# SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

### FISCAL YEAR 2017-18 ADOPTED BUDGET

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### SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

## FISCAL YEAR 2017-18 BUDGET

### Including Forecast for FY2018-19 and FY2019-20 (informational purposes only)

## Adopted June 23, 2017

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

#### FY2017-18 BUDGET

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#### SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

#### FY2017-18 BUDGET

#### **SECTION 1: Executive Summary**

#### 1.1 Introduction

This year, the Southern California Regional Rail Authority (SCRRA), operating as Metrolink, celebrates its 25<sup>th</sup> year. Metrolink is Southern California's only intercounty commuter rail provider, furnishing transportation services for over 11.5 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 8.7 million annual auto trips from our local roadways.

For 25 years, 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 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 mass 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 400 million passenger miles annually.
- Each weekday, Metrolink riders travel more than 1.3 million miles, nearly 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.
- 47% 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 41.8%, 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:
  - 8.7 million car trips annually
  - 296 million vehicle miles traveled (VMT) annually
  - 110,338 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).

County	LA	OC	RV	SB	VC	TOTAL
Metrolink Passenger Miles <sup>(1)</sup>	257,810,948	85,542,531	24,271,705	26,860,117	6,225,773	400,711,075
Metrolink Passenger Miles (%)	64%	21%	6%	7%	2%	100%
Subsidy per Passenger Mile	\$ 0.28	\$ 0.33	\$ 0.73	\$ 0.56	\$ 1.58	\$ 0.36
Car trips avoided <sup>(2)</sup>	3,726,682	2,196,739	1,392,340	1,158,114	250,589	8,724,464
VMT avoided	178,592,675	72,011,258	20,476,493	20,389,271	4,771,206	296,240,903
GHG avoided (metric tons) <sup>(3)</sup>	66,519	26,821	7,627	7,594	1,777	110,338
Total Freeway Passenger Miles <sup>(4)</sup>	36,777,391,556	13,243,296,942	13,299,424,186	11,912,016,948	2,384,178,426	77,616,308,058
Metrolink Passenger Miles as % of Total Freeway Passenger Miles	0.7%	0.6%	0.2%	0.2%	0.3%	0.5%
Capacity relief on parallel freeways: (Peak Hour Land Capacity Equivalent) <sup>(3)</sup>	1.3	0.9	0.8	0.6	0.2	n/a
Directional Peak Hour Volume relief on parallel freeways (up to) <sup>(5)</sup>	30.1%	28.4%	11.3%	6.3%	5.3%	n/a

#### Performance Statistics by County

(1) Passenger Miles reflect the cumulative distance traveled by ticketed passengers on Metrolink trains. Passenger miles reported for FY18 are utilizing a new methodology and are not comparable to passenger miles reported in previous budget years. The new methodology is based on actual ticket sales and is consistent with ridership estimates. Earlier estimates of passenger miles were based on conductor counts and passenger survey information.

(2) Using % car available and 1.1 average vehicle occupancy

(3) GHG expressed in CO2 equivalents (https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator)

(4) Total freeway passenger miles in 2014 assuming average vehicle occupancy of 1.1 persons

(5) October 2016 data for selected freeway postmiles

Agency	Avg Fare/ Passenger	Revenue/ Passenger mile	Revenue/ Train mile	Operating cost/ Train mile	Operating Cost/ Passenger	Operating Cost/ Passenger Mile	Subsidy/ Passenger	Subsidy/ Passenger Mile	Farebox Recovery Ratio
METROLINK	\$5.95	\$0.20	\$30.87	\$77.11	\$14.86	\$0.51	\$8.91	\$0.31	40.03%
Commuter Rail									
Maryland Transit Administration MTA	\$4.66	\$0.16	\$36.52	\$120.46	\$15.36	\$0.52	\$10.70	\$0.36	30.32%
Massachussetts Bay Transportation Authority MBTA	\$3.79	\$0.18	\$30.43	\$98.90	\$12.31	\$0.60	\$8.52	\$0.41	30.77%
Northeaster Illonois Regional Commuter Railroad METRO	\$4.65	\$0.21	\$48.97	\$102.56	\$9.73	\$0.44	\$5.08	\$0.23	47.75%
Peninsula corridor Joint Powers Board CALTRAIN	\$4.39	\$0.18	\$61.19	\$84.73	\$6.08	\$0.24	\$1.69	\$0.07	72.23%
Southeastern Pennsylvania Transportation Authority SEPTA	\$4.02	\$0.31	\$30.26	\$53.92	\$7.17	\$0.55	\$3.14	\$0.24	56.13%
Virginia Railway Express VRE	\$8.15	\$0.24	\$114.36	\$205.06	\$14.61	\$0.43	\$6.46	\$0.19	55.77%
Local Transit Agencies									
Los Angeles County Metropolitan Transportation Authority METRO	\$0.78	\$0.17	N/A	N/A	\$3.06	\$0.67	\$2.28	\$0.50	25.35%
Riverside Transit Agency RTA	\$1.04	\$0.15	N/A	N/A	\$5.19	\$0.75	\$4.15	\$0.60	20.12%
OMNITRANS	\$0.96	\$0.20	N/A	N/A	\$4.13	\$0.87	\$3.17	\$0.67	23.33%
Orange County Transportation Authority OCTA	\$1.27	\$0.28	N/A	N/A	\$5.16	\$1.13	\$3.88	\$0.85	24.71%

#### 1.3 Metrolink in Comparison

Source: FY2015 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 exceptional 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 FY2016-17

Below are highlights of Metrolink accomplishments during FY2016-17:

- Metrolink continued to be the nation's only commuter railroad to achieve Positive Train Control (PTC) in-service on all the train lines that it services and manages on behalf of its Member Agencies. PTC is the centerpiece of our unwavering focus on safety, providing protective collision avoidance and over-speed prevention.
- Metrolink was one of the earliest implementers of mobile ticketing technology. Mobile ticketing allows passengers to conveniently purchase tickets on their mobile devices. In the first full year since launch, passenger use of mobile ticketing exceeded all expectations. The average adoption rate across the entire system is currently at 22%, while our Inland Empire/Orange County line reached a 53% adoption rate in May 2017.

- A pilot program adding the convenience of Sunday Service on 6 national holidays was well received by passengers resulting in a farebox recovery rate of 55%. These positive results have led the Authority to conduct a full year pilot program in FY2017-18 to measure passenger response.
- FY2016-17 has seen the first full year of the extension of the 91 Line, providing new service from Riverside to Perris Valley, adding 4 new stations, 23 miles to our routes, and 71,760 train miles to our service.
- The Metrolink 91/Perris Valley Line Extension Project, funded by Riverside County Transportation Commission (RCTC), was selected by California Transportation Foundation as the 2016 Transit Project of the Year.
- A total of eleven new Tier 4 Locomotives arrived in FY2016-17. When all these state-of-the-art locomotives are in service, they will eliminate up to 500 tons of emissions annually. This will achieve the elimination of 70% of current emissions.
- In FY2016-17, a proposed project system allowed us to produce a detailed listing of all rehabilitation needed on Metrolink rail, bridges, structures and rolling stock, allowing us to better communicate the extent of current maintenance needs to our Member Agencies.
- The Project Delivery Improvement Program (PDIP) was instituted to ensure maximum efficiency and effectiveness in the delivery, record keeping, and billing of Rehabilitation, New Capital and Third Party projects.
- In December 2016, a Transit Asset Management Plan (TAM) and a TAM Policy conforming to the statutory requirements of MAP-21, was adopted by the SCRRA Board for implementation agency-wide.
- A major milestone was reached in our goal to be employer of choice with the completion of a comprehensive Class and Compensation Study was completed by our Human Resources Department in collaboration with Segal Waters Consulting.
- A peer review of the Metrolink Internal Audit Department by the Association of Local Government Auditors returned a clean review stating the following:

Based on the results of our review, it is our opinion that the Southern California Regional Rail Authority's internal quality control system was suitably designed and operating effectively to provide reasonable assurance of compliance with *Government Auditing Standards* for audits and attestation engagements during the January 1, 2015 to December 31, 2016.

• The Metrolink Marketing Department had again garnered an AdWheel (APTA) Grand Prize for 5 years running. In 2017, the wins were:

Grand Prize – Mobile Ticketing 1<sup>st</sup> Place – I-5 Billboard 1<sup>st</sup> Place – Mobile Ticketing

#### 1.5 Objectives for FY2017-18

The FY2017-18 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 Positive Train Control (PTC) as the centerpiece of our efforts.
- Enhance customer experience, implementing upgrades to the mobile ticketing application and modernize ticket vending system.
- Implement additional one-year pilot program to provide our passengers the added convenience of Sunday Service on the 6 national holidays. Passenger response to this service will be monitored to determine whether this service will become permanent.
- Increase ridership and regional mobility by way of new San Bernardino Transit Center.
- Enhance reliability and on-time performance, through fleet improvement provided by the arrival of an additional 29 new Tier 4 Locomotives during FY2017-18; in combination with an adherence to regular performance of required equipment maintenance consistent with the Fleet Management Plan.
- Secure funding to maintain existing assets in a state of good repair and determine a path forward to ensure funding availability in the future.
- Completion of the Project Delivery Improvement Program (PDIP) to improve processes accelerating project delivery.
- Implement a process to maximize use of newly available Federal Preventive Maintenance funds to supplement Member Agency subsidies.
- Implement the Transit Asset Management plan agency-wide, optimizing safety and maximize benefit of capital investments while extending the useful life of assets.
- Execution of fuel hedging program to better stabilize the fuel budget, an expense that represents almost 10% of our annual budget.
- Incorporate recommendations from the Class and Compensation Study.
- Ongoing workforce development by training and engaging employees.

#### 1.6 FY2017-18 Budget in Brief

The FY2017-18 Operating Budget of \$243.0 million is a decrease of 0.3% from the FY2016-17 Adopted Budget. The Capital Program seeks \$94.9 million in additional capital authorization: \$89.6 million in New Authority for Rehabilitation Projects and \$5.3 million in New Authority for New Capital Projects. Total SCRRA revenues are \$100.6 million, 1.2% less than the FY2016-17 Adopted Budget.

Member Agency subsidies are \$142.4 million, an increase of \$0.4 million or 0.3% over the FY2016-17 Adopted Budget.

The FY2017-18 Budget, as adopted, was modified to the amount approved by each Member Agency for Operating and Rehabilitation/New Capital during their respective budget adoption processes. The Operating Budget was adopted as proposed while the additions to the Capital Program Budget were adopted in the amount of \$56.6 million for Rehabilitation and \$2.8 million for New Capital. Staff is in continued discussion to fully fund the Capital Program request for FY2017-18. The primary objective is to secure funding necessary to "ensure safe and reliable train operations", maintain a State of Good Repair and provide continued investment in our identified backlog of prior years' Deferred Maintenance. We are hopeful that a mid-year budget adjustment can be executed that will allow these FY2017-18 Rehabilitation and New Capital Projects to proceed in a timely manner.

#### 1.7 Key FY2017-18 Budget Information

SCRRA is a Joint Exercise of Powers Authority (JPA) originally created to plan, design, build and operate the Metrolink commuter rail service in the Southern California region. In FY2017-18, Metrolink will provide service on 7 routes to 60 stations with over 536 route miles. The system map is provided as *Exhibit 1.1*.

During FY2017-18, Metrolink will operate 171 weekday trains and 90 weekend trains. Average weekday one-way ridership is projected at 39,885 daily. Additionally, we estimate 21,580 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. Daily, SCRRA will dispatch 171 Metrolink trains and up to 34 Amtrak and 60 freight trains. Metrolink is also responsible for the maintenance of right-of-way owned by SCRRA Member Agencies that span 392 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 FY2017-18 Operational Budget Statistics

- Operating Expenses per train mile are \$85.54, excluding MOW extraordinary maintenance (0.1% decrease from the FY2016-17 Adopted Budget).
- Subsidy per passenger mile equals \$0.35 (a 6.8% increase from the FY2016-17 Adopted Budget).
- Operating Expense per passenger mile is \$0.60 (a 6.4% increase from the FY2016-17 Adopted Budget).

- Total revenue recovery is projected to equal 41.4% (a 0.9% decrease from the FY2016-17 Adopted Budget).
- Farebox recovery is projected at 35.1% (a 0.9% increase from the FY2016-17 Adopted Budget).
- Member Agency subsidies are estimated to provide 58.6% of the required Operating Revenues in FY2017-18.
- Diesel fuel costs will be managed using a fuel hedging program which is expected to assist in stabilizing the fuel budget.

#### 1.9 Administrative Requirements

Under the terms of the JPA establishing SCRRA, the Chief Executive Officer submits a Preliminary Fiscal Year Budget for the following fiscal year to the SCRRA Board for transmittal to Member Agencies no later than May 1 of each year. The Preliminary Budget includes projected Authority revenues, administrative and operating costs, and capital project carryforwards and requests. The net of 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 SCRRA's annual budget, require approval by the Member Agencies.

The SCRRA Board approved the transmittal of the FY2017-18 Preliminary Budget on April 21, 2017, and the document was submitted to the Member Agencies on May 1, 2017. A revision was then made upon further review of the April 21, 2017 Board Meeting minutes related to the transmitted FY2017-18 Preliminary Budget, which indicated an additional \$777K to be included as a potential increase for the Rail-2-Rail Program. The revised budget document accommodating this change was forwarded to Member Agencies on May 5, 2017. At the May 12, 2017 Board Meeting, further revisions were requested by the SCRRA Board, including a oneyear pilot program for Sunday Service on Holidays and several IT Projects. The resulting budget document and transmittal letter was forwarded to Member Agencies on May 18, 2017. The FY18 budget was adopted by the SCRRA Board on June 23, 2017.

#### 1.10 Budget Development and Assumptions

The development of SCRRA's FY2017-18 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, Maintenance-of-Way (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.

In FY2015-16, Member Agencies requested SCRRA identify a consulting firm to reevaluate SCRRA allocation formulas and methodology. This ensures that the current system produces the fairest and most equitable distribution of costs among the Member Agencies. In July 2016, an agreement was signed with AECOM to contract LTK Engineering Services in providing consultation services. The cost allocation review study began in September 2016 with our consultant surveying and holding individual meetings with each Member Agency. With an analysis of the impacts of alternative allocations, and comments from the Member Agencies, the allocation consultant researched how peer agencies in the United States allocated the cost of commuter rail service. Member Agencies received formal and informal comments, and the consultant plans to present a draft proposal to the working group on July 14, 2017, and a subsequent presentation at the CEO Meeting on July 21, 2017.

#### 1.11 Summary of Operating Revenues and Subsidy Funding

SCRRA generates Operating Revenue from four principal sources: Fares, Dispatching, Maintenance-of-Way (MOW), and Other Revenue.

*Fare Revenues* – The FY2017-18 Budget assumes ridership of 11.5 million passengers will generate Fare Revenues equal to \$85.2 million, an increase of \$0.6 million or 0.7% from the FY2016-17 Adopted Budget. The FY2017-18 Budget includes continued implementation of the Fare Enforcement Policy, including enhanced fare enforcement efforts on the Antelope Valley Line to be funded by Metro, and a 25% fare reduction on the Antelope Valley Line, also funded by Metro.

*Dispatching Revenue* – As the operating administrator of its member-owned rightsof-way, SCRRA receives revenues from freight railroads and Amtrak Intercity Services for the right to operate in its' territories. These revenues are volumebased, and individual rates are contained in existing agreements that govern rate increases. The total dispatching revenues are projected at \$2.1 million; \$0.5 million less than the FY2016-17 Adopted Budget, and consistent with FY2016-17 estimated actual revenue forecasted in the Third Quarter.

Maintenance-of-Way (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 Maintenance-of-Way 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 FY2017-18 Budget projects MOW revenues at \$13.4 million, which is \$1.3 million, or 8.8% less than the FY2016-17 Adopted Budget. The reduction is primarily related to lower revenue from Union Pacific on the Saugus line where revenues are calculated on the basis of freight traffic (car miles). The most recent annual cost reconciliation, resulted in the establishment of rates which create revenue lower by \$1.1 million. This is, however, an upward trend from estimated actual FY2016-17.

*Other Revenues* – SCRRA will continue to offer advertising space on Metrolink trains to select organizations. We have budgeted \$12K for FY2017-18.

#### 1.12 Summary of Operating Expenses

In FY2017-18, SCRRA's Operating Expenses include Train Operations, Maintenance-of-Way (MOW) and Insurance. The combined total expense for the FY2017-18 Budget is \$243.0 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 \$183.8 million, a 1.4% increase over the FY2016-17 Adopted 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 \$41.6 million. This is a 4.7% increase over the FY2016-17 Adopted Budget.

*Insurance* – Insurance expenses of \$17.7 million increased by 5.2% over the FY2016-17 Adopted Budget.

#### 1.13 Summary of Capital Program

SCRRA's overall Capital Program Budget consists of two major components totaling \$395.2 million. The Authority's Rehabilitation and New Capital programs, which total \$177.0 million and \$218.2 million, respectively. The Rehabilitation component is comprised of \$87.5 million in carryforward from prior years, and the FY2017-18 request for additional Rehabilitation authority of \$89.6 million. The New Capital component is comprised of \$212.9 million in carryforward from prior years, and the FY2017-18 request for additional New Capital authority of \$5.3 million.

The FY2017-18 Budget, as adopted, was modified to the amount approved by each Member Agency for Operating and Rehabilitation/New Capital during their respective budget adoption processes. The Operating Budget was adopted as proposed while the additions to the Capital Program Budget were adopted in the amount of \$56.6 million for Rehabilitation and \$2.8 million for New Capital. Staff is in continued discussion to fully fund the Capital Program request for FY2017-18. The primary objective is to secure funding necessary to "ensure safe and reliable train operations", maintain a State of Good Repair and provide continued investment in our identified backlog of prior years' Deferred Maintenance. We are hopeful that a mid-year budget adjustment can be executed that will allow these FY2017-18 Rehabilitation and New Capital Projects to proceed in a timely manner.

As adopted for FY2017-18, the Capital Program Budget reflects new projects totaling \$56.6 million for Rehabilitation and \$2.8 million for New Capital. When combined with carryforward from prior years the Capital Program Budget totals \$359.8 million with \$144.1 million in Rehabilitation and \$215.7 million in New Capital. A detailed schedule is shown in Section 7 of this Budget Document.

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.



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#### SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

#### FY2017-18 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, 2017, consists of 11 voting members and 11 alternates:

County	Votes	Members	Alternates
Riverside County	2	Andrew Kotyuk <i>(Chair)</i> Council Member City of San Jacinto RCTC Board Debbie Franklin	Brian Berkson <sup>1</sup> Council Member City of Jurupa Valley RCTC Board Adam Rush <sup>1</sup>
		Mayor Pro Tem At Large City of Banning RCTC Board	Council Member City of Eastvale RCTC Board
Ventura County	1	Brian Humphrey <i>(Vice-Chair)</i> Citizen Representative VCTC Board	Ginger Gherardi Vice Mayor City of Santa Paula VCTC Board
Los Angeles County	4	Ara Najarian (2 <sup>nd</sup> Vice Chair) Councilmember City of Glendale Metro Board	Walter Allen, III Mayor Pro Tem City of Covina Metro Appointee
		Kathryn Barger Supervisor, 5 <sup>th</sup> District County of Los Angeles Metro Board	Roxana Martinez Metro Appointee
		Paul Krekorian Councilmember, 2 <sup>nd</sup> District City of Los Angeles Metro Board	Borja Leon Metro Appointee
		Hilda Solis Supervisor, 1 <sup>st</sup> District County of Los Angeles Metro Board	Joseph J. Gonzales Councilmember City of South El Monte Metro Appointee
San Bernardino County	2	Larry McCallon Mayor Pro Tem City of Highland SBCTA Board	Jon Harrison <sup>1</sup> Council Member City of Redlands SBCTA Board
		Paul Eaton Mayor City of Montclair SBCTA Board	Alan D. Wapner <sup>1</sup> Council Member City of Ontario SBCTA Board

Orange County	2	Shawn Nelson Supervisor, 4 <sup>th</sup> District County of Orange OCTA Board	Laurie Davies <sup>1</sup> Council Member City of Laguna Niguel OCTA Board
		Gregory T. Winterbottom Public Member OCTA Board	Richard D. Murphy <sup>1</sup> Council Member City of Los Alamitos OCTA Board

#### 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)	Ryan Chamberlain Director, Caltrans District 12 Alternate: Gary Slater Deputy Director, Caltrans, District 7

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			
Operations Office:	Gary Lettengarver, Chief Operating Officer			
External Affairs:	Patricia Bruno, Chief of External Affairs			
General Counsel Office:	Don O. Del Rio, General Counsel			
Finance Office:	Ronnie Campbell, Chief Financial Officer			
Internal Audit Office:	Elisabeth Lazuardi, Audit Manager			

The FY2017-18 Budget includes 273 authorized positions, a reduction of 2 positions from the FY2016-17 Adopted Budget.

<sup>&</sup>lt;sup>1</sup> Alternates represent either member

#### 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 Southern California Regional Rail Authority (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 SCRRA 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.

#### SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

#### FY2017-18 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 its' 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. The SCRRA Board must adopt a final budget no later than June 30 of each year.

The Budget shall contain a financial plan that includes:

- 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:

- Total amount appropriated for Train Operations and Maintenance-of-Way (MOW)
- 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 SCRRA'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 SCRRA Board delegates to the Chief Executive Officer the authority to manage the annual budget within the following parameters:

A budget transfer represents changes in projected expenses 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 SCRRA 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 and 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 SCRRA Board each quarter. Forecasts to the end of the current fiscal year are provided in the second, third and fourth 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 unchanged for several years. On this basis, it was determined prudent to hold fare revenue flat. No fare increase is included in the FY2017-18 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 the consumption of 9 million gallons of diesel fuel, with fuel prices managed through a hedging program.

#### 3.2 Total Operating Budget

SCRRA's FY2017-18 budgeted Operating Expense totals \$243.0 million, a decrease of \$0.8 million, or 0.3% less than the FY2016-17 Adopted Budget. Total Operating Revenues are projected to total \$100.6 million, \$1.2 million less than the FY2016-17 Adopted Budget, a decrease of 1.2%. Member Agency operating subsidies for the year are an estimated \$142.4 million, an increase of \$0.4 million, or 0.3% over the FY2016-17 Adopted Budget.

#### 3.3 Operating Revenues and Subsidy Funding

The Authority's Operating Revenue is derived from three principal sources: Fares, Dispatching and Maintenance-of-Way (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 PTC expertise to other entities.

Average weekday ridership is projected to total 39,885 thousand. Total ridership, including all weekend services, is expected to equal 11.5 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 \$85.2 million, an increase of \$0.6 million or 0.7% more than FY2016-17 Adopted Budget. No fare increase is included in the FY2017-18 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 18.0% from FY2016-17 Adopted Budget, as a result of reduced on-time performance by Amtrak.

MOW revenues are estimated at \$13.4 million, a decrease of 8.8% from FY2016-17 Adopted 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 FY2017-18 Budget includes a Train Operations budget of \$183.8 million, Maintenance-of-Way (MOW) budget of \$41.6 million, and Insurance budget of \$17.7 million. The total of \$243.0 million is a decrease of \$0.8 million or 0.3% less than the FY2016-17 Adopted 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. Projects are selected based on the principle of minimizing and managing the risk of failure among system components. For FY2017-18, Rehabilitation projects were evaluated and ranked based on this criteria. The resulting list of potential projects was then prioritized according to project delivery capacity. The amount proposed for new Rehabilitation projects in FY2017-18 totals \$89.6 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 2017-18*								
(\$000)'s								
Federal Funds	\$	838						
State Funds	\$	1,290						
Member Agency Local Funds	\$	2,253						
Carryover from prior year	\$	176,887						
Rotem Settlement	\$	303						
Other Funds	\$	58						
	\$	181,628						

\*Reflects proposed budget

#### 3.6 Summary of the Total FY2017-18 Budget

The FY2017-18 proposed budget totals \$638.2 million and consists of an Operating Budget of \$243.0 million and a Capital Program of \$395.2 million. The Operating Budget includes Train Operations of \$183.8 million, MOW budget of \$41.6 million, and \$17.7 million covering Insurance. The total Capital Program Budget is \$395.2 million. The Capital Program Budget contains a \$177.0 million Rehabilitation component, which includes \$89.6 million of New Authority; and a \$218.2 million New Capital component, which includes \$5.3 million of New Authority.

The FY2017-18 Budget was modified for adoption to the amount approved by each Member Agency for Operating and Rehabilitation/New Capital during their respective budget adoption processes. The Operating Budget was adopted as proposed by Metrolink staff while the additions to the Capital Program Budget were adopted in the amount of \$56.6 million for Rehabilitation and \$2.8 million for New Capital for a total budget of \$602.7 million.

#### 3.7 Exhibits

**Exhibits 3.1a – 3.1d: Summary of FY2015-16 to FY2017-18 Statistics by Line** provide the estimated operating statistics by line for FY2017-18 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 FY2017-18 is projected at 34.8 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 61.8%. The San Bernardino revenue recovery is estimated at 47.9%, the Riverside Line at 44.3%, the IEOC Line at 34.2%, the Antelope Valley Line at 34.4%, the Ventura County Line at 29.0%, and the 91 Line at 27.1%.

**Exhibits 3.2 – 3.5: Performance Data (FY1992-93 to FY2017-18)** provide a summary of the projected annual operating performance data as represented in the FY2017-18 Budget compared to the FY2016-17 Adopted Budget and 24 years of historical actuals since FY1992-93. 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: FY2013-14 to FY2017-18 Annual Operating Budget by Cost Component by Fiscal Year** displays the line items that comprise the FY2017-18 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 FY2017-18 Budget and compares these with actual expenses for the fiscal years FY2013-14 to FY2015-16 and the FY2016-17 Adopted 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, Maintenance-of-Way (MOW), general and administrative expenses, professional services and insurance. For FY2015-16 and FY2016-17, these expenses included the BNSF Lease Locomotive costs.

**Exhibit 3.7: FY2017-18 Annual Operating Budget by Cost Component by Member Agency** includes the line items that comprise the FY2017-18 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 & 3.7, offset by Revenues, determine the annual member subsidy contribution. FY2017-18 total Member Agency subsidy of \$142.4 million represents a \$0.4 million, or 0.3%, increase over the FY2016-17 Adopted Budget.

(000's)	Y <b>2</b> 016-17 Adopted	FY2017-18 Adopted	,	Variance	% Change
Metro	\$ 71,998	\$ 71,659	\$	(340)	(0.5%)
ΟCTA	\$ 28,294	\$ 28,239	\$	(56)	(0.2%)
RCTC	\$ 17,345	\$ 17,705	\$	361	2.1%
SBCTA	\$ 14,841	\$ 14,960	\$	119	0.8%
VCTC	\$ 9,511	\$ 9,836	\$	325	3.4%
Total	\$ 141,989	\$ 14 <b>2,</b> 399	\$	410	0.3%

Numbers may not foot due to rounding.

**Exhibit 3.8: FY2014-15 to FY2017-18 Revenue Sources Trend** provides a summary of the FY2017-18 Budget Revenue to provide funding for Operating Expenses of \$243.0 million and for that portion of the Capital Program authority which will be expended in FY2017-18, which is estimated at \$181.6 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 flat, failing to keep pace with rising operating costs. In 2018, at farebox revenue of \$85.2 million, we are assuming a \$0.6 million or 0.7% increase over the FY2016-17 Adopted Budget.
- 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 FY2017-18 Budget assumes Member Agency

subsidies at \$142.4 million, a 0.3% increase over FY2016-17 Adopted Budget.

