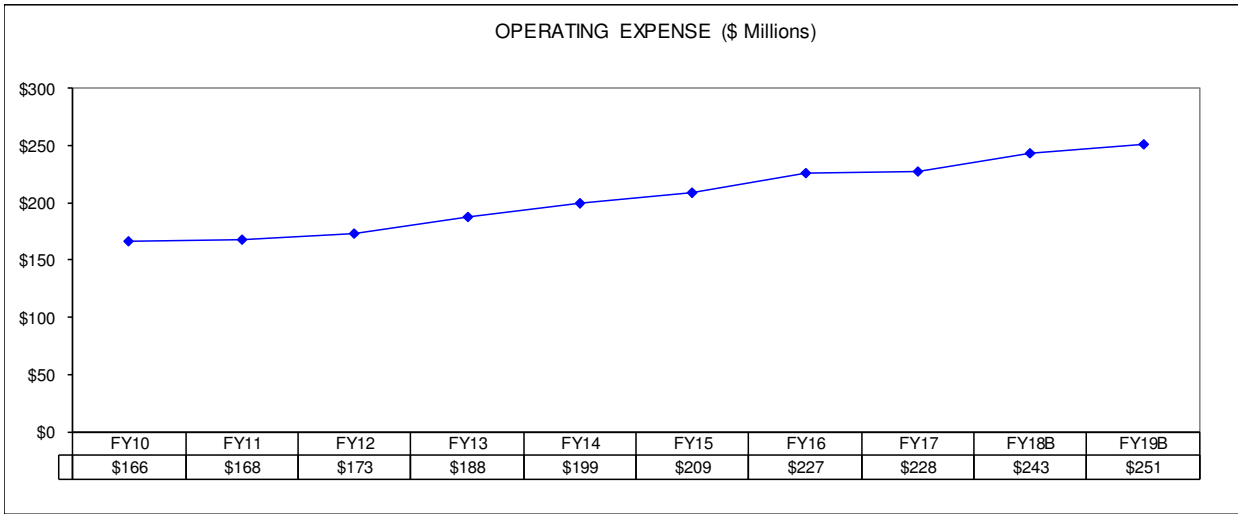
LINE	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	Orange Co MSEP	IEOC	91 Line ³	Total
Operating Cost/Service Train Mile (w/o MOW)									
FY17 Actual	\$59.45	\$77.43	\$66.12	\$97.48	\$66.56	\$56.63	\$67.79	\$78.53	\$68.81
FY18 Budget	\$61.30	\$88.83	\$66.14	\$98.16	\$67.89	\$58.45	\$68.11	\$87.04	\$71.19
FY19 Budget	\$62.51	\$95.15	\$68.35	\$100.10	\$70.30	\$57.95	\$70.18	\$95.94	\$73.93
% Change-FY19 Budget to FY17 Actual	5.2%	22.9%	3.4%	2.7%	5.6%	2.3%	3.5%	22.2%	7.4%
% Change-FY19 Budget to FY18 Budget	2.0%	7.1%	3.3%	2.0%	3.5%	(0.8%)	3.0%	10.2%	3.9%
Farebox Recovery¹									
FY17 Actual	42.7%	22.2%	24.6%	47.2%	67.2%	7.0%	31.8%	26.5%	36.6%
FY18 Budget	41.0%	21.6%	24.5%	43.2%	62.6%	15.1%	30.0%	23.9%	35.1%
FY19 Budget	39.0%	21.7%	24.3%	40.5%	62.7%	14.2%	27.5%	24.6%	34.1%
% Change-FY19 Budget to FY17 Actual	(8.5%)	(2.2%)	(1.5%)	(14.2%)	(6.7%)	102.2%	(13.4%)	(7.2%)	(6.8%)
% Change-FY19 Budget to FY18 Budget	(4.9%)	0.5%	(0.8%)	(6.2%)	0.1%	(5.6%)	(8.2%)	2.7%	(2.7%)
Revenue Recovery²									
FY17 Actual	49.8%	30.0%	33.8%	49.1%	75.3%	11.6%	36.4%	30.1%	43.3%
FY18 Budget	47.9%	29.0%	34.4%	44.3%	69.5%	19.3%	34.2%	27.1%	41.4%
FY19 Budget	45.6%	28.5%	33.0%	42.1%	69.8%	18.6%	31.9%	27.7%	40.2%
% Change-FY19 Budget to FY17 Actual	(8.4%)	(5.1%)	(2.3%)	(14.3%)	(7.3%)	60.1%	(12.6%)	(7.9%)	(7.2%)
% Change-FY19 Budget to FY18 Budget	(4.9%)	(1.6%)	(4.2%)	(5.1%)	0.4%	(3.7%)	(6.9%)	2.1%	(3.1%)

Numbers may not foot due to rounding.

Notes:

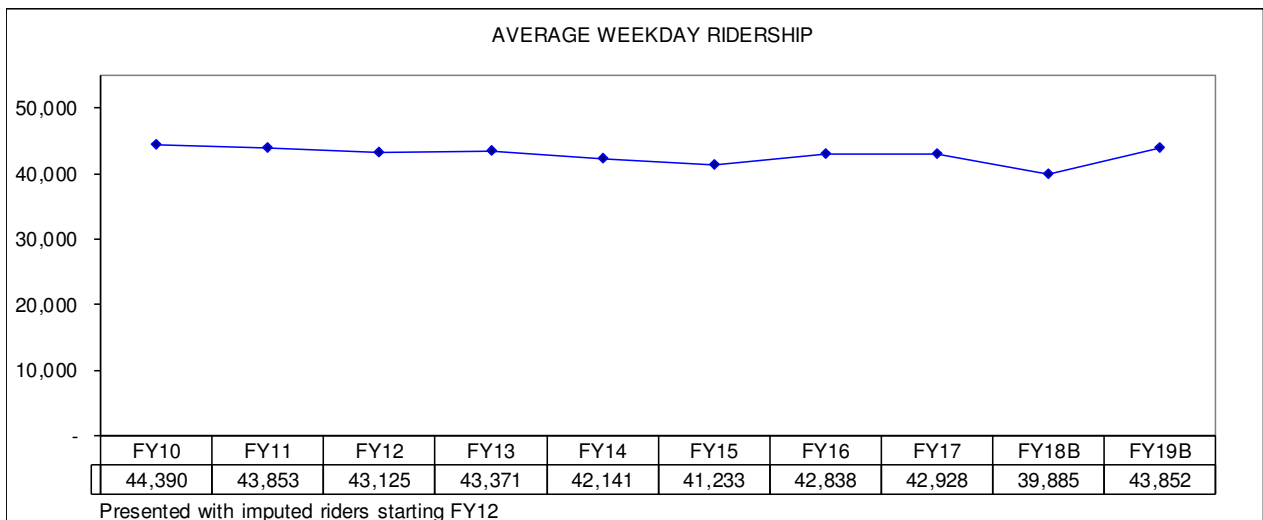
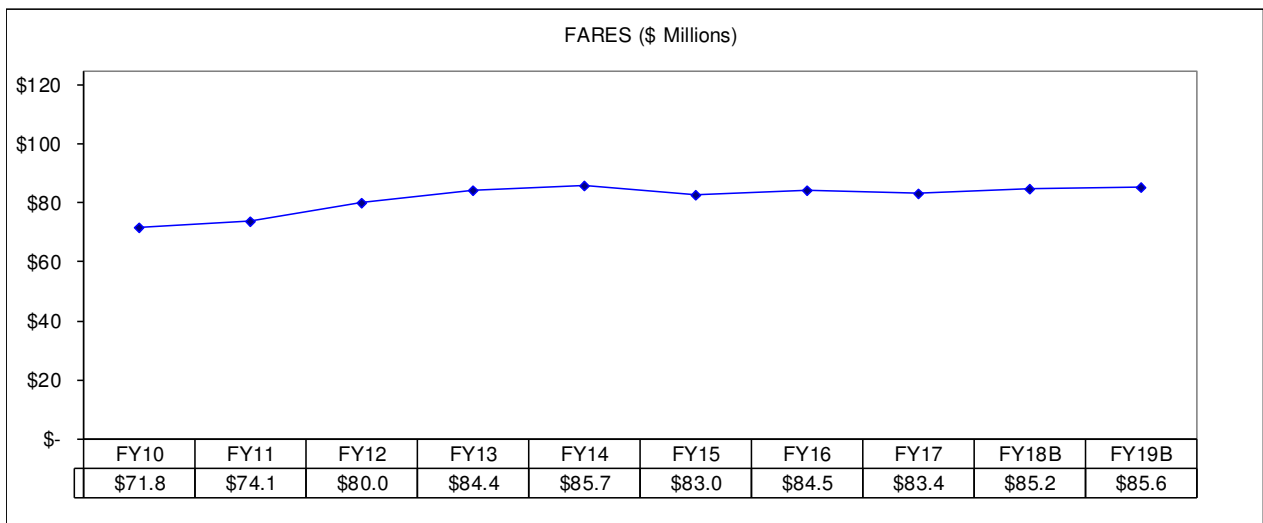
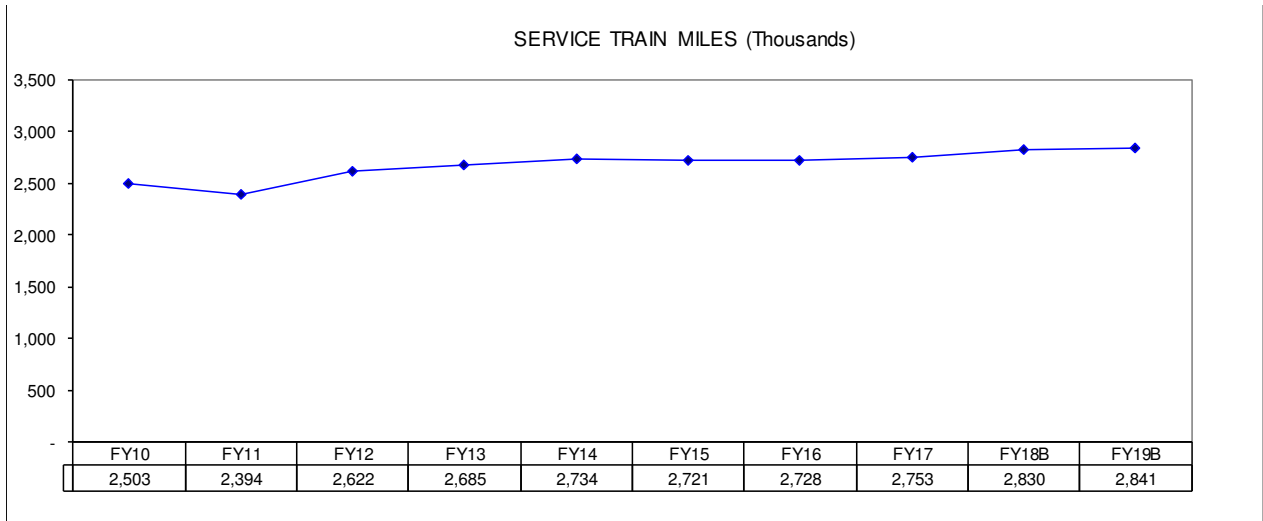
1. Farebox recovery is the ratio of farebox revenue to total expenses net of Non-BNSF operating category "Rolling Stock Lease".
2. Revenue recovery is the ratio of operating revenues to operating expenses net of Non-BNSF operating category "Rolling Stock Lease".
3. Includes PVL Services

Exhibit 3.2 Operating Expense, Revenues and Operating Subsidy



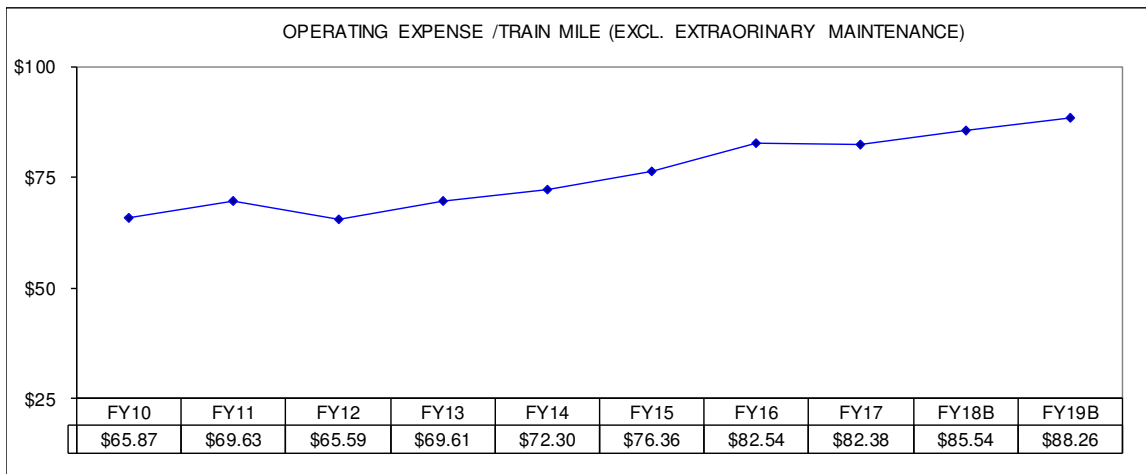
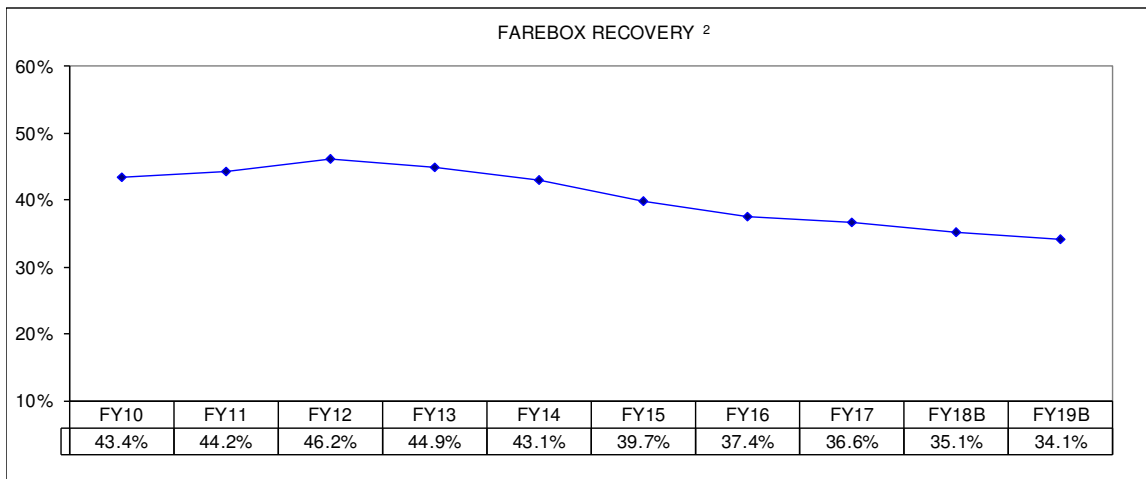
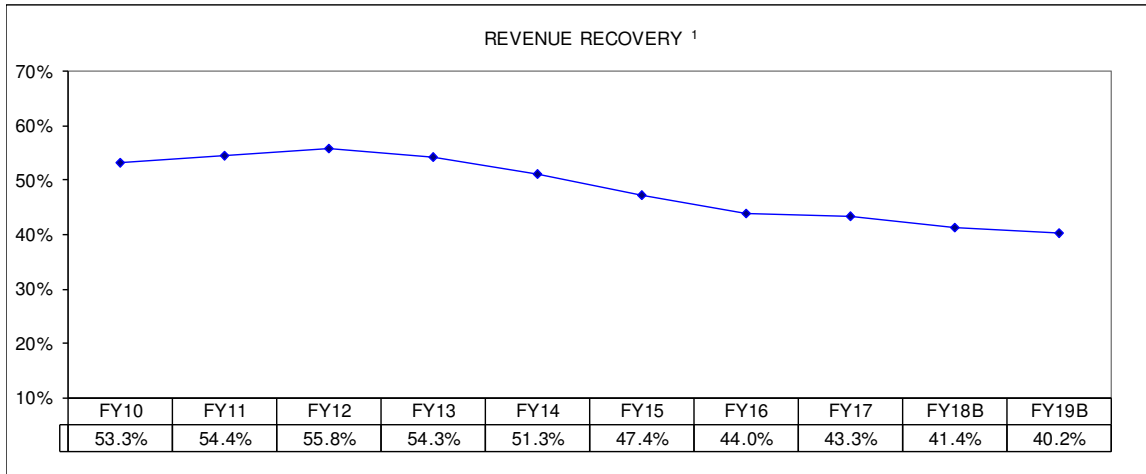
Notes:
 Actuals to FY17, Budget for FY18 and FY19
 FY16 Actuals and FY17 Actuals include BNSF Lease Locomotives costs.

Exhibit 3.3 Train Miles, Fares and Average Weekday Ridership



Notes:
Actuals to FY17, Budget for FY18 and FY19

Exhibit 3.4 Revenue Recovery, Farebox Recovery and Operating Expense per Train Mile



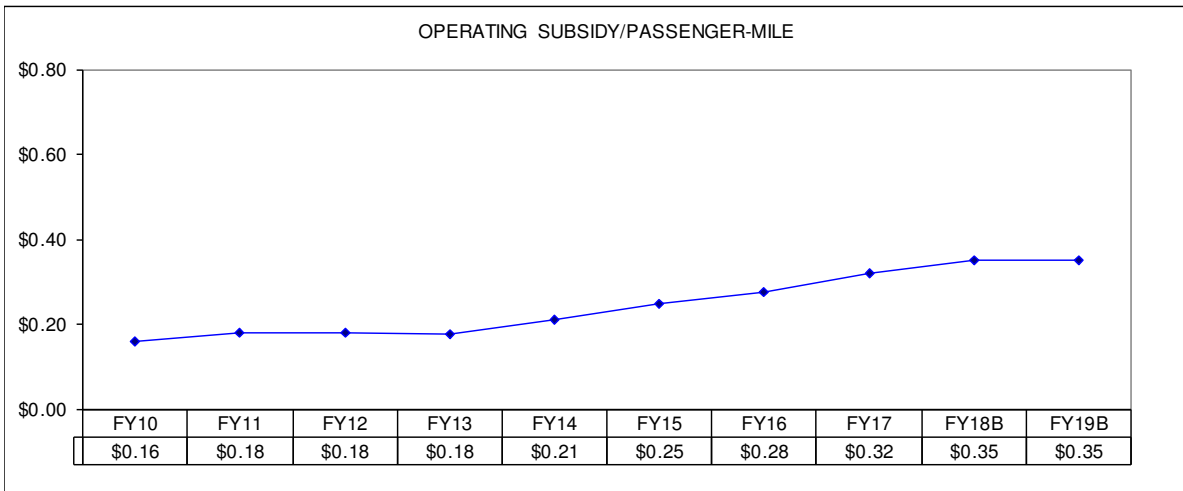
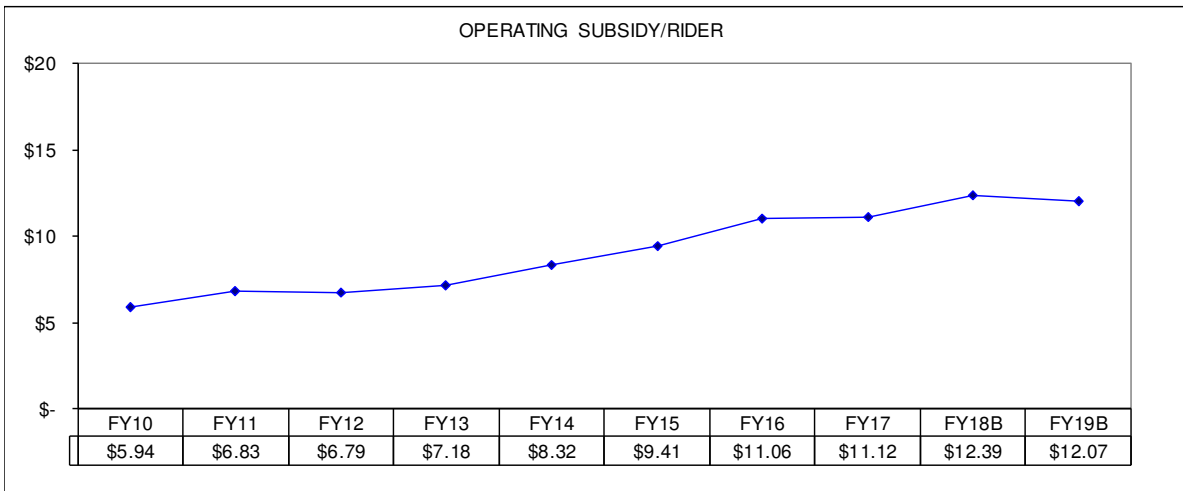
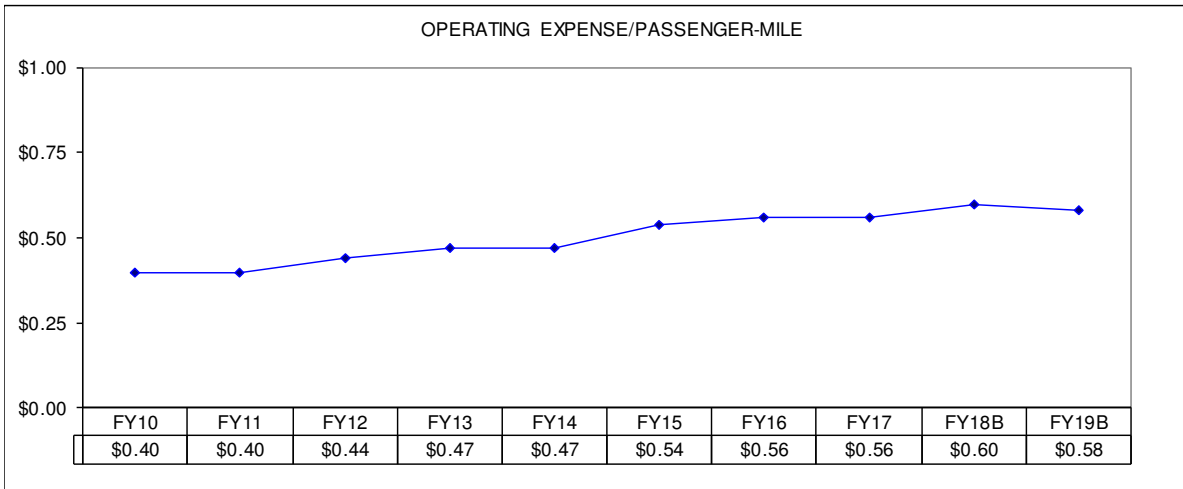
Notes:

1. Revenue Recovery = Operating Revenues/Operating Expenses Net of Rolling Stock Lease Payments
2. Farebox Recovery = Farebox Revenue/Operating Expenses Net of Rolling Stock Lease Payments

Actuals to FY17, Budget for FY18 and FY19

FY16 Actuals and FY17 Actuals include BNSF Lease Locomotives costs.

Exhibit 3.5 Operating Expense per Passenger Mile, Operating Subsidy per Rider and Operating Subsidy per Passenger Mile



Notes:
 Actuals to FY17, Budget for FY18 and FY19
 FY16 Actuals and FY17 Actuals include BNSF Lease Locomotives costs.
 Passenger miles and riders used in the calculation are based on ticket sales starting FY12

**Exhibit 3.7 FY2018-19 Annual Operating Budget by Cost Component
by Member Agency**

(000s)	METRO	OCTA	RCTC	SBCTA	VCTC	TOTAL
Operating Revenue						
Farebox Revenue	\$ 40,598	\$ 22,684	\$ 7,778	\$ 9,441	\$ 2,402	\$ 82,904
Fare Reduction Subsidy	1,606	-	-	1,126	-	2,732
Subtotal-Pro Forma FareBox	42,204	22,684	7,778	10,567	2,402	85,636
Dispatching	1,099	696	12	58	256	2,120
Other Revenues	237	108	56	62	27	490
MOW Revenues	7,377	2,523	660	1,526	475	12,561
Total Operating Revenue	50,917	26,010	8,507	12,213	3,159	100,806
Operating Expenses						
<u>Operations & Services</u>						
Train Operations	24,798	10,407	4,823	5,073	1,770	46,872
Equipment Maintenance	18,921	8,659	4,549	4,344	1,661	38,133
Fuel	9,606	4,677	1,860	1,997	605	18,744
Non-Scheduled Rolling Stock Repairs	136	61	26	29	8	260
Operating Facilities Maintenance	879	398	167	186	55	1,684
Other Operating Train Services	227	83	72	49	50	482
Rolling Stock Lease	159	66	37	48	24	336
Security - Sheriff	3,094	1,168	912	593	121	5,889
Security - Guards	1,155	422	367	250	256	2,450
Supplemental Additional Security	340	183	63	85	19	690
Public Safety Program	183	67	58	40	41	389
Passenger Relations	832	488	165	200	47	1,732
TVM Maintenance/Revenue Collection	3,852	1,960	1,487	1,216	541	9,055
Marketing	2,636	1,442	527	615	159	5,380
Media & External Communications	216	79	69	47	48	458
Utilities/Leases	1,637	599	519	355	363	3,473
Transfers to Other Operators	3,642	1,466	491	689	208	6,496
Amtrak Transfers	765	1,516	-	-	119	2,400
Station Maintenance	1,114	254	111	246	81	1,806
Rail Agreements	1,910	1,547	1,231	359	353	5,400
Subtotal Operations & Services	76,102	35,542	17,534	16,422	6,528	152,129
<u>Maintenance-of-Way</u>						
MoW - Line Segments	21,177	8,371	3,061	5,695	2,406	40,711
MoW - Extraordinary Maintenance	346	76	57	64	47	591
Subtotal Maintenance-of-Way	21,524	8,447	3,118	5,759	2,453	41,301
<u>Administration & Services</u>						
Ops Salaries & Fringe Benefits	6,497	2,387	2,055	1,410	1,433	13,782
Ops Non-Labor Expenses	3,866	1,685	841	861	382	7,635
Indirect Administrative Expenses	8,059	2,947	2,558	1,747	1,785	17,096
Ops Professional Services	1,216	445	386	264	269	2,579
Subtotal Admin & Services	19,638	7,464	5,840	4,282	3,870	41,093
Contingency	96	35	31	21	21	204
Total Operating Expenses	117,360	51,489	26,522	26,484	12,872	234,727
Insurance Expense/(Revenue)						
Liability/Property/Auto	5,958	2,695	1,129	1,263	373	11,418
Claims / SI	2,087	944	396	443	131	4,000
Claims Administration	632	286	120	134	40	1,211
PLPD Revenue	-	-	-	-	-	-
Total Net Insurance Expense	8,677	3,925	1,645	1,840	543	16,629
Total Expense	126,037	55,413	28,167	28,324	13,415	251,356
Loss	(75,120)	(29,403)	(19,660)	(16,111)	(10,256)	(150,550)
Member Subsidies						
Operations	66,443	25,478	18,015	14,271	9,713	133,920
Insurance	8,677	3,925	1,645	1,840	543	16,629
Total Member Subsidies	\$ 75,120	\$ 29,403	\$ 19,660	\$ 16,111	\$ 10,256	\$ 150,550
Surplus / (Deficit)	-	-	-	-	-	-

Numbers may not foot due to rounding.

