



METROLINK®

FISCAL YEAR

2019-2020

ADOPTED BUDGET

CREATE VALUE, EXCEED EXPECTATIONS



SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

**SOUTHERN CALIFORNIA
REGIONAL RAIL AUTHORITY**

**FISCAL YEAR 2019-20
BUDGET**

**Including Forecast for
FY2020-21 thru FY2023-24**

Adopted June 28, 2019

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

FY2019-20 BUDGET

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CREATE VALUE, EXCEED EXPECTATIONS

When I joined Metrolink in January of 2019, I outlined a vision to the agency's Board of Directors, employees and riders. I committed to **focus on our customers** by putting their experience at the forefront of every decision we make. Putting the customer first means that we continue to keep **safety and security as the foundation** of our operations. It also means that we create **an integrated system** that allows riders to skip traffic, take the train and connect to other forms of transportation that gets them to their destination. Finally, Metrolink will **modernize its business practices** so that we ensure a sustainable future for our customers.



This budget is much more than numbers. This budget is the key to Metrolink's future as a *customer-focused rail transportation provider*. It provides the resources that enable the Metrolink team to execute on the Board of Directors' *strategic priorities* as well as my *vision* to create a regional transportation system that the customers enjoy. It represents *partnership* as five transportation authorities across the region provided input, buy-in and, ultimately, approval before this budget was finalized. This budget document includes funding to make Metrolink Leadership's *commitment a reality*. Here's how:

SAFETY REMAINS FOUNDATIONAL

Metrolink was one of four rail providers in the nation that met the Positive Train Control (PTC) deadline in December of 2018. Metrolink is now sharing information and lessons learned to support others in their development of PTC. At the same time, Metrolink is looking forward to what can be achieved with the evolution of this life-saving technology in the creation of PTC 2.0.

NO FARE INCREASE

Metrolink has not increased fares in six years. This budget does not rely on a fare increase. In fact, this budget continues to fund the subsidy that enables discounts on the San Bernardino Line and the Perris Valley extension of the 91/Perris Valley Line.

NEW SERVICE

Back by popular demand. Metrolink will re-introduce weekend service on the Ventura County Line for a limited time this year. We will also add new service on the Perris Valley and Orange County lines – including later evening trips.

LOYALTY PROGRAM

We want to let our riders know how much we value them. We are going to introduce a loyalty program that provides discounts to Metrolink and other partners to attract and retain riders.

PORTER PROGRAM

Cleanliness on the trains is an important factor in providing a quality customer experience. This program promotes an enjoyable commute by having dedicated team members on board trains across the system to enhance the rider experience.

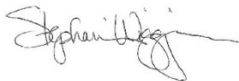
OPERATIONAL EXCELLENCE PROGRAM

This program engages Metrolink employees to identify ways to streamline processes internally and provide the best experience possible for the rider. The budget includes funding to implement these ideas.

Additionally, the budget continues to fund and build on some of the riders' favorite programs, such as the *Rail2Rail* program, which allows Metrolink riders to take the Pacific Surfliner trains when it is convenient for the rider. This budget also contains significant expenditures to keep the system and equipment safe and reliable.

I am thankful to the Board of Directors, Member Agencies and Metrolink staff who supported the development and approval of this budget. I am excited about the enhanced service this budget will allow Metrolink to provide to our riders.

Sincerely,



Metrolink CEO, Stephanie N. Wiggins





METROLINK.

SECTION 1

EXECUTIVE SUMMARY

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 1: Executive Summary

1.1 Introduction

In its 27th year of operation, the Southern California Regional Rail Authority (SCRRA), operating as Metrolink, is Southern California's only inter-county commuter rail provider, furnishing transportation services for over 12.5 million passenger rides per year. As the second largest transit provider in terms of passenger miles, Metrolink has one of the lowest subsidies 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 8.6 million annual auto trips from our local roadways.

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

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 2.9 million train miles annually.
- Metrolink is the second largest transit provider in Southern California, in terms of passenger miles, servicing more than 406 million passenger miles annually.
- Each weekday, Metrolink riders travel more than 1.4 million miles, enough to cover three roundtrips to the moon.
- 82% of Metrolink weekday trips are work related.
- 64% of Metrolink riders travel across county lines connoting a truly regional system.
- 61% of all Metrolink boardings are in Los Angeles County.

- Metrolink trains reduce directional peak hour traffic volumes by up to 28% on parallel freeways.

Cost Efficiency

- Metrolink’s FY2017-18 revenue recovery ratio was 42.1%, one of the highest of any major transit system in Southern California.
- Metrolink continues to have one of the lowest subsidies per passenger mile among major transit operators in Southern California.

Regional Benefits

- 85% of Metrolink weekday riders have access to a car. However, by taking Metrolink, they help the region avoid the following in FY2017-18:
 - 8.6 million car trips annually
 - 305 million vehicle miles traveled (VMT) annually
 - 117,959 metric tons of greenhouse gas (GHG) emissions

Performance Statistics by County

ORIGIN COUNTY	METRO	OCTA	RCTC	SBCTA	VCTC	TOTAL
Metrolink Passenger Miles (000's) ⁽¹⁾	263,762	84,741	24,125	27,074	5,900	405,602
Metrolink Passenger Miles %	65%	21%	6%	7%	1%	100%
Metrolink Subsidy per Passenger Mile ⁽²⁾	\$ 0.26	\$ 0.31	\$ 0.68	\$ 0.53	\$ 1.56	\$ 0.33
Car trips avoided (000's) ⁽³⁾	3,192	1,836	1,596	1,717	259	8,600
VMT avoided (000's) ⁽³⁾	198,093	63,643	18,119	20,333	4,431	304,619
GHG, metric tons ⁽⁴⁾	76,708	24,645	7,016	7,874	1,716	117,959
Metrolink ridership as Peak Hr Lane Capacity on parallel freeways ⁽⁵⁾	1.1	0.9	1.2	0.6	0.2	n/a
Directional Peak Hr Volume relief on parallel freeways ⁽⁵⁾	24%	28%	16%	6%	5%	n/a

NOTES:

- (1) FY2017-18 Actual. Passenger Miles in San Diego County are included for Orange County
 (2) FY2017-18 Actual
 (3) Assumptions: Percent of all riders with car available. Average vehicle occupancy: 1.1
 (4) GHG expressed in CO2 equivalents (<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>)
 (5) Compared to traffic counts at selected Caltrans freeway postmiles, October 2017

1.3 Metrolink in Comparison

	Average trip length (miles)	Revenue per trip	Revenue per passenger mile	Operating cost per passenger mile	Subsidy per passenger mile	Revenue per train mile	Operating cost per train mile	Farebox recovery ratio
COMMUTER RAIL								
METROLINK	33.0	\$ 5.79	\$ 0.20	\$ 0.53	\$ 0.33	\$ 29.61	\$ 78.84	37.6%
Maryland Transit Administration: MARC Train	29.6	\$ 5.71	\$ 0.19	\$ 0.52	\$ 0.33	\$ 40.53	\$ 109.90	36.9%
Massachusetts Bay Transportation Authority: MBTA	20.5	\$ 6.43	\$ 0.31	\$ 0.57	\$ 0.26	\$ 45.10	\$ 82.41	54.7%
Metro North (New York)	26.3	\$ 8.54	\$ 0.32	\$ 0.54	\$ 0.22	\$ 68.77	\$ 113.80	60.4%
METRA	22.3	\$ 5.03	\$ 0.23	\$ 0.47	\$ 0.24	\$ 49.33	\$ 103.14	47.8%
CALTRAIN	21.8	\$ 4.96	\$ 0.23	\$ 0.31	\$ 0.08	\$ 66.46	\$ 91.55	72.6%
SEPTA	12.8	\$ 4.12	\$ 0.32	\$ 0.63	\$ 0.31	\$ 25.97	\$ 51.13	50.8%
Virginia Railway Express	30.7	\$ 9.04	\$ 0.29	\$ 0.52	\$ 0.23	\$ 104.54	\$ 182.91	57.2%
LOCAL TRANSIT AGENCY								
Los Angeles County Metropolitan Transportation Authority	5.1	\$ 1.25	\$ 0.16	\$ 0.66	\$ 0.50	\$ 2.61	\$ 13.60	30.2%
Riverside Transit Agency: RTA	7.1	\$ 2.65	\$ 0.17	\$ 1.55	\$ 1.39	\$ 0.65	\$ 4.50	13.7%
OMNITRANS	5.4	\$ 1.96	\$ 0.20	\$ 2.81	\$ 2.60	\$ 1.02	\$ 6.20	12.3%
Orange County Transportation Authority	4.8	\$ 2.41	\$ 0.25	\$ 1.81	\$ 1.56	\$ 1.11	\$ 5.87	23.7%

Source: 2017 National Transit Database

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

While maintaining this level of performance, Metrolink works continuously to achieve new goals and meet new challenges to better serve our customers and the community. Metrolink brings leading-edge technology to the service of our customers, increasing convenience and safety.

1.4 Accomplishments in FY2018-19

Below are highlights of Metrolink accomplishments during FY2018-19:

- The restoration of four platform canopies at Union Station was completed.
- Friday late-night service was added on the San Bernardino line to accommodate and enhance passenger leisure activities.
- Metrolink has received 23 new Tier 4 locomotives, which are being phased into service. The Tier 4 technology removes particulate matter and NOx emissions by 85% compared to our legacy locomotives with Tier 0 technology.

- Positive Train Control (PTC) is the centerpiece of Metrolink’s unwavering commitment to safety, providing protective collision avoidance, prevents work zone incursion, switch misalignment detection, and overspeed prevention. Metrolink was the first commuter railroad in the nation to complete implementation of PTC and the first to achieve interoperability with BNSF, UPRR, Amtrak, and NCTD.
- A Metrolink pilot program providing a 25% discount on the San Bernardino line to increase ridership became part of the regular fare structure.
- The Metrolink Marketing Department yet again garnered AdWheel (APTA) Awards. In 2018, the wins were:
 - 1st Place – Festival of Lights Special Train (Special Service)
 - 1st Place – LA County Fair Special Service (Shoestring Tactic)
- Grant activity in FY2018-19 lead to the acquisition of \$143.7 million in new grants. When Metrolink is awarded competitive and formula grants directly, critical projects that could not have otherwise been funded can be implemented.
- Completed a review of our current use of technology to identify areas for modernization.
- Contracted for a \$70 million complete refurbishment of over 50 passenger cars.

1.5 Objectives for FY2019-20

The FY2019-20 Budget reflects objectives and priorities consistent with the Authority’s vision to improve the customer experience. The budget provides funding in alignment with the Authority’s board approved strategic priorities for the upcoming fiscal year and the strategic goals those activities support:

- Goal #1: Ensure a Safe Operating Environment.
 - Continue emphasis on safe operations, with the upgraded operation of PTC as the centerpiece of our efforts.
- Goal #2: Maintain Fiscal Sustainability.
 - Complete steps to identify the benefits of a consolidated contracted service base for Railroad Operations.

- Goal #3: Invest in People and Assets.
 - Enhance rider experience through a \$70 million rehabilitation of Passenger Cars.
 - Implementation of modernized ticket vending system.
 - Implement technology improvements determined in the FY2018-19 study.

- Goal #4: Retain and Grow Ridership.
 - Add new service on four out of seven lines to provide more options and convenience to our customers.
 - The establishment of a Customer Loyalty Program to reward our most steadfast passengers.

- Goal #6 Improve Communications to Customers and Stakeholders.
 - Initiate a method of communication with our passengers to learn how we can serve them better.

- Anticipated completion of key projects:

Van Nuys Station Center Platform	\$30.6 million
PTC Interoperability	3.0 million
Central Maintenance Facility North	
End Connection & Tail Track Design	2.0 million
Systemwide New Ticket Vending Devices	22.9 million

1.6 FY2019-20 Budget in Brief

The FY2019-20 Operating Budget of \$262.9 million is an increase of 4.6% from the FY2018-19 Operating Budget. Total SCRRA revenues are \$105.4 million, 4.6% more than the FY2018-19 Budget. Member Agency subsidies are \$157.4 million, an increase of \$6.9 million, or 4.6%, over the FY2018-19 Budget.

The Capital Program provides an additional \$70.3 million in funding authorization: \$63.7 million in new authority for Rehabilitation projects and \$6.5 million in new authority for New Capital projects. While Member Agencies will provide \$63.7 million in funding for Rehabilitation projects, their share for the New Capital request is \$3.0 million; a grant direct to Metrolink was identified to cover the funding for \$3.5 million.

1.7 Key FY2019-20 Budget Information

SCRRA is a JPA created to plan, design, build and operate the Metrolink commuter rail service in the Southern California region. In FY2019-20, Metrolink will provide service on seven routes to 62 stations with over 536 route miles. The system map is provided as *Exhibit 1.1*.

During FY2019-20, Metrolink will operate 175 weekday trains and 92 weekend trains. Average daily weekday one-way ridership is projected at 45,418. Additionally, we estimate 21,961 riders will take advantage of Saturday and Sunday services offered on the Antelope Valley, Inland Empire-Orange County, Orange County, 91/PVL, and San Bernardino lines.

Metrolink operates approximately 75% of Member Agency-owned territory. SCRRA will dispatch 175 Metrolink trains and up to 34 Amtrak and 60 freight trains per day. Metrolink is also responsible for the maintenance of right-of-way owned by SCRRA Member Agencies that span 398 track miles.

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

1.8 The FY2019-20 Operational Budget Statistics

- Operating Expenses per train mile is \$88.61, excluding Maintenance-of-Way (MOW) extraordinary maintenance (0.4% increase from the FY2018-19 Budget).
- Operating Subsidy per passenger mile equals \$0.35 (less than 1% increase from the FY2018-19 Budget).
- Operating Expenses per passenger mile is \$0.59 (a 0.8% increase from the FY2018-19 Budget).
- Total operating revenue recovery is projected to equal 40.1% (a 0.1% decrease from the FY2018-19 Budget).
- Farebox recovery is projected at 34.3% (a 0.4% increase from the FY2018-19 Budget).
- Member Agency subsidies are estimated to provide 59.9% of the required Operating Revenues in FY2019-20.
- Diesel fuel costs will continue to be managed using a fuel hedging program which is designed to stabilize the fuel budget and minimize large year-over-year variances.

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 program. The net of operating revenues and expenses represent the anticipated Member Agency subsidies required to carry out the purposes of the Authority. Decisions involving capital,

operating fund allocations, and annual approval of each Member Agency's share of SCRRA's annual budget, require approval by the Member Agencies.

The SCRRA Board approved the transmittal of the FY2019-20 Proposed Budget on April 26, 2019, and the document was transmitted to the Member Agencies on May 1, 2019. The FY2019-20 Budget was adopted by the SCRRA Board on June 28, 2019.

1.10 Budget Development and Assumptions

The development of SCRRA's FY2019-20 Budget was based on revenues, operating costs, and capital investment required to provide a safe, efficient and reliable commuter rail operation, while fulfilling the objectives of the Authority.

The SCRRA budget is made up of two principal components:

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

Funding for these costs is derived from SCRRA fare revenue and other income, with the balance provided by grants and subsidies provided by the five Member Agencies and grants awarded directly to SCRRA. 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 board approved allocations that distribute revenue and costs across operating line segments and Member Agencies.

1.11 Summary of Operating Revenues and Subsidy Funding

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

Fare Revenues – The FY2019-20 Budget assumes annual ridership of 12.9 million passengers will generate Fare Revenues equal to \$90.0 million, an increase of \$4.3 million, or 5.1%, from the FY2018-19 Budget. The Fare Revenues include revenue from new services of \$1.5 million. The FY2019-20 Budget includes a continued 25% fare reduction on the San Bernardino Line funded by Metro and SBCTA. Projections of Fare Revenues also include \$0.2 million generated by Special Trains.

Dispatching Revenue – SCRRA provides dispatching services to freight railroads and Amtrak Intercity operating on the rights-of-way which SCRRA administers. These revenues are volume-based, and individual rates are contained in existing agreements that govern rate increases. The total Dispatching Revenues are budgeted at \$2.2 million, an increase of 2.5% from the FY2018-19 Budget.

MOW Revenue – As the operating administrator of its member-owned rights-of-way, SCRRA receives revenues from freight railroads and Amtrak Intercity Services for their right to operate in its territories. Member Agency subsidies for ordinary maintenance are partially offset by revenues received from freight railroads and Amtrak Intercity Services. Most of the MOW revenue rates were negotiated based on the historical expenditures on MOW by freight railroads prior to the purchase of these right-of-way properties by the Member Agencies. Consequently, these revenue rates do not completely offset the escalating costs of maintaining a higher standard of quality for passenger rail service. The FY2019-20 Budget projects MOW Revenues at \$13.0 million which is \$0.5 million, or 3.6%, greater than the FY2018-19 Budget. The increase is primarily related to revenue from additional crossings.

Other Revenues – For FY2019-20, total budgeted amount for Other Revenues is \$0.3 million. SCRRA will continue to offer advertising space on Metrolink trains to select organizations and have budgeted \$0.05 million for FY2019-20. Non-refundable amounts for Third-Party Agreement (TPA) earnings for \$0.05 million are included, and citations, Los Angeles World Airports (LAWA) commission, interest, and miscellaneous revenues combine for a total of \$0.2 million.

1.12 Summary of Operating Expenses

In FY2019-20, SCRRA's Operating Expenses include Train Operations, MOW and Insurance. The combined total expense for the FY2019-20 Budget is \$262.9 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, *Rail2Rail* program, station maintenance, freight rail agreements, and general administrative costs that support the Authority's operation. Total Train Operations costs are \$201.7 million, a 4.3% increase over the FY2018-19 Budget.

MOW – Ordinary and extraordinary maintenance of Member Agency-owned track, signals, bridges, road crossings, other elements of the infrastructure, and right-of-way totals \$47.0 million. This is a 13.7% increase from the FY2018-19 Budget.

Insurance and Legal – Insurance and Legal expenses of \$14.2 million are a decrease of \$2.5 million, or 14.9%, from the FY2018-19 Budget.

1.13 Summary of Capital Program

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

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

SCRRRA's overall FY2019-20 Capital Program Budget request totals \$507.4 million. The Capital Program Budget contains a \$281.1 million Rehabilitation component, which includes \$63.7 million of New Authority and \$159.3 million of Member Agencies share for the Rehabilitation of projects approved and carried over from prior years (Carryover), and \$58.0 million of Other funding sources for Carryover. Total request for New Capital is \$226.3 million. This includes the FY2019-20 request for additional New Capital authority of \$6.5 million, of which \$3.0 million is Member Agency funded, and \$3.5 million is funded by Other sources. New Capital component also includes \$219.8 million in Carryover from prior years, including the Member Agencies share for the New Capital Carryover of \$36.0 million, while Other funding sources cover \$183.8 million. Section 7 of this budget document contains a detailed listing of the individual projects which these amounts represent.

1.14 Exhibits

Exhibit 1.1: Metrolink Systemwide Map

This exhibit shows the six counties served. It displays Metrolink stations, *Rail2Rail* stations shared by Metrolink and Amtrak, as well as Union Station, which is shared by Metrolink, Amtrak and Metro.





METROLINK.

SECTION 2

INTRODUCTION TO THE BUDGET

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 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 an 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 putting the Customer First. Metrolink is proud to provide affordable, dependable, and high-quality service to its' customers. Metrolink employs state-of-the-art safety operations technology for which it is known throughout the country. 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 strives for an integrated system that operates using modern business practices. Metrolink embraces community involvement and partnerships with both public and private sectors.

2.2 Board Governance

The SCRRA Board Roster, as of June 30, 2019, consists of 11 voting members and 11 alternates:

County	Votes	Members	Alternates
Ventura County	1	Brian Humphrey (<i>Chair</i>) Citizen Representative VCTC Board	Vacant
Los Angeles County	4	Ara Najarian (<i>Vice-Chair</i>) Mayor City of Glendale Metro Board Kathryn Barger Supervisor, 5 th District County of Los Angeles Metro Board Paul Krekorian Councilmember, 2 nd District City of Los Angeles Metro Board Hilda Solis Supervisor, 1 st District County of Los Angeles Metro Board	Walter Allen, III Council Member City of Covina Metro Appointee Roxana Martinez Metro Appointee Pam O'Connor Metro Appointee Paul Philips Metro Appointee

County	Votes	Members	Alternates
San Bernardino County	2	<p>Larry McCallon (2nd Vice-Chair) Mayor Pro Tem City of Highland SBCTA Board</p> <p>Alan D. Wapner Council Member City of Ontario SBCTA Board</p>	<p>Javier “John” Dutrey (1) Mayor City of Montclair SBCTA Board</p> <p>Ray Marquez¹ Council Member City of Chino Hills SBCTA Board</p>
Orange County	2	<p>Andrew Do Supervisor, 1st District County of Orange OCTA Board</p> <p>Gregory T. Winterbottom Public Member OCTA Board</p>	<p>Doug Chaffee (1) Supervisor, 4th District County of Orange OCTA Board</p> <p>Joseph Muller (1) Mayor City of Dana Point OCTA Board</p>
Riverside County	2	<p>Andrew Kotyuk Mayor Pro Tem City of San Jacinto RCTC Board</p> <p>Karen Spiegel Supervisor, 2nd District County of Riverside RCTC Board</p>	<p>Brian Berkson (1) Mayor City of Jurupa Valley RCTC Board</p> <p>Vacant¹</p>

Ex-officio members of SCRRA:

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

⁽¹⁾ Alternates represent either member

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

- Executive Office
- Customer Experience
- Finance
- Human Resources
- Internal Audit
- Legal
- Marketing and Communications
- Operations Office
- Program Delivery
- Safety, Security and Compliance
- Strategy

The FY2019-20 Budget includes 280 authorized positions, an addition of 5 positions from the FY2018-19 Budget.

2.3 SCRRRA 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 SCRRRA, 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 SCRRRA's Member Agencies. Ex-officio members of SCRRRA 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 SCRRRA 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. SCRRRA named the regional commuter rail system "Metrolink". Metrolink has grown from just three lines in 1992 to seven lines today. The first three lines - San Bernardino, Santa Clarita (now Antelope Valley) and Ventura County - began operation in October 1992. The Riverside Line was added in June 1993, and the Orange County Line (which extends 19 miles into northern San Diego County) was added in April 1994. The sixth line, Inland Empire-Orange County, the nation's first suburb-to-suburb commuter rail line, was added in October 1995. In May of 2002, the 91 Line was added to provide an alternative to Inland Empire and western Orange County commuters traveling through Fullerton. In June 2016, the 91 Line was extended to Perris Valley to provide service to an additional section of the Inland Empire.

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METROLINK.

SECTION 3

BUDGET SUMMARY

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 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 also consistent with the Authority's vision of the central focus of Customer-First, supported by the pillars of Safety and Security, an Integrated System, and Modernized Business Practices. The Operating Budget provides funds to enable the provision of such rail service and the associated administrative functions to manage that service, for the period of a single fiscal year. The Capital Program budget approves multi-year individual projects that may proceed within the approved funding level.

As specified in the Joint Exercise of Powers Agreement, the Governing Board of the Authority shall adopt a final budget no later than June 30 of each year. The fiscal year shall be July 1 of each year and including the following June 30.

The FY2019-20 Proposed Budget was offered for adoption by the SCRRA Board on June 28, 2019.

Consistent with Best Practice, our Budget Document contains a financial plan that includes the following:

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

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

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

3.1.2 Budgetary Control and Reporting

SCRRA establishes budget control and appropriates funds through the formal adoption of the budget by the SCRRA Board. This authorization is provided on an annual basis.

By adopting an annual budget, the SCRRA Board delegates to the Chief Executive Officer the authority to manage the annual budget within the total monetary parameters of the approved budget, using executive discretion as to the reallocation of resources in response to changed conditions. A more detailed explanation of SCRRA's Budget Control and Reporting is found in Board Approved Finance Policy 1.2. This policy detail the budget transfer process for both the operating and capital program, the budget amendment process, budget authorization/carryforward as well as reporting.

The SCCRA Board delegates to the Chief Executive Officer the authority to approve budget transfers within the adopted Operating Budget that do not increase the Operating Subsidy of any Member Agency.

The SCCRA Board delegates to the Chief Executive Officer the authority to approve transfers within the adopted Capital Program that are in compliance with funding requirements and that do not increase the funding requirements of any Member Agency, with the concurrence of the affected Member Agency(s).

SCRRA Board approval of a budget amendment is required in the case of the following scenarios:

- A change to the Budget that requires additional funding from one or more Member Agencies.
- A change to the Budget that requires additional funding provided by a Grant or Third-Party Agreement.
- A change to the Budget for specific expenditures(s) with funding provided by carryover of the same unexpended budget (i.e. Fuel, Marketing, etc.).
- A change to the Budget with funding provided by carryforward of operating surplus.

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.

Budget authorization for unexpended operating budget expires at the end of each fiscal year, June 30, unless approved by the SCRRA Board for carryforward. Budget authorization for capital projects are carried forward as part of SCRRA Board's adoption of the annual budget.

The Adopted Budget, or subsequently Amended Adopted Budget, as adjusted during the fiscal year through authorized budget transfers becomes the baseline for all comparisons to actual revenue and expenditures during a fiscal year. Operational Statements with accompanying reports, comparing adjusted budgets to actual for the year-to-date are presented to the SCRRA Board each quarter. Forecasts through the end of the current fiscal year are provided to the SCRRA Board with the reporting of actual operating results for the third quarter. Internal monthly operating performance review, periodic forecasting and the year-end 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.

Condition Assessment Data

Governmental accounting standards require that a condition assessment be performed on all infrastructure assets every three years. As an approved alternative to conducting a system-wide assessment every three years, SCRRA has chosen to create a Metrolink Rehabilitation Plan (MRP) that thoroughly

assesses the condition of SCRRA's key infrastructure assets. The MRP provides a "boots on the ground" approach to the scope and associated costs for both the current backlog and annual costs required to keep the railroad infrastructure at a State of Good Repair (SOGR).

3.1.4 Budget Assumptions / New in FY2019-20

- Assumptions
 - No fare increase is included in the FY2019-20 Budget.
 - Budget Approach: The approach for budgeting was a zero base. Each item submitted for inclusion in the FY2019-20 Budget required specific justification.
 - Fuel Expense: The budget for fuel purchases has been calculated using an assumption of 8.5 million gallons of diesel fuel consumption, with fuel prices managed through a hedging program.

- New in the FY2019-20 Budget
 - Special Trains which were previously handled as third-party transactions are now included in the FY2019-20 Budget. Special trains are defined as revenue operating trains that are not included in the regularly-scheduled timetable. A new "Special Trains" category has been included in the FY2019-20 Operating Budget on the basis that Special Trains present an opportunity to attract new riders and fulfill Metrolink's responsibility to serve communities. Special Trains services are projected to incur a net cost of \$0.8 million for FY2019-20.

 - Five new positions have been approved for the FY2019-20 Budget:
 - (1) Train Control Systems Engineer
 - (1) Senior Manager, Train Control Systems
 - (2) Railroad Civil Engineer II
 - (1) Manager I, Human Resources

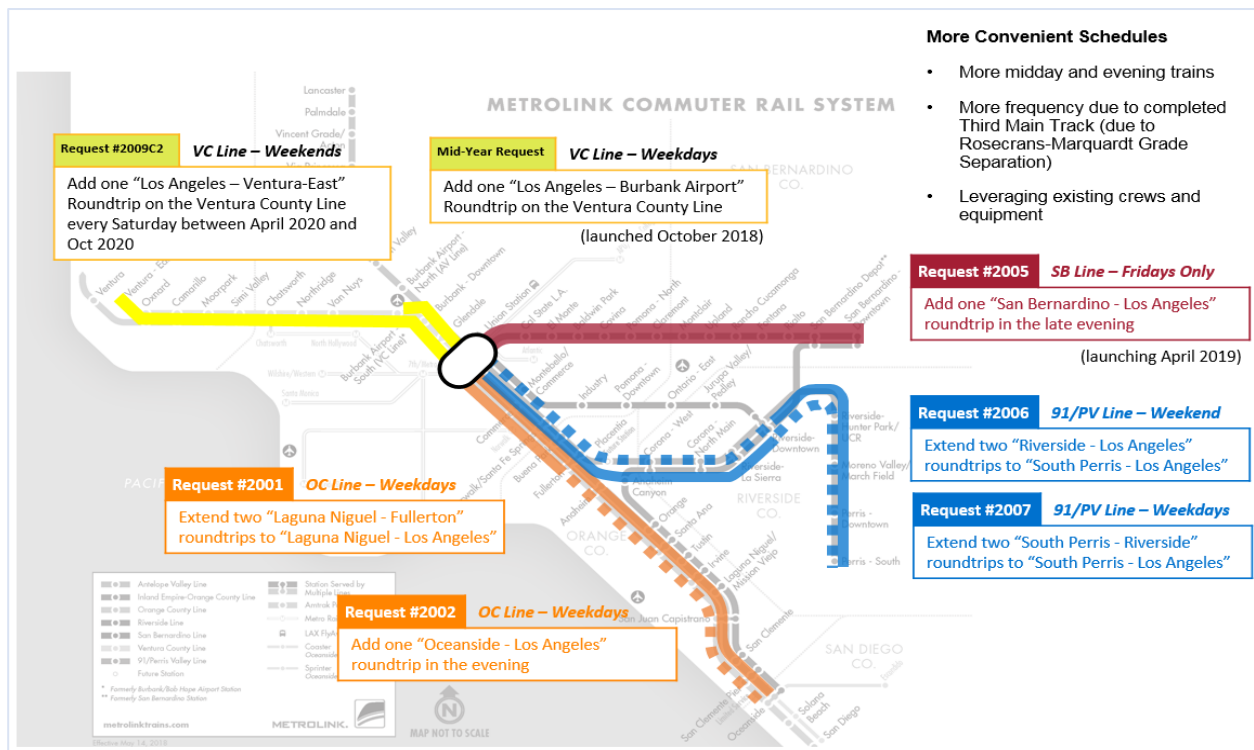
 - New Services have been added on four of seven lines as follows:
 - Orange County Line – Weekdays
 - Extend two "Laguna Niguel-Fullerton" roundtrips to "Laguna Niguel-Los Angeles"
 - Add one "Oceanside-Los Angeles" roundtrip in the evening

 - San Bernardino Line – Fridays only
 - Add one "San Bernardino-Los Angeles" roundtrip in the late evening

- 91/Perris Valley Line
 - Weekend:
 - Extend two “Riverside-Los Angeles” roundtrips to “South Perris-Los Angeles”
 - Weekdays:
 - Extend two “South Perris-Riverside” roundtrips to “South Perris-Los Angeles”

- Ventura Line – Weekends
 - Add one “Los Angeles-Ventura-East” roundtrip on the Ventura County line every Saturday between April 2020 and October 2020

The new services described above are depicted on the map as shown below:



3.2 Total Operating Budget

SCRRA’s FY2019-20 budgeted Operating Expense totals \$262.9 million, an increase of \$11.5 million, or 4.6% more than the FY2018-19 Budget. Total Operating Revenues are projected to total \$105.4 million, \$4.6 million more than the FY2018-19 Budget, an increase of 4.6%. Member Agency operating subsidies for the FY2019-20 Budget are an estimated \$157.4 million, an increase of \$6.9 million, or 4.6% over the FY2018-19 Budget.

3.3 Operating Revenues and Subsidy Funding

The Authority's Operating Revenue is derived from three principal sources: Fares, Dispatching and MOW. In order to minimize the impact to Member Agency subsidy requirements, the Authority continues to pursue, where available, other potential revenue enhancements.

Average weekday ridership is projected to total 45,418. Total ridership, including all weekend services, is expected to equal 12.9 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 \$90.0 million, an increase of \$4.3 million or 5.1% more than the FY2018-19 Budget.

Freight railroads and Amtrak Intercity Services operating over territory owned by SCRRRA Member Agencies provide dispatching and MOW revenues, based upon existing agreements. Dispatching Revenues are estimated to equal approximately \$2.2 million, an increase of 2.5% from the FY2018-19 Budget.

MOW revenues are estimated at \$13.0 million, an increase of 3.6% from the FY2018-19 Budget, as a result of the AAR index increase for the year and added crossings.

3.4 Operating Expenses

Total Operating Expenses include Train Operations, Maintenance of Member Agency-owned Rights-of-Way and Insurance. The FY2019-20 Budget includes a Train Operations budget of \$201.7 million, MOW budget of \$47.0 million, and Insurance budget of \$14.2 million. The total of \$262.9 million is an increase of \$11.5 million or 4.6% more than the FY2018-19 Budget.

Amendment

Following adoption of the FY19/20 Budget, the Board then approved an amendment to operating expense totaling \$4.0m. These funds were identified, with the FY18/19 Forecast, as a portion of the projected surplus which could be reprogrammed to support the following CEO initiatives:

After adopting the FY19/20 Proposed Budget, the Board of Directors then approved two amendments to the FY19/20 Operating Budget. The first amendment allowed for the carryforward of \$0.3m forecasted unspent FY18/19 Targeted Marketing Investment. The second amendment allowed for the carryforward of 50% or \$3.7m of the Forecasted FY18/19 Operating Surplus. This cumulative amount of \$4.0 million will provide funding in the FY19/20 Operating Budget for the Loyalty Program, designed to retain and attract riders, and funding for the Chief Executive Officer's Workplan as identified in her 90-Day Plan Funding

presented to the Board. In summary, the Workplan focuses on Improved Fiscal Sustainability, Strengthened Partnerships with the Member Agencies and Modernizing our Business Practices

3.5 Capital Program

SCRRRA is responsible for the safety and performance of the railroad system and right-of-way, including the passengers and equipment utilizing the system. Capital projects are selected and prioritized based on keeping our assets in a SOGR to maximize safety and ensure customer service and convenience. For FY2019-20, Rehabilitation projects were evaluated and ranked based on this principle. The resulting list of potential projects was then prioritized according to project delivery capacity. The amount for new Rehabilitation projects in FY2019-20 totals \$63.7 million. New Capital projects are reflective of increased infrastructure needs. The amount for New Capital projects in FY2019-20 totals \$6.5 million. The Member Agencies share of the New Capital request is \$3.0 million; a grant direct to Metrolink was identified to cover the funding for \$3.5 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 Program Budget is provided by the following sources:

Funding Sources for Estimated Capital Program Expenditures in Fiscal Year 2019-20

(000's)

Federal Funds	\$	1,353
State Funds		176
Member Agency Local Funds		1,640
Carryover from prior year		203,190
Other Funds		35
	\$	<u>206,393</u>

Numbers may not foot due to rounding.

3.6 Summary of the Total FY2019-20 Budget

The FY2019-20 Budget totals \$770.3 million and consists of an Operating Budget of \$262.9 million and a Capital Program of \$507.4 million.

The Operating Budget includes Train Operations of \$201.7 million, MOW budget of \$47.0 million, and \$14.2 million covering Insurance.

The Capital Program Budget contains a \$281.1 million Rehabilitation component, which includes \$63.7 million of New Authority, \$159.3 million of Member Agencies

share of Carryover and \$58.0 million of Other funding sources of Carryover; and a \$226.3 million New Capital component, which includes \$3.0 million of Member Agencies New Authority, \$3.5 million of Other funding sources New Authority, \$36.0 million of Member Agencies share of Carryover and \$183.8 of Other funding sources of Carryover.

3.7 Exhibits

Exhibits 3.1a – 3.1d: Summary of FY2017-18 to FY2019-20 Statistics by Line provides the estimated operating statistics by line for FY2019-20 and the calculation of various performance ratios. Revenues and expenses are allocated to lines using formulae that incorporate rail operational statistics to achieve an equitable distribution. Detailed listings of allocation categories and the methodology of their use is detailed in Sections 9 - General and Administrative Budget. Section 11 – Appendix, *Exhibit 11.2* details the percentages utilized to allocate by operating line.

Average weekday trip length for FY2019-20 is projected at 33.3 miles. Dependent on ridership and revenues received, individual line operating statistics vary considerably. The Orange County Line (excluding MSEP) has the highest revenue recovery rate at 72.3%. The San Bernardino revenue recovery is estimated at 45.2%, the Riverside Line at 43.7%, the IEOC Line at 31.6%, the Antelope Valley Line at 34.0%, the Ventura County Line at 27.1%, and the 91 Line at 26.5%.

Exhibits 3.2 – 3.5: Performance Data (FY2010-11 to FY2019-20) provide a summary of the projected annual operating performance data as represented in the FY2019-20 Budget compared to the FY2018-19 Budget and 8 years of historical actuals since FY2010-11. *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: FY2015-16 to FY2019-20 Annual Operating Budget by Cost Component by Fiscal Year displays the line items that comprise the FY2019-20 Operating Budget and includes both Revenues and Expenses, with each line presenting a key component are allocated among the Member Agencies based on a particular allocation formula. This exhibit presents actual Revenue and Expense for fiscal years FY2015-16 through FY2017-18, FY2018-19 Budget and the FY2019-20 Budget and shows variances between the FY2019-20 Budget as compared with the FY2018-19 Budget. Operating Expenses include all costs required to operate the Metrolink system including Train Operations, maintenance

of equipment, fuel, security, utilities, transfer payments to other transit operators, revenue collection, payments to freight railroads for dispatching, station maintenance, passenger services, MOW, general and administrative expenses, professional services and insurance. For FY2015-16 and FY2016-17, these expenses included the Burlington Northern Santa Fe Railway (BNSF) Lease Locomotive costs.

Exhibit 3.7: FY2019-20 Annual Operating Budget by Cost Component by Member Agency and **Exhibit 3.8: FY2019-20 Annual Operating Budget by Cost Component by Line** with each line presenting a key component which is allocated among the Member Agencies based on a particular allocation formula. That distribution across the five Member Agencies is shown in this exhibit.

Expenses as shown in *Exhibits 3.6 and 3.7*, offset by Revenues, determine the annual member subsidy contribution. FY2019-20 total Member Agency subsidy of \$157.4 million represents a \$6.9 million, or 4.6%, increase over the FY2018-19 Budget.

Operation Subsidy Contribution by Member Agency

(000's)	FY2018-19 BUDGET	FY2019-20 BUDGET	VARIANCE	% CHANGE
METRO	\$ 75,120	\$ 77,988	\$ 2,869	3.8%
OCTA	29,403	30,288	885	3.0%
RCTC	19,660	21,284	1,624	8.3%
SBCTA	16,111	17,156	1,045	6.5%
VCTC	10,256	10,729	473	4.6%
Total	\$ 150,550	\$ 157,445	\$ 6,896	4.6%

Numbers may not foot due to rounding.

Exhibit 3.9: FY2015-16 to FY2019-20 Revenue Sources Trend provides a summary of the actual FY2015-16 to FY2017-18 fund sources used to support expenditures. The Exhibit also shows the FY2018-19 and FY2019-20 Budgeted Sources of Funds to provide funding for Operating Expenses of \$251.4 million in FY2018-19 and \$262.9 in FY19-20 and for the \$168.9 million and \$203.2 million of Capital Program authority which are forecast to be expended in FY2018-19 and FY2019-20 respectively. Operating Budget expenses represent only the single year of authorized expenditures, while the Capital Program expenditure amounts include portions of the Program authorized in both current year and approved authority carryover from prior years.

With respect to Operating Revenues:

- Over the past five years actual farebox revenues have been virtually flat, failing to keep pace with rising operating costs. The FY2019-20 budgeted farebox revenue is \$90.0 million, reflecting an increase of \$4.3 million or 5.1% over the FY2018-19 Budget. New Service provides \$1.5 million of this increase. The balance of the increase will result from the successful implementation of the following:
 - Continuing effects of FY19 advertising
 - Corporate Partner Program enhancement
 - Retention improvement
 - Fare evasion mitigation
- Dispatching Revenues include fees for dispatching freight and Amtrak Intercity Services.
- MOW revenue 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 FY2019-20 Budget assumes Member Agency subsidies at \$157.4 million, a 4.6% increase over the FY2018-19 Budget.

With respect to Capital Revenues:

The amounts shown can be traced to the Cash Flows shown in *Exhibit 7.8.8* of \$3.2 million added to the Carryover spending of \$203.2 million. Total dollars are separated into funding categories, including state and federal grants, interest on lease proceeds, freight railroad and local funds. The FY2019-20 Budget detailed allocations are compared to budgeted or actual funding sources for FY2015-16 through FY2019-20.

Exhibit 3.10: FY2019-20 Budget Revenue Sources and Use by Member Agency provides a summary by Member Agency of the FY2019-20 Budget Revenue Source and Use to cover Operating Expenses of \$262.9 million and expected expenditures on the Capital Program of \$206.4 million. Operating Budget expenses represent only FY2019-20 expenditures, while the Capital Program includes expenditures on both fiscal current year and carryover Board approved authority. Total dollars are separated into funding categories including state and federal grants, freight railroad participation and local funds.