With respect to Capital Revenues:

The amounts shown can be traced to the Cash Flows shown in Exhibit 7.7.1 of \$4.7 million added to the Carryover spending of \$176.9 million. Total dollars are separated into funding categories, including state and federal grants, interest on lease proceeds, freight railroad and local funds. The FY2017-18 Budget detailed allocations are compared to budgeted or actual funding sources for FY2014-15 through FY2017-18. See proviso regarding budget modifications in second paragraph of Section 3.6.

#### Exhibit 3.9: FY2017-18 Budget Revenue Sources and Use by Member

**Agency** provides a summary of the FY2017-18 Budget Revenue Source and Use to cover Operating Expenses of \$243.0 million and capital program authority of \$181.6 million by Member Agency. Operating Budget expenses represent only FY2017-18 expenditures, while the Capital Program Budget includes 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. See proviso regarding budget modifications in second paragraph of Section 3.6.

#### Exhibit 3.1a Summary of FY2015-16 to FY2017-18 Statistics by Line

	San	Ventura	Antelope		Orange	Orange Co		91/	
LINE	Bernardino	County <sup>(1)</sup>	Valley	Riverside	County	MSEP	IEOC	PVL Line <sup>(2)</sup>	Total
Service Levels									
Weekday Train Trips - FY 16 Actual	38	31	30	12	19	10	16	15	171
Weekend Train Trips - FY 16 Actual	34	0	24	0	16	0	8	8	90
Total Train Trips - FY 16 Actual	72	31	54	12	35	10	24	23	261
Weekday Train Trips - FY 17 Budget	38	31	30	12	19	10	16	15	171
Weekend Train Trips - FY 17 Budget	34	0	24	0	16	0	8	8	90
Total Train Trips - FY 17 Budget	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
Passenger Boardings <sup>(3)</sup>									
FY16 Actual	3,073,878	982,336	1,847,900	1,144,944	2,379,192	89,756	1,251,105	735,288	11,504,399
FY17 Budget	3,074,700	1,029,879	2,090,009	1,171,603	2,704,372	97,773	1,294,735	738,031	12,201,102
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
% Change-FY16 Actual to FY18 Budget	(11.1%)	7.6%	(11.5%)	(13.8%)	13.0%	(2.4%)	16.5%	15.2%	(0.1%)
% Change-FY17 Budget to FY18 Budget	(11.2%)	2.6%	(21.8%)	(15.8%)	(0.6%)	(10.4%)	12.6%	14.8%	(5.8%)
Service Train Miles									
FY16 Actual	658,100	249,474	602,945	192,566	435,669	92,518	336,200	160,450	2,727,922
FY17 Budget	663,919	252,772	611,437	195,111	440,750	93,704	342,623	229,353	2,829,668
FY18 Budget	663,919	252,772	611,437	195,111	440,750	93,704	342,623	229,353	2,829,668
% Change-FY16 Actual to FY18 Budget	0.9%	1.3%	1.4%	1.3%	1.2%	1.3%	1.9%	42.9%	3.7%
% Change-FY17 Budget to FY18 Budget	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Passenger Miles (000s) <sup>(4)</sup>									
FY16 Actual	110,470	26,040	71,701	40,069	84,030	1,043	41,548	28,024	402,923
FY17 Budget	110,479	26,947	80,035	40,825	93,774	1,662	45,812	28,951	428,485
FY18 Budget	98,714	27,651	62,518	34,384	93,867	1,490	50,089	33,525	402,238
% Change-FY16 Actual to FY18 Budget	(10.6%)	6.2%	(12.8%)	(14.2%)	11.7%	42.8%	20.6%	19.6%	(0.2%)
% Change-FY17 Budget to FY18 Budget	(10.6%)	2.6%	(21.9%)	(15.8%)	0.1%	(10.4%)	9.3%	15.8%	(6.1%)
Average Weekday Ridership									
FY16 Actual	10,744	3,959	5,886	4,651	8,847	236	4,613	2,419	41,355
FY17 Budget	10,779	3,890	5,929	4,679	8,708	376	4,508	2,317	41,186
FY18 Budget	9,104	4,064	5,421	3,795	9,509	468	4,599	2,925	39,885
% Change-FY16 Actual to FY18 Budget	(15.3%)	2.7%	(7.9%)	(18.4%)	7.5%	98.3%	(0.3%)	20.9%	(3.6%)
% Change-FY17 Budget to FY18 Budget	(15.5%)	4.5%	(8.6%)	(18.9%)	9.2%	24.5%	2.0%	26.3%	(3.2%)
Average Trip Length (Miles) <sup>(5)</sup>	35.9	26.2	38.1	34.8	34.1	17.0	33.6	39.4	34.8

Numbers may not foot due to rounding.

(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 FY2015-16 to FY2017-18 Statistics by Line

LINE Operating Cost (w/ MOW) <sup>(L)</sup> FY16 Actual FY17 Budget FY18 Budget % Change-FY16 Actual to FY18 Budget % Change-FY17 Budget to FY18 Budget Operating Cost (w/o MOW Extraordinary Main FY16 Actual FY17 Budget	50,282 53,042 52,215	County 27,768 28,727 28,914 4.1% 0.7% 27,538	Valley 47,180 49,960 49,562 5.0% (0.8%)	Riverside   19,492   20,658   20,339   4.3%   (1.5%)	County 32,689 34,592 34,905 6.8% 0.9%	MSEP 6,010 5,866 6,261 4.2% 6.7%	IEOC 25,470 27,781 27,282 7.1%	PVL Line 17,456 22,858 23,341 33.7%	Total 226,680 243,814 243,045
FY16 Actual FY17 Budget FY18 Budget % Change-FY16 Actual to FY18 Budget % Change-FY17 Budget to FY18 Budget Operating Cost (w/o MOW Extraordinary Main FY16 Actual	53,373 52,441 3.6% (1.7%) nt) <sup>(1)</sup> 50,282 53,042 52,215	28,727 28,914 4.1% 0.7% 27,538	49,960 49,562 5.0%	20,658 20,339 4.3%	34,592 34,905 6.8%	5,866 6,261 4.2%	27,781 27,282 7.1%	22,858 23,341	243,814 243,045
FY16 Actual FY17 Budget FY18 Budget % Change-FY16 Actual to FY18 Budget % Change-FY17 Budget to FY18 Budget Operating Cost (w/o MOW Extraordinary Main FY16 Actual	53,373 52,441 3.6% (1.7%) nt) <sup>(1)</sup> 50,282 53,042 52,215	28,727 28,914 4.1% 0.7% 27,538	49,960 49,562 5.0%	20,658 20,339 4.3%	34,592 34,905 6.8%	5,866 6,261 4.2%	27,781 27,282 7.1%	22,858 23,341	243,814 243,045
FY18 Budget % Change-FY16 Actual to FY18 Budget % Change-FY17 Budget to FY18 Budget Operating Cost (w/o MOW Extraordinary Main FY16 Actual	53,373 52,441 3.6% (1.7%) nt) <sup>(1)</sup> 50,282 53,042 52,215	28,914 4.1% 0.7% 27,538	49,562 5.0%	20,339 4.3%	34,905 6.8%	6,261 4.2%	27,781 27,282 7.1%	22,858 23,341	243,814 243,045
FY18 Budget % Change-FY16 Actual to FY18 Budget % Change-FY17 Budget to FY18 Budget Operating Cost (w/o MOW Extraordinary Main FY16 Actual	52,441 3.6% (1.7%) nt) <sup>(1)</sup> 50,282 53,042 52,215	28,914 4.1% 0.7% 27,538	49,562 5.0%	20,339 4.3%	34,905 6.8%	6,261 4.2%	27,282 7.1%	23,341	243,045
% Change-FY17 Budget to FY18 Budget Operating Cost (w/o MOW Extraordinary Main FY16 Actual	(1.7%) nt) <sup>(1)</sup> 50,282 53,042 52,215	0.7% 27,538		4.3%	6.8%		7.1%	33.7%	
% Change-FY17 Budget to FY18 Budget Operating Cost (w/o MOW Extraordinary Main FY16 Actual	nt) <sup>(1)</sup> 50,282 53,042 52,215	27,538	(0.8%)	(1.5%)	0.9%	6.7%			7.2%
FY16 Actual	50,282 53,042 52,215	-				0.770	(1.8%)	2.1%	(0.3%)
FY16 Actual	50,282 53,042 52,215	-							
FY17 Budget	52,215		46,935	19,285	32,434	6,010	25,267	17,412	225,163
8		28,498	49,706	20,466	34,350	5,866	27,590	22,808	242,325
FY18 Budget		28,757	49,377	20,221	34,750	6,261	27,161	23,302	242,044
% Change-FY16 Actual to FY18 Budget	3.8%	4.4%	5.2%	4.9%	7.1%	4.2%	7.5%	33.8%	7.5%
% Change-FY17 Budget to FY18 Budget	(1.6%)	0.9%	(0.7%)	(1.2%)	1.2%	6.7%	(1.6%)	2.2%	(0.1%)
Operating Cost (w/o MOW)									
FY16 Actual	39,235	21,091	38,053	18,269	27,867	5,269	21,751	15,691	187,227
FY17 Budget	41,825	22,714	41,395	19,471	30,064	5,170	23,885	19,699	204,223
FY18 Budget	40,696	22,454	40,439	19,152	29,922	5,477	23,335	19,963	201,438
% Change-FY16 Actual to FY18 Budget	3.7%	6.5%	6.3%	4.8%	7.4%	3.9%	7.3%	27.2%	7.6%
% Change-FY17 Budget to FY18 Budget	(2.7%)	(1.1%)	(2.3%)	(1.6%)	(0.5%)	5.9%	(2.3%)	1.3%	(1.4%)
Subsidy (w/MOW)									
FY16 Actual	24,588	19,240	30,502	10,353	8,924	5,287	15,817	12,464	127,173
FY17 Budget	27,137	19,971	32,930	11,545	10,202	4,799	18,222	17,182	141,989
FY18 Budget	27,327	20,547	32,511	11,332	10,670	5,050	17,950	17,013	142,399
% Change-FY16 Actual to FY18 Budget	11.1%	6.8%	6.6%	9.5%	19.6%	(4.5%)	13.5%	36.5%	12.0%
% Change-FY17 Budget to FY18 Budget	0.7%	2.9%	(1.3%)	(1.8%)	4.6%	5.2%	(1.5%)	(1.0%)	0.3%
Farebox Revenue									
FY16 Actual	22,419	6,467	11,669	8,870	21,342	455	8,473	4,830	84,524
FY17 Budget	22,604	6,574	10,829	8,910	21,646	782	8,312	4,924	84,582
FY18 Budget	21,493	6,230	12,122	8,780	21,837	943	8,173	5,580	85,159
% Change-FY16 Actual to FY18 Budget	(4.1%)	(3.7%)	3.9%	(1.0%)	2.3%	107.3%	(3.5%)	15.5%	0.8%
% Change-FY17 Budget to FY18 Budget	(4.9%)	(5.2%)	11.9%	(1.5%)	0.9%	20.6%	(1.7%)	13.3%	0.7%
Other Revenues <sup>(2)</sup>									
FY16 Actual	3,608	2,060	5,010	269	2,423	268	1,181	163	14,983
FY17 Budget	3,632	2,182	6,201	203	2,743	285	1,246	752	17,243
FY18 Budget	3,621	2,138	4,929	227	2,398	268	1,159	747	15,487
% Change-FY16 Actual to FY18 Budget	0.4%	3.8%	(1.6%)	(15.8%)	(1.0%)	(0.2%)	(1.9%)	359.5%	3.4%
% Change-FY17 Budget to FY18 Budget	(0.3%)	(2.0%)	(20.5%)	11.9%	(12.6%)	(6.2%)	(7.0%)	(0.6%)	(10.2%)
Numbers may not foot due to rounding.									

Notes:

(1) Costs include all expenses for Metrolink and MOW on operating and non-operating lines

(2) Other revenues include dispatching fees and MOW revenues from freight and Amtrak due to individual member agencies.

#### Exhibit 3.1c Summary of FY2015-16 to FY2017-18 Statistics by Line

	San	Ventura	Antelope		Orange	Orange Co			
LINE	Bernardino	County	Valley	Riverside	County	MSEP	IEOC	91 Line <sup>(1)</sup>	Total
Average Fare/Passenger									
FY16 Actual	\$7.29	\$6.58	\$6.31	\$7.75	\$8.97	\$5.07	\$6.77	\$6.57	\$7.35
FY17 Budget	\$7.35	\$6.38	\$5.18	\$7.61	\$8.00	\$8.00	\$6.42	\$6.67	\$6.93
FY18 Budget	\$7.87	\$5.89	\$7.41	\$8.90	\$8.12	\$10.77	\$5.61	\$6.59	\$7.41
% Change-FY16 Actual to FY18 Budget	7.9%	(10.5%)	17.4%	14.9%	(9.5%)	112.4%	(17.2%)	0.3%	0.9%
% Change-FY17 Budget to FY18 Budget	7.0%	(7.6%)	43.1%	17.0%	1.5%	34.6%	(12.7%)	(1.3%)	6.9%
Op Cost/Passenger (w/o MOW Extraordinary	Maint)								
FY16 Actual	\$16.36	\$28.03	\$25.40	\$16.84	\$13.63	N/A	\$20.20	\$23.68	\$19.57
FY17 Budget	\$17.25	\$27.67	\$23.78	\$17.47	\$12.70	N/A	\$21.31	\$30.90	\$19.86
FY18 Budget	\$19.12	\$27.21	\$30.20	\$20.49	\$12.92	N/A	\$18.63	\$27.50	\$21.06
% Change-FY16 Actual to FY18 Budget	16.9%	(2.9%)	18.9%	21.7%	(5.2%)	N/A	(7.8%)	16.1%	7.6%
% Change-FY17 Budget to FY18 Budget	10.8%	(1.7%)	27.0%	17.3%	1.7%	N/A	(12.6%)	(11.0%)	6.0%
Op Cost/Passenger Mile (w/o MOW Extraord	inary Maint)								
FY16 Actual	\$0.46	\$1.06	\$0.65	\$0.48	\$0.39	N/A	\$0.61	\$0.62	\$0.56
FY17 Budget	\$0.48	\$1.06	\$0.62	\$0.50	\$0.37	N/A	\$0.60	\$0.79	\$0.57
FY18 Budget	\$0.53	\$1.04	\$0.79	\$0.59	\$0.37	N/A	\$0.54	\$0.70	\$0.60
% Change-FY16 Actual to FY18 Budget	16.2%	(1.7%)	20.7%	22.2%	(4.1%)	N/A	(10.8%)	11.9%	7.7%
% Change-FY17 Budget to FY18 Budget	10.2%	(1.7%)	27.2%	17.3%	1.1%	N/A	(10.0%)	(11.8%)	6.4%
Subsidy/Passenger									
FY16 Actual	\$8.00	\$19.59	\$16.51	\$9.04	\$3.75	N/A	\$12.64	\$16.95	\$11.05
FY17 Budget	\$8.83	\$19.39	\$15.76	\$9.85	\$3.77	N/A	\$14.07	\$23.28	\$11.64
FY18 Budget	\$10.01	\$19.44	\$19.88	\$11.48	\$3.97	N/A	\$12.31	\$20.08	\$12.39
% Change-FY16 Actual to FY18 Budget	25.1%	(0.7%)	20.4%	27.0%	5.8%	N/A	(2.6%)	18.5%	12.1%
% Change-FY17 Budget to FY18 Budget	13.4%	0.3%	26.2%	16.5%	5.2%	N/A	(12.5%)	(13.8%)	6.5%
Subsidy/Passenger Mile									
FY16 Actual	\$0.22	\$0.74	\$0.43	\$0.26	\$0.11	N/A	\$0.38	\$0.44	\$0.32
FY17 Budget	\$0.25	\$0.74	\$0.41	\$0.28	\$0.11	N/A	\$0.40	\$0.59	\$0.33
FY18 Budget	\$0.28	\$0.74	\$0.52	\$0.33	\$0.11	N/A	\$0.36	\$0.51	\$0.35
% Change-FY16 Actual to FY18 Budget	24.4%	0.6%	22.2%	27.6%	7.0%	N/A	(5.9%)	14.1%	12.2%
% Change-FY17 Budget to FY18 Budget	12.7%	0.3%	26.4%	16.5%	4.5%	N/A	(9.9%)	(14.5%)	6.8%
Op Cost/Service Train Mile (w/o MOW Extra	ordinary Maint	 :)							
FY16 Actual	\$76.40	\$110.38	\$77.84	\$100.15	\$74.45	\$64.96	\$75.16	\$108.52	\$82.54
FY17 Budget	\$79.89	\$112.74	\$81.29	\$104.89	\$77.93	\$62.60	\$80.53	\$99.44	\$85.64
FY18 Budget	\$78.65	\$113.77	\$80.76	\$103.64	\$78.84	\$66.81	\$79.27	\$101.60	\$85.54
% Change-FY16 Actual to FY18 Budget	2.9%	3.1%	3.7%	3.5%	5.9%	2.9%	5.5%	(6.4%)	3.6%
% Change-FY17 Budget to FY18 Budget	(1.6%)	0.9%	(0.7%)	(1.2%)	1.2%	6.7%	(1.6%)	2.2%	(0.1%)

Notes:

(1) Includes PVL Services
#### Exhibit 3.1d Summary of FY2015-16 to FY2017-18 Statistics by Line

	San	Ventura	Antelope		Orange	Orange Co			
LINE	Bernardino	County	Valley	Riverside	County	MSEP	IEOC	91 Line <sup>(3)</sup>	Total
Operating Cost/Service Train Mile (w/o MOV	1 <sup>-1</sup>								
FY16 Actual	\$59.62	\$84.54	\$63.11	\$94.87	\$63.96	\$56.95	\$64.70	\$97.80	\$68.63
FY17 Budget	\$63.00	\$89.86	\$67.70	\$99.79	\$68.21	\$55.17	\$69.71	\$85.89	\$72.17
FY18 Budget	\$61.30	\$88.83	\$66.14	\$98.16	\$67.89	\$58.45	\$68.11	\$87.04	\$71.19
% Change-FY16 Actual to FY18 Budget	2.8%	5.1%	4.8%	3.5%	6.1%	2.6%	5.3%	(11.0%)	3.7%
% Change-FY17 Budget to FY18 Budget	(2.7%)	(1.1%)	(2.3%)	(1.6%)	(0.5%)	5.9%	(2.3%)	1.3%	(1.4%)
Farebox Recovery <sup>(1)</sup>									
FY16 Actual	44.4%	23.4%	24.8%	45.7%	65.5%	7.6%	33.4%	27.7%	37.4%
FY17 Budget	42.4%	22.9%	21.7%	43.2%	62.7%	13.3%	30.0%	21.6%	34.7%
FY18 Budget	41.0%	21.6%	24.5%	43.2%	62.6%	15.1%	30.0%	23.9%	35.1%
% Change-FY16 Actual to FY18 Budget	(7.7%)	(7.7%)	(1.3%)	(5.5%)	(4.4%)	99.0%	(10.2%)	(13.7%)	(6.2%)
% Change-FY17 Budget to FY18 Budget	(3.3%)	(6.0%)	12.8%	(0.1%)	(0.1%)	13.0%	0.0%	11.0%	0.9%
Revenue Recovery <sup>(2)</sup>									
FY16 Actual	51.6%	30.8%	35.4%	47.1%	72.9%	12.0%	38.0%	28.6%	44.0%
FY17 Budget	49.2%	30.5%	34.1%	44.2%	70.6%	18.2%	34.5%	24.8%	41.8%
FY18 Budget	47.9%	29.0%	34.4%	44.3%	69.5%	19.3%	34.2%	27.1%	41.4%
% Change-FY16 Actual to FY18 Budget	(7.1%)	(6.0%)	(2.8%)	(5.9%)	(4.7%)	60.7%	(10.0%)	(5.3%)	(5.9%)
% Change-FY17 Budget to FY18 Budget	(2.7%)	(5.2%)	0.9%	0.2%	(1.6%)	6.3%	(0.7%)	9.1%	(0.9%)

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" = \$151K in FY18.

FY18. (2) Revenue recovery is the ratio of operating revenues to operating expenses net of Non-BNSF operating category "Rolling Stock Lease" = \$151K in FY18.

(3) Includes PVL Services

Exhibit 3.2 Operating Expense, Revenues and Operating Subsidy



Actuals to FY16, Budget for FY17 and FY18 FY16 Actual and FY17 Budget include BNSF Lease Locomotives costs.



Exhibit 3.3 Train Miles, Fares and Average Weekday Ridership

Actuals to FY16, Budget for FY17 and FY18





Actuals to FY16, Budget for FY17 and FY18

FY16 Actual and FY17 Budget include BNSF Lease Locomotives costs.

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

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



Actuals to FY16, Budget for FY17 and FY18

FY16 Actual and FY17 Budget include BNSF Lease Locomotives costs.

Passenger miles and riders used in the calculation are based on ticket sales starting FY12

## Exhibit 3.6 FY2013-14 to FY2017-18 Annual Operating Budget by Cost Component by Fiscal Year

(\$000's)	FY 13-14	FY 14-15	FY 15-16	FY 16-17 *	FY 17-18	FY17-18 Bu FY16-17 E	
Operating Revenue	Actual	Actual	Actual	Budget	Budget	Variance	%
Farebox Revenue	85,673	83,134	83,652	83,556	83,897	341	0.4%
Metro Fare Reduction Subsidy			873	1,025	1,262	236	23.0%
Subtotal-Pro Forma FareBox	85,673	83,134	84,524	84,582	85,159	577	0.7%
Dispatching	2,480	2,493	2,120	2,590	2,125	(465)	(18.0%)
Other Revenues	319	372	429	12	12	-	0.0%
MOW Revenues	12,922	13,207	12,434	14,641	13,350	(1,291)	(8.8%)
Subtotal Operating Revenue	101,394	99,207	99,507	101,825	100,646	(1,179)	(1.2%)
Operating Expenses							
Operations & Services							
Train Operations	37,043	40,569	41,887	43,942	44,642	701	1.6%
Equipment Maintenance	28,542	32,649	33,751	37,581	36,691	(890)	(2.4%)
Contingency (Train Ops)	-	-		-	-	-	n/a
Fuel	26,161	24,454	17,381	22,772	19,656	(3,116)	(13.7%)
Non-Scheduled Rolling Stock Repairs	2	2	136	100	100	-	0.0%
Operating Facilities Maintenance	1,056	1,120	1,149	1,418	1,652	234	16.5%
Other Operating Train Services	264	293	239	496	470	(26)	(5.3%)
Rolling Stock Lease	-	105	638	370	151	(219)	(59.2%)
Security - Sheriff	4,482	5,136	4,912	5,511	5,845	334	6.1%
Security - Guards	2,170	1,591	1,685	2,000	2,837	837	41.9%
Supplemental Additional Security	763	81	-	690	690	-	0.0%
Public Safety Program	157	177	217	320	277	(44)	(13.6%)
Passenger Relations	1,622	1,639	1,748	2,069	1,795	(274)	(13.2%)
Holiday Trains	-	-	-	-	-	-	n/a
TVM Maintenance/Revenue Collection	5,343	5,984	6,554	7,495	7,510	15	0.2%
Marketing	949	949	1,137	1,220	1,364	144	11.8%
Media & External Communications	226	234	343	396	443	47	11.9%
Utilities/Leases	3,180	2,622	2,046	2,778	3,289	512	18.4%
Transfers to Other Operators	6,469	7,081	6,488	6,577	6,592	14	0.2%
Amtrak Transfers	917	800	1,287	1,400	2,177	777	55.5%
Station Maintenance	1,190	1,121	1,418	1,640	1,687	47	2.9%
Rail Agreements	4,992	4,997	5,207	5,379	5,366	(12)	(0.2%)
Subtotal Operations & Services	125,528	131,602	128,223	144,153	143,234	(919)	(0.6%)
Maintenance-of-Way							
MoW - Line Segments	28,152	33,043	37,936	38,570	40,606	2,036	5.3%
MoW - Extraordinary Maintenance	1,322	1,235	1,518	1,175	1,001	(174)	(14.8%)
Subtotal Maintenance-of-Way	29,475	34,278	39,453	39,745	41,607	1,862	4.7%
Administration & Services							
Ops Salaries & Fringe Benefits	11,127	11,535	12,892	14,019	13,961	(59)	(0.4%)
Ops Non-Labor Expenses	3,424	3,651	5,322	5,378	7,374	1,996	37.1%
Indirect Administrative Expenses	12,679	11,791	12,417	15,507	15,870	364	2.3%
Ops Professional Services	464	969	2,019	1,816	3,084	1,268	69.9%
Subtotal Admin & Services	27,694	27,946	32,651	36,720	40,289	3,569	9.7%
Contingency (Non-Train Ops)	21	14	47	355	252	(103)	(29.0%)
Total Operating Expenses	182,718	193,839	200,374	220,973	225,382	4,409	2.0%
Insurance Expense/(Revenue)						-	
Liability/Property/Auto	14,252	12,597	11,634	12,588	12,475	(113)	(0.9%)
Claims / SI	1,457	1,884	3,876	3,000	4,000	1,000	33.3%
Claims Administration	743	1,145	421	1,198	1,187	(11)	(0.9%)
PLPD Revenue	(178)	(1)	(22)	-	-	-	n/a
Net Insurance Expense	16,273	15,625	15,909	16,787	17,663	876	5.2%
Total Expense Before BNSF	198,991	209,464	216,283	237,760	243,045	5,285	2.2%
Loss Before BNSF	(97,598)	(110,257)	(116,776)	(135,934)	(142,399)	(6,465)	4.8%
Member Subsidies							
Operations	83,052	92,252	109,003	119,148	124,736	5,589	4.7%
Insurance	17,302	17,678	18,079	16,787	17,663	876	5.2%
Total Member Subsidies	100,354	109,930	127,082	135,934	142,399	6,465	4.8%
Surplus / (Deficit) Before BNSF	2,757	(328)	10,306	-	-		4.0/0
BNSF LEASED LOCOMOTIVE COSTS	2,131	(320)	10,500	-	-	-	
Lease cost Inc. ship			4,449	2,525		(2,525)	n/a
	-	-	4,449	2,323	-	(2,323)	n/a n/a
Major Component Parts	_	_	/20	-	-		n/a n/a
Major Component Parts	-	-		000			
Labor for Maintenance	-	-	2,597	900 1 230	-	(900)	
Labor for Maintenance Additional Fuel	-		2,597 1,341	900 1,230	-	(900) (1,230)	n/a
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes	-		2,597 1,341 37	1,230 -	-		n/a n/a
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods	-	-	2,597 1,341 37 136	1,230 - -	-	(1,230)	n/a n/a n/a
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods PTC Costs		- - - -	2,597 1,341 37 136 1,116	1,230 - - 1,399	- - -	(1,230) - - (1,399)	n/a n/a n/a n/a
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods PTC Costs Total BNSF Lease Loco Expenses	- - - - -	-	2,597 1,341 37 136 1,116 <b>10,397</b>	1,230 - - 1,399 <b>6,055</b>	- - - -	(1,230) (1,399) (6,055)	n/a n/a n/a n/a <b>n/a</b>
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods PTC Costs Total BNSF Lease Loco Expenses Member BNSF Lease Subsidies	- - - - - -	-	2,597 1,341 37 136 1,116 <b>10,397</b> <b>11,545</b>	1,230 - - 1,399		(1,230) - - (1,399)	n/a n/a n/a n/a
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods PTC Costs Total BNSF Lease Loco Expenses	- - - - - - - - - -	-	2,597 1,341 37 136 1,116 <b>10,397</b>	1,230 - - 1,399 <b>6,055</b>		(1,230) (1,399) (6,055)	n/a n/a n/a n/a
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods PTC Costs Total BNSF Lease Loco Expenses Member BNSF Lease Subsidies		-	2,597 1,341 37 136 1,116 <b>10,397</b> <b>11,545</b>	1,230 - - 1,399 <b>6,055</b>		(1,230) (1,399) (6,055)	n/a n/a n/a n/a
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods PTC Costs Total BNSF Lease Loco Expenses Member BNSF Lease Subsidies Surplus / (Defict) - BNSF Lease TOTAL EXPENSE	- 198,991	- - - 209,464	2,597 1,341 37 136 1,116 10,397 11,545 1,148 226,680	1,230 - - 1,399 6,055 6,055 - 243,814	- 243,045	(1,230) - - (1,399) (6,055) (6,055) - - (769)	n/a n/a n/a n/a n/a n/a (0.3%)
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods PTC Costs Total BNSF Lease Loco Expenses Member BNSF Lease Subsidies Surplus / (Deficit) - BNSF Lease TOTAL EXPENSE Net Loss	- 198,991 (97,598)	- - - 209,464 (110,257)	2,597 1,341 37 136 1,116 10,397 11,545 1,148 226,680 (127,173)	1,230 - - 1,399 6,055 6,055 - - 243,814 (141,989)	- 243,045 (142,399)	(1,230) - - (1,399) (6,055) (6,055) - - (769) (410)	n/a n/a n/a n/a n/a (0.3%)
Labor for Maintenance Additional Fuel Wheel truing, Software Mods, Brakes Temp Facility Mods PTC Costs Total BNSF Lease Loco Expenses Member BNSF Lease Subsidies Surplus / (Defict) - BNSF Lease TOTAL EXPENSE	- 198,991	- - - 209,464	2,597 1,341 37 136 1,116 10,397 11,545 1,148 226,680	1,230 - - 1,399 6,055 6,055 - 243,814	- 243,045	(1,230) - - (1,399) (6,055) (6,055) - - (769)	n/a n/a n/a n/a n/a n/a (0.3%)

Numbers may not foot due to rounding.

