ATTACHMENT B



SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY
900 Wilshire Blvd. Suite 1500 Los Angeles, CA 90017

metrolinktrains.com

April 30, 2018

To: Darrell Johnson, Chief Executive Officer, OCTA

Darren Kettle, Executive Officer, VCTC Anne Mayer, Executive Director, RCTC

Phil Washington, Chief Executive Officer, Metro Dr. Raymond Wolfe, Executive Director, SBCTA

From: Arthur T. Leahy, Chief Executive Officer, SCRRA

Subject: SCRRA Preliminary FY2018-19 Budget

On April 13, 2018, the SCRRA Board of Directors authorized the transmittal of the Preliminary FY2018-19 (FY19) Budget to its Member Agencies for their consideration and approval. After the respective Member Agency Boards have acted on the Preliminary FY19 Budget, staff will return to the SCRRA Board in June 2018 for adoption of the Final FY19 Budget.

Background

In keeping with a "back to basics" approach for the budget development, requests were compiled and submitted by all Cost Center managers and their respective Chief in a series of one-on-one meetings. The meetings provided for justification of each budget line item, taking into consideration such factors as:

- Historic levels of spending,
- · Current levels of spending,
- Known adjustments for the forthcoming year, and
- Overarching goal of fiscal sustainability and operational efficiency.

These meetings began in October 2017 and concluded by mid-January 2018.

The FY19 Preliminary Budget for Operations and Rehabilitation/New Capital was reviewed with the Technical Advisory Committee (TAC) Members throughout November and December of 2017. Capital Budgets were presented to and discussed with the Member Agencies, both jointly and individually, to review the requested Line Specific and All Share projects for FY19. This was followed by an overview of the FY19

Preliminary Budget for Operations and Rehabilitation/New Capital detailing the Total Request for Funding presented to Member Agency CEOs, mid-January and February.

On February 23, 2018, the FY19 Preliminary Budget was presented to the Board at its Budget Workshop. Upon conclusion of the Budget Workshop, staff further analyzed FY19 requests considering trending estimated actuals and workload capacity. At its April 13, 2018 meeting, the SCRRA Board approved the transmission of the attached FY19 Preliminary Budget to its Member Agencies for review and approval in compliance with the JPA requirements.

Priorities for the FY19 Preliminary Budget

- Metrolink is the best investment to reduce freeway traffic and clean the air in Southern California.
 - 82% of Metrolink riders can choose to drive.
 - Metrolink removes one to two lanes of parallel freeway traffic in each direction during peak hours on the 5, 10, 60, 91, 101 and 134 freeways.
 - Metrolink accomplishes this while requiring a subsidy only half of most other transit systems in Southern California.
- The FY19 Preliminary Budget reflects priorities consistent with the "back to basics" approach outlined in the Strategic Plan adopted in March 2016. The budget provides funding in alignment with the Authority's strategic goals and includes the following priorities for the upcoming fiscal year:
 - Continued emphasis on safe operations, with the implementation of intraoperative Positive Train Control (PTC) as the centerpiece of our efforts.
 - Improved reliability and on-time performance.
 - Targeted marketing program designed to increase farebox revenues and farebox recovery ratio.
 - Continued cost containment of expenditures.
 - Enhanced customer experience through:
 - Implementation of upgrades to the mobile ticketing application and a modernized ticket vending system
 - Rehabilitation of aging passenger cars
 - o Investment in existing assets to maintain a state-of-good repair by:
 - Funding critical rehabilitation projects
 - Improving processes to accelerate project delivery
 - Ongoing workforce development by training and engaging employees.

Overall Summary

The FY19 Preliminary Budget includes new budgetary authority of \$476.7M consisting of Operating Budget authority of \$251.4M, an increase of 3.4% as compared to the FY18 Adopted Budget. Capital Program authority totals \$225.3M: \$123.8m for Rehabilitation Projects, \$77.0M for Special Projects and \$24.5M for New Capital Projects. With the closing of the third quarter, carryover of Rehabilitation Projects and New Capital Projects are still being calculated. This information is expected to be available in the next couple of weeks.

FY19 Preliminary Operating Budget

(\$ millions)	FY18 Adopted Budget	FY19 Preliminary Budget	FY19 vs FY18
Revenues	\$100.6	\$100.8	\$0.2 0.2%
Expenditures	\$243.0	\$251.4	\$8.3 3.4%
Net Local Subsidy	\$142.4	\$150.6	\$8.2 5.7%

FY19 Preliminary Operating Subsidy by Member Agency

(\$ millions)	FY18 Adopted Budget	FY19 Preliminary Budget	FY19 vs FY18
Metro	\$71.7	\$75.1	\$3.5 4.9%
OCTA	\$28.2	\$29.4	\$1.2 4.1%
RCTC	\$17.7	\$19.7	\$2.0 11.0%
SBCTA	\$15.0	\$16.1	\$1.2 7.7%
VCTC	\$9.8	\$10.3	\$0.4 4.3%
Total Subsidy	\$142.4	\$150.6	\$8.2 5.7%

Rehabilitation

The Rehabilitation requirements Preliminary Budget for FY2018-19 and the Forecast for FY2019-20 and FY2020-21 are shown below:

FY2018-19: \$200.8MFY2019-20: \$160.3MFY2020-21: \$200.3M

Completion of Rehabilitation projects are multi-year in nature. As such, the funding for the FY19, FY20 and FY21 requests are viewed as each having a four-year funding commitment which would have the following estimated cash flow impact over the next six fiscal years:

	Fro	om FY19	From FY20		From FY20 From FY21		Total	
	<u>E</u>	<u>Budget</u>	<u>F</u>	<u>orecast</u>	<u>Fo</u>	<u>orecast</u>	<u>b</u>	<u>y Year</u>
FY2018-19	\$	14.0M	\$	0.0M	\$	0.0M	\$	14.0M
FY2019-20		68.8M		8.0M		0.0M		76.8M
FY2020-21		49.2M		56.1M		10.0M		115.3M
FY2021-22		68.8M		40.1M		70.1M		179.0M
FY2022-23		0.0M		56.1M		50.1M		106.2M
FY2023-24		0.0M		0.0M		70.1M		70.1M
Total	\$ 2	20 <mark>0.8M</mark>	\$ '	160.3M	\$	200.3M	\$	561.4M

New Capital

New Capital projects are proposed for FY19 are in the amounts below:

FY2018-19: \$24.5MFY2019-20: \$54.4MFY2020-21: \$65.1M

Projects were presented that will enhance safety and security, improve system reliability, increase ridership, maximize capacity, improve efficiency, provide environmental benefit, and contribute to the strategic goals of the Authority. New Capital projects are subject to the same ranking, prioritization and optimization as the Rehabilitation Projects described above.

Note: Applies to all tables – numbers may not foot or cross due to rounding.

Operating Budget

Major Assumptions for the FY19 Preliminary Operating Budget

- No increase to base fare revenue.
- Assumes the operation of a total of 2.8 million revenue service miles through the operation of 172 weekday trains and 90 weekend trains.
- No incremental services were requested for FY19.
- Operating Revenues reflect a projected net increase of \$0.2m or 0.2% increase from the FY18 Adopted Budget.
- Reflects the use of a Fuel Hedging Program to purchase fuel more efficiently and stabilize the fuel costs from year to year.
- Reflects a 2.0% Cost of Living Adjustment and a 3.0% Pool for Performance Based Merit Adjustment.
- Operating Expenditures reflect an increase of \$8.3M or 3.4% from the FY18 Adopted Budget.

All operational budget descriptions below are detailed in Attachments A through E.

Operating Revenues

Operating Revenues include Farebox, Dispatching, Maintenance-of-Way (MOW) Revenues, interest, other minor miscellaneous revenues, and are estimated to total \$100.8M for FY19, an increase of \$0.2M or 0.2% compared to the FY18 Adopted Budget.

Farebox Revenues, the largest operating revenue of the budget, are projected to increase \$0.5M or 0.6% compared to the FY18 Adopted Budget to a total of \$85.6M. (Details as described in Major Budget Assumptions above.)

Dispatching and MOW Revenues from the freight railroads and Amtrak are estimated from existing agreements based on projections of current usage. The FY19 Dispatch Revenue projection of \$2.1M estimates a decrease of \$5K or 0.2% from the FY18 Adopted Budget. This decrease is primarily the result of lower on-time bonuses from Amtrak. The FY19 MOW Revenues are projected to decrease \$0.8M or 5.9%. Reduced rail freight traffic for the largest segment of our MOW Revenue (Saugus-Union Pacific Railroad (UPRR)) translates to a reduction of revenue which is calculated based on 'car miles'. Staff is currently in negotiation with UPRR to review this and other reciprocal agreements with that freight line.

Operating Expenditures

Train Operations, Maintenance-of-Way (MOW), Administration, and Insurance

The Train Operations component of the budget consists of those costs necessary to provide Metrolink commuter rail services across the six-county service area, including the direct costs of railroad operations, equipment maintenance, required support costs, and other administrative and operating costs. The FY19 Preliminary Budget for Expenditures related to Train Operations is \$152.3M.

Ordinary MOW Expenditures are those costs necessary to perform the inspections and repairs needed to assure the reliable, safe operation of trains and safety of the public. The FY19 budgeted amount for expenditures related to MOW is \$41.3M.

The FY19 Preliminary Budget for Expenditures related to Administration & Services is \$41.1M and Insurance/Claims is \$16.6M.

Overall, the total FY19 Preliminary Budget for Expenditures have increased from the FY18 Adopted Budget by \$8.3M or 3.4%. The components of this change are as described below.

- Total Train Operations have increased by \$8.8M. The primary drivers of this increase are:
 - Train Operations Services have increased by \$2.2M: \$1.5M service contractor; 3.0% contract rate increase and new service; \$0.7M in reassignment of positions.
 - Equipment Maintenance increased by \$1.4M due to Equipment Maintenance vendor's 3.5% contract rate increase and incentives.
 - Fuel costs are down by \$0.9M due to a combination of fuel hedging offset by higher diesel prices.
 - TVM Maintenance/Revenue Collections has increased by \$1.5M, which includes \$0.8M for new optic reader maintenance and increases; tickets increased by \$0.5M; bank fees increased by \$0.2M.
 - Marketing increased by \$4.0M primarily due to a new marketing initiative expected to increase revenue by \$2.8M.
- MOW has decreased by \$0.3M: expenses are expected to remain flat with last year as a result of increased rehabilitation activities.
- Administration and Services have increased by \$0.8M. The primary drivers of this increase are:
 - An increase in salary and benefits reflecting 2% cost of living adjustment (COLA) and 3% Merit Pool, Classification and Compensation Study and two added positions \$0.9M; PTC maintenance and support increase of \$0.4M offset by a decrease in Operations Consultants for \$0.5M.
- Total Insurance Expense decreased by \$1.0M. The primary reason for this
 decrease is a reduction in insurance premiums due to a more favorable
 insurance market.

Member Agency Operating Subsidy

 Member Agency subsidies are required to fund the difference between the total costs of operations and all available revenues. The FY19 Preliminary Budget estimates total Member Agency contributions to equal \$150.6M, an increase of \$8.2M or 5.7% from the FY18 Adopted Budget.

 Attachment E – Compares the actual net local subsidies from Member Agencies for years FY15, FY16, and FY17, the budgeted subsidies in the FY18 Adopted Budget and in the FY19 Preliminary Budget. It provides variance analysis between FY19 Preliminary Budget and FY18 Adopted Budget. In response to Member Agency requests, this schedule reflects the FY19 Preliminary Member Subsidy in whole dollars which are required to create Member Agency Board requests.

Operating Budget Attachments

The attachments as listed below provide additional detail on the FY19 Preliminary Budget as described:

Attachment A – **FY19 Preliminary Operating Budget** – details the Operating Revenues, Expenses and Subsidy adopted for FY18, and proposed for FY19. This attachment also shows variances in dollars and percentages.

Attachment B – **Historical Actual and Budgeted Operating Statements** – details Actual Operating Results for FY15, FY16 and FY17, Adopted Operating Budget for FY18 and Preliminary Operating Budget for FY19, with variance comparison between FY18 Adopted Budget and FY19 Preliminary Budget.

Attachment C – FY19 Preliminary Operating Budget by Member Agency.

Attachment D – FY19 Preliminary Operating Budget by Line.

Attachment E – History of Actual and Budgeted Operating Subsidy with Variances and Analysis of FY19 vs FY18.

Capital Budget

Carryforward from Prior Years

Capital Projects are frequently multi-year endeavors. Unexpended project balances are referred to as "Carryovers" because their uncompleted balance moves forward to the following year. With the closing of the third quarter, carryover of Rehabilitation Projects

and New Capital Projects are still being calculated. This information is expected to be available in the next couple of weeks.

Capital Rehabilitation

The Capital Rehabilitation authorization request for FY19 was identified as necessary investments to maintain a state-of-good repair. These projects total \$200.8M and are represented in detail (including a separate section for Special Projects) in Attachment H.

The total Rehabilitation Program by asset type includes:

Structures upgrades	\$	62.1M
Track upgrades		52.8M
Rolling Stock upgrades		42.2M
Signal system improvements		20.2M
Grade Crossings improvements		10.8M
Fleet and Facility projects		6.8M
Communications		3.0M
Business Systems improvements		1.1M
Non-Revenue Fleet Vehicles		1.0M
Stations		0.6M
TVD	_	0.2M
	_	

Total <u>\$200.8M</u>

As part of the FY18 budget transmission, a detailed list of projects were included for the two forward projected years. For FY19 Budget, the forecast for FY20 and FY21 will be based on the Metrolink Infrastructure Rehabilitation Plan (MIRP). Over a number of years, a significant backlog of deferred maintenance has accrued. Projections in the MIRP include increased amounts in the first six years to fund that backlog. The MIRP will be used for all forward looking estimates effective FY19 Budget. The Rehabilitation forecast for FY20 & FY21 is currently in process.

New Capital

The New Capital authorization request for FY19 was identified as necessary for safe and efficient rail operations. These projects total \$24.5M and are represented in detail in Attachment I.

The summarized New Capital Project projections for FY20 and FY21 are based on actual projects but may be significantly impacted by the Southern California Optimized Rail Expansion (SCORE) and therefore subject to change.

FY20 and FY21 Operating Budget Projections

At the April 13, 2018 meeting, the Board approved transmission of the FY20 and FY21 Operating Budget Projections to Member Agencies. FY20 and FY21 Operating Budget Projections are included in this report for informational purposes only as detailed in Attachments J and K, respectively.