Exhibit 3.8 FY2018-19 Annual Operating Budget by Cost Component by Line

(000's)	San Bernardino	Ventura County	Antelope Valley	Orange Riverside	Orange County	OC MSEP	IEOC	91/PVL	TOTAL
Operating Revenue									
Farebox Revenue	\$ 18,416	\$ 6,613	\$ 12,200	\$ 8,386	\$ 22,505	\$ 885	\$ 7,704	\$ 6,196	\$ 82,904
Fare Reduction Subsidy	2,732	-	-	-	-	-	-	-	2,732
Subtotal-Pro Forma FareBox	21,148	6,613	12,200	8,386	22,505	885	7,704	6,196	85,636
Dispatching	157	528	362	6	1,000	15	18	35	2,120
Other Revenues	108	63	86	48	75	10	61	36	490
MOW Revenues	3,303	1,492	3,928	269	1,467	248	1,136	718	12,561
Total Operating Revenue	24,715	8,696	16,576	8,709	25,047	1,159	8,919	6,986	100,806
Operating Expenses									
Operations & Services									
Train Operations	10,920	4,430	11,033	3,105	7,015	929	5,386	4,054	46,872
Equipment Maintenance	8,494	4,406	7,501	2,638	5,260	1,317	4,434	4,084	38,133
Fuel	4,035	1,565	4,228	1,283	3,131	612	2,383	1,507	18,744
Non-Scheduled Rolling Stock Repairs	61	27	54	17	39	8	31	23	260
Operating Facilities Maintenance	395	175	351	110	253	55	198	147	1,684
Other Operating Train Services	70	80	87	72	37	13	54	68	482
Rolling Stock Lease	74	51	53	46	57	-	45	10	336
Security - Sheriff	1,293	385	1,630	242	759	121	639	821	5,889
Security - Guards	355	406	444	368	190	67	275	344	2,450
Supplemental Additional Security	148	53	120	68	181	7	62	50	690
Public Safety Program	56	65	71	58	30	11	44	55	389
Passenger Relations	410	148	273	135	404	16	226	120	1,732
Holiday Trains	-	-	-	-	-	-	-	-	-
TVM Maintenance/Revenue Collection	1,734	1,261	1,464	867	935	384	1,272	1,137	9,055
Marketing	1,269	501	795	464	1,256	53	634	408	5,380
Media & External Communications	66	76	83	69	36	13	51	64	458
Utilities/Leases	503	576	630	522	269	95	390	487	3,473
Transfers to Other Operators	1,387	568	1,428	645	1,739	-	195	534	6,496
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	529	244	387	161	281	12	34	157	1,806
Rail Agreements	-	603	-	1,843	860	11	1,040	1,043	5,400
Subtotal Operations & Services	31,800	15,929	30,633	12,715	24,823	3,724	17,394	15,111	152,129
Maintenance-of-Way									
MoW - Line Segments	11,918	6,437	8,416	1,131	4,877	788	3,937	3,207	40,711
MoW - Extraordinary Maintenance	131	91	101	76	96	-	75	20	591
Subtotal Maintenance-of-Way	12,049	6,528	8,517	1,207	4,973	788	4,013	3,227	41,301
Administration & Services									
Ops Salaries & Fringe Benefits	2,005	2,278	2,505	2,063	1,081	378	1,546	1,926	13,782
Ops Non-Labor Expenses	1,642	824	1,580	677	1,039	242	904	728	7,635
Indirect Administrative Expenses	2,477	2,836	3,100	2,570	1,327	470	1,918	2,399	17,096
Ops Professional Services	374	428	468	388	200	71	289	362	2,579
Subtotal Admin & Services	6,498	6,365	7,652	5,698	3,647	1,160	4,658	5,414	41,093
Contingency	30	34	37	31	16	6	23	29	204
Total Operating Expenses	50,376	28,856	46,838	19,651	33,458	5,678	26,088	23,781	234,727
Insurance Expense/(Revenue)									
Liability/Property/Auto	2,680	1,184	2,381	746	1,716	371	1,346	996	11,418
Claims / SI	939	415	834	261	601	130	471	349	4,000
Claims Administration	284	126	253	79	182	39	143	106	1,211
PLPD Revenue	-	-	-	-	-	-	-	-	-
Total Net Insurance Expense	3,903	1,724	3,467	1,086	2,499	540	1,960	1,451	16,629
Total Expense	54,279	30,580	50,306	20,737	35,957	6,218	28,047	25,232	251,356
Loss	(29,564)	(21,883)	(33,730)	(12,028)	(10,910)	(5,060)	(19,128)	(18,247)	(150,550)
Member Subsidies									
Operations	25,661	20,160	30,262	10,942	8,411	4,519	17,168	16,796	133,920
Insurance	3,903	1,724	3,467	1,086	2,499	540	1,960	1,451	16,629
Total Member Subsidies	\$ 29,564	\$ 21,883	\$ 33,730	\$ 12,028	\$ 10,910	\$ 5,060	\$ 19,128	\$ 18,247	\$ 150,550

Numbers may not foot due to rounding.

Exhibit 3.9 FY2015-16 to FY2018-19 Revenue Sources Trend

(000s)	FY2015-16 ACTUALS	FY2016-17 ACTUALS	FY2017-18 BUDGET	FY2018-19 BUDGET	CHANGE FROM FY2017- 18 BUDGET
Operating Revenues					
Farebox	\$ 84,524	\$ 83,373	\$ 85,159	\$ 85,636	0.6%
Dispatching Agreements	2,120	2,016	2,125	2,120	(0.2%)
Other Operating ⁽¹⁾	429	762	12	490	3979.2%
Maintenance-of-Way	12,434	12,384	13,350	12,561	(5.9%)
Local Funds for Operating ⁽²⁾	127,173	129,498	142,399	150,550	5.7%
Subtotal Operating Revenues	\$ 226,680	\$ 228,032	\$ 243,045	\$ 251,356	3.4%
Percent of Total Revenues	73.4%	76.9%	57.2%	58.5%	
Capital Revenues ⁽³⁾					
State ⁽⁴⁾	\$ 29,997	\$ 22,183	\$ 1,290	\$ 2,748	113.1%
Federal ⁽⁴⁾	31,677	14,915	838	4,428	428.2%
Interest on Lease Proceeds	-	75	-	-	N/A
Union Pacific Railroad/BNSF	-	-	-	26	N/A
Amtrak	-	-	-	-	N/A
Other Non-Member (includes insurance recoveries)	9,788	15,774	58	-	(100.0%)
Local Funds for Capital	10,808	15,495	2,556	2,365	(7.5%)
Carryover from prior year ⁽⁵⁾⁽⁶⁾	N/A	N/A	176,887	168,878	(4.5%)
Subtotal Capital Revenues	\$ 82,270	\$ 68,443	\$ 181,628	\$ 178,445	(1.8%)
Percent of Total Revenues	26.6%	23.1%	42.8%	41.5%	N/A
Total Revenues	\$ 308,950	\$ 296,475	\$ 424,673	\$ 429,801	1.2%
Local Revenues as a Percent of Total	44.7%	48.9%	34.1%	35.6%	

Numbers may not foot due to rounding.

Notes

- (1) Other Revenues include one-time and other non-recurring sources.
- (2) In FY2017-18 and FY2018-19, a portion of local funds will be reimbursed by Federal Preventive Maintenance grant.
- (3) Only estimated spending amount within the budgeted year is presented under the budgeted year.
- (4) FY2018-19 Federal and State revenues are as of June 2018.
- (5) Carryover is not applicable in FY2015-16 and FY2016-17 because funding type would be identified when expenses were recorded.
- (6) \$169M of total \$355M carryover for Rehab and New Capital projects is forecast to be expended in FY2018-19. This expended amount includes \$95M from Tier 4 locomotives, \$5M from Ticket Vending Machine, \$51M from rehabilitation projects, and \$18M from other new capital projects.

Exhibit 3.10 FY2018-19 Budget Revenue Sources and Use by Member Agency

(\$000s)	METRO	OCTA	RCTC	SBCTA	VCTC	System	Total FY2018-19	% of Total
Operating Budget								
Local Funds For Operating	75,120	29,403	19,660	16,111	10,256	-	150,550	59.9%
Operations	60,973	23,479	17,201	11,878	8,278	-	121,809	48.5%
Maintenance-of-Way	14,147	5,924	2,458	4,233	1,978	-	28,740	11.4%
Other Operating Revenues	50,917	26,010	8,507	12,213	3,159	-	100,806	40.1%
Farebox Revenue	42,204	22,684	7,778	10,567	2,402	-	85,636	34.1%
Non-Fare Operating Revenue	1,336	803	69	120	282	-	2,610	1.0%
MOW Revenues	7,377	2,523	660	1,526	475	-	12,561	5.0%
Total Funding Sources For Operating	126,037	55,413	28,167	28,324	13,415	-	251,356	100.0%
Total Operating Expenditures	126,037	55,413	28,167	28,324	13,415	-	251,356	100.0%
Operating Expenditures (Excludes MOW)	104,513	46,966	25,048	22,565	10,963	-	210,055	83.6%
Maintenance-of-Way	21,524	8,447	3,118	5,759	2,453	-	41,301	16.4%
Capital Program Expenditure in FY2018-19								
Local Funds For Capital	2,087	278	-	-	-	-	2,365	1.3%
New Capital	48	-	-	-	-	-	48	0.0%
Rehabilitation/Renovation	2,039	278	-	-	-	-	2,318	1.3%
Other Capital Revenues	-	5,821	453	522	380	26	7,202	4.0%
Interest on Lease Proceeds	-	-	-	-	-	-	-	0.0%
Other Non-Member (includes insurance recoveries)	-	-	-	-	-	-	-	0.0%
State Funds	-	2,519	-	25	205	-	2,748	1.5%
Federal Funds	-	3,303	453	497	175	-	4,428	2.5%
UPRR Funds	-	-	-	-	-	26	26	0.0%
Carryover Expenditures in FY19	18,489	12,283	2,888	8,392	5,186	121,639	168,878	94.6%
Total Funding Sources For Capital Program	20,576	18,383	3,342	8,914	5,566	121,664	178,445	100.0%
Total Capital Program Expenditures in FY19	20,576	18,383	3,342	8,914	5,566	121,664	178,445	100.0%
New Capital	48	10	-	-	-	-	58	0.0%
Rehabilitation/Renovation	2,039	6,090	453	522	380	26	9,510	5.3%
Carryover from prior year	18,489	12,283	2,888	8,392	5,186	121,639	168,878	94.6%
Total Proposed Expenditures	146,613	73,797	31,508	37,238	18,982	121,664	429,801	N/A

Numbers may not foot due to rounding.

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SECTION 4: OPERATING REVENUES

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 4: Operating Revenues

4.1 Introduction

SCRRA's funding requirement for the FY2018-19 Operating Budget is \$251.4 million. This funding is provided by a combination of SCRRA generated revenues and subsidies from the five Member Agencies. SCRRA revenues include farebox, dispatching, Maintenance-of-Way (MOW) and miscellaneous revenue sources. The FY2018-19 Member Agency subsidy requirement of \$150.6 million represents a \$8.2 million, or 5.7%, increase from the FY2017-18 Budget.

SCRRA estimated FY2018-19 Revenues are \$100.8 million, an increase of \$0.2 million from the FY2017-18 Budget. In FY2017-18 and FY2018-19, total revenues are represented as follows:

	FY 2017-18	FY 2018-19	CHANGE FROM FY2017-18 BUDGET	
	BUDGET	BUDGET	\$ VARIANCE	% VARIANCE
Farebox	\$ 85,159	\$ 85,636	\$ 477	0.6%
Dispatching	2,125	2,120	(5)	(0.2%)
Other Revenues	12	490	478	3,979.2%
MOW Revenues	13,350	12,561	(789)	(5.9%)
Subtotal	100,646	100,806	160	0.2%
Member Agencies	142,399	150,550	8,151	5.7%
Total	\$ 243,045	\$ 251,356	\$ 8,311	3.4%

Numbers may not foot due to rounding.

4.2 Farebox Revenues – Marketing

The Strategic Plan, adopted March 11, 2016, identifies goals to maintain fiscal sustainability, increase non-fare revenues, retain and grow ridership, increase regional mobility, and improve communications to customers and stakeholders.

The Board approved an increased Marketing investment of \$3.9 million as a measure to increase ridership and revenue for the Agency. Marketing has developed a new strategy to retain and grow ridership that takes a more localized approach by line and focuses all marketing campaigns around a three-pronged approach of attracting new riders, retaining current riders, and recapturing former riders.

The Agency has developed monthly targets that allow us to immediately begin tracking the ridership and revenue goals. This will be one of the checks and balances in place to ensure we achieve the results set before us. The Agency can now track and monitor direct mail and digital program Return on Investment (ROI) through the Mobile App. This allows Metrolink to optimize the marketing campaigns for performance by adjusting messaging, visuals and strategy as required. The ability to have strong measurement and controls in place allows the marketing efforts to be adapted as necessary to ensure positive results.

This new marketing plan reflects a marketing strategy around growth and retention of ridership that takes a more localized approach by line and focuses all marketing campaigns specific to the demographics and profiles of the communities served. Customizing the marketing efforts by line allows Metrolink to target different audiences based on the unique characteristics of each line and the surrounding communities.

Marketing campaign messaging will include the key concepts to identify the essential of ideas that will drive ridership and revenue increases based on research and data.

In July 2017, a 6-month 25% discount incentive was offered to new corporate clients who joined the program. The success of this campaign is demonstrated by the increase of 50% in new corporate client acquisitions. Agency staff are working to have the program discount extended as an incentive to new businesses and increase dedicated new ridership. Staff are also currently working with our technology partners to integrate this program into the Mobile App and will execute a business-to-business marketing campaign to gain more corporate accounts.

This new marketing plan has been developed in coordination with Member Agencies and other stakeholders. Strategic planning goals have been integrated into this plan, which is the foundation of our efforts. Monthly meetings will continue to occur with Member Agencies for marketing coordination purposes.

Key Marketing Goals

- Increase overall farebox revenue by \$2.9 million by end of FY19.
- Customize our marketing efforts by line to ensure reach targeted to the demographics and characteristics of the communities we serve.
- Provide measurement for all campaigns. Track and monitor campaigns and optimize performance on an ongoing basis by adjusting messaging, visuals and strategy as required.

Strategic Plan Goal	Strategic Plan Measurable Outcome	Marketing Goal
Goal 2: Achieve Fiscal Sustainability	Increase Ticket Sales	Increase overall revenue by \$2.9 million by end of FY19
Goal 2: Achieve Fiscal Sustainability	Increase Non-Fare revenues through advertising, grants, and potential local sales tax increases for both operating support and capital investment.	Grow the revenue advertising program from \$75,000 annually to \$350,000
Goal 4: Retain and Grow Ridership	Strategy B: Develop a comprehensive Marketing Plan, update it annually and include performance measurements. Areas of focus could include: Highlight areas of potential growth, develop marketing partnerships with Member Agencies.	Increase overall revenue by \$2.9 million by end of FY19. Conduct monthly meetings with Member Agencies to coordinate marketing efforts.
Goal 5: Increase Regional Mobility	Strategy A: Increased and improved connectivity of local and regional transit systems to Metrolink	Use existing channels to communicate/market seamless transfers by purchasing a Metrolink ticket/pass. Create co-marketing opportunities with rideshare services to solve last mile solution.

Strategic Plan Goal	Strategic Plan Measurable Outcome	Marketing Goal
Goal 6: Improve Communications to Customers and Stakeholders	Strategy A: Improve Customer Amenities, Online Ticketing and Mobile Device Amenities	Offer online ticket purchases through metrolinktrains.com Enhance Metrolink App with schedule information, service alerts, ticket/pricing information, and email subscriptions. Ensure communications to customer is not just about delays, but also includes positive reinforcement and reminders about why they ride.

4.3 MOW Revenues

Freight railroads and Amtrak Intercity Services operating over territory owned by Member Agencies provide MOW revenues, based upon existing agreements. MOW revenue is projected at \$12.6 million, or \$0.8 million less than the FY2017-18 Budget. The details of MOW payments and their source are as shown in *Exhibit 4.2*, which displays the primary drop in revenue associated with payments from Union Pacific Railroad on the Coast & Saugus lines. This is the result of reduced freight.

4.4 Dispatching Revenues

Freight railroads and Amtrak Intercity Services operating over territory owned by Member Agencies provide dispatching revenues, based upon existing agreements. Dispatching Revenues in FY2018-19 at \$2.1 million is estimated to be flat compared with FY2017-18 Budget.

4.5 Exhibits

Exhibit 4.1: FY2017-18 to FY2018-19 Fare Revenue and Ridership provides average daily ridership, total fare revenue and revenue per rider for weekend and weekdays. Data is provided for each operating line with comparisons to prior year.

Exhibit 4.2: FY2015-16 to FY2018-19 MOW Revenue Trends details various MOW revenue agreements by territory and source with annual actual revenues for FY2015-16 and FY2016-17, and budgeted revenues for FY2017-18 and FY2018-19.

Exhibit 4.3: FY2015-16 to FY2018-19 Dispatching Revenue Trends lists various dispatching revenue agreements by territory with annual actual revenues for FY2015-16 and FY2016-17, and budgeted revenues for FY2017-18 and FY2018-19.

Exhibit 4.4: FY2015-16 to FY2018-19 Other Operating Revenue Trends lists various revenue sources such as Amtrak TVM and interest with annual actual revenues for FY2015-16 and FY2016-17, and budgeted revenues for FY2017-18 and FY2018-19.

Exhibit 4.1 FY2017-18 to FY2018-19 Fare Revenue and Ridership

Operating Line	AVERAGE DAILY RIDERSHIP			REVENUE/RIDER (\$'s)		FARE REVENUE (\$000's)		
	FY2017-18 BUDGET	FY2018-19 BUDGET	% CHANGE FROM FY2017-18 BUDGET	FY2017-18 BUDGET	FY2018-19 BUDGET	FY2017-18 BUDGET	FY2018-19 BUDGET ¹	% CHANGE FROM FY2017-18 BUDGET
San Bernardino								
Weekday	9,104	10,774	18.3%	8.11	6.82	19,208	19,111	(0.5%)
Weekend	3,502	3,622	3.4%	6.28	5.41	2,285	2,037	(10.9%)
Ventura County	4,064	4,432	9.1%	5.90	5.74	6,230	6,613	6.2%
Antelope Valley								
Weekday	5,421	6,453	19.0%	7.48	6.52	10,543	10,933	3.7%
Weekend	2,172	2,113	(2.7%)	6.99	5.76	1,579	1,267	(19.8%)
Riverside	3,795	3,721	(1.9%)	8.90	8.67	8,780	8,386	(4.5%)
Orange County								
Weekday	9,509	10,080	6.0%	8.14	8.09	20,135	21,201	5.3%
Weekend	2,293	2,189	(4.5%)	7.14	5.73	1,702	1,304	(23.4%)
OC MSEP	468	439	(6.2%)	7.75	7.75	943	885	(6.2%)
IEOC								
Weekday	4,599	4,624	0.5%	6.28	5.63	7,513	6,770	(9.9%)
Weekend	1,989	1,543	(22.4%)	3.19	5.82	660	934	41.4%
91/Perris Valley								
Weekday	2,925	3,330	13.8%	6.90	6.54	5,247	5,664	8.0%
Weekend	834	877	5.1%	3.85	5.83	334	532	59.5%
Totals								
Weekday	39,885	43,852	9.9%	7.58	6.98	78,599	79,562	1.2%
Weekend	10,790	10,343	(4.1%)	5.85	5.65	6,560	6,073	(7.4%)
Total	50,675	54,196	6.9%	7.41	6.86	85,159	85,636	0.6%

Numbers may not foot due to rounding.

Notes:

1. FY19 fare revenue budget is projected with FY17 actual average fare per rider and ridership trends.

Exhibit 4.2 FY2015-16 to FY2018-19 Maintenance-of-Way (MOW) Revenue Trends

(000's)	FY2015-16	FY2016-17	FY2017-18	FY2018-19	CHANGE FROM
Agreement/Territory	ACTUALS	ACTUALS	BUDGET	BUDGET	FY2017-18 BUDGET
Amtrak Intercity	\$ 916	\$ 959	\$ 917	\$ 938	2.3%
LAUS Rail Yard Operations & Maintenance (Amtrak)	502	599	510	623	22.2%
Azusa Branch Shared Use (UPRR/SPTC)	135	130	139	133	(4.1%)
Baldwin Park Branch Shared Use (UPRR/SPTC)	301	126	312	129	(58.5%)
Coast & Saugus Shared Use (UPRR/SPTC)	5,161	4,391	5,250	4,391	(16.4%)
East Bank Joint Facility (UPRR/SPTC)	701	832	730	866	18.6%
Mission Tower (UPRR/SPTC)	120	179	120	186	55.2%
San Diego & Olive Subdivision Shared Use (BNSF)	1,708	1,693	1,754	1,736	(1.1%)
Pasadena Subdivision Shared Use (BNSF)	2,219	2,200	2,279	2,255	(1.0%)
State Grade Crossing (CPUC)	297	306	338	306	(9.5%)
PVL/San Jacinto Subdivision Shared Use (BNSF)	54	644	667	660	(1.1%)
Redlands Subdivision Shared Use (BNSF)	216	214	222	219	(1.0%)
Crossing Maintenance Fees	105	109	113	118	4.3%
Federal/Other Funds	-	-	-	-	N/A
Total	\$ 12,434	\$ 12,384	\$ 13,350	\$ 12,561	(5.9%)

Numbers may not foot due to rounding.

Exhibit 4.3 FY2015-16 to FY2018-19 Dispatching Revenue Trends

(000's)	FY2015-16	FY2016-17	FY2017-18	FY2018-19	CHANGE FROM
Agreement/Territory	ACTUALS	ACTUALS	BUDGET	BUDGET	FY2017-18 BUDGET
Amtrak Intercity	\$ 1,425	\$ 1,492	\$ 1,424	\$ 1,459	2.5%
Coast & Saugus Shared Use (UPRR/SPTC)	257	257	257	257	0.0%
East Bank Joint Facility (UPRR/SPTC)	91	91	92	91	(1.1%)
Mission Tower (UPRR/SPTC)	222	46	225	180	(20.0%)
San Diego & Olive Subdivision Shared Use (BNSF)	58	54	59	55	(6.2%)
Pasadena Subdivision Shared Use (BNSF)	61	64	62	66	5.3%
San Jacinto Subdivision	6	12	6	12	115.8%
North County Transit District (NCTD)	-	-	-	-	N/A
Total	\$ 2,120	\$ 2,016	\$ 2,125	\$ 2,120	(0.2%)

Numbers may not foot due to rounding.

Exhibit 4.4 FY2015-16 to FY2018-19 Other Operating Revenue Trends

(000's) Revenue Source	FY2015-16 ACTUALS	FY2016-17 ACTUALS	FY2017-18 BUDGET	FY2018-19 BUDGET	CHANGE FROM FY2017-18 BUDGET
Marketing Revenues	\$ 74	\$ 62	\$ 12	\$ 50	316.7%
Amtrak TVM Revenues	159	142	-	-	N/A
Lease Proceeds	-	15	-	-	N/A
Rolling Stock Rental	-	67	-	-	N/A
LAWA (Fly-away) Commission	-	-	-	48	N/A
Flex Payment Gain	-	-	-	15	N/A
Citations	-	-	-	35	N/A
Allocable Interest	-	7	-	7	N/A
Insurance Recoveries	2	2	-	-	N/A
Interest	2	-	-	-	N/A
Miscellaneous Revenues	22	152	-	15	N/A
TPA Earnings	167	289	-	100	N/A
Gain On Disposal Of Asset	-	16	-	220	N/A
Scrap and Salvage Sales	4	8	-	-	N/A
Total	\$ 429	\$ 762	\$ 12	\$ 490	3,979.2%

Numbers may not foot due to rounding.

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SECTION 5: OPERATING EXPENSES

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 5: Operating Expenses

5.1 Introduction

SCRRA's Operating Expenses for FY2018-19 are projected at \$251.4 million. This cost includes three key budgetary components: Train Operations, Maintenance-of-Way (MOW) and Insurance Expense. Note: the categories of Administration & Services and Non-Train Ops Contingency are herein referred to as "Train Operations." Train Operations costs are \$193.4 million, or 77.0% of the total Operating Budget. MOW costs are \$41.3 million, or 16.4% of the total Operating Budget. Insurance expenses are \$16.6 million, or 6.6% of the total Operating Budget.

The approach for budgeting was a zero base. Each item submitted for inclusion in the FY2018-19 Budget required specific justification. Justification for cost submissions were reviewed, cost center by cost center, line by line. Tighter controls were instituted to ensure conformance to already established guidelines – for example, all supplies and mailing costs are to be ordered through the HQ administrative function. Meetings were then held with budgeters, managers, Deputy Chiefs and Chiefs to reach agreement on necessary and appropriate expense in the current environment. A particularly stringent review was dedicated to the "Big Five" vendors (Amtrak, Bombardier, Sheriff, Mass Electric, VTMI) as they comprise more than 40% of the Operating Expenses.

Review protocols were instituted in FY2018 to ensure Managers, Deputy Chiefs and Chiefs of all areas are apprised of the latest expense trends in their respective areas.

5.2 Operating Budget Assumptions

5.2.1 Service Levels

The FY2018-19 Budget reflects the operation of 171 weekday trains on seven lines and 90 regular weekend trains operating on five lines. Currently, weekend services offered both Saturday and Sunday, will be operated on the San Bernardino, Orange County, 91 Line, IEOC and Antelope Valley lines. No new regular service has been included in the FY2018-19 Budget. A pilot program of \$10 Sunday service on the 6 national holidays has been included in the budget.

5.2.2 Cost Allocations

Operations expenses are distributed to the operating lines, and subsequently to Member Agencies, based on several formulae approved by the Member Agencies. Multiple allocation categories are used to apply SCRRA operating costs to the various line segments and Member Agencies. Key formula types include train miles, train miles lagged, ridership, route miles dispatched, track miles and unduplicated stations.

These allocation categories are applied to specific budget line item components as outlined in Member Agency agreements. Examples include current budget year train miles to allocate Train Operations, fuel and operating contingency funds. More complex allocations are applied directly to line segments or territories, and are used for rail agreements, MOW, transfer payments and Amtrak passenger transfers. Items such as direct Train Operations expenses and fuel are distributed based on train miles, while payments to freight railroads are charged directly to operating lines associated with the specific freight lines. These allocation formulae are described in Section 10 – Appendix.

5.3 Train Operations

Train Operations expenses of \$193.4 million have increased \$9.7 million, or 5.3%, over the FY2017-18 Budget. These costs include multiple functional sub-components, which are segmented to permit allocation to operating line segments and to Member Agencies.

This portion of the Operating Budget includes expenses required to operate the Metrolink system, including rail operations, maintenance of equipment, fuel, security, utilities, transfer payments to other transit operators and revenue collection. Payments to freight railroads for dispatching services, station maintenance, passenger services, general and administrative expenses and professional service also add to Train Operation expenses.

5.3.1 Train Operations Components

There are several key groupings of costs associated with Train Operations. These categories relate to groupings that are then allocated to Member Agencies.

Train Operations - Crews

Cost in FY2018-19 have increased only to the extent of contractual increases, or 3.7%, \$1.5 million.

Train Operations - Dispatching

The costs of SCRRA-provided dispatching services over the right-of-way territories owned by the SCRRA Member Agencies increased by 16.0% or \$0.8 million in FY2018-19. This was the result of the reassignment of a number of

Communication Coordinators to report under this area instead of the Customer Relations Department, in addition to salary adjustments.

Equipment Maintenance

The Equipment Maintenance budget for FY2018-19 totals \$38.1 million, an increase of \$1.4 million, or 3.9% from the FY2017-18 Budget. This is comprised of three types of expense items:

- Outsourced mechanical services – Eastern Maintenance Facility & Stuart Mesa (primarily Bombardier) = \$26.1 million
- Materials issued from inventory to effect repairs = \$11.5 million
- Other Mechanical Services = \$560K

Outsourced mechanical service expenses increased by \$1.2 million or 5.1%. A new service-specific, performance based, 8-year contract (starting in FY2017-18) was negotiated to provide a 3.5% maximum automatic escalator on these costs for same service after year one. Incentives and Services not in the base agreement are charged separately; \$600K or 2.0% were included as estimated incentives. Incentives are determined by average fleet availability.

Materials for rolling stock repairs have increased \$179K, or 1.6%, as compared to the FY2017-18 Budget.

Fuel

Usage of approximately 9 million gallons is based on projected consumption levels. FY2018-19 fuel prices will continue to be managed through a fuel hedging program. Fuel Hedging Program is intended to lower fuel budget risk and fuel cost volatility and allow for better planning and forecasting of fuel costs. The fuel budget of \$18.7 million is a \$0.9 million decrease from the FY2017-18 Budget.

Non-Scheduled Rolling Stock Repairs/Modifications

Repairs to accommodate unforeseen medium-scaled damage to rolling stock or rolling stock modifications is budgeted at \$260K, an increase of \$160K from the FY2017-18 Budget. Increasing mechanical difficulties indicated that this budget should be increased.

Operating Facilities Maintenance

This category includes: janitorial services; maintenance and hazardous materials compliance at the Central Maintenance Facility (CMF) and other SCRRRA facilities; the repair, fueling and maintenance of Authority-owned rubber tire vehicles and facilities equipment (forklifts, cranes, etc.); maintenance of equipment for rolling stock service maintenance. The total estimate for this category for FY2018-19 is \$1.7 million, a \$33K increase, on a par with FY2017-18 Budget.

Other Operating Train Services

This category involves items directly related to operating the rail system: weather data forecast and emergency reporting services, publications, printing of required manuals and the largest line item, emergency bus services. The projected expenditures of \$482K is an increase of \$12K or 2.5% from the FY2017-18 Budget.

Rolling Stock Leases

This category provides for the lease of 3 Locomotives to assist with service during the time Locomotives are being fitted for Positive Train Control (PTC). The category has increased by \$185K as a result of the FY18 lease being paid by Electro-Motive Diesel (EMD) our Tier 4 supplier. SCRRRA is paying in FY19.

Security – Sheriff

Our contract with the Los Angeles County Sheriff's Department at \$5.9 million for FY2018-19 is \$44K or 0.8% higher than the FY2017-18 Budget.

Security – Guards

FY2018-19 Security Guard costs of \$2.5 million is less than prior year by \$387K or 13.7%. This category was over budgeted in the prior year as a result of the inadvertent inclusion of costs which were reimbursed by Third Party Agreement (TPA).

Negotiations with our Security firms were continuing at the time of budget production. Any additional budget amounts required will be transferred from the Supplemental Security Budget Line.

Supplemental Additional Security

This program is funded through an increment on fare revenues originally implemented in FY2002-03 calculated at 0.75% of fare revenues. These funds provide for specific non-recurring security-related expenses, such as improvements to station cameras, fences, lighting and other expenses related to security. Availability of these funds vary directly with the growth, or decline, in fare revenues. In FY2018-19, this amount is budgeted at \$690K, same as the FY2017-18 Budget.

Public Safety Program

Public Safety is a subset of the System Safety Department created to handle OSHA training; public safety posters, materials and activities; employee Drug and Alcohol random testing as mandated by the Federal Railroad Administration (FRA); and Operation Lifesaver participation. The FY2018-19 Public Safety program has increased by \$113K, or 40.7% from the FY2017-18 Budget to \$389K. A portion of these expenses were previously budgeted under Ops-Professional Services.