(1) FY17 budget was adjusted subsequent to adoption, to the amounts as shown here, due to MOW project expense re-distribution. Member agency subsidies are not effected by the adjustment

# Exhibit 3.7 FY2017-18 Annual Operating Budget by Cost Component by Member Agency

			FY2017-1	8 Budget		
(\$000s)	Metro	OCTA	RCTC	SBCTA	VCTC	Total
Operating Revenue				T		
Farebox Revenue	40,769	22,453	7,759	10,512	2,404	83,897
Metro Fare Reduction Subsidy	1,262	-	-	-	-	1,262
Subtotal-Pro Forma FareBox	42,031	22,453	7,759	10,512	2,404	85,159
Dispatching	1,130	684	6	55	250	2,125
Other Revenues	6	3	1	2		12
MOW Revenues	8,052	2,531	667	1,556	544	13,350
Subtotal Operating Revenue	51,219	25,671	8,433	12,124	3,199	100,646
Operating Expenses						
Operations & Services						
Train Operations	23,764	10,028	4,546	4,683	1,622	44,642
Equipment Maintenance	18,385	8,591	3,799	4,300	1,616	36,691
Fuel	10,094	4,951	1,960	2,020	631	19,656
Non-Scheduled Rolling Stock Repairs	53	24	8	11	3	100
Operating Facilities Maintenance	881	401	126	189	55	1,652
Other Operating Train Services	222	81	70	48	49	470
Rolling Stock Lease	72	30	17	22	11	151
Security - Sheriff	3,098	1,180	843	601	122	5,845
Security - Guards	1,338	489	424	290	296	2,837
Supplemental Additional Security	341	182	63	85	19	690
Public Safety Program	130	48	41	28	29	277
Passenger Relations	899	461	146	230	58	1,795
TVM Maintenance/Revenue Collection	3,129	1,650	1,252	1,024	454	7,510
Marketing	703	330	109	176	45	1,364
Media & External Communications	209	76	66	45	46	443
Utilities/Leases	1,551	567	492	336	343	3,289
Transfers to Other Operators	3,535	1,577	521	731	228	6,592
Amtrak Transfers	694	1,375	-	-	108	2,177
Station Maintenance	1,036	240	108	226	78	1,687
Rail Agreements	1,902	1,533	1,231	356	344	5,366
Subtotal Operations & Services	72,034	33,816	15,823	15,403	6,159	143,234
Maintenance-of-Way						
MoW - Line Segments	21,458	8,317	3,103	5,350	2,378	40,606
MoW - Extraordinary Maintenance	587	129	97	108	80	1,001
Subtotal Maintenance-of-Way	22,046	8,446	3,200	5,458	2,458	41,607
Administration & Services						
Ops Salaries & Fringe Benefits	6,581	2,417	2,082	1,428	1,452	13,961
Ops Non-Labor Expenses	3,745	1,630	818	806	375	7,374
Indirect Administrative Expenses	7,481	2,736	2,374	1,622	1,657	15,870
Ops Professional Services	1,454	532	461	315	322	3,084
Subtotal Admin & Services	19,261	7,314	5,736	4,172	3,806	40,289
Contingency (Non-Train Ops)	119	43	38	26	26	252
Total Operating Expenses	113,460	49,620	24,796	25,058	12,448	225,382
Insurance Expense/(Revenue)				T		
Liability/Property/Auto	6,652	3,030	948	1,431	414	12,475
Claims / SI	2,133	972	304	459	133	4,000
Claims Administration	633	288	90	136	39	1,187
PLPD Revenue	-	-	-	-	-	-
Net Insurance Expense	9,418	4,290	1,342	2,026	586	17,663
Total Expense	122,877	53,910	26,139	27,084	13,035	243,045
Loss	(71,659)	(28,239)	(17,705)	(14,960)	(9,836)	(142,399)
Member Subsidies						-
Operations	62,241	23,949	16,363	12,934	9,250	124,736
Insurance	9,418	4,290	1,342	2,026	586	17,663
Total Member Subsidies	71,659	28,239	17,705	14,960	9,836	142,399
Surplus / (Deficit)	-	-	-	-	-	-

#### Exhibit 3.8 FY2014-15 to FY2017-18 Revenue Sources Trend

	FY 14-15		FY 15-16	FY 16-17			FY 17-18	Change from
(000's)	Actual		Actual		Budget		Budget	FY 17 Budget
Operating Revenues				Ī		Γ		
Farebox	\$ 83,134	\$	84,524	\$	84,582	\$	85,159	0.7%
Dispatching Agreements	\$ 2,493	\$	2,120	\$	2,590	\$	2,125	(18.0%)
Other Operating <sup>(1)</sup>	\$ 373	\$	429	\$	12	\$	12	0.0%
Maintenance-of-Way	\$ 13,207	\$	12,434	\$	14,641	\$	13,350	(8.8%)
Local Funds for Operating <sup>(2)</sup>	\$ 110,257	\$	127,173	\$	141,989	\$	142,399	0.3%
Subtotal Operating Revenues	\$ 209,465	\$	226,680	\$	243,814	\$	243,045	(0.3%)
Percent of Total Revenues	78.8%		73.4%		68.1%		57.2%	
Capital Revenues <sup>(3)</sup>								
State	\$ 28,620	\$	29,997	\$	49,726	\$	1,290	(97.4%)
Federal	\$ 19,262	\$	31,677	\$	22,657	\$	838	(96.3%)
Interest on Lease Proceeds	\$ -	\$	-	\$	263	\$	-	(100.0%)
Union Pacific Railroad/BNSF	\$ -	\$	-	\$	120	\$	-	(100.0%)
Amtrak	\$ -	\$	-	\$	-	\$	-	N/A
Other Non-Member (includes insurance recoveries)	\$ 1,676	\$	9,788	\$	4,648	\$	58	(98.7%)
Local Funds for Capital	\$ 6,927	\$	10,808	\$	36,771	\$	2,253	(93.9%)
Rotem Settlement						\$	303	
Carryover from prior year <sup>(4)(5)</sup>	N/A		N/A		N/A	\$	176,887	N/A
Subtotal Capital Revenues	\$ 56,485	\$	82,270	\$	114,185	\$	181,628	59.1%
Percent of Total Revenues	21.2%		26.6%		31.9%		42.8%	
Total Revenues	\$ 265,950	\$	308,950	\$	357,999	\$	424,673	18.6%
ocal Revenues as a Percent of Total	44.1%	1	44.7%	Ì	49.9%	Ì	N/A	

Numbers may not foot due to rounding.

(1) Other Revenues include one-time and other non-recurring sources.

(2) In FY18, a portion of local funds will be reimbursed by Federal Preventive Maintenance Grant.

(3) FY17 Capital Revenue is presented with estimated actuals.

(4) Carryover is not applicable in FY15, FY16, and FY17 because funding type was identified when expenses were recorded.

(5) \$177M of total \$299M carryover for Rehab and New Capital projects is forecast to be expended in FY18. This expended amount includes \$106M from Tier 4 locomotives, \$36M from Rehabilitation projects, \$14M from other New Capital projects and \$21M from projects amended in FY17.

## Exhibit 3.9 FY2017-18 Budget Revenue Sources and Use by Member Agency

							Total	% of
Operating Budget	Metro	OCTA	RCTC	SBCTA	VCTC	System	FY 17-18	Total
Local Funds for Operating	71,659	28,239	17,705	14,960	9,836	-	142,399	58.6%
Operations	57,665	22,324	15,173	11,058	7,922	-	114,142	47.0%
Maintenance-of-Way (MOW)	13,994	5,915	2,532	3,902	1,914	-	28,257	11.6%
Other Operating Revenues	51,219	25,671	8,433	12,124	3,199	-	100,646	41.4%
Farebox Revenue	42,031	22,453	7,759	10,512	2,404	-	85,159	35.0%
Non-Fare Operating Revenue	1,136	687	7	57	251	-	2,137	0.9%
MOW Revenues	8,052	2,531	667	1,556	544	-	13,350	5.5%
Total Funding Sources for Operating	122,877	53,910	26,139	27,084	13,035	-	243,045	100.0%
Total Operating Expenditures	122,877	53,910	26,139	27,084	13,035	-	243,045	100.0%
Operating Expenditures (Excludes MOW)	100,832	45,464	22,939	21,626	10,577	-	201,438	82.9%
Maintenance-of-Way	22,046	8,446	3,200	5,458	2,458	-	41,607	17.1%
							Total	% of
Capital Program Expenditure in FY18	Metro	ОСТА	RCTC	SBCTA	VCTC	System	FY 17-18	Total
Local Funds for Capital	2,385	52	29	70	19	-	2,556	1.4%
New Capital	125	52	29	38	19	-	264	0.1%
Rehabilitation/Renovation	1,989	-	-	-	-	-	1,989	1.1%
Rotem Settlement	270		-	32	-	-	303	0.2%
Other Capital Revenues	-	-	-	-	-	2,186	2,186	1.2%
Interest on Lease Proceeds	-	-	-	-	-	-	-	0.0%
Other Non-Member (includes insurance recoveries)	-	-	-	-	-	58	58	0.0%
State Funds	-	-	-	-	-	1,290	1,290	0.7%
Federal Funds	-					838	838	0.5%
UPRR Funds	-	-	-	-	-	-	-	0.0%
Carryover Expenditures in FY18	31,691	16,645	2,443	7,188	6,903	112,018	176,887	97.4%
Total Funding Sources for Capital Program	34,076	16,697	2,472	7,258	6,922	114,204	181, <b>62</b> 8	100.0%
Total Capital Program Expenditures in FY18	34,076	16,697	2,472	7,258	6,922	114,204	181, <b>62</b> 8	100.0%
New Capital	125	52	29	38	19	-	264	0.1%
Rehabilitation/Renovation	1,989	-	-	-	-	2,186	4,175	2.3%
Rotem Settlement	270	-	-	32	-	-	303	0.2%
Carryover from prior year	31,691	16,645	2,443	7,188	6,903	112,018	176,887	97.4%
Total Expenditures	156,953	70,607	28,610	34,342	19.957	114,204	424,673	

Note: Sources and use Exhibits 3.8 and 3.9 are reflective of the FY18 Proposed Budget prior to the modifications for unfunded amounts described in second paragraph of Section 3.6.

## SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

## FY2017-18 BUDGET

## **SECTION 4: Operating Revenues**

#### 4.1 Introduction

SCRRA's funding requirement for the FY2017-18 Operating Budget is \$243.0 million. This funding is provided by a combination of SCRRA generated revenues and subsidies from the five Member Agencies. SCRRA revenues include farebox, dispatching, MOW and miscellaneous revenue sources. The FY2017-18 Member Agency subsidy requirement of \$142.4 million represents a \$0.4 million, or 0.3%, increase from the FY2016-17 Adopted Budget.

SCRRA estimated FY2017-18 revenues are \$100.6 million, a decrease of \$1.2 million from the FY2016-17 Adopted Budget. In FY2016-17 and FY2017-18, total revenues are represented as follows:

	FY 2016-17			FY 2017-18	Change from FY17 Budget			
	Α	dopted Budget <sup>(1)</sup>		Budget	\$ Variance	% Variance		
Farebox	\$	84,582	\$	85,159	\$ 577	0.7%		
MOW	\$	14,641	\$	13,350	\$ (1,291)	(8.8%)		
Dispatching	\$	2,590	\$	2,125	\$ (465)	(18.0%)		
Other Revenue	\$	12	\$	12	\$ -	0.0%		
Subtotal	\$	101,825	\$	100,646	\$ (1,179)	(1.2%)		
Member Agencies	\$	141,989	\$	142,399	\$ 410	0.3%		
Total	\$	243,814	\$	<b>2</b> 43,045	\$ (769)	(0.3%)		

Numbers may not foot due to rounding.

(1) Budget includes BNSF Lease Locomotive costs which ended in October 2016

#### 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. Marketing efforts directly relate to these goals and have been outlined in a comprehensive Marketing Plan that was presented to the SCRRA Board in January 2017.

Below is an executive summary of the efforts outlined in the Marketing Plan:

- The primary marketing programs for FY2016-17 focus on growing corporate accounts, targeting new residents who move near a station, students, as well as retaining existing riders. These programs are designed to attract and maintain work week commuter ridership.
- Digital programs to attract new markets are also a primary objective. Marketing plan tactics have shifted to focus on digital (i.e. social media platforms) as compared to traditional tactics (i.e. radio and print). Digital tactics are electronic, have features that provide measurement and are highly targeted. This shift is designed to reach more Millennials (born 1981-1997) and Gen X riders who tend to be digitally literate. This demographic represents 53% of Metrolink's ridership and are the fastest growth segment. Transit survey data indicates that the millennial generation expects enhanced technology including mobile ticketing and apps as part of the ridership experience. The Marketing Department is working closely with IT, PTC and Operations staff to develop essential enhancements in FY2017-18 including a new website, real time train information and improvements to the Metrolink app.
- This plan aims to enhance technology offerings to meet customer needs. Metrolink must take a more proactive approach to responding to technology trends. In 2012, 83% of Metrolink's website audience viewed our site from a desktop. In January of 2016, 65% viewed the site from a mobile device. This dramatic shift to mobile devices is expected to grow and Metrolink must meet those expectations by providing a mobile experience that is designed for smart devices utilizing responsive design.
- Four recollectables programs in the Marketing Plan are funded by Third Parties or Member Agencies. These programs supplement the Authority's marketing efforts, but they have specific objectives that must be met to fulfill funding criteria.
- Furthermore, there are secondary programs that are designed to focus on offpeak markets such as the bike community, seniors and the school-related group trips.
- Non-fare revenue generating programs are also part of the Plan and include filming opportunities, charter trains and revenue advertising. It is a goal to grow non-fare revenues to offset the costs of labor for marketing staff.
- Metrolink will celebrate its 25<sup>th</sup> anniversary in October 2017. Staff will leverage existing resources and communication channels to highlight the bright future for Metrolink. The 25<sup>th</sup> anniversary messaging will be forward thinking and focus on the improvements in safety, technology and customer convenience.

• The Board has directed staff work in coordination with our Member Agencies to develop ridership acquisition marketing campaign that will have a budget of up to \$3.9 million. The campaign will span throughout Southern California with a goal to increase Metrolink ridership. Staff will develop the campaign details and work with each Member Agency to receive approval and fund the plan.

#### Strategic Plan Alignment

The chart below outlines the Strategic Plan Goal, the Strategic Plan Measurable Outcome and Marketing Goal for programs identified in the Marketing Plan. The outline indicates alignment with goals identified to support the adopted strategic plan; there are 26 separate programs that relate to each Strategic Plan Goal. Each program includes background information, objective/target audience, previous results, the strategic goal alignment, goals and tactics.

Strategic Plan Goal	Strategic Plan Measurable Outcome	Marketing Goal
Goal 1: Maintain Fiscal Sustainability	Increase Ticket Sales	<ul> <li>Increase overall (weekday and weekend) revenue as indicated in the budget</li> </ul>
Goal 2: Increased Non-Fare Revenues	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
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	<ul> <li>Develop an annual marketing plan</li> <li>Conduct monthly meetings with Member Agencies to coordinate marketing efforts</li> </ul>

Goal 5: Increase Regional Mobility	Strategy A: Increased and improved connectivity of local and regional transit systems to Metrolink	<ul> <li>Use existing channels to communicate /market seamless transfers by purchasing a Metrolink ticket/pass.</li> <li>Create co-marketing opportunities with rideshare services to solve last mile solution</li> </ul>
Goal 6: Improve Communications to Customers and Stakeholders	Strategy A: Improve Customer Amenities, Online Ticketing and Mobile Device Amenities	<ul> <li>Offer online ticket purchases through metrolinktrains.com</li> </ul>

Using the strategic plan as a foundation, the Marketing Department will continue in their efforts of meeting with Member Agencies on a monthly basis. These meetings help to maintain brand consistency and coordinate efforts to utilize channels available to each Member Agency in promoting Metrolink. This approach streamlines creative design, web development, public relations, partnerships, print and advertising space for the benefit of Metrolink and Member Agencies.

#### 4.3 Maintenance-of-Way (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 \$13.4 million, or \$1.3 million less than the FY2016-17 Adopted 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 FY2017-18 are estimated to equal \$2.1 million, down \$0.5 million from the FY2016-17 Adopted Budget. Details are shown in Exhibit 4.3, displaying a reduction in Amtrak payments due to lower on-time performance.

#### 4.5 Exhibits

**Exhibit 4.1: FY2017-18 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:** FY2014-15 to FY2017-18 Maintenance-of-Way (MOW) Revenue Trends details various MOW revenue agreements by territory and source with annual actual revenues for FY2014-15 and FY2015-16, and budgeted revenues for FY2016-17 and FY2017-18.

**Exhibit 4.3: FY2014-15 to FY2017-18 Dispatching Revenue Trends** lists various dispatching revenue agreements by territory with annual actual revenues for FY2014-15 and FY2015-16, and budgeted revenues for FY2016-17 and FY2017-18.

**Exhibit 4.4: FY2014-15 to FY2017-18 Other Operating Revenue Trends** lists various revenue sources such as Amtrak TVM and interest with annual actual revenues for FY2014-15 and FY2015-16, and budgeted revenues for FY2016-17 and FY2017-18.

### Exhibit 4.1 FY2016-17 to FY2017-18 Fare Revenue and Ridership

(\$000)	Ave	rage Daily R	lidership	Revenue/	Rider (\$'s)	Far	e Revenue	(\$000's)
	FY16-17	FY17-18	% Change from	FY16-17	FY17-18	FY16-17	FY17-18	% Change from
Operating Line	Budget	Budget	FY17 Budget	Budget	Budget	Budget	Budget	FY17 Budget
San Benardino								
Weekday	10,419	9,104	(12.6%)	7.60	8.11	20,581	19,208	(6.7%)
Weekend	3,517	3,502	(0.4%)	5.53	6.28	2,023	2,285	13.0%
Ventura County	3,961	4,064	2.6%	6.38	5.90	6,574	6,230	(5.2%)
Antelope Valley								
Weekday	6,894	5,421	(21.4%)	5.30	7.48	9,504	10,543	10.9%
Weekend	2,861	2,172	(24.1%)	4.46	6.99	1,326	1,579	19.1%
Riverside	4,506	3,795	(15.8%)	7.61	8.90	8,910	8,780	(1.5%)
Orange County								
Weekday	9,326	9 <i>,</i> 509	2.0%	8.29	8.14	20,100	20,135	0.2%
Weekend	2,690	2,293	(14.8%)	5.53	7.14	1,546	1,702	10.1%
OC MSEP	376	468	24.5%	8.00	7.75	782	943	20.6%
IEOC								
Weekday	4,278	4,599	7.5%	6.84	6.28	7,613	7,513	(1.3%)
Weekend	1,754	1,989	13.4%	3.69	3.19	699	660	(5.5%)
91/Perris Valley								
Weekday	2,630	2,925	11.2%	6.94	6.90	4,745	5,247	10.6%
Weekend	521	834	60.1%	3.30	3.85	179	334	86.3%
Totals								
Weekday	42,390	39,885	(5.9%)	7.15	7.58	78,809	78,599	(0.3%)
Weekend	11,343	10,790	(4.9%)	4.89	5.85	5,773	6,560	13.6%
Total	53,733	50,675	(5.7%)	6.93	7.41	84,582	85,159	0.7%

## Exhibit 4.2 FY2014-15 to FY2017-18 Maintenance-of-Way (MOW) Revenue Trends

(\$000)	FY14-15	FY15-16	FY16-17	FY17-18	Change from
Agreement/Territory	Actuals	Actuals	Budget	Budget	FY17 Budget
Amtrak Intercity	1,186	916	1,187	917	(22.8%)
LAUS Rail Yard Operations & Maintenance (Amtrak)	329	502	380	510	34.2%
Azusa Branch Shared Use (UPRR/SPTC)	132	135	139	139	0.0%
Baldwin Park Branch Shared Use (UPRR/SPTC)	296	301	312	312	0.0%
Coast & Saugus Shared Use (UPRR/SPTC)	5 <i>,</i> 838	5,161	6,332	5,250	(17.1%)
East Bank Joint Facility (UPRR/SPTC)	1,042	701	735	730	(0.7%)
Mission Tower (UPRR/SPTC)	95	120	91	120	31.9%
San Diego & Olive Subdivision Shared Use (BNSF)	1,649	1,708	1,778	1,754	(1.3%)
Pasadena Subdivision Shared Use (BNSF)	2,442	2,219	2,310	2,279	(1.4%)
State Grade Crossing (CPUC)	79	297	338	338	0.0%
PVL/San Jacinto Subdivision Shared Use (BNSF)	-	54	677	667	(1.4%)
Redlands Subdivision Shared Use (BNSF)	18	216	224	222	(1.1%)
Crossing Maintenance Fees	101	105	139	113	(18.8%)
Federal/Other Funds	-	-	-	-	-
Total	13,207	12,434	14,641	13,350	(8.8%)

(\$000)	FY14-15	FY15-16	FY16-17	FY17-18	Change from
Agreement/Territory	Actuals	Actuals	Budget	Budget	FY17 Budget
Amtrak Intercity	1,846	1,425	1,876	1,424	(24.1%)
Coast & Saugus Shared Use (UPRR/SPTC)	257	257	257	257	0.0%
East Bank Joint Facility (UPRR/SPTC)	91	91	92	92	0.0%
Mission Tower (UPRR/SPTC)	167	222	226	225	(0.4%)
San Diego & Olive Subdivision Shared Use (BNSF)	52	58	58	59	1.7%
Pasadena Subdivision Shared Use (BNSF)	71	61	75	62	(16.9%)
San Jacinto Subdvision	9	6	6	6	(5.0%)
North County Transit District (NCTD)	-	-	-	-	-
Total	2,493	2,120	2,590	2,125	(18.0%)

### Exhibit 4.3 FY2014-15 to FY2017-18 Dispatching Revenue Trends

### Exhibit 4.4 FY2014-15 to FY2017-18 Other Operating Revenue Trends

(\$000's)	FY14-15	FY15-16	FY16-17	FY17-18	Change from
Revenue Source	Actuals	Actuals	Budget	Budget	FY17 Budget
Marketing Revenues	23	74	12	12	0.0%
Amtrak TVM Revenues	148	159	-	-	-
Lease Proceeds	50	-	-	-	-
Insurance Recoveries	41	2	-	-	-
Interest	8	2	-	-	-
Miscellaneous Revenues	84	22	-	-	-
TPA Earnings		167	-	-	-
Scrap and Salvage Sales	17	4	-	-	-
Total	372	429	12	12	0.0%

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## SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

## FY2017-18 BUDGET

## **SECTION 5: Operating Expenses**

#### 5.1 Introduction

SCRRA's Operating Expenses for FY2017-18 are projected at \$243.0 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 \$183.8 million, or 75.6% of the total Operating Budget. MOW costs are \$41.6 million, or 17.1% of the total Operating Budget. Insurance expenses are \$17.7 million, or 7.3% of the total Operating Budget.

The approach for budgeting was a zero base. Each item submitted for inclusion in the FY2017-18 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.

Exhibit 3.7 – FY2017-18 Annual Operating Budget by Cost Component by Member Agency presents a detail of Operating Expenses by line item.

#### 5.2 Operating Budget Assumptions

#### 5.2.1 Service Levels

The FY2017-18 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 FY2017-18 Budget. A pilot program of 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, Maintenance-of-Way (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.

A Member Agency working group is currently working with a consultant to identify whether there is a way to simplify this allocation method, while still preserving an equitable division of costs among the Member Agencies.

#### 5.3 Train Operations

Train Operations expenses of \$183.8 million have increased \$2.5 million, or 1.4%, over the FY2016-17 Adopted Budget. These costs include multiple functional subcomponents, 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 Operating 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

Discussions with our current vendor for daily operation of trains (Amtrak) during the budget process kept base costs flat in FY2017-18 in line with the FY2016-17 approved amount.

#### Train Operations - Dispatching

The costs of SCRRA-provided dispatching services over the right-of-way territories owned by the SCRRA Member Agencies increased by 9.2% or 0.4 million in FY2017-18. This was the result of contractual salary escalation and the addition of a management position.

#### Equipment Maintenance

The Equipment Maintenance budget for FY2017-18 totals \$36.7 million, a decrease of \$890K, or 2.4% from the FY2016-17 Adopted Budget. This is comprised of three types of expense items:

- Outsourced mechanical services (primarily Bombardier) = \$24.9 million
- Materials issued from inventory to effect repairs = \$11.3 million
- Other Mechanical Service items = \$553K

Outsourced mechanical service expenses increased by \$2.5 million or 10.0%. A new service-specific, performance based, 8-year contract was negotiated to provide a 3.5% maximum escalator on these costs for same service after year one. The new contract increased costs by \$2.1 million in the first year. Additionally, a mobilization fee of \$399K was required for the function of conversion of contract to a performance specific mode.

Materials for rolling stock repairs have decreased \$2.7 million, or 19.4%, as compared to the FY2016-17 Adopted Budget. Actuals in FY2016-17 are forecasted to be under budget by approximately \$3.8 million. SCRRA has an aging fleet and until old equipment is replaced or rehabilitated, rolling stock will continue to require increased levels of maintenance to ensure safe and reliable operation.