FY20 and FY21 Operating Budget Projections are based upon known contractual changes in combination with a projected increase factor based on the trends of each category of expense.

Next Steps

May - June	Staff present at Member Agencies' Committee and Board meetings as requested
June 22	FY19 Proposed Budget to Board for Adoption

We thank you for your continued support and active participation in the development of the FY19 Preliminary Budget. SCRRA staff remain available to address any questions or concerns you may have as we anticipate adoption of the budget by the SCRRA Board of Directors in June 2018. Should you have any questions, please contact me directly at (213) 452-0258 or Ronnie Campbell, Chief Financial Officer, at (213) 452-0285.

	FY 17-18	FY 18-19	Variance	
	Budget	Preliminary Budget	FY18 vs FY19 Preliminary Budget	% Variance
Operating Revenue	244844			70 00.110.1100
Farebox Revenue	83,897	85,636	1,739	2.1%
Metro Fare Reduction Subsidy	1,262	-	(1,262)	(100.0%)
Subtotal-Pro Forma FareBox	85,159	85,636	477	0.6%
Dispatching	2,125	2,120	(5)	(0.2%)
Other Revenues	12	490	478	3979.2%
MOW Revenues	13,350	12,561	(789)	(5.9%)
Subtotal Operating Revenue	100,646	100,806	160	0.2%
Operating Expenses	100,040	100,000	100	0.270
Operations & Services				
Train Operations	44,642	46,872	2,229	5.0%
Equipment Maintenance	36,691	38,133	1,442	3.9%
Fuel			(912)	
	19,656	18,744		(4.6%)
Non-Scheduled Rolling Stock Repairs	100	260	160	160.0%
Operating Facilities Maintenance	1,652	1,684	33	2.0%
Other Operating Train Services	470	482	12	2.5%
Rolling Stock Lease	151	336	185	122.2%
Security - Sheriff	5,845	5,889	44	0.8%
Security - Guards	2,837	2,450	(387)	(13.7%)
Supplemental Additional Security	690	690	-	0.0%
Public Safety Program	277	389	113	40.7%
Passenger Relations	1,795	1,732	(63)	(3.5%)
Holiday Trains	-	-	-	N/A
TVM Maintenance/Revenue Collection	7,510	9,055	1,545	20.6%
Marketing	1,364	5,380	4,016	294.5%
Media & External Communications	443	458	15	3.5%
Utilities/Leases	3,289	3,473	183	5.6%
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Transfers to Other Operators	6,592	6,496	(96)	(1.5%)
Amtrak Transfers	2,177	2,400	223	10.2%
Station Maintenance	1,687	1,806	119	7.0%
Rail Agreements	5,366	5,400	33	0.6%
Subtotal Operations & Services	143,234	152,129	8,895	6.2%
Maintenance-of-Way				
MoW - Line Segments	40,606	40,711	105	0.3%
MoW - Extraordinary Maintenance	1,001	591	(410)	(41.0%)
Subtotal Maintenance-of-Way	41,607	41,301	(306)	(0.7%)
Administration & Services				
Ops Salaries & Fringe Benefits	13,961	13,782	(179)	(1.3%)
Ops Non-Labor Expenses	7,374	7,635	261	3.5%
Indirect Administrative Expenses	15,870	17,096	1,226	7.7%
Ops Professional Services	3,084	2,579	(505)	(16.4%)
Subtotal Admin & Services	40,289	41,093	804	2.0%
Contingency (Non-Train Ops)	252	204	(48)	(19.0%)
Total Operating Expenses	225,382	234,727	9,345	4.1%
nsurance Expense/(Revenue)		T-		
Liability/Property/Auto	12,475	11,418	(1,057)	(8.5%)
Claims / SI	4,000	4,000	-	0.0%
Claims Administration	1,187	1,211	24	2.0%
PLPD Revenue	-	-	-	N/A
Net Insurance Expense	17,663	16,629	(1,033)	(5.9%)
Total Expense	243,045	251,356	8,311	3.4%
Loss	(142,399)	(150,550)	(8,151)	5.7%
1033				
Member Subsidies				
	124,736	133,920	9,184	7.4%
Member Subsidies	124,736 17,663	133,920 16,629	9,184 (1,033)	7.4% (5.9%)

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY18-19 Prelim	_
(\$000's)						FY17-18 I	Ū
Operating Revenue	Actual	Actual	Actual	Budget	Preliminary Budget	Variance	2.10
Farebox Revenue	83,134	83,652 873	82,883 490	83,897	85,636	1,739	2.1% (100.0%)
Metro Fare Reduction Subsidy Subtotal-Pro Forma FareBox	83,134	84,524	83,373	1,262 85,159	85,636	(1,262) 477	0.6%
Dispatching	2,493	2,120	2,016	2,125	2,120	(5)	(0.2%)
Other Revenues	372	429	762	12	490	478	3979.2%
MOW Revenues	13,207	12,434	12,384	13,350	12,561	(789)	(5.9%)
Subtotal Operating Revenue	99,207	99,507	98,535	100,646	100,806	160	0.2%
Operating Expenses							
Operations & Services							
Train Operations	40,569	41,887	41,616	44,642	46,872	2,229	5.0%
Equipment Maintenance	32,649	33,751	35,422	36,691	38,133	1,442	3.9%
Fuel	24,454	17,381	18,207	19,656	18,744	(912)	(4.6%)
Non-Scheduled Rolling Stock Repairs	2	136	1	100	260	160	160.0%
Operating Facilities Maintenance	1,120	1,149	1,475	1,652	1,684	33	2.0%
Other Operating Train Services	293	239	449	470	482	12	2.5%
Rolling Stock Lease	105	638	230	151	336	185	122.2%
Security - Sheriff	5,136	4,912	5,511	5,845	5,889	44	0.8%
Security - Guards	1,591	1,685	1,283	2,837	2,450	(387)	(13.7%)
Supplemental Additional Security	81	-	520	690	690	-	0.0%
Public Safety Program	177	217	203	277	389	113	40.7%
Passenger Relations	1,639	1,748	1,868	1,795	1,732	(63)	(3.5%)
TVM Maintenance/Revenue Collection	5,984	6,554	7,934	7,510	9,055	1,545	20.6%
Marketing Modia & External Communications	949 234	1,137 343	716 249	1,364 443	5,380 458	4,016 15	294.5% 3.5%
Media & External Communications Utilities/Leases	234 2,622	343 2,046	249 2,614	443 3,289	458 3,473	183	5.6%
Transfers to Other Operators	7,081	2,046 6,488	6,003	3,289 6,592	3,473 6,496	(96)	(1.5%)
Amtrak Transfers	800	1,287	1,307	2,177	2,400	223	10.2%
Station Maintenance	1,121	1,418	1,196	1,687	1,806	119	7.0%
Rail Agreements	4,997	5,207	5,155	5,366	5,400	33	0.6%
Subtotal Operations & Services	131,602	128,223	131,960	143,234	152,129	8,895	6.2%
Maintenance-of-Way				0,_0 .		3,000	0.270
MoW - Line Segments	33,043	37,936	37,355	40,606	40,711	105	0.3%
MoW - Extraordinary Maintenance	1,235	1,518	1,260	1,001	591	(410)	(41.0%)
Subtotal Maintenance-of-Way	34,278	39,453	38,615	41,607	41,301	(306)	(0.7%)
Administration & Services							
Ops Salaries & Fringe Benefits	11,535	12,892	13,808	13,961	13,782	(179)	(1.3%)
Ops Non-Labor Expenses	3,651	5,322	5,046	7,374	7,635	261	3.5%
Indirect Administrative Expenses	11,791	12,417	14,090	15,870	17,096	1,226	7.7%
Ops Professional Services	969	2,019	1,963	3,084	2,579	(505)	(16.4%)
Subtotal Admin & Services	27,946	32,651	34,907	40,289	41,093	804	2.0%
Contingency (Non-Train Ops)	14	47	2	252	204	(48)	(19.0%)
Total Operating Expenses	193,839	200,374	205,484	225,382	234,727	9,345	4.1%
Insurance Expense/(Revenue)							
Liability/Property/Auto	12,597	11,634	11,061	12,475	11,418	(1,057)	(8.5%)
Claims / SI	1,884	3,876	5,116	4,000	4,000	-	0.0%
Claims Administration	1,145	421	704	1,187	1,211	24	2.0%
PLPD Revenue	(1)	(22)	(1)		- 46.600	- (4.000)	n/a
Net Insurance Expense	15,625	15,909	16,880	17,663	16,629	(1,033)	(5.9%)
Total Expense Before BNSF	209,464	216,283	222,364	243,045	251,356	8,311	3.4%
Loss Before BNSF	(110,257)	(116,776)	(123,829)	(142,399)	(150,550)	(8,151)	5.7%
Member Subsidies		100.000		121 - 22	100.000	0.101	
Operations	92,252	109,003	119,148	124,736	133,920	9,184	7.4%
Insurance	17,678	18,079	16,787	17,663	16,629	(1,033)	(5.9%)
Total Member Subsidies	109,930	127,082	135,934	142,399	150,550	8,151	5.7%
Surplus / (Deficit) Before BNSF	(328)	10,306	12,106	-	-	-	n/a
BNSF LEASED LOCOMOTIVE COSTS							
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	209,464	226,680	228,032	243,045	251,356	8,311	3.4%
Net Loss	(110,257)	(127,173)	(129,498)	(142,399)	(150,550)	(8,151)	5.7%
All Member Subsidies	109,930	138,627	141,989	142,399	150,550	8,151	5.7%
Surplus / (Deficit)	(328)	11,454	12,491	-	-	•	n/a

FY19 Preliminary Operating Budget by Member Agency

	- F	Y2018-19 PRE	LIMINARY BUI	DGET - MEMB	ER ALLOCATIO	N
(\$000s)	Metro	OCTA	RCTC	SBCTA	VCTC	Total
Operating Revenue						
Farebox Revenue	42,204	22,684	7,778	10,567	2,402	85,636
Metro Fare Reduction Subsidy	-	-	-	-	-	-
Subtotal-Pro Forma FareBox	42,204	22,684	7,778	10,567	2,402	85,636
Dispatching	1,099	696	12	58	256	2,120
Other Revenues	237	108	56	62	27	490
MOW Revenues	7,377	2,523	660	1,526	475	12,561
Subtotal Operating Revenue	50,917	26,010	8,507	12,213	3,159	100,806
Operating Expenses						
Operations & Services						
Train Operations	24,798	10,407	4,823	5,073	1,770	46,872
Equipment Maintenance	18,921	8,659	4,549	4,344	1,661	38,133
Fuel	9,606	4,677	1,860	1,997	605	18,744
Non-Scheduled Rolling Stock Repairs	136	61	26	29	8	260
Operating Facilities Maintenance	879	398	167	186	55	1,684
Other Operating Train Services	227	83	72	49	50	482
Rolling Stock Lease	159	66	37	48	24	336
Security - Sheriff	3,094	1,168	912	593	121	5,889
Security - Guards	1,155	422	367	250	256	2,450
Supplemental Additional Security	340	183	63	85	19	690
Public Safety Program	183	67	58	40	41	389
Passenger Relations	832	488	165	200	47	1,732
Holiday Trains	-	-	103	200	47	1,732
						- 0.055
TVM Maintenance/Revenue Collection	3,852	1,960	1,487	1,216	541	9,055
Marketing	2,636	1,442	527	615	159	5,380
Media & External Communications	216	79	69	47	48	458
Utilities/Leases	1,637	599	519	355	363	3,473
Transfers to Other Operators	3,642	1,466	491	689	208	6,496
Amtrak Transfers	765	1,516	-	-	119	2,400
Station Maintenance	1,114	254	111	246	81	1,806
Rail Agreements	1,910	1,547	1,231	359	353	5,400
Subtotal Operations & Services	76,102	35,542	17,534	16,422	6,528	152,129
Maintenance-of-Way						
MoW - Line Segments	21,177	8,371	3,061	5,695	2,406	40,711
MoW - Extraordinary Maintenance	346	76	57	64	47	591
Subtotal Maintenance-of-Way	21,524	8,447	3,118	5,759	2,453	41,301
Administration & Services						
Ops Salaries & Fringe Benefits	6,497	2,387	2,055	1,410	1,433	13,782
Ops Non-Labor Expenses	3,866	1,685	841	861	382	7,635
Indirect Administrative Expenses	8,059	2,947	2,558	1,747	1,785	17,096
Ops Professional Services	1,216	445	386	264	269	2,579
Subtotal Admin & Services	19,638	7,464	5,840	4,282	3,870	41,093
Contingency (Non-Train Ops)	96	35	31	21	21	204
Total Operating Expenses	117,360	51,489	26,522	26,484	12,872	234,727
Insurance Expense/(Revenue)						
Liability/Property/Auto	5,958	2,695	1,129	1,263	373	11,418
Claims / SI	2,087	944	396	443	131	4,000
Claims Administration	632	286	120	134	40	1,211
PLPD Revenue	-	-	-	-	-	-
Net Insurance Expense	8,677	3,925	1,645	1,840	543	16,629
Total Expense	126,037	55,413	28,167	28,324	13,415	251,356
Loss	(75,120)	(29,403)	(19,660)	(16,111)	(10,256)	(150,550)
Member Subsidies						
Operations	66,443	25,478	18,015	14,271	9,713	133,920
Insurance	8,677	3,925	1,645	1,840	543	16,629