Passenger Relations

The Passenger Relations budget furnishes funds primarily for the Call Center which provides information to passengers. The \$1.7 million budget is a \$63K decrease from the FY2017-18 Budget, resulting from a reduction funds for the replacement or repair of call boxes.

Ticket Vending Machine (TVM) Maintenance/Revenue Collection

This includes maintenance of TVM, validators and all software related to mobile ticketing, revenue collection, ticket stock, fare change programming and merchant fees for credit and debit card usage. The total for this line item in the FY2018-19 Budget is \$9.1 million, a \$1.5 million or 20.6% increase from the FY2017-18 Budget. The maintenance of our aged TVM have increased and must be maintained until the installation of the new system. New Ticket Vending Devices (TVD's) are expected to be installed over the next two years which will decrease these costs.

Marketing

The Marketing category totaling \$5.4 million is comprised of Marketing Department's budget of \$5.2 million and Planning Department's market research budget of \$155K. For FY2018-19, the overall budget for Marketing Department increased by \$4.3 million whereas Planning Department's budget decreased by \$325K from the FY2017-18 Budget. The Planning Department's decrease is the result of the triennial Rider Survey having been conducted in FY18. The Marketing Department's budget includes advertising, Metrolink's weekend/destination programs, Corporate Partner Program, new resident direct mail campaign and customer outreach onboard trains and at stations. A new marketing program totaling \$3.9 million has been initiated to reverse the continuing trend of declining ridership and revenue. This program is expected to generate a total of \$2.9 million in fare revenue, included in the FY2018-19 budget, in the first year of implementation, and like amounts for several years following without further investment.

Media/External Communications

This includes media, public and community relations, website content development and the production of printed timetable schedules and Ride Guides. At \$458K, this line item is \$15K higher than the FY2017-18 Budget.

Utilities/Leases

Utility and lease budgets are estimated at current monthly average costs. The total amount in FY2018-19 Budget is \$3.5 million, an increase of \$183K or 5.6% from the FY2017-18 Budget. \$60K of the increase is a new Data Center Telecom, previously included in the Gateway lease, and a \$60K increase in water and electricity costs.

Transfers to Other Operators

This line item is the amount Metrolink pays to other Transit Operators to allow Metrolink ticket holders to transfer without further cost. The cost paid to other

transit operators at \$6.5 million is \$96K or 1.5% less than the FY2017-18 Budget. The largest portion of \$4.8 million is paid to Metro. The reduction is the result of falling bus ridership.

Amtrak Transfers

These funds represent costs to the Authority for the Rail-2-Rail program. Under this program, SCRRA, Amtrak and Caltrans agreed to collaborate in allowing complementary service to passengers on said lines as means of convenience to their travel needs for valid Metrolink monthly pass and Amtrak ticket holders. LOSSAN (the operator of Amtrak) has increased their per passenger price to Metrolink. The \$2.4 million budget is \$223K, or 10.2%, higher than the FY2017-18 Budget. The budget was constructed before final amounts were available and is expected to be slightly reduced.

Station Maintenance

For FY2018-19, Station Maintenance is budgeted at \$1.8 million. This line item represents the costs to maintain station equipment, including station displays, and maintenance of the Union Station Platform and related common area expenses. The process of reviewing common area maintenance costs of \$1.3 million to determine the equity of Union Station allocation of charges is continuing into this year. This category is \$119K, or 7.0%, more than the FY2017-18 Budget.

Rail Agreements

This line item represents payments to freight railroads, the Union Pacific and the Burlington Northern Santa Fe (BNSF), for dispatching and other operation-related services over property owned by these railroads. The amount budgeted is \$5.4 million, reflecting an amount almost flat (increase of \$33K) with the FY2017-18 Budget.

Operations Salaries and Fringe Benefits

Salaries and fringe benefits are projected based on the actual salary rate of each position charged directly to the Train Operations Budget and assumes a fringe benefit additive. A 2.0% COLA and a merit pool of 3.0% is included in the FY2018-19 budget. The total salary and fringe benefit budget for Train Operations is down from the FY2017-18 Budget by \$179K or 1.3%. The decrease is the result of the reassignment of Communication Coordinators to Dispatch under Train Operations, changes in labor distributions and position changes. *Exhibit 8.3* shows the complete current roster of SCRRA's 275 Full Time Equivalent (FTE) positions by department.

Operations Direct Non-Labor Costs

This category totals \$7.6 million for FY2018-19, an increase of \$261K from the FY2017-18 Budget. A total of \$5.8 million of the category, or 76.3 %, is PTC software and utility costs. Other costs include operations related Information Technology expenses \$839K, with another \$1.0 million consisting of travel and

lodging expenses, operations memberships, gasoline and maintenance for operating department vehicles, and minor miscellaneous expenses.

Indirect Administrative Expenses

Costs allocated to Train Operations represent this budget sector's share of the Authority's General and Administrative (G&A) costs. Indirect expenses allocated here total \$17.1 million for FY2018-19, up \$1.2 million, or 7.7%, from the FY2017-18 Budget. This increase is related to COLA and merit increases budgeted for FY2018-19, in addition to adjustments as a result of the implementation of Class and Comp Study items. Please refer to Section 8 for a discussion of G&A costs and their allocation to the various budget pools. "Other Post-Employment Benefits" (OPEB) totals \$1.6 million.

Operations Professional Services

This category includes consultants and other outside professional services. In FY2018-19, the total budget is \$2.6 million, which is a decrease of \$505K or 16.4% from the FY2017-18 Budget. Outside legal services comprise \$1.1 million or 42.1% of the costs in this category and flat as compared to last year. The decrease is primarily related to a change in plans regarding hiring a consultant.

Contingency

This line item is traditionally budgeted at \$500K for use under authority of the Chief Executive Officer. This helps to deflect any unanticipated increase in expenses, avoid subsequent increases to Member Agency subsidies, in the event short-term negative expense impacts are realized during the fiscal year. It represents the primary general reserve fund of the budget. This year, we have reduced that contingency to \$204K, representing 0.1% of the Operating Budget for FY2018-19.

5.3.2 Train Operations Note

FY2018-19 cost components by line item expenditure for Train Operations, see ***Exhibit 3.6 FY2018-19 Annual Operating Budget by Cost Component by Fiscal Year*** and ***Exhibit 3.7 FY2018-19 Annual Operating Budget by Cost Component by Member Agency***.

5.4 Maintenance-of-Way (MOW)

This portion of the Operating Budget represents ordinary maintenance of the rights-of-way owned by Member Agencies and includes routine maintenance, inspection and repairs of track, structures, right-of-way, signal, communication and the train control systems. Overall, the FY2018-19 MOW expenses of \$41.3 million have decreased slightly by \$306K, or 0.7%, compared to the FY2017-18 Budget. The slight decrease is primarily the result of tracking the historical expenses of actual MOW expenditures and more closely aligning the actual expenditures with the Budget. The greatest overall decreases were in the areas of PTC in the amount of \$592K, vegetation control in the amount of \$373K and others

in the amount of \$319K, offset by increases in Track in the amount of \$457K and Signals of in the amount of \$521K.

MOW expenses are developed by SCRRA to ensure that the level of ordinary maintenance is sufficient to prevent any loss of service quality. The levels of maintenance required on individual lines are contingent upon conditions of infrastructure, levels of commuter and freight train traffic, the number of road crossings and curves, and exposure to weather conditions. In turn, this condition is highly dependent on funds provided for rehabilitation of aging infrastructure in the Capital Program of the Budget.

SCRRA recently developed and presented a Metrolink Infrastructure Rehabilitation Plan (MIRP) which was a comprehensive assessment of the condition or State of Good Repair (SOGR) of the railroad's infrastructure and systems. The results of MIRP indicated that after years of inadequate funding of rehabilitation projects, there is approximately \$327.6 million backlog of SOGR or deferred maintenance for SCRRA's infrastructure and systems. Economic realities suggest that several years will be required to reduce the backlog to acceptable levels. A strategy is now being developed to address the backlog with a major rehabilitation investment program.

5.4.1 Assumptions

MOW expenses are expenditures that provide ordinary maintenance of Member Agency-owned track, signals, bridges, road crossings and other elements of the infrastructure and rights-of-way. The most economical methods of replacement of railroad elements (rail, ties, crossings, etc.) are through large specialized operations. Best practice indicates periodic replacement of elements, as they approach the end of their life cycle, using rehabilitation budgets while costs to perform inspections and routine repairs required to ensure reliable, safe operation of trains, should be covered in the Operating Budget. The MOW philosophy of SCRRA is to perform ordinary maintenance sufficient to meet SCRRA maintenance standards in addition to regulatory requirements. Furthermore, to prevent loss of service quality and to budget for Rehabilitation at practical intervals, we strive to utilize the full life cycle of components/elements. This substantially reduces repairs and replacements from overwhelming the ordinary MOW budget. This philosophy is consistent with other successful freight railroads on their main routes.

The core of the ordinary maintenance effort is a perpetual cycle of inspections and reports on the condition of track, signals, grade crossings and bridges, and the performance of ordinary adjustments and/or repairs of any exceptions found in those inspections. The FRA has guidelines for minimum inspection schedules, standards for track, signal and grade crossing conditions, qualifications of inspectors and repairers, and documentation requirements for most inspections. To assure a high level of safety and quality on track and signal operation, SCRRA adheres to its own maintenance standards. These standards are stricter and

inspections more frequent compared to the FRA minimum level. Thus, SCRRA shows that most conditions are discovered and repaired at an early stage of degradation before they become defects or violations under FRA regulations. The Government Accounting Standards Board Pronouncement 34 (GASB-34) method of accounting for maintenance of infrastructure includes a requirement to budget and expend a level of rehabilitation to preserve the infrastructure at Authority adopted utility level. Assuming a certain level of rehabilitation funding is received, SCRRA's utility level specifies for no loss-of-service performance and an irreducible risk to safety of train operations. GASB-34 policy also requires a triennial rating (SCRRA rates 1/3 of the property each year) of the quality of the infrastructure to facilitate the adopted rehabilitation investments/expenses for maintaining SOGR consistent with the adopted policy.

5.4.2 Conditions and Trends in the MOW Budget

Current year MOW budgets are developed annually to maintain the infrastructure in a state of high reliability and safety. They are based on assumptions for the actual number of units comprising the physical infrastructure, the number of contracted and maintenance personnel (SCRRA technicians, supervisors, inspectors, and managers/support) needed to perform the inspections and repairs, including amounts for material purchases, vehicles, supplies and support activities. Labor costs of contracted service providers are the largest component of the MOW budget. The labor rates are bid rates obtained through competitively bid maintenance contracts. They are underpinned by California Department of Labor Statistic prevailing wages for railroad maintenance operations and adjusted annually by indexes specified in the contract.

Labor is budgeted with a percentage for overtime to support system failures, repair of systems caused by outside forces and vacancies in personnel headcount while recruitment efforts occur and to recover from unusual situations. Due to the number of commuter and freight trains operated mid-day, a large majority of MOW work is being performed at night or during non-revenue service hours. Most contracts and labor agreements permit scheduled night work at premium straight time shift rates, if sufficient advance notice is given for a change of shift starting time. The MOW labor budget includes two-shift coverage of track maintenance to assure that ordinary operations are accomplished with minimal disruption to peak-period commuter rail operations.

Increases in MOW expenses since FY2013-14 can be attributed to two factors. One of those factors is the installation of Positive Train Control (PTC). The other factor is the lack of funding available for Rehabilitation projects in the Capital Program budget. While PTC will become stable, without future adequate Rehabilitation funding, an escalation of MOW cost will be unavoidable.

5.4.3 MOW Statistics

Various factors are considered when developing the MOW budget. Consideration is given to track type, number of turnouts, control points, grade crossings and added infrastructure improvements, construction elements of the track, track geometry, traffic, operating speeds and prevailing weather conditions. Through discussions with contracted vendors, MOW activity plans are outlined, and cost estimated to manage the work safely, consistently and efficiently.

Track Types include main track, branch track, yard track and siding.

- *Turnouts* include main track power, main track manual, yard track power, yard track manual, siding and industry.
- *Construction elements* of the track include type of tie, rail section, ballast section, ballast type, subgrade type and condition.
- *Track geometry* includes curvature, grade, gauge and surface.
- *Traffic* includes an analysis of annual million gross ton miles for sole freight, sole passenger and mixed freight/passenger.
- *Operating speeds* range from lows of 10/15 mph to highs of 50/90 mph.
- *Prevailing weather* conditions include rain, snow, flooding, freezing and thaw cycles, extreme heat or cold.

Other factors that can impact the annual cost of MOW include: increased FRA inspection and reporting requirements; continuous training requirements (including increased training under PTC regulations); monitoring of employees working near tracks (“roadway worker safety”); increased rehabilitation programs to improve track, signals and switches; heavier freight car axle loads; more freight traffic and inflation in some supply and material costs (e.g., fuel, steel, crushed rock, etc.). To offset such increases, SCRRA seeks opportunities to reduce expenditures with better quality power tools, trucks and roadway machines, ongoing replacement of older, more trouble-prone track, bridge and signal elements under the rehabilitation/renovation programs, improved right-of-way security (fencing and enforcement), and continuous emphasis on safety and efficiency training of MOW workers.

Because many factors impact costs, the actual operating allocations per line vary. For example, the Orange County, San Bernardino, and Ventura County lines have high density passenger train traffic and road crossings. Conversely, the River Corridor segment of tracks (both sides of the Los Angeles River from Redondo Junction on the south to CP Taylor on the north), carries heavy freight in addition to the passenger train traffic (including all SCRRA non-revenue movements in and out of the CMF). The Antelope Valley Line is a high curve and grade territory, which equates to an increased maintenance and inspection effort. The Ventura County line has light to moderate curves and grades, but older, unimproved signal and grade crossing warning systems.

5.4.4 MOW Expenditure Components

The MOW category includes six primary cost areas. Totals by area and line segments are shown on *Exhibit 5.4 and Exhibit 5.5*.

Track includes MOW contractor costs of providing labor, equipment and some of the materials required to perform inspections mandated by the FRA, as well as additional special inspections and routine maintenance of SCRRRA track.

Signal & Communications and Train Control Systems includes Signal and Communications contractor costs of providing labor, equipment and some of the materials required to perform inspections mandated by the FRA, as well as additional special inspections and routine maintenance of SCRRRA signal and communication systems.

Structures includes MOW contractor costs of providing labor, equipment and some of the materials required to perform inspections mandated by the FRA, as well as additional special inspections and routine maintenance of SCRRRA bridges, tunnels and other structures.

Procurement includes payments for items utilized in repair of track, signals, grade crossing warning and communication systems, or structures which are allocated to segments and counties on the basis of track miles.

Agency Costs include SCRRRA labor, overhead and non-labor costs allocated to the MOW budget that are subsequently allocated to specific line segments on the basis of track miles.

Other Costs include payments for PTC elements, vegetation control, vehicle and equipment expense, rail flaw detection and engineering, which are also allocated to segments and counties on the basis of track miles.

5.4.5 MOW Net Revenue, Expenditure and Member Agency Funding

Total FY2018-19 MOW expenditures are projected at \$41.3 million and are funded by SCRRRA generated MOW revenue and Member Agency subsidies. These costs and revenues are allocated over operating line and Member Agencies. ***Exhibit 5.3 FY2018-19 Maintenance-of-Way Expenditures and Revenue Offsets*** shows the Operating and Non-Operating line allocation.

Since FY1997-98, SCRRRA has had an arrangement to exchange MOW revenues for an equal amount of Orange County Gas Tax Funds. These funds are reflected outside the ordinary MOW budget and have zero net budget impact.

5.4.6 MOW Projections by Line Segment

The FY2018-19 MOW Line Segment Budget of \$40.7 million is allocated across the various line segments of SCRRA. These include the following segments:

- Los Angeles – San Bernardino
- Los Angeles – Ventura (Burbank Junction to Moorpark)
- Los Angeles – Lancaster
- Fullerton – San Diego County Line
- Olive Subdivision
- Riverside – Layover Facility
- River Corridor
- Perris Valley

Non-Operating line segments include

- Sierra Madre – Claremont (Pasadena Subdivision)
- Rialto Sub (San Bernardino County)
- Shortway Subdivision,
- Redlands 1st Mile
- Redlands Subdivision 1+

Maintenance of Way

(000's)	FY2018-19
Operating Lines - MOW	\$ 38,145
Non-Operating Lines	2,566
Total Line Segments	40,711
Extraordinary Maintenance	591
MOW Budgeted Expenses	\$ 41,301

Numbers may not foot due to rounding.

Notes:

Includes both MOW - Line Segments and Extraordinary MOW

Exhibit 5.4 FY2018-19 Maintenance-of-Way Expenditures by Line Segment / Territory – Operating Lines and Extraordinary and **Exhibit 5.5 FY2018-19 Maintenance-of-Way Expenditures by Line Segment / Territory – Non-Operating Lines and Total** show the allocation for MOW expenditures by line segment and Member Agency.

5.4.7 Extraordinary MOW

This section of MOW covers damages from vandalism, theft, crossing gate knockdowns, accidents, derailments, fires, storm damage, and other expenses related to prompt restoration following accidents or disasters. Immediate repairs are followed by permanent repairs.

Repairs to damages comply with current engineering standards and design criteria (i.e. a wooden bridge would be replaced with a steel/concrete bridge). Thus, funds are not used to rebuild obsolete infrastructure. Repairs may occur in two stages. First, the track is repaired to working condition to minimize disruption to commuter or freight trains. For example, wood ties and jointed rails are initially used, and later replaced with welded rails. Repair is complete when the replacement structure material matches the existing material (if the surrounding track has concrete ties, then the repair would not be complete until replacement concrete ties are installed).

Repairs to signal grade crossing warning and communications equipment are made to comply with current FRA/CPUC/OSHA regulatory requirements as well as engineering and safety standards (i.e., steel antenna structure would replace an antenna mounted on a wooden pole). Thus, mitigating personnel safety concerns and hazardous materials issues while enhancing the operational flexibility to achieve consistent system operations. Additionally, needed repairs to signal, grade crossing warning and communications equipment and systems are made with consideration to current technologies. The rapid pace of changing technology and regulatory requirements, and the lack of vendor support for obsolete equipment as these technologies change, require that we make repairs with current and not obsolete products and technology.

Where possible, reimbursement for expenditures is sought if a responsible party is identifiable (e.g. derailment caused by freight railroad or damage caused by a motorist covered with insurance). The Authority will also look to emergency funding if available (e.g. FEMA). After deductibles are met, SCRRRA insurance coverage may reimburse the Authority for these costs.

For FY2018-19, the budget for extraordinary MOW equals \$591K, a decrease of \$410K from the FY2017-18 Budget.

5.5 Insurance Expense

This category includes insurance premiums for Property, Liability, and Auto, in addition to claims, self-insurance costs and claims administration. In FY2018-19, Insurance total expenses of \$16.6 million have decreased by \$1.0 million or 5.9% from the FY2017-18 Budget. This change has been caused primarily by a \$1.0 million decrease in Insurance premiums as a result of a more favorable insurance market.

5.6 Exhibits

Exhibit 5.1: FY2018-19 Service Assumptions details the operating service assumptions for weekday, Saturday and Sunday trains by operating line. FY2018-19 includes 171 weekday trains and 90 weekend trains.

Exhibit 5.2: FY2018-19 Service Train Miles provides revenue train miles by operating line.

Exhibit 5.3: FY2018-19 MOW Expenditures and Revenue Offsets provides projections of MOW expenditures and funding sources. The revenues and expenditures are allocated by territory and Member Agency.

Exhibit 5.4: FY2018-19 MOW Expenditures by Line Segment / Territory – Operating Lines provides the cost of MOW for operating lines allocated across operating lines and Member Agencies.

Exhibit 5.5: FY2018-19 MOW Expenditures by Line Segment / Territory – Non-Operating Lines and Total including Extraordinary provides the cost of MOW for non-operating lines and the total costs including Extraordinary allocated across operating lines and Member Agencies.

Exhibit 5.1 FY2018-19 Service Assumptions

	Number of Trains		
	Weekday	Saturday	Sunday
San Bernardino Line			
San Bernardino Downtown-LAUS	38	20	14
Ventura County Line			
Chatsworth-LAUS	6		
Moorpark-LAUS	8		
East Ventura-LAUS	6		
Antelope Valley Line			
Santa Clarita-LAUS	2		
Via Princessa-LAUS	8		
Palmdale-LAUS	2		
Lancaster-LAUS	18	12	12
Riverside Line			
Riverside-LAUS	12		
91/Perris Valley Line			
Riverside-LAUS	3	4	4
South Perris-LAUS	6		
South Perris-Riverside	6		
Orange County Line			
Irvine-LAUS	3		
Laguna Niguel-LAUS	6		
Oceanside-LAUS	10	8	8
Fullerton-Laguna Niguel (MSEP)	8		
Fullerton-Oceanside (MSEP)	2		
IEOC Line			
San Bernardino Downtown-Irvine	1		
San Bernardino Downtown-Laguna Niguel	4		
San Bernardino Downtown-Oceanside	3	4	4
Riverside-Laguna Niguel	7		
Riverside-Oceanside	1		
Burbank/Bob Hope Airport			
Burbank Airport South-LAUS	11		
Total	171	48	42

Exhibit 5.2 FY2015-16 to FY2018-19 Service Train Miles

Line	FY2015-16 ACTUALS	FY2016-17 ACTUALS	FY2017-18 BUDGET	FY2018-19 BUDGET ¹	VARIANCE	
					FY2018-19 VS. FY2017-18 MILES	%
San Bernardino Line	658,100	645,992	663,919	675,567	11,648	1.8%
Ventura County Line	249,474	285,343	252,772	252,772	-	0.0%
Antelope Valley Line	602,945	573,958	611,437	611,437	-	0.0%
Riverside Line	192,566	179,781	195,111	195,111	-	0.0%
91/Perris Valley Line	160,450	240,192	229,353	229,353	-	0.0%
Orange County Line (incl MSEP)	528,187	503,028	534,454	534,454	-	0.0%
Inland Empire/Orange County Line	336,200	324,388	342,623	344,911	2,288	0.7%
Total Service Train Miles	2,727,922	2,752,681	2,829,668	2,843,604	13,936	0.5%

Numbers may not foot due to rounding.

Notes:

1. San Bernardino Line and Inland Empire/Orange County Line have been extended to San Bernardino Downtown.

Exhibit 5.3 FY2018-19 MOW Expenditures and Revenue Offsets

Line Segment/Territory	METRO	OCTA	RCTC	SBCTA	VCTC	FY2018-19 BUDGET
Operating Lines	\$ 6,341	\$ 2,523	\$ 660	\$ 1,298	\$ 475	\$ 11,297
LA - San Bernardino	313	-	-	1,298	-	1,611
LA - Ventura (Burbank Jct to Moorpark)	723	-	-	-	475	1,198
LA - Lancaster	3,618	-	-	-	-	3,618
CRI-BURBANK JCT	-	-	-	-	-	-
Fullerton - San Diego County Line	-	2,336	-	-	-	2,336
Olive Subdivision	-	187	-	-	-	187
Riverside Layover Facility	-	-	-	-	-	-
River Corridor	1,686	-	-	-	-	1,686
Perris Valley	-	-	660	-	-	660
Extraordinary Maintenance (Storm Damage, Vandalism, Gate Knockdowns)	-	-	-	-	-	-
Non-Operating Lines	1,036	-	-	228	-	1,264
Sierra Madre - Claremont (Pasadena Sub)	1,036	-	-	-	-	1,036
Rialto Sub (San Bernardino Co.)	-	-	-	9	-	9
Shortway Sub	-	-	-	-	-	-
Redlands 1st Mile	-	-	-	-	-	-
Redlands Sub MP1+	-	-	-	219	-	219
Total	\$ 7,377	\$ 2,523	\$ 660	\$ 1,526	\$ 475	\$ 12,561

Net Subsidy Allocation (000's)

Line Segment/Territory	METRO	OCTA	RCTC	SBCTA	VCTC	FY2018-19 BUDGET
Operating Lines	\$ 13,832	\$ 5,789	\$ 2,392	\$ 3,448	\$ 1,978	\$ 27,439
LA - San Bernardino ¹	3,582	-	-	2,511	-	6,093
LA - Ventura (Burbank Jct to Moorpark) ²	2,521	-	-	-	1,584	4,105
LA - Lancaster	3,602	-	-	-	-	3,602
CRI-BURBANK JCT	-	-	-	-	-	-
Fullerton - San Diego County Line	717	3,604	638	114	-	5,073
Olive Subdivision	-	470	229	41	-	740
Riverside Layover Facility ³	81	34	51	17	-	183
River Corridor ⁴	2,288	954	535	694	347	4,818
Perris Valley	694	651	882	7	-	2,234
Extraordinary Maintenance ⁵ (Storm Damage, Vandalism, Gate Knockdowns)	346	76	57	64	47	591
Non-Operating Lines	315	136	66	785	-	1,301
Sierra Madre - Claremont (Pasadena Sub)	170	-	-	-	-	170
Rialto Sub (San Bernardino Co.)	-	-	-	408	-	408
Shortway Sub	145	136	66	114	-	460
Redlands 1st Mile	-	-	-	65	-	65
Redlands Sub MP1+	-	-	-	199	-	199
Total	\$ 14,147	\$ 5,924	\$ 2,458	\$ 4,233	\$ 1,978	\$ 28,740

Total Expenditure Forecast (000's)

Line Segment/Territory	METRO	OCTA	RCTC	SBCTA	VCTC	FY2018-19 BUDGET
Operating Lines	\$ 20,173	\$ 8,312	\$ 3,052	\$ 4,746	\$ 2,453	\$ 38,736
LA - San Bernardino	3,895	-	-	3,809	-	7,704
LA - Ventura (Burbank Jct to Moorpark)	3,244	-	-	-	2,059	5,303
LA - Lancaster	7,221	-	-	-	-	7,221
CRI-BURBANK JCT	-	-	-	-	-	-
Fullerton - San Diego County Line	717	5,940	638	114	-	7,409
Olive Subdivision	-	657	229	41	-	927
Riverside Layover Facility	81	34	51	17	-	183
River Corridor	3,974	954	535	694	347	6,503
Perris Valley ⁶	694	651	1,542	7	-	2,894
Extraordinary Maintenance (Storm Damage, Vandalism, Gate Knockdowns)	346	76	57	64	47	591
Non-Operating Lines	1,351	136	66	1,013	-	2,566
Sierra Madre - Claremont (Pasadena Sub)	1,206	-	-	-	-	1,206
Rialto Sub (San Bernardino Co.)	-	-	-	416	-	416
Shortway	145	136	66	114	-	460
Redlands 1st Mile	-	-	-	65	-	65
Redlands Sub MP1+	-	-	-	418	-	418
Total	\$ 21,524	\$ 8,447	\$ 3,118	\$ 5,759	\$ 2,453	\$ 41,301

Numbers may not foot due to rounding.