Rolling Stock Maintenance Services (washing, buffing, extermination, etc.) were reclassified as Facilities Repairs and Maintenance. Consequently, Other Mechanical service items were \$723K lower than the FY2016-17 Adopted Budget.

#### Fuel

Usage of approximately 9 million gallons is based on projected consumption levels. FY2017-18 fuel prices are to be managed through a fuel hedging program. Use of a more formalized Fuel Hedging Program will allow SCRRA to lower fuel budget risk and fuel cost volatility, and allow for better planning and forecasting of fuel costs. The fuel budget of \$19.7 million is a \$3.1 million decrease from the FY2016-17 Adopted Budget.

#### Non-Scheduled Rolling Stock Repairs/Modifications

Repairs to accommodate unforeseen medium-scaled damage to rolling stock or rolling stock modifications is budgeted at \$100K, flat with the FY2016-17 Adopted Budget.

#### **Operating Facilities Maintenance**

This category includes: janitorial services; maintenance and hazardous materials compliance at the Central Maintenance Facility and other SCRRA facilities; the repair, fueling and maintenance of Authority-owned rubber tire vehicles and facilities equipment (forklifts, cranes, etc.); Rolling Stock service maintenance; and cost of tax on underground Fuel Storage tank. The total estimate for this category for FY2017-18 is \$1.6 million, an increase of \$233K over the FY2016-17 Adopted Budget. An increase due to the Authority's decision to purchase vehicles in lieu of renting Amtrak employee-vehicles as provided for in the Amtrak agreement. The acquisition will cost an additional \$200K in FY2017-18 and FY2018-19, but will eliminate rental fees and additional costs associated with the Amtrak agreement.

#### Other Operating Train Services

This category involves items directly related to operating the rail system: weather data forecast and earthquake reporting services, publications, printing of required manuals and the largest line item, emergency bus services. The projected expenditures of \$470K is a decrease of \$26K or 5.3% from the FY2016-17 Adopted Budget.

#### Rolling Stock Leases

In FY2016-17, rolling stock leases were utilized for PTC Testing, such costs included subsequent removal of PTC. Our Tier 4 Locomotive supplier has agreed to reimburse us for this lease, which will mean only the cost of removal will be incurred at the end of FY2017-18 which is expected to be \$151K, or \$219K less than prior year.

#### Security – Sheriff

Our contract with the Los Angeles County Sheriff's Department at \$5.8 million for FY2017-18 is 6.1% higher than the FY2016-17 Adopted Budget, but will provide security on late night Antelope Valley and San Bernardino trains.

#### Security – Guards

FY2017-18 Security Guard costs of \$2.8 million are higher than prior year by \$0.8 million or 41.9%. In an effort to maintain an adequate level of security despite rising costs, some security was shifted from Sheriffs to lower cost guards last year. The FY2016-17 contract was settled following the budget at \$2.3 million. The supplemental security category was used to provide funding. Therefore, the FY2017-18 contract is \$0.5 million or 25% higher than the FY2016-17 Adopted Budget. The steep increase is the second year of a multiyear contract with rates far lower in the first year. However, when considering the entire contract, this was the lowest bidder.

#### 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 improvements.

Availability of these funds vary directly with the growth, or decline, in fare revenues. In FY2017-18, this amount is estimated at \$690K.

#### 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 FRA; and Operation Lifesaver participation. The FY2017-18 Public Safety program has decreased by \$44K, or 13.6% from the FY2016-17 Adopted Budget.

#### Passenger Relations

The Passenger Relations budget is primarily for the Call Center which provides information to passengers. The \$1.8 million budget is a \$274K decrease from the FY2016-17 Adopted Budget, resulting from non-repetition of upgrades to the Call Center system and reduction in replacement or repair of call boxes.

#### Holiday Celebration Train

The SCRRA Board elected not to run the Holiday Celebration Train in FY2017-18.

#### 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 FY2017-18 Budget is \$7.5 million, flat with the FY2016-17 Adopted Budget. TVM repairs have decreased, while credit card fees have increased.

#### Marketing

The Marketing category totaling \$1.36 million is comprised of Marketing Department's budget of \$884K and Planning Department's market research budget of \$480K. For FY2017-18, the overall budget for Marketing Department decreased by \$126K whereas Planning Department's budget increased by \$270K from the FY2016-17 Adopted Budget. 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. The Planning Department's increased budget will be used to conduct a new Onboard Survey which has not been completed since 2015.

#### Media/External Communications

This includes media, public and community relations, website content development and the production of printed timetable schedules and Ride Guides. At \$443K, this line item is slightly up from the FY2016-17 Adopted Budget due to increased translations and Community Outreach.

#### Utilities/Leases

Utility and lease budgets are estimated at current monthly average costs. The total amount in FY2017-18 Budget is \$3.3 million, an increase of \$512K, resulting from

reclassification of a utility formerly charged to Ops Non-Labor Expenses category in the Administrative & Services section of the Operating Statement.

#### Transfers to Other Operators

These are amounts Metrolink pays to other Transit Operators to allow Metrolink ticket holders to transfer without further cost. The cost paid to other transit operators at \$6.6 million is flat with the FY2016-17 Adopted Budget. The largest share of \$5.1 million is paid to Metro.

#### 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 \$2.2 million budget is \$777K, or 55.5%, higher than the FY2016-17 Adopted Budget.

#### Station Maintenance

For FY2017-18, Station Maintenance is budgeted at \$1.7 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. We are currently in the process of reviewing changes to common area maintenance costs of \$1.2 million to determine the current equity of Union Station charges. This category is flat with the FY2016-17 Adopted Budget.

#### **Rail Agreements**

This line item represents payments to freight railroads, the Union Pacific and the Burlington Northern Santa Fe, 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 with the FY2016-17 Adopted 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 FY2017-18 budget. The total salary and fringe benefit budget for Train Operations is down from the FY2016-17 Adopted Budget by \$59K or 0.4%. *Exhibit 8.3* shows the complete current roster of SCRRA's 273 Full Time Equivalent (FTE) positions by department.

#### **Operations Direct Non-Labor Costs**

This category totals \$7.4 million for FY2017-18, an increase of \$2.0 million from the FY2016-17 Adopted Budget. This increase to maintenance of the PTC Wabtec system which was included in the base contract in Capital, is now in Operations. A total of \$5.4 million of the category, or 74.5%, is PTC software and utility costs (including the \$2.0 million increase). Other costs include operations related IT

expenses \$862K, travel and lodging expenses, 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 \$15.9 million for FY2017-18, up \$364K, or 2.3%, from the FY2016-17 Adopted Budget. Please refer to Section 7 for a discussion of G&A costs and their allocation to the various budget pools. "Other Post-Employment Benefits" (OPEB) will total \$1.6 million.

#### **Operations Professional Services**

This category includes consultants and other outside professional services. In FY2017-18, the total budget is \$3.1 million, which is an increase of \$1.3 million or 69.9% from the FY2016-17 Adopted Budget. Outside legal services comprise \$1.1 million or 35.5% of the costs in this category and are slightly down as compared to last year. The increases are: PTC Qualified MP for 24/7 desk coverage (expected to be an FRA requirement next year) - \$364K; specialized management to monitor new Condition Based Maintenance contract - \$500K; a consultant for establishment of a Retail Ticketing Sales network - \$400K.

#### 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 \$252K, representing 0.1% of the Operating Budget for FY2017-18.

#### 5.3.2 Train Operations Note

FY2017-18 cost components by line item expenditure for Train Operations, see *Exhibit 3.6 FY2017-18 Annual Operating Budget by Cost Component by Fiscal Year* and *Exhibit 3.7 FY2017-18 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, signal system, grade crossing warning system and the communication infrastructure. MOW expenses of \$41.6 million have increased \$1.8 million, or 4.7%, compared to the FY2016-17 Adopted Budget. The increase is primarily the result of maintenance needs for Signals and Communications of \$1.2 million, which were deferred from FY2016-17 as a result of necessary rehabilitation efforts on critical areas of Track and Structures. An

additional \$400K of the increase is in Track while the other \$200K is a combination of many categories.

MOW expenses are developed by SCRRA to ensure 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 portion of the Budget.

After years of inadequate funding of rehabilitation projects, in November 2016, Metrolink felt it was necessary to request an urgent budget amendment to provide \$49.2 million in additional rehabilitation funds to preserve the safety levels of the system at current speeds and weights. On April 21, 2017, the SCRRA Board voted to amend the FY2016-17 Adopted Budget to add \$34.2 million to the FY2016-17 Rehabilitation capital funding. The projects in this approved amendment have been added to the Rehabilitation Carryforward shown in this FY2017-18 Budget. Metrolink's backlog of deferred maintenance remains significant. Economic realities suggest that several years will be required to reduce the backlog to acceptable levels.

#### 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 Federal Railroad Administration (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 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 State of Good Repair 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 peakperiod 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 which has been available for Rehabilitation projects in the Capital Program budget. While PTC will become consistent, without adequate Rehabilitation funding, a continuing 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 Central Maintenance Facility '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 Exhibits 5.4 and 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 SCRRA 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 SCRRA 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 SCRRA 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 SCRRA labor, overhead and non-labor costs allocated to the Maintenance-of-Way (MOW) budget that are subsequently allocated to specific line segments on the basis of track miles.

*Other Costs* include payments for Positive Train Control 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 FY2017-18 MOW expenditures are projected at \$41.6 million and are funded by SCRRA generated MOW revenue and Member Agency subsidies. These costs and revenues are allocated over operating line and Member Agencies. *Exhibit* 5.3 *FY2017-18 Maintenance-of-Way Expenditures and Revenue Offsets* shows the Operating and Non-Operating line allocation.

Since FY1997-98, SCRRA 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

The FY2017-18 MOW Line Segment Budget of \$41.6 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 and Extraordinary Maintenance. Non-Operating lines include Sierra Madre – Claremont (Pasadena Subdivision), Baldwin Park Branch (San Bernardino County), Shortway Subdivision, Redlands 1<sup>st</sup> Mile, and Redlands Subdivision 1+.

### Maintenance-of-Way (MOW)

	FY17-18		
Operating Lines	\$	39,198	
Non-Operating Lines	\$	2,410	
FY18 Proposed Expenses	\$	41,607	

Includes both MOW - Line Segments & Extraordinary MOW

Numbers may not foot due to rounding.

Exhibit 5.4 FY2017-18 Maintenance-of-Way Expenditures by Line Segment/Territory – Operating Lines and Exhibit 5.5 FY2017-18 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 Maintenance-of-Way (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, SCRRA insurance coverage may reimburse the Authority for these costs.

For FY2017-18, the budget for extraordinary MOW equals \$1.0 million, a decrease of \$174K.

#### 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 FY2017-18, Insurance total expenses of \$17.7 million have increased by \$876K or 5.2% from the FY2016-17 Adopted Budget. This change has been caused primarily by a \$1.0 million increase (FY2016-17 was \$2.0 million, while the amount in FY2017-18 is \$3.0 million) in the set aside for FY2017-18 to recognize possible liabilities arising from the Oxnard incident in February 2015.

## 5.6 Exhibits

**Exhibit 5.1: FY2017-18 Service Assumptions** details the operating service assumptions for weekday, Saturday and Sunday trains by operating line. FY2017-18 includes 171 weekday trains and 90 weekend trains.

**Exhibit 5.2: FY2017-18 Service Train Miles** provides revenue train miles by operating line. No firm start date has been provided for the additional one mile for the new San Bernardino station. It is not included in this chart.

**Exhibit 5.3: FY2017-18 Maintenance-of-Way 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: FY2017-18 Maintenance-of-Way 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: FY2017-18 Maintenance-of-Way Expenditures by Line Segment/Territory – Non-Operating Lines and Total provides the cost of MOW for non-operating lines and the total costs allocated across operating lines and Member Agencies.

## Exhibit 5.1 FY2017-18 Service Assumptions

	Number of Trains			
	Weekday	Saturday	Sunday	
San Bernardino Line				
San Bernardino-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-Irvine	1			
San Bernardino-Laguna Niguel	4			
San Bernardino-Oceanside	3	4	4	
Riverside-Laguna Niguel	7			
Riverside-Oceanside	1			
Burbank/Bob Hope Airport				
Burbank Airport-LAUS	11			
Total	171	48	42	

#### Exhibit 5.2 FY2014-15 to FY2017-18 Service Train Miles

Line	FY15	FY16	FY17	FY18	Variance FY17-18 vs. FY16-17	
	Actuals	Actuals	Budget	Budget	Miles	%
San Bernardino Line	668,122	658,100	663,919	663,919	-	0.0%
Ventura County Line	247,204	249,474	252,772	252,772	-	0.0%
Antelope Valley Line	604,254	602 <i>,</i> 945	611,437	611,437	-	0.0%
Riverside Line	190,921	192,566	195,111	195,111	-	0.0%
91/Perris Valley Line	153,380	160,450	229 <i>,</i> 353	229 <i>,</i> 353	-	0.0%
Orange County Line (incl. MSEP)	524,188	528,187	534,454	534,454	-	0.0%
Inland Empire/Orange County Li	ne 332,906	336,200	342,623	342,623	-	0.0%
Total Service Train Miles	2,720,975	2,727,922	2,829,668	2,829,668	-	0.0%

Numbers may not foot due to rounding.

\* Service Train Miles: all train miles including deadheads and reallocation miles.

#### Exhibit 5.3 FY2017-18 Maintenance-of-Way Expenditures and Revenue Offsets

Line Segment/Territory (\$000s)	Metro	OCTA	RCTC	SBCTA	VCTC	FY17-18 Budge
Operating Lines	7,002	2,531	667	1,314	544	12,05
LA - San Bernardino	498	-	-	1,314	-	1,81
LA - Ventura (Burbank Jct to Moorpark)	829	-	-	-	544	1,37
LA - Lancaster	4,304	-	-	-	-	4,30
CRI-BURBANK JCT	-	-	-	-	-	-
Fullerton - San Diego County Line	-	2,342	-	-	-	2,34
Olive Subdivision	-	190	-	-		19
Riverside Layover Facility	-	-	-	-		-
River Corridor	1,371	-	-	-		1,37
Perris Valley	-	-	667	-	-	66
Extraordinary Maintenance	-	-	-	-		-
(Storm Damage, Vandalism, Gate Knockdowns)						
Non-Operating Lines	1,050	-	-	242	-	1,29
Sierra Madre - Claremont (Pasadena Sub)	1,050	-	-		-	1,0
Rialto Sub (San Bernardino Co.)	_,	-	-	21		
Shortway Sub	-	-	-			
Redlands 1st Mile						_
Redlands Sub MP1+				222		22
Total	8,052	2,531	667	1,556	544	13,3
Net Subsidy Allocation	8,032	2,331	007	1,550	544	13,3.
Line Segment/Territory (\$000s)	Metro	ΟርΤΑ	RCTC	SBCTA	VCTC	FY17-18 Budge
Operating Lines	13,667	5,816	2,484	3,259	1,914	27,13
LA - San Bernardino (1)	3,406	-	-	2,288	-	5,6
LA - Ventura (Burbank Jct to Moorpark) (2)	2,349	-	-	-,	1,477	3,8
LA - Lancaster	3,471	-	-	-	-,	3,4
CRI-BURBANK JCT		-	-	-	-	
Fullerton - San Diego County Line	710	3,571	632	99		5.0
Olive Subdivision	-	422	206	32		6
Riverside Layover Facility (3)	51	21	32	11		1
River Corridor (4)	2,357	982	551	715	357	4,9
Perris Valley	735	690	966	7	-	2,39
Extraordinary Maintenance (5)	587	129	97	108	80	1,00
(Storm Damage, Vandalism, Gate Knockdowns)	507	125	57	100		2,0
Non-Operating Lines	327	99	48	643		1,1
Sierra Madre - Claremont (Pasadena Sub)	220	-		-		2
Rialto Sub (San Bernardino Co.)	-	_	_	297		2
Shortway Sub	107	99	48	79		3
Redlands 1st Mile	-	-		123		12
Redlands Sub MP1+				143		14
Total	13,994	5,915	2,532	3,902	1,914	28,2
Total Expenditure Forecast	,	-,	_,	-,	_, :	
Line Segment/Territory (\$000s)	Metro	ΟርΤΑ	RCTC	SBCTA	vстс	FY17-18 Budge
Operating Lines	20,669	8,347	3,151	4,572	2,458	39,19
LA - San Bernardino	3,904	-		3,601	_,	7,5
LA - Ventura (Burbank Jct to Moorpark)	3,178			5,001	2,021	5,1
LA - Lancaster	7,775				2,021	7,7
CRI-BURBANK JCT	1,115	-	-	-	-	1,1
	710	5,913	622	- 99		7,3
Fullerton - San Diego County Line	/10		632			
Olive Subdivision	-	612	206	32	-	8
Riverside Layover Facility	51	21	32	11	-	1
River Corridor	3,728	982	551	715	357	6,3
Perris Valley (6)	735	690	1,634	7	-	3,0
Extraordinary Maintenance	587	129	97	108	80	1,0
(Storm Damage, Vandalism, Gate Knockdowns)						
Non-Operating Lines	1,377	99	48	885	-	2,4
	1 260	-	-	-	-	1,2
Sierra Madre - Claremont (Pasadena Sub)	1,269					3
	-	-	-	318	-	
Sierra Madre - Claremont (Pasadena Sub)	- 107	- 99	- 48	318 79	-	3
Sierra Madre - Claremont (Pasadena Sub) Rialto Sub (San Bernardino Co.)	-	- 99 -	- 48 -		-	
Sierra Madre - Claremont (Pasadena Sub) Rialto Sub (San Bernardino Co.) Shortway	-		- 48 - -	79	-	3

Numbers may not foot due to rounding.
(1) MoW net subsidy split by route miles (59.82% LACMTA and 40.18% SBCTA).
(2) MoM not subsidy split by train miles (61 419/ LACMTA and 29 E09/ VCTC)

Mow net subsidy split by train miles (Sol.22% Solution and Sol.25% SOLTO).
 Net subsidy split by train miles of trains using the Riverside Layover, excluding San Diego County (44.41% LACMTA, 18.33% OCTA, 27.88% RCTC, and 9.38% SBCTA).

(4) Split is assumed All Share (47.5% LACWTA, 19.8% OCTA, 11.1% RCTC, 14.4% SBCTA, and 7.2% VCTC) of cost in excess of revenues.
 (5) Allocation based on precent of route miles owned (58.66% LACWTA, 12.8% OCTA, 9.69% RCTC, 10.78% SBCTA, and 8.00% VCTC)
 (6) Allocation based on train miles of 91 line (23.98% LACWTA, 22.51% OCTA, 53.28% RCTC, 0.23% SBCTA)

## Exhibit 5.4 FY2014-15 to FY2017-18 Maintenance-of-Way Expenditures by Line Segment/Territory – Operating Lines

(\$000s)	FY 14-15	FY 15-16	FY 16-17	FY17-18	Variance		
	Expenditure	Expenditure	Expenditure	Expenditure	FY17-18 vs		
Line Segment/Territory	Actuals	Actuals	Budget <sup>(1)</sup>	Budget	\$	%	
Operating Lines	32,677	37,752	37,291	39,198	1,907	5.1%	
LA - San Bernardino	7,221	7,823	7,096	7,505	410	5.8%	
Track	1,133	1,427	1,285	1,312	27	2.1%	
Signal & Communications	2,514	2,900	2,440	2,662	221	9.1%	
Structures	173	178	205	214	9	4.5%	
Procurement	325	470	262	336	74	28.1%	
Other	1,239	1,182	1,179	1,229	50	4.2%	
Agency Costs	1,837	1,667	1,724	1,753	28	1.6%	
LA - Ventura (Burbank Jct to Moorpark)	4,800	5,399	4,873	5,199	326	6.7%	
Track	884	1,193	1,010	1,096	86	8.5%	
Signal & Communications	1,266	1,473	1,387	1,601	213	15.4%	
Structures	263	166	158	167	9	5.6%	
Procurement Other	161	416	209	155	(54)	(25.8%)	
	838 1,388	902	831 1,278	893 1 287	63 9	7.5% 0.7%	
Agency Costs LA - Lancaster	7,134	1,249 7,779	7,404	1,287 7,775	371	5.0%	
Track	1,228	1,461	1,220	1,274	54	4.4%	
Signal & Communications	1,228	2,077	2,018	2,221	204	4.4%	
Structures	1,780	135	2,018	2,221	204	3.5%	
Procurement	313	533	301	334	32	10.8%	
Other	1,328	1,449	1,428	1,479	51	3.6%	
Agency Costs	2,332	2,124	2,182	2,202	20	0.9%	
CRI-BURBANK JCT	18	-	7	-	(7)	(100.0%)	
Agency Costs	18	-	7	-	(7)	(100.0%)	
Fullerton - San Diego County Line	6,636	6,954	7,038	7,354	316	4.5%	
Track	981	1,293	1,090	1,121	31	2.8%	
Signal & Communications	2,448	2,549	2,714	2,937	224	8.2%	
Structures	208	154	205	205		0.1%	
Procurement	199	333	212	276	63	29.9%	
Other	998	990	1,121	1,109	(12)	(1.1%)	
Agency Costs	1,803	1,635	1,695	1,705	10	0.6%	
Olive Subdivision	712	701	885	850	(35)	(3.9%)	
Track	77	96	96	96	()	(0.3%)	
Signal & Communications	373	335	375	396	21	5.5%	
Structures	8	21	51	51		0.1%	
Procurement	20	10	58	24	(34)	(58.4%)	
Other	80	76	127	121	(6)	(4.4%)	
Agency Costs	154	163	178	162	(16)	(8.9%)	
Riverside Layover Facility	165	115	196	115	(82)	(41.7%)	
Track	55	41	28	23	(5)	(18.0%)	
Signal & Communications	9	10	10 8	12	2	24.4%	
Structures	4	1	_	8	(20)	5.3%	
Procurement Other	27 27	1 26	31 81	11 24	(20) (57)	(64.4%) (70.7%)	
Agency Costs	41	35	81 39	24 36	(37)	(70.7%) (6.5%)	
River Corridor	41	6,003	5,812	6,333	(3) 521	9.0%	
Track	926	1,295	1,081	1,292	210	19.4%	
Signal & Communications	2,146	2,583	2,980	3,134	153	5.1%	
Structures	132	83	135	135		0.1%	
Procurement	156	693	172	308	136	78.8%	
Other	575	617	671	696	25	3.7%	
Agency Costs	824	732	771	769	(3)	(0.4%)	
Perris Valley	1	1,460	2,805	3,066	261	9.3%	
Track		245	671	787	116	17.3%	
Signal & Communications		330	990	1,053	63	6.4%	
Structures	1	20	161	169	8	4.9%	
Procurement	1	77	143	72	(72)	(49.9%)	
Other		341	398	508	110	27.6%	
Agency Costs		446	441	476	35	7.8%	
Extraordinary Maintenance	1,235	1,518	1,175	1,001	(174)	(14.8%)	

Numbers may not foot due to rounding.

(1) FY17 budget was adjusted subsequent to adoption, to the amounts as shown here, due to MOW project expense re-distribution. Member agency subsidies are not effected by the adjustment
# Exhibit 5.5 FY2014-15 to FY2017-18 Maintenance-of-Way Expenditures by Line Segment/Territory – Non-Operating Lines and Total

(\$000)	FY 14-15	FY 15-16	FY 16-17	FY17-18	Varia	nce
	Expenditure	Expenditure	Expenditure	Expenditure	FY17-18 vs.	FY16-17
Line Segment/Territory	Actuals	Actuals	Budget <sup>(1)</sup>	Budget	\$	%
Non-Operating Lines	1,601	1,701	2,454	2,410	(45)	(1.8%)
Sierra Madre - Claremont (Pasa. Sub.)	1,438	1,242	1,214	1,269	56	4.6%
Track	194	155	61	55	(6)	(10.2%)
Signal & Communications	359	401	354	445	91	25.7%
Structures	79	32	26	27	1	2.7%
Procurement	87	32	53	48	(6)	(10.3%)
Other	284	224	280	288	8	3.0%
Agency Costs	435	397	439	407	(32)	(7.4%)
Rialto Subdivision (San Bernardino Co.)	125	161	294	318	24	8.1%
Track	13	53	109	120	11	10.0%
Signal & Communications	13	15	56	61	5	8.9%
Structures	3	-	26	26	-	0.0%
Procurement	12	6	11	15	4	39.1%
Other	27	33	40	39	(1)	(2.4%)
Agency Costs	57	54	52	57	5	9.1%
Shortway Sub	-	212	360	334	(26)	(7.2%)
Track	-	44	105	44	(61)	(57.8%)
Signal & Communications	-	12	126	133	6	5.1%
Structures	-	-	15	33	18	122.1%
Procurement	-	2	4	3	(1)	(28.8%)
Other	-	107	66	69	3	4.7%
Agency Costs	-	47	43	51	8	18.9%
Redlands 1st Mile	37	-	169	123	(46)	(27.1%)
Track	(2)	-	-	-	-	
Signal & Communications	6	-	48	63	15	32.0%
Structures	-	-	15	15	-	0.0%
Procurement	-	-	3	1	(2)	(58.0%)
Other	9	-	35	13	(22)	(63.5%)
Agency Costs	23	-	68	31	(37)	(54.6%)
Redlands Sub MP1+	-	87	418	365	(53)	(12.7%)
Track	-	46	100	28	(73)	(72.4%)
Signal & Communications	-	20	124	132	8	6.7%
Structures	-	24	3	5	2	57.4%
Procurement	-	11	12	14	3	24.3%
Other	-	43	110	113	3	2.4%
Agency Costs	-	(57)	69	73	4	6.0%

	FY 14-15 Expenditure	FY 15-16 Expenditure	FY 16-17 Expenditure	FY17-18 Expenditure	Varia FY17-18 vs.	
Line Segment/Territory	Actual	Actuals	Budget (1)	Budget	\$	%
Total Maintenance-of-Way	34,278	39,453	39,745	41,607	1,862	4.7%
Track	5,489	7,351	6,858	7,247	390	5.7%
Signal & Communications	10,914	12,706	13,623	14,851	1,228	9.0%
Structures	1,023	812	1,265	1,322	57	4.5%
Procurement	1,300	2,585	1,471	1,596	124	8.5%
Other	5,404	5,990	6,367	6,582	215	3.4%
Extraordinary Maintenance	1,235	1,518	1,175	1,001	(174)	(14.8%)
Agency Costs	8,913	8,493	8,987	9,008	21	0.2%

Numbers may not foot due to rounding.

(1) FY17 budget was adjusted subsequent to adoption, to the amounts as shown here, due to MOW project expense re-distribution. Member agency subsidies are not effected by the adjustment.

## SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

## FY2017-18 BUDGET

## **SECTION 6: Member Agency Subsidies**

#### 6.1 Member Agency Funding

For FY2017-18, total Member Agency subsidies are projected at \$142.4 million. This represents an increase of \$0.4 million over the FY2016-17 Adopted Budget, an increase of 0.3%.

	F	Y 13-14	FY 14-15	FY 15-16	FY 16-17	FY17-18
	<u>A</u>	ctual <sup>(1)</sup>	<u>Actual</u>	Actual <sup>(1)</sup>	Budget <sup>(2)</sup>	<u>Budget</u>
Subsidy	\$	97 <i>,</i> 598	\$ 110,257	\$ 127,173	\$ 141,989	\$ 142,399
% Change		12.5%	13.0%	15.3%	11.7%	0.3%

Numbers may not foot due to rounding.

(1) Actual includes BNSF Lease costs beginning October 2015.

(2) Budget includes BNSF Lease costs ending November 2016.

