



## Board Report

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### PLANNING AND PROGRAMMING COMMITTEE APRIL 19, 2017

**SUBJECT: Receive and file the Regional Rail Update**

**ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE the **Regional Rail Update through March 2017.**

#### **ISSUE**

The Regional Rail unit of the Program Management Department is responsible for providing overall coordination, management, and the programming of funds for LACMTA's commitment to the commuter, intercity, and high speed rail networks serving Los Angeles County. This unit also manages and coordinates capital improvement projects along the LACMTA owned railroad right-of-way.

#### **DISCUSSION**

LACMTA is the largest member agency for the Southern California Regional Rail Authority (SCRRA), the operator of the Metrolink commuter rail network. Metrolink carries approximately 40,000 riders per day throughout the southern California Region.

LACMTA is a member of the Los Angeles - San Diego - San Luis Obispo (LOSSAN) Rail Corridor Agency. This Joint Powers Authority (JPA) coordinates the passenger rail services of the three carriers (Amtrak, Metrolink, and COASTER) within this intercity rail corridor. LACMTA is instrumental in the planning and coordination efforts within the County of Los Angeles for the future high speed rail program connecting northern California to southern California. Staff is involved with regional and statewide groups working to develop integrated passenger rail service in the state.

The Regional Rail team coordinates and leads capital improvement projects for the Metro owned and Metrolink operated right-of-way.

#### **Capital Projects**

The Regional Rail unit is actively managing 9 capital improvement projects. These projects range from planning studies to the design of capacity and safety related projects. There are two regional rail projects currently on hold, Raymer to Bernsen Double Track and Bob Hope Pedestrian Bridge.

1. Bob Hope Airport/Hollywood Way Station (Station), Antelope Valley Line

This project will add a new Metrolink station on the Antelope Valley Line, to provide better access to the Bob Hope Airport. Construction contract award and Notice to Proceed were issued on January 5, 2017 and March 1, 2017 respectfully. A successful pre-construction community meeting was held on March 13, 2017 to discuss construction related information including construction hours, lane closures, and duration. Over 70 people attended the meeting. Construction is anticipated to be completed by May 2018 and revenue operation is anticipated by June 2018 or sooner.

2. Brighton to Roxford Double Track

This project proposes to add a second main line track on approximately 11 miles of the Antelope Valley Line (AVL) between Burbank and Sylmar. This creates over 25 miles of continuous double track rail from Los Angeles Union station to the San Fernando Valley. The goal of project is to improve regional rail service while enhancing safety for the corridor communities and commuters on AVL. The existing single main line track is used by both Metrolink commuter rail service as well as Union Pacific Railroad (UPRR) freight service and accommodates approximately 35 trains per day. This creates a significant bottleneck for rail transportation and reduces the on-time performance of Metrolink trains. Currently, trains must frequently idle at the siding track, leading to longer commutes including unpredictable arrivals and departures in surrounding communities. The addition of second main line track will allow for opposing traffic to run on separate tracks improving the overall flow of trains, effectively creating a "2-way street" for train operations. There are 16 at-grade roadway crossings that need to be improved. All crossings will be designed with quiet-zone related improvements. The consultant is currently working on Phase-2 Design Documents (65% PS&E) which is targeted for submittal on August 2017.

3. Doran Street and Broadway/Brazil Safety and Access Project

The Doran Street grade crossing has been identified by the California Public Utilities Commission as one of the most hazardous crossings on the Metrolink system. This project grade separates the crossing and enhances safety and mobility into the area. The project is currently in the Alternative Analysis (AA) phase. The Metro Board in January 2017 approved Alternative 2 Salem/ Sperry Overpass and a Northerly Point of Access (P or J Hook Options) to start preliminary engineering and environmental work. A draft environmental document is expected to be completed in Spring 2018.

L.A. County Grade Crossing and Corridor Safety Program

This study includes 110 at-grade railroad crossings along the rail corridors that Metrolink operate commuter rail service, including a total of approximately 132 miles of Metro-owned railroad right-of-way. The study includes two phases of work: Phase 1 includes development of an inventory of Metrolink grade crossings and rail corridors in Los Angeles County and identification of the scope and priority for safety enhancements; Phase 2 includes development of a Project Study Report Equivalent (PSRE) report for each of the four (4) grade crossings to be evaluated for potential grade separations.