				018-19 PRELIM		- LINE ALLOCAT	ION	-	
(\$000s)	San Bernardino	Ventura County	Antelope Valley	Riverside	Orange County	OC MSEP	IEOC	91/PVL	Total
Operating Revenue			,					5 2,1 112	
Farebox Revenue	21,148	6,613	12,200	8,386	22,505	885	7,704	6,196	85,636
Metro Fare Reduction Subsidy	21,140	0,013	12,200	8,380	22,303	-	7,704	0,130	85,050
Subtotal-Pro Forma FareBox	21,148	6,613	12,200	8,386	22,505	885	7,704	6,196	85,636
Dispatching	157	528	362	6	1,000	15	18	35	2,120
Other Revenues	108	63	86	48	75	10	61	36	490
MOW Revenues	3,303				1,467			718	
Subtotal Operating Revenue	24,715	1,492 8,696	3,928 16,576	269 8,709	25,047	248 1,159	1,136 8,919	6,986	12,561 100,806
Operating Expenses	24,715	0,030	10,570	5,755	25,047	1,133	0,515	0,500	100,000
Operations & Services									
Train Operations	10,920	4,430	11,033	3,105	7,015	929	5,386	4,054	46,872
Equipment Maintenance	8,494	4,406	7,501	2,638	5,260	1,317	4,434	4,084	38,133
Fuel	4,035	1,565	4,228	1,283	3,131	612	2,383	1,507	18,744
	*							·	
Non-Scheduled Rolling Stock Repairs	61	27	54	17	39	8	31	23	260
Operating Facilities Maintenance	395	175	351	110	253	55	198	147	1,684
Other Operating Train Services	70	80	87	72	37	13	54	68	482
Rolling Stock Lease	74	51	53	46	57	-	45	10	336
Security - Sheriff	1,293	385	1,630	242	759	121	639	821	5,889
Security - Guards	355	406	444	368	190	67	275	344	2,450
Supplemental Additional Security	170	53	98	68	185	-	65	50	690
Public Safety Program	56	65	71	58	30	11	44	55	389
Passenger Relations Holiday Trains	410	148	273	135	404	16	226	120	1,732
TVM Maintenance/Revenue Collection	1,734	1,261	1,464	867	935	384	1,272	1,137	9,055
•		501	795					408	
Marketing	1,269			464	1,256	53	634		5,380
Media & External Communications	66	76	83	69	36	13	51	64	458
Utilities/Leases	503	576	630	522	269	95	390	487	3,473
Transfers to Other Operators	1,387	568	1,428	645	1,739	-	195	534	6,496
Amtrak Transfers	-	309	-	-	2,091	-	-	-	2,400
Station Maintenance	529	244	387	161	281	12	34	157	1,806
Rail Agreements	-	603	-	1,843	860	11	1,040	1,043	5,400
Subtotal Operations & Services	31,822	15,929	30,611	12,715	24,826	3,717	17,397	15,111	152,129
Maintenance-of-Way									
MoW - Line Segments	11,918	6,437	8,416	1,131	4,877	788	3,937	3,207	40,711
MoW - Extraordinary Maintenance	131	91	101	76	96	-	75	20	591
Subtotal Maintenance-of-Way	12,049	6,528	8,517	1,207	4,973	788	4,013	3,227	41,301
Administration & Services									
Ops Salaries & Fringe Benefits	2,005	2,278	2,505	2,063	1,081	378	1,546	1,926	13,782
Ops Non-Labor Expenses	1,642	824	1,580	677	1,039	242	904	728	7,635
Indirect Administrative Expenses	2,477	2,836	3,100	2,570	1,327	470	1,918	2,399	17,096
Ops Professional Services	374	428	468	388	200	71	289	362	2,579
Subtotal Admin & Services	6,498	6,365	7,652	5,698	3,647	1,160	4,658	5,414	41,093
Contingency (Non-Train Ops)	30	, 34	, 37	31	, 16	, 6	23	29	204
Total Operating Expenses	50,398	28,856	46,816	19,651	33,462	5,671	26,091	23,781	234,727
Insurance Expense/(Revenue)	,	<u> </u>	<u> </u>	,		•	<u> </u>		•
Liability/Property/Auto	2,680	1,184	2,381	746	1,716	371	1,346	996	11,418
Claims / SI	939	415	834	261	601	130	471	349	4,000
Claims Administration	284	126	253	79	182	39	143	106	1,211
PLPD Revenue	-	-	-	-	-	-	-	-	-
Net Insurance Expense	3,903	1,724	3,467	1,086	2,499	540	1,960	1,451	16,629
Total Expense	54,301	30,580	50,284	20,737	35,961	6,211	28,051	25,232	251,356
Loss	(29,586)	(21,883)	(33,708)	(12,028)	(10,914)	(5,053)	(19,131)	(18,247)	(150,550)
Member Subsidies	-	-		-		-		- 1	<u> </u>
Operations	25,683	20,160	30,240	10,942	8,415	4,512	17,172	16,796	133,920
Insurance	3,903	1,724	3,467	1,086	2,499	540	1,960	1,451	16,629
Total Member Subsidies	29,586	21,883	33,708	12,028	10,914	5,053	19,131	18,247	150,550

History of actual and budgeted Operating Subsidy with variances, and analysis of FY19 vs FY18

Net Local Subsidy by Member Agency

	Total Net Local Subsidy	Metro Share	OCTA share	RCTC Share	SBCTA Share	VCTC Share
FY 15 ACTUAL	\$110,257,381	\$59,029,731	\$22,251,609	\$9,387,630	\$11,605,317	\$7,983,094
FY16 ACTUAL	\$127,172,992	\$66,468,865	\$24,974,739	\$13,799,263	\$13,057,846	\$8,872,279
FY17 ACTUAL	\$129,497,641	\$66,497,200	\$24,867,125	\$15,676,155	\$13,167,603	\$9,289,558
FY18 BUDGET	\$142,398,818	\$71,658,558	\$28,238,881	\$17,705,400	\$14,959,772	\$9,836,207
Estimated FY19 BUDGET	\$150,549,696	\$75,119,645	\$29,403,103	\$19,659,705	\$16,111,084	\$10,256,160

YEAR OVER YEAR CHANGE	Total Net Local Subsidy	Metro Share	OCTA share	RCTC Share	SBCTA Share	VCTC Share
FY15 vs FY16						
\$ Increase	\$16,915,611	\$7,439,134	\$2,723,130	\$4,411,633	\$1,452,529	\$889,185
% Increase	15.3%	12.6%	12.2%	47.0%	12.5%	11.1%
FY16 vs FY17						
\$ Increase	\$2,324,649	\$28,335	(\$107,614)	\$1,876,892	\$109,757	\$417,279
% Increase	1.8%	0.0%	-0.4%	13.6%	0.8%	4.7%
FY17 vs FY18						
\$ Increase	\$12,901,177	\$5,161,358	\$3,371,756	\$2,029,245	\$1,792,169	\$546,649
% Increase	10.0%	7.8%	13.6%	12.9%	13.6%	5.9%
FY18 vs FY19						
\$ Increase	\$8,150,878	\$3,461,087	\$1,164,222	\$1,954,305	\$1,151,312	\$419,953
% Increase	5.7%	4.8%	4.1%	11.0%	7.7%	4.3%

Analysis of 18 vs 19 variance:

(millions')			
Revenue	Increase in Farebox Revenue (Adv.)	\$	2.8
	Trending Decrease in Revenue	\$	(0.9)
	Decrease -Sunday Service on Holidays	\$	(0.1)
	Decrease -a/v Fare Subsidy	\$ \$	(1.3)
	Slight decrease in all other Revenues	<u>\$</u>	(0.3)
	Revenue increase	\$	0.2
Expense	Fuel	\$	(0.9)
	Big Five Train Operations	\$	2.9
	Car Maintenance	\$	0.4
	TVM Maintenance	\$	1.5
	Marketing	\$	4.0
	Wabtec & PTC upgrades	\$	0.4
	2% COLA/ 3% Merit & Class & Comp (Ops)	\$	0.9
	Amtrak transfers	\$	0.2
	Insurance	\$	(1.0)
	Expense increase	\$	8.4
Change to	Subsidy	\$	8.2



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ROW#			PROJECT		CLIDDIN (ICLO)	MILE	CONDITION		ACCES TVDE	2201507	2005	TIER	7074	.45700	0.574		cp.c=.	V	
	CRE LABREC	ECHEP	# 1155	Rehab	SUBDIVISION	140.80	CONDITION Worn			PROJECT Replace Worn Electric Switch Lock at	SCOPE Replace worn Electric Switch Lock.	(A,B,C)	TOTAL 47,785	METRO 47,785	OCTA -	RCTC -	SBCTA -	VCTC -	UPRR -
) MAXEY			Rehab			Worn			140.80 West Bank Perform State of Good Repair Engineering, Track Measurements,	NOTE: Total Project = \$100,600 / Unfunded = \$47,785 Perform continuing State of Good Repair Engineering, Condition Assessments, Track Measurements, and Prioritization to support and	А	356,250	356,250	-	-	-	-	-
										and Prioritization to support and populate the annual SOGR/Rehab/TAM Program	populate the annual State of Good Repair (SOGR)/Rehabilitation and Transit Asset Management Programs. NOTE: Total Project = \$750,000 / Unfunded = \$356,250								
3 () LABREC	ECHEP	312	Rehab	River	All	Worn	High		Phase 1 - Signal System Rehab - CP Terminal Rehab Turnouts 3X, 5, 5X, 7, 7X and Power Switch Machines	Rehab M23A Power Switch machines at all key Control Points - \$50,000 / switch. Replace dual control power switch machine with in kind rebuilt machine. NOTE: Total Project = \$1,000,000 / Unfunded = \$475,000	A	475,000	475,000	-	-	-	-	-
4 () HARRIN	INGTONG	1058	Rehab	All	N/A	Worn	High	Facilities	Replace Car shop Jacks at CMF	Replace Car Shop railcar 20 ton jacks. Jacks must be replaced in pairs. This request is for 2 jacks. NOTE: Total Project = \$279,620 / Unfunded = \$132,820	A	132,820	132,820	-	-	-	-	-
5 (HARRIS	ISW	247	Rehab	All	3.5 to 76.6, 426.4 to 462.39, 0.9 to 56.63, 165.4 to 207.4		High	Track	Rail Grinding Systemwide	Perform production rail grinding with large rail mounted specialized. Rail grinding is included in both the operating budget and rehab budgets. The rail grinding included in the operating budget is the emergency, bare minimum grinding to correct severe defects mostly on sharp curves from developing into severe defect. The rail grinding included in the rehabilitation budget is more expansive and is performed on a planned preventative maintenance basis and on all curves, tangent track and turnouts plus grade crossings. The preventative maintenance grinding is typically performed every two to four years to maintain the rail profile. Good rail profile maintains the running surface of the rail so that better contact with the train wheels is maintained. This removes conditions that may develop into defective rails with speed restrictions or even broken rails. Grinding to a design profile also improves ride quality, lowers noise and fuel consumption. This grinding work can be done on all segments of the Metrolink system. NOTE: Total Project = \$840,400 / Unfunded = \$399,190	A	399,190	399,190	-	-	-	-	-
6 (TRIPOL	ILIR	1091	Rehab	All		Worn	High	,	Condition Based Maintenance Tools, PC and Analysis Software	Purchase all CBM test equipment to include but not limited to; Frequency analyzer, Ultrasound analyzer, Vibration accelerometers, Thermograph cameras, Oscilloscopes, Spectrographic oil analyzer. These tools will be utilized to test, measure and analyze locomotive and railcar functions with a comparative analysis of component performance over time. The results of the testing determine actual condition of components and systems that will determine maintenance actions. NOTE: Total Project = \$76,125 / Unfunded = \$36,159	A	36,159	36,159	-	-	-	-	-
7 (LABREC	ЕСНЕР	1167	Rehab	River	1.60	Worn	High	"	Signal System Rehab - Replace EL1A Logic Controller at CP Capital	Replace worn or defective signal system control units with new, reliable and efficient models. NOTE: Total Project = \$335,940 / Unfunded = \$159,572	A	159,572	159,572	-	-	-	-	-
8 (PETERS	SONJ	1223	Rehab	All	All	Worn	High	_	SCRRA Production Back office System. Upgrades and Testing Support	This work is to support SCRRA replacement and upgrade of existing and implementation of minor new train control software versions, hardware modifications, testing against production systems both in the office and in the field. This replacement work rises to the level that it is not typically included in the annual Operating Budget and annual Vendor maintenance and service agreement and is not included in the recent programmed Federal Grant. Vendors will furnish software and then local and remote support technicians to test the software. Testing may include brake test trains, configuring simulators, upgrading test equipment and software for all segments including, TMDS, BOS, MDM, ITCM, ITCSM, Key Services, Interoperable testing and associated upgrades. NOTE: Total Project = \$597,500 / Unfunded = \$283,813	A	283,813	283,813	-	-	-	-	-