Notes:

- MoW net subsidy split by route miles (58.78% METRO and 41.22% SBCTA).
- MoW net subsidy split by train miles (61.41% METRO and 38.59% VCTC).
- Net subsidy split by train miles of trains using the Riverside Layover, excluding San Diego County (44.41% METRO, 18.33% OCTA, 27.88% RCTC, and 9.38% SBCTA).
- Split is assumed All Share (47.5% METRO, 19.8% OCTA, 11.1% RCTC, 14.4% SBCTA, and 7.2% VCTC) of
- Allocation based on percent of route miles owned (58.66% METRO, 12.87% OCTA, 9.69% RCTC, 10.78%
- Allocation based on train miles of 91 line (23.98% METRO, 22.51% OCTA, 53.28% RCTC, 0.23% SBCTA)

**Exhibit 5.4 FY2015-16 to FY2018-19 MOW Expenditures by Line
Segment/Territory – Operating Lines and Extraordinary**

(000's) Line Segment/Territory	FY2015-16	FY2016-17	FY2017-18	FY2018-19	FY2018-19 VS FY2017-18	
	ACTUALS	ACTUALS	BUDGET	BUDGET	\$	%
Operating Lines	\$ 36,234	\$ 35,422	\$ 38,197	\$ 38,145	\$ (51)	(0.1%)
LA - San Bernardino	7,823	7,478	7,505	7,704	199	2.7%
Track	1,427	1,138	1,312	1,308	(4)	(0.3%)
Signal & Communications	2,900	3,020	2,662	3,138	476	17.9%
Structures	178	176	214	209	(6)	(2.7%)
Procurement	470	536	336	234	(101)	(30.2%)
Other	1,182	1,124	1,229	1,241	13	1.0%
Agency Costs	1,667	1,484	1,753	1,574	(179)	(10.2%)
LA - Ventura (Burbank Jct to Moorpark)	5,399	4,846	5,199	5,303	104	2.0%
Track	1,193	864	1,096	1,114	19	1.7%
Signal & Communications	1,473	1,570	1,601	1,717	117	7.3%
Structures	166	169	167	209	42	24.9%
Procurement	416	284	155	214	59	37.9%
Other	902	823	893	915	22	2.4%
Agency Costs	1,249	1,136	1,287	1,134	(153)	(11.9%)
LA - Lancaster	7,779	7,468	7,775	7,221	(554)	(7.1%)
Track	1,461	1,480	1,274	1,207	(66)	(5.2%)
Signal & Communications	2,077	2,056	2,221	2,303	82	3.7%
Structures	135	160	265	209	(57)	(21.4%)
Procurement	533	468	334	167	(167)	(50.1%)
Other	1,449	1,402	1,479	1,423	(56)	(3.8%)
Agency Costs	2,124	1,903	2,202	1,912	(289)	(13.1%)
CRI-BURBANK JCT	-	-	-	-	-	N/A
Agency Costs	-	-	-	-	-	N/A
Fullerton - San Diego County Line	6,954	6,997	7,354	7,409	55	0.8%
Track	1,293	1,035	1,121	1,197	76	6.8%
Signal & Communications	2,549	2,874	2,937	3,036	99	3.4%
Structures	154	140	205	209	3	1.6%
Procurement	333	374	276	277	1	0.5%
Other	990	1,067	1,109	1,166	57	5.1%
Agency Costs	1,635	1,508	1,705	1,525	(180)	(10.6%)
Olive Subdivision	701	633	850	927	76	9.0%
Track	96	83	96	204	108	112.9%
Signal & Communications	335	251	396	358	(38)	(9.5%)
Structures	21	39	51	52	1	1.6%
Procurement	10	10	24	13	(11)	(46.1%)
Other	76	105	121	136	15	12.1%
Agency Costs	163	144	162	163	2	1.0%
Riverside Layover Facility	115	77	115	183	69	60.2%
Track	41	37	23	114	90	387.8%
Signal & Communications	10	4	12	5	(7)	(56.1%)
Structures	-	1	8	8	0	1.6%
Procurement	1	4	11	11	0	4.0%
Other	26	15	24	29	6	23.7%
Agency Costs	35	15	36	15	(21)	(57.7%)
River Corridor	6,003	5,603	6,333	6,503	171	2.7%
Track	1,295	1,102	1,292	1,407	115	8.9%
Signal & Communications	2,583	2,846	3,134	3,183	49	1.6%
Structures	83	69	135	138	2	1.6%
Procurement	693	355	308	373	65	21.2%
Other	617	602	696	735	39	5.7%
Agency Costs	732	628	769	668	(100)	(13.1%)
Perris Valley	1,460	2,321	3,066	2,894	(171)	(5.6%)
Track	245	508	787	812	25	3.1%
Signal & Communications	330	687	1,053	1,003	(51)	(4.8%)
Structures	20	159	169	112	(57)	(33.8%)
Procurement	77	98	72	66	(6)	(8.1%)
Other	341	450	508	496	(12)	(2.3%)
Agency Costs	\$ 446	\$ 419	\$ 476	\$ 405	\$ (71)	(14.8%)
Extraordinary Maintenance	\$ 1,518	\$ 1,260	\$ 1,001	\$ 591	\$ (410)	(41.0%)
(Derailments, Storm Damage, Gate Knockdowns, Vandalism)						

Numbers may not foot due to rounding.

Exhibit 5.5 FY2015-16 to FY2018-19 MOW Expenditures by Line Segment/Territory – Non-Operating Lines and Total including Extraordinary

(000's) Line Segment/Territory	FY2015-16 ACTUALS	FY2016-17 ACTUALS	FY2017-18 BUDGET	FY2018-19 BUDGET	FY2018-19 VS. FY2017-18	
					\$	%
Non-Operating Lines	\$ 1,701	\$ 1,932	\$ 2,410	\$ 2,566	\$ 156	6.5%
Sierra Madre - Claremont (Pasa. Sub.)	1,242	990	1,269	1,206	(64)	(5.0%)
Track	155	57	55	189	134	245.1%
Signal & Communications	401	400	445	408	(37)	(8.3%)
Structures	32	29	27	36	10	35.5%
Procurement	32	72	48	72	24	50.0%
Other	224	184	288	241	(47)	(16.2%)
Agency Costs	397	249	407	259	(147)	(36.2%)
Rialto Subdivision (San Bernardino Co.)	161	331	318	416	98	30.9%
Track	53	118	120	166	46	38.3%
Signal & Communications	15	84	61	95	34	55.9%
Structures	-	6	26	26	0	1.6%
Procurement	6	27	15	20	6	37.1%
Other	33	41	39	58	19	48.3%
Agency Costs	54	55	57	50	(7)	(11.8%)
Shortway Sub	212	336	334	460	126	37.8%
Track	44	47	44	35	(10)	(21.6%)
Signal & Communications	12	87	133	137	4	3.2%
Structures	-	14	33	67	34	101.5%
Procurement	2	8	3	7	4	127.0%
Other	107	62	69	103	34	49.2%
Agency Costs	47	118	51	112	60	117.3%
Redlands 1st Mile	-	37	123	65	(59)	(47.5%)
Track	-	(1)	-	-	-	N/A
Signal & Communications	-	30	63	9	(54)	(85.8%)
Structures	-	12	15	15	-	0.0%
Procurement	-	1	1	-	(1)	(100.0%)
Other	-	11	13	13	0	2.0%
Agency Costs	-	(15)	31	28	(3)	(10.0%)
Redlands Sub MP1+	87	238	365	418	53	14.6%
Track	46	132	28	84	56	203.1%
Signal & Communications	20	78	132	98	(35)	(26.1%)
Structures	24	2	5	52	47	1,004.0%
Procurement	11	14	14	20	5	36.4%
Other	43	61	113	101	(12)	(10.5%)
Agency Costs	\$ (57)	\$ (50)	\$ 73	\$ 64	\$ (9)	(12.3%)

Line Segment/Territory	FY2015-16 ACTUALS	FY 16-17 ACTUALS	FY17-18 BUDGET	FY2018-19 BUDGET	FY2018-19 VS. FY2017-18	
					\$	%
Total Maintenance-of-Way	\$ 39,453	\$ 38,615	\$ 41,607	\$ 41,301	\$ (306)	(0.7%)
Track	7,351	6,600	7,247	7,836	589	8.1%
Signal & Communications	12,706	13,988	14,851	15,490	639	4.3%
Structures	812	975	1,322	1,341	19	1.5%
Procurement	2,585	2,250	1,596	1,473	(122)	(7.7%)
Other	5,990	5,945	6,582	6,660	78	1.2%
Extraordinary Maintenance	1,518	1,260	1,001	591	(410)	(41.0%)
Agency Costs	\$ 8,493	\$ 7,596	\$ 9,008	\$ 7,910	\$ (1,098)	(12.2%)

Numbers may not foot due to rounding.

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**SECTION 6:
MEMBER AGENCY SUBSIDIES**

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 6: Member Agency Subsidies

6.1 Member Agency Funding

For FY2018-19, total Member Agency subsidies are projected at \$150.6 million. This represents an increase of \$8.2 million over the FY2017-18 Budget, an increase of 5.7%.

(000's)	FY2014-15	FY2015-16	FY2016-17	FY2017-18	FY2018-19
	<u>ACTUALS</u>	<u>ACTUALS</u> ¹	<u>ACTUALS</u> ²	<u>BUDGET</u>	<u>BUDGET</u>
Subsidy	\$ 110,257	\$ 127,173	\$ 129,498	\$ 142,399	\$ 150,550
% Change from prior year	13.0%	15.3%	1.8%	10.0%	5.7%

Federal Funds for Operations:

A. CMAQ	n/a	n/a	n/a	\$ 3,201	\$ 2,844
B. Preventive Maintenance	n/a	n/a	n/a	<u>\$ 24,584</u>	<u>\$ 24,017</u>
Net after Federal Funds				\$ 114,614	\$ 123,689

- A. Congestion Mitigation Air Quality (CMAQ) – Effective in 2017, CMAQ funds have been made available which can be used for new transportation services on new routes, or expanded services on existing routes for up to five years from the start of service.
- B. Federal formula funds from the Federal Transit Administration (FTA) - Beginning in FY2018 FTA formula funds have been made available for eligible Preventive Maintenance activities such as vehicle maintenance, and maintenance-of-way in Metrolink's operating budget. FTA Section 5307 and Section 5337 funds will be provided for Preventive Maintenance in FY2018-19.

Numbers may not foot due to rounding.

Notes:

1. Actual includes BNSF Lease costs beginning October 2015.
2. Actual includes BNSF Lease costs ending November 2016.

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**SECTION 7:
CAPITAL PROGRAM BUDGET**

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 7: Capital Program Budget

7.1 Introduction

SCRRA's priority is to provide safe, reliable and efficient operation. A comprehensive assessment of SCRRA's infrastructure was performed to determine the budgetary impact of the Capital Program.

The Capital Program Budget consists of three major components totaling \$481.3 million: SCRRA's Rehabilitation, Special Projects and New Capital programs. These budgets total \$184.4 million, \$62.0 million and \$234.9 million, respectively.

Rehabilitation projects were prioritized and selected based on the principle of minimizing and managing the risk of failure on SCRRA's infrastructure. In the event where unexpected high priority needs arise that will compromise safety and reliability due to changed conditions, SCRRA will submit a recommendation to the Board to reprogram and reallocate the funds approved for another rehabilitation project of lesser prior

Both the Rehabilitation and New Capital budgets include projects authorized in prior years but remain incomplete as of the end of a fiscal year (*Carryover Projects*), as well as new project authority requested in FY2018-19.

(000's)	FY2018-19
Rehabilitation Carryover Projects	\$ 121,645
Rehabilitation New Authority Projects	\$ 62,790
Special Projects New Authority	\$ 61,967
Total Rehabilitation Projects	\$ 246,402
New Capital Carryover Projects	\$ 233,789
New Capital New Authority Projects	\$ 1,150
Total New Capital	\$ 234,939
Total FY 2018-19 Capital Program	\$ 481,341

Numbers may not foot due to rounding.

SCRRA continues to seek local, state or federal funds for additional New Capital projects. However, projects for which funds are not available for commitment are not included in the FY2018-19 Budget.

In addition to the daily management of our core business of mass transit at the most efficient level, and Rehabilitation, Special Projects and New Capital Projects as described, Metrolink also takes on the responsibility of providing services to complete projects for Third Parties. Third Party projects completed in FY2016-17 are summarized in *Exhibit 7.1*. The largest of these projects are frequently performed for one of our Member Agencies.

Various Third Party Projects were undertaken in FY2017-18. The exact amount is not identified at this time as the fiscal year end has not yet been completed. Based on historical data, we expect to complete approximately \$15 million in Third Party Projects during FY2018-19.

7.2 Rehabilitation Program

Rehabilitation (Rehab) projects are those that extend the useful life of existing capital assets through activities such as the replacement of: worn ties and rail, worn or outdated signal system components, tunnels, bridges and culverts, rolling stock components such as Car Door Operators and Heating/Ventilation/Air Conditioning (HVAC), and midlife overhaul of rail cars and locomotives. SCRRA, as part of its implementation of Government Accounting Standards Board Pronouncement 34 (GASB-34), has elected to use the Modified Approach for the Metrolink Railroad Infrastructure.

Under the Modified Approach, infrastructure assets that are part of a network, or subsystem of a network, are not required to be depreciated if two requirements are met:

1. The government manages the eligible infrastructure assets using a qualified asset management system; and,
2. The government documents that the eligible infrastructure assets are being preserved approximately at (or above) a condition level established and disclosed by the government.

During FY2002-03, the SCRRA Board adopted a minimum condition rating of 75 points (of a maximum of 100) as the minimum acceptable Railroad Condition Index (RCI) for the entire railroad network, including all subsystems. As of June 30, 2015, SCRRA completed a three-year systemwide assessment of the infrastructure, which resulted in an average acceptable level of 81 points. The next systemwide assessment of the infrastructure is due at year end, June 30, 2018.

Rehab projects are those projects that replace worn-out, functionally obsolete and commercially non-viable assets. These assets are replaced, repaired or otherwise

modified with new assets that preserve and extend the useful life of these capital assets. Rehab projects and programs are also sometimes known as “State of Good Repair” or “Capital Reinvestment”. In 2012, Congress enacted a federal transportation program known as *Moving Ahead for Progress in the 21st Century* (MAP-21). This legislation replaced section 5309 Rail Modernization formula funds with section 5337 funds specifically for State of Good Repair projects, underscoring the federal government’s commitment to maintaining transportation infrastructure. MAP-21 contains Transit Asset Management provisions requiring transit agencies that receive federal transportation funds to develop and implement Transit Asset Management (TAM) Plans. A TAM Plan was adopted by the SCRRRA Board in December 2016 which is compliant with MAP-21.

7.2.1 Railroad Rehabilitation Cycles

Railroad infrastructure deteriorates due to traffic, time, environmental conditions (weather) and wear. Railroad infrastructure, especially systems hardware and software, with time and changes in technology, can become functionally obsolete or unsupported. At minimum, a Rehab program is required to overcome this deterioration and maintain a State of Good Repair. A Rehab program typically incorporates state-of-the-art or state-of-the-industry components to support service levels and replace older designs, resulting in reduced maintenance expense, improved operations or improved reliability.

Rehabilitation is performed when the infrastructure has worn or deteriorated to a level that does not yet impair serviceability, but the assets are close to being consumed. In order to utilize 100% of the assets’ service life, their replacement would be performed on the first day of asset failure. This requires meticulous inspection procedures, multiple disruptions to train service, and intensive labor to replace assets. Instead, the railroad industry adopted a “cycle” of rehabilitation where groups of assets are replaced when they are nearing the end of usefulness. Inefficiency is minimized because workforces and machines are economized to perform the work and minimize disruption of train service.

7.2.2 Rehabilitation Elements

A. Rails

Rails are subject to head and gauge face wear, and metal fatigue due to traffic loadings, and expansion and contraction of metal resulting from changes in temperatures and corrosion. Rehabilitation and renovation of rail consists of periodic grinding to restore the original contour, replacement of welds, replacement of insulated joints, transposing rail on curves, and replacement of the entire rail when limits of wear or fatigue are reached.

B. Crossties

The rail is supported on crossties of either wood or concrete. Wood ties have steel tie plates beneath the rail to spread the weight of the rail. Concrete ties have elastomeric pads to separate the steel rail from the ties. Both ties have

fasteners to hold the track together, either cut or screw spikes on the wood ties, and some form of proprietary spring steel clip on concrete ties. There are 3,250 wood ties per mile, spaced at 19½ inches, and concrete ties are spaced at 24 inches, for 2,640 per mile.

1. Wood Ties

Creosote treated wood ties have a service life of between 30 and 35 years. Wood ties deteriorate by organic decay and by mechanical abrasion and crushing from the spikes and the tie plates supporting the rail. Wood ties also deteriorate faster in curves because the centrifugal force of turning trains pushes the rail and spikes. Weak ties in curves are a serious safety consideration. They are usually maintained in a cycle method whereby 25-35% (800-1,000 per mile) of the wood ties are replaced every 7 to 10 years, depending upon specific local conditions.

2. Concrete Ties

Concrete crossties are more resistant to wear and decay; however, they can be affected by fouled ballast. Severely fouled ballast creates an abrasive paste of rock particles, which grind away the concrete surface, which exposes the reinforcing strands and can cause the tie to break. Though concrete ties last longer than wood ties, the elastic clips and the bearing pads require changing when rail is replaced on about 10 to 12 years intervals. Concrete ties are expected to last at least 50 years.

C. Ballast

The crushed rock ballast that supports the track deteriorates through weathering and abrasion. The fine particles eroded from the stone, plus fine soil particles that are blown or washed into the track, or migrate upward from underlying soil, cause the ballast to retain water, which has two adverse effects. The moisture degrades the ties and softens the subgrade, leading to settlement of the whole track structure.

D. Special Track Work

Two areas of the track structure, turnouts and road crossings, have higher levels of stress and require additional investment.

1. Turnouts and Crossing Diamonds

Turnouts (switches) are the special track work which diverts trains from one track to another. They consist of a set of movable “point” rails to divert the wheels, a “frog” to cross the rails, and special braces, supports, tie plates, guard rails, gauge plates, and long timber ties to support these components. Due to the impacts of wheels being steered to diverging routes by the points and of crossing the open flange way at the frog, these components require special attention. Even with careful maintenance they wear out in about ¼ of the time of the general track structure.

2. Road Crossings

Road Crossings have precast concrete or rubber blocks set on top of the crossties to permit roadway vehicles to cross the rails. Because the deflection of the rails under passing trains and large trucks, there is movement in the crossing structure. This motion can cause the adjoining roadway surface to become broken or cause the track profile to become irregular and require repair. Rehabilitation of road crossings is difficult because they require detour routes for highway traffic, and halt train traffic while the crossing is under repair. Rehabilitation includes a periodic removal of the crossing surface to raise and tamp the track (at about 6-year intervals) and a complete renewal of the crossing, track, and subgrade (at about 20-year intervals).

E. Bridges

Railroad bridges have steel, concrete, and timber elements, all of which have differing, and generally very long-life cycles. The critical elements are the timber parts: the decks and stringers. Timber elements in railroad bridges typically last 50-60 years. Since the 1980s, they have generally been replaced with concrete or steel elements.

F. Signal, Communication, Train Traffic Control, Electrical Systems

Railroad signal, communication, train traffic control (dispatch), and electrical systems termed here as Systems generally experience wear of moving parts in equipment such as switch machines and grade crossing gate mechanisms, exposure to the environment, and have electronic and power supply components with specific lifespans. These Systems also become obsolete due to changes in Federal regulations or in the state-of-the-art of the industry. Virtually all Systems are microprocessor, computer, or server-based and are subject to hardware and software obsolescence due to changes in technology or changes in commercial arrangements that lead to loss of support. Rehabilitation of these Systems consists of unit exchange replacement of components to avoid service disruptions or regulatory infractions, and includes replacement of outdated, or unsupported hardware and software with current industry standard hardware and software. Some components can be returned to manufacturing plants for rebuilding and reused on a cyclical basis of maintenance.

G. Embankment

The embankment supporting the railroad erodes under the action of rain. In cut sections, this deposits mud and silt near or in the track structure, causing water to be blocked from draining away from the track. This results in saturation of the track bed, deterioration of the ties (both wood and concrete ties are adversely affected by muddy embankments), and settlement of the track into a rough profile.

H. Rolling Stock

Beginning June 2017, the Metrolink rolling stock fleet consists of 55 diesel locomotives (including 3 leased) and 242 rail cars. Rolling stock directly affects the passenger experience and must be maintained in a state of good repair to ensure safety, reliability and comfort. Rolling stock goes through regular preventative maintenance on a cyclical basis as part of normal operations. Additional rehabilitation is performed on key rail car subsystems such as the heating, ventilation, air conditioning (HVAC) system, door control systems, lighting systems and battery systems.

For depreciation purposes, SCRRRA established a useful life of 30 years for revenue rolling stock. Initial locomotive and rail car purchases occurred in 1992-1993, making the vehicles 26-27 years old. To date, these vehicles have not undergone comprehensive midlife overhauls, and vehicle replacement or rebuild is necessary to prevent service degradation. Of SCRRRA's 52 locomotives, 37 have exceeded the point at which a midlife overhaul should be performed. SCRRRA has ordered 40 new Tier-4 locomotives, 37 of which will replace the oldest of the locomotives. The remaining 12 legacy locomotives will begin to need midlife overhauls sometime after FY2019-20. Funding will be necessary for this important effort.

I. Facilities

SCRRRA office space, warehouses, maintenance shops and rail yards are used to operate and maintain the system. The Central Maintenance Facility (CMF) is Metrolink's largest facility and contains specialized machinery such as a wheel true machine, drop table, overhead cranes, and train wash to service and repair rail rolling stock. Yard equipment such as ground power stations, locomotive sanders, and fuel and urea dispensing systems are also critical for service. All items must be maintained in a state of good repair to ensure safe and efficient operation.

7.2.3 Consequences of Deferred Rehabilitation

There are possible consequences of deferred maintenance:

- Reduced train speeds and headways;
- Reduced operational reliability;
- Higher cost of ordinary maintenance;
- Regulatory fines and sanctions

The track structure has a considerable amount of redundancy. Weakness in specific elements can be carried by the stronger elements. Thus a few decayed or split wood ties, if scattered throughout the length of the track, do not cause any of these problems. However, if there are many weak ties at one location, then the track overall is weak, and the above consequences become inevitable.

Rehabilitation projects are summarized in *Exhibits 7.2 and 7.3*. A number of the projects will not be completed in FY2017-18 and will be carried forward into FY2018-19. They amount to \$121.6 million and are described in the FY2018-19 Rehabilitation Carryover Projects Summary section. The new projects seeking new authority in FY2018-19 amount to \$124.8 million, which includes Rehabilitation and Special Projects in the amounts of \$62.8 million and \$62.0 million respectively. The Rehabilitation and Special Projects are discussed in the New Rehabilitation Projects section below.

7.3 FY2018-19 Rehabilitation Carryover Projects

Ongoing projects authorized in FY2017-18 or earlier that we estimate will not be completed by June 30, 2018 are shown on *Exhibits 7.2 and 7.6* in summary and detail respectively. The exhibit represents staff's estimate of the outstanding authorized balance on each project as of the adoption of the FY2018-19 fiscal year budget. These estimations in no way alter the actual project authority as approved by the SCRRRA Board. Rehabilitation Carryover Projects total \$121.6 million.

7.4 FY2018-19 New Rehabilitation Projects

New projects for Rehabilitation and Special Projects in FY2018-19 are depicted on *Exhibits 7.3 and 7.7* in summary and detail respectively. New Rehabilitation and Special Projects total \$124.8 million.

7.5 FY2018-19 New Capital Carryover Projects

New Capital Carryover projects authorized in FY2017-18 or earlier that are not anticipated to be completed prior to June 30, 2018 are depicted on *Exhibit 7.4*. The New Capital Carryover amount totals \$233.8 million.

7.6 FY2018-19 New Capital New Authority Projects

New Capital projects in FY2018-19 are shown in *Exhibit 7.5*, and total \$1.2 million.

7.7 Exhibits

Exhibit 7.1 FY2016-17 Third Party Projects Summary lists completed projects for third parties.

Exhibit 7.2: FY2018-19 Rehabilitation Carryover Projects Summary lists Rehabilitation carryover authority by subdivision, project category and funding source.

Exhibit 7.3: FY2018-19 Rehabilitation & Special Projects New Authority Projects Summary by Subdivision lists Rehabilitation and Special projects for New Authority by subdivision, project category and funding source.

Exhibit 7.4: FY2018-19 New Capital Carryover Projects Detail lists New Capital carryover authority by subdivision, project category and funding source.

Exhibit 7.5: FY2018-19 New Capital New Authority Projects Detail lists New Capital authority by project and funding source.

Exhibit 7.6: FY2018-19 Rehabilitation Carryover Projects Detail provides a detailed listing of Rehabilitation carryover authority by project.

Exhibit 7.7: FY2018-19 Rehabilitation New Authority Projects Detail provides a detailed listing of the Rehabilitation projects for New Authority by project.

Exhibit 7.8.1: Capital Summary and Cash Flow Detail – All Agencies provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehab and New Capital and Carryover projects for FY2018-19.

Exhibit 7.8.2: Capital Summary and Cash Flow Detail – METRO provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2018-19.

Exhibit 7.8.3: Capital Summary and Cash Flow Detail – OCTA provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2018-19.

Exhibit 7.8.4: Capital Summary and Cash Flow Detail – RCTC provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2018-19.

Exhibit 7.8.5: Capital Summary and Cash Flow Detail – SBCTA provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2018-19.

Exhibit 7.8.6: Capital Summary and Cash Flow Detail – VCTC provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2018-19.

Exhibit 7.8.7: Capital Summary and Cash Flow Detail – Other Fund Sources provides a capital summary and cash flow estimate for Carryover from prior year, New Authority Rehabilitation and New Capital projects for FY2018-19.

Exhibit 7.1 FY2016-17 Third Party Projects

PROJECT DESCRIPTION	TOTAL
MOORPARK-SPRING ROAD	\$ 4,567,523
IRVINE-SAND CANYON AVE.	\$ 3,673,866
BRANFORD XING CONSTRUCTION	\$ 2,440,479
CITY LA-NORTH MAIN ST. BRIDGE	\$ 667,439
CALTRANS- N ANAHEIM WIDENING	\$ 358,176
LAGUNA-PASEO DE COLONIAS	\$ 262,959
2014 ANGELS TRAIN	\$ 211,675
2015 ANGELS EXPRESS TRAIN	\$ 206,152
BOBHOPE AIRPORT STATION	\$ 92,660
BRANFORD ST XING DESIGN	\$ 85,085
2015 AUTO SPEEDWAY	\$ 66,970
2016 AUTO CLUB SPEEDWAY TRAIN	\$ 64,285
SAN CLEMENTE RIP RAP-PHASE I	\$ 61,129
STORMDRAIN ETIWANDA AVE-RANCHO	\$ 55,402
ANGELS EXPRESS TRAIN WRAP	\$ 31,905
DYNALECTRIC WORK@ WOODLEY	\$ 30,362
JUNIPER AVE GRADE CROSSING	\$ 25,534
SIERRA AVE GRADE CROSSING	\$ 22,606
MEDIA CAMPAIGN W/OPR LIFESAVER	\$ 20,000
LAGUNA NIGUEL-N.CITY BOUNDARY	\$ 18,392
NINYO-SURVEY FOR OCTA	\$ 18,003
NORTHWEST-LOWE'S STORE	\$ 16,902
2015 LA FAIR LATE NIGHT TRAIN	\$ 15,549
2014 AUTOCLUB SPEEDWAY	\$ 12,748
WILSON-210 FWY & IRWINDALE AVE	\$ 11,652
SULLY MILLER-SF BIKEPATH P2	\$ 8,240
W.ENG-PRKNG LT IN RIALTO	\$ 7,501
REPAIR CONCRETE ARTIC STATION	\$ 7,310
SPARTA NEWHALL STN PAINTING	\$ 7,186
OCTA-USC SPECIAL TRAIN	\$ 5,904
2015 LUNAR NEW YEAR TRAIN	\$ 5,566
JOHN MEEK-SAN CLEMENTE PIER	\$ 5,513
SPARTA DEMOLITION RAILROAD AVE	\$ 4,914
LACMTA-LAUS 75TH ANNVERSARY	\$ 4,845
2016 LUNAR NEW YEAR TRAIN	\$ 4,368
REHAB AT SIMI VALLEY-GRANITE	\$ 3,694
DYNALECTRIC-THERMO LIMIT LINES	\$ 3,626
2014 SAN BERDINO RAILROAD DAYS	\$ 3,558
LADWP VAN NUYS POLE RPLMNT	\$ 3,556
PARAGON-605 FWY/IRWINDALE AVE.	\$ 3,500

Exhibit 7.1 FY2016-17 Third Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
BMS HUB RLCT TAMPA & BUS CNTR	\$ 3,184
SCE LA VERNE	\$ 3,059
INSTALL FENCE UNIV OF LA VERNE	\$ 3,012
HATCH MOTT-CA HIGH SPEED RAIL	\$ 3,000
CALLEGUAS WATER SITE ACC XING	\$ 2,938
EDISON-AVENUE S	\$ 2,919
BMS HUB RLCTE MASON&PRAIRIE	\$ 2,876
SANTA ANA-FAIRHAVEN PED ACCESS	\$ 2,690
SCE-INSTLL OH/FO IN SIMIVLLEY	\$ 2,548
HUB RELOCATE DE SOTO&KNAPP	\$ 2,500
BMS HUB LINDLEY&PARTHENIA	\$ 2,500
VCI VERIZON MCI MANHOLE	\$ 2,500
GOLDEN STATE WATER-ARROW HWY	\$ 2,391
PIPE INSPECTION SIMI VALLEY	\$ 2,122
FLATIRON WEST, INC : IRWD	\$ 2,000
TORO ENT INGLEWOOD	\$ 2,000
S/P REVIEW FOR GSWATER CO	\$ 2,000
EDISON-MAC DEVITT CROSSING	\$ 1,500
CABLE ENGIN-PASADENA & AZUSA	\$ 1,254
VCI-BUENA VISTA XING @ BURBANK	\$ 1,250
WARNER BROS SOUTHLAND EPISODE	\$ 1,185
HP-BONITA AVENUE IN LA VERNE	\$ 1,000
K&B-ARCHIBALD AVE. & 8TH ST.	\$ 1,000
CABLE ENGINEER-LAUREL CANYON	\$ 1,000
K&B-DE SOTO AVENUE	\$ 1,000
K&B-LASSEN STREET	\$ 1,000
WEST COAST-VERNON AVENUE	\$ 570
CROWN DEV-3RD PTY SAFETY TRNG	\$ 500
JGRIFFIN CONST-SFTY TRNG	\$ 154
GRAND TOTAL	\$ 13,172,385

Exhibit 7.2 FY2018-19 Rehabilitation Carryover Projects Summary

(\$000)

SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
	Signage	17	-	-	-	-	-	17
91-LA Total		17	-	-	-	-	-	17
	Signal	-	49	-	-	-	-	49
	Structures	-	167	-	-	-	-	167
	Track	-	83	-	-	-	-	83
Olive Total		-	299	-	-	-	-	299
	Comm	-	475	-	-	-	-	475
	Facilities	-	48	-	-	-	-	48
	Signal	-	211	-	-	-	-	211
	Signal & Comm	-	-	-	8	-	-	8
	Structures	-	5,964	-	1,802	-	-	7,765
	Track	-	4,563	398	1,726	649	-	7,336
Orange Total		-	11,261	398	3,536	649	-	15,845
	Comm	-	185	-	-	-	-	185
	Comm & PTC	-	195	-	-	-	-	195
	Signal	-	400	-	-	-	-	400
	Signal & Comm	-	66	-	25	-	-	91
	Structures	-	1	-	-	-	-	1
	Track	-	1	-	-	-	-	1
Orange & Olive Total		-	849	-	25	-	-	873
	Signal & Comm	7	-	-	-	-	-	7
	Track	47	-	-	-	-	-	47
Pasadena Total		54	-	-	-	-	-	54
	Comm	-	-	3	-	-	-	3
	Signal	-	-	150	-	-	-	150
Perris Valley Total		-	-	153	-	-	-	153
	Comm	12	5	4	5	5	-	31
	Signal	155	5	26	34	15	-	235
	Structures	46	-	8	10	5	-	69
	Track	1,597	421	333	433	211	5,137	8,132
River Total		1,811	432	370	481	236	5,137	8,467
	Comm & PTC	18	7	4	5	3	81	118
	Signal	100	-	16	21	11	327	475
	Track	1,355	-	223	290	145	3,419	5,432
River Sub - East Bank Total		1,472	7	244	317	158	3,827	6,025
	Facilities	-	-	495	-	-	-	495
Riverside Total		-	-	495	-	-	-	495
	Comm	12	-	-	8	-	-	20
	Signal	351	-	-	244	-	10	606
	Signal & Comm	37	-	-	24	-	-	60
	Structures	1,005	-	-	670	-	-	1,675
	Track	1,960	-	-	1,571	154	518	4,204
San Gabriel Total		3,365	-	-	2,517	154	528	6,564
	Comm	-	-	50	-	-	-	50
	Comm & PTC	-	-	97	-	-	-	97
San Jacinto (PVL) Total		-	-	147	-	-	-	147

Numbers may not foot due to rounding.