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## SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

## FY2017-18 BUDGET

## **SECTION 7: Capital Program Budget**

#### 7.1 Introduction

The Capital Program Budget consists of two major components totaling \$395.2 million: SCRRA's Rehabilitation and New Capital programs. These budgets total \$177.0 million and \$218.2 million, respectively. 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 FY2017-18.

As shown below, the FY2017-18 Budget was modified for adoption to the amount approved by each Member Agency for Operating and Rehabilitation/New Capital during their respective budget adoption processes. The new additions to the Capital Program Budget were adopted in the amount of \$56.6 million for Rehabilitation and \$2.8 million for New Capital. When combined with carryforward from prior years the Capital Program Budget totals \$359.7 million with \$144.1 million in Rehabilitation and \$215.7 million in New Capital.

(000's)	Proposed 2017-18	As Adopted FY2017-18		
Rehabilitation Carryover Projects <sup>1</sup>	\$ 87,455	\$	87,455	
Rehabilitation New Authority Projects	89 <i>,</i> 559		56,599	
Total Rehabilitation Projects	 177,013		144,053	
New Capital Carryover Projects	212,908		212,908	
New Capital New Authority Projects	 5,278		2,770	
Total New Capital Projects	 218,186		215,678	
Total FY 2017-18 Capital Program	\$ 395,199	\$	359,731	

Numbers may not foot due to rounding.

(1) Includes approved amendment to FY17 Rehabilitation projects.

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 FY2017-18 Budget.

In addition to the daily management of our core business of mass transit at the most efficient level, and Rehabilitation and New Capital Projects as described, Metrolink also takes on the responsibility of providing services to complete projects for Third Parties. The largest of these projects are frequently performed for one of

our Member Agencies. Listed below are expenditures on the 273 Third Party Projects completed in FY2015-16:

PROJECT DESCRIPTION	COST
PERRIS VALLEY LINE-MOU012	\$5,235,603
SIMI VALLEY GRADE XING IMPROV	\$3,381,851
MOORPARK AVE GRADE XING CONST.	\$2,797,724
PERRIS VALLEY LINE-MOU013	\$1,185,819
MTA - OUTSIDE 20'	\$966,444
SANBAG EMF & DSBPRP	\$867,706
CALTRANS I-5 PRMOTE PUBLC TRNS	\$807,385
I-5 N ENHANCEMNTS PROJECT	\$476,215
SPEED INCREASE@ CP SOLEDAD-DES	\$422,870
I-5/SR-14 CAP DRAINAGE IMPR	\$331,573
GRADE XING IMPRV@RAMONA-DESIGN	\$304,584
GRADE XING IMPRV@CITRUS-DESIGN	\$286,968
MGE-RIVERSIDE DRIVE BRIDGE	\$286,603
CITY LA 6TH STRT VIADUCT REPLC	\$227,304
LNIGUEL/SJ CAPISTRANO SIDING	\$167,890
LAGUNA-PASEO DE COLONIAS	\$166,295
CALTRANS- N ANAHEIM WIDENING	\$156,829
SAN CLEMENTE RIP RAP-PHASE II	\$152,358
BNSF - ORANGE	\$123,042
SANBAG - OUTSIDE 20'	\$113,383
PROJECT STUDY RPTS LA CNTY	\$102,016
BRANFORD XING CONSTRUCTION	\$98,240
SPRING STREET BRIDGE	\$90,374
AT GRADE XING AT HELLMAN AVE	\$76,718
METRO GOLD LINE-FOOTHILL EXT.	\$69,116
MAINT REDLANDS SUBDIV MP0-MP4	\$67,322
SIKAND-NEAR OAKRIDGE DRIVE	\$62,520
SAN CLEMENTE RIP RAP-PHASE I	\$58,834
CLEAR CHANNEL-BILLBOARDS/MEDIA	\$50,692
BOBHOPE AIRPORT STATION	\$50,549
HNTB SJ CAP RAIL SIDE PASSING	\$44,663
VAN NUYS STN CONSTR REVIEW	\$43,897
HIGH SPEED RAIL PLANNING/COORD	\$41,148
BNSF - SAN GABRIEL	\$40,095
SURVEY/MAP BRIGHTON/ROXFORD	\$34,411
OCTA-PLACENTIA DESIGN REVIEW	\$32,770
COLICH+SONS, RPR AN INVERT SEC	\$29,988
VIACOM-REBUILD OUTDOOR SIGNS	\$29,300
METRO GOLDLINE PHASE 2B	\$28,823
Number was a first of a first of the	

TETRA-PETERS CANYON PROJ	\$27,602
LOSSAN ROW SLOPE STABILIZATION	\$26,595
STV SURVEY WORK	\$25,933
STA CLARITA VISTA CANYON STN	\$25,543
SF BIKE PATH 3 W/COLA	\$22,211
BNSF - PASADENA	\$20,051
14 FOOT HIGH SOUND WALL	\$19,959
BALDWIN PARK-GRAFFITI	\$17,489
JUNIPER AVE GRADE CROSSING	\$17,063
ANAHEIM CANYON MTROLNK STN	\$16,362
ENVIRON CORP S/P REVIEW	\$16,086
MOORPARK-SPRING ROAD	\$15,410
OCTA WO#6-10 CROSSING	\$14,521
SIERRA AVE GRADE CROSSING	\$14,405
LACMTA VINCENT SIDING EXTION	\$14,373
17TH ST GRADE SEPARATION	\$14,238
O/H LINE S CLARITA S FERNANDO	\$14,138
SCE ARROW HWY & WHEELER AVE	\$14,077
FIX PIPE LA PAZ MISSION VIEJO	\$13,153
PAG OC BLOCK WALL AUTO MALL DR	\$12,991
LAUREL ST GRADE PROJECT	\$11,668
AMERICAN HEAVY MOVING-3 MOVES	\$11,405
CEDAR AVENUE STORM DRAIN	\$9,840
CLARK ARTIC FLAGGING/TRAINING	\$9,451
QWEST: BHA PROJECT E6944534	\$9,178
PED CROSSING BOB HOPE AIRPORT	\$8,834
CROSSING TRACKS FOR BORING	\$8,216
RCFC&WCD-CNCRTE BX IN MENIFEE	\$7,769
SDG&E PROJECT IN SJCAPISTRANO	\$7,511
SANTA CLARITA STATION PAINTING	\$7,467
RJ NOBLE PAVEMENT MAINTENANCE	\$7,442
UNDERGROUND CABLE WHEELER AVE	\$7,368
SDG-TRANSMISSION LINE	\$7,187
LA PAZ OVERHEAD WIDENING	\$6,726
IRVINE-SAND CANYON AVE.	\$6,474
SANTA CLARITA YR OVERLAY PROJ	\$6,358
BJD ARMY CORP ENGINEERS	\$6,333
SCE-REPLCE TRANS LINE SOLEDAD	\$6,259
I-5 WIDENING IN OC	\$5,923
I-10 TOLL LANES FLAGGING	\$5,773
CALTRANS BRIDGE INSPECTION	\$5,620

MATICH CORP RIALTO OVERLAY	\$5,091
SPARTA NEWHALL STN PAINTING	\$5,048
TRAFFIC CONTROL ORANGE	\$3,048
REPAIR CONCRETE ARTIC STATION	\$4,768
FOOTHILL TRANST CONSTCTRS	
	\$4,733
	\$4,530
SCE POWER POLE PROJECT COVINA	\$4,291
NU-LINE REHAB MANHOLES SJ CAP	\$4,100
IRWD 20" RECY WATER TRANS	\$3,985
TWC PLACE & REMOVE TTC DEVICES	\$3,975
SUBSURFACE UTIL POTHOLING	\$3,969
ELYSIAN VIADUCT OH	\$3,955
CALTRANS-PROVIDENCIA O/H WIDNG	\$3,779
RELOCATE UTILITY POLE BURBANK	\$3,745
LAG NIGUEL MISS VIEJO STN WORK	\$3,600
SCE REPLACE 7POLES 36.27	\$3,520
LOCATE UTILITIES S BERNARDINO	\$3 <i>,</i> 505
STREET RESURFACING HOLLENBECK	\$3,457
INSPECT/MAINTAIN VALVE 384	\$3,296
K&B-TWC FO WORK @ ANAHEIM	\$3,286
SCE REMOVE 21 POLES ANAHEIM	\$3,271
REDLANDS PASSENGER RAIL	\$3,252
INSTALNEW FOC TO XO COMM	\$3,179
SDGE MANHOLE H4818556651	\$2,998
SCE RE-ROUTE EXISTING LINE	\$2,948
LADWP POLE REPLACE TAMPA AVE	\$2,942
FORMWORK REMOVAL FORBES RD	\$2,869
MNWD REPLC PIPE NEAR MP 198.23	\$2,743
PUENTE WATER PHASE 1B & 2	\$2,701
TWO BROS. PLAN REVIEW	\$2,580
BOB HOPE HOLLYWOOD WY	\$2,577
LAMAR BILLBOARD MAINTENANCE	\$2,563
SPARTA DEMOLITION RAILROAD AVE	\$2,496
GRAFFITI REMOVAL 1734 MAIN ST	\$2,442
CARDNO POTHOLING LA VERNE	\$2,340
INSTALL F/O CABLE WHEELER AVE	\$2,248
NCTD-WHEEL SETS IN CMF	\$2,185
SURVEY LAGUNA NIGUEL	\$2,181
XFINITY COMMERCIAL CMF	\$2,159
ALL AMERICAN AGGREGATES	\$2,004
CALEX-PRIVATE XING	\$1,988
	Ŷ1,500

SANTA CLARITA NEW MEDIANSINSTALL O/H LINE ORANGESTATE ST OH WIDE & SEISMICKGC GRANDVIEW SUBSTATIONW.ENG-PRKNG LT IN RIALTOINSTALL FENCE UNIV OF LA VERNE	\$1,968 \$1,961 \$1,953 \$1,907 \$1,903 \$1,870 \$1,860
STATE ST OH WIDE & SEISMICKGC GRANDVIEW SUBSTATIONW.ENG-PRKNG LT IN RIALTO	\$1,953 \$1,907 \$1,903 \$1,870
KGC GRANDVIEW SUBSTATION   W.ENG-PRKNG LT IN RIALTO	\$1,907 \$1,903 \$1,870
W.ENG-PRKNG LT IN RIALTO	\$1,903 \$1,870
	\$1,870
SURVEYS/MAPPING GOLD LINE 2B	
DIAZ BORINGS VAN NUYS STATION	\$1,849
SDG&E POLES P108537 & Z227162	\$1,848
LA RIVER WATER WHEEL	\$1,833
TRAFFIC CONTROL 8860 VINEYARD	\$1,774
SCE REPLACE POLE VALENCIA	\$1,765
SUNESYS INSTALL LINE ORANGE	\$1,757
REMOVE/REPLACE ASPHALT	\$1,744
T.HOLDING-PLAN REVIEW	\$1,740
SCE REPLACE ONE POLE PERRIS	\$1,700
SCE REPLACE THREE POLES	\$1,687
CITY LA-NORTH MAIN ST. BRIDGE	\$1,621
REMOVE FOUR TREES ORANGE	\$1,523
O/H LINE ORANGE PLAN REVIEW	\$1,520
SCE-REPLC POLE IN SANTA ANA	\$1,478
SUN VALLEY WATERSHED PHASE I	\$1,448
SCE-REPLACE POLE IN ORANGE	\$1,361
PIPELINE RELOC PERRIS VALLEY	\$1,356
PRESSURE CONTROL VALVE	\$1,348
SDG+E CAMINO CAP & .89 MILES	\$1,343
PIPE INSPECTION SIMI VALLEY	\$1,327
SDGE: REPLACE POLE Z223330	\$1,314
SCE STRUCTURE REPLACEMENT	\$1,298
BNSF - PERRIS VALLEY	\$1,272
INSTALL CABLE LORAINE AVE	\$1,264
SCE CABLE MT VERNON 4TH ST	\$1,254
CA DEPT TRANS COMM LINE PERRIS	\$1,228
FYDAQ REPLACE PIPE IRVINE	\$1,184
SCE- REPL POLE IN LA VERNE	\$1,133
ETIC-SAMPLING GRND WATER	\$1,133
SCE REPLACE 4752828E &4752829E	\$1,128
LEMON GROVE LP - 36" DRAIN	\$1,126
FIRE SPRINKLERS ANAHEIM STN	\$1,068
ICDC LANDSCAPE TECH DR IRVINE	\$1,033
CCTV & FIBER OPTIC LAWNDALE	\$1,015

TETRA-GRND H2O MNITR IN BURBNK	\$1,001
REPLACE POLE 3800 VANOWEN ST	\$980
RSE PHOTOS POMONA	\$953
ERM-SOIL SMPLING IN LA	\$936
BOB HOPE AIRPT PED BRIDGE	\$890
VCI PULL BOX JEFFREY RD IRVINE	\$876
NEW CREATION PLATFORM LIGHTING	\$869
SCE REPLACE FOUR POLES PERRIS	\$867
WRIGHT CNST COAST TRAIL	\$852
GLENDALE WASTEWATER PROJECT	\$849
WATER MAINS WALNUT GROVE AVE	\$844
WATER MAINS SAN GABRIEL BLVD	\$844
TUNNEL UNDER TRACKS GLENDALE	\$844
KB ENG FOR TW CABLE PLAN	\$840
F/O CABLE FLOWER ST GLENDALE	\$835
INSTALL CONDUIT LASSEN ST	\$835
TRAFFIC SIGNAL & O/H SIGN	\$829
LNIGUEL/MISSION V METROLNK STN	\$821
YALE AVE PAVEMENT REHAB IRVINE	\$821
ALPHA INSTALL FENCE	\$821
SCE REPLACE POLE VINEYARD AVE	\$814
ANHEUSER-BUSCH PIPE WOODLEY	\$810
INSTALL O/H F/O CABLE ACTON	\$803
LACSD REHAB PIPELINE CARSON	\$762
REPAIRS TUSTIN & IRVINE STNS	\$760
MNWD WATERMAIN ABANDONMENT	\$757
TECHNOLOGY DR PROJECT IRVINE	\$722
GLENN SPRINGS PROJ IN LAVERNE	\$700
REMOVE INNERDUCT ALHAMBRA	\$696
SCE REPLACE POLE 1662246E	\$687
SAND CANYON TRAIL PHASE 3	\$683
CITY OF ANAHEIM-ARTIC	\$675
BORINGS STATE ST POMEROY AVE	\$655
SCE POLES RIALTO AVE D ST	\$648
SCE REPLACE 8 POLES RIVERSIDE	\$637
SCE POLES 1483039E & 4841903E	\$599
IRISH COMM CO SAFETY TRAINING	\$586
SCE REPLACE POLE WINCHESTER	\$576
TRAFFIC CONTROL FIRST & AGNEW	\$576
HDR FLAGGING UNION STATION	\$564
PR FOR BEACHWOOD PROJ IN B	\$488

	Ć405
BURBANK-RELOCATE FACILITIES	\$485
POMONA MAJOR ST RR PROJECT	\$477
	\$464
FALL PROTECTION SYSTEM ORANGE	\$416
SUNESYS PLACE UG CONDUIT CABLE	\$393
SCE REPLACE 2276944E&2276997E	\$391
SCE-REPLACE POLE IN COVINA,	\$384
EDWARDS ADV-BILLBOARD RMVL	\$381
SEMPRA SAFETY CLASSES 8/4/15	\$379
COAST-SURVEY ROW & BRIDGE	\$369
SCE RECONDUCTOR 4A RIALTO	\$332
RIVER BED SURVEY SANTA CLARITA	\$321
SCE REPLACE O/H CONDUCTOR	\$318
SCE POLE FRANCISQUITO & GARVEY	\$317
SKANSKA BRIDGE WORK 6TH STREET	\$314
GLENDALE STATION LIGHTING	\$290
CALTRANS-BASSETT O/H BRIDGE	\$276
REPLACE POLE HARVILL AVE	\$269
REPLACE POLE AVE A 8TH ST	\$269
REPLACE POLE NANDINA AVE	\$269
SCE REPLACE POLE 2336415E	\$262
REPLACE POLE FAIRPLEX LA VERNE	\$249
CROWN VALLEY WIDENING	\$249
SCE POLE TECH DRIVE I-5 IRVINE	\$246
SCE REPLACE POLE ONTARIO	\$241
SCE INSTALLATION TORRANCE	\$230
COVINA - GRAFFITI ABATEMENT	\$228
SCE REPLACE POLE SANTA ANA	\$225
SCGC PIPELINE PROJ IN SYLMAR	\$224
REHAB AT SIMI VALLEY-GRANITE	\$214
INSTALL O/H CABLE MISSION RD	\$207
MANHOLE REHAB RED HILL AVE	\$207
SCE POLES 439698E & 569859E	\$206
VCI VERIZON MCI MANHOLE	\$206
AZTEC: FOR OCTA UTIL POTHOLING	\$199
INSTALL O/H CABLE RIALTO	\$186
REPLACE POLE CALLE TORO GRANDE	\$186
CONDUIT EAST AVE PALMDALE	\$186
ASPHALT OVERLAY PALMDALE	\$184
L&SCONST-BEE CANYON IMPRVMNTS	\$172
SYNERGY NEW O/H LINE BURBANK	\$168

Г	1
SEMPRA TRAINING CLASSES	\$168
SCE REPLACE POLE RIALTO & MACY	\$154
SITE/PLAN REV-FREEDOM COMM	\$107
LADWP GUY WIRES 6TH ST BRIDGE	\$87
RELOCATE TRANSMISSION POLES	\$83
REPAIR/MAINTAIN MANHOLE	\$83
INSTALL CONDUITS PEPPER AVE	\$63
RJ TRAFFIC CONTROL ORANGE	\$63
POWER POLE RELOCATION ANAHEIM	\$63
SCE REPLACE POLES COVINA	\$63
LS IMPRO NEAR RR AVE & 13TH ST	\$63
ANAHEIM SAFETY TRAINING	\$62
SCE-REPLACE POLES IN PERRIS	\$61
VCI MANHOLE JAMBOREE & HARVARD	\$61
SCE-INSTALL CABLE IN SAN DIMAS	\$58
SCE REPLACE POLE LA PALMA	\$57
SCE REPLACE POLES IRVINE	\$57
SCE REPLACE POLE 809853E	\$55
SCE REPLACE POLE 84331587E	\$55
GEOTECH FIELD INVESTIGATION	\$55
DYNALECTRIC WORK@ WOODLEY	\$55
DYNALECTRIC-THERMO LIMIT LINES	\$55
BGB: AERIAL FLYOVER/SURVEY	\$41
ROAD WIDENING & NEW MEDIAN	\$31
CALLEGUAS WATER SITE ACC XING	\$28
AESCO-GEOTECH AT 6 LOC	\$26
GEOTECH FOR DIAZ YOURMAN'S SUB	\$26
ARADIS, GRND SAMPLING MVIEJO	\$13
SCE TO REMOVE 4KV CIRCUIT	\$13
	\$20,278,108

Numbers may not foot due to rounding.

A number of Third Party Projects were undertaken in FY2016-17. The exact amount is not identified at this time as we are in the midst of the fiscal year end. Based on historical data, we expect to complete approximately \$21 million in Third Party Projects during FY2017-18.

#### 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 unviable 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 SCRRA Board in December 2016 and 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 is 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 year 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, regulatory infractions, 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 258 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, SCRRA established a useful life of 30 years for revenue rolling stock. Initial locomotive and rail car purchases occurred in 1992-1993, making the vehicles 25-26 years old. To date, these vehicles have not undergone comprehensive midlife overhauls, and vehicle replacement or rebuild is necessary to prevent service degradation. Of SCRRA's 52 locomotives, 37 have exceeded the point at which a midlife overhaul should be performed. SCRRA has ordered 40 new Tier-4 locomotives, 37 of which will replace the oldest of the locomotives. The remaining 15 locomotives will begin to need midlife overhauls sometime after FY2019-20. Funding will be necessary for this important effort.

#### I. Facilities

SCRRA 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 five consequences of deferred maintenance:

- Reduced train speeds and headways;
- Reduced operational reliability;
- Higher cost of ordinary maintenance;
- Regulatory fines and sanctions; or
- Potential accidents and loss of mission capability.

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 as a whole is weak and the above consequences become inevitable.

Rehabilitation projects are summarized in Exhibits 7.1 and 7.2. A number of the projects will not be completed in FY2016-17 and will be carried forward into the 2018 fiscal year. They amount to \$87.5 million, include Board approved amendment to the FY2016-17 Rehabilitation Budget and are described in the Ongoing Rehabilitation Projects section. The new projects seeking initial authority in FY2017-18 amount to \$89.6 million and are discussed in the New Rehabilitation Projects section below.

#### 7.3 FY2017-18 Ongoing Rehabilitation Projects

Ongoing projects authorized in FY2016-17 or earlier that are not anticipated to be completed prior to June 30, 2017 are depicted on Exhibits 7.1 and 7.5. The exhibit represents staff's estimate of the outstanding authorized balance on each project as of the adoption of the FY2017-18 fiscal year budget. These estimations in no way alter the actual project authority as approved by the SCRRA Board.

### 7.4 FY2017-18 New Rehabilitation Projects

New projects proposed for Rehabilitation in FY2017-18 are depicted in Exhibits 7.2 and 7.6 in summary and detail respectively.

### 7.5 FY2017-18 New Capital Carryover Projects

New Capital Carryover projects authorized in FY2016-17 or earlier that are not anticipated to be completed prior to June 30, 2017 are depicted on Exhibit 7.3. The New Capital Carryover amount totals \$212.9 million.

#### 7.6 FY2017-18 New Capital New Authority Projects

New Capital projects proposed in FY2017-18 are shown in Exhibit 7.4, and total \$5.3 million.

#### 7.7 Exhibits

**Exhibit 7.1: FY2017-18 Rehabilitation Carryover Projects Summary** lists Rehabilitation carryover authority by subdivision, project category and funding source.

**Exhibit 7.2:** FY2017-18 Rehabilitation New Authority Projects Summary by Subdivision lists proposed Rehabilitation projects for New Authorization by subdivision, project category and funding source.

**Exhibit 7.3: FY2017-18 New Capital Carryover Projects** lists New Capital carryover authority by subdivision, project category and funding source.

**Exhibit 7.4:** FY2017-18 New Capital New Authority Projects lists New Capital authority by project and funding source.

**Exhibit 7.5: FY2017-18 Rehabilitation Carryover Projects Detail** provides a detailed listing of Rehabilitation carryover authority by project.

**Exhibit 7.6: FY2017-18 Rehabilitation New Authority Projects Detail** provides a detailed listing of the proposed Rehabilitation projects for New Authorization by project.

**Exhibit 7.7.1: Capital Summary and Cash Flow Detail – All Agencies** provides a capital summary and cash flow estimate for New Authority Rehab and New Capital projects for FY2017-18 as well as estimated capital authority requests for FY2018-19 and FY2019-20.

**Exhibit 7.7.2: Capital Summary and Cash Flow Detail – METRO** provides a capital summary and cash flow estimate for New Authority Rehabilitation and New Capital projects for FY2017-18 as well as estimated capital authority requests for FY2018-19 and FY2019-20.

**Exhibit 7.7.3: Capital Summary and Cash Flow Detail – OCTA** provides a capital summary and cash flow estimate for New Authority Rehabilitation and New

Capital projects for FY2017-18 as well as estimated capital authority requests for FY2018-19 and FY2019-20.

**Exhibit 7.7.4: Capital Summary and Cash Flow Detail – RCTC** provides a capital summary and cash flow estimate for New Authority Rehabilitation and New Capital projects for FY2017-18 as well as estimated capital authority requests for FY2018-19 and FY2019-20.

**Exhibit 7.7.5: Capital Summary and Cash Flow Detail – SBCTA** provides a capital summary and cash flow estimate for New Authority Rehabilitation and New Capital projects for FY2017-18 as well as estimated capital authority requests for FY2018-19 and FY2019-20.

**Exhibit 7.7.6: Capital Summary and Cash Flow Detail – VCTC** provides a capital summary and cash flow estimate for New Authority Rehabilitation and New Capital projects for FY2017-18 as well as estimated capital authority requests for FY2018-19 and FY2019-20.

**Exhibit 7.7.7: Capital Summary and Cash Flow Detail – Other Fund Sources** provides a capital summary and cash flow estimate for New Authority Rehabilitation and New Capital projects for FY2017-18 as well as estimated capital authority requests for FY2018-19 and FY2019-20.

## Exhibit 7.1 FY2017-18 Rehabilitation Carryover Projects Summary

(\$000) Subdivision	Category	METRO	ОСТА	RCTC	SBCTA	VCTC	OTHERS	Carryover
								, June-17 - End
	Signal	-	450	-	-	-	-	450
	Structures	-	20	-	-	-	-	20
Olive Total		-	470	-	-	-	-	470
	Facilities	-	127	-	-	-		127
	Signal	-	387	-	-	-	-	387
	Structures	-	7,857	-	-	-	-	7,857
	Track	-	8,359	-	-	-	-	8,359
Orange Total		-	16,729	-	-	-	-	16,729
	Comm & PTC	-	300	-	-	-	-	300
	Communication	-	109	-	-	-	-	109
	Signal	-	852	-	-	-	-	852
Orange & Olive Tot	al	-	1,261	-	-	-	-	1,261
	Comm & PTC	-	-	120	-	-	-	120
	Signal	-	-	50	-	-	-	50
Perris Valley Total		-	-	170	-	-	-	170
	Signal	119	50	28	36	18	-	250
	Track	1,497	624	350	454	227	-	3,152
River Total		1,616	674	378	490	245	-	3,402
	Comm & PTC	20	9	5	6	3	80	123
	Signal	83	35	19	25	13	325	500
	Track	1,646	686	385	499	250	10,922	14,387
River East Bank Tot	al	1,750	729	409	530	265	11,327	15,011
	Facilities	-	-	36	-	-	-	36
Riverside Total		-	-	36	-	-	-	36
	Communication	95	-	-	63	-	-	158
	Signal	1,297	-	-	865	-	-	2,162
	Structures	1,003	-	-	668	-	-	1,671
	Track	1,428	-	-	952	-	-	2,379
San Gabriel Total		3,822	-	-	2,548	-	-	6,371
	Facilities	-	-	-	587	-	-	587
Shortway Total		-	-	-	587	-	-	587
	Signal	308	-	-	-	-	-	308
	Structures	7,973	-	-	-	-	-	7,973
	Track	4,773	-	-		-	-	4,773
Valley Total		13,054	-	-	-	-	-	13,054
	Facilities	192	-	-	-	-	-	192
Ventura & Valley T		192	-	-	-	-	-	192
	Communication	5	-	-	-	-	-	5
	Structures	1,960	-	-	-	-	-	1,960
	Track	3,855	-	-	-	-	-	3,855
Ventura (LA Co) To		5,820	-	-	-	-	-	5,820
	Comm & PTC	-	-	-	-	237	-	237
	Facilities	-	-	-	-	211	-	211
	Signal	-	-	-	-	200	-	200
	Structures	-	-	-	-	3,997	-	3,997
	Track	-	-	-	-	1,087	-	1,087
Ventura (Ven Co) T		-	-	-	-	5,733	-	5,733
	Comm & PTC	1,229	512	287	373	186	-	2,588
		110	49	28	36	18	-	250
	Communication	119			784	392	771	6,215
	Facilities	2,586	1,078	604			,,,	
	Facilities IT	2,586 296	124	69	90	45	-	624
	Facilities IT PTC, C+S	2,586 296 167	124 70	69 39	90 51	45 25	-	624 351
	Facilities IT PTC, C+S Rolling Stock	2,586 296 167 1,199	124 70 500	69 39 280	90 51 363	45 25 182	- - -	624 351 2,524
	Facilities IT PTC, C+S Rolling Stock Signal	2,586 296 167 1,199 8	124 70 500 3	69 39 280 2	90 51 363 3	45 25 182 1	- - -	624 351 2,524 17
	Facilities IT PTC, C+S Rolling Stock Signal Structures	2,586 296 167 1,199 8 196	124 70 500 3 82	69 39 280 2 46	90 51 363 3 59	45 25 182 1 1,490	- - -	624 351 2,524 17 1,873
	Facilities IT PTC, C+S Rolling Stock Signal Structures Track	2,586 296 167 1,199 8 196 -	124 70 500 3 82 -	69 39 280 2 46 1	90 51 363 3 59 1	45 25 182 1,490 3,088	- - - - - 15	624 351 2,524 17 1,873 3,105
	Facilities IT PTC, C+S Rolling Stock Signal Structures	2,586 296 167 1,199 8 196 - 509	124 70 500 3 82 - 212	69 39 280 2 46	90 51 363 3 59 1 154	45 25 182 1,490 3,088 77	- - - - 15 -	624 351 2,524 17 1,873 3,105 1,072
Systemwide Total Grand Total	Facilities IT PTC, C+S Rolling Stock Signal Structures Track	2,586 296 167 1,199 8 196 -	124 70 500 3 82 -	69 39 280 2 46 1	90 51 363 3 59 1	45 25 182 1,490 3,088	- - -	624 351 2,524 17 1,873 3,105 1,072 <b>18,619</b> <b>87,455</b>

Numbers may not foot due to rounding.