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호 [6	≨	CREATOR	#		SUBDIVISION		CONDITION			PROJECT	SCOPE	(A,B,C)	TOTAL	METRO	OCTA	RCTC	SBCTA	VCTC	UPRR
9 (0 A	QUINOL	1099	Rehab	Valley, Ventura - LA County	Various	Worn	High	Track	Station Pedestrian Crossing Rehab	Replace pedestrian crossing panels at Downtown Burbank, Burbank Airport and Chatsworth Stations.	A	250,800	250,800	-	-	-	-	-
.0 (0 H.	ARRINGTONG	1055	Rehab	Valley	MP76.4- MP76.5	Marginal	High	Facilities	Replace Expand Lancaster Crew Base	Lease parcel and install new modular building and portable weather resistant communication shelter for train operations and mechanical crews.	A	950,000	950,000	-	-	-	-	-
11 (0 H.	IARRINGTONG	485	Rehab	All	N/A	Worn	High	Non-Revenue Fleet	MOW VEHICLE REPLACEMENT	Replace heavy and light duty specialized rail maintenance vehicles. This includes 3 Track and Structures crew cab maintenance heavy duty by rail trucks @\$210,000 each; 2 bridge crew heavy duty hi rail trucks @\$130,000 each; 3 hy-rail track inspection light duty trucks @\$64,000 each and 2 existing Signal maintainer utility vehicles@\$40,000 each. Estimated amounts including staff time and contingency. NOTE: Total Project = \$1,163,100 / Unfunded = \$552,473	A	552,473	552,473	-	-	-	-	-
.2 (0 LA	ABRECHEP	1164		San Gabriel 60 / 40	ALL	Worn	High	Grade Crossing	Grade Crossing Rehab - 2 Locations per Year - SG Sub	Add crossing Gate Savers, rehab entrance gates, rehab predictor units, batteries, and rehab other misc. crossing equipment @ Monte Vista Avenue, & Central Avenue. (2 crossings @ \$250K each FY18; 2 other locations are budgeted in FY19 - 2 crossings @ \$250K ea.) NOTE: Total Project = \$548,600 / Unfunded = \$329,160	A	329,160	329,160	-	-	-	-	-
13 (0 H.	IARRINGTONG	1039	Rehab	All	N/A	Worn	Low	Facilities	REPLACE PUBLIC ADDRESS SYSTEM	Replace existing non-functional public address system at CMF. The system is critical for work place safety especially during earthquake or other emergency. NOTE: Total Project = \$119,700 / Unfunded = \$56,858	А	56,858	56,858	-	-	-	-	-
.4 (O PI	ETERSONJ	1222	Rehab	All	All	Worn	High	Signals	Back office Hardware & Software Replacement (DOC & MOC)	Hardware and software version upgrades, technology refreshes to any hardware or software for CAD, BOS, ITCM, MDM, WSRS, NMS, CIS, PTC, CM, backup systems, or other MOC / DOC PTC or other train traffic control data center support systems to keep current and in compliance with ITC and Federal requirements. NOTE: Total Project = \$1,130,000 / Unfunded = \$536,750	А	536,750	536,750	-	-	-	-	-
15 (0 H	IURSTJ	1247	Rehab	All	ALL	Worn	High	Rolling Stock	PTC On-Board Software updates, hardware repairs PTC on-board equipment Systems on 57 cab cars and 52 locomotives.	Acquire and install PTC on board replacement parts and perform software versions changes to stay current with industry interoperable standards and regulations. 57 cab cars and 52 locomotives. Correct defects not otherwise covered by warranty. Remove automatic train stop (ATS) because it is creating warning system overload. Average estimated cost if \$10,000 per unit x 110 units. (This could be less by 40 units depending on the delivery of the F-125 Tier 4 program which includes new onboard equipment and software. However, ATS installed on F-125's must be removed). Multiyear recurring program. NOTE: Total Project = \$1,100,000 / Unfunded = \$522,500	A	522,500	522,500	-	-	-	-	-
16 (O LA	ABRECHEP	305	Rehab	Ventura - LA County	All	Worn	High	Grade Crossing	Grade Crossing Rehab 2 Locations per Year	Add crossing Gate Savers, rehab entrance gates, rehab predictor units, batteries, and rehab other misc. crossing equipment. (2 crossings @ \$250K ea. FY18; 2 other locations are budgeted in FY19 - 2 crossings @ \$250K ea.)	A	531,800	531,800	-	-	-	-	-
7 (0 A	ZEVEDOA	1216	Rehab	Valley	3-67.5	Worn	High	Track	Valley Track Rehabilitation	New fastenings, tie plugs, anchors, destressing rail, surfacing and stabilizing track.	А	4,065,250	4,065,250	-	-	-	-	-
18 (0 A	ZEVEDOA	1217		San Gabriel 60 / 40	1.08-56	Worn	High	Track	San Gabriel Track Rehabilitation	New fastenings, tie plugs, anchors, destressing rail, surfacing and stabilizing track. NOTE: Total Project = \$2,110,250 / Unfunded = \$1,266,150	А	1,266,150	1,266,150	-	-	-	-	-
19 (0 A	ZEVEDOA	1218		Ventura - LA County	442- 462.6	Worn	High	Track	Ventura (LA) Track Rehabilitation	New fastenings, tie plugs, anchors, destressing rail, surfacing and stabilizing track.	А	1,535,250	1,535,250	-	-	-	-	-
20 (0 LA	ABRECHEP	1162	Rehab	Valley	67.55	Worn	High	Signals	Signal System Rehab - Replace EL1A Logic Controller at CP Harold	Replace worn or defective signal system control units with new, reliable and efficient models.	А	335,940	335,940	-	-	-	-	-



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#MC	N V		PROJECT			MILE						TIER							
21	0	PETERSONJ	1221	Rehab	All	All	Worn	High	ASSET TYPE Signals	PROJECT SCRRA Positive Train Control Lab Systems Support and Testing	SCOPE Hardware and software maintenance and support not covered by direct maintenance and support agreements for the SCRRA PTC Software and	(A,B,C) A	450,063	METRO 450,063	OCTA -	RCTC -	SBCTA -	VCTC -	UPRR -
											Hardware Lab not included in the annual operating budget or the production software upgrades in Project 1221. The project will include lab testing of the PTC related systems to the next version of CAD/BOS/ITCM/MDM/WSRS/OBS system software and hardware. The upgrades are to include installation in the SCRRA lab, lab testing and validation. NOTE: Total Project = \$947,500 / Unfunded = \$450,063								
22	0	YANGJ	1276	Rehab	Valley	MP3.67- MP76.6		High	Structures	Valley Sub Struct	BRIDGES:MP 25.71; CULVERTS: MP 38.64, MP 32.92, MP 43.55, MP 66.86, MP 66.90, MP 28.58, MP 53.61, MP 46.24	Α	3,638,713	3,638,713	-	-	-	-	-
23	0	YANGJ	1285	Rehab	River	0-1.1	Worn	High	Track	LA Union Station Track Rehabilitation	Track rehabilitation of Leads, Turnouts, Ties for track heading into Union Station. Approximately 6,200 Ft of Rail (leads and station), and 6 Turnouts. NOTE: Total Project = \$1,882,000 / Unfunded = \$893,950	A	893,950	893,950	-	-	-	-	-
24	0	YANGJ	1287	Rehab	San Gabriel 60 / 40	0.9 to 33.75	Worn	High	Grade Crossing	Rehabilitation of grade crossings on the San Gabriel Subdivision in Los Angeles County	Replace rail, ties, and crossing panels with new material. Apply new fasteners and ballast then surface the grade crossing. Place new asphalt road surface from the edge of the crossing panels to two feet from the end of ties. Crossings will be replaced at Azusa, Irwindale, and North Garey Avenues. NOTE: Total Project = \$1,965,220 / Unfunded = \$1,179,132		1,179,132	1,179,132	-	-	-	-	-
25	0	YANGJ	1288	Rehab	Valley	3.5 to 76.6	Worn	High	Grade Crossing	Rehabilitation of grade crossings on the Valley Subdivision in Los Angeles County	Replace rail, ties, and crossing panels with new material. Apply new fasteners and ballast then surface the grade crossing. Place new asphalt road surface from the edge of the crossing panels to two feet from the end of ties. Crossings will be replaced at Drayton Street, Aliso Canyon Road, Doran Street, and Arvilla Avenue.		1,048,700	1,048,700	-	-	-	-	-
26	0	LABRECHEP	1160	Rehab	Ventura - LA County	All	Worn	High	Signals	Rehab Signal and Grade Crossing Cables - Ven Sub	Replace worn and defective signal and grade crossing cables.	А	513,480	513,480	-	-	-	-	-
27	0	LABRECHEP	311	Rehab	River	All	Worn	High	Signals	Signal System Rehab - River Sub	Replace Signal System back-up battery banks. Replace worn underground signal system cables, Replace worn Electrologic units and replace with VHLC or Electrologix units, Replace worn Electrocode 4 units with Electrocode 5 units at high priority locations. (Rehab EL1A with VHLC = \$250,000 / location). NOTE: Total Project = \$1,017,030 / Unfunded = \$483,089	А	483,089	483,089	-	-	-	-	-
28	0	HURSTJ	1237	Rehab	River	0.00 - 3.67; 140.05 - 143.83; 480.90 - 485.20		High	Communications	Wayside Communication System Replacement Parts - River	Acquire replacement parts including software for wayside and mountain-top communication system. Top 20 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 20 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design, Professional Services, Agency Staff required. Recurring multi-year program. NOTE: Total Project = \$100,000 / Unfunded = \$47,500	A	47,500	47,500	-	-	-	-	-
29	0	LABRECHEP	352	Rehab	Valley	All	Worn	High	Signals	Rehab Worn or Defective Cables - Valley Sub	Replace worn or defective signal and grade crossing system cables in order to be regulatory compliant and to maintain safe and efficient systems.	A	511,940	511,940	-	-	-	-	-
30	0	HURSTJ	1235	Rehab	San Gabriel 60 / 40	1.08 -	Marginal	High	Communications	Wayside Communication System Replacement Parts - San Gabriel - LA County	Acquire replacement parts including software for wayside and mountain-top communication system. Top 20 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 20 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design or Professional Services required. Recurring multi-year program. NOTE: Total Project = \$100,000 / Unfunded = \$60,000	A	60,000	60,000	-	-	-	-	-



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#MO	ANK	CREATOR	PROJECT #		SUBDIVISION	MILE	CONDITION	IMPACT	ASSET TYPE	PROJECT	SCOPE	TIER (A,B,C)	TOTAL	METRO	ОСТА	RCTC	SBCTA	VCTC	UPRR
31	0	HURSTJ	1233	Rehab	San Gabriel 60 / 40	33.7 - 56.52	Marginal			****	Acquire replacement parts including software for wayside and mountain-top communication system . Top 15 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 15 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design or Professional Services required. Recurring multi-year program. NOTE: Total Project = \$75,000 / Unfunded = \$45,000		45,000	45,000	-	-	-	-	-
32	0	HURSTJ	1240	Rehab	Valley	3.67 - 76.63	Marginal	High	Communications	Wayside Communication System Replacement Parts - Valley	Acquire replacement parts including software for wayside and mountain-top communication system. Top 20 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 20 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design or Professional Services required. Recurring multi-year program.	A	100,000	100,000	-	-	-	-	-
33	0	LABRECHEP	308		San Gabriel 60 / 40	ALL	Worn	High	Grade Crossing	Grade Crossing Rehab - SG Sub	Add crossing Gate Savers, rehab entrance gates, rehab predictor units, batteries, and rehab other misc. crossing equipment @ Benson Avenue and Euclid Avenue. (2 crossings @ \$250K each for FY18; 2 other locations are budgeted in FY19 - 2 crossings @ \$250K each). NOTE: Total Project = \$509,600 / Unfunded = \$305,760	A	305,760	305,760	-	-	-	-	-
34	0	HURSTJ	1244		Ventura - LA County	442.0 - 462.39	Marginal	High	Communications	Wayside Communication System Replacement Parts - Ventura - LA County	Acquire replacement parts including software for wayside and mountain-top communication system. Top 10 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 1 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design, Professional Services, Agency Staff required. Recurring multi-year program.		50,000	50,000	-	-	-	-	-
35	0	LABRECHEP	310	Rehab	River	All	Worn	High	Grade Crossing	Grade Crossing Rehab - 2 grade crossings - River Sub	Add crossing Gate Savers, rehab entrance gates, rehab predictor units, batteries, and rehab other misc. crossing equipment. Approximate cost per crossing = \$250K. NOTE: Total Project = \$531,800 / Unfunded = \$252,605	A	252,605	252,605	-	-	-	-	-
36	0	HARRISW	178		San Gabriel 60 / 40	33.75	Worn	High	Track	Replacement of the turnouts on the San Gabriel Subdivision in San Bernardino County	Replace turnouts at CP Central, CP Locust, and CP Rancho with a new turnout. These replacements will include three #20, one #14, and one #10 turnouts. The replacement will involve installing new turnout frog and switch packages, rail, ties and other track materials. NOTE: Total Project = \$2,341,900 / Unfunded = \$917,940	A	917,940	917,940	-	-	-	-	-
37	0	LABRECHEP	317		San Gabriel 60 / 40	All	Worn	High	Signals	Rehab Worn or Defective Cables - SG Sub	Replace worn or defective signal and grade crossing system cables in order to be regulatory compliant and to maintain safe and efficient systems. NOTE: Total Project = \$511,940 / Unfunded = \$307,164	A	307,164	307,164	-	-	-	-	-
38	0	LABRECHEP	1163	Rehab	Valley	67.55	Worn	High	Signals	Signal System Rehab - Replace Track Turnout and Power Switch at CP Harold	Replace worn or defective track turnout panel and power switch machine.	А	505,560	505,560	-	-	-	-	-
39	0	LABRECHEP	318	Rehab	Valley	All	Worn	High	Grade Crossing	Grade Crossing Rehab - 2 Locations per Year - Valley Sub	Add crossing Gate Savers, rehab entrance gates, rehab predictor units, batteries, and rehab other misc. crossing equipment. (2 crossings @ \$250K ea. FY18; 2 other locations are budgeted in FY19 - 2 crossings @ \$250K ea.)	А	557,480	557,480	-	-	-	-	-
40	0	HARRISW	164		Ventura - LA County	441.97 to 462.39	Worn	High	Grade Crossing	Rehabilitation of grade crossings on the Ventura Subdivision in Los Angeles County	Replace rail, ties, and crossing panels with new material. Apply new statemers and ballast then surface the grade crossing. Place new asphalt road surface from the edge of the crossing panels to two feet from the end of ties. Crossings will be replaced at Tampa Avenue, Roscoe Boulevard, Balboa Boulevard, Lindley Avenue, and De Soto Avenue.		2,296,800	2,296,800	-	-	-	-	-
41	0	HARRISW	162		San Gabriel 60 / 40	0.9 to 33.75	Worn	High	Track	Replacement of the turnouts on the San Gabriel Subdivision in Los Angeles County	Replace turnouts at CP Barranca and CP Irwin. The replacement will involve installing new turnout frog and switch packages, rail, ties and other track materials. NOTE: Total Project = \$1,000,324 / Unfunded = \$600,194	A	600,194	600,194	-	-	-	-	-