**Exhibit 7.2 FY2018-19 Rehabilitation Carryover Projects Summary
(continued)**

(\$000)

SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
	Facilities	258	107	60	78	-	-	503
SB Shortway Total		258	107	60	78	-	-	503
	Signal	113	-	-	-	-	-	113
	Signal & Comm	-	-	-	-	12	-	12
	Structures	11,212	-	-	-	-	1,387	12,599
	Track	3,157	-	-	-	37	452	3,647
Valley Total		14,482	-	-	-	49	1,839	16,370
	Comm	1	-	-	-	39	-	40
	Signal	-	-	-	-	1	14	15
	Structures	2,836	-	-	-	-	113	2,949
	Track	1,073	-	-	-	9	396	1,478
Ventura - LA County Total		3,910	-	-	-	49	523	4,482
	Comm	-	-	-	-	125	-	125
	Comm	-	-	-	-	60	-	60
	Facilities	-	-	-	-	208	-	208
	Signal	-	-	-	-	188	-	188
	Structures	64	-	-	-	3,802	-	3,865
	Track	-	-	-	-	3,350	271	3,621
Ventura - VC County Total		64	-	-	-	7,733	271	8,067
	Facilities	-	-	-	-	-	189	189
Ventura & Valley Total		-	-	-	-	-	189	189
	Track	-	-	-	76	-	-	76
Redlands Total		-	-	-	76	-	-	76
	Comm	6	-	1	1	1	-	9
	Comm & PTC	1,136	-	187	243	122	-	1,688
	Equipment	2	-	-	1	-	-	4
	Facilities	2,633	497	515	672	336	868	5,520
	IT	174	89	51	70	27	-	411
	Mechanical	177	24	99	129	65	237	731
	PTC, C+S	15	-	9	11	42	-	77
	Rolling Stock	10,772	88	1,788	2,324	1,160	26,944	43,075
	Security	-	-	-	-	-	178	178
	Signal	51	-	8	11	5	-	76
	Structures	147	-	-	-	-	-	147
	Track	101	2	19	24	12	-	158
	Vehicles	634	1	104	135	68	-	942
Systemwide Total		15,849	701	2,781	3,620	1,838	28,227	53,016
Grand Total		41,281	13,656	4,650	10,650	10,865	40,541	121,645

Numbers may not foot due to rounding.

Exhibit 7.3 FY2018-19 Rehabilitation & Special Projects New Authority Projects Summary – by Subdivision

(\$000)

SUBDIVISION	CATEGORY	METRO ⁽¹⁾	OCTA ⁽²⁾	RCTC ⁽³⁾	SBCTA ⁽⁴⁾	VCTC ⁽⁵⁾	OTHER ⁽⁶⁾	TOTAL
	Track	-	5,221	-	-	-	-	5,221
Olive Total		-	5,221	-	-	-	-	5,221
	Communications	-	350	-	-	-	-	350
	Grade Crossing	-	1,030	-	-	-	-	1,030
	Right of Way	-	210	-	-	-	-	210
	Signals	-	482	-	-	-	-	482
	Structures	-	1,000	-	-	-	-	1,000
Orange Total		-	3,072	-	-	-	-	3,072
	Communications	110	26	15	19	9	44	223
	Facilities	667	278	156	202	101	-	1,405
	Grade Crossing	253	-	-	-	-	-	253
	Signals	2,412	520	291	378	189	472	4,262
	Track	4,625	1,555	872	1,131	565	-	8,748
River Total		8,067	2,379	1,334	1,730	865	516	14,890
	Communications	195	-	-	60	-	-	255
	Grade Crossing	635	-	-	-	-	-	635
	Signals	1,613	-	-	870	-	-	2,483
	Structures	464	-	-	310	-	-	774
	Track	3,996	-	-	2,065	-	-	6,062
San Gabriel Total		6,903	-	-	3,305	-	-	10,209
	Communications	-	-	125	-	-	-	125
San Jacinto (PVL) Total		-	-	125	-	-	-	125
	Facilities	455	190	106	138	-	-	889
	Signals	557	232	130	169	-	-	1,088
SB Shortway Total		1,012	422	237	307	-	-	1,977
	Communications	100	-	-	-	-	-	100
	Grade Crossing	557	-	-	-	-	-	557
	Right of Way	224	-	-	-	-	-	224
	Signals	145	-	-	-	-	-	145
	Track	750	-	-	-	-	-	750
Valley Total		1,776	-	-	-	-	-	1,776
	Track	251	-	-	-	-	-	251
Valley, Ventura - LA County Total		251	-	-	-	-	-	251
	Communications	50	-	-	-	-	-	50
	Right of Way	224	-	-	-	-	-	224
	Signals	359	-	-	-	-	-	359
	Track	1,555	-	-	-	-	-	1,555
Ventura - LA County Total		2,188	-	-	-	-	-	2,188
	Communications	-	-	-	-	87	-	87
	Facilities	-	-	-	-	1,543	-	1,543
	Grade Crossing	-	-	-	-	1,018	-	1,018
	Structures	-	-	-	-	1,520	-	1,520
Ventura - VC County Total		-	-	-	-	4,168	-	4,168

Numbers may not foot due to rounding.

Exhibit 7.3 FY2018-19 Rehabilitation & Special Projects New Authority Projects Summary – by Subdivision (continued)

(\$000)

SUBDIVISION	CATEGORY	METRO ⁽¹⁾	OCTA ⁽²⁾	RCTC ⁽³⁾	SBCTA ⁽⁴⁾	VCTC ⁽⁵⁾	OTHER ⁽⁶⁾	TOTAL
	Business Systems	864					-	864
	Communications	403	168	94	122	61	-	848
	Facilities	982	330	185	240	120	-	1,858
	Information Technology	119	49	28	36	18	-	250
	Non-Revenue Fleet	770	91	51	66	33	-	1,011
	Rolling Stock	3,820	1,375	771	1,000	500	-	7,464
	Signals	1,271					-	1,271
	Stations	273	131	55	87	55	-	600
	Structures	594	248	139	180	90	-	1,250
	Track	1,776	574	322	417	209	-	3,298
	TVD	95	40	22	29	14	-	200
Systemwide Total		10,966	3,005	1,666	2,177	1,100	-	18,913
	Structures	-	38,262	-	-	-	-	38,262
Special Project - Orange		-	38,262	-	-	-	-	38,262
	Track	-	-	3,456	-	-	-	3,456
Special Project - San Jacinto (PVL)		-	-	3,456	-	-	-	3,456
	Rolling Stock	9,619	4,010	2,248	2,916	1,458	-	20,250
Special Project - Systemwide		9,619	4,010	2,248	2,916	1,458	-	20,250
FY2018-19 Rehab New Authority Projects		31,162	14,098	3,361	7,520	6,133	516	62,790
FY2018-19 Special Projects New Authority Projects		9,619	42,271	5,704	2,916	1,458	-	61,967
FY2018-19 Rehab & Special Projects New Authority Projects		40,781	56,369	9,064	10,436	7,591	516	124,758
ROTEM Settlement Amounts⁽⁷⁾		3,253	(3,253)	-	-	-	-	-
Total FY2018-19 Rehabilitation & Special Projects New Authority Projects with ROTEM Settlement		44,034	53,116	9,064	10,436	7,591	516	124,758
Total Carryovers from Prior Years		41,281	13,656	4,650	10,650	10,865	40,541	121,645
Total Rehab Projects Including Carryovers		85,316	66,773	13,714	21,086	18,456	41,057	246,402

Numbers may not foot due to rounding.

NOTES:

- (1) Metro funding is Measure R.
- (2) OCTA funding is FTA Section 5337. Match is from Toll Revenue Credits.
- (3) RCTC funding is FTA Section 5337. Match is from Toll Revenue Credits.
- (4) SBCTA funding is anticipated to be FTA Section 5337 and SB1 SGR. Match is from Toll Revenue Credits.
- (5) VCTC funding is FTA Section 5337 and SB1 SGR. Match is from Toll Revenue Credits.
- (6) Other funds are anticipated from UPRR for East Bank share.
- (7) The ROTEM Settlement funding shown is related only to project amounts approved in FY2018-19. An additional \$2,566,890 approved in FY2017-18 will also be applied as well as \$396,000 in FY2017-18 New Capital.

Exhibit 7.4 FY2018-19 New Capital Carryover Projects

(\$000)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Orange	Facilities	418002	-	368	-	-	-	-	368
Orange	Signal	417007	-	1,041	-	-	-	-	1,041
Orange	Signal	418003	-	5,504	-	-	-	-	5,504
San Gabriel	Comm	418004	-	-	-	6,696	-	-	6,696
San Gabriel	Signal	417002	359	-	-	-	-	275	634
San Gabriel	Signal	417003	2,492	-	-	-	-	202	2,695
San Gabriel	Signal	417005	-	-	-	109	-	-	109
San Gabriel	Signal	417006	-	-	-	138	-	-	138
San Gabriel	Structures	491701	-	-	-	-	-	396	396
Systemwide	Comm	417001	-	-	-	-	-	5,732	5,732
Systemwide	Comm	418001	-	-	-	-	-	4,750	4,750
Systemwide	Comm	450097⁽¹⁾	7	-	1	1	3	-	12
Systemwide	Comm	450050	2	-	-	-	-	7	8
Systemwide	Comm & PTC	450096	-	337	-	-	-	387	724
Systemwide	Comm & PTC	450098⁽¹⁾	-	-	-	68	-	728	796
Systemwide	Comm & PTC	450095	-	-	-	-	-	154	154
Systemwide	Facilities	416001	-	-	-	-	-	3,581	3,581
Systemwide	Facilities	416002	-	-	-	-	-	8	8
Systemwide	Facilities	450051	154	95	53	69	(321)	-	50
Systemwide	Facilities	613007	-	-	-	-	-	43	43
Systemwide	IT	450100	-	-	-	-	-	1,831	1,831
Systemwide	IT	450110	-	-	-	-	-	3,950	3,950
Systemwide	IT	618001	12,935	6,857	4,804	4,009	1,767	-	30,372
Systemwide	IT	450090	-	1	-	-	-	546	546
Systemwide	Rolling Stock	613001	-	-	-	-	-	3,287	3,287
Systemwide	Rolling Stock	613003	-	-	-	-	-	4,925	4,925
Systemwide	Rolling Stock	613005⁽¹⁾	-	-	-	-	-	50,423	50,423
Systemwide	Rolling Stock	614002	-	-	-	-	-	912	912
Systemwide	Rolling Stock	616002⁽¹⁾	500	-	-	24	12	86,479	87,015
Systemwide	Rolling Stock	616003	1,219	-	-	-	-	9,590	10,809
Systemwide	Rolling Stock	616004	-	-	-	-	-	5,118	5,118
Systemwide	Track	450099	-	-	-	10	-	-	10
Systemwide	Business Systems	TBD	618	-	-	-	-	-	618
Valley	Track	414002	187	-	-	-	-	-	187
Valley	Track	417004	176	-	-	-	-	176	352
Grand Total			18,649	14,203	4,858	11,125	1,461	183,493	233,789

Numbers may not foot due to rounding.

NOTE:

(1) ROTEM Settlement is applies to those projects indicated in bold; amounts originally due to OCTA is swapped with METRO and/or SBCTA.

Exhibit 7.5 FY2018-19 New Capital New Authority Projects

(\$000)

PROJECT DESCRIPTION	SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
Irvine Maintenance Facility Phase I (Partial Design Phase)	Orange	Facilities	-	200	-	-	-	-	200
Central Maintenance Facility West Entrance (Design Phase)	Systemwide	Track	950	-	-	-	-	-	950
FY2018-19 New Capital New Authority Projects			950	200	-	-	-	-	1,150
Total Carryovers from Prior Years			18,649	14,203	4,858	11,125	1,461	183,493	233,789
Total FY2018-19 New Capital New Authority including Carryovers			19,599	14,403	4,858	11,125	1,461	183,493	234,939

Numbers may not foot due to rounding.

Exhibit 7.6 FY2018-19 Rehabilitation Carryover Projects Detail

(\$000)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
91-LA	Signage	514001	17	-	-	-	-	-	17
Olive	Structures	515100	-	167	-	-	-	-	167
Olive	Track	514002	-	68	-	-	-	-	68
Olive	Track	516510	-	2	-	-	-	-	2
Olive	Track	516511	-	13	-	-	-	-	13
Olive	Signal	517530	-	49	-	-	-	-	49
Olive/Orange	Comm	518640	-	150	-	-	-	-	150
Orange	Facilities	591801	-	48	-	-	-	-	48
Orange	Signal	591715	-	211	-	-	-	-	211
Orange	Signal & Comm	514003	-	-	-	8	-	-	8
Orange	Structures	514004	-	6	-	-	-	-	6
Orange	Structures	514006	-	3	-	-	-	-	3
Orange	Structures	515104	-	11	-	-	-	-	11
Orange	Structures	515105	-	3,430	-	746	-	-	4,176
Orange	Structures	515106	-	-	-	409	-	-	409
Orange	Structures	516620	-	142	-	-	-	-	142
Orange	Structures	516621	-	1,798	-	-	-	-	1,798
Orange	Structures	518620	-	573	-	647	-	-	1,219
Orange	Track	514007	-	18	-	-	-	-	18
Orange	Track	514008	-	1	-	-	2	-	3
Orange	Track	514060	-	5	-	-	-	-	5
Orange	Track	515107	-	-	-	14	-	-	14
Orange	Track	515108	-	-	-	-	57	-	57
Orange	Track	516610	-	-	2	-	-	-	2
Orange	Track	516611	-	182	-	933	327	-	1,442
Orange	Track	516612	-	25	7	-	-	-	31
Orange	Track	517610	-	3,955	390	779	263	-	5,388
Orange	Track	518630	-	377	-	-	-	-	377
Orange	Comm	591714	-	475	-	-	-	-	475
Orange & Olive	Comm & PTC	517640	-	195	-	-	-	-	195
Orange & Olive	Signal	516530	-	59	-	-	-	-	59
Orange & Olive	Signal	516631	-	341	-	-	-	-	341
Orange & Olive	Signal & Comm	514005	-	1	-	-	-	-	1
Orange & Olive	Signal & Comm	514009	-	-	-	25	-	-	25
Orange & Olive	Signal & Comm	514010	-	51	-	-	-	-	51
Orange & Olive	Signal & Comm	515102	-	14	-	-	-	-	14
Orange & Olive	Structures	514011	-	1	-	-	-	-	1
Orange & Olive	Track	515510	-	1	-	-	-	-	1
Orange & Olive	Comm	516640	-	35	-	-	-	-	35
Pasadena	Signal & Comm	515109	7	-	-	-	-	-	7
Pasadena	Track	514012	3	-	-	-	-	-	3
Pasadena	Track	515112	45	-	-	-	-	-	45
Perris Valley	Signal	516930	-	-	60	-	-	-	60
Perris Valley	Signal	516931	-	-	90	-	-	-	90
Perris Valley	Comm	516940	-	-	3	-	-	-	3

Numbers may not foot due to rounding.

Exhibit 7.6 FY2018-19 Rehabilitation Carryover Projects Detail (continued)

(\$000)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
River	Signal	514039	12	5	3	4	-	-	23
River	Signal	515139 ⁽¹⁾	2	-	-	-	-	-	2
River	Structures	515141 ⁽¹⁾	46	-	8	10	5	-	69
River	Track	514038	47	20	11	14	-	-	92
River	Track	514062 ⁽¹⁾	18	6	3	5	-	-	32
River	Track	515142 ⁽¹⁾	5	-	1	2	5	-	13
River	Track	515143 ⁽¹⁾	101	-	17	22	11	-	149
River	Track	517711 ⁽¹⁾	447	-	74	96	48	-	664
River	Track	591708 ⁽¹⁾	30	-	5	6	3	-	45
River	Track	592710	439	183	103	133	67	-	924
River	Track	592711	203	85	48	62	31	-	428
River	Track	592712	91	38	21	27	14	4,124	4,315
River	Track	592713	217	91	51	66	33	1,013	1,471
River	Comm	514037	10	5	3	4	5	-	27
River	Comm	515138 ⁽¹⁾	2	-	1	1	-	-	4
River	Signal	517730 ⁽¹⁾	141	-	23	30	15	-	210
River Sub - East Bank	Comm & PTC	517740	18	7	4	5	3	81	118
River Sub - East Bank	Signal	517731 ⁽¹⁾	100	-	16	21	11	327	475
River Sub - East Bank	Track	515144 ⁽¹⁾	448	-	74	96	48	1,475	2,140
River Sub - East Bank	Track	515160 ⁽¹⁾	61	-	10	13	7	291	381
River Sub - East Bank	Track	517710 ⁽¹⁾	372	-	61	80	40	-	553
River Sub - East Bank	Track	517712 ⁽¹⁾	410	-	68	88	44	1,350	1,959
River Sub - East Bank	Track	517713 ⁽¹⁾	64	-	10	14	7	304	398
Riverside	Facilities	515113	-	-	461	-	-	-	461
Riverside	Facilities	516820	-	-	35	-	-	-	35
San Gabriel	Signal	515115	17	-	-	1	-	10	28
San Gabriel	Signal	517430	121	-	-	81	-	-	202
San Gabriel	Signal	517431	160	-	-	107	-	-	267
San Gabriel	Signal	591712	18	-	-	23	-	-	42
San Gabriel	Signal	591713	35	-	-	32	-	-	67
San Gabriel	Signal & Comm	514013	7	-	-	4	-	-	11
San Gabriel	Signal & Comm	514015 ⁽¹⁾	10	-	-	6	-	-	16
San Gabriel	Signal & Comm	514016	13	-	-	9	-	-	22
San Gabriel	Signal & Comm	515114	7	-	-	5	-	-	12
San Gabriel	Structures	514014	13	-	-	9	-	-	22
San Gabriel	Structures	515116	3	-	-	2	-	-	5
San Gabriel	Structures	517420	159	-	-	106	-	-	265
San Gabriel	Structures	592420	829	-	-	553	-	-	1,382

Numbers may not foot due to rounding.

Exhibit 7.6 FY2018-19 Rehabilitation Carryover Projects Detail (continued)

(\$000)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
San Gabriel	Track	514017	-	-	-	82	123	-	205
San Gabriel	Track	514061	-	-	-	21	31	-	52
San Gabriel	Track	515117	6	-	-	4	-	-	10
San Gabriel	Track	515118	45	-	-	30	-	-	75
San Gabriel	Track	515412 ⁽¹⁾	-	-	-	51	-	-	51
San Gabriel	Track	516410	-	-	-	110	-	-	110
San Gabriel	Track	517410	804	-	-	536	-	-	1,340
San Gabriel	Track	517411	4	-	-	3	-	-	6
San Gabriel	Track	591802	-	-	-	-	-	518	518
San Gabriel	Track	592410	862	-	-	575	-	-	1,437
San Gabriel	Track	593410	240	-	-	160	-	-	400
San Gabriel	Comm	517440	12	-	-	8	-	-	20
San Jacinto (PVL)	Comm & PTC	517940	-	-	97	-	-	-	97
San Jacinto (PVL)	Comm	518940	-	-	50	-	-	-	50
SB Shortway	Facilities	517053	258	107	60	78	-	-	503
Valley	Signal	517330	113	-	-	-	-	-	113
Valley	Signal & Comm	514018	-	-	-	-	12	-	12
Valley	Structures	515123	-	-	-	-	-	873	873
Valley	Structures	517320	75	-	-	-	-	-	75
Valley	Structures	591701	-	-	-	-	-	514	514
Valley	Structures	592320	743	-	-	-	-	-	743
Valley	Structures	592321	760	-	-	-	-	-	760
Valley	Structures	592322	761	-	-	-	-	-	761
Valley	Structures	592323	450	-	-	-	-	-	450
Valley	Structures	592324	761	-	-	-	-	-	761
Valley	Structures	592325	163	-	-	-	-	-	163
Valley	Structures	592326	36	-	-	-	-	-	36
Valley	Structures	592327	145	-	-	-	-	-	145
Valley	Structures	592328	257	-	-	-	-	-	257
Valley	Structures	593320	7,059	-	-	-	-	-	7,059
Valley	Track	514024	1	-	-	-	25	325	352
Valley	Track	515126	3	-	-	-	-	-	3
Valley	Track	515159	-	-	-	-	2	-	2
Valley	Track	517310	60	-	-	-	-	39	99
Valley	Track	591702	-	-	-	-	10	88	98
Valley	Track	592310	194	-	-	-	-	-	194
Valley	Track	593310	2,899	-	-	-	-	-	2,899
Ventura - LA County	Signal	591704	-	-	-	-	1	14	15
Ventura - LA County	Structures	515129	219	-	-	-	-	113	332
Ventura - LA County	Structures	592220	1,777	-	-	-	-	-	1,777
Ventura - LA County	Structures	593220	839	-	-	-	-	-	839

Numbers may not foot due to rounding.

Exhibit 7.6 FY2018-19 Rehabilitation Carryover Projects Detail (continued)

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SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Ventura - LA County	Track	514027	-	-	-	-	4	-	4
Ventura - LA County	Track	514028	1	-	-	-	-	-	1
Ventura - LA County	Track	514029	6	-	-	-	-	-	6
Ventura - LA County	Track	514030	2	-	-	-	2	396	400
Ventura - LA County	Track	514066	-	-	-	-	3	-	3
Ventura - LA County	Track	592210	1,064	-	-	-	-	-	1,064
Ventura - LA County	Comm	515127	1	-	-	-	39	-	40
Ventura - VC County	Facilities	591710	-	-	-	-	208	-	208
Ventura - VC County	Signal	514032	-	-	-	-	2	-	2
Ventura - VC County	Signal	514034	-	-	-	-	8	-	8
Ventura - VC County	Signal	515134	-	-	-	-	6	-	6
Ventura - VC County	Signal	516130	-	-	-	-	43	-	43
Ventura - VC County	Signal	517130	-	-	-	-	129	-	129
Ventura - VC County	Structures	514035	-	-	-	-	3	-	3
Ventura - VC County	Structures	514063	64	-	-	-	-	-	64
Ventura - VC County	Structures	515135	-	-	-	-	1,011	-	1,011
Ventura - VC County	Structures	516120	-	-	-	-	565	-	565
Ventura - VC County	Structures	517121	-	-	-	-	330	-	330
Ventura - VC County	Structures	517122	-	-	-	-	487	-	487
Ventura - VC County	Structures	592120	-	-	-	-	1,405	-	1,405
Ventura - VC County	Track	514036	-	-	-	-	48	-	48
Ventura - VC County	Track	515137	-	-	-	-	25	-	25
Ventura - VC County	Track	516111	-	-	-	-	407	-	407
Ventura - VC County	Track	517110	-	-	-	-	301	-	301
Ventura - VC County	Track	518110	-	-	-	-	1,480	-	1,480
Ventura - VC County	Track	591711	-	-	-	-	48	-	48
Ventura - VC County	Track	592110	-	-	-	-	405	270	675
Ventura - VC County	Track	592111	-	-	-	-	253	-	253

Numbers may not foot due to rounding.

Exhibit 7.6 FY2018-19 Rehabilitation Carryover Projects Detail (continued)

(\$000)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Ventura - VC									
County	Track	592112	-	-	-	-	393	-	393
Ventura - VC									
County	Comm	515133	-	-	-	-	11	-	11
Ventura - VC									
County	Comm	518140	-	-	-	-	49	-	49
Ventura - VC									
County	Comm	517140	-	-	-	-	125	-	125
Ventura & Valley	Facilities	516081	-	-	-	-	-	189	189
Redlands	Track	516819	-	-	-	76	-	-	76
Systemwide	Comm & PTC	517040⁽¹⁾	1,136	-	187	243	122	-	1,688
Systemwide	Facilities	514040	1	-	-	-	-	-	2
Systemwide	Facilities	514042⁽¹⁾	25	-	4	5	3	-	37
Systemwide	Facilities	514044	16	2	1	2	-	-	21
Systemwide	Facilities	514045⁽¹⁾	3	-	-	1	-	-	4
Systemwide	Facilities	515145⁽¹⁾	7	-	1	2	1	2	13
Systemwide	Facilities	516069	-	-	-	4	3	-	7
Systemwide	Facilities	517051⁽¹⁾	87	-	14	19	9	-	130
Systemwide	Facilities	517052⁽¹⁾	775	-	128	166	83	-	1,151
Systemwide	Facilities	517054⁽¹⁾	1,467	389	306	397	199	-	2,758
Systemwide	Facilities	517055	252	105	59	76	38	168	699
Systemwide	Facilities	517056	-	-	-	-	-	699	699
Systemwide	IT	514046	29	29	17	20	9	-	104
Systemwide	IT	514047	24	10	6	7	-	-	47
Systemwide	IT	514048	1	-	-	-	-	-	1
Systemwide	IT	514049	1	1	0	7	0	-	9
Systemwide	IT	515146⁽¹⁾	119	50	28	36	18	-	250
Systemwide	PTC, C+S	515152⁽¹⁾	15	-	9	11	42	-	77
Systemwide	Rolling Stock	515050	-	-	(3)	-	(2)	-	(5)
Systemwide	Rolling Stock	516050	-	-	-	-	-	800	800
Systemwide	Rolling Stock	517050⁽¹⁾	625	-	103	134	67	-	928
Systemwide	Rolling Stock	591709⁽¹⁾	485	88	95	123	61	-	852
Systemwide	Rolling Stock	518050⁽¹⁾	9,662	-	1,594	2,067	1,034	26,144	40,500
Systemwide	Signal	514041	1	-	-	-	-	-	1
Systemwide	Signal	517030⁽¹⁾	50	-	8	11	5	-	74
Systemwide	Structures	517020	38	-	-	-	-	-	38
Systemwide	Structures	592221	109	-	-	-	-	-	109
Systemwide	Track	514055	3	1	1	1	-	-	5
Systemwide	Track	514056⁽¹⁾	2	-	-	-	-	-	3
Systemwide	Track	514057⁽¹⁾	77	-	13	16	-	-	106
Systemwide	Track	514065⁽¹⁾	13	-	2	3	1	-	19
Systemwide	Track	515154⁽¹⁾	4	-	2	3	10	-	19
Systemwide	Track	515155⁽¹⁾	3	1	1	1	-	-	6
Systemwide	Vehicles	514058	3	-	-	-	-	-	3
Systemwide	Vehicles	514059	2	1	-	1	-	-	4
Systemwide	Vehicles	591705⁽¹⁾	185	-	31	40	20	-	276
Systemwide	Vehicles	591706⁽¹⁾	444	-	73	95	47	-	660
Systemwide	Comm	591707⁽¹⁾	6	-	1	1	1	-	9
Systemwide	Equipment	514043⁽¹⁾	2	-	-	1	-	-	4
Systemwide	Mechanical	515147⁽¹⁾	1	-	-	-	1	-	2
Systemwide	Mechanical	515148⁽¹⁾	37	-	-	-	-	-	37
Systemwide	Mechanical	515151⁽¹⁾	140	24	99	129	64	237	692
Systemwide	Security	591803	-	-	-	-	-	178	178
Grand Total			41,281	13,656	4,650	10,650	10,865	40,541	121,645

Numbers may not foot due to rounding.

NOTE:

(1) ROTEM Settlement is applies to those projects indicated in bold; amounts originally due to OCTA is swapped with METRO and/or SBCTA.