Exhibit 3.1a Summary of FY2017-18 to FY2019-20 Statistics by Line

LINE	San Bernardino ⁽⁶⁾	Ventura County ⁽¹⁾	Antelope Valley	Riverside	Orange County	Orange Co MSEP	IEOC	91/ PVL Line ⁽²⁾	Total
Service Levels									
Weekday Train Trips - FY 18 Actual	38	31	30	12	19	10	16	15	171
Weekend Train Trips - FY 18 Actual	34	0	24	0	16	0	8	8	90
Total Train Trips - FY 18 Actual	72	31	54	12	35	10	24	23	261
Weekday Train Trips - FY 19 Budget	38	31	30	12	19	10	16	15	171
Weekend Train Trips - FY 19 Budget	34	0	24	0	16	0	8	8	90
Total Train Trips - FY 19 Budget	72	31	54	12	35	10	24	23	261
Weekday Train Trips - FY 20 Budget	40	33	30	12	25	4	16	15	175
Weekend Train Trips - FY 20 Budget	34	2	24	0	16	0	8	8	92
Total Train Trips - FY 20 Budget	74	35	54	12	41	4	24	23	267
Passenger Boardings ⁽³⁾									
FY18 Actual	2,713,313	1,087,227	1,805,644	1,008,845	2,691,495	125,314	1,368,576	888,193	11,688,607
FY19 Budget	3,177,827	1,152,285	1,897,438	967,476	2,848,380	114,056	1,362,807	956,934	12,477,203
FY20 Budget	3,276,742	1,169,412	2,051,810	1,030,082	3,000,777	71,519	1,403,500	931,768	12,935,610
% Change-FY20 Budget to FY18 Actual	20.8%	7.6%	13.6%	2.1%	11.5%	(42.9%)	2.6%	4.9%	10.7%
% Change-FY20 Budget to FY19 Budget	3.1%	1.5%	8.1%	6.5%	5.4%	(37.3%)	3.0%	(2.6%)	3.7%
Service Train Miles									
FY18 Actual	662,222	246,334	604,943	198,215	445,364	90,872	341,863	229,354	2,819,166
FY19 Budget	675,567	252,772	611,437	195,111	440,750	93,704	342,493	229,353	2,841,186
FY20 Budget	682,246	254,251	614,255	195,922	514,717	70,876	342,299	284,005	2,958,571
% Change-FY20 Budget to FY18 Actual	3.0%	3.2%	1.5%	(1.2%)	15.6%	(22.0%)	0.1%	23.8%	4.9%
% Change-FY20 Budget to FY19 Budget	1.0%	0.6%	0.5%	0.4%	16.8%	(24.4%)	(0.1%)	23.8%	4.1%
Passenger Miles (000's) ⁽⁴⁾									
FY18 Actual	97,625	27,639	67,900	35,003	93,914	1,682	46,252	35,587	405,602
FY19 Budget	114,181	29,959	71,749	33,571	99,302	1,939	46,091	35,097	431,890
FY20 Budget	117,715	29,703	76,950	35,744	102,109	1,216	47,267	37,387	448,090
% Change-FY20 Budget to FY18 Actual	20.6%	7.5%	13.3%	2.1%	8.7%	(27.7%)	2.2%	5.1%	10.5%
% Change-FY20 Budget to FY19 Budget	3.1%	(0.9%)	7.2%	6.5%	2.8%	(37.3%)	2.6%	6.5%	3.8%
Average Weekday Ridership									
FY18 Actual	9,141	4,182	6,070	3,880	9,497	482	4,632	3,121	41,005
FY19 Budget	10,774	4,432	6,453	3,721	10,080	439	4,624	3,330	43,852
FY20 Budget	11,083	4,498	6,971	3,962	10,590	275	4,784	3,256	45,418
% Change-FY20 Budget to FY18 Actual	21.3%	7.6%	14.8%	2.1%	11.5%	(42.9%)	3.3%	4.3%	10.8%
% Change-FY20 Budget to FY19 Budget	2.9%	1.5%	8.0%	6.5%	5.1%	(37.3%)	3.5%	(2.2%)	3.6%
Average Weekday Trip Length (Miles) ⁽⁵⁾									
	34.2	25.4	35.8	34.7	32.7	N/A	31.3	39.0	33.3

Numbers may not foot due to rounding.

NOTES:

- (1) Includes LAUS - Burbank Bob Hope Airport Trains
- (2) Includes PVL Services
- (3) Passenger Boardings are based on ticket sales and unlinked trips
- (4) Passenger is calculated based on ticket sales with origin and destination
- (5) Average trip length is calculated based on ticket sales
- (6) San Bernardino Weekday Trains include Friday only train service

Exhibit 3.1b Summary of FY2017-18 to FY2019-20 Statistics by Line

LINE	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	Orange Co MSEP	IEOC	91/ PVL Line	Total
Operating Cost (w/ MOW) (000's) ⁽¹⁾									
FY18 Actual	50,453	28,619	48,038	19,150	32,249	6,169	26,483	21,740	232,902
FY19 Budget	54,279	30,580	50,306	20,737	35,957	6,218	28,047	25,232	251,356
FY20 Budget	55,248	32,037	51,619	21,343	38,044	6,476	28,822	29,280	262,869
% Change-FY20 Budget to FY18 Actual	9.5%	11.9%	7.5%	11.4%	18.0%	5.0%	8.8%	34.7%	12.9%
% Change-FY20 Budget to FY19 Budget	1.8%	4.8%	2.6%	2.9%	5.8%	4.2%	2.8%	16.0%	4.6%
Operating Cost (w/o MOW Extraordinary Maint) (000's) ⁽¹⁾									
FY18 Actual	50,323	28,529	47,943	19,068	32,149	6,169	26,403	21,723	232,308
FY19 Budget	54,148	30,489	50,204	20,661	35,861	6,218	27,972	25,212	250,765
FY20 Budget	55,086	31,924	51,480	21,265	37,943	6,469	28,740	29,249	262,157
% Change-FY20 Budget to FY18 Actual	9.5%	11.9%	7.4%	11.5%	18.0%	4.9%	8.9%	34.6%	12.8%
% Change-FY20 Budget to FY19 Budget	1.7%	4.7%	2.5%	2.9%	5.8%	4.0%	2.7%	16.0%	4.5%
Operating Cost (w/o MOW) (000's)									
FY18 Actual	37,998	21,945	38,336	18,033	27,059	5,342	22,369	18,815	189,897
FY19 Budget	42,230	24,052	41,789	19,530	30,984	5,431	24,035	22,005	210,055
FY20 Budget	41,693	24,477	41,616	20,020	32,013	5,816	24,575	25,692	215,902
% Change-FY20 Budget to FY18 Actual	9.7%	11.5%	8.6%	11.0%	18.3%	8.9%	9.9%	36.6%	13.7%
% Change-FY20 Budget to FY19 Budget	(1.3%)	1.8%	(0.4%)	2.5%	3.3%	7.1%	2.2%	16.8%	2.8%
Subsidy (w/MOW) (000's)									
FY18 Actual	26,094	20,374	32,104	10,113	7,860	5,531	17,536	15,207	134,818
FY19 Budget	29,564	21,883	33,730	12,028	10,910	5,060	19,128	18,247	150,550
FY20 Budget	30,306	23,373	34,068	12,025	10,551	5,858	19,730	21,533	157,445
% Change-FY20 Budget to FY18 Actual	16.1%	14.7%	6.1%	18.9%	34.2%	5.9%	12.5%	41.6%	16.8%
% Change-FY20 Budget to FY19 Budget	2.5%	6.8%	1.0%	(0.0%)	(3.3%)	15.8%	3.1%	18.0%	4.6%
Farebox Revenue (000's) ⁽²⁾									
FY18 Actual	20,693	6,031	11,605	8,688	21,799	391	7,737	5,754	82,699
FY19 Budget	21,148	6,613	12,200	8,386	22,505	885	7,704	6,196	85,636
FY20 Budget	21,223	6,553	13,172	8,979	24,748	416	7,919	6,972	89,983
% Change-FY20 Budget to FY18 Actual	2.6%	8.7%	13.5%	3.3%	13.5%	6.3%	2.4%	21.2%	8.8%
% Change-FY20 Budget to FY19 Budget	0.4%	(0.9%)	8.0%	7.1%	10.0%	(53.0%)	2.8%	12.5%	5.1%
Other Revenues (000's) ⁽³⁾									
FY18 Actual	3,666	2,214	4,329	349	2,590	247	1,210	779	15,385
FY19 Budget	3,567	2,083	4,376	323	2,542	274	1,215	789	15,171
FY20 Budget	3,718	2,111	4,378	338	2,745	203	1,173	774	15,440
% Change-FY20 Budget to FY18 Actual	1.4%	(4.7%)	1.1%	(3.0%)	6.0%	(17.9%)	(3.1%)	(0.7%)	0.4%
% Change-FY20 Budget to FY19 Budget	4.2%	1.3%	0.0%	4.7%	8.0%	(25.9%)	(3.5%)	(1.9%)	1.8%

Numbers may not foot due to rounding.

NOTES:

- (1) Costs include all expenses for Metrolink and MOW on operating and non-operating lines
- (2) Includes fare reduction subsidies for Antelope Valley Line (FY18) and San Bernardino Line (FY19, FY20)
- (3) Other revenues include dispatching fees and MOW revenues from freight and Amtrak due to individual member agencies

Exhibit 3.1c Summary of FY2017-18 to FY2019-20 Statistics by Line

LINE	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	Orange Co MSEP	Orange Co IEOC	91 Line ⁽¹⁾	Total
Average Fare/Passenger									
FY18 Actual	\$7.63	\$5.55	\$6.43	\$8.61	\$8.10	\$3.12	\$5.65	\$6.48	\$7.08
FY19 Budget	\$6.65	\$5.74	\$6.43	\$8.67	\$7.90	\$7.75	\$5.65	\$6.48	\$6.86
FY20 Budget	\$6.48	\$5.60	\$6.42	\$8.72	\$8.25	\$5.81	\$5.64	\$7.48	\$6.96
% Change-FY20 Budget to FY18 Actual	(15.1%)	1.0%	(0.1%)	1.2%	1.8%	86.2%	(0.2%)	15.5%	(1.7%)
% Change-FY20 Budget to FY19 Budget	(2.7%)	(2.4%)	(0.2%)	0.6%	4.4%	(25.1%)	(0.2%)	15.6%	1.4%
Op Cost/Passenger (w/o MOW Extraordinary Maint)									
FY18 Actual	\$18.55	\$26.24	\$26.55	\$18.90	\$11.94	N/A	\$19.29	\$24.46	\$19.87
FY19 Budget	\$17.04	\$26.46	\$26.46	\$21.36	\$12.59	N/A	\$20.53	\$26.35	\$20.10
FY20 Budget	\$16.81	\$27.30	\$25.09	\$20.64	\$12.64	N/A	\$20.48	\$31.39	\$20.27
% Change-FY20 Budget to FY18 Actual	(9.4%)	4.0%	(5.5%)	9.2%	5.9%	N/A	6.1%	28.4%	2.0%
% Change-FY20 Budget to FY19 Budget	(1.3%)	3.2%	(5.2%)	(3.3%)	0.4%	N/A	(0.2%)	19.1%	0.8%
Op Cost/Passenger Mile (w/o MOW Extraordinary Maint)									
FY18 Actual	\$0.52	\$1.03	\$0.71	\$0.54	\$0.34	N/A	\$0.57	\$0.61	\$0.57
FY19 Budget	\$0.47	\$1.02	\$0.70	\$0.62	\$0.36	N/A	\$0.61	\$0.72	\$0.58
FY20 Budget	\$0.47	\$1.07	\$0.67	\$0.59	\$0.37	N/A	\$0.61	\$0.78	\$0.59
% Change-FY20 Budget to FY18 Actual	(9.2%)	4.1%	(5.3%)	9.2%	8.6%	N/A	6.5%	28.2%	2.1%
% Change-FY20 Budget to FY19 Budget	(1.3%)	5.6%	(4.4%)	(3.3%)	2.9%	N/A	0.2%	8.9%	0.8%
Subsidy/Passenger									
FY18 Actual	\$9.62	\$18.74	\$17.78	\$10.02	\$2.92	N/A	\$12.81	\$17.12	\$11.53
FY19 Budget	\$9.30	\$18.99	\$17.78	\$12.43	\$3.83	N/A	\$14.04	\$19.07	\$12.07
FY20 Budget	\$9.25	\$19.99	\$16.60	\$11.67	\$3.52	N/A	\$14.06	\$23.11	\$12.17
% Change-FY20 Budget to FY18 Actual	(3.8%)	6.7%	(6.6%)	16.5%	20.4%	N/A	9.7%	35.0%	5.5%
% Change-FY20 Budget to FY19 Budget	(0.6%)	5.2%	(6.6%)	(6.1%)	(8.2%)	N/A	0.2%	21.2%	0.9%
Subsidy/Passenger Mile									
FY18 Actual	\$0.27	\$0.74	\$0.47	\$0.29	\$0.08	N/A	\$0.38	\$0.43	\$0.33
FY19 Budget	\$0.26	\$0.73	\$0.47	\$0.36	\$0.11	N/A	\$0.42	\$0.52	\$0.35
FY20 Budget	\$0.26	\$0.79	\$0.44	\$0.34	\$0.10	N/A	\$0.42	\$0.58	\$0.35
% Change-FY20 Budget to FY18 Actual	(3.7%)	6.7%	(6.4%)	16.4%	23.5%	N/A	10.1%	34.8%	5.7%
% Change-FY20 Budget to FY19 Budget	(0.6%)	7.7%	(5.8%)	(6.1%)	(5.9%)	N/A	0.6%	10.8%	0.8%
Op Cost/Service Train Mile (w/o MOW Extraordinary Maint)									
FY18 Actual	\$75.99	\$115.82	\$79.25	\$96.20	\$72.19	\$67.89	\$77.23	\$94.71	\$82.40
FY19 Budget	\$80.15	\$120.62	\$82.11	\$105.89	\$81.36	\$66.36	\$81.67	\$109.93	\$88.26
FY20 Budget	\$80.74	\$125.56	\$83.81	\$108.54	\$73.72	\$91.27	\$83.96	\$102.99	\$88.61
% Change-FY20 Budget to FY18 Actual	6.3%	8.4%	5.8%	12.8%	2.1%	34.4%	8.7%	8.7%	7.5%
% Change-FY20 Budget to FY19 Budget	0.7%	4.1%	2.1%	2.5%	(9.4%)	37.5%	2.8%	(6.3%)	0.4%

Numbers may not foot due to rounding.

NOTES:

(1) Includes PVL Services

Exhibit 3.1d Summary of FY2017-18 to FY2019-20 Statistics by Line

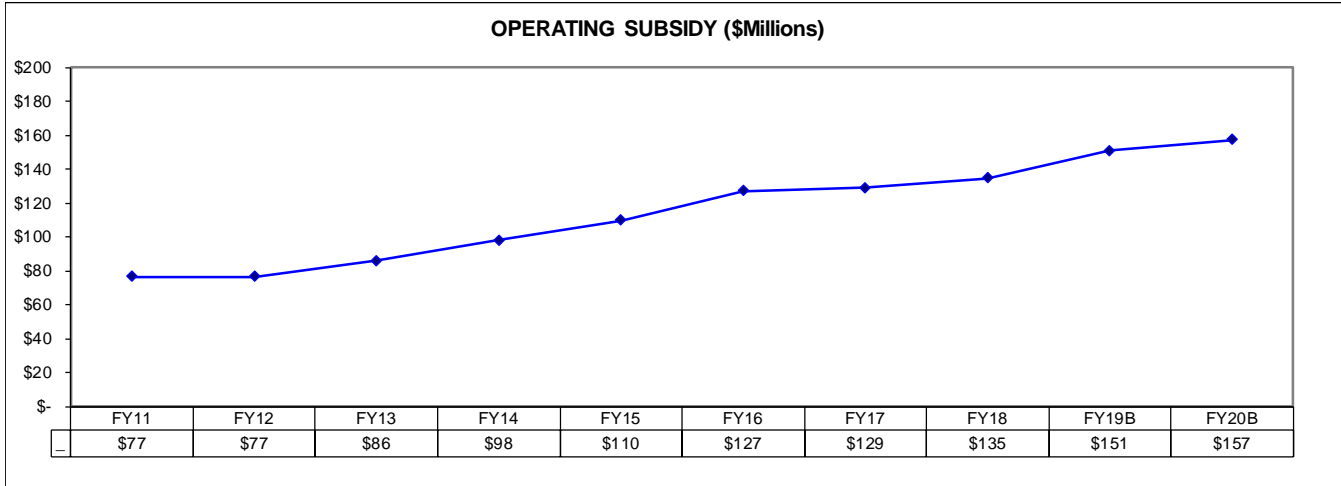
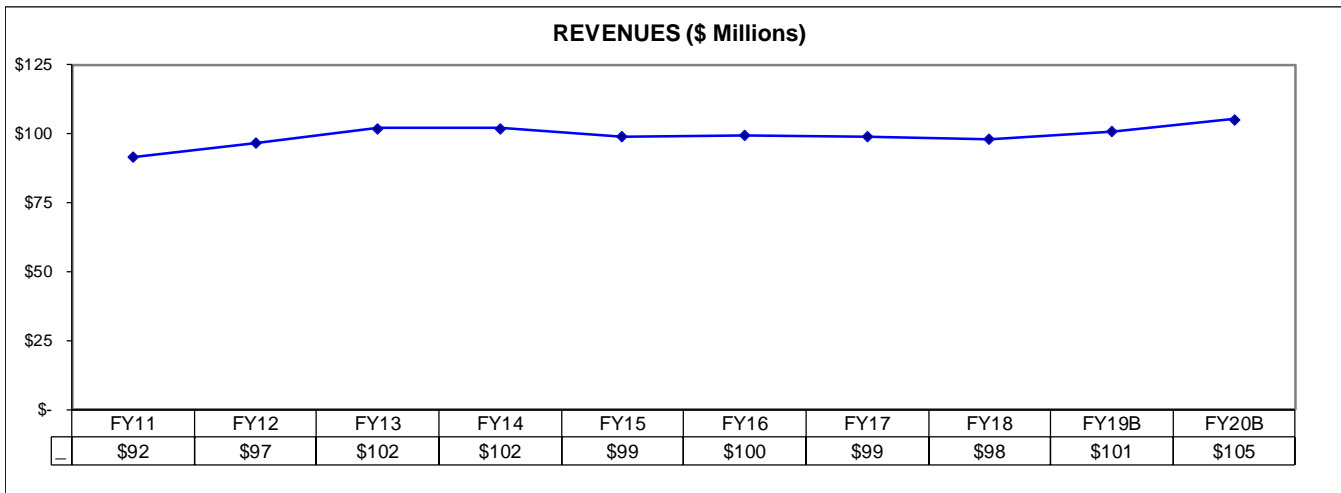
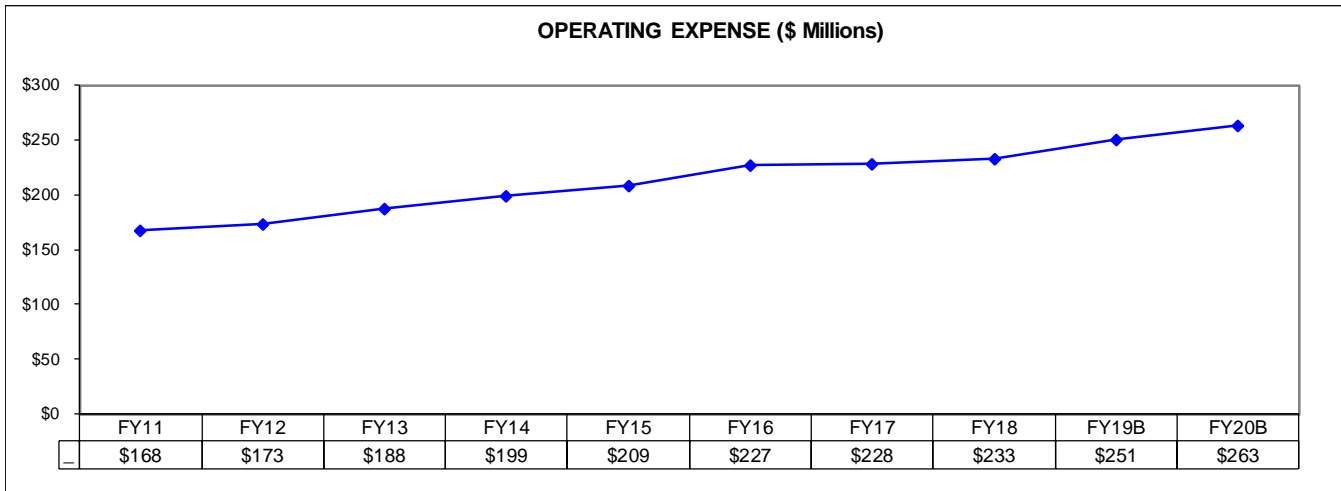
LINE	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	Orange Co MSEP	IEOC	91 Line ⁽³⁾	Total
Operating Cost/Service Train Mile (w/o MOW)									
FY18 Actual	\$57.38	\$89.08	\$63.37	\$90.98	\$60.76	\$58.79	\$65.43	\$82.03	\$67.36
FY19 Budget	\$62.51	\$95.15	\$68.35	\$100.10	\$70.30	\$57.95	\$70.18	\$95.94	\$73.93
FY20 Budget	\$61.11	\$96.27	\$67.75	\$102.18	\$62.20	\$82.06	\$71.79	\$90.46	\$72.98
% Change-FY20 Budget to FY18 Actual	6.5%	8.1%	6.9%	12.3%	2.4%	39.6%	9.7%	10.3%	8.3%
% Change-FY20 Budget to FY19 Budget	(2.2%)	1.2%	(0.9%)	2.1%	(11.5%)	41.6%	2.3%	(5.7%)	(1.3%)
Farebox Recovery ⁽¹⁾									
FY18 Actual	41.0%	21.1%	24.2%	45.4%	67.6%	6.3%	29.2%	26.5%	35.5%
FY19 Budget	39.0%	21.7%	24.3%	40.5%	62.7%	14.2%	27.5%	24.6%	34.1%
FY20 Budget	38.4%	20.5%	25.5%	42.1%	65.1%	6.4%	27.5%	23.8%	34.3%
% Change-FY20 Budget to FY18 Actual	(6.3%)	(2.8%)	5.7%	(7.1%)	(3.7%)	1.2%	(5.9%)	(10.0%)	(3.5%)
% Change-FY20 Budget to FY19 Budget	(1.4%)	(5.5%)	5.2%	4.0%	3.9%	(54.9%)	(0.0%)	(3.0%)	0.4%
Revenue Recovery ⁽²⁾									
FY18 Actual	48.3%	28.8%	33.2%	47.2%	75.6%	10.4%	33.8%	30.1%	42.1%
FY19 Budget	45.6%	28.5%	33.0%	42.1%	69.8%	18.6%	31.9%	27.7%	40.2%
FY20 Budget	45.2%	27.1%	34.0%	43.7%	72.3%	9.6%	31.6%	26.5%	40.1%
% Change-FY20 Budget to FY18 Actual	(6.4%)	(6.0%)	2.6%	(7.4%)	(4.4%)	(7.7%)	(6.5%)	(11.9%)	(4.7%)
% Change-FY20 Budget to FY19 Budget	(0.9%)	(5.0%)	3.1%	3.9%	3.7%	(48.7%)	(0.9%)	(4.5%)	(0.0%)

Numbers may not foot due to rounding.

NOTES:

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

Exhibit 3.2 Operating Expense, Revenues and Operating Subsidy

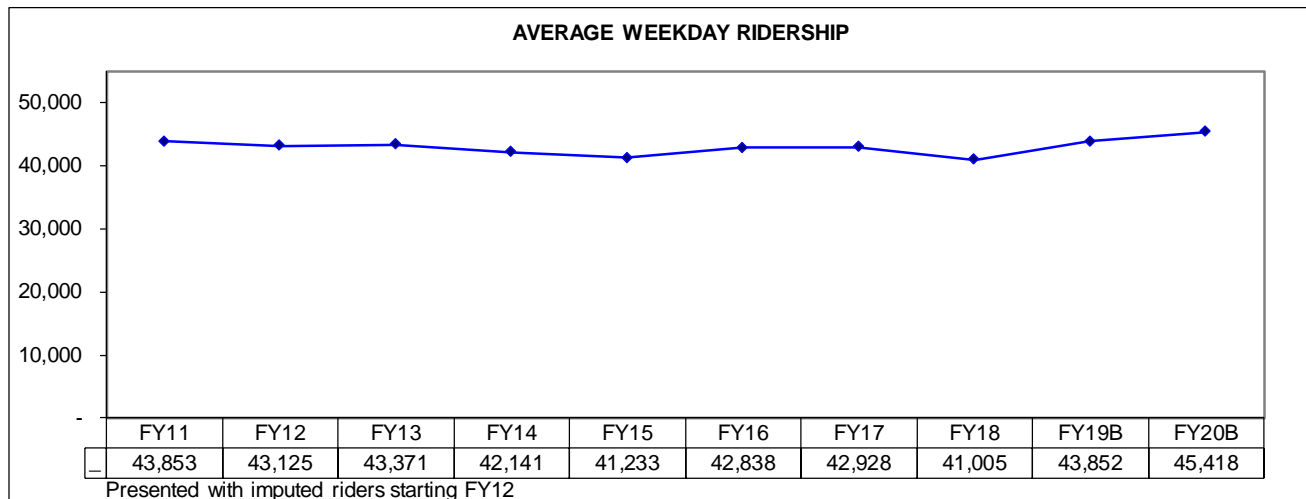
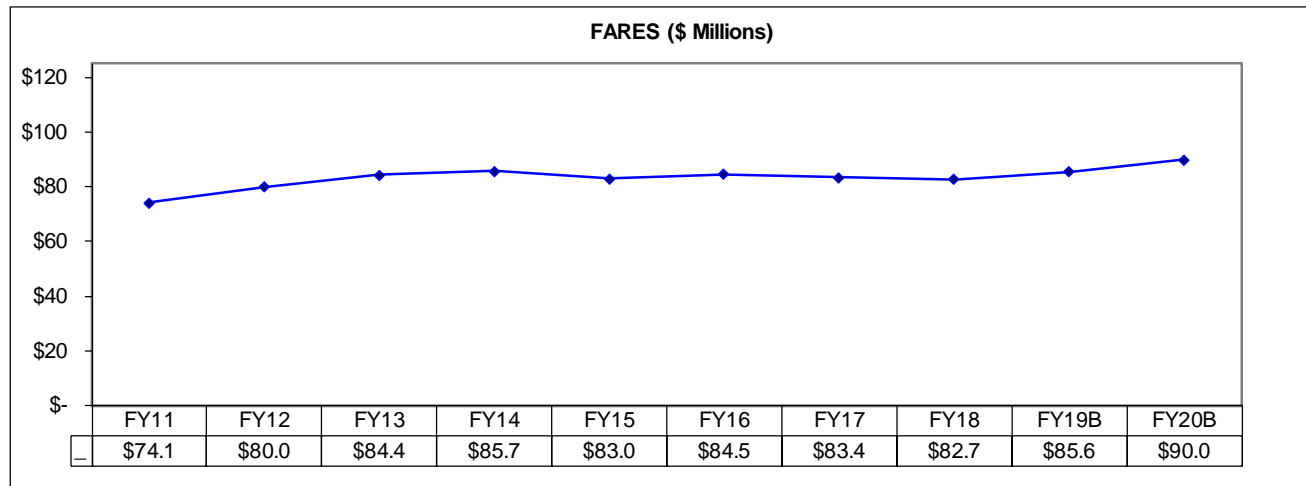
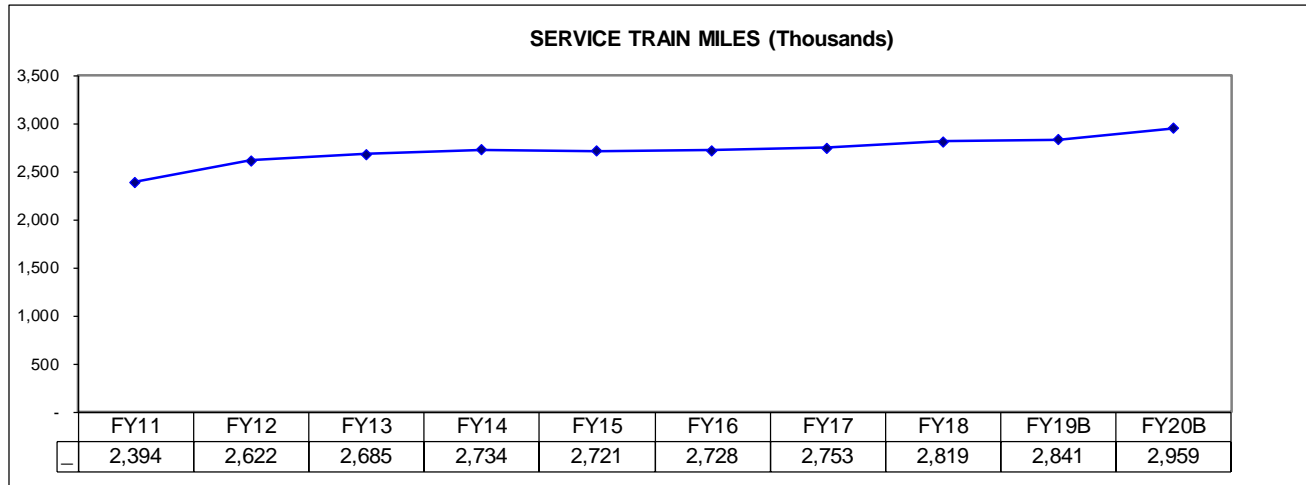


NOTES:

Actuals to FY18, Budget for FY19 and FY20

FY16 Actuals and FY17 Actuals include BNSF Lease Locomotives costs

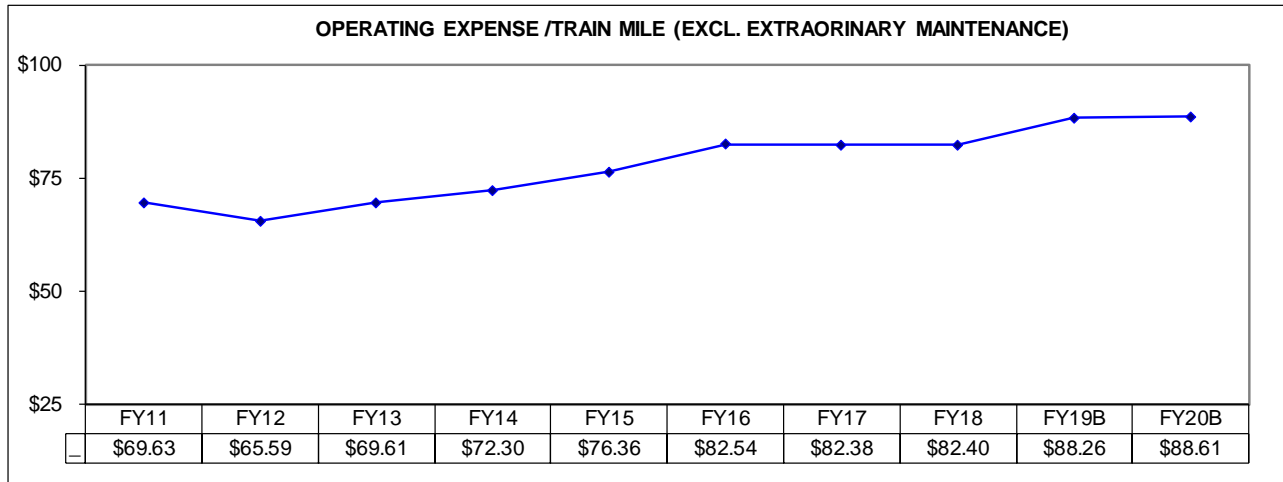
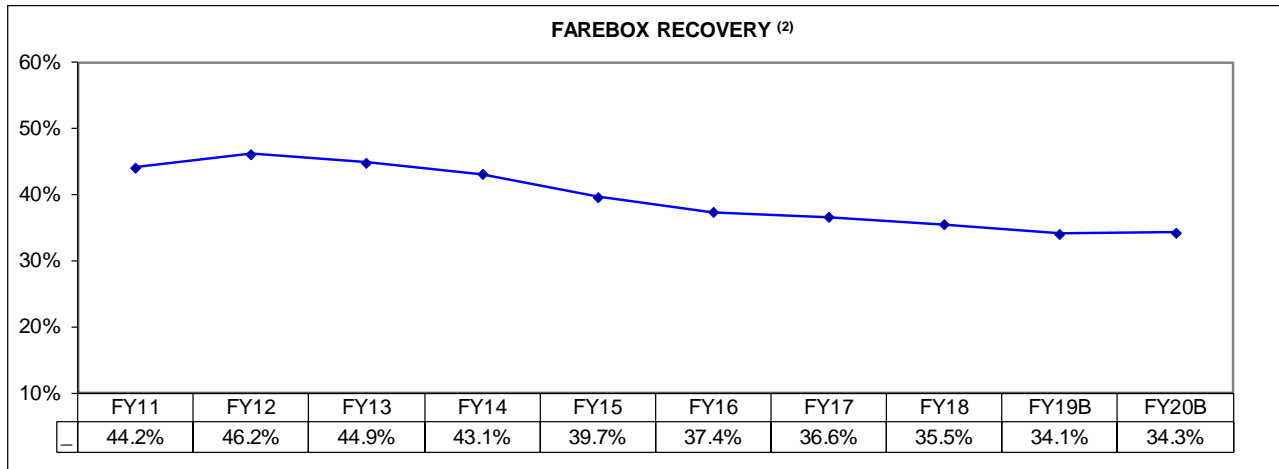
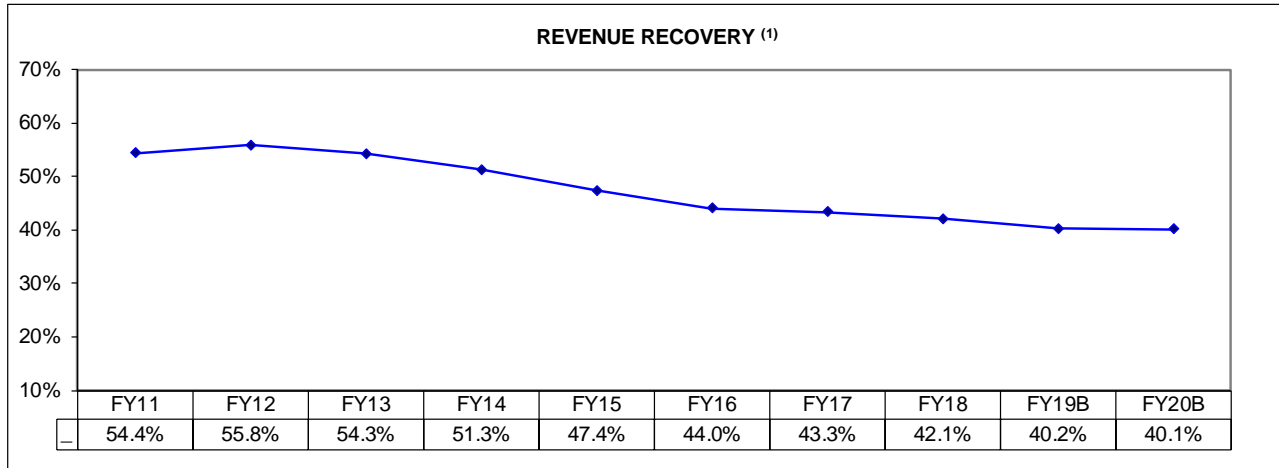
Exhibit 3.3 Train Miles, Fares and Average Weekday Ridership



NOTES:

Actuals to FY18, Budget for FY19 and FY20

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



NOTES:

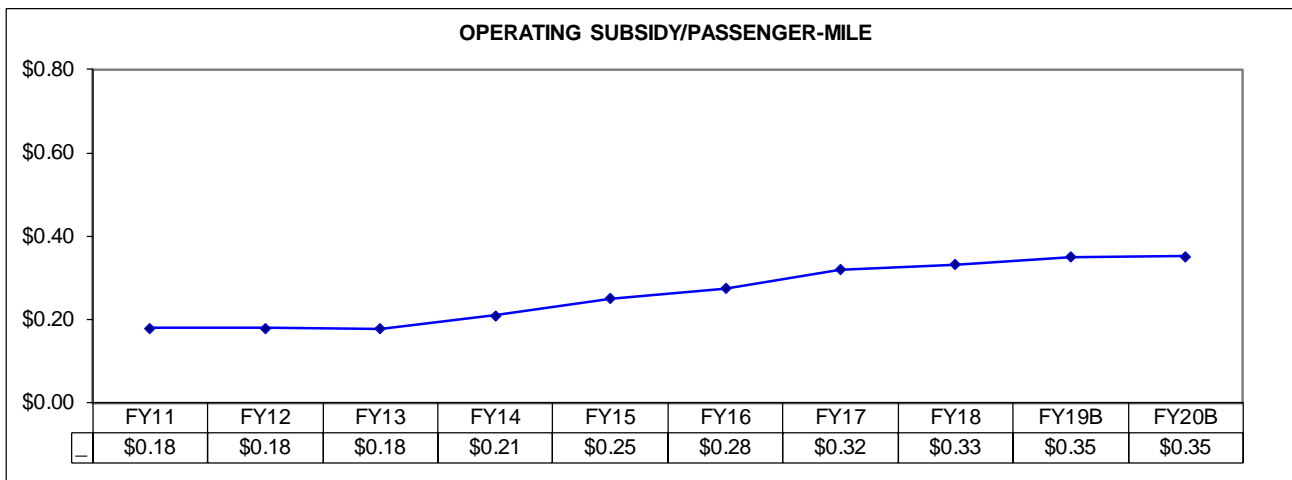
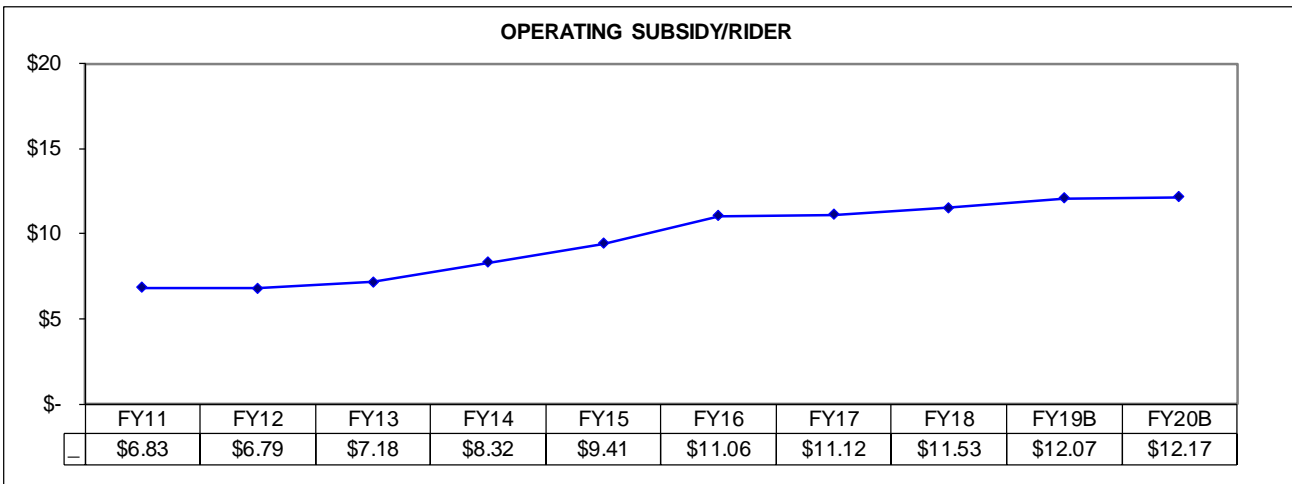
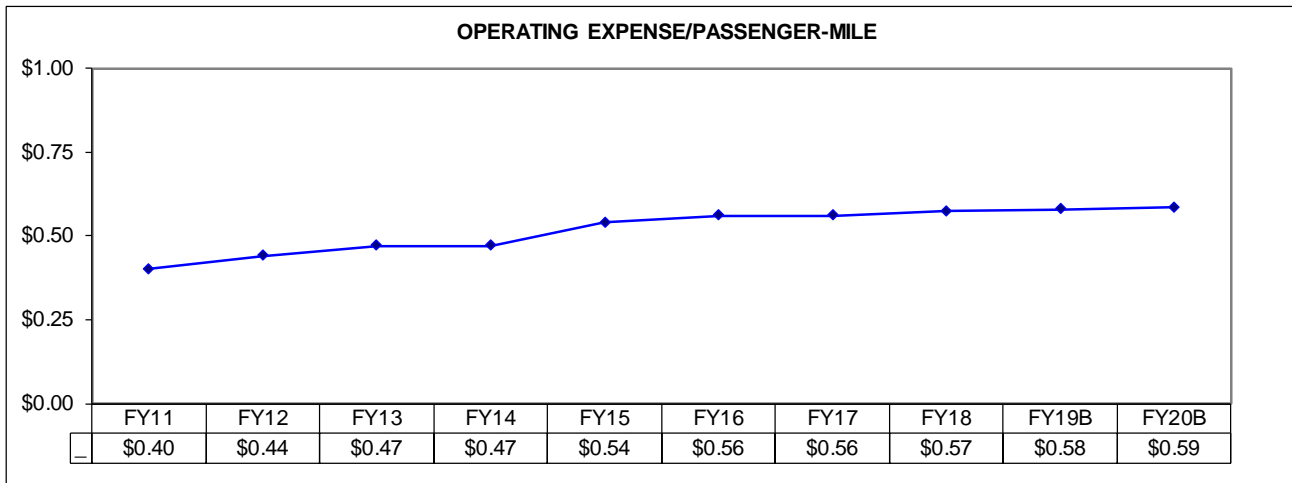
(1) Revenue Recovery = Operating Revenues/Operating Expenses Net of Rolling Stock Lease Payments