 $\ast$  Includes \$32.8M of \$34.2M of approved amendment to FY17 Rehabilitation projects.

# Exhibit 7.2 FY2017-18 Rehabilitation New Authority Projects – Summary – by Subdivision

SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
	Communications		75				-	7
Olive Total			75				-	7
	Communications		75				-	7
	Grade Crossing		561				-	5
	Structures		1,225				-	1,2
Orange Total			1,861				-	1,80
	Communications	48	20	11	14	7	-	10
	Grade Crossing	253	105	59	77	38	-	53
	Signals	1,165	486	272	353	177	-	2,45
	Track	894	373	209	271	136	-	1,88
River Total		2,360	984	551	715	358	-	4,90
	Communications	105			70		-	1
	Grade Crossing	1,814			1,209		-	3,02
	Signals	307			205		-	53
	Track	2,784			1,856		812	5,45
San Gabriel T		5,011			3,340		812	9,16
	Communications			50			-	
San Jacinto (F	•			50			-	
	Communications	100					-	10
	Facilities	950					-	9
	Grade Crossing	1,606					-	1,60
	Signals	2,792					-	2,79
	Structures	3,639					-	3,63
	Track	4,065					-	4,06
Valley Total		13,153					-	13,15
	Track	251					-	25
Valley, Ventu	ra - LA County Total	251					-	25
	Communications	50					-	5
	Grade Crossing	2,829					-	2,82
	Signals	513					-	51
	Structures	450					-	45
	Track	4,546					-	4,54
Ventura - LA	County Total	8,388					-	8,38
	Communications					50	-	5
	Grade Crossing					892	-	89
	Signals					513	-	51
	Track					1,700	-	1,70
Ventura - VC	County Total					3,155	-	3,15
	Business Systems	864	360	202	262	131	-	1,81
	Facilities	190	79	44	58	29	-	39
	Non-Revenue Fleet	552	230	129	167	84	-	1,16
	Rolling Stock	7,342	3,060	1,716	2,226	1,113	26,144	41,60
	Signals	1,271	530	297	385	193	-	2,67
	Track	399	166	93	121	61	-	84
Systemwide 1	Total	10,618	4,426	2,481	3,219	1,609	26,144	48,49
Proposed FY2	2017-18 Rehab New Authority Projects	39,779	7,345	3,083	7,274	5,122	26,956	89,55
	Unfunded	(32,960)						(32,96
Adopted FY	2017-18 Rehab New Authority Projects	6,819	7,345	3,083	7,274	5,122	26,956	56,59
Rotem Settlen	nent Amounts	5,409	(6,059)	-	650	-	-	
	Unfunded	(2,567)	2,567					-
Total Adopte	d FY2017-18 Rehab New Authority Projects	9,662	3,853	3,083	7,924	5,122	26,956	56,59
w/ Rotem set	tlement							
Total Carryove	ers from Prior Years	32,563	22,493	2,468	6,069	11,748	12,113	87,4
	Projects Including Carryovers	45,067	22,854	5,551	14,643			,

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. Match is from Toll Revenue Credits.

5) VCTC funding is FTA Section 5337. Match is from Toll Revenue Credits.

6) Other funds are anticipated from CalTrans, UPRR, and Amtrak.

## Exhibit 7.3 FY2017-18 New Capital Carryover Projects

(\$000)									
SUBDIVISION	CATEGORY	PROJECT	METRO	ΟርΤΑ	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Orange	Signal	417007	-	2,356	-	-	-	-	2,356
San Gabriel	Signal	417002	1,143	-	-	762	-	-	1,904
San Gabriel	Signal	417003	1,202	-	-	801	-	-	2,004
San Gabriel	Signal	417005	431	-	-	287	-	-	718
San Gabriel	Signal	417006	512	-	-	341	-	-	853
Valley	Track	409006	8	-	-	-	-	-	8
Valley	Track	414002	5	-	-	-	-	-	5
Systemwide	Comm	417001	2,609	1,087	610	791	395	-	5,492
Systemwide	Comm	450100	1,417	591	331	430	215	-	2,984
Systemwide	Equipment	613001	-	-	-	-	-	3,799	3,799
Systemwide	Equipment	613003	500	-	12	24	-	8,682	9,218
Systemwide	Equipment	613005	-	-	-	-	-	79,317	79,317
Systemwide	Equipment	616002	-	-	-	-	-	86,460	86,460
Systemwide	Equipment	616003	-	-	-	-	-	10,152	10,152
Systemwide	Equipment	616004	-	-	-	-	-	5,076	5,076
Systemwide	Facility	416001	959	400	224	291	145	-	2,019
Systemwide	Facility	416002	41	17	10	12	6	-	86
Systemwide	Facility	613007	-	-	-	-	-	458	458
Total			8,826	4,451	1,187	3,740	762	193,943	212,908

## Exhibit 7.4 FY2017-18 New Capital New Authority Projects

(\$000)														
PROJECT DESCRIPTION	CATEGORY	N	1etro	оста	I	RCTC	S	BCTA	\	/стс	OTH	HER	T	OTAL
Laptop and Server Upgrade	Business Systems		99	41		23		30		15				208
Central Maintenance Facility West Entrance Phase A - focused on Design, Engineering, & putting together contract documents of the CMF West Enterance Porject	Track		950	396		222		288		144				2,000
Interoperable Positive Train Control Rung II Non-Vital to Vital System Upgrade	PTC Systems		1,458	608		341		442		221				3,070
TOTAL FY 2017-18 PROPOSED AUTHORITY FOR NEW FUNDING		\$	2,507	\$ 1,045	\$	586	\$	760	\$	380	\$	-	\$	5,278
Unfunded			(2,507)											(2,507
Adopted FY2017-18 New Capital New Authority Projects			-	1,045		586		760		380		-		2,770
PRIOR YEAR CARRYOVERS		\$	8,826	\$ 4,451	\$	1,187	\$	3,740	\$	762	\$ 193	3,943	\$ 2	12,908
TOTAL FY 2017-18 AUTHORITY INCLUDING CARRYOVERS		\$	8,826	\$ 5,496	\$	1,773	\$	4,500	\$	1,142	\$ 193	3,943	\$ 2	15,678

## Exhibit 7.5 FY2017-18 Rehabilitation Carryover Projects Detail

(\$000)		_							
Project	Subdivision	Category	METRO	ΟርΤΑ	RCTC	SBCTA	VCTC	OTHER	TOTAL
517530	Olive	Signal	-	450	-	-	-	-	450
515100	Olive	Structures	-	20	-	-	-	-	20
511064	Orange	Facilities	-	127	-	-	-	-	127
591715	Orange	Signal	-	387	-	-	-	-	387
513023	Orange	Structures	-		-	-	-	-	
515105	Orange	Structures	-	5,009	-	-	-	-	5,009
515106	Orange	Structures	-	444	-	-	-	-	444
516620	Orange	Structures	-	192	-	-	-	-	192
516621	Orange	Structures	-	1,726	-	-	-	-	1,726
517620	Orange	Structures	-	485	-	-	-	-	485
516611	Orange	Track	-	1,468	-	-	-	-	1,468
517610	Orange	Track	-	6,892	-	-	-	-	6,892
517640	Orange & Olive	Comm & PTC	-	300	-	-	-	-	300
516640	Orange & Olive	Communication	-	109	-	-	-	-	109
516530	Orange & Olive	Signal	-	186	-	-	-	-	186
516631	Orange & Olive	Signal	-	666	-	-	-	-	666
517940	Perris Valley	Comm & PTC	-	-	120	-	-	-	120
516930	Perris Valley	Signal	-	-	50	-	-	-	50
517730	River	Signal	119	50	28	36	18	-	250
515143	River	Track	1					-	2
517711	River	Track	475	198	111	144	72	-	1,000
591708	River	Track	24	10	6	7	4	-	50
TBD	River	Track	998	416	233	302	151	-	2,100
517740	River East Bank	Comm & PTC	20	9	5	6	3	80	123
517731	River East Bank	Signal	83	35	19	25	13	325	500
515144	River East Bank	Track	487	203	114	148	74	1,906	2,931
515160	River East Bank	Track	74	31	17	22	11	288	443
517710	River East Bank	Track	151	63	35	46	23	589	906
517712	River East Bank	Track	519	216	121	157	79	2,032	3,125
517713	River East Bank	Track	76	32	18	23	11	296	455
TBD	River East Bank	Track	340	142	80	103	52	5,811	6,527
516820	Riverside	Facilities	-		36		-		36
517440	San Gabriel	Communication	95	-	-	63	-	-	158
515115	San Gabriel	Signal	247	-	-	165	_	-	412
517430	San Gabriel	Signal	240	_	-	160	-	-	400
517431	San Gabriel	Signal	522	_	_	348	-	_	870
591712	San Gabriel	Signal	155		-	103			259
591712	San Gabriel	Signal	133	-	-	89			233
517420	San Gabriel	Structures	163	-	-	108		-	271
517420 TBD	San Gabriel	Structure	840	-	-	560	-	-	1,400
515118	San Gabriel	Track	5	-	-	3	-	-	1,400
516410	San Gabriel	Track	1	-	-	1	-	-	2
516410 517411	San Gabriel	Track	72	-	-	48	-	-	120
				-			-		
TBD	San Gabriel	Track	1,350		-	900	-	-	2,250
517053	Shortway	Facilities	-	-	-	587	-	-	587

## Exhibit 7.5 FY2017-18 Rehabilitation Carryover Projects Detail (continued)

(\$000)									
Project	Subdivision	Category	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
517040	Systemwide	Comm & PTC	1,229	512	287	373	186	-	2,588
591707	Systemwide	Communication	119	49	28	36	18	-	250
516082	Systemwide	Facilities	10	4	2	3	2	-	21
517051	Systemwide	Facilities	67	28	16	20	10	-	140
517052	Systemwide	Facilities	755	315	176	229	114	-	1,589
517054	Systemwide	Facilities	529	220	124	160	80	-	1,113
514046	Systemwide	IT	296	124	69	90	45	-	624
515152	Systemwide	PTC, C+S	167	70	39	51	25	-	351
516050	Systemwide	Rolling Stock	418	174	98	127	63	-	880
517050	Systemwide	Rolling Stock	461	192	108	140	70	-	970
591709	Systemwide	Rolling Stock	320	133	75	97	49	-	674
514041	Systemwide	Signal						-	
517030	Systemwide	Signal	8	3	2	2	1	-	17
517020	Systemwide	Structures	196	82	46	59	30	-	413
TBD	Systemwide	Structure	1,226	511	287	372	186	771	3,352
515154	Systemwide	Track	-	-	1	1		15	17
591705	Systemwide	Vehicles	191	80	45	58	29	-	403
591706	Systemwide	Vehicles	318	133	74	96	48	-	670
517330	Valley	Signal	308	-	-	-	-	-	308
515123	Valley	Structures	828	-	-	-	-	-	828
517320	Valley	Structures	856	-	-	-	-	-	856
591701	Valley	Structures	1,028	-	-	-	-	-	1,028
TBD	Valley	Structure	5,260	-	-	-	-	-	5,260
514024	Valley	Track	679	-	-	-	-	-	679
517310	Valley	Track	1,981	-	-	-	-	-	1,981
TBD	Valley	Track	2,113	-	-	-	-	-	2,113
516081	Ventura & Valley	Facilities	192	-	-	-	-	-	192
515127	Ventura (LA Co)	Communication	5	-	-	-	-	-	5
TBD	Ventura (LA Co)	Structure	1,960	-	-	-	-	-	1,960
514030	Ventura (LA Co)	Track	381	-	-	-	-	-	381
591702	Ventura (LA Co)	Track	99	-	-	-	-	-	99
TBD	Ventura (LA Co)	Track	3,375	-	-	-	-	-	3,375
517140	Ventura (Ven Co)	Comm & PTC	-	-	-	-	237	-	237
591710	Ventura (Ven Co)	Facilities	-	-	-	-	211	-	211
517130	Ventura (Ven Co)	Signal	-	-	-	-	200	-	200
515135	Ventura (Ven Co)	Structures	-	-	-	-	1,003	-	1,003
516120	Ventura (Ven Co)	Structures	-	-	-	-	454	-	454
517120	Ventura (Ven Co)	Structures	-	-	-	-	1,680	-	1,680
517121	Ventura (Ven Co)	Structures	-	-	-	-	370	-	370
517122	Ventura (Ven Co)	Structures	-	-	-	-	490	-	490
TBD	Ventura (Ven Co)		-	-	-	-	1,460	-	1,460
515137	Ventura (Ven Co)	Track	-	_	-	-	285	-	285
516111	Ventura (Ven Co)	Track	-	-	-	-	427	-	427
517110	Ventura (Ven Co)	Track	-	-	-	-	333	-	333
591711			-		-		42	-	42
TBD	Ventura (Ven Co)	Track	-	-	-		3,088	-	3,088
Grand Total		HACK	32,563	22,493	2,468	6,069	11,748	12,113	87,455
Si alla TUtdi			32,303	22,433	2,400	0,009	11,/40	se,sis	07,400

## Exhibit 7.6 FY2017-18 Rehabilitation New Authority Projects Detail

(\$000)									
PROJECT DESCRIPTION	SUBDIVISION	CATETORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
Wayside Communication System Replacment Parts - Olive	Olive	Communications	-	75	-	-	-	-	75
Wayside Communication System Replacement Parts - Orange	Orange	Communications	-	75	-	-	-	-	75
Grade Crossing Rehab - Rehab 2 Locations per Year - Orange	Orange	Grade Crossing		561	-	-	-	-	561
Sub (rehab entrance gates, gate savers, predictor units,	orange	erade erossing		501					501
batteries and other misc crossing equipment.)									
Orange Sub Struct (Culvert replacement - 203.05, 203.09,	Orange	Structures	-	1,225	-	-	-	-	1,225
204.15, 204.18, 204.27 - San Clemente area)									
Wayside Communication System Replacement Parts - River	River	Communications	48	20	11	14	7	-	100
Grade Crossing Rehab - 2 grade crossings - River Sub	River	Grade Crossing	253	105	59	77	38	-	532
Phase 1 - Signal System Rehab - CP Terminal Rehab Turnouts	River	Signals	475	198	111	144	72	-	1,000
3X, 5, 5X, 7, 7X and Power Switch Machines.									
Replace Worn Electric Switch Lock at 140.80 West Bank	River	Signals	48	20	11	14	7	-	101
Signal System Rehab - Replace EL1A Logic Controller at CP	River	Signals	160	67	37	48	24	-	336
Capital Signal System Rehab - River Sub, including backup battery	River	Signals	483	201	113	146	73	-	1,017
banks, and signal system cables. Replace electrologic units	Nivei	Jighais	405	201	115	140	/5		1,017
with VHLC or Electrologix. Replace Electrocode 4 with EC5 at									
high-priority locations.									
LA Union Station Track Rehabilitation, including leads,	River	Track	894	373	209	271	136	-	1,882
turnouts and ties leading into LAUS.									
Wayside Communication System Replacement Parts - San	San Gabriel	Communications	60	-	-	40	-	-	100
Gabriel - LA County									
Wayside Communication System Replacement Parts - San	San Gabriel	Communications	45	-	-	30	-	-	75
Gabriel - SB County									
Grade Crossing Rehab - Rehab 2 Locations per Year - SG Sub-	San Gabriel	Grade Crossing	329	-	-	219	-	-	549
LA County(rehab entrance gates, gate savers, predictor units,									
batteries and other misc crossing equipment.)	San Cabriel	Grade Croccian	200			204			F10
Grade Crossing Rehab - Rehab 2 Locations per Year - SG Sub- SB County(rehab entrance gates, gate savers, predictor units,	San Gabriel	Grade Crossing	306	-	-	204	-	-	510
batteries and other misc crossing equipment.)									
Rehabilitation of grade crossings on the San Gabriel	San Gabriel	Grade Crossing	1,179		-	786		-	1,965
Subdivision in Los Angeles County (Replace rail, ties, crossing		Grade crossing	1,175			700			1,505
panels, fasteners and ballast at Azusa, Irwindale and North									
Garey Avenues. Place new asphalt road surface from edge of									
crossing panels to 2 ft from end of ties.)									
Rehab Worn or Defective Cables - SG Sub	San Gabriel	Signals	307	-	-	205	-	-	512
Replacement of the turnouts on the San Gabriel Subdivision in	San Gabriel	Track	600	-	-	400	-	-	1,000
Los Angeles County, specifically CP Barranca and CP Irwin.									
The replacement will involve installing new turnout frog and									
switch packages, rail, ties and OTM.									
Replacement of the turnouts on the San Gabriel Subdivision in	San Gabriel	Track	918	-	-	612	-	812	2,342
San Bernardino County, specifically CP Central, CP Beech 1 & 3, CP Locust, and CP Rancho. (see note 1). Replacement will									
involve installing new turnout frog and switch pkgs, rail, ties									
and other track matls.									
San Gabriel Track Rehabilitation (replace fastenings, tie plugs	San Gabriel	Track	1,266	-	-	844	-	-	2,110
and anchors. Destress rail and surface and stablize track).			_,						_,
Wayside Communication System Replacement Parts - PVL	San Jacinto	Communications	-	-	50	-	-	-	50
	(PVL)								
Condition Based Maintenance Tools, PC and Analysis	Systemwide	Business Systems	36	15	8	11	5	-	76
Software									
Perform State of Good Repair Engineering, Track	Systemwide	Business Systems	356	149	83	108	54	-	750
Measurements, and Prioritization to support and populate the									
annual SOGR/Rehab/TAM Program.	<b>.</b>					<u> </u>			
Trapeze Maintenance Management System Software Upgrade	Systemwide	Business Systems	472	197	110	143	71	-	993
Penlace Carshon lacks at CME. Current inclusion 34	Suctomuida	Eacilities	177		21	40	20		200
Replace Car shop Jacks at CMF. Current jacks are 24 years old.	Systemwide	Facilities	133	55	31	40	20	-	280
old. Replace public address system at CMF.	Systemwide	Facilities	57	24	13	17	9	-	120
MOW VEHICLE REPLACEMENT - 6 SUVs for train ops, 1	Systemwide	Non-Revenue Fleet	552	24	129	167	84	-	1,163
welding truck, 4 hy-rail inspection/repair trucks, 2 signal	systemwide		552	250	123	107	04	-	1,105
maintainer vehicles.									
Bombardier (Sentinel) passenger rail cars Midlife Overhaul or	Systemwide	Rolling Stock	6,819	2,843	1,594	2,067	1,034	26,144	40,500
28 cars (see note 3)		-			-	-			
PTC On-Board Software updates, hardware repairs PTC on-	Systemwide	Rolling Stock	523	218	122	158	79	-	1,100
board equipment Systems on 57 cab cars and 52 locomotives.									
Backoffice Hardware & Software Replacement (DOC & MOC)	Systemwide	Signals	537	224	125	163	81	-	1,130
for mission critical train control and PTC systems.									
SCRRA Positive Train Control Lab Systems Support and Testing	g Systemwide	Signals	450	188	105	136	68	-	948
CODDA Develoption Develop <i>f</i> in a Contract of the Contract of	Contrary 11	Circu a la	~~ •		~~				50-
SCRRA Production Backoffice Systems Upgrades and Testing	Systemwide	Signals	284	118	66	86	43	-	598
Support	Sustamuida	Track	200	100	02	101	C1		040
Rail Grinding Systemwide to maintain rail profile and improve	systemwide	Track	399	166	93	121	61	-	840
running surface of the rail									
running surface of the rail. Wayside Communication System Replacement Parts - Valley	Valley	Communications	100	-	-	-	-	-	100

# Exhibit 7.6 FY2017-18 Rehabilitation New Authority Projects Detail (continued)

(\$000)									
PROJECT DESCRIPTION	SUBDIVISION	CATETORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
Replace Expand Lancaster Crew Base by installing new	Valley	Facilities	950	-	-	-	-	-	950
modular building and portable weather resistant									
communication shelter for train operations and mechanical									
crews. The existing crew base has 18 crew members									
reporting daily, and currently comfortably seats 2 people.									
Grade Crossing Rehab - 2 Locations per Year - Valley Sub	Valley	Grade Crossing	557	-	-	-	-		557
Rehabilitation of grade crossings on the Valley Subdivision in	Valley	Grade Crossing	1,049	-	-	-	-	-	1,049
Los Angeles County (Drayton Street, Aliso Canyon Road,									
Doran Street, and Arvilla Ave.)									
Rehab Worn or Defective Cables - Valley Sub	Valley	Signals	512	-	-	-	-	-	512
Replace Temporary AC Power Feed to signal 761 with	Valley	Signals	308	-	-	-	-	-	308
Permanent and sustainable solar power supply - Valley Sub.									
Signal System Rehab - Rehab Logic Controllers and Supporting		Signals	1,131	-	-	-	-	-	1,131
Equipment - Valley Sub. Replace signal system backup battery									
banks, and worn underground signal cables. Replace									
Electrologic with VHLC or electrologix. Replace Electocode 4									
units with Electrocode 5 at high priority locations.									
Signal System Dabab - Daplace FL1A Logic Controller at CD	Valley	Cignolo	220						220
Signal System Rehab - Replace EL1A Logic Controller at CP Harold	Valley	Signals	336	-	-	-	-	-	336
Signal System Rehab - Replace Track Turnout and Power	Valley	Signals	506	-	-	-	-	-	506
Switch at CP Harold									
Valley Sub Structures - bridge 25.71 & 8 culverts (38.64,	Valley	Structures	3,639	-	-	-	-	-	3,639
32.92, 43.55, 66.86, 66.90, 28.58 53.61, 46.24). Valley Track Rehabilitation. Install new fastenings, tie plugs,	Valley	Track	4,065						4,065
anchors, and destress rail, surface and stablizie track. MP 3 -	valley	HIdek	4,005	-	-	-	-	-	4,005
67.5.									
	Valley	Tue els	251						251
Station Pedestrian Crossing panels at downtown Burbank,	Valley,	Track	251	-	-	-	-	-	251
Burbank Airport and Chatsworth stations. Current panels are									
at end of useful life and are not ADA compliant.	County	Commission	50						50
Wayside Communication System Replacement Parts - Ventura		Communications	50	-	-	-	-	-	50
- LA County	County	Carda Caracian	522						500
Grade Crossing Rehab 2 Locations per Year	Ventura - LA	Grade Crossing	532	-	-	-	-	-	532
Dehebilitation of grade processings on the Venture Cubdivision	County	Cuada Cuassing	2 207						2,297
Rehabilitation of grade crossings on the Ventura Subdivision in Los Angeles County	Ventura - LA County	Grade Crossing	2,297	-	-	-	-	-	2,297
Rehab Signal and Grade Crossing Cables - Ven Sub	Ventura - LA	Signals	513						513
Reliab Signal and Grade Clossing Cables - Ven Sub	County	Jighais	515	-	-	-	-	-	515
Ventura Sub (LA CO) Struct. Construct replacement of bridge	Ventura - LA	Structures	450		-	-			450
461.65 which is partially funded in FY 16. Bridge is 101 years	County	Scructures	150						.50
old.	county								
Ventura (LA) Tie Rehabilitation - replace 7,500 ies using a	Ventura - LA	Track	3,010						3,010
production tie gang.	County	THUCK .	5,610						5,610
Ventura (LA) Track Rehabilitation. Install new fastenings, tie	Ventura - LA	Track	1,535		-	-			1,535
plugs, anchors, and destress rail, surface and stabilize track.	County	THUCK .	2,555						2,000
	county								
Wayside Communication System Replacement Parts - Ventura	Ventura - VC	Communications	-		-	-	50		50
- Ventura County	County								
Grade Crossing Rehab - 2 Locations per Year - Ven Sub	Ventura - VC	Grade Crossing	-	-	-	-	549		549
	County								
Rehabilitation of grade crossings on the Ventura Subdivision	Ventura - VC	Grade Crossing	-		-	-	343		343
in Ventura County	County	Grade crossing					545		545
Rehab Signal and Grade Crossing Cables - Ven Sub	Ventura - VC	Signals					513		513
Reliab Signal and Grade clossing cables - ven Sub	County	JIGHIIIS					515		515
Replace rail ties and ballast on Arroyo Simi Bridges - Ventura	Ventura - VC	Track	-	-	-	-	1,026	-	1,026
Sub VN Cty - MP 427.70, 428.15, 428.63, and 429.26. 300	County	THUCK .					1,020		1,020
track feet each, 1,200 track feet total).	county								
Ventura (VC) Tie Rehabilitation - replace 1,550 ties using a	Ventura - VC	Track			-	-	674		674
production tie gang.	County	Huck					074		0/4
Proposed FY2017-18 Rehab New Authority Projects	,		39,779	7,345	3,083	7,274	5,122	26,956	89,559
Unfunded			(32,960)	7,010	5,005	.,_, .	5,122	20,000	(32,960
Adopted FY2017-18 Rehab New Authority Projects			6,819	7,345	3,083	7,274	5,122	26,956	56,599
					-,		-,	,	
ROTEM SETTLEMENT AMOUNTS Unfunded			5,409	(6,059)	-	650	-	-	-
			(2,567)	2,567	2			20.000	
			9,662	3,853	3,083	7,924	5,122	26,956	56,599
Total Adopted FY2017-18 Rehab New Authority Projects			-,						
			-,	-				· ·	
Total Adopted FY2017-18 Rehab New Authority Projects			32,563	22,493	2,468	6,069	11,748	12,113	87,455

#### Exhibit 7.7.1 Capital Summary and Cash Flow Detail – All Agencies

(\$000)
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FISCAL YEAR	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
2017/18 <sup>1</sup>	\$ 89,559	\$ 5,278	\$ 94,837
2018/19	\$ 194,925	\$ 9,842	\$ 204,767
2019/20	\$ 113,349	\$ 4,907	\$ 118,256
TOTALS	\$ 397,832	\$ 20,026	\$ 417,859

1. Excludes prior year budget carryover amounts

		CAPITAL BUD	GET SUMMAR	Y			
	CONS	OLIDATED CAS	H FLOW BY FIS	CAL YEAR			
(\$000)							
BUDGET FISCAL YEAR	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL
2017/2018							
REHABILITATION	\$ 4,478	\$ 31,346	\$ 26,868	\$ 26,868			\$ 89,559
NEW CAPITAL	\$ 264	\$ 1,583	\$ 1,847	\$ 1,583			\$ 5,278
SUBTOTAL	\$ 4,742	\$ 32,929	\$ 28,715	\$ 28,451			\$ 94,837
2018/2019							
REHABILITATION		\$ 9,746	\$ 68,224	\$ 58,477	\$ 58 <i>,</i> 477		\$ 194,925
NEW CAPITAL		\$ 492	\$ 2,953	\$ 3,445	\$ 2,953		\$ 9,842
SUBTOTAL		\$ 10,238	\$ 71,176	\$ 61,922	\$ 61,430		\$ 204,767
2019/2020							
REHABILITATION			\$ 5,667	\$ 39,672	\$ 34,005	\$ 34,005	\$ 113,349
NEW CAPITAL			\$ 245	\$ 1,472	\$ 1,717	\$ 1,472	\$ 4,907
SUBTOTAL			\$ 5,913	\$ 41,144	\$ 35,722	\$ 35,477	\$ 118,256
TOTALS							
REHABILITATION	\$ 4,478	\$ 41,092	\$ 100,759	\$ 125,017	\$ 92,482	\$ 34,005	\$ 397,832
NEW CAPITAL	\$ 264	\$ 2,075	\$ 5,045	\$ 6,500	\$ 4,670	\$ 1,472	\$ 20,026
TOTAL PROJECTED CASH FLOW BY							
FISCAL YEAR	\$ 4,742	\$ 43,167	\$ 105,804	\$ 131,517	\$ 97,152	\$ 35,477	\$ 417,859
PROJECT BUDGETS BY FISCAL YEAR	\$ 94,837	\$ 204,767	\$ 118,256	N/A	N/A	N/A	N/A

Numbers may not foot due to rounding.