Exhibit 7.7 FY2018-19 Rehabilitation New Authority Projects Detail

(\$000)

PROJECT DESCRIPTION	SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
Orange / Olive Subdivision Track Rehabilitation	Olive & Orange	Track	-	5,221	-	-	-	-	5,221
Wayside Communication System Replacement Parts - Orange	Orange	Communications	-	75	-	-	-	-	75
Wayside Communication System Design, slot planning, interference mitigation - Orange	Orange	Communications	-	125	-	-	-	-	125
Grade Crossing Rehabilitation - Orange	Orange	Grade Crossing	-	1,030	-	-	-	-	1,030
Orange/Olive Sub ROW Maintenance	Orange	Right of Way	-	210	-	-	-	-	210
Orangethorpe Ave 166.20 - Orange Sub - Replace Defective Grade Crossing Cables	Orange	Signals	-	265	-	-	-	-	265
C&S Corrosion Mitigation	Orange	Signals	-	217	-	-	-	-	217
Rehabilitation Update CIS at Stations - Orange	Orange	Communications	-	150	-	-	-	-	150
Orange Sub Bridge Replacement - Design only	Orange	Structures	-	1,000	-	-	-	-	1,000
Replace Worn Electric Switch Lock at 140.80 West Bank	River	Signals	48	-	-	-	-	-	48
Phase 1 - Signal System Rehabilitation - CP Terminal Rehabilitation Turnouts 3X, 5, 5X, 7, 7X and Power Switch Machines	River	Signals	475	-	-	-	-	-	475
Signal System Rehabilitation- Replace EL1A Logic Controller at CP Capital	River	Signals	160	-	-	-	-	-	160
LA Union Station Track Rehabilitation	River	Track	894	-	-	-	-	-	894
Signal System Rehabilitation - River Sub	River	Signals	483	-	-	-	-	-	483
Wayside Communication System Replacement Parts - River	River	Communications	48	-	-	-	-	-	48
Grade Crossing Rehabilitation - 2 grade crossings - River Sub	River	Grade Crossing	253	-	-	-	-	-	253
Wayside Communication System Replacement Parts - River	River	Communications	36	15	8	11	5	25	100
Wayside Communication System Design, slot planning, interference mitigation - River	River	Communications	27	11	6	8	4	19	75
LA Union Station West Portal Ticket Booth Expansion	River	Facilities	287	120	67	87	44	-	605
CMF Drainage Re-direction Phase II	River	Facilities	380	158	89	115	58	-	800
CP Mission MP 0.7 - Rehabilitation Control Point Remote Control Protocol to ATCS Standards	River	Signals	42	17	10	13	6	-	88
CP Dayton MP 0.7 - Signal System Rehabilitation and Reliability	River	Signals	859	358	201	260	130	-	1,808
Rehabilitation Worn and/or Defective Battery Cells - River Sub	River	Signals	31	13	7	9	5	-	64
Replace AC Meter Service @ N. Main Street - East Bank	River	Signals	3	1	1	1	.4	125	131
LA Union Station Track and Signal Rehabilitation	River	Track	2,387	995	558	724	362	-	5,025
Signal System Rehabilitation - 50% West Bank, 50% East Bank	River	Signals	313	131	73	95	47	347	1,006
River Subdivision Track Rehabilitation	River	Track	1,344	560	314	407	204	-	2,829
Grade Crossing Rehabilitation - 2 Locations per Year - SG Sub	San Gabriel	Grade Crossing	329	-	-	-	-	-	329
Wayside Communication System Replacement Parts - San Gabriel - LA County	San Gabriel	Communications	60	-	-	-	-	-	60
Wayside Communication System Replacement Parts - San Gabriel - SB County	San Gabriel	Communications	45	-	-	-	-	-	45
Grade Crossing Rehabilitation - SG Sub	San Gabriel	Grade Crossing	306	-	-	-	-	-	306
Replacement of the turnouts on the San Gabriel Subdivision in San Bernardino County	San Gabriel	Track	898	-	-	-	-	-	898
Rehabilitation Worn or Defective Cables - SG Sub	San Gabriel	Signals	307	-	-	-	-	-	307
Temple Ave 15.13 - Grade Crossing Warning Equipment Rehabilitation - SG Sub	San Gabriel	Signals	326	-	-	218	-	-	544
Amar Rd 16.43 - Grade Crossing Warning Equipment Rehabilitation - SG Sub	San Gabriel	Signals	326	-	-	218	-	-	544
Rehabilitation Update CIS at Stations - San Gabriel Subdivision	San Gabriel	Communications	90	-	-	60	-	-	150

Numbers may not foot due to rounding.

Exhibit 7.7 FY2018-19 Rehabilitation New Authority Projects Detail (continued)

(\$000)

PROJECT DESCRIPTION	SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
Mountain Ave 35.73 - Grade Crossing Warning Equipment Rehabilitation - SG Sub	San Gabriel	Signals	326	-	-	218	-	-	544
Euclid Ave 36.81 - Grade Crossing Warning Equipment Rehabilitation - SG Sub	San Gabriel	Signals	326	-	-	218	-	-	544
San Gabriel (LA) SUB Bridge Replacement - Design & Construction	San Gabriel	Structures	464	-	-	310	-	-	774
San Gabriel Subdivision Track Rehabilitation	San Gabriel	Track	3,098	-	-	2,065	-	-	5,164
Wayside Communication System Replacement Parts - PVL	San Jacinto (PVL)	Communications	-	-	50	-	-	-	50
Wayside Communication System Design, slot planning, interference mitigation - PVL	San Jacinto (PVL)	Communications	-	-	75	-	-	-	75
Purchase electric train car mover for EMF	SB Shortway	Facilities	455	190	106	138	-	-	889
Rialto Ave 0.66 - Grade Crossing Warning Equipment Rehabilitation - Shortway Sub	SB Shortway	Signals	278	116	65	84	-	-	544
Walnut St 0.97 - Grade Crossing Warning Equipment Rehabilitation - Shortway Sub	SB Shortway	Signals	278	116	65	84	-	-	544
Perform State of Good Repair Engineering, Track Measurements, and Prioritization to support and populate the annual SOGR/Rehabilitation/TAM Program	Systemwide	Business Systems	356	-	-	-	-	-	356
Replace Car shop Jacks at CMF	Systemwide	Facilities	133	-	-	-	-	-	133
Rail Grinding Systemwide	Systemwide	Track	399	-	-	-	-	-	399
Condition Based Maintenance Tools, PC and Analysis Software	Systemwide	Business Systems	36	-	-	-	-	-	36
SCRRA Production Back office Systems Upgrades and Testing Support	Systemwide	Signals	284	-	-	-	-	-	284
MOW VEHICLE REPLACEMENT	Systemwide	Non-Revenue Fleet	552	-	-	-	-	-	552
REPLACE PUBLIC ADDRESS SYSTEM	Systemwide	Facilities	57	-	-	-	-	-	57
Back office Hardware & Software Replacement (DOC & MOC)	Systemwide	Signals	537	-	-	-	-	-	537
PTC On-Board Software updates, hardware repairs PTC on-board equipment Systems on 57 cab cars and 52 locomotives.	Systemwide	Rolling Stock	523	-	-	-	-	-	523
SCRRA Positive Train Control Lab Systems Support and Testing	Systemwide	Signals	450	-	-	-	-	-	450
Phase 2 - Replace Car shop Jacks at CMF	Systemwide	Facilities	266	111	62	81	40	-	559
Renovate restrooms, partitions & gates at CMF and MOC	Systemwide	Facilities	433	180	101	131	66	-	911
Purchase Hy-Rail Bucket Truck	Systemwide	Facilities	94	39	22	28	14	-	198
Switch Rehabilitation Project	Systemwide	Information Technology	119	49	28	36	18	-	250
Vehicle Replacements (Trucks & Hi-Rail Truck)	Systemwide	Non-Revenue Fleet	218	91	51	66	33	-	459
TVM End of Life components	Systemwide	TVD	95	40	22	29	14	-	200
Locomotive and Cab Car Camera & DVR replacements	Systemwide	Rolling Stock	522	218	122	158	79	-	1,100
Overhaul side door motors in 50 Rotem passenger rail cars	Systemwide	Rolling Stock	274	114	64	83	42	-	578
HVAC Overhaul in forty (40) Rotem railcars	Systemwide	Rolling Stock	528	220	123	160	80	-	1,112
Replace rubber window gaskets in fifty (50) Rotem passenger railcars	Systemwide	Rolling Stock	316	132	74	96	48	-	666
Miscellaneous annual repair and replacement of operating envelope station signage, pedestrian crossing repair, fence repair and striping, and detectable warning tile	Systemwide	Stations	273	131	55	87	55	-	600
Arroyo Seco (480.82) Bridge Replacement (DESIGN ONLY)	Systemwide	Structures	594	248	139	180	90	-	1,250
System Wide Track Asset Condition Assessments	Systemwide	Track	344	144	80	104	52	-	725
Trapeze Maintenance Management System Software Upgrade	Systemwide	Business Systems	472	-	-	-	-	-	472

Numbers may not foot due to rounding.

Exhibit 7.7 FY2018-19 Rehabilitation New Authority Projects Detail (continued)

(\$000)

PROJECT DESCRIPTION	SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
Rotem passenger rail cars Push Back Coupler Overhaul	Systemwide	Rolling Stock	1,656	690	387	502	251	-	3,487
Rail Grinding Systemwide	Systemwide	Track	473	197	111	144	72	-	997
Enterprise Asset Management Migration - Systemwide	Systemwide	Track	559	233	131	169	85	-	1,177
SCRRRA Positive Train Control Lab Systems Support and Testing	Systemwide	Communications	403	168	94	122	61	-	848
Grade Crossing Rehabilitation - 2 Locations per Year - Valley Sub	Valley	Grade Crossing	557	-	-	-	-	-	557
Wayside Communication System Replacement Parts - Valley	Valley	Communications	100	-	-	-	-	-	100
Valley Sub Row Maint	Valley	Right of Way	224	-	-	-	-	-	224
Intermediate Signal 761 - MP 76.64 Valley Subdivision - Install Electrical Power Supply	Valley	Signals	145	-	-	-	-	-	145
Tunnel 25 Track Renovation	Valley	Track	750	-	-	-	-	-	750
Station Pedestrian Crossing Rehabilitation	Valley, Ventura - LA County	Track	251	-	-	-	-	-	251
Ventura (LA) Track Rehabilitation	Ventura - LA County	Track	1,555	-	-	-	-	-	1,555
Wayside Communication System Replacement Parts - Ventura - LA County	Ventura - LA County	Communications	50	-	-	-	-	-	50
Ventura (LA) Sub ROW Maint	Ventura - LA County	Right of Way	224	-	-	-	-	-	224
Intermediate Signals 4581-4584 MP 458.06 - Replace Signal Equipment	Ventura - LA County	Signals	359	-	-	-	-	-	359
Wayside Communication System Replacement Parts - Ventura - Ventura County	Ventura - VC County	Communications	-	-	-	-	50	-	50
Wayside Communication System Design, slot planning, interference mitigation - Ventura - Ventura County	Ventura - VC County	Communications	-	-	-	-	38	-	38
Replace Moorpark Trailer (Crew Base)	Ventura - VC County	Facilities	-	-	-	-	1,543	-	1,543
Grade Crossing Rehabilitation	Ventura - VC County	Grade Crossing	-	-	-	-	1,018	-	1,018
Arroyo Simi 1st Crossing Scour Protection with Concrete Pile Collar and Debris Removal	Ventura - VC County	Structures	-	-	-	-	1,520	-	1,520
FY2018-19 Rehabilitation New Authority Projects			31,162	14,098	3,361	7,520	6,133	516	62,790
Special Project / Orange Sub Structure - San Juan Creek Bridge	Orange	Structures	-	38,262	-	-	-	-	38,262
Special Project / Perris Valley Sub Rail Rehab Program	San Jacinto (PVL)	Track	-	-	3,256	-	-	-	3,256
Special Project / Box Springs Area Drainage Assessment	San Jacinto (PVL)	Track	-	-	200	-	-	-	200
Special Project / Bombardier (Sentinel) passenger rail cars Midlife Overhaul	Systemwide	Rolling Stock	9,619	4,010	2,248	2,916	1,458	-	20,250
FY2018-19 Special Projects New Authority Projects			9,619	42,271	5,704	2,916	1,458	-	61,967
Total FY2018-19 Rehabilitation & Special Projects New Authority			40,781	56,369	9,064	10,436	7,591	516	124,758
ROTEM Settlement Amounts⁽¹⁾			3,253	(3,253)	-	-	-	-	-
Total FY2018-19 Rehabilitation & Special Projects			44,034	53,116	9,064	10,436	7,591	516	124,758
Total Carryovers from Prior Years			41,281	13,656	4,620	10,650	10,865	40,541	121,615
TOTAL FY18-19 Rehabilitation Projects Including Carryovers			85,316	66,773	13,684	21,086	18,456	41,057	246,372

Numbers may not foot due to rounding.

NOTE:

(1) The ROTEM Settlement funding shown is related only to project amounts approved in FY2018-19. An additional \$2,566,890 approved in FY2017-18 will also be applied as well as \$396,000 in FY2017-18 New Capital.

Exhibit 7.8.1 Capital Summary and Cash Flow Detail – All Agencies

(\$000)

CAPITAL PROGRAM	REHABILITATION PROJECTS	SPECIAL PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 121,645	-	\$ 233,789	\$ 355,433
FY2018-19 New Authority	\$ 62,790	\$ 61,967	\$ 1,150	\$ 125,908
TOTALS	\$ 184,435	\$ 61,967	\$ 234,939	\$ 481,341

Numbers may not foot due to rounding.

NOTE: Does not include ROTEM Settlement in Cash Flow.

CAPITAL BUDGET SUMMARY CONSOLIDATED CASH FLOW BY FISCAL YEAR

(\$000)

BUDGET FISCAL YEAR	2018/19	2019/20	2020/21	2021/22	TOTAL
Carryover from prior years					
REHABILITATION	\$ 51,303	\$ 49,111	\$ 21,231	-	\$ 121,645
NEW CAPITAL	\$ 117,575	\$ 98,723	\$ 17,491	-	\$ 233,789
SUBTOTAL	\$ 168,878	\$ 147,834	\$ 38,722	-	\$ 355,433
FY2018-19 New Authority					
REHABILITATION	\$ 3,140	\$ 21,977	\$ 15,698	\$ 21,977	\$ 62,790
SPECIAL PROJECTS	\$ 6,370	\$ 17,625	\$ 20,083	\$ 17,889	\$ 61,967
NEW CAPITAL	\$ 58	\$ 403	\$ 288	\$ 403	\$ 1,150
SUBTOTAL	\$ 9,567	\$ 40,004	\$ 36,068	\$ 40,268	\$ 125,908
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 178,445	\$ 187,838	\$ 74,790	\$ 40,268	\$ 481,341

Numbers may not foot due to rounding.

Exhibit 7.8.2 Capital Summary and Cash Flow Detail – METRO

(\$000)

CAPITAL PROGRAM	REHABILITATION PROJECTS	SPECIAL PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 41,281	-	\$ 18,649	\$ 59,930
FY2018-19 New Authority	\$ 31,162	\$ 9,619	\$ 950	\$ 41,731
TOTALS	\$ 72,444	\$ 9,619	\$ 19,599	\$ 101,661

Numbers may not foot due to rounding.

NOTE: Does not include ROTEM Settlement in Cash Flow.

CAPITAL BUDGET SUMMARY METRO CASH FLOW BY FISCAL YEAR

(\$000)

BUDGET FISCAL YEAR	2018/19	2019/20	2020/21	2021/22	TOTAL
Carryover from prior years					
REHABILITATION	\$ 14,120	\$ 19,975	\$ 7,186	-	\$ 41,281
NEW CAPITAL	\$ 4,369	\$ 10,454	\$ 3,826	-	\$ 18,649
SUBTOTAL	\$ 18,489	\$ 30,429	\$ 11,012	-	\$ 59,930
NOTE:					
Carryover FY2018-19 includes \$2.1M for TVD project					
FY2018-19 New Authority					
REHABILITATION	\$ 1,558	\$ 10,907	\$ 7,791	\$ 10,907	\$ 31,162
SPECIAL PROJECTS	\$ 481	\$ 3,367	\$ 2,405	\$ 3,367	\$ 9,619
NEW CAPITAL	\$ 48	\$ 333	\$ 238	\$ 333	\$ 950
SUBTOTAL	\$ 2,087	\$ 14,606	\$ 10,433	\$ 14,606	\$ 41,731
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 20,576	\$ 45,035	\$ 21,445	\$ 14,606	\$ 101,661

Numbers may not foot due to rounding.

Exhibit 7.8.3 Capital Summary and Cash Flow Detail – OCTA

(\$000)

CAPITAL PROGRAM	REHABILITATION PROJECTS	SPECIAL PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 13,656	-	\$ 14,203	\$ 27,860
FY2018-19 New Authority	\$ 14,098	\$ 42,271	\$ 200	\$ 56,569
TOTALS	\$ 27,755	\$ 42,271	\$ 14,403	\$ 84,429

Numbers may not foot due to rounding.

NOTE: Does not include ROTEM Settlement in Cash Flow.

CAPITAL BUDGET SUMMARY OCTA CASH FLOW BY FISCAL YEAR

(\$000)

BUDGET FISCAL YEAR	2018/19	2019/20	2020/21	2021/22	TOTAL
Carryover from prior years					
REHABILITATION	\$ 8,426	\$ 4,772	\$ 459	-	\$ 13,656
NEW CAPITAL	\$ 3,857	\$ 5,950	\$ 4,396	-	\$ 14,203
SUBTOTAL	\$ 12,283	\$ 10,722	\$ 4,855	-	\$ 27,860
FY2018-19 New Authority					
REHABILITATION	\$ 705	\$ 4,934	\$ 3,525	\$ 4,934	\$ 14,098
SPECIAL PROJECTS	\$ 5,385	\$ 10,731	\$ 15,159	\$ 10,995	\$ 42,271
NEW CAPITAL	\$ 10	\$ 70	\$ 50	\$ 70	\$ 200
SUBTOTAL	\$ 6,100	\$ 15,736	\$ 18,734	\$ 16,000	\$ 56,569
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 18,383	\$ 26,458	\$ 23,588	\$ 16,000	\$ 84,429

Numbers may not foot due to rounding.

Exhibit 7.8.4 Capital Summary and Cash Flow Detail – RCTC

(\$000)

CAPITAL PROGRAM	REHABILITATION PROJECTS	SPECIAL PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 4,650	-	\$ 4,858	\$ 9,508
FY2018-19 New Authority	\$ 3,361	\$ 5,704	-	\$ 9,064
TOTALS	\$ 8,011	\$ 5,704	\$ 4,858	\$ 18,573

Numbers may not foot due to rounding.

NOTE: Does not include ROTEM Settlement in Cash Flow.

CAPITAL BUDGET SUMMARY RCTC CASH FLOW BY FISCAL YEAR

(\$000)

BUDGET FISCAL YEAR	2018/19	2019/20	2020/21	2021/22	TOTAL
Carryover from prior years					
REHABILITATION	\$ 2,054	\$ 1,939	\$ 657	-	\$ 4,650
NEW CAPITAL	\$ 834	\$ 2,604	\$ 1,420	-	\$ 4,858
SUBTOTAL	\$ 2,888	\$ 4,542	\$ 2,078	-	\$ 9,508
FY2018-19 New Authority					
REHABILITATION	\$ 168	\$ 1,176	\$ 840	\$ 1,176	\$ 3,361
SPECIAL PROJECTS	\$ 285	\$ 1,996	\$ 1,426	\$ 1,996	\$ 5,704
NEW CAPITAL	-	-	-	-	-
SUBTOTAL	\$ 453	\$ 3,173	\$ 2,266	\$ 3,173	\$ 9,064
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 3,342	\$ 7,715	\$ 4,344	\$ 3,173	\$ 18,573

Numbers may not foot due to rounding.

Exhibit 7.8.5 Capital Summary and Cash Flow Detail – SBCTA

(\$000)

CAPITAL PROGRAM	REHABILITATION PROJECTS	SPECIAL PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 10,650	-	\$ 11,125	\$ 21,775
FY2018-19 New Authority	\$ 7,520	\$ 2,916	-	\$ 10,436
TOTALS	\$ 18,170	\$ 2,916	\$ 11,125	\$ 32,211

Numbers may not foot due to rounding.

NOTE: Does not include ROTEM Settlement in Cash Flow.

CAPITAL BUDGET SUMMARY SBCTA CASH FLOW BY FISCAL YEAR

(\$000)

BUDGET FISCAL YEAR	2018/19	2019/20	2020/21	2021/22	TOTAL
Carryover from prior years					
REHABILITATION	\$ 5,172	\$ 4,328	\$ 1,149	-	\$ 10,650
NEW CAPITAL	\$ 3,219	\$ 4,042	\$ 3,864	-	\$ 11,125
SUBTOTAL	\$ 8,392	\$ 8,370	\$ 5,013	-	\$ 21,775
FY2018-19 New Authority					
REHABILITATION	\$ 376	\$ 2,632	\$ 1,880	\$ 2,632	\$ 7,520
SPECIAL PROJECTS	\$ 146	\$ 1,021	\$ 729	\$ 1,021	\$ 2,916
NEW CAPITAL	-	-	-	-	-
SUBTOTAL	\$ 522	\$ 3,653	\$ 2,609	\$ 3,653	\$ 10,436
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 8,914	\$ 12,022	\$ 7,622	\$ 3,653	\$ 32,211

Numbers may not foot due to rounding.

Exhibit 7.8.6 Capital Summary and Cash Flow Detail – VCTC

(\$000)

CAPITAL PROGRAM	REHABILITATION PROJECTS	SPECIAL PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 10,865	-	\$ 1,461	\$ 12,327
FY2018-19 New Authority	\$ 6,133	\$ 1,458	-	\$ 7,591
TOTALS	\$ 16,998	\$ 1,458	\$ 1,461	\$ 19,918

Numbers may not foot due to rounding.

NOTE: Does not include ROTEM Settlement in Cash Flow.

CAPITAL BUDGET SUMMARY VCTC CASH FLOW BY FISCAL YEAR

(\$000)

BUDGET FISCAL YEAR	2018/19	2019/20	2020/21	2021/22	TOTAL
Carryover from prior years					
REHABILITATION	\$ 5,207	\$ 4,634	\$ 1,025	-	\$ 10,865
NEW CAPITAL	(\$ 20)	\$ 976	\$ 505	-	\$ 1,461
SUBTOTAL	\$ 5,186	\$ 5,610	\$ 1,530	-	\$ 12,327
FY2018-19 New Authority					
REHABILITATION	\$ 307	\$ 2,147	\$ 1,533	\$ 2,147	\$ 6,133
SPECIAL PROJECTS	\$ 73	\$ 510	\$ 365	\$ 510	\$ 1,458
NEW CAPITAL	-	-	-	-	-
SUBTOTAL	\$ 380	\$ 2,657	\$ 1,898	\$ 2,657	\$ 7,591
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 5,566	\$ 8,267	\$ 3,428	\$ 2,657	\$ 19,918

Numbers may not foot due to rounding.

Exhibit 7.8.7 Capital Summary and Cash Flow Detail – Other Fund Sources

(\$000)

CAPITAL PROGRAM	REHABILITATION PROJECTS	SPECIAL PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 40,541	-	\$ 183,493	\$ 224,034
FY2018-19 New Authority	\$ 516	-	-	\$ 516
TOTALS	\$ 41,057	-	\$ 183,493	\$ 224,549

Numbers may not foot due to rounding.

NOTE: Does not include ROTEM Settlement in Cash Flow.

CAPITAL BUDGET SUMMARY OTHER CASH FLOW BY FISCAL YEAR

(\$000)

BUDGET FISCAL YEAR	2018/19	2019/20	2020/21	2021/22	TOTAL
Carryover from prior years					
REHABILITATION	\$ 16,324	\$ 13,463	\$ 10,754	-	\$ 40,541
NEW CAPITAL	\$ 105,315	\$ 74,698	\$ 3,480	-	\$ 183,493
SUBTOTAL	\$ 121,639	\$ 88,161	\$ 14,234	-	\$ 224,034
FY2018-19 New Authority					
REHABILITATION	\$ 26	\$ 180	\$ 129	\$ 180	\$ 516
SPECIAL PROJECTS	-	-	-	-	-
NEW CAPITAL	-	-	-	-	-
SUBTOTAL	\$ 26	\$ 180	\$ 129	\$ 180	\$ 516
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 121,664	\$ 88,342	\$ 14,363	\$ 180	\$ 224,549

Numbers may not foot due to rounding.

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**SECTION 8:
GENERAL & ADMINISTRATIVE
BUDGET**

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 8: General and Administrative Budget

8.1 General and Administrative Expenses

Indirect costs are those incurred by an organization for common or joint objectives that cannot be readily or specifically identified with a particular cost grouping. SCRRA accounts for agency costs that cannot be directly attributed to any specific agency program or mode, and therefore serve to benefit the agency as a whole, or benefit at least three of the Authority's five business modes by grouping them in the General and Administrative (G&A) Budget. SCRRA business modes are Train Operations, Maintenance-of-Way (MOW), New Capital, Rehabilitation and 'recollectables' or Third Party Agreements (TPA's).

For FY2018-19, the SCRRA G&A budget, using the compilation of costs as described above, is \$24.1 million or an increase of \$1.7 million, or 7.8% over the FY2017-18 Budget. *Exhibit 8.1* identifies the key elements of this budget by expenditure type.

8.2 Indirect Cost Allocation Plan (ICAP)

Funding the cost of SCRRA's various business modes is derived from grantor funding sources. Indirect costs have historically been charged to the grantor by project based on a percentage of the projects direct labor costs. This chargeable percentage is called the indirect cost rate. As part of the FY2018-19 Indirect Cost Allocation Plan (ICAP), SCRRA developed a cost allocation based primarily on labor costs.

SCRRA has submitted and received approval for its Indirect Cost Allocation Plans for FY2011-12, FY2012-13, FY2013-14 and FY2014-15. The final rates in FY2013-14 and FY2014-15 have been provisionally approved by the Federal Transit Administration (FTA) for use in FY2015-16 and FY2016-17 respectively. The ICAP plan for FY2017-18 is currently under review by the FTA. The ICAP plan for FY2018-19 will be submitted following completion of the FY2017-18 review.

The FY2018-19 Plan contains a specific ICAP rate for each business mode, as indicated on *Exhibit 8.2*. SCRRA further divides costs within G&A into three distinct cost collector pools.

8.2.1 Pool One

The first grouping of expenses consists of specified costs, as identified in Office of Management and Budget Circular A-87 (OMB A-87), which are authorized for allocation to federal grant funding sources. Items in the G&A budget include: lease costs of the Authority's administrative headquarters; general administrative items such as office supplies, postage and the lease of office equipment; labor costs of non-project, non-operational staff such as Finance, Internal Audit function, Human Resources, et al; and the costs of operating and maintaining the Information Technology infrastructure.

8.2.2 Pool Two

The second grouping of expenses is made up of costs that, while benefiting three or more of the Authority's business modes, are specifically excluded from allocation by federal regulation and therefore funded locally. Examples of costs recognized within this group include the costs of the Chief Executive Officer and legislative advocacy.

8.2.3 Pool Three

The third grouping of expenses represents Administrative Capital costs, treated as depreciable assets according to GAAP guidelines. Costs in this pool are primarily related to the procurement of Information Technologies equipment and other administrative equipment purchases.

8.3 Allocation of Indirect Costs

A double-step down allocation methodology is used to allocate the allowable costs of the central services departments. This methodology recognizes the cross support provided between central service departments. The double-step down methodology requires an initial sequencing of allocating departments. The two steps are:

1. Allowable costs from central service departments are allocated in the defined numeric sequence to all departments and divisions including other central service departments. All operating costs recorded in the central service department as well as all allocated costs received from other central service departments up to this point in the calculation cycle are allocated in the first step.
2. The double-step down methodology is made to fully account for the cross support provided between central service departments. Costs received from other central service departments subsequent to the department's first allocation are allocated in the second step. Central service departments are closed after the second step in the methodology

and cannot receive additional allocations from other central services. For the remaining G&A expenses ineligible for federal reimbursement, allocation is made to the various operating budget modes based on the modal labor distribution.

8.4 Organizational Summary

Under the leadership of the Chief Executive Officer, Deputy Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, and Chief of External Affairs, SCRRA manages 275 full time equivalent (FTE) headcounts.

Agency FTE Headcount FY2018-19

REPORTING GROUP	FTE's
Executive	45
Internal Audit	4
Legal	4
Office of the DCEO	42
Administration	41
Operations	139
	275

Executive group includes Office of the CEO, Office of the CFO (Fare Collection Services, Finance, and Information Technology).

Internal Audit group reports directly to the SCRRA Board and includes a team of internal auditors.

Legal group includes the General Counsel who is a direct report to the SCRRA Board and oversees the activities of in-house and outside counsel, litigation, and Risk Management.

Deputy Chief Executive Officer group includes Human Resources, System Safety, Contracts and Compliance, and Material Management & Warehousing.

Administration group includes Government Affairs, Office of External Affairs, Sales and Marketing, Public Affairs, and Customer Relations.

Operations group includes responsibility for Positive Train Control (PTC), dispatching services, facilities and fleet maintenance, field operations, program management, the execution of rehabilitation and new capital projects, management of outsourced vendors for Train Operations, equipment

maintenance, track, signal & structure maintenance and rehabilitation, Maintenance-of-Way, rail corridor crossings and encroachment, and security and system safety.

Exhibit 8.3 identifies the classification titles in the approved budgeted cost centers for a total of 275 FTE headcount. Total Authority labor and fringe costs are allocated across the business modes.