(2) Farebox Recovery = Farebox Revenue/Operating Expenses Net of Rolling Stock Lease Payments

Actuals to FY18, Budget for FY19 and FY20

FY16 Actuals and FY17 Actuals include BNSF Lease Locomotives costs

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



NOTES:

Actuals to FY18, Budget for FY19 and FY20

FY16 Actuals and FY17 Actuals include BNSF Lease Locomotives costs

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

Exhibit 3.6 FY2015-16 to FY2019-20 Annual Operating Budget by Cost Component by Fiscal Year

(000's)	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY19-20 BUDGET VS. FY18-19 BUDGET	
	ACTUAL	ACTUAL	ACTUAL	BUDGET	BUDGET	VARIANCE	%
Operating Revenue							
Farebox Revenue	\$ 83,652	\$ 82,883	\$ 82,542	\$ 82,904	\$ 87,739	4,835	5.8%
Special Trains	-	-	-	-	219	219	N/A
Fare Reduction Subsidy	873	490	157	2,732	2,025	(706)	(25.9%)
Subtotal-Pro Forma FareBox	84,524	83,373	82,699	85,636	89,983	4,347	5.1%
Dispatching	2,120	2,016	2,133	2,120	2,172	52	2.5%
Other Revenues	429	762	463	490	257	(233)	(47.5%)
MOW Revenues	12,434	12,384	12,789	12,561	13,011	450	3.6%
Subtotal Operating Revenue	99,507	98,535	98,084	100,806	105,423	4,617	4.6%
Operating Expenses							
Operations & Services							
Train Operations	41,887	41,616	42,116	46,872	48,733	1,861	4.0%
Equipment Maintenance	33,751	35,422	34,242	38,133	36,638	(1,496)	(3.9%)
Contingency (Train Ops)	-	-	-	-	-	-	N/A
Fuel	17,381	18,207	17,577	18,744	21,730	2,986	15.9%
Non-Scheduled Rolling Stock Repairs	136	1	56	260	160	(100)	(38.5%)
Operating Facilities Maintenance	1,149	1,475	1,493	1,684	1,749	65	3.9%
Other Operating Train Services	239	449	722	482	977	495	102.7%
Special Trains	-	-	-	-	793	793	N/A
Rolling Stock Lease	638	230	11	336	230	(106)	(31.4%)
Security - Sheriff	4,912	5,511	5,662	5,889	6,095	206	3.5%
Security - Guards	1,685	1,283	1,931	2,450	2,552	102	4.2%
Supplemental Additional Security	-	520	227	690	660	(30)	(4.3%)
Public Safety Program	217	203	193	389	421	32	8.2%
Passenger Relations	1,748	1,868	1,723	1,732	1,797	65	3.7%
TVM Maintenance/Revenue Collection	6,554	7,934	8,188	9,055	9,652	597	6.6%
Marketing	1,137	716	1,307	5,380	1,769	(3,610)	(67.1%)
Media & External Communications	343	249	320	458	459	1	0.1%
Utilities/Leases	2,046	2,614	2,804	3,473	2,695	(778)	(22.4%)
Transfers to Other Operators	6,488	6,003	3,818	6,496	5,301	(1,195)	(18.4%)
Amtrak Transfers	1,287	1,307	1,678	2,400	2,400	-	0.0%
Station Maintenance	1,418	1,196	1,575	1,806	2,230	425	23.5%
Rail Agreements	5,207	5,155	4,938	5,400	6,362	963	17.8%
Subtotal Operations & Services	128,223	131,960	130,582	152,129	153,404	1,276	0.8%
Maintenance-of-Way							
MoW - Line Segments	37,936	37,355	42,411	40,711	46,254	5,543	13.6%
MoW - Extraordinary Maintenance	1,518	1,260	594	591	712	121	20.6%
Subtotal Maintenance-of-Way	39,453	38,615	43,005	41,301	46,966	5,665	13.7%
Administration & Services							
Ops Salaries & Fringe Benefits	12,892	13,808	12,507	13,782	14,631	849	6.2%
Ops Non-Labor Expenses	5,322	5,046	5,890	7,635	8,792	1,156	15.1%
Indirect Administrative Expenses	12,417	14,090	19,333	17,096	20,755	3,659	21.4%
Ops Professional Services	2,019	1,963	2,687	2,579	3,962	1,383	53.6%
Subtotal Admin & Services	32,651	34,907	40,417	41,093	48,140	7,047	17.1%
Contingency (Non-Train Ops)	47	2	15	204	200	(4)	(2.0%)
Total Operating Expenses	200,374	205,484	214,019	234,727	248,710	13,984	6.0%
Insurance Expense/(Revenue)							
Liability/Property/Auto	11,634	11,061	9,748	11,418	11,906	488	4.3%
Claims / SI	3,876	5,116	8,551	4,000	1,000	(3,000)	(75.0%)
Claims Administration	421	704	585	1,211	1,252	41	3.4%
PLPD Revenue	(22)	(1)	-	-	-	-	N/A
Net Insurance Expense	15,909	16,880	18,883	16,629	14,158	(2,471)	(14.9%)
Total Expense Before BNSF	216,283	222,364	232,902	251,356	262,869	11,512	4.6%
Loss Before BNSF	(116,776)	(123,829)	(134,818)	(150,550)	(157,445)	(6,896)	4.6%
Member Subsidies							
Operations	109,003	119,148	124,736	133,920	143,287	9,367	7.0%
Insurance	18,079	16,787	17,663	16,629	14,158	(2,471)	(14.9%)
Total Member Subsidies	127,082	135,934	142,399	150,550	157,445	6,896	4.6%
Surplus / (Deficit) Before BNSF	10,306	12,106	7,581	-	-	-	N/A
BNSF LEASED LOCOMOTIVE COSTS							
Lease cost Inc. ship	4,449	2,649	-	-	-	-	N/A
Major Component Parts	720	(136)	-	-	-	-	N/A
Labor for Maintenance	2,597	1,077	-	-	-	-	N/A
Additional Fuel	1,341	1,046	-	-	-	-	N/A
Diesel Fuel Offset	-	-	-	-	-	-	N/A
Wheel truing, Software Mods, Brakes	37	-	-	-	-	-	N/A
Temp Facility Mods	136	140	-	-	-	-	N/A
PTC Costs	1,116	892	-	-	-	-	N/A
Contingency	-	-	-	-	-	-	N/A
Total BNSF Lease Loco Expenses	10,397	5,669	-	-	-	-	N/A
Member BNSF Lease Subsidies	11,545	6,055	-	-	-	-	N/A
Surplus / (Deficit) - BNSF Lease	1,148	386	-	-	-	-	N/A
TOTAL EXPENSE	226,680	228,032	232,902	251,356	262,869	11,512	4.6%
Net Loss	(127,173)	(129,498)	(134,818)	(150,550)	(157,445)	(6,896)	4.6%
All Member Subsidies	138,627	141,989	142,399	150,550	157,445	6,896	4.6%
Surplus / (Deficit)	\$ 11,454	\$ 12,491	\$ 7,581	\$ -	\$ -	\$ -	N/A
Budget Amendment							
Use of Deferred Revenue/Other Funding Source ⁽¹⁾							
Amendment#1 ⁽¹⁾	-	-	-	-	4,034	4,034	N/A
Amendment#2 ⁽¹⁾	-	-	-	-	300	300	N/A
Amendment#2 ⁽¹⁾	-	-	-	-	3,734	3,734	N/A
Total Revenue and Other Funding Sources	99,507	98,535	98,084	100,806	109,457	8,651	8.6%
Total Expenses	226,680	228,032	232,902	251,356	266,903	15,546	6.2%
Total Member Subsidy	127,173	129,498	134,818	150,550	157,445	6,896	4.6%

Numbers may not foot due to rounding.

NOTE:

(1) Amounts were approved by the Board on June 28, 2019 based on a forecast of Operation Surplus for FY19. The actual amount of Operating Surplus will be finalized with the FY19 Year-End.

Exhibit 3.7 FY2019-20 Annual Operating Budget by Cost Component by Member Agency

(000's)	METRO	OCTA	RCTC	SBCTA	VCTC	TOTAL
Operating Revenue						
Farebox Revenue	\$ 42,967	\$ 24,374	\$ 8,134	\$ 9,891	\$ 2,373	\$ 87,739
Special Trains	97	54	45	18	5	219
Fare Reduction Subsidy	1,187	-	-	839	-	2,025
Subtotal-Pro Forma FareBox	44,250	24,427	8,179	10,748	2,378	89,983
Dispatching	1,122	717	8	64	262	2,172
Other Revenues	123	54	28	36	17	257
MOW Revenues	7,696	2,613	670	1,553	479	13,011
Total Operating Revenue	53,191	27,812	8,884	12,401	3,135	105,423
Operating Expenses						
Operations & Services						
Train Operations	25,633	10,888	5,317	5,154	1,742	48,733
Equipment Maintenance	18,025	8,451	4,356	4,255	1,552	36,638
Fuel	10,740	5,906	2,283	2,183	618	21,730
Non-Scheduled Rolling Stock Repairs	83	38	16	18	5	160
Operating Facilities Maintenance	905	416	173	200	55	1,749
Other Operating Train Services	486	134	116	164	77	977
Special Trains	303	226	223	37	5	793
Rolling Stock Lease	109	46	26	33	17	230
Security - Sheriff	3,198	1,212	939	628	119	6,095
Security - Guards	1,211	440	380	268	254	2,552
Supplemental Additional Security	324	180	60	79	17	660
Public Safety Program	200	73	63	44	42	421
Passenger Relations	857	501	169	209	59	1,797
TVM Maintenance/Revenue Collection	4,137	2,104	1,596	1,234	581	9,652
Marketing	825	479	193	197	75	1,769
Media & External Communications	218	79	68	48	46	459
Utilities/Leases	1,278	464	401	283	268	2,695
Transfers to Other Operators	2,973	1,192	378	600	159	5,301
Amtrak Transfers	767	1,526	2	3	101	2,400
Station Maintenance	1,378	304	147	303	98	2,230
Rail Agreements	2,215	1,895	1,533	383	337	6,362
Subtotal Operations & Services	75,865	36,554	18,437	16,321	6,228	153,404
Maintenance-of-Way						
MoW - Line Segments	24,352	9,311	3,423	6,388	2,780	46,254
MoW - Extraordinary Maintenance	417	102	68	76	49	712
Subtotal Maintenance-of-Way	24,769	9,413	3,491	6,464	2,829	46,966
Administration & Services						
Ops Salaries & Fringe Benefits	6,941	2,531	2,171	1,538	1,451	14,631
Ops Non-Labor Expenses	4,457	1,939	965	1,002	429	8,792
Indirect Administrative Expenses	9,846	3,576	3,088	2,179	2,065	20,755
Ops Professional Services	1,880	683	590	416	394	3,962
Subtotal Admin & Services	23,123	8,729	6,813	5,135	4,339	48,140
Contingency	95	34	30	21	20	200
Total Operating Expenses	123,853	54,730	28,771	27,941	13,416	248,710
Insurance and Legal						
Liability/Property/Auto	6,161	2,834	1,175	1,359	377	11,906
Net Claims / SI	517	238	99	114	32	1,000
Claims Administration	648	298	124	143	40	1,252
PLPD Revenue	-	-	-	-	-	-
Total Net Insurance and Legal	7,326	3,370	1,398	1,616	448	14,158
Total Expense	131,179	58,100	30,168	29,557	13,865	262,869
Loss	(77,988)	(30,288)	(21,284)	(17,156)	(10,729)	(157,445)
Member Subsidies						
Operations	70,662	26,918	19,887	15,540	10,281	143,287
Insurance	7,326	3,370	1,398	1,616	448	14,158
Total Member Subsidies	\$ 77,988	\$ 30,288	\$ 21,284	\$ 17,156	\$ 10,729	\$ 157,445
Surplus / (Deficit)	-	-	-	-	-	-
Budget Amendment						
Use of Deferred Revenue/Other Funding Source ⁽¹⁾	2,236	905	390	360	142	4,034
Amendment#1 ⁽¹⁾	147	81	29	34	9	300
Amendment#2 ⁽¹⁾	2,089	825	361	326	133	3,734
Total Revenue and Other Funding Sources	55,427	28,717	9,274	12,761	3,277	109,457
Total Expenses	133,415	59,005	30,558	29,917	14,006	266,903
Total Member Subsidy	77,988	30,288	21,284	17,156	10,729	157,445

Numbers may not foot due to rounding.

NOTES:

(1) Amounts were approved by the Board on June 28, 2019 based on a forecast of Operation Surplus for FY19. The actual amount of Operating Surplus will be finalized with the FY19 Year-End.

Exhibit 3.8 FY2019-20 Annual Operating Budget by Cost Component by Line

(000's)	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL	TOTAL
Operating Revenue									
Farebox Revenue	\$ 19,165	\$ 6,539	\$ 13,141	\$ 8,968	\$ 24,707	\$ 416	\$ 7,862	\$ 6,941	\$ 87,739
Special Trains	33	14	31	11	42	-	57	31	\$ 219
Fare Reduction Subsidy	2,025	-	-	-	-	-	-	-	2,025
Subtotal-Pro Forma FareBox	21,223	6,553	13,172	8,979	24,748	416	7,919	6,972	89,983
Dispatching	165	540	369	6	1,029	16	18	31	2,172
Other Revenues	57	36	41	33	46	1	34	10	257
MOW Revenues	3,496	1,535	3,968	299	1,669	187	1,122	733	13,011
Total Operating Revenue	24,942	8,664	17,550	9,317	27,493	619	9,092	7,746	105,423
Operating Expenses									
Operations & Services									
Train Operations	10,456	5,011	10,397	3,070	7,326	959	5,372	6,142	48,733
Equipment Maintenance	8,135	3,799	7,342	2,654	5,247	1,342	4,335	3,784	36,638
Fuel	4,381	1,880	4,583	1,291	3,964	913	2,663	2,055	21,730
Non-Scheduled Rolling Stock Repairs	38	14	34	11	25	5	19	13	160
Operating Facilities Maintenance	411	153	375	123	276	56	212	142	1,749
Other Operating Train Services	313	129	140	116	60	21	88	109	977
Special Trains	72	17	79	11	112	-	189	314	793
Rolling Stock Lease	50	35	37	32	39	-	31	7	230
Security - Sheriff	1,342	330	1,730	265	812	122	674	821	6,095
Security - Guards	372	424	461	382	196	70	289	357	2,552
Supplemental Additional Security	144	49	99	67	186	3	60	52	660
Public Safety Program	61	70	76	63	32	12	48	59	421
Passenger Relations	419	153	295	140	414	18	234	124	1,797
TVM Maintenance/Revenue Collection	1,790	1,355	1,572	931	1,004	410	1,367	1,222	9,652
Marketing	415	140	233	130	445	16	177	212	1,769
Media & External Communications	67	76	83	69	35	13	52	64	459
Utilities/Leases	393	448	487	404	207	74	305	377	2,695
Transfers to Other Operators	1,241	443	1,177	453	1,401	-	174	413	5,301
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	640	289	462	194	392	14	39	201	2,230
Rail Agreements	-	627	-	1,939	1,131	12	1,044	1,609	6,362
Subtotal Operations & Services	30,743	15,749	29,662	12,347	25,397	4,059	17,370	18,077	153,404
Maintenance-of-Way									
MoW - Line Segments	13,393	7,447	9,865	1,246	5,930	653	4,165	3,556	46,254
MoW - Extraordinary Maintenance	162	113	138	77	101	8	82	31	712
Subtotal Maintenance-of-Way	13,555	7,560	10,003	1,323	6,031	660	4,247	3,587	46,966
Administration & Services									
Ops Salaries & Fringe Benefits	2,142	2,423	2,648	2,184	1,138	399	1,656	2,040	14,631
Ops Non-Labor Expenses	1,846	927	1,767	761	1,323	218	1,012	938	8,792
Indirect Administrative Expenses	3,028	3,449	3,748	3,109	1,598	569	2,349	2,904	20,755
Ops Professional Services	578	659	716	594	305	109	449	554	3,962
Subtotal Admin & Services	7,595	7,458	8,880	6,647	4,364	1,295	5,466	6,435	48,140
Contingency	29	33	36	30	15	5	23	28	200
Total Operating Expenses	51,922	30,800	48,581	20,347	35,807	6,020	27,105	28,128	248,710
Insurance and Legal									
Liability/Property/Auto	2,797	1,040	2,555	837	1,881	384	1,444	969	11,906
Net Claims / SI	235	87	215	70	158	32	121	81	1,000
Claims Administration	294	109	269	88	198	40	152	102	1,252
Total Net Insurance and Legal	3,326	1,237	3,038	995	2,237	456	1,717	1,152	14,158
Total Expense	55,248	32,037	51,619	21,343	38,044	6,476	28,822	29,280	262,869
Member Subsidies									
Total Member Subsidies	\$ 30,306	\$ 23,373	\$ 34,068	\$ 12,025	\$ 10,551	\$ 5,858	\$ 19,730	\$ 21,533	\$ 157,445

Numbers may not foot due to rounding.

NOTE:

Budget Amendments 1 & 2 are not reflected in this Exhibit - fiscal impact by line is unknown at this time.

Exhibit 3.9 FY2015-16 to FY2019-20 Revenue Sources Trend

(000's)	FY2015-16 ACTUALS	FY2016-17 ACTUALS	FY2017-18 ACTUALS	FY2018-19 BUDGET	FY2019-20 BUDGET	CHANGE FROM FY2018-19 BUDGET
Operating Revenues						
Farebox	\$ 84,524	\$ 83,373	\$ 82,699	\$ 85,636	\$ 89,983	5.1%
Dispatching Agreements	2,120	2,016	2,133	2,120	2,172	2.5%
Other Operating ⁽¹⁾	429	762	463	490	257	(47.5%)
Maintenance-of-Way	12,434	12,384	12,789	12,561	13,011	3.6%
Local Funds for Operating ⁽²⁾	127,173	129,498	134,818	150,550	157,445	4.6%
Subtotal Operating Revenues	\$ 226,680	\$ 228,032	\$ 232,902	\$ 251,356	\$ 262,869	0.6%
Percent of Total Revenues	73.4%	76.9%	73.9%	58.5%	56.0%	
Capital Revenues ⁽³⁾						
State	\$ 29,997	\$ 22,183	\$ 21,472	\$ 2,748	\$ 176	(93.6%)
Federal	31,677	14,915	26,795	4,428	1,353	(69.4%)
Interest on Lease Proceeds	-	75	-	-	-	N/A
Union Pacific Railroad/BNSF	-	-	-	26	-	N/A
Amtrak	-	-	-	-	-	N/A
Other Non-Member (includes insurance recoveries)	9,788	15,774	9,585	-	35	N/A
Local Funds for Capital	10,808	15,495	24,459	2,365	1,640	(30.7%)
Carryover from prior year ⁽⁴⁾⁽⁵⁾	N/A	N/A	N/A	168,878	203,190	20.3%
Subtotal Capital Revenues	\$ 82,270	\$ 68,443	\$ 82,311	\$ 178,445	\$ 206,393	150.7%
Percent of Total Revenues	26.6%	23.1%	26.1%	41.5%	44.0%	N/A
Total Revenues	\$ 308,950	\$ 296,475	\$ 315,213	\$ 429,801	\$ 469,262	48.9%
Local Revenues as a Percent of Total	44.7%	48.9%	50.5%	35.6%	33.9%	

Numbers may not foot due to rounding.

NOTES:

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

(2) In FY2017-18, FY2018-19 and FY2019-20 a portion of local funds will be reimbursed by a Federal Preventive Maintenance grant.

(3) Each year includes only that amount expended within that year.

(4) There is no separate category for carryover in FY2015-16 through FY2017-18 because funding types are identified when expenses were recorded and categorized in the appropriate

(5) Carryover amounts are included in specific categories in years which are actual. Carryover amounts for budgeted years reflect expected expenditures as calculated at the time of the Budget Adoption. In FY2018-19 budget column, the estimated amount was \$168.9M. In FY2019-20 budget column, the estimated amount is \$203.2M of total \$507.4M carryover for Rehabilitation and New Capital projects. This FY2019-20 expended amount includes \$81.6M from Tier 4 locomotives, \$10.3M from Ticket Vending Machine, \$95.0M from rehabilitation projects, and \$16.3M from other new capital projects.

This chart does not reflect the amounts for CMAQ \$2,844 million, and Preventive Maintenance \$24,017 million that will be available in FY2019-20.

Exhibit 3.10 FY2019-20 Budget Revenue Sources and Use by Member Agency

(000's)	METRO	OCTA	RCTC	SBCTA	VCTC	System	Total FY2019-20	% of Total
Operating Budget								
Local Funds For Operating	77,988	30,288	21,284	17,156	10,729	-	157,445	59.9%
Operations	60,915	23,488	18,463	12,245	8,379	-	123,490	47.0%
Maintenance-of-Way	17,073	6,799	2,821	4,911	2,350	-	33,955	12.9%
Other Operating Revenues	53,191	27,812	8,884	12,401	3,135	-	105,423	40.1%
Farebox Revenue	44,250	24,427	8,179	10,748	2,378	-	89,983	34.2%
Non-Fare Operating Revenue	1,245	771	36	100	278	-	2,429	0.9%
MOW Revenues	7,696	2,613	670	1,553	479	-	13,011	4.9%
Total Funding Sources For Operating	131,179	58,100	30,168	29,557	13,865	-	262,869	100.0%
Total Operating Expenditures	131,179	58,100	30,168	29,557	13,865	-	262,869	100.0%
Operating Expenditures (Excludes MOW)	106,410	48,687	26,677	23,093	11,035	-	215,902	82.1%
Maintenance-of-Way	24,769	9,413	3,491	6,464	2,829	-	46,966	17.9%
Capital Program Expenditure in FY2019-20								
Local Funds For Capital	1,587	-	-	-	53	35	1,675	0.8%
New Capital	49	-	-	-	-	35	84	0.0%
Rehabilitation/Renovation	1,538	-	-	-	53	-	1,591	0.8%
Other Capital Revenues	-	626	91	405	406	-	1,528	0.7%
Interest on Lease Proceeds	-	-	-	-	-	-	-	0.0%
Other Non-Member (includes insurance recoveries)	-	-	-	-	-	-	-	0.0%
State Funds	-	-	-	72	104	-	176	0.1%
Federal Funds	-	626	91	334	302	-	1,353	0.7%
UPRR Funds	-	-	-	-	-	-	-	0.0%
Carryover Expenditures in FY20	39,049	18,842	6,875	10,097	9,461	118,865	203,190	98.4%
Total Funding Sources For Capital Program	40,636	19,468	6,966	10,503	9,920	118,900	206,393	100.0%
Total Capital Program Expenditures in FY20	40,636	19,468	6,966	10,503	9,920	118,900	206,393	100.0%
New Capital	49	17	20	16	6	35	143	0.1%
Rehabilitation/Renovation	1,538	609	71	390	453	-	3,061	1.5%
Carryover from prior year	39,049	18,842	6,875	10,097	9,461	118,865	203,190	98.4%
Total Proposed Expenditures	171,816	77,568	37,134	40,060	23,785	118,900	469,262	N/A

Numbers may not foot due to rounding.

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METROLINK.

SECTION 4

OPERATING REVENUES

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 4: Operating Revenues

4.1 Introduction

SCRRA's funding requirement for the FY2019-20 Operating Budget is \$262.9 million. Funding for the Operating Budget is provided by a combination of SCRRA generated revenues and subsidies from the five Member Agencies. SCRRA revenues include farebox, dispatching, Maintenance-of-Way (MOW), and miscellaneous revenue sources. The FY2019-20 Member Agency subsidy requirement of \$157.4 million represents a \$6.9 million, or 4.6%, increase from the FY2018-19 Budget.

SCRRA estimated FY2019-20 Revenues are \$105.4 million, an increase of \$4.6 million from the FY2018-19 Budget. In FY2018-19 and FY2019-20, total revenues are budgeted as follows:

	FY 2018-19	FY 2019-20	CHANGE FROM FY2018-19 BUDGET	
	BUDGET	BUDGET	\$ VARIANCE	% VARIANCE
Farebox	\$ 85,636	\$ 89,983	\$ 4,347	5.1%
Dispatching	2,120	2,172	52	2.5%
Other Revenues	490	257	(233)	(47.6%)
MOW Revenues	12,561	13,011	450	3.6%
Subtotal	100,806	105,423	4,617	4.6%
Member Agencies	150,550	157,445	6,895	4.6%
Total	\$ 251,356	\$ 262,869	\$ 11,512	4.6%

Numbers may not foot due to rounding.

As shown in Section 6 - Member Agency Subsidies, operational subsidies are effectively reduced by the annual Congestion Mitigation Air Quality Grant (CMAQ) and Preventive Maintenance Federal Formula Funds, which are claimed by Metrolink and passed on to Member Agencies.

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.

In FY18-19, the Board approved an increased marketing investment of \$3.9 million to help the Agency grow ridership and revenue. The strategy included a three-pronged approach to attract new riders, retain current riders and recapture former riders and to customize the marketing by line.

As a result of the FY19 increased \$3.9 marketing investment, Staff were able to generate new ridership for the Agency. For FY20, Staff will focus on retention of that ridership through development of a loyalty program as one of the key marketing strategies. A loyalty program will reward, encourage and incentivize our riders to continue to take Metrolink. The goals of a loyalty program include increased customer loyalty (reduction of churn) and revenues and to obtain information to help understand consumer purchase behavior. Currently, rider churn is 27%. Retention of new ridership will drive reduced churn. For each 1% reduction in churn, revenue is impacted by an increase of \$.08 million.

In FY2019-20, Staff will also focus on increasing revenue through the Corporate Partner Program (CPP). The focus will include a revamped sales approach to the existing program and will incorporate our Member Agencies and third-party benefit vendors to develop a more cohesive, customer-focused program. Staff will also develop new sales and marketing materials and work to build and maintain stronger relationships with existing CPP clients to grow ridership.

Staff will ramp up efforts to increase revenue generated from on-train advertising, experiential events and entertainment/location filming. The focus will also be to maximize advertising revenue by monetizing other Metrolink-owned properties including Metrolink's website, timetables, and the newsletter, Metrolink Matters.

Strategic planning goals have been integrated into this plan, which is the foundation of all efforts. Monthly meetings will continue to occur with Member Agencies for marketing coordination purposes.

Key Marketing Goals

- Implement a loyalty program to improve rider retention and reduce customer churn.
- Continue to track and monitor marketing campaigns and optimize performance on an ongoing basis by adjusting messaging, visuals and strategy as required.
- Improve revenue generated through the CPP.
- Increase revenue generated through advertising, sponsorship, and filming opportunities.

4.3 MOW Revenues

Freight railroads and Amtrak Intercity Services operating over territory owned by Member Agencies provide MOW revenues, based upon existing agreements. MOW revenue is projected at \$13.0 million, or \$0.5 million more than the FY2018-19 Budget. The details of MOW payments and their source are as shown in *Exhibit 4.2*, which displays that the increase in revenue is over the entire portfolio as a result of the improved economy yielding more freight. The amounts are also affected by the slight increase in the AAR annual rate.

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 FY2019-20 is projected at \$2.2 million, which is 2.5% more than the FY2018-19 Budget. The increase is reflective of the projected AAR rate increase.

4.5 Exhibits

Exhibit 4.1: FY2015-16 to FY2019-20 Fare Revenue and Ridership provides average daily ridership, total fare revenue and revenue per rider for weekend and weekdays. Data is provided for each operating line with comparisons to prior year.

Exhibit 4.2: FY2015-16 to FY2019-20 MOW Revenue Trends details various MOW revenue agreements by territory and source with annual actual revenues for Y2015-16, FY2016-17 and FY2017-18, and budgeted revenues for FY2018-19 and FY2019-20.

Exhibit 4.3: FY2015-16 to FY2019-20 Dispatching Revenue Trends lists various dispatching revenue agreements by territory with annual actual revenues for FY2015-16, FY2016-17 and FY2017-18, and budgeted revenues for FY2018-19 and FY2019-20.

Exhibit 4.4: FY2015-16 to FY2019-20 Other Operating Revenue Trends lists various revenue sources such as Amtrak TVM and interest with annual actual revenues for FY2015-16, FY2016-17 and FY2017-18, and budgeted revenues for FY2018-19 and FY2019-20.

Exhibit 4.1 FY2015-16 to FY2019-20 Fare Revenue and Ridership

Operating Line	AVERAGE DAILY RIDERSHIP						REVENUE/RIDER (\$'s)					FARE REVENUE (\$000's)					
	FY2015-16 ACTUAL	FY2016-17 ACTUAL	FY2017-18 ACTUAL	FY2018-19 BUDGET	FY2019-20 BUDGET	% CHANGE FROM FY2018-19 BUDGET	FY2015-16 ACTUAL	FY2016-17 ACTUAL	FY2017-18 ACTUAL	FY2018-19 BUDGET	FY2019-20 BUDGET	FY2015-16 ACTUAL	FY2016-17 ACTUAL	FY2017-18 ACTUAL	FY2018-19 BUDGET	FY2019-20 BUDGET ⁽¹⁾	% CHANGE FROM FY2018-19 BUDGET
San Bernardino																	
Weekday	10,407	9,271	9,141	10,774	11,083	2.9%	7.56	7.87	7.81	6.82	6.69	20,447	18,969	18,572	19,111	19,271	0.8%
Weekend	3,538	3,220	3,238	3,622	3,799	4.9%	5.36	6.21	6.30	5.41	4.94	1,972	2,079	2,121	2,037	1,952	(4.2%)
Ventura County																	
Weekday	3,778	4,175	4,182	4,432	4,498	1.5%	6.58	5.74	5.55	5.74	5.59	6,467	6,230	6,031	6,613	6,535	(1.2%)
Weekend ⁽²⁾					291						4.75					18	
Antelope Valley																	
Weekday	6,048	5,767	6,070	6,453	6,971	8.0%	6.53	6.72	6.37	6.52	6.48	10,275	10,077	10,055	10,933	11,747	7.4%
Weekend	2,635	2,113	2,186	2,113	2,302	8.9%	5.08	6.65	6.82	5.76	5.95	1,391	1,462	1,550	1,267	1,425	12.5%
Riverside																	
Weekday	4,404	3,863	3,880	3,721	3,962	6.5%	7.75	8.67	8.61	8.67	8.72	8,870	8,705	8,688	8,386	8,979	7.1%
Orange County																	
Weekday	8,242	9,657	9,497	10,080	10,590	5.1%	9.33	8.03	8.19	8.09	8.46	19,989	20,158	20,231	21,201	23,296	9.9%
Weekend	2,206	1,985	2,138	2,189	2,379	8.7%	5.90	7.11	7.06	5.73	5.87	1,353	1,468	1,569	1,304	1,452	11.4%
OC MSEP																	
Weekday	345	440	482	439	275	(37.3%)	5.07	3.58	3.12	7.75	5.81	455	410	391	885	416	(53.0%)
IEOC																	
Weekday	4,438	4,673	4,632	4,624	4,784	3.5%	6.98	6.38	6.11	5.63	5.61	8,057	7,751	7,355	6,770	6,980	3.1%
Weekend	935	1,513	1,578	1,543	1,535	(0.5%)	4.27	2.33	2.33	5.82	5.88	415	366	382	934	939	0.6%
91/Perris Valley																	
Weekday	2,610	3,109	3,121	3,330	3,256	(2.2%)	6.64	6.64	6.67	6.54	7.59	4,508	5,367	5,411	5,664	6,422	13.4%
Weekend	546	708	739	877	820	(6.5%)	5.71	4.50	4.46	5.83	6.46	324	331	343	532	551	3.5%
Totals																	
Weekday	40,272	40,955	41,005	43,852	45,418	3.6%	7.55	7.29	7.20	6.98	7.08	79,069	77,667	76,735	79,562	83,647	5.1%
Weekend	9,859	9,539	9,879	10,343	11,126	7.6%	5.32	5.75	5.80	5.65	5.48	5,455	5,706	5,964	6,073	6,337	4.3%
Total	50,132	50,494	50,883	54,196	56,544	4.3%	7.35	7.16	7.08	6.86	6.94	84,524	83,373	82,699	85,636	89,983	5.1%

Numbers may not foot due to rounding.

NOTES:

- (1) FY20 fare revenue budget is projected with FY18 actual average fare per rider and ridership trends
- (2) Ventura weekend service is for 13 Saturdays

Exhibit 4.2 FY2015-16 to FY2019-20 Maintenance-of-Way (MOW) Revenue Trends

(000's)	FY2015-16	FY16-17	FY2017-18	FY2018-19	FY2019-20	CHANGE FROM
Agreement/Territory	ACTUALS	ACTUALS	ACTUALS	BUDGET	BUDGET	FY2018-19 BUDGET
Amtrak Intercity Services	\$ 916	\$ 959	\$ 941	\$ 938	\$ 965	2.8%
LAUS Rail Yard Operations & Maintenance (Amtrak)	502	599	750	623	781	25.2%
Azusa Branch Shared Use (UPRR/SPTC)	135	130	136	133	140	4.8%
Baldwin Park Branch Shared Use (UPRR/SPTC)	301	126	220	129	225	74.6%
Coast & Saugus Shared Use (UPRR/SPTC)	5,161	4,391	4,391	4,391	4,391	0.0%
East Bank Joint Facility (UPRR/SPTC)	701	832	864	866	885	2.2%
Mission Tower (UPRR/SPTC)	120	179	192	186	197	5.9%
San Diego & Olive Subdivision Shared Use (BNSF)	1,708	1,693	1,717	1,736	1,760	1.4%
Pasadena Subdivision Shared Use (BNSF)	2,219	2,200	2,230	2,255	2,286	1.4%
State Grade Crossing (CPUC)	297	306	328	306	328	7.2%
PVL/San Jacinto Subdivision Shared Use (BNSF)	54	644	653	660	670	1.4%
Redlands Subdivision Shared Use (BNSF)	216	214	217	219	222	1.3%
Crossing Maintenance Fees	105	109	149	118	162	37.0%
Federal/Other Funds	-	-	-	-	-	N/A
Total	\$ 12,434	\$ 12,384	\$ 12,789	\$ 12,561	\$ 13,011	3.6%

Numbers may not foot due to rounding.

Exhibit 4.3 FY2015-16 to FY2019-20 Dispatching Revenue Trends

(000's) Agreement/Territory	FY2015-16 ACTUALS	FY2016-17 ACTUALS	FY2017-18 ACTUALS	FY2018-19 BUDGET	FY2019-20 BUDGET	CHANGE FROM FY2018-19 BUDGET
Amtrak Intercity Services	\$ 1,425	\$ 1,492	\$ 1,464	\$ 1,459	\$ 1,501	2.9%
Coast & Saugus Shared Use (UPRR/SPTC)	257	257	257	257	257	0.0%
East Bank Joint Facility (UPRR/SPTC)	91	91	92	91	91	0.0%
Mission Tower (UPRR/SPTC)	222	46	183	180	183	1.7%
San Diego & Olive Subdivision Shared Use (BNSF)	58	54	59	55	60	8.4%
Pasadena Subdivision Shared Use (BNSF)	61	64	71	66	72	10.4%
San Jacinto Subdivision	6	12	8	12	8	(36.7%)
North County Transit District (NCTD)	-	-	-	-	-	N/A
Total	\$ 2,120	\$ 2,016	\$ 2,133	\$ 2,120	\$ 2,172	2.5%

Numbers may not foot due to rounding.

Exhibit 4.4 FY2015-16 to FY2019-20 Other Operating Revenue Trends

(000's) Revenue Source	FY2015-16 ACTUALS	FY2016-17 ACTUALS	FY2017-18 ACTUALS	FY2018-19 BUDGET	FY2019-20 BUDGET	CHANGE FROM FY2018-19 BUDGET
Marketing Revenues	\$ 74	\$ 62	\$ 11	\$ 50	\$ 50	0.0%
Amtrak TVM Revenues	159	142	79	-	-	N/A
Lease Proceeds	-	15	-	-	-	N/A
Rolling Stock Rental	-	67	-	-	-	N/A
LAWA (Fly-away) Commission	-	-	-	48	-	(100.0%)
Flex Payment Gain	-	-	-	15	-	(100.0%)
Citations	-	-	-	35	-	(100.0%)
Allocable Interest	-	7	-	7	-	(100.0%)
Insurance Recoveries	2	2	-	-	-	N/A
Interest	2	-	-	-	-	N/A
Miscellaneous Revenues	22	152	128	15	107	613.3%
TPA Earnings	167	289	202	100	100	0.0%
Gain On Disposal Of Asset	-	16	33	220	-	(100.0%)
Scrap and Salvage Sales	4	8	11	-	-	N/A
Total	\$ 429	\$ 762	\$ 463	\$ 490	\$ 257	(47.5%)

Numbers may not foot due to rounding.

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METROLINK.

SECTION 5

OPERATING EXPENSES

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 5: Operating Expenses

5.1 Introduction

SCRRA's Operating Expenses for FY2019-20 are projected at \$262.9 million. This cost includes three key budgetary components: Train Operations, Maintenance-of-Way (MOW) and Insurance Expense. Note that the categories of Train Operations, Administration & Services and Non-Train Ops Contingency are herein combined with and referred to as "Train Operations." Train Operations costs are \$201.7 million, or 76.7% of the total Operating Budget. MOW costs are \$47.0 million, or 17.9% of the total Operating Budget. Insurance expenses are \$14.2 million, or 5.4% of the total Operating Budget.

The approach for budgeting was a zero base. Each item submitted for inclusion in the FY2019-20 Budget required specific justification. Justification for cost submissions were reviewed, cost center by cost center, line by line. Tighter controls were instituted to ensure conformance to already established guidelines – for example, all supplies and mailing costs are to be ordered through the HQ administrative function. Meetings were then held with budgeters, managers, Deputy Chiefs and Chiefs to reach agreement on necessary and appropriate expense in the current environment. A particularly stringent review was dedicated to the "Big Five" vendors (Amtrak, Bombardier, Sheriff, Mass Electric, VTMI) as they comprise more than 40% of the Operating Expenses.

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

5.2 Operating Budget Assumptions

5.2.1 Service Levels

The FY2019-20 Budget reflects the operation of 175 weekday trains on seven lines and 92 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/PVL, IEOC and Antelope Valley lines.

New services on the following lines will be implemented in FY2019-20:

- Orange County line
- San Bernardino line
- 91/Perris Valley line
- Ventura line

The map and details of new services are described in Section 3.1.4.

A FY2018-19 pilot program of \$10 Sunday service on the six national holidays has been made a permanent offering and is included in this budget.

5.2.2 Cost Allocations

Operations expenses are distributed to the operating lines, and subsequently to Member Agencies, based on a number of formulae approved by the Member Agencies. Multiple allocation categories are used to apply SCRRRA 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 used to allocate Train Operations, fuel and operating contingency funds. More complex allocations are applied directly to line segments or territories, and are used for rail agreements, MOW, transfer payments and Amtrak passenger transfers. Items such as direct Train Operations expenses and fuel are distributed based on train miles, while payments to freight railroads are charged directly to operating lines associated with the specific freight lines. These allocation formulae are described in Section 11 – Appendix.

5.3 Train Operations

Train Operations expenses of \$201.7 million have increased \$8.3 million, or 4.3%, over the FY2018-19 Budget. These costs include multiple functional sub-components, which are segmented to permit allocation to operating line segments and to Member Agencies.

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

5.3.1 Train Operations Components

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

Train Operations - Crews

Cost in FY2019-20 have increased only to the extent of contractual increases, plus the cost of new service. The increase is 4.4% or \$1.8 million.

Train Operations - Dispatching

The costs of SCRRA-provided dispatching services over the right-of-way territories owned by the SCRRA Member Agencies increased by 9.2%, or \$0.4 million, in FY2019-20.

Equipment Maintenance

The Equipment Maintenance budget for FY2019-20 totals \$36.6 million, a decrease of \$1.5 million, or 3.9% from the FY2018-19 Budget. This is comprised of three types of expense items:

- Outsourced mechanical services – Eastern Maintenance Facility & Stuart Mesa (primarily Bombardier) totals \$27.0 million
- Materials issued from inventory to effect repairs totals \$9.3 million
- Other Mechanical Services totals \$0.3 million

Outsourced mechanical services are budgeted to increase \$0.9 million or 3.2% from the FY2018-19 Budget. A new service-specific, performance based, 8-year contract (starting in FY2017-18) was negotiated to provide a 3.5% maximum automatic escalator on these costs for same service after year one. Incentives and Services not in the base agreement are charged separately. The contract is performance based and includes penalties for non-performance. Incentives/Penalties are determined by average fleet availability.