Note: A total of \$108.1 million has been moved from the original FY18 Rehab submissions, and added in equal parts to the FY19 & FY20 submissions. Budget assumption is that for these portions added to FY19 and FY20, that cash flow amounts will be allocated in the same percentage proportions across the years and same funding pattern for each member that was used for FY18.

## Exhibit 7.7.2 Capital Summary and Cash Flow Detail – Metro

(\$000)

	REHABILITATIO	NEW CAPITAL	
FISCAL YEAR	N PROJECTS	PROJECTS	TOTAL
2017/18	\$ 39,779	\$ 2,507	\$ 42,286
ROTEM SETTLEMENT	\$ 5,409	ş 2,507	\$ 42,286
TOTAL 2017/18	\$ 45,189	\$ 2,507	\$ 47,696
2018/19	\$ 130,878	\$ 9,600	\$ 140,478
2019/20	\$ 52,258	\$ 2,427	\$ 54,685
TOTALS	\$ 228,325	\$ 14,533	\$ 242,858
Numbers may not foot due to roundi	ng.		
Note: 18/19 AND 19/20 REHAB BUD	GETS EXCLUDE ROTEM	SETTLEMENT	

			BUDGET SUMMAR				
(\$000)		Wetro CASH	FLOW BY FISCAL	TEAK			
BUDGET FISCAL YEAR	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL
2017/2018							
REHABILITATION	\$ 1,989	\$ 13,923	\$ 11,934	\$ 11,934			\$ 39,779
ROTEM SETTLEMENT	\$ 270	\$ 1,893	\$ 1,623	\$ 1,623			\$ 5,409
NEW CAPITAL	\$ 125	\$ 752	\$ 877	\$ 752			\$ 2,507
SUBTOTAL	\$ 2,385	\$ 16,568	\$ 14,434	\$ 14,309			\$ 47,696
2018/2019							
REHABILITATION		\$ 6,544	\$ 45,807	\$ 39,263	\$ 39,263		\$ 130,878
NEW CAPITAL		\$ 480	\$ 2,880	\$ 3,360	\$ 2,880		\$ 9,600
SUBTOTAL		\$ 7,024	\$ 48,687	\$ 42,623	\$ 42,143		\$ 140,478
2019/2020							
REHABILITATION			\$ 2,613	\$ 18,290	\$ 15,678	\$ 15,678	\$ 52,258
NEW CAPITAL			\$ 121	\$ 728	\$ 849	\$ 728	\$ 2,427
SUBTOTAL			\$ 2,734	\$ 19,018	\$ 16,527	\$ 16,406	\$ 54,685
TOTALS							
REHABILITATION AND ROTEM	\$ 2,259	\$ 22,360	\$ 61,977	\$ 71,110	\$ 54,941	\$ 15,678	\$ 228,325
NEW CAPITAL	\$ 125	\$ 1,232	\$ 3,879	\$ 4,840	\$ 3,729	\$ 728	\$ 14,533
TOTAL PROJECTED CASH FLOW BY							1
FISCAL YEAR	\$ 2,385	\$ 23,592	\$ 65,855	\$ 75,950	\$ 58,670	\$ 16,406	\$ 242,858
PROJECT BUDGETS BY FISCAL YEAR	\$ 47,696	\$ 140,478	\$ 54,685	N/A	N/A	N/A	N/A
Numbers may not foot due to rounding.							
Note: EXCLUDES ROTEM SETTLEMENT A							

#### Exhibit 7.7.3 Capital Summary and Cash Flow Detail – OCTA

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FISCAL YEAR	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
FISCAL YEAR	PROJECTS	PROJECTS	TUTAL
2017/18	\$ 7,345	\$ 1,045	\$ 8,390
ROTEM SETTLEMENT Metro	(\$ 5,409)		(\$ 5,409)
ROTEM SETTLEMENT RCTC	-		-
ROTEM SETTLEMENT SBCTA	(\$ 650)		(\$ 650)
ROTEM SETTLEMENT VCTC	-		-
TOTAL 17/18	\$ 1,286	\$ 1,045	\$ 2,331
2018/19	\$ 13,525	\$ 91	\$ 13,616
2019/20	\$ 16,139	\$ 1,012	\$ 17,150
TOTALS	\$ 30,950	\$ 2,148	\$ 33,098
Numbers may not foot due to round	ing.		
Note: 18/19 AND 19/20 REHAB BUD	GETS EXCLUDE ROTEN	I SETTLEMENT	

			UDGET SUMMAR				
(\$000)							
BUDGET FISCAL YEAR	2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023	TOTAL
2017/2018	4						
REHABILITATION	\$ 367	\$ 2,571	\$ 2,203	\$ 2,203			\$ 7,345
ROTEM SETTLEMENT Metro	(\$ 270)	(\$ 1,893)	(\$ 1,623)	(\$ 1,623)			(\$ 5,409)
ROTEM SETTLEMENT RCTC	(4.99)	(4.997)	(4.495)	(4.4.95)			(4.550)
ROTEM SETTLEMENT SBCTA	(\$ 32)	(\$ 227)	(\$ 195)	(\$ 195)			(\$ 650)
ROTEM SETTLEMENT VCTC			4				
NEW CAPITAL	\$ 52	\$ 314	\$ 366	\$ 314			\$ 1,045
SUBTOTAL	\$ 117	\$ 764	\$ 752	\$ 699			\$ 2,331
2018/2019							
REHABILITATION		\$ 676	\$ 4,734	\$ 4,058	\$ 4,058		\$ 13,525
NEW CAPITAL		\$ 5	\$ 27	\$ 32	\$ 27		\$ 91
SUBTOTAL		\$ 681	\$ 4,761	\$ 4,090	\$ 4,085		\$ 13,616
2019/2020							
REHABILITATION			\$ 807	\$ 5,649	\$ 4,842	\$ 4,842	\$ 16,139
NEW CAPITAL			\$ 51	\$ 303	\$ 354	\$ 303	\$ 1,012
SUBTOTAL			\$ 858	\$ 5,952	\$ 5,196	\$ 5,145	\$ 17,150
TOTALS							
REHABILITATION NET OF ROTEM	\$ 64	\$ 1,126	\$ 5,927	\$ 10,092	\$ 8,899	\$ 4,842	\$ 30,950
NEW CAPITAL	\$ 52	\$ 318	\$ 444	\$ 649	\$ 381	\$ 303	\$ 2,148
TOTAL PROJECTED CASH FLOW BY							
FISCAL YEAR	\$ 117	\$ 1,444	\$ 6,370	\$ 10,741	\$ 9,281	\$ 5,145	\$ 33,098
PROJECT BUDGETS BY FISCAL YEAR	\$ 2,331	\$ 13,616	\$ 17,150	N/A	N/A	N/A	N/A
	÷ _,5 <b>5</b> =	÷,- 20	<i>,,_</i>	,	,		
Numbers may not foot due to rounding.							
Note: EXCLUDES ROTEM SETTLEMENT	AMOUNTS FOR FY 18	/19 AND 19/20					

#### Exhibit 7.7.4 Capital Summary and Cash Flow Detail – RCTC

FISCAL YEAR	REHABILITATION	NEW CAPITAL	
	PROJECTS	PROJECTS	TOTAL
2017/18	\$ 3,083	\$ 586	\$ 3,668
2017/18	\$ 10,092	\$ 51	\$ 10,143
2018/19	\$ 7,093	\$ 567	\$ 7,661
TOTALS	\$ 20,268	\$ 1,204	\$ 21,472

lumbers may not foot due to rounding.

Note: EXCLUDES ROTEM SETTLEMENT FOR FY 18/19 AND 19/20

			IDGET SUMMARY OW BY FISCAL YEA	R				
(\$000)								
BUDGET FISCAL YEAR	2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023	TOTAL	
2017/2018								
REHABILITATION	\$ 154	\$ 1,079	\$ 925	\$ 925			\$ 3,083	
NEW CAPITAL	\$ 29	\$ 176	\$ 205	\$ 176			\$ 586	
SUBTOTAL	\$ <b>183</b>	\$ 1,255	\$ 1,130	\$ 1,101			\$ 3,668	
2018/2019								
REHABILITATION		\$ 505	\$ 3,532	\$ 3,028	\$ 3,028		\$ 10,092	
NEW CAPITAL		\$ 3	\$ 15	\$ 18	\$ 15		\$ 51	
SUBTOTAL		\$ 507	\$ 3,548	\$ 3,046	\$ 3,043		\$ 10,143	
2019/2020								
REHABILITATION			\$ 355	\$ 2,483	\$ 2,128	\$ 2,128	\$ 7,093	
NEW CAPITAL			\$ 28	\$ 170	\$ 198	\$ 170	\$ 567	
SUBTOTAL			\$ 383	\$ 2,653	\$ 2,327	\$ 2,298	\$ 7,661	
TOTALS								
REHABILITATION	\$ 154	\$ 1,584	\$ 4,812	\$ 6,435	\$ 5,156	\$ 2,128	\$ 20,268	
NEW CAPITAL	\$ 29	\$ 178	\$ 249	\$ 364	\$ 214	\$ 170	\$ 1,204	
TOTAL PROJECTED CASH FLOW BY FISCAL								
YEAR	\$ 183	\$ 1,762	\$ 5,060	\$ 6,799	\$ 5,370	\$ 2,298	\$ 21,472	
PROJECT BUDGETS BY FISCAL YEAR	\$ 3,668	\$ 10,143	\$ 7,661	N/A	N/A	N/A	N/A	
Numbers may not foot due to rounding.			,					
Note: EXCLUDES ROTEM SETTLEMENT FOR FY	18/19 AND 19/20							

#### Exhibit 7.7.5 Capital Summary and Cash Flow Detail – SBCTA

(\$000)

(\$000)	REHABILITATION	NEW CAPITAL	
FISCAL YEAR	PROJECTS	PROJECTS	TOTAL
HISCAL TEAK	PROJECTS	FROJECIJ	IOTAL
	4		
20/17/18	\$ 7,274	\$ 760	\$ 8,034
ROTEM SETTLEMENT	\$ 650		\$ 650
TOTAL 17/18	\$ 7,924	\$ 760	\$ 8,684
-			
2018/19	\$ 11,096	\$ 66	\$ 11,162
	+ 11,000	<b>,</b>	¥ ==)=0=
2019/20	\$ 13,025	\$ 736	\$ 13,761
TOTALS	\$ 32,045	\$ 1,562	\$ 33,607
Numbers may not foot due to roundi	ng.		
Note: EXCLUDES ROTEM SETTLEME	NT FOR FY 18/19 AND 19	/20	

		CAPITAL B	UDGET SUMMAR	(					
(\$000)		SBCTA CASH F	LOW BY FISCAL Y	EAR					
BUDGET FISCAL YEAR	2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023	TOTAL		
2017/2018									
REHABILITATION	\$ 364	\$ 2,546	\$ 2,182	\$ 2,182			\$ 7,274		
ROTEM SETTLEMENT	\$ 32	\$ 227	\$ 195	\$ 195			\$ 650		
NEW CAPITAL	\$ 38	\$ 228	\$ 266	\$ 228			\$ 760		
SUBTOTAL	\$ 434	\$ 3,001	\$ 2,643	\$ 2,605			\$ 8,684		
2018/2019									
REHABILITATION		\$ 555	\$ 3,883	\$ 3,329	\$ 3,329		\$ 11,096		
NEW CAPITAL		\$3	\$ 20	\$ 23	\$ 20		\$ 66		
SUBTOTAL		\$ 558	\$ 3,903	\$ 3,352	\$ 3,349		\$ 11,162		
2019/2020									
REHABILITATION			\$ 651	\$ 4,559	\$ 3,907	\$ 3,907	\$ 13,025		
NEW CAPITAL			\$ 37	\$ 221	\$ 257	\$ 221	\$ 736		
SUBTOTAL			\$ 688	\$ 4,779	\$ 4,165	\$ 4,128	\$ 13,761		
TOTALS									
REHABILITATION NET OF ROTEM	\$ 396	\$ 3,328	\$ 6,912	\$ 10,265	\$ 7,236	\$ 3,907	\$ 32,045		
NEW CAPITAL	\$ 38	\$ 231	\$ 323	\$ 472	\$ 277	\$ 221	\$ 1,562		
TOTAL PROJECTED CASH FLOW BY									
FISCAL YEAR	\$ 434	\$ 3,560	\$ 7,235	\$ 10,737	\$ 7,514	\$ 4,128	\$ 33,607		
PROJECT BUDGETS BY FISCAL YEAR	\$ 8,684	\$ 11,162	\$ 13,761	N/A	N/A	N/A	N/A		
Numbers may not foot due to rounding.									
Note: EXCLUDES ROTEM SETTLEMENT FC	OR FY 18/19 AND 19/2	0							

#### Exhibit 7.7.6 Capital Summary and Cash Flow Detail – VCTC

(\$000)

(\$666)	REHABILITATION	NEW CAPITAL	
	REHABILITATION	NEW CAPITAL	
FISCAL YEAR	PROJECTS	PROJECTS	TOTAL
2017/18	\$ 5,122	\$ 380	\$ 5,502
2017/10	<i> </i>	<i><b>v</b></i> 000	¥ 0,001
2018/19	\$ 8,360	\$ 33	\$ 8,393
2010/15	ş 8,500	Ş 55	ş 6,353
2010/20	¢ 0.550	¢ 107	¢ 0 725
2019/20	\$ 8,560	\$ 165	\$ 8,725
TOTALS	\$ 22,042	\$ 579	\$ 22,620
Numbers may not foot due to rounding.			
Note: EXCLUDES ROTEM SETTLEMENT FO	OR FY 18/19 AND 19/2	20	

			JDGET SUMMARY				
VCTC CASH FLOW BY FISCAL YEAR (\$000)							
BUDGET FISCAL YEAR	2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023	TOTAL
2017/2018							
REHABILITATION	\$ 256	\$ 1,793	\$ 1,537	\$ 1,537			\$ 5,122
NEW CAPITAL	\$ 19	\$ 114	\$ 133	\$ 114			\$ 380
SUBTOTAL	\$ 275	\$ 1,907	\$ 1,670	\$ 1,651			\$ 5,502
2018/2019							
REHABILITATION		\$ 418	\$ 2,926	\$ 2,508	\$ 2,508		\$ 8,360
NEW CAPITAL		\$ 2	\$ 10	\$ 12	\$ 10		\$ 33
SUBTOTAL		\$ 420	\$ 2,936	\$ 2,520	\$ 2,518		\$ 8,393
2019/2020							
REHABILITATION			\$ 428	\$ 2,996	\$ 2,568	\$ 2,568	\$ 8,560
NEW CAPITAL			\$8	\$ 50	\$ 58	\$ 50	\$ 165
SUBTOTAL			\$ 436	\$ 3,046	\$ 2,626	\$ 2,618	\$ 8,725
TOTALS							
REHABILITATION	\$ 256	\$ 2,211	\$ 4,891	\$ 7,040	\$ 5,076	\$ 2,568	\$ 22,042
NEW CAPITAL	\$ 19	\$ 116	\$ 151	\$ 175	\$ 68	\$ 50	\$ 579
TOTAL PROJECTED CASH FLOW BY							
FISCAL YEAR	\$ 275	\$ 2,326	\$ 5,042	\$ 7,216	\$ 5,144	\$ 2,618	\$ 22,620
PROJECT BUDGETS BY FISCAL YEAR	\$ 5,502	\$ 8,393	\$ 8,725	N/A	N/A	N/A	N/A
Numbers may not foot due to rounding.	·					,	
Note: EXCLUDES ROTEM SETTLEMENT FO	R FY 18/19 AND 19/20	)					

### Exhibit 7.7.7 Capital Summary and Cash Flow Detail – Other Fund Sources

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(\$000)			
	REHABILITATION	NEW CAPITAL	
FISCAL YEAR	PROJECTS	PROJECTS	TOTAL
2017/18	\$ 26,956	-	\$ 26,956
2018/19	\$ 20,974	-	\$ 20,974
2019/20	\$ 16,274	-	\$ 16,274
TOTALS	\$ 64,203	-	\$ 64,203

Numbers may not foot due to rounding.

(\$000)			DGET SUMMARY OW BY FISCAL Y				
BUDGET FISCAL YEAR	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL
<b>2017/2018</b> REHABILITATION NEW CAPITAL	\$ 1,348	\$ 9,435	\$ 8,087	\$ 8,087			\$ 26,956 -
SUBTOTAL	\$ 1,348	\$ 9,435	\$ 8,087	\$ 8,087			\$ 26,956
<b>2018/2019</b> REHABILITATION NEW CAPITAL		\$ 1,049	\$ 7,341	\$ 6,292	\$ 6,292		\$ 20,974
SUBTOTAL		\$ 1,049	\$ 7,341	\$ 6,292	\$ 6,292		\$ 20,974
2019/2020 REHABILITATION NEW CAPITAL SUBTOTAL			\$ 814 - <b>\$ 814</b>	\$ 5,696 - <b>\$ 5,696</b>	\$ 4,882 - <b>\$ 4,882</b>	\$ 4,882 - <b>\$ 4,882</b>	\$ 16,274 - <b>\$ 16,274</b>
TOTALS REHABILITATION NEW CAPITAL	\$ 1,348 -	\$ 10,483	\$ 16,241	\$ 20,075 -	\$ 11,174	\$ 4,882 -	\$ 64,203
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 1,348	\$ 10,483	\$ 16,241	\$ 20,075	\$ 11,174	\$ 4,882	\$ 64,203
PROJECT BUDGETS BY FISCAL YEAR	\$ 26,956	\$ 20,974	\$ 16,274	N/A	N/A	N/A	N/A

## SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

# FY2017-18 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 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 FY2017-18, the adopted SCRRA G&A budget, using the compilation of costs as described above, is \$22.4 million or an increase of \$1.2 million, or 5.5%, over the FY2016-17 Adopted 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 FY2017-18 Indirect Cost Allocation Plan (ICAP), SCRRA developed a cost allocation based primarily on labor costs and the benefit each cost center receives from support departments.

SCRRA has received approval of the FY2007-08, FY2008-09, FY2011-12 and FY2012-13 Plans from the Federal Transit Administration (FTA), SCRRA's cognizant agency. In October of 2012, a letter was received from the FTA advising that SCRRA's FY2009-10 and FY2010-11 did not require approval, because those rates did not exceed the previous rate by more than 20%. The ICAP for FY2013-14 and FY2014-15 were submitted to the FTA in FY2015-16 and final audits are pending. SCRRA received provisional approval to use those rates for FY2015-16, FY2016-17, and FY2017-18. The FY2018-19 plan, based on FY2015-16 actuals has been submitted to the FTA and is pending provisional or final approval.

The FY2017-18 Plan contains a specific ICAP rate for each cost center that receives shared service support, as indicated on *Exhibit 8.2.* SCRRA further divides costs within General and Administrative 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 Budget and Financial Analysis, General Accounting; certain financial services; the Internal Audit function; 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 Future Revision in ICAP Rate(s)

SCRRA is in the process of modifying the ICAP calculation methodology as follows:

- Changing from a project category based rate to a cost center rate that better aligns service costs with cost centers and ultimately projects benefitting from those services.
- With the exception of Operations and Maintenance-of-Way, projects which are trued-up at year-end, the unrecovered or over-recovered balances will be carried over to Plan calculations for the next period.

This FY2017-18 Budget reflects the historic ICAP calculation methodology. Should the modified methodology be approved, it will be applied to actuals for FY2017-18 in the reconciliation process.

#### 8.5 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 273 full time equivalent (FTE) headcounts.

Agency FTE Headcount

FY2017-18	
REPORTING GROUP	FTE's
Executive	3
Internal Audit	4
Legal	4
Office of the DCEO	61
Administration	42
Operations	159
	273

# *Executive* group includes the Chief Executive Officer, Deputy Chief Executive Officer and an Administrative Management Specialist.

*Internal Audit* reports directly to the SCRRA Board and includes a team of internal auditors.
*Legal* 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 Finance, Human Resources, Contracts and Compliance, and Information Technology.

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

*Operations* includes responsibility for Positive Train Control (PTC), dispatching services, facilities and fleet maintenance, field operations, materials management and warehousing, fare collection services, 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 273 FTE headcount. Total Authority labor and fringe costs are allocated across the business modes.

#### 8.6 Exhibits

**Exhibit 8.1: FY2017-18 General Administrative Expenses** identifies the individual cost components included in the general and administrative cost grouping.

Exhibit 8.2: FY2017-18 Indirect Cost Allocation Plan (ICAP) Cost Calculations illustrates the proposed SCRRA business modes and the cost allocations that support the FY2017-18 ICAP rates.

**Exhibit 8.3: FY2017-18 Roster of Positions** provides a roster of FY2017-18 FTE headcount identified by specific positions within each Executive Office and Department.

#### Exhibit 8.1 FY2017-18 General and Administrative Expenses

(\$000)			cal Year 2017	7-18	FY 17-18 B	udget vs.
	FY 16-17	Federally	Local		FY 16-17	-
Expenditure Description	Budget	Eligible	Funding	Total Budget	Variance	%
Agency Costs	100	400		100		
Audting and Accounting	100	100		100	-	0.0%
Consultants	636 150	190		190 150	(446)	(70.1%) 0.0%
Recruitment Services Medical Examinations	150	150 4		150	- (4)	(46.7%
Office Equip Maint & Repair	2	4		4	(4)	33.5%
Document Management & Storage	52	26		26	(25)	(49.3%
In-House Training Services	293	312		312	(23)	6.3%
Bank Service Charges	44	43		43	(1)	(3.2%
Materials & Supplies	144	125	1	126	(18)	(12.5%
Office Equipment	35	10		10	(25)	(71.4%
Computer Software	4		4	4	-	0.0%
Printing & Reproduction	6	13	3	15	9	154.2%
Claims Administration Fees	3	3		3	-	0.0%
Professional Memberships	103	163	10	172	69	66.9%
Subscriptions & Reference Materials	5	5	0	5	(0)	(2.0%
Meeting Expenses	22	22	6	28	7	31.29
Registration Fees	45	22	23	44	(1)	(1.39
Transportation	77	19	51	70	(7)	(8.5%
Meals & Entertainment	18	8	7	15	(3)	(17.29
Lodging	69	17	57	74	5	7.89
Mileage/Parking	27	24	4	28	1	2.9%
Misc Expenses Media Relations	2 1	3		3	(1)	21.3% (100.0%
Event Marketing	4		5	5	(1)	12.59
Legal & Meeting Notices	33	14	80	94	62	189.29
Postage & Messenger	82	71	00	71	(11)	(13.29
Fines & Penalties	0	/1	0	0	(11)	0.09
Other Misc Expense	29	74	5	79	50	174.09
Total Agency Costs	1,992	1,420	254	1,674	(318)	(16.0%
Staff Labor						
SCRRA Wages & Salaries	8,039	7,131	915	8,046	7	0.19
Wages Interns	270	250		250	(20)	(7.49
Wages Job Core / Grads on Track	100	250		250	150	150.0%
Merit Increase	55	214	27	241	186	336.19
Allocated Fringe Benefits	3,047	2,295	295	2,589	(458)	(15.09
OPEB - GASB45	1,768	10.1.10	1,627	1,627	(141)	(8.09
Total Staff Labor Professional Services	13,280	10,140	2,864	13,004	(276)	(2.1%
Legal Services	3	3		3	-	0.09
Auditing & Accounting	450	725		725	275	61.19
Consultants	876	1,702	1	1,702	827	94.49
Lobby Services	459		480	480	21	4.69
Service Contract	4	4		4	0	8.69
Total Professional Services	1,791	2,433	481	2,914	1,123	62.7%
MIS						
Consultants	1,300	1,448		1,448	148	11.49
Computer S/W / H/W Maintenance	760	760		760	-	0.09
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	-	0.09
Computer H/W	150	515		515	365	243.39
Computer S/W	465	546		546	81	17.49
Printing & Reproduction						
License & Registration Fees	1	1		1	-	0.09
Total MIS	3,000	3,594		3,594	594	19.8%
Employee Recognition Bonus Pay			139	139	139	
Total Employee Recognition			139	139	139	
Utilities/Leases			135	133	135	
Office Equipment Rental	5				(5)	(100.09
Office Space Rental	966	884		884	(82)	(100.07
Total Utilities/Leases	971	884		884	(87)	(9.0%
Board Related Items					( <i>'</i> )	(1.1.2)
Board Travel/Meeting Expenses	16		16	16	-	0.09
Board Travel	13		13	13	-	0.09
Board Per Diem	70		70	70	-	0.09
Board Development Program	52		52	52	-	0.09
Total Board Related Items	150		150	150	-	0.0%
		18,471	3,888	22,359	1,175	5.5%

## Exhibit 8.2 FY2017-18 Indirect Cost Allocation Plan (ICAP) Cost Calculations

## General & Adminstrative Expenses (\$000)FY 17-18Federally Eligible G&A18,471

Federally Eligible G&A	
Non-Federal Eligible G&A	

Total G&A Expenses

3,888
22,359

Tier 1 Cost Distribution		Operating		Capital					
	Train		Subtotal	New	Equipment	Rehabilitation	Subtotal		Grand
	Operations	MOW	Operating	Capital	Procurement	& Renovation	Capital	Recollectable	Total
SCRRA Labor Distribution (%)	68.4%	14.0%	82.4%	3.8%	0.3%	9.6%	13.7%	3.9%	100.0%
Federally Eligible G&A Allocation (Proj# 000000)	12,642	2,583	15,226	705	55	1,772	2,532	713	18,471
Non-Federal Eligible Labor Distribution (%) Non-Federal Eligible G&A Allocation	83.0%	17.0%	100.0%						100.0%
(Proj# 000002)	3,228	660	3,888						3,888
Total G&A Expense Allocation	15,870	3,243	19,114	705	55	1,772	2,532	713	22,359

Numbers may not foot due to rounding.