8.5 Exhibits

Exhibit 8.1: FY2018-19 G&A Expenses identifies the individual cost components included in the general and administrative cost grouping.

Exhibit 8.2: FY2018-19 ICAP Cost Calculations illustrates the SCRRA business modes and the cost allocations that support the FY2018-19 ICAP rates.

Exhibit 8.3: FY2018-19 Roster of Positions provides a roster of FY2018-19 FTE headcount identified by specific positions within each Executive Office and Department.

Exhibit 8.1 FY2018-19 G&A Expenses

(\$000'S)	EXPENDITURE DESCRIPTION	FY2017-18 BUDGET	FISCAL YEAR 2018-19			FY2018-19 BUDGET VS. FY2017-18 BUDGET	
			FEDERALLY ELIGIBLE	LOCAL FUNDING	TOTAL BUDGET	VARIANCE	%
Agency Costs							
	Auditing and Accounting	100	-	-	-	(100)	(100.0%)
	Consultants	190	65	-	65	(125)	(65.8%)
	Recruitment Services	150	175	-	175	25	16.7%
	Medical Examinations	4	4	-	4	0	3.0%
	Computer Programming/Data Processing	-	135	-	135	135	N/A
	Office Equip Maint & Repair	3	3	-	3	0	3.0%
	Document Management & Storage	26	55	-	55	29	110.1%
	In-House Training Services	312	330	-	330	18	5.9%
	Bank Service Charges	43	30	-	30	(13)	(30.2%)
	Materials & Supplies	126	129	1	130	4	3.4%
	Office Equipment	10	10	-	10	0	3.0%
	Computer Software	4	-	1	1	(3)	(71.4%)
	Printing & Reproduction	15	10	3	13	(2)	(15.7%)
	Claims Administration Fees	3	3	-	3	-	-
	Professional Memberships	172	89	10	99	(73)	(42.7%)
	Subscriptions & Reference Materials	5	11	0	12	7	130.6%
	Meeting Expenses	28	22	7	29	0	1.6%
	Registration Fees	44	15	25	39	(5)	(10.8%)
	Transportation	70	21	55	76	6	8.4%
	Meals & Entertainment	15	10	8	18	3	17.5%
	Lodging	74	21	57	78	4	6.0%
	Mileage/Parking	28	56	4	59	31	111.6%
	Misc Expenses	3	3	-	3	0	11.2%
	Event Marketing	5	-	5	5	-	-
	Legal & Meeting Notices	94	1	84	85	(9)	(9.6%)
	Postage & Messenger	71	74	-	74	2	3.0%
	Other Misc Expense	79	53	8	60	(19)	(24.2%)
	Total Agency Costs	1,674	1,324	266	1,590	(84)	(5.0%)
Staff Labor							
	SCRRA Wages & Salaries	8,046	8,139	1,027	9,166	1,121	13.9%
	Wages Interns	250	250	-	250	-	0.0%
	Wages Job Core / Grads on Track	250	250	-	250	-	0.0%
	Merit Increase	241	-	-	-	(241)	(100.0%)
	Allocated Fringe Benefits	2,589	2,881	364	3,244	655	25.3%
	OPEB - GASB45	1,627	-	1,625	1,625	(2)	(0.1%)
	Total Staff Labor	13,004	11,520	3,016	14,536	1,532	11.8%
Professional Services							
	Legal Services	3	-	-	-	(3)	(100.0%)
	Auditing & Accounting	725	830	-	830	105	14.5%
	Consultants	1,702	1,677	1	1,678	(24)	(1.4%)
	Lobby Services	480	-	480	480	-	0.0%
	Service Contract	4	3	-	3	(0)	(10.5%)
	Total Professional Services	2,914	2,511	481	2,991	77	2.7%
MIS							
	Consultants	1,448	1,598	-	1,598	150	10.4%
	Computer S/W / H/W Maintenance	760	625	-	625	(135)	(17.8%)
	Office Equip Maint & Repair	138	138	-	138	-	0.0%
	Document Management & Storage	50	50	-	50	-	0.0%
	Materials & Supplies	62	62	-	62	-	0.0%
	Office Equipment	75	75	-	75	-	0.0%
	Computer H/W	515	515	-	515	-	0.0%
	Computer S/W	546	546	-	546	-	0.0%
	License & Registration Fees	1	1	-	1	-	0.0%
	Total MIS	3,594	3,609	-	3,609	15	0.4%
Employee Recognition							
	Bonus Pay	139	-	150	150	11	7.7%
	Total Employee Recognition	139	-	150	150	11	7.7%
Utilities/Leases							
	Office Space Rental	884	46	-	46	(837)	(94.8%)
	WG Lease Operating Expense	-	784	-	784	784	N/A
	Total Utilities/Leases	884	830	-	830	(54)	(6.1%)
Agency Vehicles							
	GASOLINE AUTOS & TRUCKS	-	97	-	97	97	N/A
	VEHICLE MAINTENANCE & REPAIRS	-	138	-	138	138	N/A
	Total Agency Vehicles	-	234	-	234	234	N/A
Board Related Items							
	Board Travel/Meeting Expenses	16	-	16	16	-	0.0%
	Board Travel	13	-	15	15	2	15.0%
	Board Per Diem	70	-	70	70	-	0.0%
	Board Development Program	52	-	54	54	2	3.9%
	Total Board Related Items	150	-	154	154	4	2.7%
	Total General & Administrative Expenses	22,359	20,028	4,067	24,095	1,736	7.8%

Numbers may not foot due to rounding.

Exhibit 8.2 FY2018-19 ICAP Cost Calculations

General & Administrative Expenses (\$000)	FY2018-19
Federally Eligible G&A	20,028
Non-Federal Eligible G&A	<u>4,067</u>
Total G&A Expenses	24,095

Tier 1 Cost Distribution	Operating			Capital				Recollectable	Grand Total
	Train Operations	MOW	Subtotal Operating	New Capital	Equipment Procurement	Rehabilitation & Renovation	Subtotal Capital		
SCRRA Labor Distribution (%)	68.3%	11.7%	80.0%	4.7%	1.6%	9.2%	15.5%	4.5%	100.0%
Federally Eligible G&A Allocation (Proj# 000000)	13,670	2,346	16,016	936	325	1,852	3,114	898	20,028
Non-Federal Eligible Labor Distribution (%)	84.3%	15.7%	100.0%						100.0%
Non-Federal Eligible G&A Allocation (Proj# 000002)	3,426	641	4,067						4,067
Total G&A Expense Allocation	17,096	2,986	20,083	936	325	1,852	3,114	898	24,095

Numbers may not foot due to rounding.

Tier 2 Allocation and Calculation of Direct Rates

Collector Pool Expenses									
Salaries & Wages	2,449	230	2,679	163	31	552	747	184	3,610
Fringe Benefits	834	82	915	58	11	196	265	65	1,245
Other Expenses	14,252	263	14,514	643	56	(478)	221	1,873	16,608
Subtotal - Indirect Expenses	17,534	574	18,109	864	98	270	1,233	2,122	21,463
G&A Expense Allocation	17,096	2,986	20,083	936	325	1,852	3,114	898	24,095
Total Indirect and Allocable Expenses	34,631	3,561	38,191	1,801	424	2,122	4,346	3,020	45,558
Direct Expenses									
Salaries & Wages	11,763	2,492	14,255	743	283	1,241	2,268	686	17,208
Fringe Benefits	4,173	885	5,058	264	101	440	805	243	6,106
Other Expenses	159,488	34,364	193,852	58,005	99,858	13,162	171,026	11,051	375,928
Total Direct Expenses	175,424	37,741	213,165	59,012	100,242	14,844	174,098	11,980	399,243
Grand Total	210,055	41,301	251,356	60,812	100,666	16,966	178,445	15,000	444,801

Total Indirect and Allocable Expenses as % of Direct Labor	294%	143%	268%	242%	149%	171%	192%	440%	265%
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Numbers may not foot due to rounding.

Exhibit 8.3 FY2018-19 Roster of Positions

BUSINESS UNIT	COST CENTER	POSITION TITLE	TOTAL	
Executive	1100	Chief Executive Officer	1	
		Deputy Chief Executive Officer	1	
		Management Analyst I	1	
	Office of the CEO Total			3
	3600	Management Analyst I	1	
		Manager (Various) I (FCS Manager)	2	
		Senior Manager, Fare Collections	1	
	Fare Collection Services Total			4
	4100	Accountant I	5	
		Accountant II	1	
		Accounts Payable Specialist I	1	
		Budget Analyst I	2	
		Budget Analyst II	1	
		Business Analyst II	1	
		Capital Budget Analyst	1	
		Chief Financial Officer	1	
		Controller	1	
		Finance Specialist II	2	
		Financial Analyst I	1	
		Financial Analyst II	3	
		Grants Accountant I	1	
		Senior Accountant	1	
		Senior Manager, Finance	3	
		Senior Manager, General Accounting	1	
	Finance Total			26
	4230	Information Systems Manager	1	
IT Architect II, Business Intelligence		2		
IT Architect II, ERP		2		
IT Systems Manager		1		
Senior Business Analyst (Network Engineer I)		1		
Senior Director, Information Technology		1		
Senior Manager, Information Technology		2		
Senior Network Engineer		1		
Web Services Manager		1		
Information Technology Total			12	
Internal Audit	1110	Senior Auditor	1	
		Senior Auditor, Governmental Compliance	1	
		Senior Manager, Audit	1	
		Staff Auditor II	1	
Internal Audit Total			4	

Exhibit 8.3 FY2018-19 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	POSITION TITLE	TOTAL	
Legal	1115	Associate General Counsel	1	
		Business Analyst	1	
		General Counsel	1	
		Office of the General Counsel Total	3	
	2150	Senior Counsel, Risk Manager	1	
		Risk Management Total	1	
Deputy CEO	1130	Director, Human Resources	1	
		HR Analyst I	3	
		HR Analyst II	1	
		Human Resources Specialist	1	
		Manager (Various) II	1	
		Senior Administrative Assistant	2	
		Senior Human Resources Analyst	1	
		Senior Manager, Human Resources	1	
			Human Resources Total	11
	2210	Assistant Director, System Safety	1	
		Business Operations Administrator	1	
		Coordinator, Safety & Compliance	1	
		Director, System Safety + Security	1	
		Public Safety + Environment Manager	1	
		Security Manager	1	
		System Safety Total	6	
4220	Contract & Compliance Administrator	4		
	Contract Specialist	2		
	Director, Contracts, Procurement and Materials Management	1		
	Principal Contract & Compliance Administrator	3		
	Senior Administrative Assistant	1		
	Senior Contract & Compliance Administrator	3		
		Purchasing, Contracts & Contract Compliance Total	14	
4223	Business Analyst II	1		
	Director, Special Projects	1		
	Inventory Control Operator II	3		
	Material Handler/Operator	4		
	Senior Inventory Control Operator	1		
	Supervisor, Inventory Control	1		
		Materials Management + Warehousing Total	11	

Exhibit 8.3 FY2018-19 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	POSITION TITLE	TOTAL
Administration	1105	Government Relations Manager	1
		Senior Manager, Government & Regulatory Affairs	1
		Government Affairs Total	2
	1150	Assistant Board Secretary	1
		Assistant to the CEO/Board Secretary	1
		Chief of External Affairs	1
		Executive Assistant	1
		Office of the CEA Total	4
	3200	Administrative Assistant II	1
		Coordinator, Marketing	1
		Marketing Manager I	1
		Marketing Manager II	1
		Senior Administrative Assistant (Corporate Accounts & Sales)	1
		Senior Manager, Marketing & Digital Programs	1
		Social Media Manager	1
		Sales + Marketing Total	7
	3300	Communications Coordinator	1
		Customer Relations Manager	2
		Customer Relations Representative I	9
		Senior Customer Engagement Representative	1
		Senior Customer Relations Representative	4
		Senior Manager, Customer Relations	1
		Supervisor, Customer Relations	3
		Customer Relations Total	21
	3450	Communications Coordinator (Acting-Public Affairs)	1
		Director, Public Affairs	1
		Public Affairs Manager	3
		Public Affairs Manager (Proposed)	1
		Public Affairs Specialist	1
		Public Affairs Total	7

Exhibit 8.3 FY2018-19 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	POSITION TITLE	TOTAL	
Operations	2875	Administrative Assistant II	1	
		Deputy Chief Operating Officer (PTC&Engineering)	1	
		Manager (Various) II (Proposed)	1	
		Senior Manager, Train Control Systems	1	
	PTC, C+S Systems Management Total			4
	1550	Assistant Director, Grants	1	
		Director, Planning and Development	1	
		Grants Funding and Reporting Administrator	1	
		Manager, Research & Planning	1	
		Planning Manager II	4	
		Sr. Public Projects Specialist	1	
	Planning + Development Total			9
	2175	Chief Operating Officer	1	
		Department Assistant	1	
		Deputy Chief Operating Officer (Disp + OS)	1	
		Deputy Chief Operating Officer (PPD)	1	
		Executive Assistant II	1	
		Senior Manager, Business Operations	1	
	Office of the COO Total			6
	2200	Business Administrator	1	
		Field Operations Manager	1	
		Operations Administrator	1	
	Operations + Security Total			3
	2215	Communications Coordinator	6	
		Director, Dispatching Operations	1	
		Senior Manager, Dispatching	3	
		Supervisor, Customer Relations	2	
Supervisor, Dispatching Operations		6		
Train Dispatcher		21		
Dispatching Services Total			39	
2250	Coordinator, Operations Compliance	1		
	Operations Compliance Officer	3		
	Operations Compliance Officer I	3		
	Operations Compliance Officer II	1		
	Senior Manager (Various)	1		
Field Operations Management Total			9	

Exhibit 8.3 FY2018-19 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	POSITION TITLE	TOTAL	
Operations	2300	Assistant Director, Maintenance of Equipment	1	
		Business Administrator	1	
		Business Analyst II	1	
		Department Assistant	1	
		Director, Maintenance of Equipment	1	
		Project Engineer II	1	
		Rolling Stock Engineering Manager II	2	
		Senior Manager (Various)	1	
		Senior Mechanical Operations Officer	2	
		Equipment Total		11
		2310	Coordinator, Facilities Maintenance	1
Coordinator, Fleet Maintenance	1			
Customer Experience Administrator	1			
Facilities Maintenance Supervisor	1			
Maintenance Technician	1			
Maintenance Technician II	2			
Senior Maintenance Technician	1			
Senior Manager, Facilities & Fleet Maintenance	1			
Facilities + Fleet Maintenance Total		9		
2800	Director, Engineering & Construction	1		
	Executive Assistant I	1		
Engineering & Construction Total		2		
2820	Assistant Director, T+S Rehabilitation	1		
	Business Administrator	1		
	Coordinator, Right-Of-Way	1		
	Senior Engineer, Track & Structures	1		
	Supervisor, Track & Structures	1		
Track Total		5		
2860	Coordinator, Right-Of-Way	1		
	Principal Engineer (Design & Engineering)	1		
	Railroad Civil Engineer II	1		
	Senior Civil Design Specialist	1		
Standards + Design Total		4		
2870	Assistant Director, Signal Systems	1		
	Business Administrator	1		
	Planning Manager	1		
	Supervisor, Signal Systems	2		
C+S Train Control Maintenance Total		5		
2875	Director, Train Control Systems	1		
PTC Systems Management Total		1		

Exhibit 8.3 FY2018-19 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	POSITION TITLE	TOTAL
Operations	2876	Director, Signals and Communications	1
		PTC Equipment Engineer I	2
		PTC Equipment Engineer II	1
		Senior Manager, Communication Systems	1
		Senior Manager, Train Control On-Board Systems	1
		Supervisor, Communications Systems	2
		PTC Communications Systems Total	8
	2877	Assistant Director, PTC Technical Services	1
		Business Analyst II	1
		Configuration Management Manager	1
		Project Engineer, Communication Systems	1
		Senior Manager, Train Control Systems	1
		Senior Train Control Systems Engineer	1
		Train Control Systems Engineer I	1
	PTC Technical Support Services Total	7	
	2878	Senior Train Control Systems Engineer	3
		Train Control Network Engineer	1
		PTC Network Control Operations Total	4
	2880	Principal Engineer (Project Management)	1
		Railroad Civil Engineer II	3
		Senior Railroad Civil Engineer	1
	Public Projects Total	5	
	2890	Principal Engineer (Structures & Stations)	1
		Project Engineer I	1
		Railroad Civil Engineer I	1
	Capital Construction + Rehabilitation Total	3	
	4530	Assistant Director, Program Management	1
Business Analyst II		1	
Program Management Analyst I		1	
Program Management Analyst II		2	
Program Management Total	5		
Agency Total	275		

**SECTION 9:
BUDGET FORECASTS
FY2018-19 & FY2019-20**

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 9: Budget Forecasts FY2019-20 and FY2020-21

9.1 Background

At the request of the SCRRA Board, and in conjunction with the ongoing development of the strategic plan, SCRAA has created a two year forward budget forecast for the fiscal years 2020 and 2021. It is to be noted that the forecast years are provided for informational purposes only. No approval is requested for the two forecasted years.

9.2 Basis for Forecast

- Estimates of expenses were constructed by individual Cost Centers when submitting their FY2018-19 Budget amounts. These estimates included contractual amounts where available, estimates on known activities planned for the future, and minor escalations for inflation.
- No headcount increase was included. A 2% Cost of Living Adjustment (COLA) and Merit pool of 3% was included in each year.
- No New service was included for FY2019-20 and FY2020-21.

9.3 Exhibits

Exhibit 9.1: FY2019-20 and FY2020-21 Forecast New Service Requests

No new service was included for FY2019-20 and FY2020-21

Exhibit 9.2: FY2019-20 Forecast of Operating Budget by Cost Component by Member Agency

Exhibit 9.3: FY2019-20 Forecast of Operating Budget by Cost Component by Line

Exhibit 9.4: FY2020-21 Forecast of Operating Budget by Cost Component by Member Agency

Exhibit 9.5: FY2020-21 Forecast of Operating Budget by Cost Component by Line

Exhibit 9.1 FY2019-20 and FY2020-21 Forecast New Service Requests
No new service was included for FY2019-20 and FY2020-21

Exhibit 9.2 FY2019-20 Forecast of Operating Budget by Cost Component by Member Agency

(000's)	METRO	OCTA	RCTC	SBCTA	VCTC	Total
Operating Revenue						
Farebox Revenue	\$ 40,999	\$ 22,817	\$ 7,783	\$ 9,506	\$ 2,370	\$ 83,476
SB Line 25% Fare Reduction Subsidy	1,212	-	-	814	-	2,025
Subtotal-Pro Forma FareBox	42,211	22,817	7,783	10,320	2,370	85,501
Dispatching	1,099	696	12	59	256	2,122
Other Revenues	126	58	32	37	17	270
MOW Revenues	7,426	2,549	668	1,544	475	12,663
Subtotal Operating Revenue	50,862	26,121	8,496	11,960	3,118	100,556
Operating Expenses						
<u>Operations & Services</u>						
Train Operations	25,587	10,725	4,984	5,206	1,824	48,327
Equipment Maintenance	19,439	8,960	4,641	4,503	1,704	39,248
Fuel	9,998	4,828	1,943	2,067	634	19,471
Non-Scheduled Rolling Stock Repairs	94	43	18	20	6	180
Operating Facilities Maintenance	901	411	169	194	56	1,731
Other Operating Train Services	233	85	74	51	52	495
Rolling Stock Lease	-	-	-	-	-	-
Security - Sheriff	3,180	1,216	926	617	126	6,066
Security - Guards	1,179	431	374	256	261	2,500
Supplemental Additional Security	341	184	63	83	19	690
Public Safety Program	183	67	58	40	41	389
Passenger Relations	823	490	166	203	57	1,739
TVM Maintenance/Revenue Collection	3,972	2,021	1,533	1,254	557	9,338
Marketing	800	446	163	193	59	1,661
Media & External Communications	216	79	68	47	48	458
Utilities/Leases	1,666	609	529	361	369	3,535
Transfers to Other Operators	3,753	1,519	508	699	212	6,691
Amtrak Transfers	765	1,516	-	-	119	2,400
Station Maintenance	1,159	264	115	255	84	1,877
Rail Agreements	1,948	1,594	1,265	357	360	5,525
Subtotal Operations & Services	76,238	35,489	17,599	16,406	6,589	152,320
<u>Maintenance-of-Way</u>						
MoW - Line Segments	22,643	8,891	3,296	6,018	2,567	43,414
MoW - Extraordinary Maintenance	366	80	60	64	50	620
Subtotal Maintenance-of-Way	23,009	8,971	3,356	6,082	2,617	44,035
<u>Administration & Services</u>						
Ops Salaries & Fringe Benefits	6,818	2,504	2,157	1,480	1,504	14,464
Ops Non-Labor Expenses	3,930	1,717	855	871	381	7,754
Indirect Administrative Expenses	8,375	3,063	2,658	1,816	1,855	17,767
Ops Professional Services	1,241	454	394	269	275	2,633
Subtotal Admin & Services	20,365	7,738	6,064	4,435	4,016	42,618
Contingency (Non-Train Ops)	96	35	31	21	21	204
Total Operating Expenses	119,708	52,233	27,049	26,945	13,242	239,177
Insurance Expense/(Revenue)						
Liability/Property/Auto	6,195	2,829	1,164	1,331	387	11,906
Claims / SI	520	238	98	112	33	1,000
Claims Administration	648	296	122	139	41	1,246
PLPD Revenue	-	-	-	-	-	-
Net Insurance Expense	7,363	3,363	1,384	1,582	460	14,152
Total Expense	127,071	55,596	28,433	28,527	13,702	253,329
Loss	(76,209)	(29,475)	(19,937)	(16,567)	(10,584)	(152,773)
Member Subsidies						
Operations	68,846	26,113	18,553	14,985	10,124	138,621
Insurance	7,363	3,363	1,384	1,582	460	14,152
Total Member Subsidies	\$ 76,209	\$ 29,475	\$ 19,937	\$ 16,567	\$ 10,584	\$ 152,773

Numbers may not foot due to rounding.

**Exhibit 9.3 FY2019-20 Forecast of Operating Budget by Cost Component
by Line**

(000's)	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL	TOTAL
Operating Revenue									
Farebox Revenue	\$ 18,902	\$ 6,525	\$ 12,515	\$ 7,961	\$ 22,738	\$ 888	\$ 7,573	\$ 6,373	\$ 83,476
SB Line 25% Fare Reduction Subsidy	2,025	-	-	-	-	-	-	-	2,025
Subtotal-Pro Forma FareBox	20,928	6,525	12,515	7,961	22,738	888	7,573	6,373	85,501
Dispatching	158	528	362	6	1,001	15	18	35	2,122
Other Revenues	59	37	43	32	45	2	36	15	270
MOW Revenues	3,345	1,498	3,934	275	1,485	251	1,148	727	12,663
Subtotal Operating Revenue	24,489	8,588	16,854	8,273	25,269	1,157	8,776	7,151	100,556
Operating Expenses									
Operations & Services									
Train Operations	11,276	4,592	11,369	3,217	7,226	938	5,552	4,159	48,327
Equipment Maintenance	8,749	4,132	7,942	2,824	5,573	1,378	4,633	4,016	39,248
Fuel	4,202	1,641	4,389	1,345	3,248	612	2,474	1,560	19,471
Non-Scheduled Rolling Stock Repairs	42	16	39	12	28	6	22	15	180
Operating Facilities Maintenance	406	155	374	119	270	57	208	140	1,731
Other Operating Train Services	72	82	90	74	38	14	56	69	495
Rolling Stock Lease	-	-	-	-	-	-	-	-	-
Security - Sheriff	1,335	348	1,697	268	808	129	669	812	6,066
Security - Guards	362	415	453	376	194	69	281	351	2,500
Supplemental Additional Security	153	53	101	64	187	-	64	68	690
Public Safety Program	56	65	71	58	30	11	44	55	389
Passenger Relations	414	146	266	135	418	1	241	117	1,739
TVM Maintenance/Revenue Collection	1,788	1,301	1,510	895	964	396	1,312	1,173	9,338
Marketing	395	153	236	143	401	-	211	122	1,661
Media & External Communications	66	76	83	69	36	13	51	64	458
Utilities/Leases	512	586	641	531	274	97	397	496	3,535
Transfers to Other Operators	1,414	580	1,493	641	1,800	-	201	563	6,691
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	550	253	403	167	292	13	36	163	1,877
Rail Agreements	-	622	-	1,861	885	12	1,071	1,074	5,525
Subtotal Operations & Services	31,794	15,523	31,156	12,801	24,764	3,745	17,521	15,016	152,320
Maintenance-of-Way									
MoW - Line Segments	12,702	6,856	9,032	1,195	5,199	842	4,196	3,392	43,414
MoW - Extraordinary Maintenance	138	96	108	78	100	-	78	22	620
Subtotal Maintenance-of-Way	12,841	6,952	9,140	1,274	5,299	842	4,275	3,414	44,035
Administration & Services									
Ops Salaries & Fringe Benefits	2,104	2,391	2,628	2,166	1,134	396	1,623	2,022	14,464
Ops Non-Labor Expenses	1,675	830	1,607	681	1,062	246	919	734	7,754
Indirect Administrative Expenses	2,574	2,947	3,221	2,670	1,379	489	1,993	2,493	17,767
Ops Professional Services	382	437	477	396	204	72	295	369	2,633
Subtotal Admin & Services	6,735	6,605	7,934	5,913	3,779	1,203	4,831	5,618	42,618
Contingency (Non-Train Ops)	30	34	37	31	16	6	23	29	204
Total Operating Expenses	51,399	29,114	48,267	20,018	33,857	5,796	26,650	24,077	239,177
Insurance Expense/(Revenue)									
Liability/Property/Auto	2,796	1,064	2,575	822	1,856	395	1,432	966	11,906
Claims / SI	235	89	216	69	156	33	120	81	1,000
Claims Administration	293	111	270	86	194	41	150	101	1,246
PLPD Revenue	-	-	-	-	-	-	-	-	-
Net Insurance Expense	3,323	1,265	3,061	976	2,206	470	1,702	1,148	14,152
Total Expense	54,722	30,379	51,328	20,995	36,064	6,266	28,352	25,224	253,329
Loss	(30,233)	(21,791)	(34,474)	(12,721)	(10,795)	(5,109)	(19,577)	(18,073)	(152,773)
Member Subsidies									
Operations	26,910	20,526	31,413	11,745	8,589	4,639	17,874	16,926	138,621
Insurance	3,323	1,265	3,061	976	2,206	470	1,702	1,148	14,152
Total Member Subsidies	\$ 30,233	\$ 21,791	\$ 34,474	\$ 12,721	\$ 10,795	\$ 5,109	\$ 19,577	\$ 18,073	\$ 152,773

Numbers may not foot due to rounding.

Exhibit 9.4 FY2020-21 Forecast of Operating Budget by Cost Component by Member Agency

(000's)	METRO	OCTA	RCTC	SBCTA	VCTC	TOTAL
Operating Revenue						
Farebox Revenue	\$ 41,676	\$ 23,045	\$ 7,782	\$ 9,708	\$ 2,365	\$ 84,577
SB Line 25% Fare Reduction Subsidy	772	-	-	519	-	1,291
Subtotal-Pro Forma FareBox	42,448	23,045	7,782	10,227	2,365	85,868
Dispatching	1,099	697	13	59	256	2,124
Other Revenues	127	58	32	37	17	270
MOW Revenues	7,493	2,576	677	1,563	475	12,784
Subtotal Operating Revenue	51,167	26,376	8,503	11,886	3,112	101,045
Operating Expenses						
<u>Operations & Services</u>						
Train Operations	26,404	11,031	5,128	5,376	1,892	49,831
Equipment Maintenance	19,959	9,196	4,761	4,772	1,754	40,441
Fuel	10,148	4,886	1,969	2,099	645	19,747
Non-Scheduled Rolling Stock Repairs	93	43	18	21	6	180
Operating Facilities Maintenance	924	422	174	207	58	1,785
Other Operating Train Services	240	88	76	52	53	508
Rolling Stock Lease	-	-	-	-	-	-
Security - Sheriff	3,265	1,254	941	656	132	6,248
Security - Guards	1,202	440	381	261	266	2,550
Supplemental Additional Security	341	185	63	82	19	690
Public Safety Program	183	67	58	40	41	389
Passenger Relations	834	489	162	200	54	1,739
TVM Maintenance/Revenue Collection	4,097	2,084	1,581	1,293	575	9,630
Marketing	984	538	192	229	68	2,011
Media & External Communications	219	80	70	48	49	465
Utilities/Leases	1,697	621	538	368	376	3,599
Transfers to Other Operators	3,867	1,575	524	710	216	6,892
Amtrak Transfers	765	1,516	-	-	119	2,400
Station Maintenance	1,205	274	120	266	88	1,952
Rail Agreements	1,988	1,642	1,295	362	367	5,654
Subtotal Operations & Services	78,413	36,431	18,050	17,040	6,777	156,711
<u>Maintenance-of-Way</u>						
MoW - Line Segments	23,623	9,248	3,445	6,257	2,675	45,248
MoW - Extraordinary Maintenance	385	84	64	68	52	653
Subtotal Maintenance-of-Way	24,007	9,332	3,508	6,325	2,728	45,901
<u>Administration & Services</u>						
Ops Salaries & Fringe Benefits	7,155	2,628	2,264	1,553	1,579	15,179
Ops Non-Labor Expenses	4,036	1,764	876	894	390	7,961
Indirect Administrative Expenses	8,722	3,190	2,768	1,891	1,932	18,503
Ops Professional Services	1,267	464	402	275	281	2,689
Subtotal Admin & Services	21,181	8,045	6,311	4,613	4,181	44,332
Contingency (Non-Train Ops)	96	35	31	21	21	204
Total Operating Expenses	123,698	53,844	27,899	27,999	13,707	247,148
Insurance Expense/(Revenue)						
Liability/Property/Auto	6,372	2,910	1,198	1,430	399	12,309
Claims / SI	518	236	97	116	32	1,000
Claims Administration	664	303	125	149	42	1,282
PLPD Revenue	-	-	-	-	-	-
Net Insurance Expense	7,554	3,449	1,420	1,695	473	14,591
Total Expense	131,252	57,293	29,319	29,695	14,180	261,739
Loss	(80,085)	(30,917)	(20,815)	(17,809)	(11,068)	(160,694)
Member Subsidies						
Operations	72,531	27,468	19,396	16,113	10,595	146,103
Insurance	7,554	3,449	1,420	1,695	473	14,591
Total Member Subsidies	\$ 80,085	\$ 30,917	\$ 20,815	\$ 17,809	\$ 11,068	\$ 160,694

Numbers may not foot due to rounding.