Materials for rolling stock repairs are budgeted to decrease \$2.1 million, or 19%, as compared to the FY2018-19 Budget primarily as a result of new locomotives under warranty, and deferral of car maintenance in anticipation of major car overhauls.

Fuel

The budget assumes an annual consumption of 8.5 million gallons of fuel for train operations. FY2019-20 fuel prices will continue to be managed through a fuel hedging program. Fuel Hedging Program is intended to lower fuel budget risk and fuel cost volatility and allow for better planning and forecasting of fuel costs. The fuel budget of \$21.7 million is a \$3.0 million increase from the FY2018-19 Budget. New train service in FY2019-20 accounts for \$0.9 million of the budgeted increase.

Non-Scheduled Rolling Stock Repairs/Modifications

Repairs to accommodate unforeseen medium-scaled damage to rolling stock or rolling stock modifications is budgeted at \$0.2 million, a \$0.1 million decrease from the FY2018-19 Budget.

Operating Facilities Maintenance

This category includes janitorial services; maintenance and hazardous materials compliance at the Central Maintenance Facility (CMF) and other SCRRA facilities; repair, fueling and maintenance of Authority-owned rubber tire vehicles and facilities equipment (forklifts, cranes, etc.); maintenance of equipment for the routine repair of rolling stock. The total budget for this category for FY2019-20 is \$1.7 million, a 3.9% increase from the FY2018-19 Budget.

Other Operating Train Services

This category involves items directly related to operating the rail system; weather data forecast and emergency reporting services, publications, printing of required manuals and the largest line item, emergency bus services. A new item included in this category for the FY2019-20 Budget is Quality Service Pledge Reimbursement. The projected expenditures of \$1.0 million is an increase of \$.0.5 million double the amount from the FY2018-19 Budget. The Quality Service Pledge is \$0.2 million of the increase. Bus bridges for planned service outages due to Capital Project activities are \$0.3 million and charged in this budget line item, while they were previously capital project expenses.

Special Trains

A new category for this fiscal year, Special Trains are being included in the Operating Budget on the basis that Special Trains are important factors in both attracting new riders and fulfilling Metrolink's responsibility to serve communities. The budget for FY2019-20 has been established at \$0.8 million. Special Trains were previously managed as third-party agreements; they include trains for such events as Angels baseball games, Festival of Lights, Rams football games, and Lunar New Year.

Rolling Stock Leases

This category provides for the lease of three Locomotives to assist with service during the time Locomotives are being serviced or tested.

Security – Sheriff

Our contract with the Los Angeles County Sheriff's Department at \$6.1 million for FY2019-20 is \$0.2 million, or 3.5%, higher than the FY2018-19 Budget.

Security – Guards

FY2019-20 Security Guard costs of \$2.6 million is more than prior year by \$0.1 million or 4.2%.

Supplemental Additional Security

This program is funded through an increment on fare revenues originally implemented in FY2002-03 calculated at 0.75% of fare revenues. These funds provide for specific non-recurring security-related expenses, such as improvements to station cameras, fences, lighting and other expenses related to security. Availability of these funds vary directly with the growth, or decline, in fare revenues. In FY2019-20, this amount is budgeted at \$0.7 million, slightly less than the FY2018-19 Budget.

Public Safety Program

Public Safety is a subset of the System Safety Department created to handle OSHA training; public safety posters, materials and activities; employee Drug and Alcohol random testing as mandated by the Federal Railroad Administration (FRA); and Operation Lifesaver participation. The FY2019-20 Public Safety is \$0.4 million, or 8.2% more than the FY2018-19 Budget.

Passenger Relations

The Passenger Relations budget furnishes funds primarily for the Call Center which provides multiple types of information to passengers seven days a week. The \$1.8 million budget is a 3.7% budgeted increase from the FY2018-19 Budget.

Ticket Vending Machine (TVM) Maintenance/Revenue Collection

This includes maintenance of TVM, validators and all software related to mobile ticketing, revenue collection, ticket stock purchases, fare change programming and merchant fees for credit and debit card usage. The total for this line item in the FY2019-20 Budget is \$9.7 million, a \$0.6 million or 6.6% budgeted increase from the FY2018-19 Budget. The maintenance of our aged TVM machines have increased by \$0.4 million and must be maintained until the installation of the new system. New Ticket Vending Devices (TVDs) are expected to be installed over the next two years which will decrease these costs. The budgeted increase of \$0.2 million reflects increased costs for processing credit cards.

Marketing

The Marketing category totaling \$1.8 million is comprised of Marketing Department's budget of \$1.7 million and Planning Department's market research budget of \$0.1 million. For FY2019-20, the overall budget for Marketing Department decreased by \$3.6 million from the FY2018-19 Budget. The Marketing Department's budget includes advertising, Metrolink's weekend/destination programs, Corporate Partner Program (CPP), new resident direct mail campaign and customer outreach onboard trains and at stations. The decrease from last year was the result of a new marketing program totaling \$3.9 million initiated to reverse the continuing trend of declining ridership and revenue. Further analysis is necessary to determine the return on the marketing investment, to what extent this level of investment should be continued, and in what form. Until that determination is made, the focus will be on retaining riders and growing the CPP. Advertising to promote new service planned for FY2019-20 is \$0.3 million.

Media/External Communications

This includes media, public and community relations, website content development and the production of printed timetable schedules and Ride Guides. At \$0.5 million, this line item is flat as compared to the FY2018-19 Budget.

Utilities/Leases

Utility and lease budgets are estimated at current monthly average costs. The total amount in FY2019-20 Budget is \$2.7 million, a budgeted decrease of \$0.8 million, or 22.4%, from the FY2018-19 Budget. This Budget reduction was achieved through the implementation and use of more energy efficient equipment across the Agency.

Transfers to Other Operators

This line item is the amount Metrolink pays to other Transit Operators to allow Metrolink ticket holders to transfer without additional cost. The cost paid to other transit operators at \$5.3 million is \$1.2 million, or 18.4% less, than the FY2018-19 Budget. The reduction is the result of decreasing bus ridership. The largest portion of \$4.0 million is paid to Metro.

Amtrak Transfers

These funds represent costs to the Authority for the *Rail2Rail* program. Under this program, SCRRA, Amtrak and Caltrans agreed to collaborate in allowing reciprocal service to monthly pass holders on the Ventura and Orange County lines. LOSSAN (the operator of Amtrak) has increased their per passenger price to Metrolink. The \$2.4 million budget is the cap for this service and is flat with the FY2018-19 Budget.

Station Maintenance

For FY2019-20, Station Maintenance is budgeted at \$2.2 million. This line item represents the costs to maintain station equipment, including station displays, and maintenance of the Union Station Platform and related common area expenses. The process of reviewing common area maintenance costs of \$1.7 million to determine the equity of Union Station allocation of charges is continuing into this year. This category is \$0.4 million more than the FY2018-19 Budget, entirely due to the increase in Union Station maintenance.

Rail Agreements

This line item represents payments to Union Pacific and Burlington Northern Santa Fe (BNSF) freight railroads, for dispatching and MOW services for Metrolink trains traveling over property owned by these railroads. The amount budgeted is \$6.4 million, reflecting a budgeted increase of \$1.0 million from the FY2018-19 Budget. An increase of \$0.8 million is related to new service in FY2019-20.

Operations Salaries and Fringe Benefits

Salaries and fringe benefits are projected based on the actual salary rate of each position charged to Train Operations with an assumed fringe benefit additive. A 2.0% COLA and a merit pool of 3.0% is included in the FY2019-20 budget. The

total salary and fringe benefit budget for Train Operations is up from the FY2018-19 Budget by \$0.8 million or 6.2%. The increase is due in part the result of three new approved positions totaling \$0.6 million, the assignment of Communication Coordinators to Dispatch under Train Operations, changes in labor distributions. *Exhibit 9.3* shows the complete current roster of SCRRA's 280 Full-Time Equivalent (FTE) positions by department.

Operations Direct Non-Labor Costs

This category totals \$8.8 million for FY2019-20, a budgeted increase of \$1.2 million from the FY2018-19 Budget. A total of \$6.7 million of this category, or 75.7%, is PTC software, maintenance agreements, tech support and utility costs which has increased \$0.9 million from the FY2018-19 Budget. Other costs include operations related Information Technology expenses of \$1.2 million, which has increased \$0.3 million. This category also includes \$1.0 million consisting of travel and lodging expenses for employee training, and conferences, operations memberships, gasoline and maintenance and repairs for operating department vehicles, and miscellaneous expenses.

Indirect Administrative Expenses

The Indirect Administrative Expense category represents the Train Operations budget sector's share of the Authority's General and Administrative (G&A) costs. Indirect expenses allocated here total \$20.8 million for FY2019-20, up \$2.7 million, or 21.4%, from the FY2018-19 Budget. An increase to Fringe Benefits is \$1.2 million of this increase; an additional \$1.5 million of the increase is the result of changes to Overhead allocations between Operating expense and capital projects arising from an FTA audit; the remaining increase is the effect of COLA, merit, and salary adjustments. Please refer to Section 9 for a discussion of G&A costs and their allocation to the various budget pools.

Operations Professional Services

This category includes consultants and other outside professional services. In FY2019-20, the total budget is \$4.0 million, which is an increase of \$1.4 million, or 53.6%, from the FY2018-19 Budget. Outside legal services comprise \$1.1 million, or 28.2%, of the costs in this category an increase of 3% from FY2018-19. For FY2019-20 Disadvantaged Business Enterprise (DBE) consulting was incorporated into the Operating Budget increasing the budget by \$1.1 million. In previous years, 80% of the DBE costs were charged to Capital Projects.

Contingency

This line item is traditionally budgeted at \$0.5 million 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 again reduced that contingency to \$0.2 million, representing less than 0.1% of the Operating Budget for FY2019-20.

5.3.2 Train Operations Note

FY2019-20 cost components by line item expenditure for Train Operations, see **Exhibit 3.6 FY2019-20 Annual Operating Budget by Cost Component by Fiscal Year** and **Exhibit 3.7 FY2019-20 Annual Operating Budget by Cost Component by Member Agency**.

5.4 Maintenance-of-Way (MOW)

This portion of the Operating Budget represents ordinary maintenance of the rights-of-way owned by Member Agencies and includes routine maintenance, inspection and repairs of track, structures, right-of-way, signal, communication and the train control systems. Overall, the FY2019-20 MOW expenses of \$47.0 million an increase of \$5.7 million, or 13.7%, compared to the FY2018-19 Budget. The increase is primarily the result two items: changes to the ICAP Allocation as a result of an FTA Audit causing shift of \$1.2 million in Overhead from Capital to Operating expense; and \$1.8 million in Salaries and Fringe also shifting from Capital to Operating expense. Other increases include procurement of parts and labor costs for the maintenance of track of \$0.5 million, \$1.0 million for the maintenance of signals, and \$0.3 million for structures. The cost of vegetation control has increased by \$0.2 million and Consultants increased by \$0.6 million.

SCRRA budgets for MOW expenses to ensure that the level of Ordinary Maintenance (OM) is sufficient to prevent any degradation of service quality or safety performance. The levels of maintenance required on the individual subdivisions are dependent upon the condition of the infrastructure, levels of commuter and freight train traffic, the number of road crossings and curves, and weather conditions. The condition of the infrastructure is also highly dependent on the level of funding available for Capital Maintenance (rehabilitation) in the Capital Program of the Budget.

To address Capital Maintenance needs SCRRA developed and distributed the Metrolink Rehabilitation Plan (MRP), which was a comprehensive assessment of the State of Good Repair (SOGR) of SCRRA's infrastructure and systems. The results of MRP indicated that after years of inadequate funding of rehabilitation projects, there is approximately \$412.5 million backlog of deferred SOGR or Capital Maintenance for SCRRA's Track and Structures. Economic realities suggest that several years will be required to reduce the backlog to acceptable levels. A strategy is now being developed to address the backlog with a major rehabilitation investment program.

5.4.1 Assumptions

MOW expenses are expenditures that provide OM of Member Agency-owned Track, Structures, Signals, and Road crossings. The most economical methods of replacement of Track elements (rail, ties, crossings, etc.) are through large specialized production-based projects. Best practice indicates periodic

replacement of elements, as they approach the end of their life cycle using Capital Maintenance while costs to perform inspections and routine repairs should be covered in the OM budget. The MOW policy 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 OM budget. This philosophy is consistent with other successful freight railroads on their main routes.

The primary function of OM is a continual cycle of inspections and reports on the condition of track, signals, grade crossings and bridges, and the performance of adjustments and/or repairs of any exceptions found in those inspections. The FRA has guidelines for minimum inspection schedules, standards for track, signal and grade crossing conditions, qualifications of inspectors and repairers, and documentation requirements for most inspections. To assure a high level of safety and quality on track and signal operation, SCRRA adheres to its own maintenance standards. These standards are stricter and inspections more frequent compared to the FRA minimum level. Thus, SCRRA shows that most conditions are discovered and repaired at an early stage of degradation before they become defects or violations under FRA regulations.

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 assessing the actual quantities of infrastructure components, 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 OM budget. The labor rates are based on rates obtained through competitively bid OM contracts. They are further verified by the California Department of Labor Statistics 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 take place and to recover from unusual situations. Due to the number of commuter and freight trains operated mid-day, a large majority of OM 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 OM labor budget includes two-shift coverage of track maintenance to assure that ordinary operations are accomplished with minimal disruption to peak-period commuter rail operations.

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

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

5.4.3 MOW Expenditure Components

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

Track includes MOW contractor costs of providing labor, equipment and some of the materials required to perform inspections mandated by the FRA, as well as additional special inspections and routine maintenance of 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 MOW budget that are subsequently allocated to specific line segments on the basis of track miles.

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

5.4.4 MOW Net Revenue, Expenditure and Member Agency Funding

Total FY2019-20 MOW expenditures are projected at \$47.0 million and are funded by SCRRA generated MOW revenue and Member Agency subsidies. These costs and revenues are allocated over operating lines and Member Agencies. **Exhibit 5.3 FY2019-20 Maintenance-of-Way Expenditures and Revenue Offsets** shows the Operating and Non-Operating line allocation.

5.4.5 MOW Projections by Line Segment

The FY2019-20 MOW Line Segment Budget of \$47.0 million is allocated across the various line segments of SCRRA. These include the following segments:

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

Non-Operating line segments include

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

Maintenance-of-Way

(000's)	FY2019-20	
Operating Lines - MOW	\$	43,449
Non-Operating Lines		2,805
Total Line Segments		46,254
Extraordinary Maintenance		712
MOW Budgeted Expenses	\$	46,966

Numbers may not foot due to rounding.

NOTES:

Includes both MOW - Line Segments and Extraordinary MOW

Exhibit 5.4 FY2019-20 Maintenance-of-Way Expenditures by Line Segment / Territory – Operating Lines and Extraordinary and Exhibit 5.5 FY2019-20 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.

5.4.6 Extraordinary MOW

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

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

Repairs to signal grade crossing warning and communications equipment are made to comply with current FRA/CPUC/OSHA regulatory requirements as well as engineering and safety standards (i.e., steel antenna structure would replace an antenna mounted on a wooden pole). Thus, mitigating personnel safety concerns and hazardous materials issues while enhancing the operational flexibility to achieve consistent system operations. Additionally, needed repairs to

signal, grade crossing warning and communications equipment and systems are made with consideration to current technologies. The rapid pace of changing technology and regulatory requirements, and the lack of vendor support for obsolete equipment as these technologies change, require that we make repairs with current and not obsolete products and technology.

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

5.5 Insurance and Legal Expense

This category includes insurance premiums for Property, Liability, and Auto, in addition to claims, self-insurance costs and claims administration. In FY2019-20, Insurance and Legal total expenses of \$14.2 million have decreased by \$2.5 million or 14.9% from the FY2018-19 Budget. This change has been caused by a reduction of \$3.0 million in claims offset by a \$0.5 million increase in Insurance Premiums.

5.6 Exhibits

Exhibit 5.1: FY2019-20 Service Assumptions details the operating service assumptions for weekday, Saturday and Sunday trains by operating line. FY2019-20 includes 175 weekday trains and 92 weekend trains.

Exhibit 5.2: FY 2016-17 to FY2019-20 Service Train Miles provides revenue train miles by operating line.

Exhibit 5.3: FY2019-20 MOW Expenditures and Revenue Offsets provides projections of MOW expenditures and funding sources. The revenues and expenditures are allocated by territory and Member Agency.

Exhibit 5.4: FY2016-17 to FY2019-20 MOW Expenditures by Line Segment / Territory – Operating Lines provides the cost of MOW for operating lines allocated across operating lines and Member Agencies.

Exhibit 5.5: FY2016-17 to FY2019-20 MOW Expenditures by Line Segment / Territory – Non-Operating Lines and Total including Extraordinary provides the cost of MOW for non-operating lines and the total costs including Extraordinary allocated across operating lines and Member Agencies.

Exhibit 5.1 FY2019-20 Service Assumptions

	Number of Trains		
	Weekday	Saturday	Sunday
San Bernardino Line			
San Bernardino Downtown-LAUS	40	20	14
Ventura County Line			
Chatsworth-LAUS	6		
Moorpark-LAUS	8		
East Ventura-LAUS	6	2	
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		
South Perris-LAUS	10	4	4
South Perris-Riverside	2		
Orange County Line			
Irvine-LAUS	3		
Laguna Niguel-LAUS	10		
Oceanside-LAUS	12	8	8
Fullerton-Laguna Niguel (MSEP)	2		
Fullerton-Oceanside (MSEP)	2		
IEOC Line			
San Bernardino Downtown-Irvine	1		
San Bernardino Downtown-Laguna Niguel	4		
San Bernardino Downtown-Oceanside	3	4	4
Riverside-Laguna Niguel	7		
Riverside-Oceanside	1		
Burbank/Bob Hope Airport			
Burbank Airport South-LAUS	13		
Total	175	50	42

Exhibit 5.2 FY2016-17 to FY2019-20 Service Train Miles

Line	FY2016-17 ACTUALS	FY2017-18 ACTUALS	FY2018-19 BUDGET ⁽¹⁾	FY2019-20 BUDGET ⁽¹⁾	VARIANCE FY2019-20 VS. FY2018-19	
					MILES	%
San Bernardino Line	645,992	662,222	675,567	682,246	6,679	1.0%
Ventura County Line	285,343	246,334	252,772	254,251	1,479	0.6%
Antelope Valley Line	573,958	604,943	611,437	614,255	2,818	0.5%
Riverside Line	179,781	198,215	195,111	195,922	811	0.4%
91/Perris Valley Line	240,192	229,354	229,353	284,005	54,653	23.8%
Orange County Line (incl MSEP)	503,028	536,236	534,454	585,593	51,139	9.6%
Inland Empire/Orange County Line	324,388	341,863	344,911	342,299	(2,612)	-0.8%
Total Service Train Miles	2,752,681	2,819,167	2,843,604	2,958,571	128,903	4.6%

Numbers may not foot due to rounding.

NOTES:

- (1) San Bernardino Line and Inland Empire/Orange County Line have been extended to San Bernardino Downtown
- * Service Train Miles: all train miles including deadheads and reallocation miles

Exhibit 5.3 FY2019-20 MOW Expenditures and Revenue Offsets

Line Segment/Territory	METRO	OCTA	RCTC	SBCTA	VCTC	FY2019-20 BUDGET
Operating Lines	\$ 6,644	\$ 2,613	\$ 670	\$ 1,316	\$ 479	\$ 11,721
LA - San Bernardino	416	-	-	1,316	-	1,732
LA - Ventura (Burbank Jct to Moorpark)	730	-	-	-	479	1,208
LA - Lancaster	3,624	-	-	-	-	3,624
CRI-BURBANK JCT	-	-	-	-	-	-
Fullerton - San Diego County Line	-	2,416	-	-	-	2,416
Olive Subdivision	-	197	-	-	-	197
Riverside Layover Facility	-	-	-	-	-	-
River Corridor	1,874	-	-	-	-	1,874
Perris Valley	-	-	670	-	-	670
Extraordinary Maintenance (Storm Damage, Vandalism, Gate Knockdowns)	-	-	-	-	-	-
Non-Operating Lines	1,052	-	-	237	-	1,289
Sierra Madre - Claremont (Pasadena Sub)	1,052	-	-	-	-	1,052
Rialto Sub (San Bernardino Co.)	-	-	-	15	-	15
Shortway Sub	-	-	-	-	-	-
Redlands 1st Mile	-	-	-	-	-	-
Redlands Sub MP1+	-	-	-	222	-	222
Total	\$ 7,696	\$ 2,613	\$ 670	\$ 1,553	\$ 479	\$ 13,011

Net Subsidy Allocation (000's)

Line Segment/Territory	METRO	OCTA	RCTC	SBCTA	VCTC	FY2019-20 BUDGET
Operating Lines	\$ 16,876	\$ 6,624	\$ 2,637	\$ 3,953	\$ 2,350	\$ 32,440
LA - San Bernardino ⁽¹⁾	4,136	-	-	2,922	-	7,058
LA - Ventura (Burbank Jct to Moorpark) ⁽²⁾	3,076	-	-	-	1,925	5,001
LA - Lancaster	4,937	-	-	-	-	4,937
CRI-BURBANK JCT	-	-	-	-	-	-
Fullerton - San Diego County Line	948	4,220	710	130	-	6,008
Olive Subdivision	-	473	230	42	-	745
Riverside Layover Facility ⁽³⁾	89	37	79	19	-	224
River Corridor ⁽⁴⁾	2,480	1,034	580	752	376	5,221
Perris Valley	793	758	971	12	-	2,534
Extraordinary Maintenance ⁽⁵⁾ (Storm Damage, Vandalism, Gate Knockdowns)	417	102	68	76	49	712
Non-Operating Lines	342	150	73	950	-	1,516
Sierra Madre - Claremont (Pasadena Sub)	182	-	-	-	-	182
Rialto Sub (San Bernardino Co.)	-	-	-	476	-	476
Shortway Sub	160	150	73	127	-	510
Redlands 1st Mile	-	-	-	132	-	132
Redlands Sub MP1+	-	-	-	215	-	215
Total	\$ 17,218	\$ 6,774	\$ 2,710	\$ 4,903	\$ 2,350	\$ 33,955

Total Expenditure Forecast (000's)

Line Segment/Territory	METRO	OCTA	RCTC	SBCTA	VCTC	FY2019-20 BUDGET
Operating Lines	\$ 23,520	\$ 9,237	\$ 3,306	\$ 5,269	\$ 2,829	\$ 44,161
LA - San Bernardino	4,552	-	-	4,238	-	8,790
LA - Ventura (Burbank Jct to Moorpark)	3,805	-	-	-	2,404	6,209
LA - Lancaster	8,561	-	-	-	-	8,561
CRI-BURBANK JCT	-	-	-	-	-	-
Fullerton - San Diego County Line	948	6,636	710	130	-	8,424
Olive Subdivision	-	670	230	42	-	942
Riverside Layover Facility	89	37	79	19	-	224
River Corridor	4,354	1,034	580	752	376	7,095
Perris Valley ⁶	793	758	1,640	12	-	3,203
Extraordinary Maintenance (Storm Damage, Vandalism, Gate Knockdowns)	417	102	68	76	49	712
Non-Operating Lines	1,394	150	73	1,187	-	2,805
Sierra Madre - Claremont (Pasadena Sub)	1,234	-	-	-	-	1,234
Rialto Sub (San Bernardino Co.)	-	-	-	491	-	491
Shortway	160	150	73	127	-	510
Redlands 1st Mile	-	-	-	132	-	132
Redlands Sub MP1+	-	-	-	438	-	438
Total	\$ 24,914	\$ 9,387	\$ 3,380	\$ 6,456	\$ 2,829	\$ 46,966

Numbers may not foot due to rounding.

NOTES:

- (1) MOW net subsidy split by route miles (58.60% METRO and 41.40% SBCTA)
- (2) MOW net subsidy split by train miles (61.50% METRO and 38.50% VCTC)
- (3) Net subsidy split by train miles of trains using the Riverside Layover, excluding San Diego County (39.76% METRO, 16.49% OCTA, 35.26% RCTC, and 8.50% SBCTA)
- (4) Split is assumed All Share (47.5% METRO, 19.8% OCTA, 11.1% RCTC, 14.4% SBCTA, and 7.2% VCTC of cost in excess of revenues)
- (5) Allocation based on percent of route miles owned (58.58% METRO, 14.30% OCTA, 9.53% RCTC, 10.66% SBCTA, and 6.93% VCTC)
- (6) Allocation based on train miles of 91 line (24.75% METRO, 23.67% OCTA, 51.20% RCTC, 0.37% SBCTA)

**Exhibit 5.4 FY2016-17 to FY2019-20 MOW Expenditures by Line
Segment/Territory – Operating Lines and Extraordinary**

(000's) Line Segment/Territory	FY2016-17	FY2017-18	FY2018-19	FY2019-20	FY2019-20 VS. FY2018-19	
	ACTUALS	ACTUALS	BUDGET	BUDGET	\$	%
Operating Lines	\$ 35,422	\$ 39,412	\$ 38,145	\$ 43,449	\$ 5,304	13.9%
LA - San Bernardino	7,478	8,338	7,704	8,790	1,086	14.1%
Track	1,138	1,111	1,308	1,258	(50)	(3.8%)
Signal & Communications	3,020	2,982	3,138	3,267	128	4.1%
Structures	176	190	209	224	16	7.5%
Procurement	536	657	234	496	262	111.6%
Other	1,124	1,367	1,241	1,465	224	18.1%
Agency Costs	1,484	2,032	1,574	2,080	506	32.1%
LA - Ventura (Burbank Jct to Moorpark)	4,846	5,496	5,303	6,209	907	17.1%
Track	864	899	1,114	1,335	221	19.8%
Signal & Communications	1,570	1,609	1,717	1,806	89	5.2%
Structures	169	240	209	249	41	19.4%
Procurement	284	306	214	237	23	10.9%
Other	823	1,026	915	1,132	217	23.8%
Agency Costs	1,136	1,415	1,134	1,450	316	27.9%
LA - Lancaster	7,468	8,460	7,221	8,561	1,341	18.6%
Track	1,480	1,266	1,207	1,323	115	9.6%
Signal & Communications	2,056	2,355	2,303	2,435	132	5.7%
Structures	160	316	209	274	65	31.4%
Procurement	468	496	167	344	177	106.5%
Other	1,402	1,644	1,423	1,747	324	22.8%
Agency Costs	1,903	2,384	1,912	2,439	526	27.5%
CRI-BURBANK JCT	-	-	-	-	-	N/A
Agency Costs	-	-	-	-	-	N/A
Fullerton - San Diego County Line	6,997	7,906	7,409	8,424	1,015	13.7%
Track	1,035	944	1,197	1,169	(28)	(2.3%)
Signal & Communications	2,874	3,047	3,036	3,184	148	4.9%
Structures	140	167	209	274	65	31.4%
Procurement	374	550	277	450	173	62.5%
Other	1,067	1,280	1,166	1,386	220	18.8%
Agency Costs	1,508	1,918	1,525	1,962	437	28.6%
Olive Subdivision	633	829	927	942	16	1.7%
Track	83	86	204	175	(29)	(14.3%)
Signal & Communications	251	393	358	374	16	4.3%
Structures	39	39	52	62	10	19.4%
Procurement	10	14	13	7	(6)	(49.3%)
Other	105	126	136	150	14	10.0%
Agency Costs	144	171	163	175	12	7.3%
Riverside Layover Facility	77	75	183	224	40	22.0%
Track	37	26	114	135	21	18.6%
Signal & Communications	4	5	5	6	1	10.2%
Structures	1	-	8	10	2	19.4%
Procurement	4	1	11	10	(1)	(10.2%)
Other	15	18	29	36	7	24.1%
Agency Costs	15	25	15	26	11	72.3%
River Corridor	5,603	6,243	6,503	7,095	591	9.1%
Track	1,102	1,198	1,407	1,448	41	2.9%
Signal & Communications	2,846	2,980	3,183	3,314	131	4.1%
Structures	69	34	138	164	27	19.4%
Procurement	355	493	373	427	54	14.6%
Other	602	693	735	879	143	19.5%
Agency Costs	628	845	668	862	194	29.1%
Perris Valley	2,321	2,658	2,894	3,203	309	10.7%
Track	508	724	812	795	(17)	(2.1%)
Signal & Communications	687	614	1,003	1,049	47	4.7%
Structures	159	160	112	111	(1)	(1.1%)
Procurement	98	123	66	92	26	38.9%
Other	450	485	496	592	95	19.2%
Agency Costs	\$ 419	\$ 552	405	\$ 565	\$ 160	39.4%
Extraordinary Maintenance	\$ 1,260	\$ 594	\$ 591	\$ 712	\$ 121	20.6%
(Derailments, Storm Damage, Gate Knockdowns, Vandalism)						

Numbers may not foot due to rounding.

Exhibit 5.5 FY2016-17 to FY2019-20 MOW Expenditures by Line Segment/Territory – Non-Operating Lines and Total including Extraordinary

(000's) Line Segment/Territory	FY2016-17	FY2017-18	FY2018-19	FY2019-20	FY2019-20 VS. FY2018-19	
	ACTUALS	ACTUALS	BUDGET	BUDGET	\$	%
Non-Operating Lines	\$ 1,932	\$ 2,404	\$ 2,566	\$ 2,805	\$ 239	9.3%
Sierra Madre - Claremont (Pasa. Sub.)	990	1,184	1,206	1,234	28	2.3%
Track	57	63	189	105	(83)	(44.1%)
Signal & Communications	400	430	408	430	22	5.3%
Structures	29	23	36	19	(18)	(48.8%)
Procurement	72	100	72	79	7	10.3%
Other	184	238	241	264	23	9.5%
Agency Costs	249	330	259	337	77	29.8%
Rialto Subdivision (San Bernardino Co.)	331	366	416	491	75	17.9%
Track	118	119	166	182	16	9.5%
Signal & Communications	84	82	95	99	5	4.8%
Structures	6	5	26	31	5	19.4%
Procurement	27	40	20	36	16	79.0%
Other	41	54	58	75	17	29.3%
Agency Costs	55	65	50	66	16	32.1%
Shortway Sub	336	387	460	510	50	10.8%
Track	47	24	35	21	(14)	(39.7%)
Signal & Communications	87	114	137	145	8	5.9%
Structures	14	15	67	74	7	10.9%
Procurement	8	12	7	3	(4)	(54.0%)
Other	62	81	103	124	21	20.0%
Agency Costs	118	139	112	143	31	27.8%
Redlands 1st Mile	37	192	65	131	67	102.8%
Track	(1)	(3)	-	-	-	N/A
Signal & Communications	30	85	9	22	13	146.2%
Structures	12	15	15	12	(3)	(18.7%)
Procurement	1	5	-	-	-	N/A
Other	11	29	13	35	23	173.9%
Agency Costs	(15)	60	28	61	34	121.1%
Redlands Sub MP1+	238	277	418	438	20	4.7%
Track	132	68	84	64	(19)	(23.0%)
Signal & Communications	78	47	98	103	5	5.2%
Structures	2	4	52	62	10	19.4%
Procurement	14	16	20	16	(3)	(16.9%)
Other	61	69	101	118	17	16.9%
Agency Costs	\$ (50)	\$ 72	\$ 64	\$ 74	\$ 10	15.3%

Line Segment/Territory	FY 16-17	FY17-18	FY2018-19	FY2019-20	FY2019-20 VS. FY2018-19	
	ACTUALS	ACTUALS	BUDGET	BUDGET	\$	%
Total Maintenance-of-Way	\$ 38,615	\$ 43,005	\$ 41,301	\$ 46,966	\$ 5,665	13.7%
Track	6,600	6,526	7,836	8,010	174	2.2%
Signal & Communications	13,988	14,743	15,490	16,234	743	4.8%
Structures	975	1,210	1,341	1,567	226	16.9%
Procurement	2,250	2,815	1,473	2,199	725	49.2%
Other	5,945	7,111	6,660	8,004	1,345	20.2%
Extraordinary Maintenance	1,260	594	591	712	121	20.6%
Agency Costs	\$ 7,596	\$ 10,007	\$ 7,910	\$ 10,240	\$ 2,330	29.4%

Numbers may not foot due to rounding.



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SECTION 6

MEMBER AGENCY SUBSIDIES

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 6: Member Agency Subsidies

6.1 Member Agency Funding

For FY2019-20, total Member Agency subsidies are projected at \$157.4 million. This represents an increase of \$6.8 million over the FY2018-19 Budget, an increase of 4.6%.

(000's)	FY2015-16	FY2016-17	FY2017-18	FY2018-19	FY2019-20
	<u>ACTUALS</u> ⁽¹⁾	<u>ACTUALS</u> ⁽¹⁾	<u>ACTUALS</u>	<u>BUDGET</u>	<u>BUDGET</u>
Subsidy	\$ 127,173	\$ 129,498	\$ 134,818	\$ 150,550	\$ 157,445
% Change from prior year	15.3%	1.8%	4.1%	11.7%	4.6%

Federal Funds for Operations:

A. CMAQ	n/a	n/a	\$ 3,201	\$ 2,844	\$ 3,007
B. Preventive Maintenance	n/a	n/a	<u>\$ 24,584</u>	<u>\$ 24,017</u>	<u>\$ 21,806</u>
Net after Federal Funds			\$ 107,033	\$ 123,689	\$ 132,633

- A. Congestion Mitigation Air Quality (CMAQ) – Effective beginning FY2016-17, CMAQ funds have been made available which can be used for new transportation services on new routes, or expanded services on existing routes for up to five years from the start of service.
- B. Federal formula funds from the Federal Transit Administration (FTA) - Beginning in FY2017-18 FTA formula funds have been made available for eligible Preventive Maintenance activities such as vehicle maintenance, and maintenance-of-way in Metrolink's operating budget. FTA Section 5307 and Section 5337 funds will be provided for Preventive Maintenance in FY2019-20.

Numbers may not foot due to rounding.

NOTES:

(1) FY2015-16 and FY2016-17 Actuals includes BNSF Lease costs beginning October 2015 and ending November 2016.

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SECTION 7

CAPITAL PROGRAM BUDGET

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 7: Capital Program Budget

7.1 Introduction

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

The Capital Program Budget consists of two major components totaling \$507.4 million: SCRRA's Rehabilitation and New Capital programs. These budgets total \$281.1 million and \$226.3 million, respectively.

Rehabilitation projects were prioritized and selected based on keeping our assets in a State of Good Repair (SOGR) to maximize safety and ensure customer service and convenience. In the event where unexpected high priority needs arise that will compromise safety and reliability due to changed conditions, SCRRA will submit a recommendation to the Board to reprogram and reallocate the funds approved for another rehabilitation project originally considered to be of lesser priority.

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 FY2019-20.

(000's)	FY2019-20
CARRYOVER	
<u>Rehabilitation</u>	
Member Agency Rehabilitation	\$ 159,305
Other Funding Sources	\$ 58,016
Subtotal Rehabilitation Carryover	<u>\$ 217,321</u>
<u>New Capital</u>	
Member Agency New Capital	\$ 36,003
Other Funding Sources	\$ 183,795
Subtotal New Capital Carryover	<u>\$ 219,798</u>
Total FY2019-20 Capital Program Carryover	<u>\$ 437,119</u>
NEW AUTHORITY	
<u>Rehabilitation</u>	
Member Agency Rehabilitation	\$ 63,731
Subtotal Rehabilitation New Authority	<u>\$ 63,731</u>
<u>New Capital</u>	
Member Agency New Capital	\$ 3,040
Other Funding Sources	\$ 3,504
Subtotal New Capital New Authority	<u>\$ 6,544</u>
Total FY2019-20 Capital Program New Authority	<u>\$ 70,275</u>
Grand Total FY2019-20 Capital Program	<u>\$ 507,394</u>

Numbers may not foot due to rounding.

SCRRRA continues to seek local, state or federal funds for additional New Capital projects.

In addition to the daily management of our core business of mass transit at the most efficient level, including Rehabilitation and New Capital Projects as described, Metrolink also takes on the responsibility of providing services to complete projects or provide consulting assistance to Third-Parties. The largest of these projects are frequently performed for one of our Member Agencies. Third-Party projects completed and closed in FY2017-18 are detailed in *Exhibit 7.1*, in the total amount of \$110.6 million. This amount is exceptionally large because although \$110.6 million is the total of projects reconciled and closed in FY2017-18, the work for \$81.0 million of these projects was completed several years earlier.

Various Third-Party Projects were undertaken in FY2018-19. The exact amount is not identified at this time as the fiscal year end has not yet been completed. Based on historical data, we expect to complete approximately \$20 million in Third-Party Projects during FY2019-20.

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.

Rehab projects are those projects that replace worn-out, functionally obsolete and commercially non-viable assets. These assets are replaced, repaired or otherwise modified with new assets that preserve and extend the useful life of these capital assets. Rehab projects and programs are also sometimes known as “State of Good Repair” or “Capital Reinvestment”. In 2012, Congress enacted a federal transportation program known as *Moving Ahead for Progress in the 21st Century* (MAP-21). This legislation replaced section 5309 Rail Modernization formula funds with section 5337 funds specifically for SOGR 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 which is compliant with MAP-21.

7.2.1 Metrolink Rehabilitation Plan

The FY2019-20 Capital Program Rehabilitation Budget was developed based on the following steps and in conjunction with the Metrolink Rehabilitation Plan (MRP). The MRP was created in response to requests by the Member Agencies and the

Metrolink Board for a long-range (20 to 25-year) forecast of the Authority's SOGR needs so that Member Agencies, the Authority, and others could develop long range financial programming to address critical SOGR needs.

The MRP achieves this by addressing two critical elements:

- Backlog - Total cost of getting SCRRRA assets up to a SOGR
- SOGR - Annual cost of keeping SCRRRA assets in a SOGR

The MRP recommends that the Backlog be drawn down over six years and ramped up/down over that timeframe to make the transition more achievable. The Backlog and SOGR numbers together represent the estimated SCRRRA Overall Rehabilitation Total for each fiscal year.

7.2.2 Budget Development

Based on the MRP for FY2019-20, the Overall Rehabilitation Total estimate is \$115.62 million, including \$31.05 million for Backlog and \$84.57 million for SOGR (see table below).

Asset Category	Backlog	State of Good Repair (SOGR)	MRP Fiscal Year Estimates (State of Good Repair + Portion of Backlog)					
	Total Cost	Annual Cost	FY2019-20	FY2020-21	FY2021-22	FY2022-23	FY2023-24	FY2024-25
Annual State of Good Repair Cost			\$84.57M	\$84.57M	\$84.57M	\$84.57M	\$84.57M	\$84.57M
Backlog Drawdown*			7%	19%	24%	24%	19%	7%
Annual Backlog Cost			\$31.05M	\$84.27M	\$106.44M	\$106.44M	\$84.27M	\$31.05M
SCRRRA Overall Rehab Total			\$115.62M	\$168.84M	\$191.01M	\$191.01M	168.84M	\$115.62M
Rail	\$26.55M	\$9.34M	\$11.20M	\$14.39M	\$15.72M	\$15.72M	\$14.39M	\$11.20M
Ties	\$9.36M	\$8.71M	\$9.37M	\$10.49M	\$10.96M	\$10.96M	\$10.49M	\$9.37M
Crossings	\$10.43M	\$3.83M	\$4.56M	\$5.81M	\$6.34M	\$6.34M	\$5.81M	\$4.56M
Special Trackwork	\$54.78M	\$6.48M	\$10.32M	\$16.89M	\$19.63M	\$19.63M	\$16.89M	\$10.32M
Ballast	\$8.51M	\$3.34M	\$9.4M	\$1.96M	\$2.38M	\$2.38M	\$1.96M	\$9.4M
Track Rehab Total	\$109.63M	\$28.71M	\$36.39M	\$49.54M	\$55.02M	\$55.02M	\$49.54M	\$36.39M
Bridges	\$22.80M	\$4.95M	\$6.54M	\$9.28M	\$10.42M	\$10.42M	\$9.28M	\$6.54M
Culverts	\$82.34M	\$3.04M	\$8.81M	\$18.69M	\$22.81M	\$22.81M	\$18.69M	\$8.81M
Tunnels	\$19.91M	\$7.6M	\$2.16M	\$4.55M	\$5.54M	\$5.54M	\$4.55M	\$2.16M
Structures Rehab Total	\$125.05M	\$8.76M	\$17.51M	\$32.52M	\$38.77M	\$38.77M	\$32.52M	\$17.51M
Signal Systems	\$33.56M	\$7.73M	\$10.08M	\$14.10M	\$15.78M	\$15.78M	\$14.10M	\$10.08M
Crossing Systems	\$55.67M	\$7.07M	\$10.96M	\$17.64M	\$20.43M	\$20.43M	\$17.64M	\$10.96M
Communication Systems	\$9.17M	\$2.24M	\$2.89M	\$3.99M	\$4.44M	\$4.44M	\$3.99M	\$2.89M
Centralized Train Control Systems	\$9.00M	\$9.1M	\$9.1M	\$9.1M	\$9.1M	\$9.1M	\$9.1M	\$9.1M
Systems Rehab Total	\$98.40M	\$17.95M	\$24.84M	\$36.64M	\$41.56M	\$41.56M	\$36.64M	\$24.84M
MOW Vehicles & Equipment	\$16.52M	\$2.49M	\$3.65M	\$5.63M	\$6.45M	\$6.45M	\$5.63M	\$3.65M
Vehicles Rehab Total	\$16.52M	\$2.49M	\$3.65M	\$5.63M	\$6.45M	\$6.45M	\$5.63M	\$3.65M
Passenger Cars	\$0.00M	\$15.62M	\$15.62M	\$15.62M	\$15.62M	\$15.62M	\$15.62M	\$15.62M
Locomotives	\$87.67M	\$8.41M	\$14.54M	\$25.06M	\$29.45M	\$29.45M	\$25.06M	\$14.54M
Rolling Stock Rehab Total	\$87.67M	\$24.03M	\$30.16M	\$40.68M	\$45.07M	\$45.07M	\$40.68M	\$30.16M
Maintenance Facilities	\$4.15M	\$1.93M	\$2.22M	\$2.72M	\$2.93M	\$2.93M	\$2.72M	\$2.22M
Pomona Campus	\$7.6M	\$4.4M	\$4.9M	\$5.8M	\$6.2M	\$6.2M	\$5.8M	\$4.9M
Layover Yards	\$1.33M	\$2.7M	\$3.6M	\$5.2M	\$5.9M	\$5.9M	\$5.2M	\$3.6M
Facilities Rehab Total	\$6.24M	\$2.64M	\$3.08M	\$3.82M	\$4.14M	\$4.14M	\$3.82M	\$3.08M

Note: These values are in 2018 dollars, excluding escalation and inflation.