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ROW#	RANK	CREATOR	PROJECT		SUBDIVISIO	MILE N POSTS	CONDITION	IMPACT	ASSET TYPE	PROJECT	SCOPE	TIER (A,B,C)	TOTAL	METRO	ОСТА	RCTC	SBCTA	VCTC	UPRR
42	8	HURSTJ	1517	Rehab	Valley	03.67 - 76.63	Marginal	High	Communications	Wayside Communication System Replacement Parts - Valley	Acquire replacement parts including software for wayside and mountain-top communication system. Top 20 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 20 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design or Professional Services required. Recurring multi-year program.	A	100,000	100,000	-	-	-	-	-
43	9	HURSTJ	1520	Rehab	Ventura - LA County	442.0 - 462.39	Marginal	High	Communications	Wayside Communication System Replacement Parts - Ventura - LA County	Acquire replacement parts including software for wayside and mountain-top communication system. Top 10 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 1 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design, Professional Services required. Recurring multi-year program.	A	49,999	49,999	-	-	-	-	-
44	10	HURSTJ	1519	Rehab	Ventura - Vo County	402.81 - 404.47; 403.14 - 403.50; 426.40 - 442.0	Marginal	High	Communications	Wayside Communication System Replacement Parts - Ventura - Ventura County	Acquire replacement parts including software for wayside and mountain-top communication system. Top 10 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 1 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design, Professional Services required. Recurring multi-year program.	А	49,999	-	-	-	-	49,999	-
45	11	HURSTJ	1460	Rehab	Orange	165.55 - 207.40	Marginal	High	Communications	Wayside Communication System Replacement Parts - Orange	Acquire replacement parts including software for wayside and mountain-top communication system. Top 10 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 1 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design, Professional Services required. Recurring multi-year program.	А	74,855	-	74,855	-	-	-	-
46	12	HURSTJ	1518	Rehab	River	0.00 - 3.67; 140.05 - 143.83; 480.90 - 485.20 (East Bank)	Marginal	High		to the Mileposts, 36.6% of the stated	Acquire replacement parts including software for wayside and mountain-top communication system . Top 20 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 20 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design, Professional Services required. Recurring multi-year program.	A	100,000	35,522	14,807	8,301	10,769	5,384	25,217
47	13	HURSTJ	1516	Rehab	San Jacinto (PVL)	65.00 - 85.40	Marginal	High	Communications	Wayside Communication System Replacement Parts - PVL	Acquire replacement parts including software for wayside and mountain-top communication system. Top 10 high priority parts will be identified that are encountering premature failure, nearing the end of their life cycle or are reaching functional obsolescence. 1 parts at an average unit cost of \$5,000, Install with maintenance forces. Also includes new locks and keys. No Design, Professional Services required. Recurring multi-year program.	A	49,999	-	-	49,999.0	-	-	-
48	14	HURSTJ	1255	Rehab	San Gabriel 60 / 40	33.7 - 56.52	Marginal	High	Communications	Wayside Communication System Design, slot planning, interference mitigation - San Gabriel - SB County	Perform annual design, engineering, or special studies to determine condition of wayside and mountain-top systems or revise standards and as built to keep current. Comply with Config. Mgmt. Recurring multi-year program.	А	37,500	22,500	-	-	15,000	-	-
49	15	HURSTJ	1254		San Gabriel 60 / 40	1.08 - 33.70	Marginal	High	Communications	Wayside Communication System Design, slot planning, interference mitigation - San Gabriel - LA County	Perform annual design, engineering, or special studies to determine condition of wayside and mountain-top systems or revise standards and as built to keep current. Comply with Config. Mgmt. Recurring multi-year program.	А	37,500	22,500	-	-	15,000	-	-
50	16	HURSTJ	1245	Rehab	Ventura - LA County	402.81 - 404.47; 403.14 - 403.50; 426.40 - 442.0		High	Communications	Wayside Communication System Design, slot planning, interference mitigation - Ventura - LA County	Perform annual design, engineering, or special studies to determine condition of wayside and mountain-top systems or revise standards and as built to keep current. Comply with Config. Mgmt. Recurring multi-year program.	A	37,500	37,500	-	-	-	-	-



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#MC	RANK		PROJECT		CLIBBIN (ICLO	MILE	CONDITION		ACCET TYPE	22.215.67	20075	TIER	T0741		0074	D070	CD 07.1	1/0=0	
		CREATOR HURSTJ	1243	_	Ventura - VC County	_	CONDITION Marginal	High		Design, slot planning, interference	Perform annual design, engineering, or special studies to determine condition of wayside and mountain-top systems or revise standards and as built to keep current. Comply with Config. Mgmt. Recurring multi-year program.	A	37,500	METRO -	OCTA -	RCTC -	SBCTA -	VCTC 37,500	UPRR -
52 1	18 F	HURSTJ	1241	Rehab	Valley	3.67 - 76.63	Marginal	High	Communications	Wayside Communication System Design, slot planning, interference mitigation - Valley	Perform annual design, engineering, or special studies to determine condition of wayside and mountain-top systems or revise standards and as built to keep current. Comply with Config. Mgmt. Recurring multi-year program.	A	75,000	75,000	-	-	-	-	-
53 1	19 F	HURSTJ	1239	Rehab	River	0.00 - 3.67; 140.05 - 143.83; 480.90 - 485.20 (East Bank)	Marginal	High	Communications	Wayside Communication System Design, slot planning, interference mitigation - River (According to Mileposts, 36.6% of the stated distance is on the East Bank. Assume East Bank Zone 2)	Perform annual design, engineering, or special studies to determine condition of wayside and mountain-top systems or revise standards and as built to keep current. Comply with Config. Mgmt. Recurring multi-year program.	A	75,000	26,641	11,105	6,226	8,077	4,038	18,913
54 2	20 F	HURSTJ	1227	Rehab	San Jacinto (PVL)	65.00 - 85.40	Marginal	High	Communications	Wayside Communication System Design, slot planning, interference mitigation - PVL	Perform annual design, engineering, or special studies to determine condition of wayside and mountain-top systems or revise standards and as built to keep current. Comply with Config. Mgmt. Recurring multi-year program.	A	75,000	-	-	75,000.0	-	-	-
55 2	21 F	HURSTJ	1230	Rehab	Orange	165.55 - 207.40	Marginal	High	Communications	Wayside Communication System Design, slot planning, interference mitigation - Orange	Perform annual design, engineering, or special studies to determine condition of wayside and mountain-top systems or revise standards and as built to keep current. Comply with Config. Mgmt. Recurring multi-year program.	А	125,000	-	125,000	-	-	-	-
56	1 F	HARRINGTONG	1349	Rehab	River	N/A	Worn	Low	Facilities	LAUS WEST PORTAL TICKET BOOTH EXPANSION	Expand ticket booth to mirror adjacent Amtrak information booth. The existing ticket booth is too small for staff to safely and comfortably perform their duties.	А	605,000	287,375	119,790	67,155	87,120	43,560	-
57	2 F	HOLMANS	1313	Rehab	All	N/A	Worn	High	Facilities	Phase 2 - Replace Car shop Jacks at CMF	Replace Car Shop railcar 20 ton jacks.	Α	559,240	265,639	110,730	62,076	80,531	40,265	-
58	3 F	HARRINGTONG	1060	Rehab	Ventura - VC	N/A	Worn	Low	Facilities	Replace Moorpark Trailer (Crew Base)	Replace trailer and possibly connect to city sewer system.	Α	1,666,500	-	-	-	-	1,666,500	-
59	5 F	HARRINGTONG	1054	Rehab	-	N/A	Marginal	Low	Facilities	Renovate restrooms, partitions & gates at CMF and MOC	Replace tile, lighting, RR fixtures, and partitions at CMF and MOC, Replace corroding fence, gates, and automatic gate mechanisms at MOC	А	910,800	432,630	180,338	101,099	131,155	65,578	-
60	6 L	LABRECHEP	300	Rehab	All	All	N/A	N/A	Facilities	Purchase Hy-Rail Bucket Truck	Purchase one Hy-Rail bucket to allow for maintenance of any signal, communications or SCRRA infrastructure system.	А	197,890	93,998	39,182	21,966	28,496	14,248	
61	7 F	HARRINGTONG	1347	Rehab	River Sub - East Bank	N/A	N/A	N/A	Facilities	CMF Drainage Re-direction Phase II	Change site conditions (deteriorated condition) of existing Industrial Oil Water Separator. Project is needed to comply with NPDES Storm Water permit.	А	800,000	380,000	158,400	88,800	115,200	57,600	
62 (00 L	LABRECHEP	357	Rehab	Ventura - VC County	434.31; 433.27; 430.83; 429.51		High	Grade Crossing	Grade Crossing Rehab	Add crossing Gate Savers, rehab entrance gates, rehab predictor units, batteries, and rehab other misc. crossing equipment. (4 crossings @ approx. \$250K ea.); Locations (1) Erringer Rd 434.31; (2) 1st Street 433.27; (3) Quimisa Dr 430.83; (4) E. Los Angeles Ave 429.51; Field conditions may change resulting in different locations taking precedent by the time the funding is available.	A	1,018,320	-	-	-	-	1,018,320	-
63	2 L	LABRECHEP	335	Rehab	Orange	165.4 - 207.4	Worn	High	Grade Crossing	Grade Crossing Rehab	Add crossing Gate Savers, rehab entrance gates, rehab predictor units, batteries, and rehab other misc. crossing equipment. Locations: (1) Ball Road MP 169.12; (2) Santa Clara Ave MP 174.16; (3) Rancho Capistarno MP 194.3; (4) Avenida Aeropuerto MP 198.75	А	1,030,320	-	1,030,320	-	-	-	-
64	3 S	SAKODAK	1305	Rehab	San Gabriel 60 / 40	47.1	Worn	High	Grade Crossing	Rehabilitation of Beech Ave crossing on the San Gabriel Subdivision	Replace rail, ties, and crossing panels with new material. Apply new fasteners and ballast then surface the grade crossing. Place new asphalt road surface from the edge of the crossing panels to two feet from the end of ties. Crossing will be replaced at Beech Avenue.		462,000	277,200	-	-	184,800	-	-
65	1 (CHAKLADARA	133	Rehab	All	N/A	Worn	High	Information Technology	Switch Rehab Project	Replace critical aging, end-of-life switch equipment for SCRRA's business network.	А	249,700	118,608	49,441	27,717	35,957	17,978	-



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ROW#	RANK	CREATOR	PROJECT #		SUBDIVISION	MILE POSTS	CONDITION	IMPACT	ASSET TYPE	PROJECT	SCOPE	TIER (A,B,C)	TOTAL	METRO	ОСТА	RCTC	SBCTA	VCTC	UPRR
66	1	HARRINGTONG	1798	Rehab	All	N/A	Worn	High	Non-Revenue Fleet	Vehicle Replacements (Trucks & Hi-Rail Truck)	Replace MOW vehicles that have outlived useful life (includes 2 trucks for Mass Electric Signal Maintenance; 1 truck for T&S Maintenance; 1 hi-rail truck for MOW Mechanic).	A	458,975	218,013	90,877	50,946	66,092	33,046	-
67	1	HWONGD	1348	Rehab	All	N/A	Worn	High	Other	TVM End of Life components	The Ticket Vending Machines (TVM) have surpassed their standard lifespan. Conduent, our maintenance vendor has reviewed the Bill of materials for all existing TVMs and have identified (4) items that are at their end of life and needs replacement: BNA, Note boxes, ADA Panels and Displays. The purpose of this proposal is to procure the (4) items mentioned to maintain system performance.	A	200,000	95,000	39,600	22,200	28,800	14,400	-
68	1	DUNGOK	999/424	Rehab	San Gabriel - SB County	51.00 - 53.00	Worn	Low	Right of Way	San Gabriel SB Sub ROW Maint	ROW grading/ditching, correcting drainage issues near Meridian Avenue.	А	44,490	26,694	-	-	17,796	-	-
69	2	DUNGOK	422	Rehab	Orange	0 to 5 Olive & 178.00 to 179.00	Worn	Low	Right of Way	Orange/Olive Sub ROW Maint	Orange/Olive SUB ROW grading/ditching): Olive SUB between MP 0 and MP 5; Orange SUB between MP 178 and MP 179	A	209,750	-	209,750	-	-	-	-
70	3a	DUNGOK	998/418	Rehab	Valley	47.3- 47.4; 49.5- 52.0; 57.97- 58.30; 67.50- 67.92	Worn	Low	Right of Way	Valley Sub Row Maint	ROW grading/ditching MP47.3 to MP47.4 0.1 mi South Side LA County Main Track Slide Fence Area MP49.5 to MP52.0 2.5 mi South Side LA County Main Track 4 Locations between Mp 50-52.0 MP57.97 to MP58.30 0.3 mi South Side LA County Main Track Alsio Canyon Road going west MP67.50 to MP67.92 0.4 mi South Side LA County Main Track Cp Harold to Ave R South side only	A	223,850	223,850	-	-	-	-	-
71	3b	DUNGOK	998/420	Rehab	Ventura - LA County	442.80- 442.90; 443.07- 443.17; 443.80- 443.90; 444.0- 444.10	Worn	Low	Right of Way	Ventura (LA) Sub ROW Maint	ROW grading/ditching MP442.80 to MP442.9 0.1 mi North/South LA County Main Track Outside Tunnel 27 going west on North/South sides MP443.07 to MP443.17 0.1 mi North/South LA County Main Track Outside Tunnel 27 going east on North/South sides MP443.80 to MP443.9 0.1 mi North/South LA County Main Track Outside Tunnel 28 going west on North/South sides MP444.00 to MP444.1 0.1 mi North/South LA County Main Track Outside Tunnel 28 going east on North/South LA County Main Track Outside Tunnel 28 going east on North/South sides	A	223,850	223,850	-	-	-	-	-
72	1	TRIPOLIR	1061	Rehab	All	All	Worn	Low	Rolling Stock	Locomotive and Cab Car Camera & DVR replacements	Replace the DVR'S and cameras on 15 locomotives and 57 cab cars with new model	А	1,099,875	522,441	217,775	122,086	158,382	79,191	-
73	2	KAKARIST	1344	Rehab	All	ALL	Adequate	High	Rolling Stock	Overhaul side door motors in 50 Rotem passenger rail cars	Every passenger rail car in the fleet has four (4) side doors and each side door has two (2) panels with one door motor per each panel (8 door motors per rail car). The door motor has to be overhauled to function properly when rail car is in passenger service. Malfunction of door motors create train delays due to doors not opening or closing when requested by conductor. There are 137 Rotem passenger rail cars in the Metrolink fleet. Request will be made until all 137 are complete.		577,500	274,313	114,345	64,103	83,160	41,580	-
74	5	KAKARIST	1343	Rehab	All	ALL	Adequate	Low	Rolling Stock	HVAC Overhaul in forty (40) Rotem railcars	Complete overhaul the HVAC units (2 per rail car) in forty (40) Rotem railcars. Per OEM vendor the HVAC units must be overhauled every 6 years.	A	1,112,100	528,248	220,196	123,443	160,142	80,071	-
75	6	KAKARIST	1342	Rehab	All	ALL	Adequate	Low	Rolling Stock	Replace rubber window gaskets in fift (50) Rotem passenger railcars	The rubber window gaskets with time became hard and brittle. With this project a vendor will be selected to replace all rubber window gaskets in emergency and non-emergency windows in 50 Rotem passenger rail cars.	A	665,500	316,113	131,769	73,871	95,832	47,916	-
76	00	LABRECHEP	1399		San Gabriel - LA County	15.13	Worn	High	Signals	Temple Ave 15.13 - Grade Crossing Warning Equipment Rehab - SG Sub	Temple Ave MP 15.13 - Replace grade crossing warning system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	A	544,060	326,436	-	-	217,624	-	-