Staff received comments and new traffic information from cities and accordingly revised the recommended safety enhancements at some grade crossings as well as the priority rankings. Staff has completed the Phase 1 work, which includes a planning level cost estimate for safety enhancements, priority rankings for near term roadway and pedestrian improvements, and priority rankings for long term grade separation candidate projects. Staff is reviewing all Phase 1 information to determine the four grade crossings to be evaluated in PSRE reports as Phase 2 work. The anticipated completion date for Phase 2 work is April 2018.

4. Los Angeles County Metrolink Station Assessment and Improvement Plan

The Southern California Regional Rail Authority (SCRRA) operates Metrolink passenger rail service in six southern California counties, including Los Angeles County. There are 25 Metrolink Stations in Los Angeles County that are either owned and/or maintained by the city where they are located, Caltrans, or Los Angeles County. Some of the stations serve as “shared stations” for Metrolink and Amtrak service. This study looked into opportunities to upgrade the 25 existing Metrolink stations in Los Angeles County which to improve the passenger experience. The team completed assessment of the Stations and identified improvements that will provide passengers with convenient, safe, and user-friendly services at the Stations. The draft study was submitted for review in December 2017 and review comments were provided to the team in January 2018. The final study will be ready by next quarter for distribution.

5. Rosecrans/Marquardt Grade Separation

This project will grade separates the existing at-grade crossing at the Rosecrans and Marquardt intersection in City of Santa Fe Springs, which has been ranked No. 1 on the California Public Utilities Commission (CPUC) Section 190 list as the most hazardous crossing in the state. In the Summer 2016, Metro was awarded \$15 million in TIGER grant for the Project. Based on the 65% design plans, Metro established the life of project budget of \$155.3 million. The CPUC has approved the grade separation application in March 2017. The 90% design plans is scheduled to be submitted for May 2017. Metro is currently is coordinating with CAHSR, BNSF, & City of Santa Fe Springs to secure funding agreements for construction and right of way acquisition.

6. Link Union Station (Link US)

The Link US project will convert the stub-ended railyard at Los Angeles Union Station (LAUS) to a run-through railyard which will significantly expand rail service capacity and enhance operational flexibility. Link US will include up to 10 new run-through tracks over US 101, reconstruction of the railyard and the throat, addition of a northern loop track, and a new expanded multi-modal passenger concourse designed to meet the demands from the growing ridership at LAUS. Link US will significantly reduce greenhouse gases associated with idling locomotives and provide the infrastructure needed to support potential one-seat rides to key destinations in Southern California. Lastly, Link US will be designed to accommodate the future California High Speed Rail (HSR) and

West Santa Ana Branch (WSAB) Line Light Rail services.

The project is currently in the Preliminary Engineering and Environmental Clearance phase. The Draft EIR/EIS is scheduled to be released to the public in late summer 2017 and FRA's Record of Decision is scheduled for early spring 2018. Staff has received Board approval in March on the Recommended Alternative that will be included in the Draft EIR/EIS.

Staff is continuing to coordinate the development of Link US with the California High Speed Rail Authority (CHSRA). Regular meetings are occurring between the Link US team and the CHSRA about accommodating the high speed rail program into the footprint of Link US EIR/S. Staff continues to work with the CHSRA on the necessary agreements including a full funding agreement and operations and maintenance agreement that addresses the implementation phase of the project (right of way acquisition and construction).

7. Lone Hill to CP White Second Track

The Metrolink San Bernardino line is 70% single track. This project will add a 3.9 mile section of additional second track in the cities of La Verne and San Dimas. All 12 crossings will be designed to be quiet-zone ready.

The project is in the environmental clearance and 30% design phase. Community meetings were held in November 2016. Further outreach to the community is continuing this Spring. Preliminary engineering is scheduled to be completed Summer 2017.

8. Metrolink San Bernardino Line Diesel Multiple Unit (DMU) Study

Metro is partnering with San Bernardino County Transportation Authority (SBCTA) perform a study to assess the feasibility of operating Diesel Multiple Unit (DMU) service on the Metrolink San Bernardino Line between Redlands in San Bernardino and Los Angeles Union Station. The DMU study presents unique opportunities to operate additional transit service and/or achieve cost savings for commuter rail operations.