*Backlog is divided into a 6-year request with the following ramp up/ramp down plan: 7%, 19%, 24%, 24%, 19%, 7%. This can be modified for year of expenditure as needed. Rolling Stock special projects \$417.35 million is excluded from the first 6 years.

The budget development process for FY2019-20 concluded with the Member Agencies overall Rehabilitation total funding commitment at \$63.7 million.


7.2.3 Programmatic Approach

Methodology

The MRP was developed with SCRRA asset owners (staff responsible for the rehabilitation of each asset type).

Each asset owner identified the most critical, highest priority projects and provided descriptions, mileposts, age, condition, and estimated costs. Projects for individual asset categories have been included for the budget year in a total amount for that category which is consistent with the asset category amounts as identified by the MRP. The results of this methodology are reflected in the aggregate of the total FY2019-20 Capital Program Rehabilitation projects for the proposed request of \$115.62 million as indicated on the above table.

As shown above is a sample of this methodology. This particular project submission is identified as an Asset Type for Structures and would be included as part of the Structures Rehab Total line item on the MRP table as show in 7.2.2 above.

 PROJECT PROPOSAL		FY20
		LIBRINGD PROJECT# 1943.00
PROJECT : ORANGE COUNTY - STRUCTURES REHABILITATION		
SCOPE		TYPE: REHAB MRP
Structures Rehabilitation in Orange County high priority projects identified by Metrolink Rehabilitation Plan (MRP). Projects include: Replace Bridge MP 194.6000 (12 ft PCS) = \$1,485,000 Culverts OR MP 207.20, 205.80 and OL MP 5.40 = \$2,380,000 Projects to be reviewed in year of expenditure to confirm prioritization. Mile Posts: 165.08 - 212.30 Division: Orange County: OC Asset Type: Structures		
OBJECTIVES	RISKS CAUSING PROJECT DELAY	
1. (Goal 3: Invest in People and Assets) Maintain State of Good Repair 2. (Goal 4: Retain and Grow Ridership) Improve service reliability 3. (Goal 2: Maintain Fiscal Sustainability) Reduce operating cost 4. (Goal 1: Ensure a Safe Operating Environment) Reduce train accidents		
JUSTIFICATION	RANKING // PROJECT READINESS	
Structures rehabilitation projects identified by the MRP include bridges, culverts and tunnels. Projects have been identified because the asset has fallen below a State of Good Repair and is in need of rehabilitation based on limits set by SCRRA staff and industry standards.	1. Condition of Asset..... Worn 2. System Impact..... High	
RISK CREATED BY NON-IMPLEMENTATION		
If the project is not implemented in full, the remaining projects that are beyond the rehabilitation limits will be added to the backlog in future years. Current Age: 77 Year(s) Standard Lifespan: 100 Year(s)	Additional support document was submitted	

Benefits

The MRP addresses funding rehabilitation programs rather than individual projects.

The benefits of this programmatic approach in budget development allow Metrolink to:

- Take advantage of economies of scale for procurement purposes and project scope.
- Construct multiple components of the work under one contract.
- Improve project delivery.
- More effectively maximize the capital investments made by Member Agencies.

The benefits of the programmatic approach in project delivery allow Metrolink staff to:

- Make changes to individual projects based on funding constraints.
- Adapt to changing field conditions, be more sheltered from price escalation, and be able to provide more efficient and cost-effective delivery.

The benefits of the programmatic approach in fiscal planning include better providing:

- Projections of future investments needed for the SOGR at a macro level.
- Estimated cash flow information at a macro level to assist with multi-year forward planning and fiscal forecast as requested by our Member Agencies.

To ensure SCRRRA gains the full benefits outlined above, the Programmatic Approach to budget development will be strictly adhered to in future budget cycles to develop both the annual budget and out-year projections.

7.2.4 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 SOGR. A Rehab program typically incorporates state-of-the-art or state-of-the-industry components to support service levels and replace older designs, resulting in reduced maintenance expense, improved operations or improved reliability.

Rehabilitation is performed when the infrastructure has worn or deteriorated to a level that does not yet impair serviceability, but the assets are close to being consumed. In order to utilize 100% of the assets' service life, their replacement would be performed 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.

7.2.5 Rehabilitation Elements

A. Rails

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

B. Crossties

The rail is supported on crossties of either wood or concrete. Wood ties have steel tie plates beneath the rail to spread the weight of the rail. Concrete ties have elastomeric pads to separate the steel rail from the ties. Both ties have fasteners to hold the track together, either cut or screw spikes on the wood ties, and some form of proprietary spring steel clip on concrete ties. There are 3,250 wood ties per mile, spaced at 19½ inches, and concrete ties are spaced at 24 inches, for 2,640 per mile.

1. Wood Ties

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

2. Concrete Ties

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

C. Ballast

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

the ties and softens the subgrade, leading to settlement of the whole track structure.

D. Special Track Work

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

1. Turnouts and Crossing Diamonds

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

2. Road Crossings

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

E. Bridges

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

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

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

or regulatory infractions, and includes replacement of outdated, or unsupported hardware and software with current industry standard hardware and software. Some components can be returned to manufacturing plants for rebuilding and reused on a cyclical basis of maintenance.

G. Embankment

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

H. Rolling Stock

The Metrolink rolling stock fleet consists of 55 diesel locomotives (including three leased), 57 Cab Cars and 144 coach cars. Rolling stock directly affects the passenger experience and must be maintained in a SOGR to ensure safety, reliability and comfort. Rolling stock goes through regular preventative maintenance on a cyclical basis as part of normal operations. Additional rehabilitation is performed on key rail car subsystems such as the heating, ventilation, air conditioning (HVAC) system, door control systems, lighting systems and battery systems.

For depreciation purposes, SCRRRA established a useful life of 30 years for revenue rolling stock. Initial locomotive and rail car purchases occurred in 1992-1993, making the vehicles 26-27 years old. To date, these vehicles have not undergone comprehensive midlife overhauls, and vehicle replacement or rebuild is necessary to prevent service degradation. Of SCRRRA's 52 locomotives, 37 have exceeded the point at which a midlife overhaul should be performed. SCRRRA has ordered 40 new Tier-4 locomotives, 37 of which will replace the oldest of the locomotives. To date, 14 of these Tier-4 locomotives have been received and are in service or testing. The remaining 12 legacy locomotives will begin to need midlife overhauls sometime after FY2019-20. Funding will be necessary for this important effort.

I. Facilities

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

7.2.6 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 overall is weak, and the above consequences become inevitable.

Rehabilitation projects are summarized in *Exhibits 7.2 and 7.3*. A number of the projects will not be completed in FY2018-19 and will be carried forward into the FY2019-20. They amount to \$217.3 million and are described in the FY2019-20 Rehabilitation Carryover Projects Summary section. The new projects seeking new authority in FY2019-20 amount to \$63.7 million and are discussed in the New Rehabilitation Projects section below.

7.3 FY2019-20 Rehabilitation Carryover Projects

Ongoing projects authorized in FY2018-19 or earlier that we estimate will not be completed by June 30, 2019 are shown on *Exhibits 7.2 and 7.6* in summary and detail respectively. The exhibit represents staff's estimate of the outstanding authorized balance on each project as of the adoption of the FY2019-20 fiscal year budget. These estimations in no way alter the actual project authority as approved by the SCRRRA Board. Rehabilitation Carryover Projects total \$217.3 million, Member Agencies share is \$159.3 million, and the amount covered by Other funding sources is \$58.0 million.

7.4 FY2019-20 New Rehabilitation Projects

New projects for Rehabilitation in FY2019-20 are depicted on *Exhibits 7.3 and 7.7* in summary and detail respectively. New Rehabilitation projects total \$63.7 million.

7.5 FY2019-20 New Capital Carryover Projects

New Capital Carryover projects authorized in FY2018-19 or earlier that are not anticipated to be completed prior to June 30, 2019 are depicted on *Exhibit 7.4*. The New Capital Carryover amount totals \$219.8 million, Member Agencies share is \$36.0 million, and the amount covered by Other funding sources is \$183.8 million.

7.6 FY2019-20 New Capital New Authority Projects

New Capital projects in FY2019-20 are shown in *Exhibit 7.5*, and total \$6.5 million. Member Agencies share for New Capital request is \$3.0 million and the amount covered by Other funding sources is \$3.5 million.

7.7 Exhibits

Exhibit 7.1: FY2017-18 Third-Party Projects Summary lists completed projects for third-parties.

Exhibit 7.2: FY2019-20 Rehabilitation Carryover Projects Summary lists Rehabilitation carryover authority by subdivision, project category and funding source.

Exhibit 7.3: FY2019-20 Rehabilitation New Authority Projects Summary by Subdivision lists Rehabilitation for New Authority by subdivision, project category and funding source.

Exhibit 7.4: FY2019-20 New Capital Carryover Projects Detail lists New Capital carryover authority by subdivision, project category and funding source.

Exhibit 7.5: FY2019-20 New Capital New Authority Projects Detail lists New Capital authority by project and funding source.

Exhibit 7.6: FY2019-20 Rehabilitation Carryover Projects Detail provides a detailed listing of Rehabilitation carryover authority by project.

Exhibit 7.7: FY2019-20 Rehabilitation New Authority Projects Detail provides a detailed listing of the Rehabilitation projects for New Authority by project.

Exhibit 7.8.1: Capital Program Summary and Cash Flow Detail – All Member Agencies provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehab and New Capital projects for FY2019-20.

Exhibit 7.8.2: Capital Program Summary and Cash Flow Detail – METRO provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2019-20.

Exhibit 7.8.3: Capital Program Summary and Cash Flow Detail – OCTA provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2019-20.

Exhibit 7.8.4: Capital Program Summary and Cash Flow Detail – RCTC provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2019-20.

Exhibit 7.8.5: Capital Program Summary and Cash Flow Detail – SBCTA provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2019-20.

Exhibit 7.8.6: Capital Program Summary and Cash Flow Detail – VCTC provides a capital summary and cash flow estimate for Carryover from prior years, New Authority Rehabilitation and New Capital projects for FY2019-20.

Exhibit 7.8.7: Capital Program Summary and Cash Flow Detail – Other Funding Sources provides a capital summary and cash flow estimate for Carryover from prior year, New Authority Rehabilitation and New Capital projects for FY2019-20.

Exhibit 7.8.8: Capital Program Summary and Cash Flow Detail – All Member Agencies and Other Funding Sources provides a capital summary and cash flow estimate for Carryover from prior year, New Authority Rehabilitation and New Capital projects for FY2019-20.

Exhibit 7.1 FY2017-18 Third-Party Projects

PROJECT DESCRIPTION	TOTAL
OCTA-SANTA ANA(10)	\$ 15,094,988
OCTA-ORANGE(ORANGE-9)	\$ 13,151,048
OCTA-GRADE CROSSING SAFETY	\$ 12,098,532
OCTA-ORANGE (OLIVE-7)	\$ 11,008,000
OCTA-ANAHEIM(ORANGE-10)	\$ 9,952,863
OCTA-SAN JUAN CAPISTRANO(6)	\$ 7,833,748
SIMI VALLEY GRADE XING IMPROV	\$ 7,294,684
MOORPARK AVE GRADE XING CONST.	\$ 4,815,394
MTA-CANOGA TRANS CORRIDOR	\$ 3,532,626
OCTA-ANAHEIM(OLIVE-4)	\$ 2,892,638
OCTA-TUSTIN(1)	\$ 2,553,656
OCTA-IRVINE(2)	\$ 2,399,482
OCTA-SAN CLEMENTE(2)	\$ 2,122,952
RANCHO CUCAMONGA-HAVEN AVE	\$ 2,036,288
CITY OF ANAHEIM-ARTIC	\$ 1,861,599
OCTA-DANA POINT(1)	\$ 1,581,590
I-5 N ENHANCEMNTS PROJECT	\$ 1,437,688
TUSTIN-TUSTIN RANCH ROAD	\$ 898,592
I-5/SR-14 CAP DRAINAGE IMPR	\$ 852,489
CLARK ARTIC FLAGGING/TRAINING	\$ 751,004
BRUTOCO-LASSEN STREET	\$ 581,420
ALP-CITRUS AVE UNDERCROSSING	\$ 339,831
CALTRANS-BASSETT O/H BRIDGE	\$ 331,943
OCTA-FULLERTON(1)	\$ 277,030
SO PAC RAIL - SUN VALLEY	\$ 239,335
OCTA-2012 ANGELS TRAINS	\$ 229,366
PERRIS VALLEY LINE MARKETING	\$ 199,519
SAN CLEMENTE RIP RAP-PHASE II	\$ 196,240
MARKTING CAMPAIGN FOR MTA	\$ 188,708
LAUREL ST GRADE PROJECT	\$ 184,928
2013 ANGELS EXPRESS TRAIN	\$ 166,262
ARB--RELO 20"" PIPLN IN BURBANK	\$ 131,022
GLENDALE-DORAN STREET	\$ 122,670
BMS-WOODLEY AND PROVIDENCIA OH	\$ 82,302
LONE HILL TO WHITE DOUBLE TRK	\$ 78,175
GLENDALE QUIET ZONE	\$ 76,020
JOHN MEEK-LA PLAYA FLOODWALL	\$ 70,868
BALI-FIRST ST. & MADERA RD.	\$ 70,735
OCTA C-1-3095 \$249k	\$ 68,324
L&SCONST-BEE CANYON IMPRVMNTS	\$ 65,057

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
RASIC-SAN CANYONPROJ IN IRVINE	\$ 62,527
LACMTA-405 FREEWAY CLOSURE	\$ 60,932
S/P FOR ARB-REPLACE GAS LINE	\$ 59,191
FORKERT-AT&T MOORPARK TO LA	\$ 57,640
TORO ENT PLAN REV INTRSTE 5	\$ 56,830
PUBLIC SFTY AWARENSS CAMPAIGN	\$ 56,320
SNELSON-PIPELINE SAND CANYON	\$ 51,753
VAN NUYS STN CONSTR REVIEW	\$ 48,976
ARB-BLOOMINGTON TO VICTORY PL.	\$ 48,403
C&V-GRADING & EROSION REVIEW	\$ 47,741
AUTOSPEEDWAY PROMO TRAIN	\$ 45,092
SE PIPELINE-JEFFREY RD/I-5 FWY	\$ 43,342
SPECTRUM COMMERCIAL SHOOT	\$ 42,582
HNTB-STATE STREET BRIDGE	\$ 39,323
2016 LA COUNTY FAIR TRAIN	\$ 37,236
17TH ST GRADE SEPARATION	\$ 37,073
TUNNEL UNDER TRACKS GLENDALE	\$ 36,038
COLICH+SONS, RPR AN INVERT SEC	\$ 35,606
SDG-DISTRIBUTION LINE	\$ 35,315
ARB PIPELNE RELCTN MISSN VJO	\$ 34,968
TWO BROS. PLAN REVIEW	\$ 32,713
STV SURVEY WORK	\$ 28,162
J.FLETCHER-BRANFORD & SHELDON	\$ 27,034
GAS CO-OSO PARKWAY @ I-5	\$ 26,897
VCI-126' LF 18" STEEL CASING	\$ 25,947
SECC-UNDERGROUND FIBER OPTIC	\$ 24,183
TORO-AVENUE K & DIVISIONS ST.	\$ 23,549
SOUTHWEST-SAND CANYON/LANG	\$ 22,749
PORT OF LONG BEACH RAIL TOURS	\$ 22,442
RETAINING WALL-CITY OF LNIGUEL	\$ 22,078
PASCAL & LUDWIG-IRWD DESALTER	\$ 21,897
AT&T-OSO PARKWAY WIDENING	\$ 20,963
KINDER MORGAN-INTERVAL SURVEY	\$ 20,242
QWEST-GRANDVIEW & SONORA	\$ 19,349
CALTRANS-ALMANSOR OVERCROSSING	\$ 18,771
O/H LINE S CLARITA S FERNANDO	\$ 18,536
STN. LOC. FEASIBILITY STUDIES	\$ 18,518
PRS CHARTER TRAIN	\$ 18,268
FISHEL-EMPIRE AVE/I-5 PROJ	\$ 18,249
MARK COMPANY-PEPPER AVENUE	\$ 16,128

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
FIX PIPE LA PAZ MISSION VIEJO	\$ 15,587
QWEST: BHA PROJECT E6944534	\$ 14,998
ADD DIRECT MAIL TO NEW RESIDTS	\$ 14,928
WEST VALLEY-OSO PARKWAY	\$ 14,828
RMC-GLADSTONE AVENUE	\$ 14,490
HENKLES-ACTON/VINCENT STN	\$ 13,858
PAG OC BLOCK WALL AUTO MALL DR	\$ 13,499
SE PIPELINE-GAS CO.CASING	\$ 13,282
SDG&E PROJECT IN SJCAPISTRANO	\$ 13,023
SCE-INSTLPOLE CITY OF INDUSTRY	\$ 12,949
ATKINSON CONSTRUCTION 1-10	\$ 12,842
PAR ELECTRICAL-VINCENT VIEW RD	\$ 12,788
CAPISTRANO BAY-ENTRY & PARKING	\$ 12,704
SITE/PLAN PIPING REV - SOLEDAD	\$ 12,455
RIALTO ST IMPROVEMENT	\$ 12,303
SCE-INSTALL CABLE IN SAN DIMAS	\$ 12,221
FLATIRON WEST, INC	\$ 12,121
WAGNER-CALIF HIGH SPEED RAIL	\$ 11,889
SCCI-SAN FERNANDO & WINONA	\$ 11,782
FYDAQ-INSTALL PIPE IN IRVINE	\$ 11,506
SECC INSTL FIBR SONORA-G/VIEW	\$ 11,478
BORINGS STATE ST POMEROY AVE	\$ 11,206
RM MYERS-N.ONTARIO/N.SAN FERNA	\$ 11,000
CENTURY - WATERPROOFING	\$ 10,925
POUK & STEINLE-SANTA ANA/SOUTH	\$ 10,897
CEDRO-SIERRA HWY & AVENUE K	\$ 10,765
UP-XINGS AT PALMDALE/LANCASTER	\$ 10,405
CROSSING TRACKS FOR BORING	\$ 10,366
LEMON GROVE LP - 36" DRAIN	\$ 9,919
XFINITY COMMERCIAL CMF	\$ 9,900
2013 PORT OF L/BEACH SPCL TRN	\$ 9,790
WHITING-TURNER-398 E.FIRST ST.	\$ 9,477
EDISON-TODD AVENUE	\$ 9,398
SDG&E LAGUNA NIGEL	\$ 9,344
2017 GOLDEN VALLEY PROM TRAIN	\$ 9,218
S/P REV OF H2OLINE-GENTRY BROS	\$ 9,085
HOWARD BLDG-ALMOND AVENUE	\$ 9,047
EDISON-TUSTIN/MIRA LOMA	\$ 8,872
AESCO-GEOTECH AT 6 LOC	\$ 8,805
UNDERGRND FIBER @ BUENA VISTA	\$ 8,643

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
CABLE ENGINEER-TUJUNGA AVENUE	\$ 8,453
SITE/PLAN REV FOR 1734 N MAIN	\$ 8,366
OLSSON ASSOC TOPOGRAPHY SURVEY	\$ 8,364
2017 RAIL SERIES	\$ 8,322
SDG&E SAN J CAP TRANMN POLES	\$ 8,186
MNWD REPLC PIPE NEAR MP 198.23	\$ 8,036
CHANNEL ISLANDS DODGER TRAIN	\$ 8,005
GOLDEN VALLEY PROM SPCLTRAIN	\$ 7,865
SCGAS-PIPELNE INSP IN IRVINE	\$ 7,613
VCI-GRANDVIEW TO BROADWAY	\$ 7,564
SDG&E LAGUNA NIGL	\$ 7,434
ACTA REDONDO	\$ 7,413
FENCE RELO IN SAN CLEMENTE	\$ 7,336
TRAFFIC CONTROL FIRST & AGNEW	\$ 7,312
SEMA-SAN JUAN & TRABUCO CREEK	\$ 7,195
AIRX-RIVERSIDE DR. BRIDGE	\$ 7,195
RELOCATE UTILITY POLE BURBANK	\$ 7,065
LADWP- INSTALL UNDRGRND UTIL	\$ 6,923
SAN CLEM. LIGHTING AVENIDA	\$ 6,916
ELECTRO-SAN FERNANDO/FLOWER	\$ 6,897
CITY VENTURES-TOWNHOMES COVINA	\$ 6,870
ELECTRO-LIGHT RETRO INGLEDALE	\$ 6,861
LOCATE UTILITIES S BERNARDINO	\$ 6,845
HP COMM INC. N. MAIN ST.	\$ 6,799
SCE REPLACE POLES COVINA	\$ 6,765
COAST SURVEY-SIDING EXT.SURVEY	\$ 6,684
SDGE: REPLACE POLE # Z223406	\$ 6,589
W.A.RASIC-PIPELINE IN TUSTIN	\$ 6,569
SUNESYS PLACE UG CONDUIT CABLE	\$ 6,469
WESTERN LIGHTWAVE-CENTRAL AVE.	\$ 6,453
CBS SCORPION FILM PRODUCTION	\$ 6,384
AB MILLER PROM TRAIN	\$ 6,359
SO PAC RAIL-VULCAN RAIL SPUR	\$ 6,324
T.HOLDING-PLAN REVIEW	\$ 6,280
DOMINGUEZ-FOOTHILL & GRAND	\$ 6,140
PACIFIC PIPELINE-SAN FERNANDO	\$ 6,013
SCE REPLACE 4752828E &4752829E	\$ 5,988
NU-LINE REHAB MANHOLES SJ CAP	\$ 5,986
BMS-BURBANK AIRPORT(EMPIRE)	\$ 5,986
WATER PIPE LINE IN RANCHO	\$ 5,924

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
CBS FILMING - ACTON, CA	\$ 5,866
SITE/PLAN REVIEW FOR NCM DEMO	\$ 5,859
GRAFFITI REMOVAL 1734 MAIN ST	\$ 5,852
INSTALNEW FOC TO XO COMM	\$ 5,847
DIAZ BORINGS VAN NUYS STATION	\$ 5,673
GAS CO-SAND CANYON @BURT ROAD	\$ 5,647
SOIL AND GROUND WATER SAMPLING	\$ 5,639
LADWP POLE REPLACE TAMPA AVE	\$ 5,595
K&B-UNDRGRND LINE IN RIVERSIDE	\$ 5,536
SCE REPLACE THREE POLES	\$ 5,530
IRISH-COLUMBIA WAY&SIERRA HYWY	\$ 5,524
DUNKIN DONUTS COMMERCIAL 8/10	\$ 5,500
TRAFFIC CONTR NEAR MP 35.73	\$ 5,463
SCE REPLACE 2276944E&2276997E	\$ 5,448
INSPECT/MAINTAIN VALVE 384	\$ 5,433
LAGUNA STATION TVM INSTALL	\$ 5,395
EDWARDS ADV-BILLBOARD RMVL	\$ 5,363
SCE RE-ROUTE EXISTING LINE	\$ 5,328
POWER POLE RELOCATION ANAHEIM	\$ 5,252
CABLE ENGINEER-BEKINS WAY	\$ 5,237
ST. IMPRVMT BET. 1ST AND 2ND	\$ 5,173
SITE PLAN FOR BEE CANYON	\$ 5,130
BELAIRE-WEST-ORANGE GREAT PARK	\$ 5,090
SDGE MANHOLE H4818556651	\$ 5,027
ALL AMERICAN AGGREGATES	\$ 4,921
ORTIZ-MIRALOMA AVENUE	\$ 4,894
EDISON-ETIWANDA AVENUE	\$ 4,854
HARDY & HARPER-BENSON AVENUE	\$ 4,794
ITC-5 FIBER OPTIC CROSSINGS	\$ 4,761
AVALON-GRADING @RTE 66	\$ 4,760
EDISON-DOUGLAS/KATELLA	\$ 4,756
SCE-.55 MI OF 653 ASCRR TO 954	\$ 4,741
REMOVE/REPLACE ASPHALT	\$ 4,705
WRIGHT CNST COAST TRAIL	\$ 4,655
MOOT POINT SECRET FILMING	\$ 4,598
TORO-TAPO & LOS ANGELES	\$ 4,570
SCE-REPLC POLE IN SANTA ANA	\$ 4,539
KLEINFELDER-2ND MAIN TRACK	\$ 4,473
POINTER-TUSTIN METROLINK STN	\$ 4,467
SDG+E CAMINO CAP & .89 MILES	\$ 4,416

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
EDISON-LANKERSHIM BLVD.	\$ 4,391
INSTALL O/H CABLE RIALTO	\$ 4,246
SA ASSOC-GAREY & SANTA FE ST.	\$ 4,211
DIAZ-YOURMAN-EMPIRE AVENUE	\$ 4,186
SCE- REPLACE POLE#1886433E	\$ 4,179
SCE REPLACE ONE POLE PERRIS	\$ 4,044
ALL AMERICAN ASPHALT-LYON ST.	\$ 3,960
FIRE SPRINKLERS ANAHEIM STN	\$ 3,916
S/P REV PARKNG- CAPISTRANO BCH	\$ 3,889
SCE POLES 4016296E & 4292661E	\$ 3,832
CARDNO-DESIGN BIKE/PED BRIDGE	\$ 3,828
SDG&E POLES P108537 & Z227162	\$ 3,815
BNSF-SIDESWIPE ON 5/15/11	\$ 3,771
FYDAQ REPLACE PIPE IRVINE	\$ 3,769
KB ENG FOR TW CABLE PLAN	\$ 3,747
C&V-NUEVO-VALENCIA SR. HOUSING	\$ 3,737
SCE REPLACE POLES IRVINE	\$ 3,737
SCE JEFFREY RD IRVINE	\$ 3,734
ALPHA INSTALL FENCE	\$ 3,734
WATER MAINS WALNUT GROVE AVE	\$ 3,680
PRESSURE CONTROL VALVE	\$ 3,678
INSTALL O/H F/O CABLE ACTON	\$ 3,672
LA RIVER WATER WHEEL	\$ 3,657
OH EQUIP MAIN. CAMINO CAP	\$ 3,637
INSTALL O/H LINE ORANGE	\$ 3,600
REPAIR/MAINTAIN MANHOLE	\$ 3,589
CABLE ENGINEER-FRANCISQUITO	\$ 3,572
SITE/PLAN REV-FREEDOM COMM	\$ 3,567
INSTALL CONDUITS PEPPER AVE	\$ 3,565
REPLACE POLE FAIRPLEX LA VERNE	\$ 3,518
MOORE-CITRUS/SEVILLE & WITTRAM	\$ 3,485
PROJ DESIGN, SUY SAN JUAN CAL	\$ 3,479
INSTALL CONDUIT LASSEN ST	\$ 3,469
TORO ASPHALT PAVING & STRIPING	\$ 3,462
SDGE-REPLACE POLE IN CAPISTRANO	\$ 3,456
GLENDALE WASTEWATER PROJECT	\$ 3,453
SCE-REPLACE 2 POLES IN ORANGE	\$ 3,437
BISCUIT FILM-AT&T COMMERCIAL	\$ 3,415
ASPHALT OVERLAY PALMDALE	\$ 3,401
WATER MAINS SAN GABRIEL BLVD	\$ 3,398

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
HERMAN WEISSKER RIVERSIDE	\$ 3,396
CVE-MOORPARK STATION	\$ 3,377
91/PVL SPECIAL DISPLAY TRAIN	\$ 3,371
SCE TO REPLACE POLE IN RIALTO	\$ 3,368
SCE- REPL POLE IN LA VERNE	\$ 3,283
PORTRAIT HOMES-ORANGE & SIERRA	\$ 3,276
GINGERICH-PLATFORM LIGHTING	\$ 3,263
O/H LINE ORANGE PLAN REVIEW	\$ 3,262
T.E.ROBERTS-CATARACT AVENUE	\$ 3,257
INSPECT ROW AT SB STATION	\$ 3,243
K&B-TWC F/O WORK IN SANTA ANA	\$ 3,211
SCE REPLACE POLE VINEYARD AVE	\$ 3,203
GSWC RPAIR H2O LINE SANDIMAS	\$ 3,108
FALL PROTECTION SYSTEM ORANGE	\$ 3,091
TWC SAFETY TRAINING	\$ 3,037
HP-PASADENA AVENUE	\$ 2,978
SURVEY LAGUNA NIGUEL	\$ 2,938
SCE REPLACE FOUR POLES PERRIS	\$ 2,937
SDG&E SJ CAPSTRNO	\$ 2,934
SAF-R-DIG-BURBANK SURVEYS	\$ 2,931
MNWD WATERMAIN ABANDONMENT	\$ 2,922
YALE AVE PAVEMENT REHAB IRVINE	\$ 2,913
TW TELECOM UNDERGRND F/O	\$ 2,908
SCE REPLACE POLE 809853E	\$ 2,882
SCE-RELO BENSON/8TH, UPLAND	\$ 2,840
SCE REPLACE 8 POLES RIVERSIDE	\$ 2,821
EDISON-HUNTINGTON/2ND	\$ 2,818
SCE REPLACE POLE WINCHESTER	\$ 2,790
JFLETCHER-FIBER OPTIC INSTALL	\$ 2,788
SCG-RELOCATE PIPE IN VERNON	\$ 2,781
SCE OVERHEAD WIRE LINE REPLC	\$ 2,759
REPLACE POLE CALLE TORO GRANDE	\$ 2,744
SURVEYS/MAPPING GOLD LINE 2B	\$ 2,716
TETRA-WELL MONITORING BURABNK	\$ 2,714
YOUNG-PAXTON STREET CLOSURE	\$ 2,691
CEG CONST PROJ IN SAN DIMAS	\$ 2,674
REPLACE POLE HARVILL AVE	\$ 2,649
GLENDALE STATION LIGHTING	\$ 2,646
SCE: REPLACE PWR POLE MP 14.65	\$ 2,641
SP REVW- ALL AMERICAN ASPHALT	\$ 2,634

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
SCE ""A"" ST CROSSNG	\$ 2,625
SCE REPLACE POLE ONTARIO	\$ 2,621
SCE INSTALLATION TORRANCE	\$ 2,616
SITE/PLAN FOR L01018 PIPELINE	\$ 2,606
INSTALL O/H CABLE MISSION RD	\$ 2,604
SCE-POWER POLE @RIALTO AVE	\$ 2,590
HOVELL-SANTA CLARA RIVER	\$ 2,568
REMOVE FOUR TREES ORANGE	\$ 2,563
F.J.S. DEVONSHIRE ST	\$ 2,552
SCE-PALMDALE SHUTTLE FIBER	\$ 2,535
HENKLES-EL TORO FRONTAGE RD.	\$ 2,534
VCI MANHOLE JAMBOREE & HARVARD	\$ 2,531
SCE REPLACE POLE LA PALMA	\$ 2,529
SCE-66 KV O/H TRANSMISSION	\$ 2,430
K &B-OH/FO WORK @ SONORA AVE	\$ 2,394
CITY VENTURES-MONROVIA NURSERY	\$ 2,378
PACIFIC WEST-VAN NUYS BLVD.	\$ 2,362
K&B-LINCOLN AVENUE	\$ 2,354
MURAL REST. ARROW HW D ST	\$ 2,349
SDG&E LAGNA NIGEL	\$ 2,312
HP-QUIMISA DRIVE	\$ 2,277
CONDUIT EAST AVE PALMDALE	\$ 2,272
SCE- RELC MONROVIA/CITRUS	\$ 2,261
MARMAC-LINE 235 & 335 CASING	\$ 2,254
SCE-LATTICE TOWER @ SRANCH	\$ 2,238
LNIGUEL/MISSION V METROLNK STN	\$ 2,223
BIGGE-STATE COLLEGE & TAFT	\$ 2,218
RELOCATE COMMLINES @SANDCANYON	\$ 2,171
LADWP-ELYSIAN DAM & RESERVOIR	\$ 2,170
EDISON-SYCAMORE DR.	\$ 2,157
FISHEL CO SAFETY TRAINING	\$ 2,150
SCE REPLACE POLE# 1343289E	\$ 2,150
TAFT- NEWHALL METROLINK	\$ 2,134
K&B FOR O/H COMM WORK @BURBANK	\$ 2,032
CITY OFORANGE-BATAVIA DRAIN	\$ 2,000
LACSD PLANS-REHAB PIPELINES	\$ 1,964
ANDREASEN-FIRST ST CLAREMONT	\$ 1,938
SDG&E TO CHANGE OVERHEAD EQUIP	\$ 1,934
SCE-REPLACE POLE IN FONTANA	\$ 1,911
SCE REPL RECNDCTRS ETIWNDA	\$ 1,906

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
STRUCTURE DEMOLITION HIGH ST	\$ 1,906
SHAY-8460 SAN FERNANDO ROAD	\$ 1,891
EDISON-NEAR VINCENT VIEW ROAD	\$ 1,848
LANGAN-CARRION RD & ARROW HWY	\$ 1,808
PSOMAS N. SPRING ST BRIDGE	\$ 1,799
RASMUSSEN-QUISMA DRIVE	\$ 1,797
ANHEUSER-BUSCH PIPE WOODLEY	\$ 1,742
REPAIRS TUSTIN & IRVINE STNS	\$ 1,730
SEQUEL-ST RESURFACE IN TUSTIN	\$ 1,692
CABLE ENGINEER -VAN NUYS BLVD.	\$ 1,687
BMS COMM UTILITY POLES PALMDALE	\$ 1,668
RENOVATION OF ADA RAMP	\$ 1,645
PAINTING EL CAMINO CAPIST	\$ 1,634
IRISH COMM CO SAFETY TRAINING	\$ 1,633
K&B-OLYMPIC BLVD. IN LA	\$ 1,631
MORLIN SAFETY TRAINING	\$ 1,555
PB AMERICAS-KATALLA/SANTA ANA	\$ 1,544
QWEST CONDUIT WRK IN LA	\$ 1,508
SCE-13-POLES MSEP FULLERTON	\$ 1,507
LADWP-SAN FERNANDO ROAD	\$ 1,500
C/CARGO-FLAGNG AT STATE& TAFT	\$ 1,353
SDGE CROWN VALLEY PKWY	\$ 1,327
CNTY SANITATION LA-BEACH AVE	\$ 1,286
HP-SAN DIMAS AVE/BONITA AVE	\$ 1,256
SUBCONSCIOUS PRDCTNS-6TH ST	\$ 1,229
HP-EVERGREEN AVENUE	\$ 1,205
WEST COAST-BUENA VISTA ST.	\$ 1,199
SCE-ETIWANDA-ALDER-RANDALL	\$ 1,163
PROJ DESIGN, SUY SAN CLEMENTE	\$ 1,150
CABLECOM-CEDAR AVENUE	\$ 1,145
ADVENT-COLLEGE AVENUE	\$ 1,103
IMPACT SOLUTIONS-TUJUNGA AVE.	\$ 1,083
DOTY BROS-OSO PKWY EXPANSION	\$ 1,055
K&B-CHESTNUT & SANTA FE	\$ 1,040
TRC-EMPIRE PROJECT	\$ 1,039
INSTALL TEMPORARY POWER POLE	\$ 1,000
VCI-ALLEN AVENUE	\$ 976
CA AMERICAN WATER CO-REPAIRS	\$ 974
VERIZON-JUNIPER AVENUE	\$ 934
BMS-VERNON AVENUE	\$ 833

Exhibit 7.1 FY2017-18 Third-Party Projects (continued)

PROJECT DESCRIPTION	TOTAL
HATCH MOTT-CRENSHAW & IMPERIAL	\$ 760
SECC-HIDDEN RANCH/KATHERINE	\$ 758
K&B-NW OF CA HWY 118	\$ 752
F.J.S. TOPANGA CANYON BLVD	\$ 726
AT&T-MACLAY AVENUE	\$ 668
REMVE FENCE@ ROW-CITY OF TUSTIN	\$ 667
WEST COAST-TAMPA AVENUE	\$ 654
SPEC-POTHOLING LOCATIONS	\$ 599
NEXTLINK-ORANGETHORPE AVENUE	\$ 558
INLAND EMPIRE-HAVEN/MILLIKEN	\$ 530
INDUSTRIAL HYGENE-SAN FERNANDO	\$ 503
OPTIMUM-3RD PTY TRNG	\$ 500
COMNET AMTRAK A/V CIS SYS	\$ 500
RIVER BED SURVEY SANTA CLARITA	\$ 500
WEST COAST-ONTARIO/FERNANDO	\$ 458
MLS SOLUTIONS NEW RAIL SPUR	\$ 443
FILMING BOSE COMMERCIAL-2/13	\$ 432
SOURCE BROADBAND - 3RD PTY TRA	\$ 375
WEST COAST-SANTA SUSANA PASS	\$ 369
WEST COAST-R STREET	\$ 366
DRAINAGE 12459-B ARROW ROUTE	\$ 344
K&B-CEDAR AVENUE	\$ 339
TWC-3RD PTY SAFETY TRNING	\$ 307
ACNE MEDIA PHOTO SHOOT	\$ 289
HP-AVALON & E. SLAUSON AVENUE	\$ 261
BIGGE-2010 STATE COLLEGE/TAFT	\$ 244
SCE POLE REPLMNT PRIMROSE ST	\$ 238
MERITAGE-ARROW STATION	\$ 176
K&B-ACACIA STREET	\$ 174
WEST COAST COMM LAKME AVE	\$ 154
Grand Total	\$ 110,632,674

Exhibit 7.2 FY2019-20 Rehabilitation Carryover Projects Summary

(000's)

SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
	Track	-	250	-	-	-	-	250
Olive Total		-	250	-	-	-	-	250
	Communications	-	399	-	8	-	-	408
	Facilities	-	23	-	-	-	-	23
	Safety	-	6	-	-	-	-	6
	Signage	-	-	-	25	-	-	25
	Signal	-	1,498	-	-	-	-	1,498
	Structures	45	22,524	-	-	-	20,477	43,046
	Track	-	2,281	-	14	3	-	2,298
Orange Total		45	26,732	-	47	3	20,477	47,303
	Communications	-	144	-	-	-	-	144
	Signal	-	51	-	-	-	-	51
	Track	-	5,377	-	-	-	-	5,377
Orange & Olive Total		-	5,573	-	-	-	-	5,573
	Signal	7	-	-	-	-	-	7
	Track	3	-	-	-	-	-	3
Pasadena Total		10	-	-	-	-	-	10
	Communications	-	-	128	-	-	-	128
	Signal	-	-	151	-	-	-	151
	Structures	-	-	197	-	-	-	197
	Track	-	-	3,221	-	-	-	3,221
Perris Valley Total		-	-	3,697	-	-	-	3,697
	Communications	-	-	89	-	-	-	89
PVL Total		-	-	89	-	-	-	89
	Track	-	-	-	76	-	-	76
Redlands Total		-	-	-	76	-	-	76
	Communications	16	6	3	4	-	-	30
	Signal	1,603	117	284	368	182	-	2,553
	Structures	660	273	148	199	92	-	1,372
	Track	5,120	1,613	1,110	1,442	722	5,659	15,666
River Total		7,399	2,009	1,545	2,013	997	5,659	19,621
	Communications	13	6	3	4	2	62	90
	Signal	115	48	27	35	17	645	887
	Track	408	152	95	124	62	3,350	4,191
River Sub - East Bank Total		536	205	125	162	81	4,057	5,167
	Communications	119	22	23	30	15	-	209
	Signal	1,558	372	318	413	206	-	2,866
River Sub - West Bank Total		1,676	393	341	443	221	-	3,075
	Facilities	-	-	454	-	-	-	454
Riverside Total		-	-	454	-	-	-	454

Numbers may not foot due to rounding.