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# %	RANK		PROJECT			MILE						TIER							
<u>27</u>		CREATOR	1411		SUBDIVISION	_		IMPACT		PROJECT		(A,B,C)	TOTAL	METRO 41 FO1	OCTA	RCTC	SBCTA	VCTC	UPRR
//	00	LABRECHEP	1411	кепар	River Sub - West Bank	0.70	Worn	High	Signals	CP Mission MP 0.7 - Rehab Control Point Remote Control Protocol to ATCS Standards	Replace existing Bi-Polar type Control Point remote control system at CP Mission, MP 0.7, River Subdivision.	A	87,560	41,591	17,337	9,719	12,609	6,304	-
		LABRECHEP		Rehab		0.70	Worn		Signals	CP Dayton MP 0.7 - Signal System Rehab and Reliability	Replace existing signal relay logic system with new logic controllers that will provide system reliability and operation efficiency by eliminating a single point of failure. Replace old, worn and damaged signal cables. Replace Dual Control power switch machines.	A	1,807,800	858,705	357,944	200,666	260,323	130,162	-
79	00	LABRECHEP	1421	Rehab	Valley	28.00	Worn	High	Signals	CP Portal MP 28.00 - Replace Equipment Shelter and Logic Controller	CP Portal MP 28.0, Valley Subdivision - Replace existing equipment shelter, signal logic controller, battery backup system and associated supporting equipment with new, modern and reliable equipment. Replace dual control power switch machine and all underground cables at this control point with new, modern and reliable components.	A	668,910	668,910	-	-	-	-	-
80	00	LABRECHEP	1426	Rehab	Valley	76.64	Worn	High	Signals	Intermediate Signal 761 - MP 76.64 Valley Subdivision - Install Electrical Power Supply	Intermediate Signal 761 MP 76.64, Valley Subdivision - Replace existing temporary electrical power supply with new solar panel power supply.	A	144,980	144,980	-	-	-	-	-
81	00	LABRECHEP	1428	Rehab	Ventura - LA County	458.06	Worn	High	Signals	Intermediate Signals 4581-4584 MP 458.06 - Replace Signal Equipment	Intermediate Signal 4581-4584 MP 458.06, Ventura Subdivision - Replace existing equipment shelter, signal logic controller, back up battery system and supporting equipment with new, modern and reliable components.	A	358,710	358,710	-	-	-	-	-
82	00	LABRECHEP	1440	Rehab	Orange	166.20	Worn		Signals	Orangethorpe Ave 166.20 - Orange Sub - Replace Defective Grade Crossing Cables	Orangethorpe Ave MP 166.20 - Replace underground grade crossing cable for control of grade crossing.	А	265,320	-	265,320	-	-	-	-
83	1	LABRECHEP	1166	Rehab	River	ALL	Worn	High	Signals	Rehab Worn and/or Defective Battery Cells - River Sub	Replace worn and defective signal and grade crossing battery cells	Α	64,240	30,514	12,720	7,131	9,251	4,625	-
84	2	LABRECHEP	1154	Rehab	River Sub - East Bank	481.68	Worn	High	Signals	Replace AC Meter Service @ N. Main Street - East Bank Zone 1	Replace worn AC Electrical Meter Service which feed power to the grade crossing	A	130,600	2,742	1,143	641	831	416	124,827
85	3	LABRECHEP	1175	Rehab	Orange	196.1 - 207.4	Worn	High	Signals	C&S Corrosion Mitigation	Rehabilitate signal and/or grade crossing equipment due to the ongoing extremely damaging effects of salt air. This condition not only affects the physical condition of these systems, but also the operating characteristic. If left unattended, may cause an unsafe condition for the public, or passengers and train operations. Requests each year is relatively small, just to replace signals, gate mechanisms, gate arms, bells, etc. These are signal and grade crossing warning equipment that is directly exposed to salt air. Requests for 2021 may be significantly higher due to the need to replace signal and grade crossing enclosures and electronic equipment in the area. Locations: (1) Intermediate Signal Mast and Heads 2011-2; (2) Intermediate Signal Mast and Heads 2061-2	A	216,615	-	216,615	-	-	-	-
86	4	LABRECHEP	1401	Rehab	San Gabriel - LA County	16.43	Worn	High	Signals	Amar Rd 16.43 - Grade Crossing Warning Equipment Rehab - SG Sub	Amar Rd MP 16.43 - Replace grade crossing warning system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	А	544,060	326,436	-	-	217,624	-	-
87	1	AQUINOL	1109	Rehab	All	Various	Worn	High	Stations	Miscellaneous annual repair and replacement of operating envelope station signage, pedestrian crossing repair, fence repair and striping, and detectable warning tile	Replace damaged and worn out detectable warning panels and painted pavement markings placed at station platform edges throughout the Metrolink system to comply with Americans with Disabilities Act (ADA) requirements, ensure passenger safety at station platforms and to conform with the current SCRRA Engineering Standards. Replace damaged passenger information signage and displays at stations throughout the Metrolink system.	A	600,000	272,700	130,920	54,540	87,300	54,540	-
88	4	LUNE	237	Rehab	All	480.82	N/A	N/A	Structures	Arroyo Seco (480.82) Bridge Replacement (DESIGN ONLY)	Design Only. This bridge is a 240 ft. span through plate girder bridge built in 1930 and is 84 years old. Rebar are exposed and corroded on the bridge deck. The soffit of the superstructure and deck needs to be repaired. Performing Engineering and Design including Environmental Contract Packaging. The Design phase being requested is \$1,250,000. The Construction phase, currently estimated at \$9,212,125 will be requested in a future fiscal year.	A	1,250,000	593,750	247,500	138,750	180,000	90,000	



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#MO	ANK	CREATOR	PROJECT		CLIBDIVICION	MILE	CONDITION	INADACT	ACCET TYPE	DDOLECT	SCORE	TIER	TOTAL	METRO	OCTA	DCTC	CDCTA	VCTC	LIDDD
89	2 00 A	CREATOR AZEVEDOA	1536	Rehab	SUBDIVISION River	N/A	Worn			PROJECT LA Union Station Track and Signal	SCOPE Rehabilitate LA Union Station leads, switch points, frogs, and signal and	(A,B,C) A	TOTAL 5,025,000	METRO 2,386,875	OCTA 994,950	RCTC 557,775	SBCTA 723,600	VCTC 361,800	UPRR -
										Rehabilitation	communication systems. Install ballast, new insulated joints, frogs, stock								
											rails, OTM, signal wires, signal and communication conduits. Rehabilitation								
											existing signals, signal houses, switch machines, and communication lines to								
											increase the reliability of the union station leads and prevent impacts to our								
											customers. Rehabilitate CP Mission, including the signal bridge, relays, power	-							
											switch machines, rod packages, and power crossovers. This is the first year of								
											a multi-year program.								
90	1 /	AZEVEDOA	1389	Rehab	ΛII	Various	Worn	High	Track	System Wide Track Asset Condition	This task will perform data collection and asset condition assessments for	Α	724,900	344,328	143,530	80,464	104,386	52,193	
50	7 /	AZEVEDOA	1303	Kenab	All	Various	Worm	IIIgII		Assessments	Crossties (Machine Vision Tie inspection), and ballast (ground penetrating	^	724,300	344,320	143,330	00,404	104,560	32,133	
										Assessments	radar and mobile lidar ballast scanning) systemwide.								
											Total Amount o	of Tier A:	\$ 53,261,857	\$ 38,598,898	\$ 5.326.259	\$ 2.014.671	\$ 3.135.856	\$ 4,017,215	\$ 168,958
91	0 1	TRIPOLIR	1041	Rehab	All		Marginal	High	Business Systems	Trapeze Maintenance Management	Baseline Services: (\$690K)	В	471,568	471,568	-	-	-	-	-
									1	System Software Upgrade	- Business Process Workflow Optimization		,	,					
										,	- System Configuration - Detailed labor capture, Out-of-Use Credit, Report								
											Scheduler, etc.								
											- Data Loader Training								
											- Enterprise Purchasing Migration								
											- Testing Services								
											- Training								
											- Go Live Support								
											Optional Services:								
											- Data Load Assistance (\$48K)								
											- Interfaces (Fuel / Intelli-Train) (\$65K)								
											- Report Development (\$30K)								
											- State of Good Repair (100k)								
02	0 \	VANCI	1270	Dahah	Mantuna IA	NADAC1	Mann	Lave	Characterine	Vonture Sub (LA CO) Struct	NOTE: Total Project = \$992,775 / Unfunded = \$471,568	D	450.200	450.200					
92	ון ט	YANGJ	1278	Kenab	Ventura - LA County	65	Worn	Low	Structures	Ventura Sub (LA CO) Struct	BRIDGES: MP 461.65	В	450,360	450,360	-	-	-	-	-
93	0 \	YANGJ	1283	Rehab	Ventura - LA	442-	Worn	High	Track	Ventura (LA) Tie Rehabilitation	Rehabilitation of 7,500 Ties using a production tie gang on the Ventura	В	3,010,440	3,010,440	-	-	-	-	-
					County	462.6					Subdivision.								
94	0 [LABRECHEP	1161	Rehab	Valley	76.64	Worn	High		Replace Temporary AC Power Feed	Replace temporary AC electrical power supply to signal 761 with a	В	307,560	307,560	-	-	-	-	-
										with Permanent Solar System - Valley	permanent and sustainable solar power supply.								
										Sub									
95	2 H	HURSTJ	1459	Rehab	San Gabriel	1.08 -	Marginal	Low	Communications	Rehab Update CIS at Stations - San	Rehab field signage with Daktronics and PA at 1 station per year for next	В	150,000	90,000	-	-	60,000	-	-
					60 / 40	56.52				Gabriel Subdivision	three years. \$150,000 per station. Recurring multi-year program.								
96	3 H	HURSTJ	1457	Rehab	Ventura - VC	462.39;	Marginal	Low	Communications	Rehab Update CIS at Stations -	Rehab field signage with Daktronics and PA at 1 station per year for next	В	150,000	-	-	-	-	150,000	-
					County	404.47				Ventura Subdivision	three years. \$150,000 per station. Recurring multi-year program.								
97	4 H	HURSTJ	1456	Rehab	Valley	03.67 -	Marginal	Low	Communications	Rehab Update CIS at Stations - Valley	Rehab field signage with Daktronics and PA at 1 station per year for next	В	150,000	150,000	-	-	-	-	-
						76.63					three years. \$150,000 per station. Recurring multi-year program.								
98	5 H	HURSTJ	1253	Rehab	Ventura - LA	442.0 -	Marginal	Low		Rehab Update CIS at Stations -	Rehab field signage with Daktronics and PA at 1 station per year for next	В	150,000	150,000	-	-	-	-	-
					County	462.39				Ventura - LA County	three years. \$150,000 per station. Recurring multi-year program.								
99	6 H	HURSTJ	1250	Rehab	Orange	165.55 -	Marginal	Low	Communications	Rehab Update CIS at Stations - Orange	Rehab field signage with Daktronics and PA at 1 station per year for next	В	150,000	-	150,000	-	-	-	-
465	_		46:5			207.40					three years. \$150,000 per station. Recurring multi-year program.	-							
100	/ H	HURSTJ	1249	Rehab	Ventura - VC	402.81-	Marginal	Low	Communications	Rehab Update CIS at Stations -	Rehab field signage with Daktronics and PA at 1 station per year for next	В	150,000	-	-	-	-	150,000	-
					County	404.47;				Ventura - Ventura County	three years. \$150,000 per station. Recurring multi-year program.								
						403.14-													
						403.50;													
						426.40-													
						442.0													
101	4 H	HARRINGTONG	1064	Rehab	SB Shortway	N/A	Worn	Low			Purchase car mover to move equipment without running locomotives.	В	889,240	455,157	189,728	106,362	137,983	-	-
										EMF									



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#MOX	SANK	CREATOR	PROJECT		SUBDIVISION	MILE POSTS	CONDITION	IMPACT	ASSET TYPE	PROJECT	SCOPE	TIER (A,B,C)	TOTAL	METRO	ОСТА	RCTC	SBCTA	vстс	UPRR
102	1 L	LABRECHEP	292	_		_	Worn		Grade Crossing	Grade Crossing Rehab	Add crossing Gate Savers, rehab entrance gates, rehab predictor units, batteries, and rehab other misc. crossing equipment. (4 crossings @ approx. \$250K ea.). Locations: (1) Tapo St. MP 437.31; (2) Tapo Canyon Rd MP 436.83; (3) Sequoia Ave MP 436.08; (4) Sycamore Dr MP 435.32; Field conditions may change resulting in different locations taking precedent by the time the funding is available.	В	1,028,160	-	-	-	-	1,028,160	-
103	3 k	KAKARIST	1346	Rehab	All	ALL	Marginal	High	Rolling Stock	Rotem passenger rail cars Push Back Coupler Overhaul	There are two (2) Push Back Couplers in every Rotem passenger rail car and there are 137 Rotem passenger cars in the Metrolink fleet. Per OEM instructions the Push Back Couplers have to be overhauled every 6 years. The Push Back Couplers are an important component for the CEM function of the Rotem rail cars.	В	3,487,000	1,656,325	690,426	387,057	502,128	251,064	-
104	00 L	LABRECHEP	349	Rehab	River	0.7	Worn	High	Signals	Signal System Rehab - 50% West Bank 50% East Bank Zone 2	Replace Signal System back-up battery banks. Replace worn underground signal system cables, Replace worn Electrologic units and replace with VHLC or Electrologix units, Replace worn Electrocode 4 units with Electrocode 5 units at high priority locations. (Rehab EL1A with VHLC = approx. \$250,000 / location).	В	1,006,320	313,330	130,609	73,220	94,989	47,494	346,677
105	00 L	LABRECHEP	1405		San Gabriel - SB County	35.73	Worn	High	Signals	Mountain Ave 35.73 - Grade Crossing Warning Equipment Rehab - SG Sub	Mountain Ave MP 35.73 - Replace grade crossing warning system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	544,060	326,436	-	-	217,624	-	-
106	00 L	LABRECHEP	1407		San Gabriel - SB County	36.81	Worn	High	Signals	Euclid Ave 36.81 - Grade Crossing Warning Equipment Rehab - SG Sub	Euclid Ave MP 36.81 - Replace grade crossing warning system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	544,060	326,436	-	-	217,624	-	-
107	00 L	LABRECHEP	1408	Rehab	SB Shortway	0.66	Worn	High	Signals	Rialto Ave 0.66 - Grade Crossing Warning Equipment Rehab - Shortway Sub	Rialto Ave MP 0.66 - Replace grade crossing warning system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	544,060	278,477	116,081	65,075	84,422	-	-
108	00 L	LABRECHEP	1409	Rehab	SB Shortway	0.97	Worn	High	Signals	Walnut St 0.97 - Grade Crossing Warning Equipment Rehab - Shortway Sub	Walnut St MP 0.97 - Replace grade crossing warning system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	544,060	278,477	116,081	65,075	84,422	-	-
109	00 L	LABRECHEP	1417	Rehab	Valley	34.96	Worn	High	Signals	Golden Oak Rd 34.96 - Grade Crossing Warning Equipment Rehab - Valley Sub	Golden Oak Rd MP 34.96 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	571,560	571,560	-	-	-	-	-
110	00 L	LABRECHEP	1418	Rehab	Valley	32.35	Worn	High	Signals	Drayton St 32.35 - Grade Crossing Warning Equipment Rehab - Valley Sub	Drayton St MP 32.35 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	571,560	571,560	-	-	-	-	-
111	00 L	LABRECHEP	1419	Rehab	Valley	30.39	Worn	High	Signals	13th St 30.39 - Grade Crossing Warning Equipment Rehab - Valley Sub	13th St MP 30.39 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	571,560	571,560	-	-	-	-	-
112	00 L	LABRECHEP	1422	Rehab	Valley	30.20	Worn	High	Signals	CP Hood MP 30.20 - Replace Equipment Shelter and Logic Controller	CP Hood MP 30.2, Valley Subdivision - Replace existing equipment shelter, signal logic controller, battery backup system and associated supporting equipment with new, modern and reliable equipment. Replace dual control power switch machine and all underground cables at this control point with new, modern and reliable components.	В	668,910	668,910	-	-	-	-	-
113	00 L	LABRECHEP	1423	Rehab	Valley	42.0	Worn	High	Signals	CP Humphreys MP 42.0 - Replace Signal Logic Controller and supporting Equipment	CP Humphreys MP 42.0, Valley Subdivision - Replace existing signal logic controller, local control panel, backup battery system and supporting equipment with new, modern and reliable controller.	В	327,910	327,910	-	-	-	-	-
114	00 L	LABRECHEP	1429		Ventura - LA County	451.78	Worn	High	Signals	Balboa Ave 451.78 - Grade Crossing	Balboa Ave MP 451.78 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	571,560	571,560	-	-	-	-	-