**Regional Rail projects currently on hold:**

9. Bob Hope Airport Pedestrian Grade Separation, Ventura Line

The Bob Hope Airport Pedestrian Bridge project is a pedestrian safety enhancement project that provides a direct plane-to-train connection between the regional rail network and the Hollywood Burbank Airport. This project was then placed on indefinite hold because Burbank-Glendale-Pasadena Airport Authority, LOSSAN, and City of Burbank staff have declined to operate and maintain the pedestrian bridge. Metro and the Southern California Regional Rail Authority (SCRRA) does not maintain Metrolink stations or related improvements such as pedestrian bridges.

10. Raymer to Bernson Double Track

Six miles of second main line track is proposed to be constructed between Van Nuys and

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Chatsworth. Metro has secured a total of \$80.3 million for the project with \$60.82 million from the California State Transportation Improvement Program and \$19.48 million California State Proposition 1B Intercity Rail. The California Transportation Commission has postponed the funding of the project to fiscal year 2019. As of June 2016, Caltrans has ended the funding contract for the design phase of the project. The November Metro Board has placed the project on hold.

## Metrolink Commuter Rail Operations

- Ticket Vending Machine Update

Metrolink informed the member agencies that they are still in the process of writing their TVM procurement scope of work. The RFP is scheduled to be released in early April or May 2017 with an expected award date of October 2017. As a result of this updated schedule new TVMs are anticipated to be installed in January 2019. Metro has emphasized our Board's request for a TVM cash option in Los Angeles County and submitted a station by station request for one or more cash TVM at all Los Angeles County stations. Metro's TAP, OMB and Regional Rail departments meet regularly with Metrolink to provide input on the TVM procurement.

- Metrolink Request for Additional Rehab Funding

In order to provide assurance to the Metro Board, prior to any multi-million dollar commitment of funding, that the highest priority rehabilitation projects are addressed in the most expeditious manner, particularly in the event of a risk to the operational safety of our passengers, staff performed due diligence review of Metrolink's "Priority A" urgent structure and rail tie rehabilitation work from November 23, 2017 through March 27, 2017 (refer to Attachment D). Staff inspected as many ties, bridges, turnouts and culverts within the aforementioned time period to corroborate and validate Metrolink's priority list so that it can be used to provide guidance for programming of funds for urgent structure and rail tie rehabilitation work. Staff has also hired a consultant, WSP, to review and validate SCRRA's state of good repair projects including performing a condition risk assessment to be used as a diagnostic tool for allocation of funds.

Staff is working with SCRRA on a multi-phasing approach to Metrolink's urgent structure and rail tie rehabilitation work totaling up to \$31,864,316, beginning with "Priority A" projects and followed by "Priority B" projects. Staff has inspected 29 bridges and culverts and over 10 miles of rail ties in the Valley, Ventura, San Gabriel and River Subdivisions under the "Priority A" projects. For the 29 bridges and culverts under "Phase A" projects inspected as part of phase 1, staff concurs with SCRRA that at least 10 bridges and culverts including ties and turnouts need to be replaced immediately within the next three years. The remaining 19 bridges and culverts under "Phase A" projects inspected as part of phase 1 appear to be in "fair to satisfactory" conditions and do not require immediate replacement within the next 3 years even though these structures are at least over 29 years old. However, since these structures are old and approaching their service life, staff is recommending that it be programmed for replacement within the next ten (10) years with continuous annual inspections. Staff is recommending approval of additional funding for Metrolink's urgent structure and rail tie rehabilitation work for phase 1.

- FY 2015-2016 CAFR and Audit

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Metro's auditors Vasquez and Company have completed their field work and are in the process of preparing their draft audit report. Metro staff will return back to the Board when the final audit report is issued.

- \$18 Million Loan

Metro received Metrolink's first payment of \$5 million on April 1, 2016.

The following is a summary of Metrolink's repayment plan for the remaining payments and what has been paid to date:

\$5 million on or before March 31, 2016 - PAID

\$5 million on or before May 31, 2016 - PAID

\$590,240.76 Interest Payment received on July 29, 2016

\$1 million on or before August 31, 2016 - PAID

\$1 million on or before November 30, 2016 - PAID

\$1 million on or before February 28, 2017 - PAID

The balance on or before June 30, 2017

This will achieve final payment by the loan maturity date of June 30, 2017.