Exhibit 7.2 FY2019-20 Rehabilitation Carryover Projects Summary (continued)

(000's)

SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
	Communications	215	-	-	152	-	-	367
	Signage	10	-	-	6	-	-	16
	Signal	2,268	-	-	1,504	-	8	3,780
	Structures	1,292	-	-	861	-	-	2,153
	Track	4,344	-	-	3,074	95	1	7,514
San Gabriel Total		8,128	-	-	5,597	95	8	13,828
	Facilities	630	263	147	191	-	-	1,231
	Signal	551	230	129	167	-	-	1,077
Shortway Total		1,181	492	276	358	-	-	2,308
	Communications	99	-	-	-	12	-	111
	Security	64	-	-	-	-	-	64
	Signal	698	-	-	-	-	-	698
	Structures	9,262	-	-	-	-	5	9,266
	Track	2,232	-	-	-	2	78	2,312
Valley Total		12,354	-	-	-	14	83	12,451
	Communications	92	-	-	-	-	-	92
	Signal	359	-	-	-	1	14	375
	Structures	2,176	-	-	-	-	-	2,176
	Track	2,411	-	-	-	11	84	2,505
Ventura - LA County Total		5,038	-	-	-	11	98	5,147
	Communications	10	-	-	-	165	-	175
	Facilities	-	-	-	-	418	50	468
	Signal	10	-	-	-	327	-	337
	Structures	3	-	-	-	5,269	-	5,272
	Track	48	-	-	-	2,248	-	2,295
Ventura - VC County Total		70	-	-	-	8,427	50	8,547
	Communications	873	74	162	210	141	-	1,460
	Facilities	4,267	1,415	923	1,140	578	1,522	9,845
	IT	969	114	183	251	108	17	1,642
	Rolling Stock	23,208	5,169	4,732	6,078	3,028	26,046	68,260
	Signage	17	-	-	-	-	-	17
	Signal	1,154	1	190	247	123	-	1,716
	Structures	1	-	-	-	-	-	1
	Track	2,492	600	511	663	331	-	4,597
	Vehicle	1,268	204	242	314	157	-	2,186
Systemwide Total		34,249	7,577	6,944	8,904	4,467	27,584	89,725
Grand Total		70,685	43,232	13,472	17,599	14,317	58,016	217,321

Numbers may not foot due to rounding.

Exhibit 7.3 FY2019-20 Rehabilitation Projects New Authority Projects Summary by Subdivision

(000's)

SUBDIVISION	CATEGORY	METRO ⁽¹⁾	OCTA ⁽²⁾	RCTC ⁽³⁾	SBCTA ⁽⁴⁾	VCTC ⁽⁵⁾	OTHER ⁽⁶⁾	TOTAL
	Communications	-	602	-	-	-	-	602
	Structures	-	2,380	-	-	-	-	2,380
	Track	-	7,230	-	-	-	-	7,230
Orange Total		-	10,212	-	-	-	-	10,212
	Communications	118	49	28	36	18	-	249
River Total		118	49	28	36	18	-	249
	Communications	206	-	-	137	-	-	343
	Signals	3,576	-	-	2,384	-	-	5,959
	Structures	1,388	-	-	925	-	-	2,313
	Track	4,368	-	-	2,912	-	-	7,280
San Gabriel Total		9,537	-	-	6,358	-	-	15,896
	Communications	-	-	315	-	-	-	315
San Jacinto (PVL) Total		-	-	315	-	-	-	315
	Communications	348	-	-	-	-	-	348
	Signals	3,806	-	-	-	-	-	3,806
	Track	9,675	-	-	-	-	-	9,675
Valley Total		13,828	-	-	-	-	-	13,828
	Communications	381	-	-	-	-	-	381
	Track	2,297	-	-	-	-	-	2,297
Ventura - LA County Total		2,677	-	-	-	-	-	2,677
	Communications	-	-	-	-	189	-	189
	Signals	-	-	-	-	3,778	-	3,778
	Structures	-	-	-	-	2,500	-	2,500
	Track	-	-	-	-	1,870	-	1,870
Ventura - VC County Total		-	-	-	-	8,338	-	8,338
	Facilities	1,470	613	344	446	223	-	3,095
	Non-Revenue Fleet	1,970	821	460	597	299	-	4,148
	Rolling Stock	1,354	564	316	410	205	-	2,851
	Track	1,008	420	236	306	153	-	2,123
Systemwide Total		5,803	2,419	1,356	1,759	880	-	12,217
FY2019-20 Rehabilitation New Authority Projects		31,964	12,680	1,698	8,153	9,235	-	63,731
Total Carryovers from Prior Years		70,685	43,232	13,472	17,599	14,317	58,016	217,321
Total Rehabilitation Projects Including Carryovers		102,649	55,912	15,170	25,752	23,552	58,016	281,052

Numbers may not foot due to rounding.

NOTES:

- (1) Metro funding is Measure R
- (2) OCTA funding is FTA Section 5337
- (3) RCTC funding is FTA Section 5337
- (4) SBCTA funding is anticipated to be FTA Section 5337, SB1 SGR and STA
- (5) VCTC funding is FTA Section 5337, FTA 5307, FTA 5309, LTF/STA, and SB1 SGR
- (6) Other funds are anticipated from UPRR for East Bank share

Exhibit 7.4 FY2019-20 New Capital Carryover Projects

(000's)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Orange	Facilities	418002	-	60	-	-	-	-	60
Orange	Facilities	419001	-	198	-	-	-	-	198
Orange	Signal	417007	-	986	-	-	-	-	986
Orange	Signal	418003	-	3,789	-	-	-	-	3,789
Perris Valley	Communication	419002	-	-	198	-	-	-	198
River	Track	418005 ⁽¹⁾	759	316	177	230	-	115	1,598
Riverside	Structures	419003	-	-	168	-	-	-	168
San Bernardino	Communication	491901	-	-	-	23	-	-	23
San Gabriel	Communication	418004	-	-	-	5,118	-	-	5,118
San Gabriel	Structures	491701	-	-	-	-	-	325	325
San Gabriel	Track	417005	-	-	-	89	-	-	89
San Gabriel	Track	417006	-	-	-	84	-	-	84
Systemwide	Business Systems	TBD	60	218	122	159	8	-	568
Systemwide	Communication	418001	-	-	-	-	-	6,018	6,018
Systemwide	Facilities	460002	-	-	-	-	-	297	297
Systemwide	IT	450100	-	-	-	-	-	519	519
Systemwide	IT	450110	-	-	-	-	-	3,152	3,152
Systemwide	IT	618001	9,839	1,859	3,619	2,980	4,752	-	23,050
Systemwide	IT	618002	-	-	-	-	-	109	109
Systemwide	Rolling Stock	613005 ⁽¹⁾	-	-	-	-	-	66,230	66,230
Systemwide	Rolling Stock	616002 ⁽¹⁾	-	-	-	-	-	79,532	79,532
Systemwide	Rolling Stock	616003	-	-	-	-	-	9,151	9,151
Systemwide	Rolling Stock	616004	-	-	-	-	-	4,576	4,576
Systemwide	Security	417001	-	-	-	-	-	4,278	4,278
Systemwide	Track	409006	-	-	-	-	-	451	451
Systemwide	Track	460001	-	-	-	-	-	5,768	5,768
Systemwide	Track	460003	-	-	-	-	-	491	491
Systemwide	Track	460701	-	-	-	-	-	392	392
Valley	Structures	418006	-	-	-	-	-	2,392	2,392
Valley	Track	414002	191	-	-	-	-	-	191
Grand Total			10,850	7,426	4,285	8,682	4,760	183,795	219,798

Numbers may not foot due to rounding.

NOTE:

(1) Projects part of the ROTEM Settlement

Exhibit 7.5 FY2019-20 New Capital New Authority Projects

(000's)

PROJECT DESCRIPTION	SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
CMF and EMF Modernization	All	Facilities	356	149	83	108	54	-	750
MP36 Locomotive Overhaul & Tier IV Conversion	All	Rolling Stock	309	129	72	94	47	-	650
Purchase & Set-Up Trailerized Back-Up Generator Set	All	Signals	50	21	12	15	8	-	106
Specialized Maintenance Equipment ⁽¹⁾	All	Facilities	523	218	122	158	79	3,504	4,604
Riverside Yard Switch ⁽²⁾	San Jacinto (PVL)	Signals	151	-	213	71	-	-	434
FY2019-20 New Capital New Authority Projects			1,389	516	502	446	188	3,504	6,544
Total Carryovers from Prior Years			10,850	7,426	4,285	8,682	4,760	183,795	219,798
Total FY2019-20 New Capital New Authority Including Carryovers			12,239	7,942	4,786	9,128	4,947	187,299	226,342

Numbers may not foot due to rounding.

NOTES:

- (1) Member Agencies shared commitment for the Specialized Maintenance Equipment project is \$1.1M; the remaining commitment is to be subsidized by Other funding sources.
- (2) The Riverside Yard Switch project is an exception to the standard formulas established.

Exhibit 7.6 FY2019-20 Rehabilitation Carryover Projects Detail

(000's)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Olive	Track	514002	-	68	-	-	-	-	68
Olive	Track	515100	-	168	-	-	-	-	168
Olive	Track	516510	-	2	-	-	-	-	2
Olive	Track	516511	-	13	-	-	-	-	13
Orange	Communications	514003	-	-	-	8	-	-	8
Orange	Communications	516640	-	26	-	-	-	-	26
Orange	Communications	519640	-	346	-	-	-	-	346
Orange	Communications	591714	-	27	-	-	-	-	27
Orange	Facilities	591801	-	23	-	-	-	-	23
Orange	Safety	514004	-	6	-	-	-	-	6
Orange	Signage	514009	-	-	-	25	-	-	25
Orange	Signal	514005	-	1	-	-	-	-	1
Orange	Signal	519630	-	1,497	-	-	-	-	1,497
Orange	Structures	514006	-	3	-	-	-	-	3
Orange	Structures	514011	-	1	-	-	-	-	1
Orange	Structures	515104	-	11	-	-	-	-	11
Orange	Structures	515105	-	1,538	-	-	-	-	1,538
Orange	Structures	515112	45	-	-	-	-	-	45
Orange	Structures	516621	-	1,200	-	-	-	-	1,200
Orange	Structures	517620	-	412	-	-	-	-	412
Orange	Structures	518620	-	967	-	-	-	-	967
Orange	Structures	519620	-	17,402	-	-	-	20,477	37,879
Orange	Structures	519621	-	990	-	-	-	-	990
Orange	Track	514007	-	18	-	-	-	-	18
Orange	Track	514008	-	1	-	-	3	-	4
Orange	Track	514060	-	5	-	-	-	-	5
Orange	Track	515107	-	-	-	14	-	-	14
Orange	Track	515108	-	57	-	-	-	-	57
Orange	Track	516610	-	2	-	-	-	-	2
Orange	Track	516612	-	32	-	-	-	-	32
Orange	Track	517610	-	187	-	-	-	-	187
Orange	Track	518630	-	295	-	-	-	-	295
Orange	Track	591902	-	1,683	-	-	-	-	1,683
Orange & Olive	Communications	515102	-	14	-	-	-	-	14
Orange & Olive	Communications	517640	-	22	-	-	-	-	22
Orange & Olive	Communications	518640	-	108	-	-	-	-	108
Orange & Olive	Signal	514010	-	51	-	-	-	-	51
Orange & Olive	Track	515510	-	1	-	-	-	-	1
Orange & Olive	Track	519510	-	5,169	-	-	-	-	5,169
Orange & Olive	Track	519520	-	208	-	-	-	-	208

Numbers may not foot due to rounding.

Exhibit 7.6 FY2019-20 Rehabilitation Carryover Projects Detail (continued)

(000's)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Pasadena	Signal	515109	7	-	-	-	-	-	7
Pasadena	Track	514012	3	-	-	-	-	-	3
Perris Valley	Communications	516940	-	-	5	-	-	-	5
Perris Valley	Communications	519940	-	-	124	-	-	-	124
Perris Valley	Signal	516930	-	-	60	-	-	-	60
Perris Valley	Signal	516931	-	-	90	-	-	-	90
Perris Valley	Structures	519911	-	-	197	-	-	-	197
Perris Valley	Track	519910	-	-	3,221	-	-	-	3,221
Perris Valley	Communications	517940	-	-	59	-	-	-	59
Perris Valley	Communications	518940	-	-	30	-	-	-	30
Redlands	Track	516819	-	-	-	76	-	-	76
River	Communications	514037	15	5	3	4	-	-	27
River	Communications	515138 ⁽¹⁾	1	1	0	0	0	-	3
River	Signal	514039	12	5	3	4	-	-	23
River	Signal	515139 ⁽¹⁾	1	1	0	0	0	-	3
River	Signal	519730	1,590	111	281	364	182	-	2,527
River	Structures	514038	47	20	11	14	-	-	92
River	Structures	515141 ⁽¹⁾	25	8	-	6	3	-	43
River	Structures	519020	588	245	137	178	89	-	1,238
River	Track	514062 ⁽¹⁾	17	7	3	5	-	-	32
River	Track	515142 ⁽¹⁾	2	3	1	2	5	-	13
River	Track	515143 ⁽¹⁾	3	1	-	1	0	-	5
River	Track	517711 ⁽¹⁾	50	21	12	15	8	-	105
River	Track	519710	1,254	-	207	268	134	-	1,863
River	Track	519711	1,330	555	311	403	202	-	2,801
River	Track	519712	2,363	985	552	716	358	-	4,975
River	Track	591708 ⁽¹⁾	22	9	5	7	3	-	46
River	Track	591806	-	-	-	-	-	5,659	5,659
River	Track	592711	80	33	19	24	12	-	169
River Sub - EB	Communications	517740	4	2	1	1	1	18	26
River Sub - EB	Communications	519741	9	4	2	3	1	44	63
River Sub - EB	Signal	517731 ⁽¹⁾	38	16	9	12	6	178	259
River Sub - EB	Signal	519731	74	31	17	22	11	343	498
River Sub - EB	Signal	519733	3	1	1	1	0	124	129
River Sub - EB	Track	517710 ⁽¹⁾	107	26	25	32	16	-	206
River Sub - EB	Track	517712 ⁽¹⁾	195	81	45	59	29	907	1,317
River Sub - EB	Track	517713 ⁽¹⁾	28	12	7	8	4	189	248
River Sub - EB	Track	592712	46	19	11	14	7	2,100	2,197
River Sub - EB	Track	592713	33	14	8	10	5	153	222
River Sub - WB	Communications	519740	119	22	23	30	15	-	209

Numbers may not foot due to rounding.

Exhibit 7.6 FY2019-20 Rehabilitation Carryover Projects Detail (continued)

(000's)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
River Sub - WB	Signal	519732	1,558	372	318	413	206	-	2,866
Riverside	Facilities	515113	-	-	419	-	-	-	419
Riverside	Facilities	516820	-	-	35	-	-	-	35
San Gabriel	Communications	514013	7	-	-	4	-	-	11
San Gabriel	Communications	515114	7	-	-	5	-	-	12
San Gabriel	Communications	517440	8	-	-	5	-	-	13
San Gabriel	Communications	519440	193	-	-	129	-	-	322
San Gabriel	Communications	591805	-	-	-	8	-	-	8
San Gabriel	Signage	514015 ⁽¹⁾	10	-	-	6	-	-	16
San Gabriel	Signal	514016	13	-	-	9	-	-	22
San Gabriel	Signal	515115	15	-	-	2	-	8	24
San Gabriel	Signal	517431	15	-	-	10	-	-	25
San Gabriel	Signal	519430	2,225	-	-	1,484	-	-	3,709
San Gabriel	Structures	514014	13	-	-	9	-	-	22
San Gabriel	Structures	515116	3	-	-	2	-	-	5
San Gabriel	Structures	517420	134	-	-	89	-	-	223
San Gabriel	Structures	519420	460	-	-	307	-	-	766
San Gabriel	Structures	592420	682	-	-	455	-	-	1,137
San Gabriel	Track	514017	-	-	-	46	69	-	115
San Gabriel	Track	514061	-	-	-	17	26	-	43
San Gabriel	Track	515117	6	-	-	4	-	-	10
San Gabriel	Track	515118	45	-	-	30	-	-	75
San Gabriel	Track	515412 ⁽¹⁾	-	-	-	46	-	-	46
San Gabriel	Track	516410	-	-	-	78	-	-	78
San Gabriel	Track	517410	85	-	-	57	-	-	142
San Gabriel	Track	519410	2,565	-	-	1,710	-	-	4,275
San Gabriel	Track	519411	1,391	-	-	927	-	-	2,318
San Gabriel	Track	591712	19	-	-	9	-	-	28
San Gabriel	Track	591713	34	-	-	16	-	-	50
San Gabriel	Track	591802	-	-	-	-	-	1	1
San Gabriel	Track	593410	199	-	-	133	-	-	331
Shortway	Facilities	517053	179	75	42	54	-	-	350
Shortway	Facilities	519034	451	188	105	137	-	-	880
Shortway	Signal	519033	551	230	129	167	-	-	1,077
Valley	Communications	514018	-	-	-	-	12	-	12
Valley	Communications	519340	99	-	-	-	-	-	99
Valley	Security	514063	64	-	-	-	-	-	64
Valley	Signal	517330	2	-	-	-	-	-	2
Valley	Signal	519330	695	-	-	-	-	-	695
Valley	Structures	515123	-	-	-	-	-	3	3

Numbers may not foot due to rounding.

Exhibit 7.6 FY2019-20 Rehabilitation Carryover Projects Detail (continued)

(000's)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Valley	Structures	591701	-	-	-	-	-	1	1
Valley	Structures	592320	614	-	-	-	-	-	614
Valley	Structures	592321	629	-	-	-	-	-	629
Valley	Structures	592322	633	-	-	-	-	-	633
Valley	Structures	592323	370	-	-	-	-	-	370
Valley	Structures	592324	632	-	-	-	-	-	632
Valley	Structures	592326	36	-	-	-	-	-	36
Valley	Structures	592327	20	-	-	-	-	-	20
Valley	Structures	592328	257	-	-	-	-	-	257
Valley	Structures	593320	5,941	-	-	-	-	-	5,941
Valley	Structures	593321	130	-	-	-	-	-	130
Valley	Track	514024	5	-	-	-	-	6	11
Valley	Track	515126	3	-	-	-	-	-	3
Valley	Track	515159	-	-	-	-	2	-	2
Valley	Track	517310	60	-	-	-	-	33	93
Valley	Track	519310	742	-	-	-	-	-	742
Valley	Track	519320	222	-	-	-	-	-	222
Valley	Track	591901	62	-	-	-	-	39	102
Valley	Track	593310	1,138	-	-	-	-	-	1,138
Ventura - LA County	Communications	515127	42	-	-	-	-	-	42
Ventura - LA County	Communications	519240	50	-	-	-	-	-	50
Ventura - LA County	Signal	514027	4	-	-	-	-	-	4
Ventura - LA County	Signal	519230	355	-	-	-	-	-	355
Ventura - LA County	Signal	591704	-	-	-	-	1	14	15
Ventura - LA County	Structures	514028	1	-	-	-	-	-	1
Ventura - LA County	Structures	592220	1,477	-	-	-	-	-	1,477
Ventura - LA County	Structures	593220	698	-	-	-	-	-	698
Ventura - LA County	Track	514030	4	-	-	-	-	21	25
Ventura - LA County	Track	514066	1	-	-	-	2	-	3
Ventura - LA County	Track	519210	1,540	-	-	-	-	-	1,540
Ventura - LA County	Track	519211	248	-	-	-	-	-	248

Numbers may not foot due to rounding.

Exhibit 7.6 FY2019-20 Rehabilitation Carryover Projects Detail (continued)

(000's)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Ventura - LA County	Track	519220	222	-	-	-	-	-	222
Ventura - LA County	Track	591702	-	-	-	-	8	63	71
Ventura - LA County	Track	592210	397	-	-	-	-	-	397
Ventura - VC County	Communications	515133	10	-	-	-	1	-	11
Ventura - VC County	Communications	517140	-	-	-	-	138	-	138
Ventura - VC County	Communications	518140	-	-	-	-	25	-	25
Ventura - VC County	Facilities	591710	-	-	-	-	174	-	174
Ventura - VC County	Facilities	591804	-	-	-	-	244	50	294
Ventura - VC County	Signal	514032	2	-	-	-	-	-	2
Ventura - VC County	Signal	514034	8	-	-	-	13	-	21
Ventura - VC County	Signal	515134	-	-	-	-	6	-	6
Ventura - VC County	Signal	516130	-	-	-	-	14	-	14
Ventura - VC County	Signal	517130	-	-	-	-	294	-	294
Ventura - VC County	Structures	514035	3	-	-	-	-	-	3
Ventura - VC County	Structures	517122	-	-	-	-	39	-	39
Ventura - VC County	Structures	519120	-	-	-	-	1,505	-	1,505
Ventura - VC County	Structures	519130	-	-	-	-	1,008	-	1,008
Ventura - VC County	Structures	519140	-	-	-	-	87	-	87
Ventura - VC County	Structures	519160	-	-	-	-	1,527	-	1,527
Ventura - VC County	Structures	592120	-	-	-	-	1,104	-	1,104
Ventura - VC County	Track	514036	48	-	-	-	-	-	48
Ventura - VC County	Track	515137	-	-	-	-	20	-	20
Ventura - VC County	Track	517110	-	-	-	-	111	-	111

Numbers may not foot due to rounding.

Exhibit 7.6 FY2019-20 Rehabilitation Carryover Projects Detail (continued)

(000's)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Ventura - VC County	Track	518110	-	-	-	-	1,448	-	1,448
Ventura - VC County	Track	591711	-	-	-	-	39	-	39
Ventura - VC County	Track	592110	-	-	-	-	92	-	92
Ventura - VC County	Track	592111	-	-	-	-	227	-	227
Ventura - VC County	Track	592112	-	-	-	-	310	-	310
Systemwide	Communications	514040	1	0	0	0	-	-	2
Systemwide	Communications	514041	1	0	0	0	-	-	1
Systemwide	Communications	515152 ⁽¹⁾	-	15	9	11	42	-	77
Systemwide	Communications	517040(1)	133	56	31	40	20	-	280
Systemwide	Communications	519040	733	-	121	157	78	-	1,089
Systemwide	Communications	591707 ⁽¹⁾	5	2	1	2	1	-	11
Systemwide	Facilities	514042 ⁽¹⁾	20	7	4	5	-	-	37
Systemwide	Facilities	514044	16	2	1	1	-	-	20
Systemwide	Facilities	514045 ⁽¹⁾	2	1	0	1	-	-	4
Systemwide	Facilities	514048	1	-	-	-	-	-	1
Systemwide	Facilities	515145 ⁽¹⁾	2	1	0	1	0	2	6
Systemwide	Facilities	516069	-	-	-	4	3	-	7
Systemwide	Facilities	517030 ⁽¹⁾	29	12	7	9	4	-	61
Systemwide	Facilities	517051 ⁽¹⁾	32	13	8	10	5	-	68
Systemwide	Facilities	517052 ⁽¹⁾	749	312	175	149	75	-	1,460
Systemwide	Facilities	517054 ⁽¹⁾	452	189	106	137	69	-	953
Systemwide	Facilities	517055	381	159	89	116	58	253	1,056
Systemwide	Facilities	517056	-	-	-	-	-	1,267	1,267
Systemwide	Facilities	519041	1,030	166	197	256	128	-	1,777
Systemwide	Facilities	519060	449	110	92	120	60	-	830
Systemwide	Facilities	519061	80	-	13	17	9	-	119
Systemwide	Facilities	519062	428	179	100	130	65	-	902
Systemwide	Facilities	519064	270	130	54	86	54	-	594
Systemwide	Facilities	519760	285	119	66	86	43	-	599
Systemwide	Facilities	591705 ⁽¹⁾	41	17	9	12	6	-	86
Systemwide	IT	514046	20	16	10	11	-	17	73
Systemwide	IT	514047	24	10	6	7	-	-	47
Systemwide	IT	514049	2	1	0	16	0	-	19
Systemwide	IT	519070	117	49	27	36	18	-	247
Systemwide	IT	519091	94	39	22	29	14	-	198

Numbers may not foot due to rounding.

Exhibit 7.6 FY2019-20 Rehabilitation Carryover Projects Detail (continued)

(000's)

SUBDIVISION	CATEGORY	PROJECT	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL CARRYOVER
Systemwide	IT	519092	51	-	8	11	5	-	75
Systemwide	IT	519093	661	-	109	142	71	-	983
Systemwide	Rolling Stock	514043 ⁽¹⁾	2	1	-	1	-	-	4
Systemwide	Rolling Stock	515147 ⁽¹⁾	0	0	0	0	1	-	2
Systemwide	Rolling Stock	515148 ⁽¹⁾	30	7	-	-	-	-	37
Systemwide	Rolling Stock	515151 ⁽¹⁾	6	65	69	112	45	228	526
Systemwide	Rolling Stock	517050 ⁽¹⁾	340	142	80	103	52	-	716
Systemwide	Rolling Stock	518050 ⁽¹⁾	6,734	2,807	1,574	1,959	979	25,818	39,871
Systemwide	Rolling Stock	519050	12,743	749	2,225	2,887	1,443	-	20,048
Systemwide	Rolling Stock	519051	517	216	121	157	78	-	1,089
Systemwide	Rolling Stock	519052	272	113	63	82	41	-	572
Systemwide	Rolling Stock	519053	523	218	122	159	79	-	1,101
Systemwide	Rolling Stock	519054	313	130	73	95	47	-	659
Systemwide	Rolling Stock	519055	1,640	684	383	497	249	-	3,452
Systemwide	Rolling Stock	591709 ⁽¹⁾	87	36	20	26	13	-	184
Systemwide	Signage	514001	17	-	-	-	-	-	17
Systemwide	Signal	514055	3	1	1	1	-	-	5
Systemwide	Signal	519031	753	-	124	161	81	-	1,119
Systemwide	Signal	519032	398	-	66	85	43	-	592
Systemwide	Structures	592221	1	-	-	-	-	-	1
Systemwide	Track	514056 ⁽¹⁾	2	1	-	-	-	-	3
Systemwide	Track	514057 ⁽¹⁾	54	23	13	16	-	-	106
Systemwide	Track	514065 ⁽¹⁾	10	4	2	3	-	-	19
Systemwide	Track	515154 ⁽¹⁾	-	4	2	3	10	-	19
Systemwide	Track	515155 ⁽¹⁾	3	1	1	1	-	-	6
Systemwide	Track	519010	1,029	195	202	262	131	-	1,819
Systemwide	Track	519011	341	142	80	103	52	-	718
Systemwide	Track	519012	500	-	82	107	53	-	743
Systemwide	Track	519090	553	231	129	168	84	-	1,165
Systemwide	Vehicle	514058	3	-	-	-	-	-	3
Systemwide	Vehicle	514059	2	1	-	1	-	-	4
Systemwide	Vehicle	519063	1,084	129	200	259	130	-	1,802
Systemwide	Vehicle	591706 ⁽¹⁾	179	75	42	54	27	-	378
Grand Total			70,685	43,232	13,472	17,599	14,317	58,016	217,321

Numbers may not foot due to rounding.

NOTE:

(1) Projects part of the ROTEM Settlement

Exhibit 7.7 FY2019-20 Rehabilitation New Authority Projects Detail

(000's)

PROJECT DESCRIPTION	SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
ATCS/PTC/CIS/Backhaul Rehabilitation Orange	Orange	Communications	-	602	-	-	-	-	602
Orange County - Structures Rehabilitation	Orange	Structures	-	2,380	-	-	-	-	2,380
Orange/Olive Subdivision Track Rehabilitation	Orange	Track	-	7,230	-	-	-	-	7,230
ATCS/PTC/CIS/Backhaul Rehabilitation River	River	Communications	118	49	28	36	18	-	249
ATCS/PTC/CIS/Backhaul Rehabilitation San Gabriel	San Gabriel	Communications	206	-	-	137	-	-	343
Grade Crossing Warning System Rehabilitation - LA/SB County	San Gabriel	Signals	2,729	-	-	1,819	-	-	4,548
San Gabriel Subdivision - Structures Rehabilitation	San Gabriel	Structures	1,388	-	-	925	-	-	2,313
San Gabriel Subdivision Track Rehabilitation	San Gabriel	Track	4,368	-	-	2,912	-	-	7,280
Signal System Rehabilitation - San Gabriel Subdivision LA/SB County	San Gabriel	Signals	847	-	-	565	-	-	1,411
ATCS/PTC/CIS/Backhaul Rehabilitation PVL	San Jacinto (PVL)	Communications	-	-	315	-	-	-	315
Facilities Rehabilitation	Systemwide	Facilities	1,470	613	344	446	223	-	3,095
Gen 1 HVAC Overhaul (Additional 40 Cars)	Systemwide	Rolling Stock	441	184	103	134	67	-	928
HVAC Overhaul for Forty (40) Rotem Passenger Cars Phase II	Systemwide	Rolling Stock	618	258	144	187	94	-	1,301
MOW Total Loss Vehicle Replacement	Systemwide	Non-Revenue Fleet	241	101	56	73	37	-	508
MOW Vehicle Replacement	Systemwide	Non-Revenue Fleet	1,254	523	293	380	190	-	2,640
Overhaul Current Specialized MOW Equipment; Phase 1	Systemwide	Non-Revenue Fleet	475	198	111	144	72	-	1,000
Overhaul Rotem Car Side Door Mechanisms & Components	Systemwide	Rolling Stock	295	123	69	89	45	-	621
Rail Grinding FY20	Systemwide	Track	465	194	109	141	70	-	979
Systemwide Lubrication Study & Implementation	Systemwide	Track	543	227	127	165	82	-	1,144
ATCS/PTC/CIS/Backhaul Rehabilitation Valley	Valley	Communications	348	-	-	-	-	-	348

Numbers may not foot due to rounding.

Exhibit 7.7 FY2019-20 Rehabilitation New Authority Projects Detail (continued)

(000's)

PROJECT DESCRIPTION	SUBDIVISION	CATEGORY	METRO	OCTA	RCTC	SBCTA	VCTC	OTHER	TOTAL
Grade Crossing Warning System Rehabilitation - Valley Subdivision	Valley	Signals	696	-	-	-	-	-	696
Pedestrian Gates at Stations	Valley	Signals	1,500	-	-	-	-	-	1,500
Signal System Rehabilitation - Valley Subdivision	Valley	Signals	1,610	-	-	-	-	-	1,610
Valley Subdivision Track Rehabilitation	Valley	Track	9,675	-	-	-	-	-	9,675
ATCS/PTC/CIS/Backhaul Rehabilitation Ventura (LA)	Ventura - LA County	Communications	381	-	-	-	-	-	381
Ventura Subdivision (LA) Track Rehabilitation	Ventura - LA County	Track	2,297	-	-	-	-	-	2,297
ATCS/PTC/CIS/Backhaul Rehabilitation Ventura	Ventura - VC County	Communications	-	-	-	-	189	-	189
Grade Crossing Warning System Rehabilitation - Ventura County	Ventura - VC County	Signals	-	-	-	-	2,022	-	2,022
Signal System Rehabilitation - Ventura County	Ventura - VC County	Signals	-	-	-	-	1,756	-	1,756
Ventura County - Structures Rehabilitation	Ventura - VC County	Structures	-	-	-	-	2,500	-	2,500
Ventura Subdivision (VC) Track Rehabilitation	Ventura - VC County	Track	-	-	-	-	1,870	-	1,870
Total FY2019-20 Rehabilitation New Authority			31,964	12,680	1,698	8,153	9,235	-	63,731
Total Carryovers from Prior Years			70,685	43,232	13,472	17,599	14,317	58,016	217,321
TOTAL FY19-20 Rehabilitation Projects Including Carryovers			102,649	55,912	15,170	25,752	23,552	58,016	281,052

Numbers may not foot due to rounding.

Exhibit 7.8.1 Capital Program Summary and Cash Flow Detail – ALL MEMBER AGENCIES

(000's)

CAPITAL PROGRAM	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 159,305	\$ 36,003	\$ 195,308
FY2019-20 New Authority	\$ 63,731	\$ 3,040	\$ 66,771
TOTALS	\$ 223,035	\$ 39,043	\$ 262,079
<i>Numbers may not foot due to rounding.</i>			

CAPITAL PROGRAM BUDGET SUMMARY ALL MEMBER AGENCIES CASH FLOW BY FISCAL YEAR

(000's)

BUDGET FISCAL YEAR	2019/20	2020/21	2021/22	2022/23	TOTAL
Carryover from prior years					
REHABILITATION	\$ 69,046	\$ 49,675	\$ 40,584	-	\$ 159,305
NEW CAPITAL	\$ 15,279	\$ 20,517	\$ 207	-	\$ 36,003
SUBTOTAL	\$ 84,325	\$ 70,192	\$ 40,791	-	\$ 195,308
FY2019-20 New Authority					
REHABILITATION	\$ 3,061	\$ 21,604	\$ 18,711	\$ 20,355	\$ 63,731
NEW CAPITAL	\$ 108	\$ 734	\$ 1,189	\$ 1,009	\$ 3,040
SUBTOTAL	\$ 3,169	\$ 22,338	\$ 19,900	\$ 21,364	\$ 66,771
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 87,493	\$ 92,530	\$ 60,692	\$ 21,364	\$ 262,079
<i>Numbers may not foot due to rounding.</i>					

Exhibit 7.8.2 Capital Program Summary and Cash Flow Detail – METRO

(000's)

CAPITAL PROGRAM	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 70,685	\$ 10,850	\$ 81,535
FY2019-20 New Authority	\$ 31,964	\$ 1,389	\$ 33,352
TOTALS	\$ 102,649	\$ 12,239	\$ 114,888

Numbers may not foot due to rounding.

CAPITAL PROGRAM BUDGET SUMMARY METRO CASH FLOW BY FISCAL YEAR

(000's)

BUDGET FISCAL YEAR	2019/20	2020/21	2021/22	2022/23	TOTAL
Carryover from prior years					
REHABILITATION	\$ 34,251	\$ 19,674	\$ 16,760	-	\$ 70,685
NEW CAPITAL	\$ 4,798	\$ 6,052	-	-	\$ 10,850
SUBTOTAL	\$ 39,049	\$ 25,726	\$ 16,760	-	\$ 81,535
FY2019-20 New Authority					
REHABILITATION	\$ 1,538	\$ 10,844	\$ 9,286	\$ 10,296	\$ 31,964
NEW CAPITAL	\$ 49	\$ 329	\$ 551	\$ 460	\$ 1,389
SUBTOTAL	\$ 1,587	\$ 11,173	\$ 9,837	\$ 10,756	\$ 33,352
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 40,636	\$ 36,899	\$ 26,596	\$ 10,756	\$ 114,888

Numbers may not foot due to rounding.

Exhibit 7.8.3 Capital Program Summary and Cash Flow Detail – OCTA

(000's)

CAPITAL PROGRAM	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	43,232	\$ 7,426	\$ 50,659
FY2019-20 New Authority	12,680	\$ 516	\$ 13,196
TOTALS	55,912	\$ 7,942	\$ 63,854

Numbers may not foot due to rounding.

CAPITAL PROGRAM BUDGET SUMMARY OCTA CASH FLOW BY FISCAL YEAR

(000's)

BUDGET FISCAL YEAR	2019/20	2020/21	2021/22	2022/23	TOTAL
Carryover from prior years					
REHABILITATION	15,412	\$ 15,695	\$ 12,125	-	\$ 43,232
NEW CAPITAL	3,430	\$ 3,926	\$ 70	-	\$ 7,426
SUBTOTAL	18,842	\$ 19,622	\$ 12,195	-	\$ 50,659
FY2019-20 New Authority					
REHABILITATION	609	\$ 4,316	\$ 3,763	\$ 3,992	\$ 12,680
NEW CAPITAL	17	\$ 115	\$ 214	\$ 170	\$ 516
SUBTOTAL	626	\$ 4,431	\$ 3,977	\$ 4,162	\$ 13,196
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	19,468	\$ 24,053	\$ 16,171	\$ 4,162	\$ 63,854

Numbers may not foot due to rounding.

Exhibit 7.8.4 Capital Program Summary and Cash Flow Detail – RCTC

(000's)

CAPITAL PROGRAM	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	13,471,624.00	\$ 4,285	\$ 17,756
FY2019-20 New Authority	1,698,260.51	\$ 502	\$ 2,200
TOTALS	15,169,884.51	\$ 4,786	\$ 19,956

Numbers may not foot due to rounding.

CAPITAL PROGRAM BUDGET SUMMARY RCTC CASH FLOW BY FISCAL YEAR

(000's)

BUDGET FISCAL YEAR	2019/20	2020/21	2021/22	2022/23	TOTAL
Carryover from prior years					
REHABILITATION	4,994,317.00	\$ 4,705	\$ 3,773	-	\$ 13,472
NEW CAPITAL	1,880,590.00	\$ 2,275	\$ 129	-	\$ 4,285
SUBTOTAL	6,874,907.00	\$ 6,979	\$ 3,902	-	\$ 17,756
FY2019-20 New Authority					
REHABILITATION	70,394.93	\$ 524	\$ 751	\$ 352	\$ 1,698
NEW CAPITAL	20,204.34	\$ 139	\$ 173	\$ 170	\$ 502
SUBTOTAL	90,599.27	\$ 663	\$ 924	\$ 522	\$ 2,200
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	6,965,506.27	\$ 7,642	\$ 4,826	\$ 522	\$ 19,956

Numbers may not foot due to rounding.

Exhibit 7.8.5 Capital Program Summary and Cash Flow Detail – SBCTA

(000's)

CAPITAL PROGRAM	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	17,599,076.00	\$ 8,682	\$ 26,281
FY2019-20 New Authority	8,153,245.04	\$ 446	\$ 8,599
TOTALS	25,752,321.04	\$ 9,128	\$ 34,881
<i>Numbers may not foot due to rounding.</i>			

CAPITAL PROGRAM BUDGET SUMMARY SBCTA CASH FLOW BY FISCAL YEAR

(000's)

BUDGET FISCAL YEAR	2019/20	2020/21	2021/22	2022/23	TOTAL
Carryover from prior years					
REHABILITATION	6,813,090.00	\$ 5,903	\$ 4,883	-	\$ 17,599
NEW CAPITAL	3,284,105.00	\$ 5,391	\$ 7	-	\$ 8,682
SUBTOTAL	10,097,195.00	\$ 11,294	\$ 4,890	-	\$ 26,281
FY2019-20 New Authority					
REHABILITATION	389,528.50	\$ 2,735	\$ 2,394	\$ 2,634	\$ 8,153
NEW CAPITAL	15,963.84	\$ 109	\$ 173	\$ 148	\$ 446
SUBTOTAL	405,492.34	\$ 2,844	\$ 2,568	\$ 2,783	\$ 8,599
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	10,502,687.34	\$ 14,138	\$ 7,458	\$ 2,783	\$ 34,881
<i>Numbers may not foot due to rounding.</i>					

Exhibit 7.8.6 Capital Program Summary and Cash Flow Detail – VCTC

(000's)

CAPITAL PROGRAM	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	14,316,904.00	\$ 4,760	\$ 19,077
FY2019-20 New Authority	9,235,334.52	\$ 188	\$ 9,423
TOTALS	23,552,238.52	\$ 4,947	\$ 28,500

Numbers may not foot due to rounding.

CAPITAL PROGRAM BUDGET SUMMARY VCTC CASH FLOW BY FISCAL YEAR

(000's)

BUDGET FISCAL YEAR	2019/20	2020/21	2021/22	2022/23	TOTAL
Carryover from prior years					
REHABILITATION	7,574,734.00	\$ 3,697	\$ 3,045	-	\$ 14,317
NEW CAPITAL	1,886,302.00	\$ 2,874	-	-	\$ 4,760
SUBTOTAL	9,461,036.00	\$ 6,571	\$ 3,045	-	\$ 19,077
FY2019-20 New Authority					
REHABILITATION	452,699.85	\$ 3,185	\$ 2,517	\$ 3,080	\$ 9,235
NEW CAPITAL	6,213.37	\$ 42	\$ 78	\$ 62	\$ 188
SUBTOTAL	458,913.22	\$ 3,227	\$ 2,595	\$ 3,142	\$ 9,423
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	9,919,949.22	\$ 9,798	\$ 5,640	\$ 3,142	\$ 28,500

Numbers may not foot due to rounding.