Exhibit 9.5 FY2020-21 Forecast of Operating Budget by Cost Component by Line

(000's)	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL	TOTAL
Operating Revenue									
Farebox Revenue	\$ 19,547	\$ 6,510	\$ 12,904	\$ 7,588	\$ 23,042	\$ 892	\$ 7,500	\$ 6,593	\$ 84,577
SB Line 25% Fare Reduction Subsidy	1,291	-	-	-	-	-	-	-	1,291
Subtotal-Pro Forma FareBox	20,838	6,510	12,904	7,588	23,042	892	7,500	6,593	85,868
Dispatching	158	528	362	6	1,002	15	18	35	2,124
Other Revenues	47	33	36	28	33	2	30	62	270
MOW Revenues	3,393	1,507	3,944	283	1,507	253	1,161	737	12,784
Subtotal Operating Revenue	24,436	8,577	17,245	7,904	25,584	1,163	8,709	7,427	101,045
Operating Expenses									
Operations & Services									
Train Operations	11,644	4,759	11,716	3,332	7,443	948	5,723	4,267	49,831
Equipment Maintenance	9,105	4,250	8,154	2,901	5,719	1,412	4,783	4,116	40,441
Fuel	4,266	1,670	4,450	1,368	3,292	612	2,509	1,580	19,747
Non-Scheduled Rolling Stock Repairs	43	16	39	12	28	6	22	15	180
Operating Facilities Maintenance	424	159	384	123	277	59	215	144	1,785
Other Operating Train Services	74	84	92	76	39	14	57	71	508
Rolling Stock Lease	-	-	-	-	-	-	-	-	-
Security - Sheriff	1,390	362	1,732	280	833	134	692	825	6,248
Security - Guards	369	423	462	383	198	70	286	358	2,550
Supplemental Additional Security	157	52	104	61	189	-	64	63	690
Public Safety Program	56	65	71	58	30	11	44	55	389
Passenger Relations	47	4	46	2	44	1	45	1,551	1,739
TVM Maintenance/Revenue Collection	1,844	1,341	1,557	923	994	408	1,353	1,210	9,630
Marketing	-	-	-	-	-	-	-	2,011	2,011
Media & External Communications	67	77	84	70	36	13	52	65	465
Utilities/Leases	522	597	653	541	279	99	404	505	3,599
Transfers to Other Operators	1,442	592	1,559	636	1,863	-	207	593	6,892
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	572	264	419	174	304	13	37	169	1,952
Rail Agreements	-	640	-	1,880	912	12	1,103	1,107	5,654
Subtotal Operations & Services	32,023	15,664	31,521	12,821	24,572	3,812	17,594	18,704	156,711
Maintenance-of-Way									
MoW - Line Segments	13,240	7,143	9,418	1,247	5,422	878	4,373	3,527	45,248
MoW - Extraordinary Maintenance	146	101	116	81	104	-	82	24	653
Subtotal Maintenance-of-Way	13,386	7,244	9,533	1,328	5,526	878	4,455	3,551	45,901
Administration & Services									
Ops Salaries & Fringe Benefits	2,208	2,509	2,758	2,273	1,190	416	1,703	2,122	15,179
Ops Non-Labor Expenses	1,723	850	1,651	697	1,092	253	944	752	7,961
Indirect Administrative Expenses	2,681	3,070	3,355	2,781	1,436	509	2,076	2,596	18,503
Ops Professional Services	390	446	487	404	209	74	302	377	2,689
Subtotal Admin & Services	7,001	6,875	8,251	6,155	3,927	1,251	5,025	5,847	44,332
Contingency (Non-Train Ops)	30	34	37	31	16	6	23	29	204
Total Operating Expenses	52,439	29,817	49,342	20,335	34,040	5,947	27,096	28,131	247,148
Insurance Expense/(Revenue)									
Liability/Property/Auto	2,927	1,095	2,649	846	1,909	406	1,483	993	12,309
Claims / SI	238	89	215	69	155	33	121	81	1,000
Claims Administration	305	114	276	88	199	42	155	103	1,282
PLPD Revenue	-	-	-	-	-	-	-	-	-
Net Insurance Expense	3,470	1,299	3,140	1,002	2,263	482	1,758	1,177	14,591
Total Expense	55,909	31,116	52,482	21,337	36,303	6,429	28,854	29,308	261,739
Loss	(31,473)	(22,539)	(35,238)	(13,433)	(10,719)	(5,265)	(20,145)	(21,882)	(160,694)
Member Subsidies									
Operations	28,003	21,240	32,098	12,430	8,456	4,784	18,387	20,704	146,103
Insurance	3,470	1,299	3,140	1,002	2,263	482	1,758	1,177	14,591
Total Member Subsidies	\$ 31,473	\$ 22,539	\$ 35,238	\$ 13,433	\$ 10,719	\$ 5,265	\$ 20,145	\$ 21,882	\$ 160,694

Numbers may not foot due to rounding.

SECTION 10: APPENDIX

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2018-19 BUDGET

SECTION 10: Appendix

10.1 Introduction

In this section, supplementary descriptions and information are provided on SCRRA allocations methodology, policy on debt, GASB-34 Condition Assessment Ratings, Authority information and statistics, glossary of budget terms, and key acronyms associated with SCRRA.

10.2 Revenue and Cost Allocation Methodology Detail

10.2.1 Formulae for Allocation to Members

Under the terms of the Joint Powers Authority (JPA) governing the actions of the SCRRA, each Member Agency shall approve its individual Operating and Capital subsidies for an upcoming fiscal year. Because of its JPA structure, SCRRA utilizes a number of formulae for the purposes of allocating costs to both Member Agencies and Operating Line Segments. The goal is to allocate or assign the costs based on the root causes of the common costs instead of merely spreading the costs.

Subsidies for each Member Agency are determined by each budgeting cycle based on a series of previously agreed allocations for each budget component line item. This includes both revenues and expenses. *Exhibit 10.1* provides detailed information on allocation percentages.

10.2.2 Formulae for Allocation to Lines

In addition to calculating allocations by Member Agency, the FY2018-19 Budget is also allocated across operating rail lines to provide the costs associated with providing system-wide services across the counties served. The lines are defined as San Bernardino, Ventura County, Antelope Valley, Riverside, Orange County, Orange County MSEP, Inland Empire/Orange County and the 91/Perris Valley Line.

Exhibit 10.2 provides detailed information on allocation percentages by line. This allocation is used to calculate operating expenses, revenues, subsidies and statistics by line.

10.2.3 Allocation of Revenues

Farebox revenues are received by each operating line based on point of sale origin/destination pairs, and allocated to Member Agencies (counties) on the basis of county train-miles for each line. Dispatching/Other revenues are allocated directly to those line segments that are subject to agreements with freight railroads and Amtrak. These revenues are allocated to the counties that own the particular segments and to the lines that are made up of these segments.

10.2.4 Allocation of Expenses

Operating Expenses are allocated using a variety of railroad metrics. Most expenses in the Operating Budget are allocated on a combination of allocation and tier applications. Some exceptions are described as follows: fuel and Amtrak services related to the operation of trains are allocated to operating lines and counties based on train miles for each line or county; dispatching is allocated directly to operating lines and counties based on the ownership of line segments over which the Authority has dispatching authority. Additionally, transfers to other Operators, Rail Agreements, and Maintenance-of-Way (MOW) expenses are allocated directly to line segments.

MOW (expenditure and revenue) net subsidies on lines shared by more than one operating line segment are split to the counties by the respective share of train miles in each county of the respective lines segments. There are specific expenditures related to particular lines. For example, the expenditures related to the Riverside Layover Facility are allocated to lines with services originating or terminating at the layover and subsequently to each county's base train miles on the participating line segments. In contrast, the River Corridor is shared by all lines, thus the expenditures in excess of revenues on this segment are split to lines and counties on the basis of the "All-Share" formula. Extraordinary Maintenance expenses for derailments are split on the All-Share formula, and for storm damage, gate knockdowns and vandalism using the formula representing route miles owned by county.

10.3 SCRRRA Policy on Debt

The purpose of issuing debt is to finance essential capital facilities and equipment. The issuance of debt spreads the cost of the facilities and equipment over their useful life. Historically, SCRRRA has not issued debt for the development of facilities or the purchase of equipment. Rather, the capital has been funded by a combination of federal, state, Member Agency, and other local sources. In the absence of the need to issue debt, SCRRRA has not adopted a formal debt policy.

State law defines the process under which a JPA may issue debt. The Marks-Roos Local Bond Pooling Act (Government Code, Sec. 6584) provided flexibility to a JPA by permitting the identification of future revenues for the maintenance of debt. Under this statute, a JPA is given powers to issue bonds to pay for the cost

of capital, including facilities and equipment. The statute requires the establishment of a new joint powers authority for the exclusive purpose of financing capital projects or acquisitions for its members. If future capital funding requirements ever require the issuance of debt, the Member Agencies and SCRRA Board may be asked to review and adopt a debt policy incorporating the establishment of a new joint powers authority as permitted in the Marks-Roos Local Bond Pooling Act.

10.4 SCRRA Leveraged Lease Transactions

Although SCRRA has never issued debt for the construction of facilities or acquisition of equipment, three U.S. leveraged lease transactions were completed. Only one of these leases remain.

10.4.1 Remaining Lease Agreement

In FY1995-96, SCRRA's Board entered into an agreement to lease 94 coach and cab cars and 31 locomotives and simultaneously entered into a sublease agreement with the lessee to lease them back. SCRRA received proceeds of approximately \$193.9 million of which it used approximately \$152.3 million to prepay future lease payments and defease part of its obligation. This prepayment amount was sufficient to cover the loan amount taken by the lessee through the years 2012 and 2014 for the locomotives and the cars, respectively. In addition, the Board invested approximately \$21.2 million in U.S. Zero Coupon Treasury strips. The Treasury strips will mature at values sufficient to cover all remaining lease payments due under the lease agreement as well as amounts necessary to exercise the repurchase options.

As a result, all obligations under this lease/leaseback transaction are considered to be defeased in substance. Additionally, in July 2003, SCRRA entered into a restructured agreement related to the 1996 transaction. The restructuring included 92 coach and cab cars related to the original 1996 transaction; two of the cars in the original transaction were damaged beyond repair in previous years. As a result of this 1996-A restructuring, SCRRA received proceeds of approximately \$2.9 million. The total net gain recognized by SCRRA from this leaseback agreement of \$19.1 million was fully amortized in FY2012-13.

10.5 Description of GASB-34 Condition Assessment Ratings

SCRRA, as part of its implementation of Government Accounting Standards Board Pronouncement 34 (GASB-34), has elected to use the Modified Approach for the Metrolink Railroad Infrastructure. Under the modified approach, infrastructure assets that are part of a network, or subsystem of a network, are not required to be depreciated as long as two requirements are met:

- 1) The government manages the eligible infrastructure assets using a qualified asset management system; and
- 2) The government documents that the eligible infrastructure assets are being preserved approximately at (or above) a condition level established and disclosed by the government.

In FY2002-03, to comply with the requirements of GASB-34, the SCRRA Board adopted a condition rating of 75 points (of a maximum of 100) as the minimum acceptable Railroad Condition Index (RCI) for the entire railroad network, including all subsystems. The actual index value of the condition of SCRRA's infrastructure network at the time of adoption is 86.

The following ratings values are utilized to describe the asset condition of various railroad infrastructure components:

- *Excellent (90+)* – An asset that exhibits no conditions of wear or degradation and is suitable for continued use for 5 plus years with only routine inspection and repair; essentially a “like new” condition.
- *Good (80 to 89)* – An asset rated as good has some components that will require repair or replacement within the next 5 years but is expected to be fully serviceable for the next 5 years.
- *Fair (70 to 79)* – An asset rated as fair will be in serviceable condition at the time of the rating but will require rehabilitation of two or more components within 5 years.
- *Poor (60 to 69)* – An asset that is operating at less than full capacity (e.g. a speed restriction is imposed) due to maintenance conditions and will require rehabilitation of at least one component before becoming fully operational.
- *Critical (59 or below)* – An asset that is operating at less than full capacity and must have repairs or rehabilitation within the year in order to continue operating.

The system-wide condition assessment conducted as of the year ended June 30, 2015 and June 30, 2014, resulted in an overall rating of 81 points.

10.6 SCRRA Information

10.6.1 Date of Formation

SCRRA was formed through a Joint Powers Agreement in August 1991.

10.6.2 Form of Government

SCRRA operates as a Joint Exercise of Powers Authority.

10.6.3 Purpose

The purpose of SCRRA is to plan, design, create and administer the operation of regional passenger rail lines.

10.6.4 Member Agencies

There are five Member Agencies associated with SCRRA: Los Angeles County Metropolitan Transportation Authority (Metro), Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC), San Bernardino County Transportation Authority (SBCTA), and Ventura County Transportation Commission (VCTC).

10.6.5 Counties Served

SCRRA serves Los Angeles County, Northern San Diego County, Orange County, Riverside County, San Bernardino County and Ventura County.

10.7 SCRRA Statistical Information

Population by County	Los Angeles County	10.2 million
	Orange County	3.2 million
	Riverside County	2.4 million
	San Bernardino County	2.2 million
	San Diego County	3.3 million
	Ventura County	<u>0.9 million</u>
	Total Population:	22.3 million
	California Population	39.8 million
% of State Population located within SCRRA Service Area		56%
Route Miles in System (Duplicated)	Los Angeles County	220
	Orange County	117
	Riverside County	79
	San Bernardino County	41
	Northern San Diego County	38
	Ventura County	<u>41</u>
	Total Miles:	536

Route Miles (Unduplicated)	Los Angeles County	184
	Orange County	67
	Riverside County	58
	San Bernardino County	40
	Northern San Diego County	19
	Ventura County	<u>41</u>
	Total Miles:	409
Available Equipment	Locomotives	55
	Cab Cars	56
	Coaches	186
Stations	Los Angeles County	27
	Orange County	11
	Riverside County	9
	San Bernardino	8
	Northern San Diego County	1
	Ventura County	<u>5</u>
Total Stations:	61	
Ticket Vending Machines	Installed TVMs	123
	Test TVMs	1
	Validators Installed	126
	Ticket Office Machines	4
Projected Number of Annual Auto Trips Removed in FY2018-19		8,895,902
Percent of Freeway Traffic Removed on I-10 and SR 60 corridor (peak hours)		up to 28%
Average Metrolink weekday Trip Length		33.0 miles
Percent of Metrolink Riders Formerly Driving Alone		81.5%
Percent of Riders with Los Angeles Union Station Destination		62%

Percent of Minority Riders by Line Corridor

San Bernardino Line	75%
Riverside Line	81%
Antelope Valley Line	70%
Ventura County Line	49%
Orange County Line	54%
Inland Empire-OC Line	56%
91 Line	66%

10.8 Glossary of Budget Terms

Approved Budget: The official budget as approved by the five Member Agencies and the SCRRA Board of Directors.

Adopted Budget: The approved budget as Adopted by the SCRRA Board of Directors during a fiscal year.

Appropriation: Legal authorization to make expenditures and to incur obligations for specific purposes. An appropriation is usually limited in amount and to the time it may be expended.

Budget: A plan of financial operations comprised of estimated expenditures for a given period (one fiscal year) and the means of revenue generation to finance the expenditures.

Carryover: Estimated outstanding budgeted project amounts as of 06/30/18 that include the unspent portion of projects assigned number and currently in process, and projects not yet assigned numbers but approved prior to 06/30/18.

Contracted Services: Services rendered in support of SCRRA operations and other activities by external parties. These are generally based upon formal contracts or purchase orders.

Cost Center: The accounting designated summary of all expenditures related to an individual SCRRA department.

Department: An organizational subgroup of SCRRA.

Expenditures/Expenses: Decreases in net financial resources during a specific period.

Extraordinary Maintenance: The expenditures related to repairing damages due to vandalism, crossing gate knockdowns, accidents, derailments, fires, storm and other severe weather conditions.

Farebox Revenue: Fares received from passengers for travel on Metrolink trains.

Farebox Recovery: Ratio of farebox revenue to total expenses net of non-BNSF rolling stock leases.

Fiscal Year: A 12-month period to which the annual budget applies and at the end of which SCRRA determines its financial position, the results of its operations and capital program, and adopts a budget for the coming fiscal year. SCRRA's fiscal year is from July 1 through June 30.

Full Time Equivalent (FTE): The conversion of full-time and part-time employee hours to the equivalent of a full-time position.

Member Agency: The designated and defined five county entities in the Joint Powers of Authority agreement: Los Angeles County Metropolitan Transportation Authority (Metro), Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC), San Bernardino County Transportation Authority (SBCTA), and Ventura County Transportation Commission (VCTC).

Modes: Discrete business units of operation within an organization. SCRRA business modes are Train Operations, MOW, new capital, rehabilitation and collectable.

Operating Budget: A financial forecast that focuses on everyday operating activities and programs. For SCRRA, the Operating Budget includes Train Operations, Maintenance-of-Way and Insurance Expense.

Positive Train Control (PTC): GPS-based safety technology capable of preventing train-to-train collisions, over speed derailments, unauthorized incursion into work zones and train movement through switches left in the wrong position. PTC monitors and, if necessary, controls train movement in the event of human error. PTC can also bring trains to a safe stop in the event of a natural disaster.

Preliminary Budget: A budget in its preliminary preparation stage prior to adoption by the SCRRA Board of Directors.

Rehabilitation Expenditure: Those expenditures that replace worn-out assets with like or improved assets and thus extend the useful life of these capital assets. Such costs are generally capitalized.

Revenue: Monies that SCRRA receives as income in the form of farebox revenue, payments from other railroads, local funds for operating or capital, grants, interest, and advertising, among others.

Revenue Recovery: The ratio of Operating Revenues to Operating Expenses net of Non-BNSF Rolling Stock Lease.

Ridership: The number of one-way trips by passengers on Metrolink trains.

Salary and Fringe Benefit Expenses: Compensation paid to or on behalf of SCRRA employees for salaries, wages, overtime, and benefits.

10.9 Key Acronyms Associated with Southern California Regional Rail Authority

ADA	Americans with Disabilities Act
Amtrak	National Railroad Passenger Corporation (Intercity Rail Service)
APTA	American Public Transportation Association
AQMD	Air Quality Management District
ARRA	American Recovery and Reinvestment Act
BNSF	Burlington Northern Santa Fe Railroad
CAFR	Comprehensive Annual Financial Report
Caltrans	California Department of Transportation
CAM	Capital Asset Management
CEQA	California Environmental Quality Act
CMAQ	Congestion Mitigation Air Quality
CMF	Central Maintenance Facility
CTC	California Transportation Commission
DBE	Disadvantaged Business Enterprises
DOL	Federal Department of Labor
DOT	Federal Department of Transportation
EIR	Environmental Impact Report
EIS	Environmental Impact Study
EPA	Federal Environmental Protection Agency
ETC	Employer Transportation Coordinator
FCR	Flexible Congestion Relief
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GHG	Green House Gas
ICAP	Indirect Cost Allocation Plan
IEOC	Inland Empire to Orange County Line
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation System
JPA	Joint Powers Authority
MAP-21	Moving Ahead for Progress in the 21st Century Act (P.L. 112-141)
Metro	Los Angeles County Metropolitan Transportation Authority
MIRP	Metrolink Infrastructure Rehabilitation Plan
MOC	Metrolink Operations Center
MOW	Maintenance-of-Way
LNG	Liquefied Natural Gas
MOU	Memorandum of Understanding
MTA	Los Angeles County Metropolitan Transportation Authority
OCTA	Orange County Transportation Authority
PA/CMS	Public Address/Changeable Message Sign
PDIP	Project Delivery Improvement Plan
PERS	Public Employees Retirement System
PRESS	Passenger Rail Equipment Safety Standards
PTC	Positive Train Control

RCI	Railroad Condition Index
RCTC	Riverside County Transportation Commission
ROW	Right-of-Way
RTIP	Regional Transportation Improvement Program
RTPA	Regional Transportation Planning Agency
SBCTA	San Bernardino County Transit Authority
SCAG	Southern California Associated Governments
SCAQMD	South Coast Air Quality Management District
SCORE	Southern California Optimized Rail Expansion
SCRRA	Southern California Regional Rail Authority
SHA	State Highway Account
SPRR	Southern Pacific Railroad
STA	State Transit Assistance
STIP	State Transportation Improvement Plan
STP	Surface Transportation Program
TAC	Technical Advisory Committee
TAM	Transit Asset Management
TCI	Transit Capital Improvement (funds/program)
TDA	Transportation Development Act
TEA-21	Transportation Equity Act for the 21 st Century
TIP	Transportation Improvement program
TPA	Third Party Agreement
TSM	Transportation Systems Management
TVM	Ticket Vending Machine
UP	Union Pacific Railroad
VCTC	Ventura County Transportation Commission
VMT	Vehicle Miles Traveled

10.10 Exhibits

Exhibit 10.1: FY2017-18 Formulae Used to Allocate Expenses by Member Agency lists the allocation categories and the percentages allocated for each across Member Agencies.

Exhibit 10.2: FY2017-18 Formulae Used to Allocate Expenses by Line lists the allocation categories and the percentages allocated for each across the operating rail lines.

Exhibit 10.1 FY2018-19 Formulae Used to Allocate Expenses by Member Agency

Allocation	METRO	OCTA	RCTC	SBCTA	VCTC
Train Miles Lagged (FY17)	52.18%	23.60%	9.89%	11.06%	3.27%
FY19 Budget Train Miles (Base Services)	54.08%	20.84%	9.46%	11.60%	4.02%
FY19 Budget Train Miles (All Services)	51.77%	23.64%	9.73%	11.62%	3.24%
Revenue Moves Thru LAUS	65.19%	12.93%	4.43%	13.70%	3.75%
Unduplicated Stations (Incl Buena Park)	44.26%	19.67%	14.75%	13.11%	8.21%
TVMs (Excl TOMs & Flower St)	42.54%	21.64%	16.42%	13.43%	5.97%
Ridership Lagged (FY17)	49.00%	26.81%	9.80%	11.44%	2.95%
Current Ridership w/o IEOC (Transfer Payments)	55.70%	21.27%	6.92%	12.26%	3.85%
FY18 Fare Revenue	49.28%	26.49%	9.08%	12.34%	2.81%
75% Train Miles Lagged/25% Unduplicated Stations	50.20%	22.62%	11.10%	11.58%	4.50%
S.B. Line Trn Miles	58.78%	0.00%	0.00%	41.22%	0.00%
SB Weekend	58.78%	0.00%	0.00%	41.22%	0.00%
S.B. Incremental (100% SBCTA)	0.00%	0.00%	0.00%	100.00%	0.00%
Ven Line Trn Miles	61.41%	0.00%	0.00%	0.00%	38.59%
A.V. Line Trn Miles (combine wk and we)	100.00%	0.00%	0.00%	0.00%	0.00%
Riv Line Trn Miles	60.54%	0.00%	23.13%	16.33%	0.00%
O.C. Line Trn Miles (combine wk and we)	30.50%	69.50%	0.00%	0.00%	0.00%
O.C. Line Trn Miles - Incremental (100% OCTA)	0.00%	100.00%	0.00%	0.00%	0.00%
OC MSEP	0.00%	100.00%	0.00%	0.00%	0.00%
IEOC Line Trn Miles	0.00%	62.56%	31.76%	5.68%	0.00%
IEOC Weekday Incremental Trn Miles	0.00%	63.87%	35.78%	0.35%	0.00%
IEOC Line: San Bernardino-Oceanside	0.00%	69.23%	24.18%	6.59%	0.00%
IEOC Line: Riverside-Oceanside	0.00%	77.00%	23.00%	0.00%	0.00%
91 Line Trn Miles	26.68%	25.04%	48.02%	0.26%	0.00%
Route Miles Dispatched	58.45%	17.76%	7.82%	9.76%	6.21%
All-Share (MoW)	47.50%	19.80%	11.10%	14.40%	7.20%
All-Share (MoW) w/o IEOC/MSEP	47.50%	19.80%	11.10%	14.40%	7.20%
Route Miles Owned (MoW Storm Damage)	58.66%	12.87%	9.69%	10.78%	8.00%
Undup Route Miles (Excl S.D.)	47.14%	17.24%	14.96%	10.22%	10.44%
MTA Train Miles	100.00%	0.00%	0.00%	0.00%	0.00%
OCTA Train Miles	0.00%	100.00%	0.00%	0.00%	0.00%
RCTC Train Miles	0.00%	0.00%	100.00%	0.00%	0.00%
SBCTA Train Miles	0.00%	0.00%	0.00%	100.00%	0.00%
Budget Adjustment	0.00%	0.00%	0.00%	0.00%	0.00%
VCTC Train Miles	0.00%	0.00%	0.00%	0.00%	100.00%

Exhibit 10.2 FY2018-19 Formulae Used to Allocate Expenses by Line

Allocation	San Bernardino	Ventura	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL
Train Miles Lagged (FY17)	23.47%	10.37%	20.85%	6.53%	15.03%	3.25%	11.78%	8.73%
FY19 Budget Train Miles (Base Services)	23.01%	10.41%	22.13%	8.53%	16.10%	0.00%	12.49%	7.33%
FY19 Budget Train Miles (All Services)	23.78%	8.90%	21.52%	6.87%	15.51%	3.30%	12.05%	8.07%
Revenue Moves Thru LAUS	31.19%	12.87%	22.39%	8.90%	16.65%	0.00%	0.00%	8.00%
Unduplicated Stations (Incl Buena Park)	19.95%	16.67%	16.67%	9.00%	10.11%	4.10%	11.48%	12.02%
TVMs (Excl TOMs & Flower St)	19.15%	13.93%	16.17%	9.58%	10.32%	4.24%	14.05%	12.56%
Ridership Lagged (FY17)	23.59%	9.32%	14.77%	8.63%	23.34%	0.98%	11.79%	7.58%
Current Ridership w/o IEOC (Transfer Payments)	26.08%	10.59%	17.88%	9.13%	27.32%	0.00%	0.00%	9.00%
FY18 Fare Revenue	21.51%	7.72%	17.44%	9.79%	26.28%	1.03%	9.00%	7.23%
75% Train Miles Lagged/25% Unduplicated Stations	22.59%	11.94%	19.81%	7.15%	13.80%	3.46%	11.71%	9.54%
S.B. Line Trn Miles	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SB Weekend	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S.B. Incremental (100% SBCTA)	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Ven Line Trn Miles	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
A.V. Line Trn Miles (combine wk and we)	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Riv Line Trn Miles	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
O.C. Line Trn Miles (combine wk and we)	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
O.C. Line Trn Miles - Incremental (100% OCTA)	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
OC MSEP	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
IEOC Line Trn Miles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
IEOC Weekday Incremental Trn Miles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
IEOC Line: San Bernardino-Oceanside	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
IEOC Line: Riverside-Oceanside	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
91 Line Trn Miles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Route Miles Dispatched	29.08%	15.20%	26.46%	2.08%	6.49%	5.67%	6.61%	8.41%
All-Share (MoW)	21.94%	15.10%	15.90%	13.84%	16.85%	0.00%	13.43%	2.94%
All-Share (MoW) w/o IEOC/MSEP	25.34%	17.44%	18.37%	15.98%	19.47%	0.00%	0.00%	3.40%
Route Miles Owned (MoW Storm Damage)	25.94%	18.97%	32.20%	0.66%	8.15%	0.00%	4.84%	9.24%
Undup Route Miles (Excl S.D.)	14.49%	16.59%	18.13%	15.03%	7.76%	2.75%	11.22%	14.03%
MTA Train Miles	24.73%	11.82%	41.55%	9.41%	8.94%	0.00%	0.00%	3.55%
OCTA Train Miles	0.00%	0.00%	0.00%	0.00%	53.87%	0.00%	37.49%	8.64%
RCTC Train Miles	0.00%	0.00%	0.00%	21.50%	0.00%	0.00%	41.96%	36.54%
SBCTA Train Miles	81.91%	0.00%	0.00%	11.83%	0.00%	0.00%	6.11%	0.15%
Budget Adjustment	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
VCTC Train Miles	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



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