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ROW#	RANK	CREATOR	PROJECT		SUBDIVISION	MILE POSTS	CONDITION	IMPACT	ASSET TYPE	PROJECT	SCOPE	TIER (A,B,C)	TOTAL	METRO	ОСТА	RCTC	SBCTA	VCTC	UPRR
115	00	LABRECHEP	1435		Ventura - LA County	450.33	Worn	High	Signals	Lindley Ave 450.33 - Grade Crossing Warning Equipment Rehab - Ventura Sub	Lindley Ave MP 450.33 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	571,560	571,560	-	-	-	-	-
116	00	LABRECHEP	1436		Ventura - LA County	448.79	Worn	High	Signals	Tampa Ave 448.79 - Grade Crossing Warning Equipment Rehab - Ventura Sub	Tampa Ave MP 448.79 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	571,560	571,560	-	-	-	-	-
117	00	LABRECHEP	1437	Rehab	Ventura - LA County	446.73	Worn	High	Signals	DeSoto Ave 446.73 - Grade Crossing Warning Equipment Rehab - Ventura Sub	DeSoto Ave MP 446.73 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	571,560	571,560	-	-	-	-	-
118	00	LABRECHEP	1438		Ventura - LA County	447.76	Worn	High	Signals		Winnetka Ave MP 447.76 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables.	В	571,560	571,560	-	-	-	-	-
119	00	LUNE	221		Ventura - VC County	427.70	n/a	n/a	Structures	Arroyo Simi 1st Crossing Scour Protection with Concrete Pile Collar and Debris Removal	Bridge 427.70 has experienced significant scour at the right (Railroad East, Geographic West) abutment. During 2011 flooding, a sink hole was identified behind the abutment where ballast was washed away. This project will provide scour protection to the bridge. Replace Bridge Ties, Approach Ties (100 feet), Fastening (Pandrol E Clips) and Ballast on all 4 Simi Bridges including 427.70, 428.15, 428.83, 429.26 @\$100,000 each.	В	1,519,955	-	-	-	-	1,519,955	-
120	1	QUINNT	1384	Rehab	San Gabriel - LA County	29.096	Worn	High	Structures	San Gabriel (LA) SUB Bridge Replacement - Design & Construction	At MP 29.096 replacement of 14 ft. span (10'x4.5') reinforced concrete box / rail top bridge.	В	774,000	464,400	-	-	309,600	-	-
121	2	QUINNT	1381	Rehab	Orange	200.2	Worn	High	Structures	Orange SUB Bridge Replacement - Design only	At MP 200.2 replace 81.50' span steel thru girder (ballast deck) bridge. (DESIGN ONLY)	В	999,900	-	999,900	-	-	-	-
122	00	AZEVEDOA	1212	Rehab	Valley	26.50	Worn	High	Track	Tunnel 25 Track Renovation	Complete Rehabilitation of the Track Structure in Tunnel 25 (Rail, Ties, Ballast, Drainage, water pumps)	В	10,792,750	10,792,750	-	-	-	-	-
123	00	AZEVEDOA	1496	Rehab	All	3.5 to 76.6, 426.4 to 462.39, 0.9 to 56.63, 165.4 to 207.4		High	Track	Rail Grinding Systemwide	Perform production rail grinding with large rail mounted specialized. Rail grinding is included in both the operating budget and rehab budgets. The rail grinding included in the operating budget is the emergency, bare minimum grinding to correct severe defects mostly on sharp curves from developing into severe defect. The rail grinding included in the rehabilitation budget is more expansive and is performed on a planned preventative maintenance basis and on all curves, tangent track and turnouts plus grade crossings. The preventative maintenance grinding is typically performed every two to four years to maintain the rail profile. Good rail profile maintains the running surface of the rail so that better contact with the train wheels is maintained. This removes conditions that may develop into defective rails with speed restrictions or even broken rails. Grinding to a design profile also improves ride quality, lowers noise and fuel consumption. This grinding work can be done on all segments of the Metrolink system.	В	996,600	473,385	197,327	110,623	143,510	71,755	-
124	1	QUINNT	1388	Rehab	River	0.68 to 3.7	Worn	High	Track	River Subdivision Track Rehabilitation	Replacement due to degradation: 13,357 ft. of rail and 2 turnouts. Replacement was determined by using the Holland Range CAM Track Analyst software; uses current wear rates on rail to project when it will have to be replaced. Locations on this subdivision were identified by mile post and added together to determine the number of ft. of rail. Locations: (1) River SUB (non-East Bank) worn rail sections only within MP 0.68 to MP 3.7; (2) River West Bank MP worn rail sections only within 143.0 to MP 143.4; (3) 2 Turnouts at CP Chavez	В:	2,829,000	1,343,775	560,142	314,019	407,376	203,688	-



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#MOX	ZANK	CREATOR	PROJECT #		SUBDIVISION	MILE	CONDITION	IMPACT	ASSET TYPE	PROJECT	SCOPE	TIER (A,B,C)	TOTAL	METRO	ОСТА	RCTC	SBCTA	VCTC	UPRR
125	2 C	TMMIUQ	1386	Rehab	San Gabriel 60 / 40	Various	Worn			San Gabriel Subdivision Track Rehabilitation	Replacement due to degradation: 13,000 ft. of rail, 4 crossings, 2 turnouts, and 20,000 ft. of undercutting (ballast). Replacement was determined by using the Holland Range CAM Track Analyst software; uses current wear rates on rail to project when it will have to be replaced. Locations on this subdivision were identified by mile post and added together to determine the number of ft. of rail.	В	5,163,500	3,098,100	-	-	2,065,400	-	-
126	3 C	QUINNT	1387		Orange and Olive	Various	Worn	High	Track	Orange / Olive Subdivision Track Rehabilitation	Replacement due to degradation: 4,000 ft. of rail, 9,000 ties, 1 crossing, and 35,700 ft. of undercutting (ballast). Replacement was determined by using the Holland Range CAM Track Analyst software; uses current wear rates on rail to project when it will have to be replaced. Locations on this subdivision were identified by mile post and added together to determine the number of ft. of rail (see sample attached).		5,221,000	-	5,221,000	-	-	-	-
127	5 A	AZEVEDOA	1394	Rehab	All	N/A	Worn	High	Track	Enterprise Asset Management Migration - Systemwide	This task will advertise and award an enterprise asset management tool so that all of Metrolink infrastructure assets, conditions, work order assignments, progress tracking, and inspections, for both linear assets (track) and singular assets (crossings, structures, turnouts, etc.). This task will include a selection of a vendor from the two vendors we have existing asset condition databases with currently.	В	1,177,000	559,075	233,046	130,647	169,488	84,744	-
128	6 A	AZEVEDOA	1379		Ventura - LA County	Various	Worn	High	Track	Ventura (LA County) Track Rehabilitation	Track Rehabilitation includes 6500 ft. of worn rail replacement, 3 crossing replacements, 2 turnout replacements, and 18000 ft. of undercutting and ballast cleaning. Replacement was determined by using the Holland Range CAM Track Analyst software; uses current wear rates on rail to project when it will have to be replaced. Locations on this subdivision were identified by mile post and added together to determine the number of ft. of rail.	В	3,747,000	3,747,000	-	-	-	-	-
											Total Amount o	of Tier B:	\$ 52,516,893	\$ 34,312,352	\$ 8,604,340	\$ 1,252,078	\$ 4,494,566	\$ 3,506,860	\$ 346,677
129	0 L	ABRECHEP	319	Rehab	Valley	All	Worn	High	Signals	Signal System Rehab - Rehab Logic Controllers and Supporting Equipment - Valley Sub	Replace Signal System back-up battery banks. Replace worn underground signal system cables, Replace worn Electrologic units and replace with VHLC or Electrologix units, Replace worn Electrocode 4 units with Electrocode 5 units at high priority locations. (Rehab EL1A with VHLC = \$250,000 / location).	С	1,131,460	1,131,460	-	-	-	-	-
130	1 P	PETERSONJ	272	Rehab	All	All	Worn	High	Communications	SCRRA Positive Train Control Lab Systems Support and Testing	Hardware and software maintenance and support not covered by direct maintenance and support agreements for the SCRRA PTC Lab. The project will include upgrading the PTC related systems to the next version of CAD/BOS/ITCM/MDM/WSRS/OBS system software and hardware. The upgrades are to include installation in the SCRRA lab, lab testing and validation.	С	847,500	402,563	167,805	94,073	122,040	61,020	-
131	3 C	TNNIUQ	1378	Rehab	Valley	Varies	Worn	High	Structures	Valley SUB Bridge Replacement Design & Construction	At MP 8.12 replace 95' span deck plate girder ballast deck bridge. At MP 47.83 replace 13' span I-beam ballast deck bridge. At MP 44.94 replace 173' (2 spans @ 86.5') steel thru girder open deck bridge. At MP 19.42 replace 6' span rail top bridge. At MP 28.49 replace 8' railtop bridge deck and 10' concrete slab bridge.	С	15,299,760	15,299,760	-	-	-	-	-
132 0	00 C	QUINNT	1696	Rehab	Pasadena	n/a	Worn	Low	Track, Grade Crossing, Structures	Pasadena Subdivision Rehab	Replacement may include rail, ties, grade crossings, bridges, and/or culverts. Rehab work is needed to extend asset life since the Foothill Gold Line Extension relocation and rebuild is going to be several years away.	С	750,000	750,000	-	-	-	-	-
											Total Amount o	of Tier C:	\$ 18,028,720	\$ 17,583,783	\$ 167,805	\$ 94,073	\$ 122,040	\$ 61,020	\$ -
133 S	SP Y	(ANGJ	503	Rehab	METRO ONLY		N/A	N/A	Equipment	Refurbish 10 passenger cars for expanded service	Refurbish 10 passenger cars for expanded service. Cost is \$1.45M per unit for mid-life overhaul. Service for 2 round trips from LA to Chatsworth and 2 round trips from LA to Lancaster. Rail cars to be refurbished: 2 Second Generation Bombardier Coaches 6 First Generation Bombardier Cab Cars 2 Second Generation Bombardier Cab Cars	SP	14,500,000	14,500,000	-	-	-	-	_
134 5	SP B	BENINGH	1203	Rehab	Orange	197.9	N/A	N/A	Structures	Orange Sub Struct - San Juan Creek Bridge	BRIDGES: MP 197.9 Construction of replacement for 300-ft span thru-plate girder bridge (San Juan Creek Bridge-MP 197.9).	SP	38,261,522	-	38,261,522	-	-	-	



Revised: 03.13.18

#MC	X	PROJECT			MILE						TIER							
2		#		SUBDIVISION			IMPACT		PROJECT	SCOPE	(A,B,C)	TOTAL	METRO	OCTA	RCTC	SBCTA	VCTC	UPRR
135	SP AZEVEDOA	1209	Rehab	San Jacinto (PVL)	64.5	Worn	Low	Track	Perris Valley Subdivision Rail Rehab Program	Upgrade aged and work rail from 1977 to new 136 lb Head-Hardened Rail between the limits of 69.81-71.09 and 71.24-71.66 (8,976 Track ft, 17,952 ft of Rail). Upgrade Cut Spike fastening to resilient (pandrol clip) fastening (8,976 Track Ft). Replace approximately 50% of wood Ties (about 2800).	SP	3,256,250	-	-	3,256,250	-	-	-
136	SP LABRECHEP	1425	Rehab	Valley	14.14	Worn	High	Signals	Arvilla St 14.14 - Grade Crossing Warning Equipment Rehab - Valley Sub	Arvilla St MP 14.14 - Replace existing grade crossing warning equipment shelter, system logic controller and associated backup battery systems, replace gate mechanisms, add crossing arm gate savers, replace existing underground warning system cables. NOTE: Project 1288 funding is in the Rehab FY18 Backlog	SP	571,560	571,560	-	-	-	-	-
137	SP LUNE	1818	Rehab	San Jacinto (PVL)	68.0	Worn	Low	Track	Box Springs Area Drainage Assessment	Perform hydrology and hydraulics study for Box Springs Area to determine drainage solutions to capture and convey flows away from railroad tracks.	SP	199,638	-	-	199,638	-	-	-
138	SP KAKARIST	1120	Rehab	All	ALL	Marginal	High	Rolling Stock		The current fleet of 121 Bombardier passenger rail cars includes three generations of rail cars with delivery dates of 1992, 1997 and 2002. The purpose of this midlife overhaul is to improve passenger comfort and safety, reliability, appearance and upgrade to current standards. The overhaul will replace and upgrade worn and marginal running gear, hardware, systems and components and will extend the useful life of the rail cars. The midlife overhaul as recommended by the OEM manufacturer is about 15 years after the cars initial in service date. The Metrolink Bombardier car fleet has not gone through a midlife overhaul yet. About fourteen (14) first generation Bombardier coach cars will be overhauled. The Overhaul Specification and also a breakdown on the costs per each system is the same as is shown on the previous year 2018.	SP	20,250,000	9,618,750	4,009,500	2,247,750	2,916,000	1,458,000	-