Exhibit 7.8.7 Capital Program Summary and Cash Flow Detail – OTHER FUNDING SOURCES

(000's)

CAPITAL PROGRAM	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 58,016	\$ 183,795	\$ 241,811
FY2019-20 New Authority	-	\$ 3,504	\$ 3,504
TOTALS	\$ 58,016	\$ 187,299	\$ 245,315

Numbers may not foot due to rounding.

CAPITAL PROGRAM BUDGET SUMMARY OTHER FUNDING SOURCES CASH FLOW BY FISCAL YEAR

(000's)

BUDGET FISCAL YEAR	2019/20	2020/21	2021/22	2022/23	TOTAL
Carryover from prior years					
REHABILITATION	\$ 26,001	\$ 22,433	\$ 9,582	-	\$ 58,016
NEW CAPITAL	\$ 92,863	\$ 36,830	\$ 54,101	-	\$ 183,795
SUBTOTAL	\$ 118,865	\$ 59,263	\$ 63,683	-	\$ 241,811
FY2019-20 New Authority					
REHABILITATION	-	-	-	-	-
NEW CAPITAL	\$ 35	\$ 175	\$ 2,243	\$ 1,051	\$ 3,504
SUBTOTAL	\$ 35	\$ 175	\$ 2,243	\$ 1,051	\$ 3,504
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 118,900	\$ 59,438	\$ 65,926	\$ 1,051	\$ 245,315

Numbers may not foot due to rounding.

**Exhibit 7.8.8 Capital Program Summary and Cash Flow Detail – GRAND TOTAL
OF ALL MEMBER AGENCIES & OTHER FUNDING SOURCES**

(000's)

CAPITAL PROGRAM	REHABILITATION PROJECTS	NEW CAPITAL PROJECTS	TOTAL
Carryover from Prior Years	\$ 217,321	\$ 219,798	\$ 437,119
FY2019-20 New Authority	\$ 63,731	\$ 6,544	\$ 70,275
TOTALS	\$ 281,052	\$ 226,342	\$ 507,394

Numbers may not foot due to rounding.

**CAPITAL PROGRAM BUDGET SUMMARY
CONSOLIDATED CASH FLOW BY FISCAL YEAR**

(000's)

BUDGET FISCAL YEAR	2019/20	2020/21	2021/22	2022/23	TOTAL
Carryover from prior years					
REHABILITATION	\$ 95,047	\$ 72,107	\$ 50,167	-	\$ 217,321
NEW CAPITAL	\$ 108,142	\$ 57,348	\$ 54,308	-	\$ 219,798
SUBTOTAL	\$ 203,190	\$ 129,455	\$ 104,475	-	\$ 437,119
FY2019-20 New Authority					
REHABILITATION	\$ 3,061	\$ 21,604	\$ 18,711	\$ 20,355	\$ 63,731
NEW CAPITAL	\$ 143	\$ 909	\$ 3,432	\$ 2,060	\$ 6,544
SUBTOTAL	\$ 3,204	\$ 22,513	\$ 22,143	\$ 22,415	\$ 70,275
TOTAL PROJECTED CASH FLOW BY FISCAL YEAR	\$ 206,393	\$ 151,968	\$ 126,617	\$ 22,415	\$ 507,394

Numbers may not foot due to rounding.



METROLINK.

SECTION 8

SCORE

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 8: Southern California Optimized Rail Expansion (SCORE) Budget

8.1 Introduction

The Southern California Optimized Rail Expansion (SCORE) Program was developed as a path to implement service growth that would fulfill goals laid out in the 2015 10-year Strategic Plan. Plans to achieve these goals were devised in conjunction with the guidance laid out in the 2018 California State Rail Plan. Recognizing Metrolink's place in the state's vision for an integrated statewide rail system, Metrolink successfully pursued grant funding from the Transit and Intercity Rail Capital Program (TIRCP) and was awarded an amount of \$875.7 million in April 2018 from the California State Transportation Agency (CalSTA) to implement the first phase of the SCORE Program.

SCRRA continues to seek local, state or federal funds to fund additional projects on the SCORE Program.

8.2 Program Budget

SCORE Phase 1 comprises of 17 capital improvement projects located throughout the system. The table below outlines the budget allocated for each SCORE project, some of which are combined to be consistent with the grant categories. The amounts shown are commitments from the TIRCP. On September 14, 2018, the Authority amended the FY2018-19 Capital Program Budget to reflect the entire \$875.7 million CalSTA grant.

Budgets for SCORE are treated separately in the document. All Capital items that are referred to without the SCORE designation are part of the SCRRA annual Capital Budget.

Line	SCORE Projects	TIRCP Funding (\$000's)
Ventura County Line	Simi Valley Double Track	\$ 67,501
	Chatsworth Station	25,158
	Burbank Junction Speed Improvements	0
	Signals Burbank – LA	8,219
San Bernardino Line	Marengo Siding Improvements	9,675
	El Monte Station Improvements	22,158
	Rancho Cucamonga Siding	46,581
Orange County / IE-OC Line	Improvements at Commerce Station and Fullerton Junction	132,043
	Signals in OC (Atwood-Orange)	1,060
	Irvine Station Improvements	61,387
	Signals in OC (Avery-Songs)	6,500
	Capacity Improvements South OC (Serra to Beach / County Line to Songs)	18,747
Systemwide Projects	Link US	355,521
	Orange County Maintenance Facility	58,340
	Various Systemwide Efforts (where budget is allocated) ¹	48,327
	SCORE Phase 1 Program Total	\$ 875,708

¹ Supplemental Fleet / Environmental Clearance of additional projects on BNSF Corridor / Network Integration Studies / Double Track Sylmar Station to CP Roxford

8.3 Projected Expenditures

Since the award in April 2018, there has been two allocations by the California Transportation Commission (CTC). On August 16, 2018, the CTC approved an allocation of \$6.5 million to the Authority from the CalSTA grant of \$875.7 million for delivering the SCORE program. These funds support preliminary engineering, preliminary environmental assessments, operations modeling project validation, and early program management support. On October 18, 2018, the CTC approved another SCORE Program allocation in the amount of \$91.2 million. The table below shows the life of project cost projections through FY2024.

	*System-wide	Ventura County Line	San Bernardino Line	Orange County / IE-OC / 91-PVL Lines	Total
FY2018-19	\$15.1M	\$3.0M	\$2.4M	\$8.2M	\$28.7M
FY2019-20	\$64.4M	\$12.1M	\$9.4M	\$32.9M	\$118.8M
FY2020-21	\$96.2M	\$20.2M	\$15.7M	\$46.8M	\$178.9M
FY2021-22	\$128.5M	\$30.3M	\$23.5M	\$70.3M	\$252.6M
FY2022-23	\$124.2M	\$30.3M	\$23.5M	\$70.3M	\$248.2M
FY2023-24	\$27.8M	\$5.0M	\$3.9M	\$11.7M	\$48.5M
Total	\$456.2M	\$100.9M	\$78.4M	\$240.2M	\$875.7M

*System-wide Projects include LinkUS, OCMF, Fleet Rehab, and Integration Studies

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METROLINK.

SECTION 9

GENERAL AND ADMINISTRATIVE BUDGET

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 9: General and Administrative Budget

9.1 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 FY2019-20, the SCRRA G&A budget, using the compilation of costs as described above, is \$26.9 million or an increase of \$2.8 million, or 11.5% over the FY2018-19 Budget. \$1.2 million of this increase is the result of an increase in the Fringe Benefit elements in G&A for FY2019-20. The balance of the increase is primarily as a result of the new method of developing the Indirect Cost Allocations which were significantly changed. *Exhibit 9.1* identifies the key elements of this budget by expenditure type.

9.2 Indirect Cost Allocation Plan (ICAP)

Grantors fund a significant portion of SCRRA's business modes. Indirect costs have historically been charged to projects using direct labor costs as the allocation base. The business mode specific allocation percentages are called indirect cost rates. SCRRA has submitted and received approval for its Indirect Cost Allocation Plans for FY2011-12, FY2012-13, FY2013-14 and FY2014-15. The final rates from FY2014-15 have been approved by the Federal Transit Administration (FTA) for use in FY2015-16 through FY2018-19. The ICAP plan for FY2019-20 based on FY2017-18 actual costs has been submitted to the FTA for review and approval.

The FY2019-20 Plan contains indirect cost rates for each business mode, as indicated on *Exhibit 9.2*. SCRRA further divides costs within G&A expenses into three distinct cost collector pools.

9.2.1 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 Human Resources, Budget and Financial Analysis, and General Accounting; certain financial services; the Internal Audit function; and the costs of operating and maintaining the Information Technology infrastructure.

9.2.2 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 by member agencies instead. Examples of costs recognized within this group include the costs of the Chief Executive Officer and legislative advocacy.

9.2.3 Pool Three

The third grouping of expenses represents project category overhead costs associated with specific business modes that cannot be readily allocated to specific direct projects. Examples would be costs associated with Program Management staff who could be supporting 200 or more projects.

9.3 Allocation of Indirect Costs

A double-step down allocation methodology is used to allocate the allowable costs of the central services departments to benefiting cost centers using various metrics (labor dollars, headcount, number of transactions, amount of leased space, etc.) as the allocation base. This methodology recognizes the cross support provided between central service departments. The allocation steps are:

1. Allowable costs from central service departments are allocated to all departments and divisions including other central service departments. All operating costs recorded in the central service departments 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. Once allocated to receiving cost centers, the expenses are allocated to the project overhead pools as a function of actual labor charged to project category by each receiving cost center.

3. The G&A expenses added to the general project category overhead costs are then allocated to specific projects in proportion to the actual direct labor costs within each project category.
4. For the remaining G&A expenses ineligible for federal reimbursement, allocation is made to the operating budget.

9.4 Organizational Summary

Under the leadership of the Chief Executive Officer; Chief of Staff; Chief Financial Officer; Chief Human Resources; Chief Marketing & Communications Officer; Chief Operating Officer; Chief Program Delivery; Chief Safety, Security & Compliance Officer; Chief Strategy Officer, SCRRA manages 280 full-time equivalent (FTE) headcounts.

AGENCY FTE HEADCOUNT FY2019-20

REPORTING GROUP	FTE's
Office of the CEO	31
Finance	41
Human Resources	13
Internal Audit	4
Legal	4
Marketing & Communications	22
Operations Office	90
Program Delivery	28
Safety, Security & Compliance	14
Strategy	33
Total	280

Office of the CEO includes the Office of the CEO, Fare Collection Services, Customer Relations, and Customer Experience.

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

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

Human Resources includes Office of the Chief, Human Resources, Human Resources, and Administrative Services.

Finance includes Office of the Chief Financial Officer, Finance, Information Technology and Grants Funding & Reporting.

Safety, Security & Compliance includes Office of the Chief, System Safety, Security & Compliance Officer, System Safety, and Compliance.

Marketing & Communications includes Office of the Chief, Marketing & Communications Officer, Sales & Marketing, Public Affairs, and Digital Communications.

Strategic Planning includes Office of the Chief, Strategy Officer, Government & Community Relations, Planning & Development, Purchasing, Contracts & Contracts Compliance and Materials Management & Warehousing.

Program Delivery includes Office of the Chief, Program Delivery, Public Projects, Capital Construction & Rehabilitation, Program Management, Engineering & Construction, Business Operations, and Standards & Design.

Operations group includes the Office of the Chief Operating Officer, Operations Administration, Positive Train Control (PTC), Dispatching, Facilities & Fleet Maintenance, 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, and rail corridor crossings and encroachment.

Exhibit 8.3 identifies the classification titles in the approved budgeted cost centers for a total of 280 FTE headcount. Total Authority labor and fringe costs are allocated across the business modes.

9.5 Exhibits

Exhibit 9.1: FY2019-20 G&A Expenses identifies the individual cost components included in the general and administrative cost grouping.

Exhibit 9.2: FY2019-20 ICAP Cost Calculations illustrates the SCRRA business modes and the cost allocations that support the FY2019-20 ICAP rates.

Exhibit 9.3: FY2019-20 Roster of Positions provides a roster of FY2019-20 FTE headcount identified by specific positions within each Executive Office and Department.

Exhibit 9.1 FY2019-20 G&A Expenses

(000's)	EXPENDITURE DESCRIPTION	FY2018-19 BUDGET	FISCAL YEAR 2019-20			FY2019-20 BUDGET VS. FY2018-19 BUDGET	
			FEDERALLY ELIGIBLE	LOCAL FUNDING	TOTAL BUDGET	VARIANCE	%
Agency Costs							
	Auditing and Accounting			-	-	-	N/A
	Consultants	65		-	-	(65)	(100.0%)
	Recruitment Services	175	175	-	175	-	-
	Medical Examinations	4	5	-	5	1	21.4%
	Computer Programming/Data Processing	135		-	-	(135)	(100.0%)
	Office Equip Maint & Repair	3	3	-	3	-	-
	Document Management & Storage	55	57	-	57	2	3.0%
	In-House Training Services	330	273	-	273	(57)	(17.3%)
	Bank Service Charges	30	30	-	30	-	-
	Vehicle Maintenance & Repairs		140	-	140	140	N/A
	Gasoline Autos & Trucks		97	-	97	97	N/A
	Materials & Supplies	130	133	1	134	4	3.4%
	Office Equipment	10	10	-	10	-	-
	Computer Software	1	16	-	16	15	1,460.0%
	Printing & Reproduction	13	9	3	12	(1)	(7.9%)
	Claims Administration Fees	3	13	-	13	10	333.3%
	Professional Memberships	99	175	50	224	126	127.1%
	Subscriptions & Reference Materials	12	16	1	17	5	45.8%
	Meeting Expenses	29	23	7	30	1	4.5%
	Registration Fees	39	15	25	40	1	1.7%
	Transportation	76	25	55	80	4	5.4%
	Meals & Entertainment	18	8	8	16	(1)	(7.7%)
	Lodging	78	20	57	77	(2)	(2.3%)
	Mileage/Parking	59	56	4	60	1	1.5%
	Misc Expenses	3	4	-	4	0	8.8%
	Event Marketing	5	-	5	5	-	-
	Legal & Meeting Notices	85	47	13	60	(25)	(29.4%)
	Postage & Messenger	74	72	-	72	(1)	(2.0%)
	Other Misc Expense	60	12	8	20	(40)	(66.8%)
	Total Agency Costs	1,590	1,434	235	1,668	78	4.9%
Staff Labor							
	SCRRR Wages & Salaries	9,166	8,318	928	9,246	80	0.9%
	Wages Interns	250	250	-	250	-	0.0%
	Wages Job Core / Grads on Track	250	250	-	250	-	0.0%
	Merit Increase		250	28	277	277	N/A
	Allocated Fringe Benefits	3,244	2,742	306	3,048	(196)	(6.1%)
	OPEB - GASB45	1,625	-	2,882	2,882	1,257	77.4%
	Total Staff Labor	14,536	11,809	4,144	15,954	1,418	9.8%
Professional Services							
	Legal Services		-	-	-	-	-
	Auditing & Accounting	830	867	-	867	37	4.5%
	Consultants	1,678	1,626	101	1,726	48	2.9%
	Lobby Services	480	-	480	480	-	0.0%
	Service Contract	3	4	-	4	0	2.9%
	Total Professional Services	2,991	2,496	581	3,077	86	2.9%
MIS							
	Consultants	1,598	1,598	-	1,598	-	0.0%
	Computer S/W / H/W Maintenance	625	760	-	760	135	21.6%
	Office Equip Maint & Repair	138	138	-	138	-	0.0%
	Document Management & Storage	50	50	-	50	-	0.0%
	Materials & Supplies	62	62	-	62	-	0.0%
	Office Equipment	75	75	-	75	-	0.0%
	Computer H/W	515	793	-	793	278	54.0%
	Computer S/W	546	766	-	766	220	40.3%
	License & Registration Fees	1	-	-	-	(1)	(100.0%)
	Total MIS	3,609	4,241	-	4,241	632	17.5%
Employee Recognition							
	Bonus Pay	150	-	160	160	10	6.7%
	Total Employee Recognition	150	-	160	160	10	6.7%
Utilities/Leases							
	Office Space Rental	46	654	-	654	608	1,317.7%
	WG Lease Operating Expense	784	884	-	884	100	12.8%
	Total Utilities/Leases	830	1,598	0	1,598	768	92.5%
Agency Vehicles							
	GASOLINE AUTOS & TRUCKS	97		-	-	(97)	(100.0%)
	VEHICLE MAINTENANCE & REPAIRS	138		-	-	(138)	(100.0%)
	Total Agency Vehicles	234	-	-	-	(234)	(100.0%)
Board Related Items							
	Board Travel/Meeting Expenses	16	-	16	16	0	2.6%
	Board Travel	15	-	22	22	6	40.5%
	Board Per Diem	70	-	70	70	-	0.0%
	Board Development Program	54	-	49	49	(5)	(9.3%)
	Total Board Related Items	154	-	156	156	2	1.0%
Total General & Administrative Expenses		24,095	21,578	5,276	26,854	2,759	11.5%

Numbers may not foot due to rounding.

Exhibit 9.2 FY2019-20 ICAP Cost Calculations

General & Administrative Expenses (000's)	FY2019-20
Federally Eligible G&A	21,578
Non-Federal Eligible G&A	<u>5,276</u>
Total G&A Expenses	26,854

Tier 1 Cost Distribution	Operating			Capital				Recollectable	Grand Total
	Train Operations	MOW	Subtotal Operating	New Capital	Equipment Procurement	Rehabilitation & Renovation	Subtotal Capital		
SCRRA Labor Distribution (%)	71.0%	18.0%	89.0%	1.0%	2.0%	5.0%	8.0%	3.0%	100.0%
Federally Eligible G&A Allocation (Proj# 000000)	15,320	3,884	19,205	216	432	1,079	1,726	647	21,578
Non-Federal Eligible Labor Distribution (%)	100.0%	0.0%	100.0%						100.0%
Non-Federal Eligible G&A Allocation (Proj# 000002)	5,276	-	5,276						5,276
Total G&A Expense Allocation	20,596	3,884	24,480	216	432	1,079	1,726	647	26,854

Numbers may not foot due to rounding.

Tier 2 Allocation and Calculation of Direct Rates

Collector Pool Expenses									
Salaries & Wages	2,196	379	2,575	195	114	452	762	219	3,556
Fringe Benefits	1,209	210	1,418	63	37	145	244	70	1,733
Other Expenses	11,575	107	11,682	502	2,822	4,754	8,078	2,081	21,840
Subtotal - Indirect Expenses	14,980	696	15,676	760	2,973	5,351	9,083	2,370	27,129
G&A Expense Allocation	20,596	3,884	24,480	216	432	1,079	1,726	647	26,854
Total Indirect and Allocable Expenses	35,576	4,580	40,156	976	3,404	6,430	10,810	3,018	53,983
Direct Expenses									
Salaries & Wages	10,555	3,135	13,691	426	388	1,060	1,873	548	16,112
Fringe Benefits	5,798	1,736	7,534	137	124	339	600	176	8,309
Other Expenses	145,929	37,457	183,386	14,805	88,026	90,279	193,110	16,259	392,755
Total Direct Expenses	162,283	42,328	204,611	15,368	88,538	91,678	195,584	16,982	417,177
Grand Total	197,859	46,908	244,767	16,343	91,942	98,108	206,393	20,000	471,160

Total Indirect and Allocable Expenses as % of Direct Labor	337%	146%	293%	229%	878%	607%	577%	551%	335%
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Numbers may not foot due to rounding.

Exhibit 9.3 FY2019-20 Roster of Positions

BUSINESS UNIT	COST CENTER	COST CENTER DESCRIPTION	POSITION TITLE	TOTAL	
Office of the CEO	3300	Customer Relations	Communications Coordinator	2	
			Customer Relations Manager	1	
			Customer Relations Representative I	8	
			Customer Relations Representative II	1	
			Senior Customer Relations Representative	5	
			Senior Manager, Customer Relations	1	
			Supervisor, Customer Relations	4	
	Customer Relations Total				22
	3600	Fare Collection Services	Fare Collections Manager	2	
			Management Analyst I	1	
			Senior Manager, Fare Collections	1	
	Fare Collection Services Total				4
	1100	Office of the CEO	Assistant Board Secretary	1	
			Board Secretary/Chief, Board Relations	1	
			Chief Executive Officer	1	
			Chief of Staff	*	
			Executive Assistant II	*	
	Office of the CEO Total				3
	3050	Customer Experience	Director, Customer Experience	1	
			Customer Experience Total		
	Legal	1115	Office of the General Counsel	Associate General Counsel	1
				Business Analyst	1
General Counsel				1	
Office of the General Counsel Total				3	
2150	Risk Management	Senior Counsel, Risk Manager	1		
		Risk Management Total			
Internal Audit	1110	Internal Audit	Auditor II	1	
			Senior Auditor	2	
			Senior Manager, Audit	1	
Internal Audit Total				4	
Human Resources	1130	Human Resources	Human Resources Analyst I	4	
			Human Resources Analyst II	1	
			Human Resources Specialist	1	
			Manager II	1	
			Senior Human Resources Analyst	1	
			Senior Manager, Human Resources	1	
			Manager I, Human Resources	1	
	Human Resources Total				10
	4210	Administrative Services	Senior Administrative Assistant	2	
			Administrative Services Total		
1515	Office of the CHR	Chief, Human Resources	1		
		Office of the CHR Total			
Finance	4100	Finance	Accountant I	5	
			Accountant II	1	
			Accounts Payable Specialist I	1	
			Budget Analyst I	1	
			Budget Analyst II	2	
			Business Analyst II	1	
			Capital Budget Analyst	1	
			Finance Analyst I	1	
			Finance Specialist II	2	
			Financial Analyst II	3	
			Senior Accountant	2	
			Senior Manager, Finance	3	
			Senior Manager, General Accounting	1	
			Manager II, Finance	1	
			Finance Total		

* The position will use an approved vacant position and will not add or create an additional position beyond the total number of authorized budgeted positions.

Exhibit 9.3 FY2019-20 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	COST CENTER DESCRIPTION	POSITION TITLE	TOTAL				
Safety, Security & Compliance	4230	Information Technology	IT Architect II, Business Intelligence	2				
			IT Architect II, ERP	2				
			IT Systems Manager	1				
			Manager, Information Technology	1				
			Network Engineer I	1				
			Senior Director, Information Technology	1				
			Senior Manager, Information Technology	2				
			Senior Network Engineer	1				
			Web Services Manager	1				
			Information Technology Total			12		
	4125	Office of the CFO	Chief Financial Officer	1				
				Office of the CFO Total	1			
	4115	Grants Funding & Reporting	Assistant Director, Grants	1				
				Grants Funding & Reporting Administrator	1			
				Planning Manager II	1			
	Grants Funding & Reporting Total			3				
	2250	Compliance	Coordinator, Operations Compliance	1				
				Operations Compliance Officer	3			
				Operations Compliance Officer I	3			
				Operations Compliance Officer II	1			
				Senior Manager - Various	1			
				Compliance Total			9	
				2210	System Safety	Business Operations Administrator	1	
							Management Analyst I	*
							Senior Manager (Various – System Safety)	*
							Public Safety + Environment Manager	1
	Security Manager	1						
System Safety Total			3					
1505	Office of the CSSC	Director, System Safety & Security (Interim Chief, SSC)	1					
			Chief, System Safety, Security & Compliance Officer	1				
			Office of the CSSC Total	2				
Marketing & Communications	3200	Sales & Marketing	Administrative Assistant II	1				
			Coordinator, Marketing	1				
			Marketing Manager II	1				
			Senior Administrative Assistant	1				
			Senior Manager, Marketing & Digital	1				
			Social Media Specialist	1				
			Manager I, Corporate Partner Program	1				
			Senior Marketing Analyst	1				
	Sales & Marketing Total			8				
	3450	Public Affairs	Manager II	1				
				Public Affairs Manager	1			
				Public Affairs Specialist	1			
	Public Affairs Total			3				
	3405	Digital Communications	Communications Coordinator	6				
Manager II				1				
Supervisor, Customer Relations				2				
Digital Communications Total			9					
1500	Office of the CMCO	Planning Manager II	1					
			Interim Chief, Marketing & Communications	1				
			Chief, Marketing & Communications Officer	1				
			Executive Assistant II *	1				
Office of the CMCO			3					

* The position will use an approved vacant position and will not add or create an additional position beyond the total number of authorized budgeted positions.

Exhibit 9.3 FY2019-20 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	COST CENTER DESCRIPTION	POSITION TITLE	TOTAL	
Strategic Planning	1105	Government & Community Relations	Government Relations Manager	1	
			Public Affairs Manager	1	
			Director, Government Relations	1	
			Senior Manager Government & Regulatory Affairs*		
	Government & Community Relations Total				3
	1520	Office of the CSO		Chief, Strategy Officer	1
				Executive Assistant	1
				Management Analyst II	1
				Project Engineer II	1
	Office of the CSO Total				4
	1550	Planning & Development		Director, Planning & Development	1
				Planning Manager II	2
	Planning & Development Total				3
	4220	Purchasing, Contracts & Contract Compliance		Contract & Compliance Administrator	5
				Contract Specialist	1
				Director, Contracts, Procurement and Materials Management	1
				Principal Contract & Compliance Administrator	3
				Senior Administrative Assistant	1
				Senior Contract & Compliance Administrator	2
				Purchasing, Contracts & Contract Compliance Total	
	4223	Materials Management & Warehousing		Inventory Control Operator II	2
				Manager II	1
				Material Handler/Operator	4
Senior Inventory Control Operator				1	
Supervisor, Inventory Control				2	
Materials Management & Warehousing Total				10	
Program Delivery	1510	Office of the CPD	Executive Assistant I	1	
			Manager II, Transit Asset Management	1	
			Senior Manager, Business Operations	1	
			Director, Engineering & Construction (Interim Chief, PD)	1	
			Chief, Program & Delivery	1	
	Office of the CPD Total				5
	2880	Public Projects		Principal Engineer (Project Management)	1
				Railroad Civil Engineer II	5
				Senior Railroad Civil Engineer	1
	Public Projects Total				7
	2890	Capital Construction & Rehabilitation		Principal Engineer (Structures & Stations)	1
				Railroad Civil Engineer I	1
	Capital Construction & Rehabilitation Total				2
	4530	Program Management		Assistant Director, Program Management Office	1
				Program Management Analyst I	1
				Program Management Analyst II	2
Program Management Total				4	
2800	Engineering & Construction		Principal Engineer	1	
Engineering & Construction Total				1	
2815	Business Operations		Business Administrator	3	
			Business Analyst II	3	
Business Operations Total				6	

* The position will use an approved vacant position and will not add or create an additional position beyond the total number of authorized budgeted positions.

Exhibit 9.3 FY2019-20 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	COST CENTER DESCRIPTION	POSITION TITLE	TOTAL	
Operations	2860	Standards & Design	Coordinator, Right-Of-Way	1	
			Railroad Civil Engineer II	1	
			Senior Civil Design Specialist	1	
	Standards & Design Total				3
	2175	Office of the COO		Chief Operating Officer (Interim COO)	1
				Department Assistant	1
				Deputy Chief Operating Officer (Disp+OS)	1
				Executive Assistant II	1
				Deputy Chief Operating Officer (PTC & ENGR)	1
				(Interim COO)	1
	Office of the COO Total				5
	2300	Equipment		Assistant Dir, Maintenance of Equipment	1
				Department Assistant	1
				Director, Maintenance of Equipment	1
				Program Manager (Fleet)	1
				Project Engineer II	1
				Rolling Stock Engineering Manager II	1
				Senior Manager - Various	1
				Senior Mechanical Operations Officer	2
	Equipment Total				9
	2876	PTC Communications Systems		Director, Signals & Communications	1
				Manager II, Railroad Operations	1
				PTC Equipment Engineer I	2
				PTC Equipment Engineer II	1
				Senior Manager, Communications Systems	1
				Senior Railroad Systems Engineer	1
				Sr Manager, Train Control On-Board Systems	1
Supervisor, Communications Systems	2				
PTC Communications Systems Total				10	
2870	C&S Train Control Maintenance		Assistant Director, Signal Systems	1	
			Planning Manager	1	
			Supervisor, Signal Systems	2	
C&S Train Control Maintenance Total				4	
2215	Dispatching Services		Director, Dispatching Operations	1	
			Senior Manager, Dispatching	3	
			Supervisor, Dispatching Operations	6	
			Train Dispatcher	21	
Dispatching Services Total				31	
2877	PTC Technical Support Services		Assistant Director, PTC Technical Services	1	
			Configuration Management Manager	1	
			Senior Manager, Train Control Systems	2	
			Senior Train Control Systems Engineer	3	
			Train Control System Engineer I	1	
PTC Technical Support Services Total				8	
2310	Facilities & Fleet Maintenance		Coordinator, Facilities Maintenance	1	
			Coordinator, Fleet Maintenance	1	
			Customer Experience Administrator	1	
			Maintenance Technician	1	
			Maintenance Technician II	2	
			Senior Maintenance Technician	1	
			Senior Manager - Various	1	
			Sr Manager, Facilities & Fleet Maintenance	1	
			Supervisor, Facilities Maintenance	1	
Facilities & Fleet Maintenance Total				10	

* The position will use an approved vacant position and will not add or create an additional position beyond the total number of authorized budgeted positions.

Exhibit 9.3 FY2019-20 Roster of Positions (continued)

BUSINESS UNIT	COST CENTER	COST CENTER DESCRIPTION	POSITION TITLE	TOTAL
	2820	Track	Assistant Director, T+S Rehabilitation	1
			Coordinator, Right-Of-Way	1
			District T & S Maintenance Supervisor	1
			Senior Engineer, Track & Structures	1
		Track Total		4
	2200	Operations Administration	Business Administrator	1
			Operations Administrator	1
		Operations Administration Total		2
	2875	PTC, C&S Systems Management	Director, Train Control Systems	1
			Executive Assistant I	1
		PTC, C&S Systems Management Total		2
	2878	PTC Network Control Operations	Senior Manager, Train Control Systems	1
			Senior Train Control Systems Engineer	3
			Train Control Network Engineer	1
		PTC Network Control Operations Total		5
		Agency Total		280

* The position will use an approved vacant position and will not add or create an additional position beyond the total number of authorized budgeted positions.

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METROLINK.

SECTION 10

BUDGET FORECASTS

FY2020-2021

through

FY2023-2024

CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 10: Budget Forecasts FY2020-21 through FY2023-24

10.1 Background

At the request of the SCRRA Board, and in conjunction with the ongoing development of the strategic plan, SCRAA has created a four year forward budget forecast for the fiscal years 2021, 2022, 2023 and 2024. It is to be noted that the forecast years are provided to request approval and programming individual single year operating budgets and life of project capital budgets will be adopted prior to each fiscal year. The information provided below is as specified in the Multi-Year Budget Development Guides.

10.2 Basis for Forecast

- Estimates of expenses were constructed by using FY2019-20 as a base, then indexing that base to include contractual amounts where available, estimates on known activities planned for the future, and minor escalations of repetitive items based on the historic inflation that individual category of operational expense.
- No headcount increase was included. A 2% Cost of Living Adjustment (COLA) and Merit pool of 3% was included in each year.
- The new service included in the forecast were those proposed as of the FY2019-20 Budget process. This consists of the following:
 - Req#2008 – 91/Perris Valley Line – Add 1 peak-period, peak direction round trip (1 new South Perris <>LA round trip) beginning October 2021

10.3 Capital Program Forecast

- Estimates were constructed using the development of Metrolink Rehabilitation Plan (MRP) when submitting the FY2019-20 Budget amounts. These estimates included the Backlog and State of Good Repair (SOGR) needs.
- MRP recommends that the Backlog be drawn down over six years.

10.4 Exhibits

Exhibit 10.1: FY2020-21 through FY2023-24 Forecast New Service Requests

Exhibit 10.2: FY2020-21 Forecast of Operating Budget by Cost Component by Member Agency

Exhibit 10.3: FY2020-21 Forecast of Operating Budget by Cost Component by Line

Exhibit 10.4: FY2021-22 Forecast of Operating Budget by Cost Component by Member Agency

Exhibit 10.5: FY2021-22 Forecast of Operating Budget by Cost Component by Line

Exhibit 10.6: FY2022-23 Forecast of Operating Budget by Cost Component by Member Agency

Exhibit 10.7: FY2022-23 Forecast of Operating Budget by Cost Component by Line

Exhibit 10.8: FY2023-24 Forecast of Operating Budget by Cost Component by Member Agency

Exhibit 10.9: FY2023-24 Forecast of Operating Budget by Cost Component by Line

Exhibit 10.10: FY2020-24 Forecast of Rehabilitation Budget by Asset Category

Exhibit 10.11: FY2020-24 Forecast of Rehabilitation Budget by Member Agency

Exhibit 10.12: FY2020-24 Forecast of New Capital Budget by Asset Category

Exhibit 10.13: FY2020-24 Forecast of New Capital Budget by Member Agency

Exhibit 10.1 FY2020-21 Through FY2023-24 Forecast New Service Requests

FY2020-21 No new service

FY2021-22 REQ#2008 – 91/Perris Valley line – Add 1 peak-period, peak-direction round trip (1 new South Perris <> LA round trip) beginning October 2021

FY2022-23 No new service

FY2023-24 No new service

Exhibit 10.2 FY2020-21 Forecast of Operating Budget by Cost Component by Member Agency

(000's)	METRO	OCTA	RCTC	SBCTA	VCTC	Total
Operating Revenue						
Farebox Revenue	\$ 43,955	\$ 24,935	\$ 8,321	\$ 10,119	\$ 2,428	\$ 89,757
Special Event Trains	99	55	46	19	5	224
Fare Reduction Subsidy	756	-	-	534	-	1,290
Subtotal-Pro Forma FareBox	44,810	24,989	8,367	10,672	2,433	91,270
Dispatching	1,156	739	8	66	270	2,237
Other Revenues	123	54	28	36	17	257
MOW Revenues	7,927	2,692	690	1,600	493	13,401
Total Operating Revenue	54,015	28,474	9,092	12,373	3,212	107,166
Operating Expenses						
<u>Operations & Services</u>						
Train Operations	26,530	11,269	5,503	5,334	1,803	50,439
Equipment Maintenance	18,566	8,704	4,486	4,382	1,598	37,737
Fuel	11,259	6,191	2,394	2,288	648	22,780
Non-Scheduled Rolling Stock Repairs	83	38	16	18	5	160
Operating Facilities Maintenance	932	429	178	206	57	1,802
Other Operating Train Services	501	138	119	169	80	1,007
Special Trains	312	233	230	38	5	817
Rolling Stock Lease	109	46	26	33	17	230
Security - Sheriff	3,310	1,254	971	650	124	6,309
Security - Guards	1,247	453	391	276	262	2,628
Supplemental Additional Security	332	184	61	81	18	676
Public Safety Program	206	75	65	46	43	434
Passenger Relations	883	516	174	216	61	1,851
TVM Maintenance/Revenue Collection	3,645	1,854	1,406	1,087	512	8,503
Marketing	850	493	199	203	78	1,822
Media & External Communications	228	83	72	51	48	481
Utilities/Leases	1,304	474	409	289	273	2,748
Transfers to Other Operators	3,062	1,228	389	618	164	5,460
Amtrak Transfers	767	1,526	2	3	101	2,400
Station Maintenance	1,433	316	153	315	102	2,319
Rail Agreements	2,303	1,971	1,594	398	350	6,617
Subtotal Operations & Services	77,862	37,475	18,837	16,698	6,348	157,221
<u>Maintenance-of-Way</u>						
MoW - Line Segments	25,814	9,869	3,628	6,771	2,947	49,029
MoW - Extraordinary Maintenance	434	106	71	79	51	740
Subtotal Maintenance-of-Way	26,247	9,975	3,699	6,850	2,998	49,770
<u>Administration & Services</u>						
Ops Salaries & Fringe Benefits	7,288	2,658	2,279	1,614	1,523	15,362
Ops Non-Labor Expenses	4,591	1,997	994	1,032	442	9,055
Indirect Administrative Expenses	10,240	3,719	3,212	2,266	2,148	21,585
Ops Professional Services	1,917	696	601	424	402	4,041
Subtotal Admin & Services	24,036	9,070	7,086	5,338	4,515	50,044
Contingency	95	34	30	21	20	200
Total Operating Expenses	128,240	56,555	29,652	28,907	13,881	257,235
Insurance and Legal						
Liability/Property/Auto	6,346	2,919	1,210	1,400	388	12,263
Net Claims / SI	533	245	102	118	33	1,030
Claims Administration	668	307	127	147	41	1,290
Total Net Insurance and Legal	7,546	3,471	1,439	1,664	462	14,583
Total Expense	135,786	60,026	31,092	30,572	14,342	271,818
Member Subsidies						
Total Member Subsidies	\$ 81,771	\$ 31,553	\$ 21,999	\$ 18,199	\$ 11,130	\$ 164,652

Numbers may not foot due to rounding.

Exhibit 10.3 FY2020-21 Forecast of Operating Budget by Cost Component by Line

(000's)	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL	TOTAL
Operating Revenue									
Farebox Revenue	\$ 19,806	\$ 6,689	\$ 13,444	\$ 9,174	\$ 25,275	\$ 425	\$ 8,043	\$ 7,101	\$ 89,757
Special Event Trains	34	15	32	12	43	-	58	32	\$ 224
Fare Reduction Subsidy	1,290	-	-	-	-	-	-	-	1,290
Subtotal-Pro Forma FareBox	20,929	6,704	13,475	9,186	25,317	425	8,101	7,133	91,270
Dispatching	170	556	380	6	1,060	18	18	32	2,237
Other Revenues	57	36	41	33	46	1	34	10	257
MOW Revenues	3,601	1,581	4,087	308	1,719	193	1,155	755	13,401
Total Operating Revenue	24,757	8,877	17,983	9,533	28,143	634	9,308	7,930	107,166
Operating Expenses									
Operations & Services									
Train Operations	10,822	5,186	10,761	3,177	7,583	992	5,560	6,357	50,439
Equipment Maintenance	8,379	3,912	7,563	2,734	5,404	1,382	4,465	3,897	37,737
Fuel	4,592	1,971	4,804	1,354	4,156	957	2,791	2,154	22,780
Non-Scheduled Rolling Stock Repairs	38	14	34	11	25	5	19	13	160
Operating Facilities Maintenance	423	157	387	127	285	58	218	147	1,802
Other Operating Train Services	323	133	145	120	62	22	91	112	1,007
Special Trains	74	17	81	11	115	-	194	324	817
Rolling Stock Lease	50	35	37	32	39	-	31	7	230
Security - Sheriff	1,389	341	1,791	274	841	126	698	850	6,309
Security - Guards	383	437	475	394	202	72	298	368	2,628
Supplemental Additional Security	147	50	101	69	190	3	61	54	676
Public Safety Program	63	72	78	65	33	12	49	61	434
Passenger Relations	432	157	303	144	426	19	241	128	1,851
TVM Maintenance/Revenue Collection	1,577	1,194	1,385	821	884	361	1,204	1,077	8,503
Marketing	428	145	240	134	458	17	182	219	1,822
Media & External Communications	70	80	87	72	37	13	54	67	481
Utilities/Leases	401	457	496	412	212	75	311	385	2,748
Transfers to Other Operators	1,278	456	1,212	467	1,443	-	179	425	5,460
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	666	301	480	201	407	14	40	209	2,319
Rail Agreements	-	652	-	2,017	1,176	12	1,086	1,673	6,617
Subtotal Operations & Services	31,538	16,076	30,460	12,636	26,071	4,142	17,773	18,525	157,221
Maintenance-of-Way									
MoW - Line Segments	14,196	7,893	10,457	1,320	6,286	692	4,415	3,770	49,029
MoW - Extraordinary Maintenance	168	118	144	81	105	8	85	32	740
Subtotal Maintenance-of-Way	14,365	8,011	10,601	1,401	6,391	700	4,500	3,802	49,770
Administration & Services									
Ops Salaries & Fringe Benefits	2,250	2,544	2,781	2,293	1,195	419	1,739	2,142	15,362
Ops Non-Labor Expenses	1,902	955	1,820	783	1,362	225	1,042	966	9,055
Indirect Administrative Expenses	3,149	3,587	3,898	3,233	1,862	591	2,443	3,020	21,585
Ops Professional Services	590	672	730	605	311	111	457	565	4,041
Subtotal Admin & Services	7,890	7,758	9,229	6,915	4,530	1,346	5,682	6,693	50,044
Contingency	29	33	36	30	15	5	23	28	200
Total Operating Expenses	53,822	31,878	50,326	20,982	37,008	6,193	27,978	29,047	257,235
Insurance and Legal									
Liability/Property/Auto	2,881	1,072	2,631	862	1,937	395	1,487	998	12,263
Net Claims / SI	242	90	221	72	163	33	125	84	1,030
Claims Administration	303	113	277	91	204	42	156	105	1,290
PLPD Revenue	-	-	-	-	-	-	-	-	-
Total Net Insurance and Legal	3,426	1,274	3,129	1,025	2,304	470	1,768	1,186	14,583
Total Expense	57,248	33,153	53,456	22,008	39,311	6,663	29,746	30,234	271,818
Member Subsidies									
Total Member Subsidies	\$ 32,491	\$ 24,276	\$ 35,472	\$ 12,475	\$ 11,168	\$ 6,029	\$ 20,438	\$ 22,304	\$ 164,652

Numbers may not foot due to rounding

Exhibit 10.4 FY2021-22 Forecast of Operating Budget by Cost Component by Member Agency

(000's)	METRO	OCTA	RCTC	SBCTA	VCTC	Total
Operating Revenue						
Farebox Revenue	\$ 44,614	\$ 25,309	\$ 8,446	\$ 10,271	\$ 2,464	\$ 91,103
Special Event Trains	102	56	47	19	6	231
Fare Reduction Subsidy	309	-	-	218	-	527
Subtotal-Pro Forma FareBox	45,025	25,365	8,493	10,508	2,470	91,861
Dispatching	1,190	761	8	68	278	2,305
Other Revenues	125	55	28	36	17	262
MOW Revenues	8,165	2,772	710	1,648	508	13,803
Total Operating Revenue	54,505	28,953	9,240	12,260	3,272	108,230
Operating Expenses						
<u>Operations & Services</u>						
Train Operations	27,592	11,720	5,723	5,547	1,875	52,456
Equipment Maintenance	19,122	8,965	4,621	4,514	1,646	38,869
Fuel	11,007	6,053	2,340	2,237	633	22,270
Non-Scheduled Rolling Stock Repairs	83	38	16	18	5	160
Operating Facilities Maintenance	960	442	183	212	59	1,856
Other Operating Train Services	516	142	123	174	82	1,037
Special Trains	321	240	236	39	6	842
Rolling Stock Lease	-	-	-	-	-	-
Security - Sheriff	3,409	1,292	1,001	669	127	6,498
Security - Guards	1,284	466	403	284	269	2,707
Supplemental Additional Security	337	187	62	82	18	685
Public Safety Program	212	77	66	47	44	447
Passenger Relations	910	532	180	222	63	1,906
TVM Maintenance/Revenue Collection	3,754	1,909	1,449	1,119	527	8,759
Marketing	850	493	199	203	78	1,822
Media & External Communications	238	86	75	53	50	501
Utilities/Leases	1,330	483	417	294	279	2,803
Transfers to Other Operators	3,093	1,240	393	624	166	5,515
Amtrak Transfers	767	1,526	2	3	101	2,400
Station Maintenance	1,491	329	159	327	106	2,412
Rail Agreements	2,372	2,030	1,642	410	361	6,815
Subtotal Operations & Services	79,647	38,251	19,289	17,079	6,495	160,760
<u>Maintenance-of-Way</u>						
MoW - Line Segments	26,846	10,264	3,774	7,042	3,065	50,990
MoW - Extraordinary Maintenance	451	110	73	82	53	770
Subtotal Maintenance-of-Way	27,297	10,374	3,847	7,124	3,118	51,761
<u>Administration & Services</u>						
Ops Salaries & Fringe Benefits	7,652	2,791	2,393	1,695	1,599	16,131
Ops Non-Labor Expenses	4,728	2,057	1,024	1,063	455	9,327
Indirect Administrative Expenses	10,650	3,868	3,340	2,357	2,234	22,449
Ops Professional Services	1,975	717	619	437	414	4,163
Subtotal Admin & Services	25,005	9,433	7,377	5,553	4,702	52,069
<u>Contingency</u>	95	34	30	21	20	200
Total Operating Expenses	132,044	58,092	30,542	29,777	14,335	264,790
<u>Insurance and Legal</u>						
Liability/Property/Auto	6,536	3,006	1,247	1,442	400	12,631
Net Claims / SI	549	253	105	121	34	1,061
Claims Administration	688	316	131	152	42	1,329
Total Net Insurance and Legal	7,773	3,575	1,483	1,714	476	15,021
Total Expense	139,816	61,667	32,024	31,491	14,811	279,810
Member Subsidies						
Total Member Subsidies	\$ 85,311	\$ 32,714	\$ 22,784	\$ 19,231	\$ 11,539	\$ 171,580

Numbers may not foot due to rounding.