Total Indirect and Allocable Expenses as % of Direct Labor	226%	153%		257%	705%	181%		145%	
Grand Total	201,438	41,607	243,045	12,951	106,648	62,029	181,628	17,403	442,076
Total Direct Expenses	174,344	37,724	212,068	11,786	106,531	59,490	177,807	16,463	406,337
Other Expenses	158,421	34,385	192,805	11,190	106,509	57,648	175,347	15,611	383,764
Fringe Benefits	3,930	796	4,726	142	5	440	587	203	5,516
Salaries & Wages	11,993	2,543	14,536	454	17	1,403	1,873	648	17,058
Direct Expenses									
Total Indirect and Allocable Expenses	27,094	3,883	30,977	1,165	117	2,539	3,821	940	35,738
G&A Expense Allocation	15,870	3,243	19,114	705	55	1,772	2,532	713	22,359
Subtotal - Indirect Expenses	11,224	640	11,864	460	63	766	1,288	228	13,380
Other Expenses	8,504	229	8,733	32	5	38	75	45	8,853
Fringe Benefits	617	98	715	102	14	174	289	44	1,048
Salaries & Wages	2,103	313	2,416	326	44	554	924	139	3,479
Collector Pool Expenses									

Numbers may not foot due to rounding.

#### Exhibit 8.3 FY2017-18 Roster of Positions

	Cost			
Business Unit	Center	Cost Center/Division	Position	Total
Executive	1100	Office of the CEO	Chief Executive Officer	1
			Deputy Chief Executive Officer	1
			Administrative Management Specialist	1
		Office of the CEO Total		3
Internal Audit	1110	Internal Audit	Audit Manager	1
			Senior Auditor	1
			Senior Auditor, Governmental Compliance	1
			Staff Auditor II	1
		Internal Audit Total		4
Legal	1115	Office of the General Counsel	Associate General Counsel	1
			General Counsel	1
			Business Analyst	1
		Office of the General Counsel Total		3
	2150	Risk Management	Senior Counsel, Risk Manager	1
		Risk Management Total		1
Deputy CEO	1130	Human Resources	HR Analyst	4
			Assistant Manager, Human Resources	1
			Department Assistant	2
			Director, Human Resources	1
			Manager, Human Resources	1
			Manager, Learning & Development	1
		Human Resources Total		10
	4100	Finance	Grants Accountant I	2
			Financial Analyst II	(1) (1)
			Senior Accountant	1
			Accounting Assistant	1
			Manager, Special Projects	1
			Accountant I	1
			Cost Accountant I	2
			Accounts Payable Specialist I	2
			Chief Financial Officer	1
			Controller	1
			Cost Accountant II	1
			Fare Collections Services (FCS) Revenue Specialist	1
			Executive Assistant	1
			Financial Analyst I	1
			Manager, Budgets + Financial Analysis	1
			Manager, General Accounting	1
	1		Manager, Grants Admin + Fiscal Mngmt	1
			Capital Budget Analyst	1
			Payroll Accountant I	1
	1		Cash Management Analyst I	1
	1		Grants Accountant II	1
		Finance Total		26

Business Unit	Cost Center	Cost Center/Division	Position	Total		
Deputy CEO	4220	Purchasing, Contracts & Contract Compliance	Assistant Director, Contracts	1		
			Senior Contract & Compliance Administrator	5		
			Contract + Compliance Administrator	3		
			Contracts Data Analyst I	1		
			Administrative Assistant	1		
			Principal Contract + Compliance Administrator	2		
		Purchasing, Contracts & Contract Compliance Total				
	4230	Information Technology	Business Intelligence Architect	2		
			IT Systems Manager - Applications	1		
			Functional Lead, Operations and Engineering	1		
			Information Systems Supervisor	1		
			Lead, Oracle Finance + Procurement	2		
			Salesforce.com Administrator	1		
			Senior Director, Information Technology	1		
			Senior Network Engineer	1		
			IT Systems Manager (Infrastructure)	1		
			Webmaster	1		
		Information Technology Total		12		
Administration	1105	Government Affairs	Government & Regulatory Affairs Manager	1		
			Government Relations Administrator	1		
		Government Affairs Total		2		
	1150	Office of the C.E.A.	Chief of External Affairs	1		
			Department Assistant	1		
			Assistant to the CEO/Board Secretary	1		
			Assistant Board Secretary (AMS)	1		
		Office of the C.E.A. Total		4		
	3200	Sales + Marketing	Department Assistant	1		
			Marketing Manager (Digital Systems)	1		
			Manager, Corporate Accounts	1		
			Manager, Sales + Marketing	1		
			Marketing Manager	1		
			Sales & Marketing Coordinator	1		
			Social Media Specialist	1		
		Sales + Marketing Total		7		

	Cost			
Business Unit		Cost Center/Division	Position	Total
Administration	3300	Customer Relations	Assistant Manager, Customer Engagement LAUS	1
			Assistant Manager, Customer Engagement MOC	1
			Customer Engagement Representative	11
			Communications Coordinator	2
			Lead, Customer Engagement Representative	6
			Customer Relations Supervisor	2
			Manager, Customer Engagement LAUS	1
			Customer Relations Supervisor (PM)	1
		Customer Relations Total		25
	3450	Public Affairs	Assistant Public Affairs Officer	2
			Public Affairs Specialist (AMS)	1
			Director, Public Affairs	1
		Public Affairs Total		4
Operations	2875	PTC, C+S Systems Management	Manager, PTC Network Architecture (Acting/Dir, Network C	1
		PTC, C+S Systems Management Total		1
	1550	Planning + Development	Director, Planning and Development	1
			Grants Funding and Compliance Administrator	1
			Planning Manager (Performance Data and Metrics)	1
			Planning Manager, Asset Data	1
			Manager, Research & Planning	1
			Planning Manager	1
			Sr. Public Projects Specialist	1
			Assistant Director, Grants	1
			Planning Manager (Planning and System Performance Anal	1
		Planning + Development Total		9
	2175	Office of the COO	Department Assistant	1
			Deputy Chief Operating Officer (PPD)	1
			Chief Operating Officer	1
			Deputy Chief Operating Officer (Disp + OS)	1
			Executive Assistant	1
			Business Manager	1
		Office of the COO Total		6
	2200	Operations + Security	Business Administrator	2
		,	Manager, Special Projects	1
	1	Operations + Security Total		3

	Cost			
Business Unit	Center	Cost Center/Division	Position	Tota
Operations	2210	System Safety	Assistant Director, System Safety	
			Business Administrator	
			Administrative Management Specialist	
			Director, System Safety + Security	
			Public Safety + Environment Manager	
			Security Manager	
			Deputy Chief Operating Officer (System Safety & Complian	í í
		System Safety Total		7
	2215	Dispatching Services	Communications Coordinator	ť
			Customer Relations Supervisor	1
			Dispatching Manager (PM)	1
			Director, Dispatching Operations	1
			Dispatching Manager	1
			Supervisor, Dispatching Operations	6
			Train Dispatcher	21
		Dispatching Services Total		37
	2250	Field Operations Management	Field Operations Administrator (Trainee)	(T)
			Director, Compliance	1
			Field Operations Administrator	1
			Operations Compliance Officer	
		Field Operations Management Total		10
	2300	Equipment	Assistant Director, Maintenance of Equipment	1
			Business Administrator	1
			Business Analyst	
			Department Assistant	,
			Director, Maintenance of Equipment	:
			Program Manager (Fleet)	
			Mechanical Compliance Officer	
			Project Engineer II	:
			Program Manager	
		Equipment Total		1(

Business Unit	Cost Center	Cost Center/Division	Position	Tota
Operations	2310	Facilities + Fleet Maintenance	Customer Experience Administrator	
			Department Assistant	
			Facilities + Fleet Maintenance Manager	
			Fleet Maintenance Coordinator	
			Lead, Maintenance Technician	
			Maintenance Technician	
		Facilities + Fleet Maintenance Total		
	2800	Engineering & Construction	Director, Engineering & Construction	
			Executive Assistant (Office Engineer)	
		Engineering & Construction Total		
	2820	Track	Assistant Director, T+S Rehabilitation	
			Business Administrator	
			District T + S Maintenance Supervisor	
			ROW Maintenance Coordinator	
			Track Maintenance Engineer	
		Track Total		
	2860	Standards + Design	Principal Engineer (Design & Engineering)	
			Civil Design CADD Operator	
			Project Engineer I	
			ROW Crossings Coordinator	
		Standards + Design Total		
	2870	C+S Train Control Maintenance	Assistant Director, Signal Systems	
			Business Administrator	
			Planning Manager	
			Project Engineer I	
			District C + S Supervisor	
		C+S Train Control Maintenance Total		
	2875	PTC Systems Management	Department Assistant	
			Director, Network Control Systems	
			Director, Signals and Communications	
			Deputy Chief Operating Officer (PTC&Engineering)	
		PTC Systems Management Total		
	2876	PTC Communications Systems	Communication Systems Manager	
			District Supervisor, Communications Network	
			Manager, On Board PTC Systems	
			PTC Equipment Engineer I	
			PTC Equipment Engineer II	
		PTC Communications Systems Total		

Business Unit	Cost Center	Cost Center/Division	Position	Tota
Operations	2877	PTC Technical Support Services	Assistant Director, PTC Technical Services	
			Business Analyst	
			Project Engineer, Communication Systems	
			Project Engineer, Signal Systems	
			PTC Configuration Engineer	
			PTC Records Engineer	
			PTC Technical Services Manager	
		PTC Technical Support Services Total		
	2878	PTC Network Control Operations	Business Intelligence Architect	1
			Senior Network Engineer	1
			Senior Systems Engineer	2
		PTC Network Control Operations Total		4
	2880	Public Projects	Principal Engineer (Project Management)	1
			Project Engineer I (Railroad Civil Engineer II)	1
			Civil Engineer	1
			Project Engineer I	1
			Senior Civil Engineer	1
		Public Projects Total		5
	2890	Capital Construction + Rehabilitation	Principal Engineer (Structures & Stations)	1
			Project Engineer I	1
		Capital Construction + Rehabilitation Total		2
	3600	Fare Collection Services	Manager, Special Projects (Fare Collections)	1
			Fare Collections Services Specialist	1
			Principal Planner	1
			Fare Collections Services Specialist	1
		Fare Collection Services Total		4
	4223	Materials Management + Warehousing	Business Analyst	1
			Director, Special Projects	1
			Inventory Control Analyst	1
			Manager, Special Projects	
			Material Handler/Operator	8
		Materials Management + Warehousing Total		12
	4530	Program Management	Assistant Director, Program Management	
			Department Assistant	
			Program Management Analyst II	
			Program Management Analyst I	
		Program Management Total		
	1		ΤΟΤΑΙ	L 27

## SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

## FY2017-18 BUDGET

## SECTION 9: Budget Forecasts FY2018-19 and FY2019-20

#### 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 2019 and 2020. 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 FY2017-18 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 FY2018-19 and FY2019-20.
- The Authority is currently in the process of negotiating new office space. Because a final agreement has not been reached with respect to this possible future event, the existing lease is reflected in FY2017-18, FY2018-19 or FY2019-20.

#### 9.3 Exhibits

- Exhibit 9.1: FY2018-19 and FY2019-20 Forecast New Service Requests No new service was included for FY2018-19 and FY2019-20
- Exhibit 9.2: FY2018-19 Forecast of Operating Budget by Cost Component by Member Agency
- Exhibit 9.3: FY2019-20 Forecast of Operating Budget by Cost Component by Member Agency

# Exhibit 9.2 FY2018-19 Forecast of Operating Budget by Cost Component by Member Agency

			Forecast of FY2	018-19 Budget		
(\$000s)	METRO	ΟርΤΑ	RCTC	SBCTA	VCTC	TOTAL
Operating Revenue						
Farebox Revenue	40,769	22,453	7,759	10,512	2,404	83,897
Metro Fare Reduction Subsidy	1,262	-	-	-	-	1,262
Subtotal-Pro Forma FareBox	42,031	22,453	7,759	10,512	2,404	85,159
Dispatching	1,130	685	6	57	250	2,128
Other Revenues	. 6	3	1	1		12
MOW Revenues	8,120	2,537	670	1,560	544	13,431
Subtotal Operating Revenue	51,287	25,678	8,436	12,130	3,199	100,730
Operating Expenses	51,207		0,450	12,150	5,255	100,750
Operations & Services						
Train Operations	24,559	10,331	4,679	4,842	1,685	46,097
Equipment Maintenance	18,449	8,637	4,476	4,334	1,633	37,530
Fuel	9,579	4,794	1,878	1,912	588	18,751
	-	-	· ·			18,751
Non-Scheduled Rolling Stock Repairs	52	24	10	11	3	
Operating Facilities Maintenance	879	401	166	190	55	1,690
Other Operating Train Services	227	83	72	49	50	482
Rolling Stock Lease	-	-	-	-	-	
Security - Sheriff	3,150	1,206	943	614	126	6,040
Security - Guards	1,362	498	432	295	302	2,889
Supplemental Additional Security	341	182	63	85	19	690
Public Safety Program	130	47	41	28	29	275
Passenger Relations	871	451	151	213	53	1,740
TVM Maintenance/Revenue Collection	2,508	1,322	1,003	821	364	6,019
Marketing	556	263	96	134	35	1,085
Media & External Communications	192	70	61	42	43	408
Utilities/Leases	1,560	570	495	338	345	3,309
Transfers to Other Operators	3,641	1,624	536	753	235	6,789
Amtrak Transfers	707	1,402	-	-	110	2,219
Station Maintenance	1,046	248	115	230	81	1,720
Rail Agreements	1,926	1,579	1,257	358	347	5,466
Subtotal Operations & Services	71,736	33,735	16,475	15,251	6,102	143,300
-	71,750	55,755	10,475	13,231	0,102	143,300
Maintenance-of-Way	22.201	9.651	2.245	E E 27	2 462	40 177
MoW - Line Segments	22,291	8,651	3,245	5,527	2,463	42,177
MoW - Extraordinary Maintenance	612	134	101	113	84	1,044
Subtotal Maintenance-of-Way	22,903	8,785	3,346	5,640	2,546	43,221
Administration & Services	C 055	2 5 1 7	2.100	1 407	1 510	14 5 41
Ops Salaries & Fringe Benefits	6,855	2,517	2,169	1,487	1,513	14,541
Ops Non-Labor Expenses	3,895	1,701	844	839	380	7,658
Indirect Administrative Expenses	7,452	2,725	2,365	1,616	1,650	15,807
Ops Professional Services	1,268	464	402	275	281	2,689
Subtotal Admin & Services	19,469	7,407	5,779	4,216	3,824	40,695
Contingency (Non-Train Ops)	119	43	38	26	26	252
Total Operating Expenses	114,227	49,971	25,638	25,133	12,499	227,468
Insurance Expense/(Revenue)				r		
Liability/Property/Auto	6,809	3,110	1,284	1,471	426	13,099
Claims / SI	546	249	103	118	34	1,050
Claims Administration	619	283	117	134	39	1,191
PLPD Revenue	-	-	-	-	-	
Net Insurance Expense	7,974	3,642	1,503	1,723	499	15,341
Total Expense	122,201	53,613	27,142	26,856	12,997	242,808
Loss	(70,914)	(27,935)	(18,706)	(14,726)	(9,799)	(142,079)
Member Subsidies						
Operations	62,940	24,293	17,202	13,003	9,300	126,738
Insurance	7,974	3,642	1,503	1,723	499	15,341
Total Member Subsidies	70,914	27,935	18,706	14,726	9,799	142,079

Numbers may not foot due to rounding.

# Exhibit 9.3 FY2019-20 Forecast of Operating Budget by Cost Component by Member Agency

	Forecast of FY2019-20 Budget						
(\$000s)	METRO	OCTA	RCTC	SBCTA	VCTC	TOTAL	
Operating Revenue							
Farebox Revenue	40,769	22,453	7,759	10,512	2,404	83,897	
Metro Fare Reduction Subsidy	1,262	-	-	-	-	1,262	
Subtotal-Pro Forma FareBox	42,031	22,453	7,759	10,512	2,404	85,159	
Dispatching	1,130	685	6	57	250	2,128	
Other Revenues	6	3	1	1		12	
MOW Revenues	8,120	2,537	670	1,560	544	13,431	
Subtotal Operating Revenue	51,287	25,678	8,436	12,130	3,199	100,730	
Operating Expenses					·		
Operations & Services							
Train Operations	25,382	10,644	4,817	5,006	1,750	47,600	
Equipment Maintenance	19,120	8,942	4,619	4,474	1,692	38,847	
Fuel	9,894	4,946	1,939	1,975	608	, 19,361	
Non-Scheduled Rolling Stock Repairs	52	24	10	11	3	100	
Operating Facilities Maintenance	796	364	150	171	50	1,530	
Other Operating Train Services	233	85	74	51	50	495	
Rolling Stock Lease	-	-	-	-	-		
Security - Sheriff	3,257	1,255	962	635	132	6,241	
Security - Guards	1,387	507	440	301	307	2,942	
Supplemental Additional Security	341	182	63	85	19	690	
Public Safety Program	130	47	41	28	29	275	
Passenger Relations	826	47	167	203	29 57	1,746	
TVM Maintenance/Revenue Collection				854			
•	2,610	1,376	1,044		379	6,264	
Marketing	523	291	107	126	39	1,085	
Media & External Communications	192	70	61	42	43	408	
Utilities/Leases	1,569	574	498	340	348	3,329	
Transfers to Other Operators	3,751	1,673	552	776	242	6,993	
Amtrak Transfers	721	1,429	-	-	112	2,262	
Station Maintenance	1,096	259	119	241	85	1,800	
Rail Agreements	1,950	1,626	1,283	361	349	5,569	
Subtotal Operations & Services	73,829	34,786	16,945	15,681	6,295	147,536	
Maintenance-of-Way							
MoW - Line Segments	23,309	9,017	3,408	5,759	2,577	44,071	
MoW - Extraordinary Maintenance	639	140	106	117	87	1,090	
Subtotal Maintenance-of-Way	23,948	9,157	3,514	5,877	2,664	45,160	
Administration & Services							
Ops Salaries & Fringe Benefits	7,202	2,645	2,279	1,563	1,589	15,277	
Ops Non-Labor Expenses	4,014	1,753	867	864	390	7,888	
Indirect Administrative Expenses	7,671	2,805	2,434	1,663	1,699	16,273	
Ops Professional Services	1,270	464	403	275	281	2,694	
Subtotal Admin & Services	20,156	7,668	5,983	4,365	3,959	42,132	
Contingency (Non-Train Ops)	119	43	38	26	26	252	
Total Operating Expenses	118,052	51,655	26,480	25,949	12,944	235,080	
nsurance Expense/(Revenue)							
Liability/Property/Auto	7,224	3,299	1,358	1,552	451	13,885	
Claims / SI	579	264	109	124	36	1,113	
Claims Administration	623	285	117	134	39	1,197	
PLPD Revenue	-	-	-	-	-	-	
Net Insurance Expense	8,427	3,848	1,584	1,811	526	16,196	
Total Expense	126,479	55,503	28,064	27,759	13,470	251,276	
Loss	(75,192)	(29,825)	(19,628)	(15,629)	(10,271)	(150,546)	
	1 3,1321	123,0231	120,0201	120,0201	\_~;~/ 1]	1200,040	
Memher Subsidies							
Member Subsidies	66 765	25 077	18 044	13 8 10	9 7/15	12/ 250	
Member Subsidies Operations Insurance	66,765 8,427	25,977 3,848	18,044 1,584	13,819 1,811	9,745 526	134,350 16,196	

Numbers may not foot due to rounding.

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## SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

## FY2017-18 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 Southern California Regional Rail Authority.

#### **10.2** Revenue and Cost Allocation Methodology Detail

#### **10.2.1 Formulae for Allocation to Members**

Under the terms of the 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 FY2017-18 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 provide 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. At the end of each fiscal year, the interest on fares and other funds received in advance for operations and capital projects is assigned to counties based upon a calculation of funds on account throughout the year which were provided by each Member Agency.

#### 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 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 counties based 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 SCRRA 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, SCRRA 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, SCRRA has not adopted a formal debt policy. State law defines the process under which a Joint Powers Authority (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 Statement 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 Orange County Riverside County San Bernardino County San Diego County Ventura County Total Population:	10.2 million 3.2 million 2.4 million 2.2 million 3.3 million 0.9 million 22.2 million	
	California Population % of State Population	39.5 million	
	located within SCRRA		
	Service Area	56%	
Route Miles in System	Los Angeles County	220	
(Duplicated)	Orange County	117	
	Riverside County	79	
	San Bernardino County	41	
	Northern San Diego County	38	
	Ventura County	41	
	Total Miles:	536	

Route Miles <i>(Unduplicated)</i>	Los Angeles County Orange County Riverside County San Bernardino County Northern San Diego County Ventura County Total Miles:	184 67 58 40 19 <u>41</u> 409
Available Equipment	Locomotives Cab Cars Coaches	54 56 160
Stations	Los Angeles County Orange County Riverside County San Bernardino Northern San Diego County Ventura County Total Stations:	26 11 9 8 1 <u>5</u> 60
Ticket Vending Machines	<b>icket Vending Machines</b> Installed TVMs Test TVMs Validators Installed Ticket Office Machines	
Test TVMs1Validators Installed144Ticket Office Machines4Number of Annual Auto Trips Removed8,724,464		
Percent of Passenger Miles Removed on Regional Freev	vays	up to 0.7%
Percent of Freeway Traffic Removed on I-10 and SR 60	corridor (peak hours)	up to 30%
Average Metrolink weekday Trip Length		34.8 miles
Percent of Metrolink Riders Formerly Driving Alone		81.5%
June 23, 2017	126	

#### Percent of Riders with Los Angeles Union Station Destination

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%

61.3%

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#### 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 proposed means of revenue generation to finance the expenditures.

*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 recollectables.

*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

#### 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 FY2017-18 Formulae Used to Allocate Expenses by Member Agency

Allocation	Metro	OCTA	RCTC	SBCTA	VCTC
Train Miles Lagged (FY16)	53.32%	24.29%	7.60%	11.47%	3.32%
FY18 Budget Train Miles (Base Services)	54.35%	20.94%	9.50%	11.17%	4.04%
FY18 Budget Train Miles (All Services)	52.03%	23.76%	9.78%	11.18%	3.25%
Revenue Moves Thru LAUS	65.50%	12.93%	4.43%	13.39%	3.75%
Unduplicated Stations (Incl Buena Park)	43.33%	20.00%	15.00%	13.33%	8.34%
TVMs (Excl TOMs & Flower St)	41.67%	21.97%	16.67%	13.64%	6.05%
Ridership Lagged (FY16)	51.56%	24.20%	8.00%	12.93%	3.31%
Current Ridership w/o IEOC (Transfer Payments)	55.35%	21.08%	6.83%	12.64%	4.10%
FY18 Fare Revenue	49.36%	26.37%	9.11%	12.34%	2.82%
75% Train Miles Lagged/25% Unduplicated Statior	50.82%	23.22%	9.45%	11.94%	4.57%
S.B. Line Trn Miles	59.82%	0.00%	0.00%	40.18%	0.00%
SB Weekend	59.82%	0.00%	0.00%	40.18%	0.00%
S.B. Incremental (100% SBCTA)				100.00%	
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)		100.00%			
OC MSEP		100.00%			
IEOC Line Trn Miles	0.00%	63.02%	32.00%	4.98%	0.00%
IEOC Weekday Incremental Trn Miles	0.00%	63.87%	35.78%	0.35%	0.00%
IEOC Line: San Bernardino-Oceanside		69.23%	24.18%	6.59%	
IEOC Line: Riverside-Oceanside		77.00%	23.00%		
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%				
OCTA Train Miles		100.00%			
RCTC Train Miles			100.00%		
SBCTA Train Miles				100.00%	
VCTC Train Miles					100.00%

## Exhibit 10.2 FY2017-18 Formulae Used to Allocate Expenses by Line

	San		Antelope		Orange			
Allocation	Bernardino	Ventura	Valley	Riverside	County	OC MSEP	IEOC	91/PVL
Train Miles Lagged (FY16)	24.12%	9.15%	22.10%	7.06%	15.97%	3.40%	12.32%	5.88%
FY18 Budget Train Miles (Base Services)	22.72%	10.46%	22.24%	8.58%	16.18%	0.00%	12.46%	7.36%
FY18 Budget Train Miles (All Services)	23.48%	8.94%	21.63%	6.90%	15.59%	3.32%	12.03%	8.11%
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)	20.28%	16.94%	15.28%	9.16%	10.28%	4.17%	11.67%	12.22%
TVMs (Excl TOMs & Flower St)	20.20%	14.14%	14.90%	9.72%	10.48%	4.30%	13.51%	12.75%
Ridership Lagged (FY16)	26.74%	8.54%	16.06%	9.96%	20.64%		10.88%	7.18%
Current Ridership w/o IEOC (Transfer Payments)	27.40%	10.60%	16.40%	9.90%	27.19%	0.00%	0.00%	8.51%
FY18 Fare Revenue	25.12%	7.32%	12.65%	10.31%	26.18%	0.00%	10.07%	8.35%
75% Train Miles Lagged/25% Unduplicated Station	23.16%	11.10%	20.40%	7.59%	14.55%	3.59%	12.16%	7.45%
S.B. Line Trn Miles	100.00%	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%
S.B. Incremental (100% SBCTA)	100.00%							
Ven Line Trn Miles	0.00%	100.00%	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%
Riv Line Trn Miles	0.00%	0.00%	0.00%	100.00%	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)					100.00%			
OC MSEP						100.00%		
IEOC Line Trn Miles	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%		100.00%	0.00%
IEOC Line: San Bernardino-Oceanside							100.00%	
IEOC Line: Riverside-Oceanside							100.00%	
91 Line Trn Miles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Route Miles Dispatched	29.26%	15.20%	26.46%	2.08%	6.49%	5.67%	6.42%	8.42%
All-Share (MoW)	21.94%	15.10%	15.90%	13.84%	16.85%		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%		4.84%	9.24%
Undup Route Miles (Excl S.D.)	14.62%	16.59%	18.13%	15.03%	7.76%	2.75%	11.09%	14.03%
MTA Train Miles	24.73%	11.82%	41.55%	9.41%	8.94%			3.55%
OCTA Train Miles					53.87%	0.00%	37.49%	8.64%
RCTC Train Miles	0.00%			21.50%	55.5770	0.0070	41.96%	36.54%
SBCTA Train Miles	81.93%			12.35%			5.56%	0.16%
VCTC Train Miles	01.5570	100.00%		12.5570			5.5570	0.1070

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## METROLINK IS THE BEST INVESTMENT TO REDUCE FREEWAY TRAFFIC AND CLEAN THE AIR IN SOUTHERN CALIFORNIA.



**METROLINK HAS THE HIGHEST FAREBOX RECOVERY** AMONG MAJOR PUBLIC TRANSIT OPERATORS IN SOUTHERN CALIFORNIA.

## METROLINK HAS A VERY LOW TAX SUBSIDY PER PASSENGER MILE AMONG SOUTHERN CALIFORNIA

PUBLIC TRANSIT AGENCIES.



Sources: 2014 National Transit Database, Metrolink on-board survey, Metrolink ticket sales data, Caltrans.