Total Amount of Special Projects: \$ 77,038,970 \$ 24,690,310 \$42,271,022 \$ 5,703,638 \$ 2,916,000 \$ 1,458,000 \$

Final Requested: \$ 200,846,440 \$115,185,342 \$56,369,426 \$ 9,064,459 \$10,668,461 \$ 9,043,095 \$ 515,635



NEW CAPITAL PROJECT PROPOSALS - FY19 PROPOSED BUDGET INCLUDING FY18 BACKLOG

Revised: 01.10.18

														Kev	rised: 01.10.18
	PROJECT														
CREATOR	#	TYPE	SUBDIVISION	MILE POSTS	CONDITION	IMPACT	ASSET TYPE	PROJECT	SCOPE	TOTAL	METRO	ОСТА	RCTC	SBCTA	VCTC
CHAKLADARA	1119	Capital	All	N/A	N/A	N/A	Business Systems	Laptop and Server Upgrade	Replace old laptops and servers to support Windows 10 rollout. NOTE: Total project = \$208,000 / Unfunded = \$98,800	98,800	98,800	-	-	-	-
LUNE	219	Capital	All	3.35	N/A	N/A	Track	Central Maintenance Facility West Entrance	A new connection from the existing track at CMF to the main lines will be constructed to provide second entrance to the CMF Facility. This connection will provide emergency exit from the CMF on the west side. The project will include track and signal work, a new bridge to go across CMF Access Road and tie into existing CP Taylor. NOTE: Total Project = \$2,000,000 / Unfunded = \$950,000	950,000	950,000	-	-	-	-
PETERSONJ	1238	Capital	All	All	N/A	N/A	PTC Systems	Interoperable Positive Train Control Rung II Non-Vital to Vital System Upgrade	Perform a System wide upgrade to all PTC systems and subsystems to achieve a federal certification of compliance for a vital control system. The upgrade is to include onboard systems, communication systems, back office systems, wayside systems, documentation, laboratory and field testing, updating and submitting the SCRRA's PTC Implementation Plan and PTC Safety Plan to the FRA for approval. NOTE: Total Project = \$3,070,000 / Unfunded = \$1,458,250	1,458,250	1,458,250	-	-	-	-
LUNE	215	Capital	Valley	68.50 - 69.80	N/A	N/A	Track	Palmdale Passing Siding (DESIGN ONLY)	Design Only. Construct 2,000 feet of passing siding near Palmdale Station for operational flexibility. The Design phase being requested is \$1,000,000. The Construction phase, currently estimated at \$8,360,400, will be requested in a future fiscal year.	1,000,000	1,000,000	-	-	-	•
LUNE	366	Capital	Orange	183.5	N/A	N/A	Facilities	Irvine Maintenance Facility Phase I (DESIGN & ENVIRONMENTAL ONLY)	Perform Design and Environmental. Build a first phase new maintenance facility in Irvine on the property acquired by OCTA to maintain Metrolink vehicles and locomotives. The first phase will include layover tracks, car wash, S&I tracks, sanding and fueling system. Perform Design Only of EMF Phase 2 and 3 Build Out including Railroad West (south) main track connection. The Design phase being requested is \$10,000,000. The Constructions phase, currently estimated at \$40,100,000, will be requested in a future fiscal year.	10,000,000	-	10,000,000	-	-	-
FORNELLIJ	374	Capital	All	Systemwide	N/A	N/A	Track	6 Automatic Equipment Identification (AEI) and 2 Automated Wheel and Brake Inspection (WILD) - wheel impact and loaded detection	Wheel scan system provide immediate feedback on the wheel wear and wheel profile of every axles of each train that passes wayside measurement system. Wheel scan systems take wheel profile images and perform dimensional measurements on each wheel in real time. Wheel scan systems are designed to measure wheel profile, flange height, flange width, flange cross dimension, flange angle, rim thickness, back-to-back gauge, and wheel diameter. Other railroad specific wheel parameters may also be calculated using the collected data. Data is collected in real-time and at track speeds. Wheel scan systems are designed to be installed in mainline track, yards, or in maintenance workshops for the real-time evaluation of wheel parameters. The system can also be integrated with other track-based measurement and detection systems including wheel impact, brake and truck monitoring equipment and maintenance management systems. In a typical installation, each wheel image is synchronized with vehicle identification information, and transferred to offsite computers to a web-based data management application for fleet analysis and reporting. Some systems have are compatible with enterprise resource planning (ERP) systems.	500,000	237,500	99,000	55,500	72,000	36,000
HARRINGTONG	1079	Capital	All	N/A	N/A	N/A	Facilities	Electric Vehicle Charging Stations	Install EV charging stations at CMF, MOC, DOC, and Melbourne.	804,320	382,052	159,255	89,280	115,822	57,911

FY2018-19 New Capital Project List
ATTACHMENT I



NEW CAPITAL PROJECT PROPOSALS - FY19 PROPOSED BUDGET INCLUDING FY18 BACKLOG

Revised: 01.10.18

		PROJECT														
CRI	EATOR	#	TYPE	SUBDIVISION	MILE POSTS	CONDITION	IMPACT	ASSET TYPE	PROJECT	SCOPE	TOTAL	METRO	ОСТА	RCTC	SBCTA	VCTC
LUNE		1358	Capital	All	3.35	N/A	N/A		Central Maintenance Facility West Entrance.	A new connection from the existing track at CMF to the main lines will be constructed to provide second entrance to the CMF Facility. This connection will provide emergency exit from the CMF on the west side. The project will include track and signal work, a new bridge to go across CMF Access Road and tie into existing CP Taylor. (Design project #219 is part of the FY18 budget request, in an amount of \$2,000,000).	9,698,500	4,606,788	1,920,303	1,076,534	1,396,584	698,292
										Final Requested	\$ 24.509.870	\$ 8.733.390	\$ 12.178.558	\$ 1.221.313	\$ 1.584.406	\$ 792,203

	Projected EY 19-20 Budget									
(\$000s)	Metro	OCTA	RCTC	SBCTA	VCTC	Total				
Operating Revenue										
Farebox Revenue	42,190	22,817	7,783	10,341	2,370	85,501				
Metro Fare Reduction Subsidy	, -	· -	-	-	-	-				
Subtotal-Pro Forma FareBox	42,190	22,817	7,783	10,341	2,370	85,501				
Dispatching	1,099	696	12	59	256	2,122				
Other Revenues	126	58	32	37	17	270				
MOW Revenues	7,426	2,549	668	1,544	475	12,663				
Subtotal Operating Revenue	50,841	26,121	8,496	11,981	3,118	100,556				
Operating Expenses										
Operations & Services										
Train Operations	25,587	10,725	4,984	5,206	1,824	48,327				
Equipment Maintenance	19,439	8,960	4,641	4,503	1,704	39,248				
Fuel	9,998	4,828	1,943	2,067	634	19,471				
Non-Scheduled Rolling Stock Repairs	94	43	18	20	6	180				
Operating Facilities Maintenance	901	411	169	194	56	1,731				
Other Operating Train Services	233	85	74	51	52	495				
Rolling Stock Lease	-	-	-	-	-	-				
Security - Sheriff	3,180	1,216	926	617	126	6,066				
Security - Guards	1,179	431	374	256	261	2,500				
Supplemental Additional Security	340	184	63	83	19	690				
Public Safety Program	183	67	58	40	41	389				
Passenger Relations Holiday Trains	823	490	166	203	57	1,739				
TVM Maintenance/Revenue Collection	3,972	2,021	1,533	1,254	- 557	9,338				
· ·	3,972 800	•	-		557 59	1				
Marketing Media & External Communications	216	446 79	163 68	193 47	48	1,661 458				
Utilities/Leases		609	529	361	369					
Transfers to Other Operators	1,666		529 508	699	212	3,535				
Amtrak Transfers	3,753 765	1,519 1,516	506	-	119	6,691 2,400				
Station Maintenance	1,159	264	115	255	84	1,877				
Rail Agreements	1,139	1,594	1,265	255 357	360	5,525				
Subtotal Operations & Services	76,238	35,489	17,599	16,406	6,589	152,320				
Maintenance-of-Way	70,230	33,409	17,399	10,400	0,309	132,320				
MoW - Line Segments	22,643	8,891	3,296	6,018	2,567	43,414				
MoW - Extraordinary Maintenance	366	80	60	64	50	620				
Subtotal Maintenance-of-Way	23,009	8,971	3,356	6,082	2,617	44,035				
Administration & Services										
Ops Salaries & Fringe Benefits	6,818	2,504	2,157	1,480	1,504	14,464				
Ops Non-Labor Expenses	3,930	1,717	855	871	381	7,754				
Indirect Administrative Expenses	8,375	3,063	2,658	1,816	1,855	17,767				
Ops Professional Services	1,241	454	394	269	275	2,633				
Subtotal Admin & Services Contingency (Non-Train Ops)	20,365 96	7,738 35	6,064 31	4,435 21	4,016 21	42,618 204				
condugency (Non-Train ops)	70	33	31	21	21	201				
Total Operating Expenses	119,708	52,233	27,049	26,945	13,242	239,177				
Insurance Expense/(Revenue)										
Liability/Property/Auto	6,195	2,829	1,164	1,331	387	11,906				
Claims / SI	520	238	98	112	33	1,000				
Claims Administration	648	296	122	139	41	1,246				
PLPD Revenue	-		-	-						
Net Insurance Expense	7,363	3,363	1,384	1,582	460	14,152				
Total Expense	127,071	55,596	28,433	28,527	13,702	253,329				
Loss	(76,230)	(29,475)	(19,937)	(16,546)	(10,584)	(152,773)				
Member Subsidies										
Operations	68,866	26,113	18,553	14,964	10,124	138,621				
Insurance	7,363	3,363	1,384	1,582	460	14,152				
Total Member Subsidies	76,230	29,475	19,937	16,546	10,584	152,773				
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	Projected EY 20-21 Budget									
(\$000s)	Metro	ОСТА	RCTC	SBCTA	VCTC	Total				
Operating Revenue										
Farebox Revenue	42,435	23,045	7,782	10,241	2,365	85,868				
Metro Fare Reduction Subsidy	-	-	-	-	-	-				
Subtotal-Pro Forma FareBox	42,435	23,045	7,782	10,241	2,365	85,868				
Dispatching	1,099	697	13	59	256	2,124				
Other Revenues	127	58	32	37	17	270				
MOW Revenues	7,493	2,576	677	1,563	475	12,784				
Subtotal Operating Revenue	51,154	26,376	8,503	11,900	3,112	101,045				
Operating Expenses										
Operations & Services										
Train Operations	26,404	11,031	5,128	5,376	1,892	49,831				
Equipment Maintenance	19,959	9,196	4,761	4,772	1,754	40,441				
Fuel	10,148	4,886	1,969	2,099	645	19,747				
Non-Scheduled Rolling Stock Repairs	93	43	18	21	6	180				
Operating Facilities Maintenance	924	422	174	207	58	1,785				
Other Operating Train Services	240	88	76	52	53	508				
Rolling Stock Lease	-	-	-	-	-	-				
Security - Sheriff	3,265	1,254	941	656	132	6,248				
Security - Guards	1,202	440	381	261	266	2,550				
Supplemental Additional Security	341	185	63	82	19	690				
Public Safety Program	183	67	58	40	41	389				
Passenger Relations	834	489	162	200	54	1,739				
Holiday Trains	-	107	102	200	-	1,737				
TVM Maintenance/Revenue Collection	4,097	2,084	1,581	1,293	575	9,630				
Marketing	984	538	1,301	229	68	2,011				
Media & External Communications	219	80	70	48	49	465				
Utilities/Leases	1,697	621	538	368	376					
•	· ·		530 524	710		3,599				
Transfers to Other Operators	3,867	1,575	524		216	6,892				
Amtrak Transfers	765	1,516	- 120	-	119	2,400				
Station Maintenance	1,205	274	120	266	88	1,952				
Rail Agreements	1,988	1,642	1,295	362	367	5,654				
Subtotal Operations & Services	78,413	36,431	18,050	17,041	6,777	156,711				
Maintenance-of-Way	00.000	0.040			0.5==					
MoW - Line Segments	23,623	9,248	3,445	6,257	2,675	45,248				
MoW - Extraordinary Maintenance	385	84	64	68	52	653				
Subtotal Maintenance-of-Way	24,007	9,332	3,508	6,325	2,728	45,901				
Administration & Services		0.000	0.044	4 ==0	4 ==0					
Ops Salaries & Fringe Benefits	7,155	2,628	2,264	1,553	1,579	15,179				
Ops Non-Labor Expenses	4,036	1,764	876	894	390	7,961				
Indirect Administrative Expenses	8,722	3,190	2,768	1,891	1,932	18,503				
Ops Professional Services	1,267	464	402	275	281	2,689				
Subtotal Admin & Services	21,181	8,045	6,311	4,613	4,181	44,332				
Contingency (Non-Train Ops)	96	35	31	21	21	204				
Total Operating Expenses	123,698	53,844	27,899	28,000	13,707	247,148				
Insurance Expense/(Revenue)										
Liability/Property/Auto	6,372	2,910	1,198	1,430	399	12,309				
Claims / SI	518	2,910	97	1,430	32	1,000				
Claims Administration	664	303	125	116	32 42	1,000				
PLPD Revenue	004	303	125	149	44	1,202				
	7 = 5.4	2.440			450	14 504				
Net Insurance Expense	7,554	3,449	1,420	1,695	473	14,591				
Total Expense	131,252	57,293	29,319	29,695	14,180	261,739				
Loss	(80,098)	(30,917)	(20,815)	(17,795)	(11,067)	(160,694)				
Member Subsidies										
Operations	72,544	27,468	19,396	16,100	10,595	146,103				
Insurance	7,554	3,449	1,420	1,695	473	14,591				
Total Member Subsidies	80,098	30,917	20,815	17,795	11,067	160,694				