Exhibit 10.5 FY2021-22 Forecast of Operating Budget by Cost Component by Line

(000's)	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL	TOTAL
Operating Revenue									
Farebox Revenue	\$ 19,900	\$ 6,789	\$ 13,645	\$ 9,312	\$ 25,854	\$ 432	\$ 8,164	\$ 7,207	\$ 91,103
Special Event Trains	35	15	33	12	44	-	60	33	\$ 231
Fare Reduction Subsidy	527	-	-	-	-	-	-	-	\$ 527
Subtotal-Pro Forma FareBox	20,461	6,805	13,678	9,324	25,698	432	8,224	7,240	91,861
Dispatching	175	572	392	6	1,092	16	19	33	2,305
Other Revenues	58	37	41	34	47	1	34	10	262
MOW Revenues	3,709	1,629	4,210	318	1,771	199	1,190	778	13,803
Total Operating Revenue	24,404	9,042	18,321	9,681	28,608	647	9,466	8,061	108,230
Operating Expenses									
Operations & Services									
Train Operations	11,255	5,394	11,191	3,304	7,886	1,032	5,782	6,611	52,456
Equipment Maintenance	8,631	4,030	7,789	2,816	5,666	1,424	4,599	4,014	38,869
Fuel	4,490	1,927	4,897	1,323	4,062	936	2,729	2,106	22,270
Non-Scheduled Rolling Stock Repairs	38	14	34	11	25	5	19	13	160
Operating Facilities Maintenance	436	162	398	130	293	60	225	151	1,856
Other Operating Train Services	333	137	149	124	64	23	93	115	1,037
Special Trains	76	18	84	12	119	-	200	333	842
Rolling Stock Lease	-	-	-	-	-	-	-	-	-
Security - Sheriff	1,431	351	1,844	283	866	130	719	875	6,498
Security - Guards	395	460	489	406	208	74	306	379	2,707
Supplemental Additional Security	149	51	103	70	193	3	62	54	685
Public Safety Program	65	74	81	67	34	12	51	62	447
Passenger Relations	445	162	312	149	439	19	248	132	1,906
TVM Maintenance/Revenue Collection	1,625	1,230	1,427	845	911	372	1,240	1,109	8,759
Marketing	428	145	240	134	458	17	182	219	1,822
Media & External Communications	73	83	90	75	39	14	57	70	501
Utilities/Leases	409	466	506	420	216	77	317	392	2,803
Transfers to Other Operators	1,291	460	1,224	471	1,457	-	181	430	5,515
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	693	313	499	209	424	15	42	217	2,412
Rail Agreements	-	672	-	2,078	1,212	12	1,119	1,723	6,815
Subtotal Operations & Services	32,261	16,446	31,159	12,927	26,564	4,224	18,171	19,007	160,760
Maintenance-of-Way									
MoW - Line Segments	14,764	8,209	10,875	1,373	6,538	720	4,591	3,921	50,990
MoW - Extraordinary Maintenance	175	122	150	84	109	8	88	33	770
Subtotal Maintenance-of-Way	14,940	8,332	11,025	1,457	6,647	728	4,680	3,954	51,761
Administration & Services									
Ops Salaries & Fringe Benefits	2,362	2,871	2,920	2,408	1,255	440	1,826	2,249	16,131
Ops Non-Labor Expenses	1,959	983	1,875	807	1,403	232	1,073	995	9,327
Indirect Administrative Expenses	3,275	3,731	4,054	3,363	1,729	615	2,541	3,141	22,449
Ops Professional Services	607	692	752	624	321	114	471	582	4,163
Subtotal Admin & Services	8,203	8,077	9,601	7,201	4,707	1,401	5,912	6,966	52,069
Contingency	29	33	36	30	15	5	23	28	200
Total Operating Expenses	55,433	32,889	51,821	21,615	37,933	6,359	28,785	29,955	264,790
Insurance and Legal									
Liability/Property/Auto	2,967	1,104	2,710	888	1,995	407	1,532	1,028	12,631
Net Claims / SI	249	93	228	75	168	34	129	86	1,061
Claims Administration	312	116	285	93	210	43	161	108	1,329
PLPD Revenue	-	-	-	-	-	-	-	-	-
Total Net Insurance and Legal	3,528	1,312	3,223	1,056	2,373	484	1,821	1,222	15,021
Total Expense	58,962	34,201	55,044	22,671	40,306	6,843	30,607	31,177	279,810
Member Subsidies									
Total Member Subsidies	\$ 34,558	\$ 25,159	\$ 36,723	\$ 12,990	\$ 11,698	\$ 6,196	\$ 21,140	\$ 23,116	\$ 171,580

Numbers may not foot due to rounding

Exhibit 10.6: FY2022-23 Forecast of Operating Budget by Cost Component by Member Agency

(000's)	METRO	OCTA	RCTC	SBCTA	VCTC	Total
Operating Revenue						
Farebox Revenue	\$ 45,596	\$ 25,865	\$ 8,631	\$ 10,496	\$ 2,518	\$ 93,107
Special Event Trains	105	58	49	20	6	238
Fare Reduction Subsidy	-	-	-	-	-	-
Subtotal-Pro Forma FareBox	45,701	25,923	8,680	10,517	2,524	93,345
Dispatching	1,226	783	9	70	286	2,374
Other Revenues	128	56	29	37	17	267
MOW Revenues	8,410	2,856	732	1,697	523	14,217
Total Operating Revenue	55,464	29,619	9,449	12,320	3,350	110,203
Operating Expenses						
<u>Operations & Services</u>						
Train Operations	28,695	12,189	5,952	5,769	1,950	54,555
Equipment Maintenance	19,696	9,234	4,760	4,649	1,696	40,035
Fuel	10,755	5,914	2,286	2,186	619	21,760
Non-Scheduled Rolling Stock Repairs	84	38	16	18	5	162
Operating Facilities Maintenance	989	455	189	218	61	1,911
Other Operating Train Services	531	146	126	180	85	1,068
Special Trains	331	247	243	40	6	867
Rolling Stock Lease	-	-	-	-	-	-
Security - Sheriff	3,511	1,331	1,031	690	131	6,693
Security - Guards	1,323	480	415	293	277	2,788
Supplemental Additional Security	344	191	63	84	18	700
Public Safety Program	218	79	68	48	46	460
Passenger Relations	937	548	185	229	65	1,963
TVM Maintenance/Revenue Collection	3,867	1,967	1,492	1,153	543	9,021
Marketing	850	493	199	203	78	1,822
Media & External Communications	249	91	78	55	52	526
Utilities/Leases	1,370	498	430	303	287	2,888
Transfers to Other Operators	3,155	1,265	401	636	169	5,625
Amtrak Transfers	767	1,526	2	3	101	2,400
Station Maintenance	1,565	345	167	344	111	2,533
Rail Agreements	2,444	2,091	1,691	422	372	7,020
Subtotal Operations & Services	81,680	39,128	19,795	17,523	6,671	164,797
<u>Maintenance-of-Way</u>						
MoW - Line Segments	27,920	10,675	3,924	7,324	3,187	53,030
MoW - Extraordinary Maintenance	474	116	77	86	56	809
Subtotal Maintenance-of-Way	28,394	10,790	4,002	7,410	3,243	53,839
<u>Administration & Services</u>						
Ops Salaries & Fringe Benefits	8,035	2,930	2,513	1,780	1,679	16,937
Ops Non-Labor Expenses	4,870	2,118	1,054	1,095	469	9,607
Indirect Administrative Expenses	11,076	4,023	3,474	2,451	2,323	23,347
Ops Professional Services	2,034	739	638	450	427	4,288
Subtotal Admin & Services	26,015	9,810	7,679	5,777	4,898	54,178
<u>Contingency</u>	95	34	30	21	20	200
Total Operating Expenses	136,183	59,763	31,505	30,730	14,832	273,014
<u>Insurance and Legal</u>						
Liability/Property/Auto	6,732	3,097	1,284	1,485	412	13,010
Net Claims / SI	565	260	108	125	35	1,093
Claims Administration	701	323	134	155	43	1,355
Total Net Insurance and Legal	7,999	3,679	1,526	1,764	489	15,458
Total Expense	144,182	63,443	33,031	32,495	15,321	288,472
Member Subsidies						
Total Member Subsidies	\$ 88,718	\$ 33,824	\$ 23,581	\$ 20,174	\$ 11,971	\$ 178,269

Numbers may not foot due to rounding.

Exhibit 10.7: FY2022-23 Forecast of Operating Budget by Cost Component by Line

(000's)	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL	TOTAL
Operating Revenue									
Farebox Revenue	\$ 20,338	\$ 6,939	\$ 13,946	\$ 9,517	\$ 26,218	\$ 441	\$ 8,343	\$ 7,368	\$ 93,107
Special Event Trains	36	16	34	12	45	-	62	34	\$ 238
Fare Reduction Subsidy	-	-	-	-	-	-	-	-	-
Subtotal-Pro Forma FareBox	20,373	6,955	13,979	9,529	26,263	441	8,405	7,400	93,345
Dispatching	180	590	403	6	1,124	17	19	34	2,374
Other Revenues	59	37	42	34	48	1	35	10	267
MOW Revenues	3,821	1,678	4,336	327	1,824	205	1,225	801	14,217
Total Operating Revenue	24,433	9,259	18,761	9,897	29,260	663	9,685	8,245	110,203
Operating Expenses									
Operations & Services									
Train Operations	11,706	5,610	11,639	3,437	8,201	1,073	6,014	6,876	54,555
Equipment Maintenance	8,890	4,151	8,023	2,901	5,733	1,466	4,737	4,134	40,035
Fuel	4,387	1,883	4,589	1,293	3,989	915	2,666	2,058	21,760
Non-Scheduled Rolling Stock Repairs	38	14	35	11	26	5	20	13	162
Operating Facilities Maintenance	449	167	410	134	302	62	232	156	1,911
Other Operating Train Services	342	141	153	127	65	23	96	119	1,068
Special Trains	79	18	86	12	122	-	206	343	867
Rolling Stock Lease	-	-	-	-	-	-	-	-	-
Security - Sheriff	1,473	362	1,900	291	892	133	740	901	6,693
Security - Guards	407	463	504	418	215	76	316	390	2,788
Supplemental Additional Security	153	52	105	71	197	3	63	56	700
Public Safety Program	67	76	83	69	35	13	52	64	460
Passenger Relations	458	167	322	153	452	20	255	136	1,963
TVM Maintenance/Revenue Collection	1,673	1,267	1,470	871	938	383	1,277	1,142	9,021
Marketing	428	145	240	134	458	17	182	219	1,822
Media & External Communications	77	87	95	79	40	14	60	74	526
Utilities/Leases	421	480	521	433	222	79	327	404	2,888
Transfers to Other Operators	1,317	470	1,249	481	1,487	-	184	438	5,825
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	727	328	524	220	445	16	44	228	2,533
Rail Agreements	-	692	-	2,140	1,248	13	1,152	1,775	7,020
Subtotal Operations & Services	33,092	16,881	31,948	13,274	27,141	4,312	18,623	19,526	164,797
Maintenance-of-Way									
MoW - Line Segments	15,355	8,537	11,310	1,428	6,799	748	4,775	4,077	53,030
MoW - Extraordinary Maintenance	184	129	157	88	114	9	93	35	809
Subtotal Maintenance-of-Way	15,539	8,666	11,467	1,516	6,913	757	4,868	4,112	53,839
Administration & Services									
Ops Salaries & Fringe Benefits	2,480	2,805	3,066	2,528	1,317	462	1,917	2,361	16,937
Ops Non-Labor Expenses	2,018	1,013	1,931	831	1,445	239	1,106	1,025	9,607
Indirect Administrative Expenses	3,406	3,880	4,216	3,497	1,708	640	2,643	3,266	23,347
Ops Professional Services	626	713	774	642	330	117	485	600	4,288
Subtotal Admin & Services	8,530	8,410	9,988	7,499	4,890	1,458	6,151	7,252	54,178
Contingency	29	33	36	30	15	5	23	28	200
Total Operating Expenses	57,189	33,991	53,439	22,319	38,961	6,533	29,665	30,918	273,014
Insurance and Legal									
Liability/Property/Auto	3,056	1,137	2,792	915	2,055	419	1,578	1,058	13,010
Net Claims / SI	257	95	234	77	173	35	133	89	1,093
Claims Administration	318	118	291	95	214	44	164	110	1,355
PLPD Revenue	-	-	-	-	-	-	-	-	-
Total Net Insurance and Legal	3,631	1,351	3,317	1,087	2,442	498	1,874	1,258	15,458
Total Expense	60,820	35,341	56,756	23,406	41,403	7,031	31,539	32,176	288,472
Member Subsidies									
Total Member Subsidies	\$ 36,387	\$ 26,082	\$ 37,995	\$ 13,509	\$ 12,142	\$ 6,368	\$ 21,855	\$ 23,931	\$ 178,269

Numbers may not foot due to rounding

Exhibit 10.8: FY2023-24 Forecast of Operating Budget by Cost Component by Member Agency

(000's)	METRO	OCTA	RCTC	SBCTA	VCTC	Total
Operating Revenue						
Farebox Revenue	\$ 46,553	\$ 26,408	\$ 8,813	\$ 10,717	\$ 2,571	\$ 95,063
Special Event Trains	108	60	50	21	6	245
Fare Reduction Subsidy	-	-	-	-	-	-
Subtotal-Pro Forma FareBox	46,661	26,468	8,863	10,738	2,577	95,307
Dispatching	1,263	807	9	72	294	2,445
Other Revenues	130	58	30	38	18	273
MOW Revenues	8,662	2,941	754	1,748	539	14,644
Total Operating Revenue	56,716	30,274	9,655	12,595	3,428	112,669
Operating Expenses						
<u>Operations & Services</u>						
Train Operations	29,843	12,676	6,190	6,000	2,028	56,737
Equipment Maintenance	20,287	9,511	4,902	4,789	1,747	41,236
Fuel	10,503	5,776	2,233	2,134	604	21,250
Non-Scheduled Rolling Stock Repairs	84	39	16	19	5	163
Operating Facilities Maintenance	1,019	469	194	225	62	1,969
Other Operating Train Services	547	151	130	185	87	1,100
Special Trains	341	254	251	41	6	893
Rolling Stock Lease	-	-	-	-	-	-
Security - Sheriff	3,616	1,371	1,062	710	135	6,894
Security - Guards	1,362	495	427	302	286	2,872
Supplemental Additional Security	351	195	65	85	19	715
Public Safety Program	225	82	71	50	47	474
Passenger Relations	965	564	191	236	67	2,022
TVM Maintenance/Revenue Collection	3,983	2,026	1,537	1,188	559	9,292
Marketing	850	493	199	203	78	1,822
Media & External Communications	262	95	82	58	55	552
Utilities/Leases	1,411	512	443	312	296	2,974
Transfers to Other Operators	3,218	1,290	409	649	172	5,738
Amtrak Transfers	767	1,526	2	3	101	2,400
Station Maintenance	1,644	363	175	361	117	2,659
Rail Agreements	2,517	2,154	1,742	435	383	7,230
Subtotal Operations & Services	83,795	40,041	20,320	17,984	6,854	168,992
<u>Maintenance-of-Way</u>						
MoW - Line Segments	29,037	11,102	4,081	7,617	3,315	55,151
MoW - Extraordinary Maintenance	497	121	81	91	59	849
Subtotal Maintenance-of-Way	29,534	11,223	4,162	7,707	3,374	56,000
<u>Administration & Services</u>						
Ops Salaries & Fringe Benefits	8,436	3,077	2,639	1,869	1,763	17,784
Ops Non-Labor Expenses	5,016	2,182	1,086	1,128	483	9,895
Indirect Administrative Expenses	11,519	4,184	3,613	2,549	2,416	24,280
Ops Professional Services	2,095	761	657	464	439	4,416
Subtotal Admin & Services	27,066	10,203	7,994	6,010	5,101	56,376
<u>Contingency</u>	97	35	30	21	20	204
Total Operating Expenses	140,492	61,503	32,507	31,722	15,349	281,572
Insurance and Legal						
Liability/Property/Auto	6,934	3,190	1,323	1,529	424	13,400
Net Claims / SI	582	268	111	128	36	1,126
Claims Administration	715	329	136	158	44	1,382
Total Net Insurance and Legal	8,232	3,787	1,570	1,816	504	15,908
Total Expense	148,724	65,289	34,077	33,538	15,852	297,481
Member Subsidies						
Total Member Subsidies	\$ 92,007	\$ 35,015	\$ 24,422	\$ 20,943	\$ 12,424	\$ 184,812

Numbers may not foot due to rounding.

Exhibit 10.9: FY2023-24 Forecast of Operating Budget by Cost Component by Line

(000's)	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL	TOTAL
Operating Revenue									
Farebox Revenue	\$ 20,765	\$ 7,085	\$ 14,238	\$ 9,717	\$ 26,769	\$ 450	\$ 8,519	\$ 7,521	\$ 95,063
Special Event Trains	37	16	35	13	46	-	63	35	\$ 245
Fare Reduction Subsidy	-	-	-	-	-	-	-	-	-
Subtotal-Pro Forma FareBox	20,801	7,101	14,273	9,729	26,815	450	8,582	7,555	95,307
Dispatching	186	607	415	6	1,158	17	20	35	2,445
Other Revenues	61	38	43	35	49	1	36	10	273
MOW Revenues	3,935	1,728	4,466	337	1,879	211	1,262	825	14,644
Total Operating Revenue	24,983	9,474	19,198	10,108	29,902	679	9,900	8,426	112,669
Operating Expenses									
Operations & Services									
Train Operations	12,174	5,834	12,104	3,574	8,529	1,116	6,254	7,151	56,737
Equipment Maintenance	9,156	4,275	8,264	2,988	5,905	1,510	4,879	4,258	41,236
Fuel	4,284	1,838	4,482	1,263	3,876	893	2,604	2,010	21,250
Non-Scheduled Rolling Stock Repairs	38	14	35	11	26	5	20	13	163
Operating Facilities Maintenance	462	172	422	138	311	63	239	160	1,969
Other Operating Train Services	353	145	158	131	67	24	99	122	1,100
Special Trains	81	19	89	12	126	-	212	354	893
Rolling Stock Lease	-	-	-	-	-	-	-	-	-
Security - Sheriff	1,518	373	1,957	300	919	137	762	928	6,894
Security - Guards	419	477	519	430	221	79	325	402	2,872
Supplemental Additional Security	156	53	107	73	201	3	65	57	715
Public Safety Program	69	79	86	71	36	13	54	66	474
Passenger Relations	472	172	332	158	466	20	263	140	2,022
TVM Maintenance/Revenue Collection	1,724	1,305	1,514	897	966	395	1,316	1,176	9,292
Marketing	428	145	240	134	458	17	182	219	1,822
Media & External Communications	81	92	100	83	43	15	62	77	552
Utilities/Leases	434	494	537	446	229	81	337	416	2,974
Transfers to Other Operators	1,343	479	1,274	490	1,516	-	188	447	5,738
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	764	345	551	231	467	16	46	240	2,659
Rail Agreements	-	712	-	2,204	1,286	13	1,187	1,828	7,230
Subtotal Operations & Services	33,955	17,332	32,769	13,634	27,742	4,403	19,093	20,065	168,992
Maintenance-of-Way									
MoW - Line Segments	15,969	8,879	11,762	1,485	7,071	778	4,966	4,240	55,151
MoW - Extraordinary Maintenance	193	135	165	92	120	9	97	37	849
Subtotal Maintenance-of-Way	16,162	9,014	11,927	1,578	7,191	787	5,064	4,277	56,000
Administration & Services									
Ops Salaries & Fringe Benefits	2,604	2,945	3,219	2,655	1,383	486	2,013	2,479	17,784
Ops Non-Labor Expenses	2,078	1,043	1,989	856	1,488	246	1,139	1,055	9,895
Indirect Administrative Expenses	3,543	4,035	4,385	3,637	1,870	665	2,749	3,397	24,280
Ops Professional Services	644	734	798	662	340	121	500	618	4,416
Subtotal Admin & Services	8,869	8,758	10,391	7,809	5,081	1,517	6,400	7,549	56,376
Contingency	30	34	37	31	16	6	23	29	204
Total Operating Expenses	59,016	35,138	55,124	23,051	40,030	6,714	30,580	31,920	281,572
Insurance and Legal									
Liability/Property/Auto	3,148	1,171	2,875	942	2,117	432	1,625	1,090	13,400
Net Claims / SI	264	98	242	79	178	36	136	92	1,126
Claims Administration	325	121	297	97	218	45	168	112	1,382
PLPD Revenue	-	-	-	-	-	-	-	-	-
Total Net Insurance and Legal	3,737	1,390	3,414	1,118	2,513	513	1,929	1,294	15,908
Total Expense	62,753	36,528	58,537	24,170	42,543	7,226	32,510	33,214	297,481
Member Subsidies									
Total Member Subsidies	\$ 37,770	\$ 27,054	\$ 39,340	\$ 14,062	\$ 12,641	\$ 6,547	\$ 22,610	\$ 24,788	\$ 184,812

Numbers may not foot due to rounding

Exhibit 10.10: FY2020-24 Forecast of Rehabilitation Budget by Cost Asset Category

(000's)

Asset Category	FY20-21	FY21-22	FY22-23	FY23-24	TOTAL
Tracks	48,166	61,191	62,483	63,775	235,615
Structures	29,324	43,605	44,526	45,447	162,901
Systems	34,880	46,383	47,363	48,343	176,969
Vehicles	5,297	7,218	7,370	7,523	27,408
Rolling Stock	39,650	50,087	51,145	52,203	193,085
Facilities	3,818	4,580	4,677	4,774	17,848
Rehabilitation Total	161,135	213,064	217,564	222,064	813,826
<i>Numbers may not foot due to rounding.</i>					

Exhibit 10.11: FY2020-24 Forecast of Rehabilitation Budget by Member Agency

(000's)

MEMBER AGENCY	FY20-21	FY21-22	FY22-23	FY23-24	TOTAL
METRO	84,499	112,887	115,272	117,656	430,313
OCTA	30,553	38,664	39,481	40,298	148,996
RCTC	9,957	12,389	12,651	12,912	47,910
SBCTA	23,058	31,243	31,903	32,562	118,766
VCTC	13,068	17,880	18,258	18,635	67,841
Rehabilitation Total	161,135	213,064	217,564	222,064	813,826
<i>Numbers may not foot due to rounding.</i>					

Exhibit 10.12: FY2020-24 Forecast of New Capital Budget by Asset Category

(000's)

Asset Category	FY20-21	FY21-22	FY22-23	FY23-24	TOTAL
Tracks	-	31,710	-	10,388	42,098
Structures	-	-	-	-	
Systems	28	-	3,258	-	3,286
Vehicles	4,328	-	-	11,170	15,498
Rolling Stock	-	39,109	29,000	35,655	103,764
Facilities	26,342	73,990	54,300	-	154,632
Rehabilitation Total	30,698	144,809	86,558	57,213	319,278
<i>Numbers may not foot due to rounding.</i>					

Exhibit 10.13: FY2020-24 Forecast of New Capital Budget by Member Agency

(000's)

MEMBER AGENCY	FY20-21	FY21-22	FY22-23	FY23-24	TOTAL
METRO	14,581	85,432	41,115	32,630	173,759
OCTA	6,078	22,394	17,138	9,271	54,882
RCTC	3,407	12,554	9,608	5,198	30,767
SBCTA	4,420	16,286	12,464	6,743	39,914
VCTC	2,210	8,143	6,232	3,371	19,957
Rehabilitation Total	30,698	144,809	86,558	57,213	319,278
<i>Numbers may not foot due to rounding.</i>					

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METROLINK.

SECTION 11

APPENDIX

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

FY2019-20 BUDGET

SECTION 11: Appendix

11.1 Introduction

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

11.2 Revenue and Cost Allocation Methodology Detail

11.2.1 Formulae for Allocation to Members

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

Subsidies for each Member Agency are determined by each budgeting cycle based on a series of previously agreed allocations for each budget component line item. This includes both revenues and expenses. *Exhibit 11.1* provides detailed information on allocation percentages.

11.2.2 Formulae for Allocation to Lines

In addition to calculating allocations by Member Agency, the FY2019-20 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 11.2 provides detailed information on allocation percentages by line. This allocation is used to calculate operating expenses, revenues, subsidies and statistics by line.

11.2.3 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.

11.2.4 Allocation of Expenses

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

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

11.3 SCRRRA Policy on Debt

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

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

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

11.4 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. As of June 2017, all three leases have been terminated and/or defeased in substance. Accordingly, the related debt and investments have been excluded from SCRRA's financial statements.

11.4.1 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.

11.5 Description of GASB-34 Condition Assessment Ratings

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

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

As an alternative to conducting a system-wide assessment every three years, SCRRA has chosen to create a Metrolink Rehabilitation Plan (MRP) that thoroughly assesses the condition of SCRRA's key infrastructure assets. The MRP provides a "boots on the ground" approach to the scope and associated costs for both the current backlog and annual costs required to keep the railroad infrastructure at a State of Good Repair (SOGR).

The SCRRA Board adopted the SCRRA Transit Asset Management Plan (TAM Plan) in 2016 with the following overarching goal; "To ensure that a transit agency's assets are maintained and operated in a consistent, measurable SOGR. The TAM Plan provides guideposts by which an agency can track progress toward a mature, data driven asset management system. During 2018, Metrolink also introduced the MRP which is an element of the TAM Plan to better define infrastructure rehabilitation needs.

A team of SCRRA staff and consultants completed a yearlong comprehensive analysis to thoroughly assess the condition of SCRRA's infrastructure assets. These assessments were compiled and documented in the MRP. Based on these assessments within the MRP, the team was able to determine when these assets must be rehabilitated or replaced to support safe, reliable, high-quality and efficient services across SCRRA's rail network.

The MRP is the first report commissioned by SCRRA's engineering department to thoroughly assess the condition of SCRRA's key infrastructure components. This plan focuses on structures, tracks, systems and maintenance vehicles, rolling stock, and facilities. It provides recommendations for the rehabilitation efforts required to ensure safe and reliable operation. SCRRA's major infrastructure assets include: Bridges, Tunnels, Culverts, Track, Turnouts, Grade Crossings, Non-revenue Maintenance-of-Way (MOW) Vehicles, Signal Control Points, Intermediate Signals, Stations, Communication Sites with Positive Train Control (PTC) Antennas, Train Control Centers with Computer-aided Dispatch/PTC, Maintenance Facilities, Pomona Campus Facilities, Layover Yards, Locomotives, and Passenger Cars.

At the direction of SCRRA, infrastructure rehabilitation work was broadly organized into the following rehabilitation categories:

Backlog – This rehabilitation category covers a wide range of deferred rehabilitation on assets that are currently obsolete, exceed the age of useful life or a condition assessment indicates is due for rehabilitation. The risks for continuing to defer backlog work are significant and could result in failure.

State of Good Repair (SOGR) – This rehabilitation category indicates the recommended level of normalized annual rehabilitation budgeting required to maintain the railroad in a SOGR. An asset under SOGR is able to perform its manufacture design function, not pose an unacceptable identified safety risk, and its life cycle investment needs are met.

Special Projects – In addition to backlog and annual rehabilitation expenditures, there is also special rehabilitation projects that are needed in order to keep assets in SOGR. This includes future rolling stock procurements to replace current fleet, converting current locomotives to be low emissions compliant, major passenger car overhauls to extend the useful life, and large bridge and tunnel projects. These special projects are typically significant one-time expenditures.

The key findings of the MRP include the condition and cost estimates for existing infrastructure Backlog, recommended SOGR, and Special Projects. SCRRA's MRP outlines four general approaches to estimating backlogs and SOGR needs: (1) age, (2) condition, (3) performance, and (4) comprehensive assessment (age, condition, and performance).

Based on these four approaches, SCRRA was able to prioritize reinvestment and rehabilitation needs by tiers. Tier 1 as the highest priority, Tier 2, and Tier 3 as the lowest priority. Guideways and Bridges, Trackwork and Ballasts, PTC and Roadway Crossings have been designated as Tier 1 needs for the first draft of the MRP.

11.6 SCRRA Information

11.6.1 Date of Formation

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

11.6.2 Form of Government

SCRRA operates as a Joint Exercise of Powers Authority.

11.6.3 Purpose

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

11.6.4 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).

11.6.5 Counties Served

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

11.7 SCRRA Statistical Information

Population by County	Los Angeles County	10.3 million
	Orange County	3.2 million
	Riverside County	2.4 million
	San Bernardino County	2.2 million
	San Diego County	3.3 million
	Ventura County	<u>0.9 million</u>
	Total Population:	22.3 million
	California Population	39.8 million
% of State Population located within SCRRA Service Area		56%
Route Miles in System (Duplicated)	Los Angeles County	220
	Orange County	117
	Riverside County	79
	San Bernardino County	41
	Northern San Diego County	38
	Ventura County	<u>41</u>
	Total Miles:	536

Route Miles (Unduplicated)	Los Angeles County	184
	Orange County	67
	Riverside County	58
	San Bernardino County	40
	Northern San Diego County	19
	Ventura County	<u>41</u>
	Total Miles:	409

Available Equipment	Locomotives	52
	Cab Cars	57
	Coaches	144

Stations	Los Angeles County	27
	Orange County	12
	Riverside County	9
	San Bernardino	8
	Northern San Diego County	1
	Ventura County	<u>5</u>
Total Stations:	62	

Ticket Vending Machines	Installed TVMs	125
	Test TVMs	1
	Validators Installed	132
	Ticket Office Machines	4

Projected Number of Annual Auto Trips Removed in FY2018-19 9,286,927

**Percent of Freeway Traffic Removed on I-10 and SR 60 corridor
(peak hours)** up to 29%

Average Metrolink weekday Trip Length 34.0 miles

Percent of Metrolink Weekday Riders Formerly Driving Alone 86%

Percent of Riders with Los Angeles Union Station Destination 61%

Percent of Minority Riders by Line Corridor

San Bernardino Line 73%

Riverside Line 78%

Antelope Valley Line 67%

Ventura County Line 52%

Orange County Line 63%

Inland Empire-OC Line 61%

91 Line 69%

11.8 Glossary of Budget Terms

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

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

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

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

Capital Program: The program consists of two major components: Rehabilitation and New Capital projects.

Carryover: Estimated outstanding budgeted project amounts as of June 30th of each fiscal year that includes the unspent portion of projects assigned number and currently in process, and projects not yet assigned numbers but approved prior to June 30th.

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 collectables.

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.

Special Trains: Revenue trains not included in the regularly-scheduled timetable.

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.

11.9 Key Acronyms Associated with Southern California Regional Rail Authority

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

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

11.10 Exhibits

Exhibit 11.1: FY2019-20 Formulae Used to Allocate Expenses by Member Agency lists the allocation categories and the percentages allocated for each across Member Agencies in the FY2019-20 Budget.

Exhibit 11.2: FY2019-20 Formulae Used to Allocate Expenses by Line lists the allocation categories and the percentages allocated for each across the operating rail lines in the FY2019-20 Budget.

Exhibit 11.1 FY2019-20 Formulae Used to Allocate Expenses by Member Agency

Allocation	METRO	OCTA	RCTC	SBCTA	VCTC
Train Miles Lagged (FY18)	51.75%	23.80%	9.87%	11.41%	3.17%
FY20 Budget Train Miles (Base Services)	53.22%	20.89%	10.64%	11.36%	3.89%
FY20 Budget Train Miles (All Services)	51.22%	24.20%	10.13%	11.33%	3.12%
Revenue Moves Thru LAUS	63.57%	13.92%	5.67%	13.25%	3.59%
Unduplicated Stations (Incl Buena Park)	44.26%	19.67%	14.75%	13.11%	8.20%
TVMs (Excl TOMs & Flower St)	42.86%	21.80%	16.54%	12.78%	6.02%
Ridership Lagged (FY18)	48.66%	26.47%	9.72%	11.56%	3.59%
Current Ridership w/o IEOC (Transfer Payments)	56.35%	20.35%	6.27%	13.33%	3.70%
FY20 Fare Revenue	49.31%	27.24%	8.89%	11.93%	2.63%
75% Train Miles Lagged/25% Unduplicated Station	49.88%	22.77%	11.09%	11.84%	4.42%
S.B. Line Trn Miles	58.60%	0.00%	0.00%	41.40%	0.00%
SB Weekend	58.60%	0.00%	0.00%	41.40%	0.00%
S.B. Incremental (100% SBCTA)	0.00%	0.00%	0.00%	100.00%	0.00%
Ven Line Trn Miles	63.79%	1.72%	0.73%	1.03%	32.73%
A.V. Line Trn Miles (combine wk and we)	100.00%	0.00%	0.00%	0.00%	0.00%
Riv Line Trn Miles	60.32%	0.00%	23.40%	16.28%	0.00%
O.C. Line Trn Miles (combine wk and we)	30.24%	69.76%	0.00%	0.00%	0.00%
O.C. Line Trn Miles - Incremental (100% OCTA)	0.00%	100.00%	0.00%	0.00%	0.00%
OC MSEP	0.00%	100.00%	0.00%	0.00%	0.00%
IEOC Line Trn Miles	0.00%	62.51%	31.70%	5.79%	0.00%
91 Line Trn Miles	25.81%	24.73%	49.06%	0.40%	0.00%
Route Miles Dispatched	59.12%	17.76%	7.80%	9.80%	5.52%
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)	58.58%	14.30%	9.53%	10.66%	6.93%
Undup Route Miles (Excl S.D.)	47.44%	17.23%	14.88%	10.50%	9.95%
MTA Train Miles	100.00%	0.00%	0.00%	0.00%	0.00%
OCTA Train Miles	0.00%	100.00%	0.00%	0.00%	0.00%
RCTC Train Miles	0.00%	0.00%	100.00%	0.00%	0.00%
SBCTA Train Miles	0.00%	0.00%	0.00%	100.00%	0.00%
VCTC Train Miles	0.00%	0.00%	0.00%	0.00%	100.00%

Exhibit 11.2 FY2019-20 Formulae Used to Allocate Expenses by Line

Allocation	San Bernardino	Ventura	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL
Train Miles Lagged (FY18)	23.49%	8.74%	21.46%	7.03%	15.80%	3.22%	12.13%	8.14%
FY20 Budget Train Miles (Base Services)	22.13%	11.87%	20.58%	8.20%	15.32%	0.00%	12.12%	9.78%
FY20 Budget Train Miles (All Services)	23.06%	8.59%	20.76%	6.62%	17.40%	2.40%	11.57%	9.60%
Revenue Moves Thru LAUS	30.28%	12.31%	21.42%	8.62%	18.89%	0.00%	0.00%	8.48%
Unduplicated Stations (Incl Buena Park)	19.95%	16.67%	16.67%	9.00%	10.11%	4.10%	11.48%	12.02%
TVMs (Excl TOMs & Flower St)	18.55%	14.04%	16.29%	9.65%	10.40%	4.25%	14.16%	12.66%
Ridership Lagged (FY18)	23.21%	9.30%	15.45%	8.63%	23.03%	1.07%	11.71%	7.60%
Current Ridership w/o IEOC (Transfer Payme	28.59%	10.20%	17.90%	8.99%	26.18%	0.00%	0.00%	8.14%
FY20 Fare Revenue	21.81%	7.42%	14.96%	10.20%	28.14%	0.47%	9.06%	7.94%
75% Train Miles Lagged/25% Unduplicated S	22.60%	10.72%	20.26%	7.52%	14.38%	3.44%	11.96%	9.12%
S.B. Line Trn Miles	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SB Weekend	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S.B. Incremental (100% SBCTA)	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Ven Line Trn Miles	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
A.V. Line Trn Miles (combine wk and we)	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Riv Line Trn Miles	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
O.C. Line Trn Miles (combine wk and we)	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
O.C. Line Trn Miles - Incremental (100% OCT	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
OC MSEP	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
IEOC Line Trn Miles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
91 Line Trn Miles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Route Miles Dispatched	29.25%	15.30%	26.40%	2.07%	6.48%	5.66%	6.44%	8.40%
All-Share (MoW)	21.94%	15.10%	15.90%	13.84%	16.85%	0.00%	13.43%	2.94%
All-Share (MoW) w/o IEOC/MSEP	25.34%	17.44%	18.37%	15.98%	19.47%	0.00%	0.00%	3.40%
Route Miles Owned (MoW Storm Damage)	25.54%	18.66%	31.65%	0.65%	4.86%	4.80%	4.76%	9.08%
Undup Route Miles (Excl S.D.)	14.59%	16.62%	18.06%	14.98%	7.70%	2.74%	11.32%	13.99%
MTA Train Miles	24.36%	14.23%	38.68%	9.29%	8.70%	0.00%	0.00%	4.74%
OCTA Train Miles	0.00%	0.98%	0.00%	0.00%	51.17%	0.00%	36.28%	11.58%
RCTC Train Miles	0.00%	0.81%	0.00%	18.03%	0.00%	0.00%	36.10%	45.06%
SBCTA Train Miles	80.65%	1.08%	0.00%	11.75%	0.00%	0.00%	6.18%	0.34%
VCTC Train Miles	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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