- Metrolink Invoices and Billing Issues

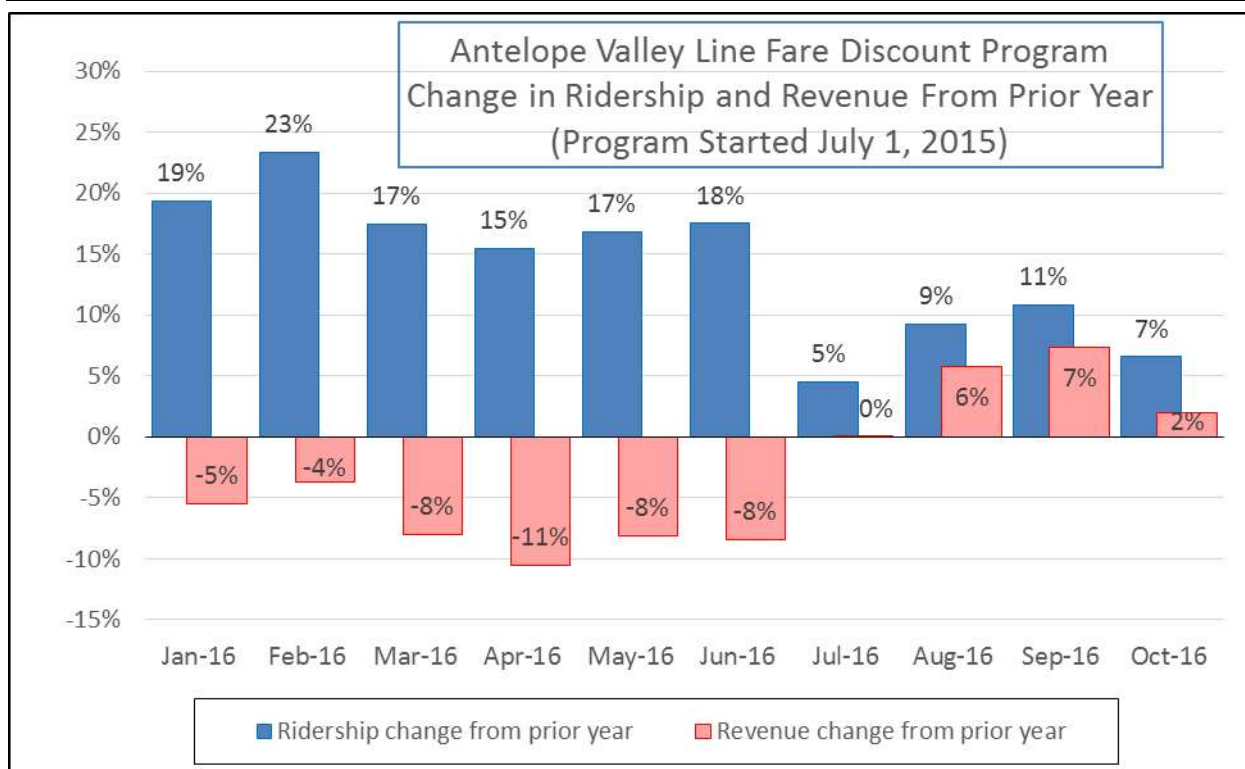
Metrolink has made some progress in submitting invoices to draw down on the \$30M of funding. However, there remains an issue with billing member agencies for Oracle 11I reimbursements for fiscal years 2011, 2012 and 2013. Metro's board approved extending the lapsing date to June 30, 2017, to allow Metrolink an opportunity to expend these funds. Metrolink has provided an invoicing and expenditure plan to meet the June 30, 2017, deadline to expend the lapsing funds. Staff will monitor Metrolink's progress in meeting the expenditure plan and will continue to meet with Metrolink management to resolve the invoicing backlog.

- Metrolink Ridership and Revenues for FY 2016-17

For FY 2016-17 (July 2016 thru September 2017) Metrolink ridership was at 99.9% of budget, and 3.5% higher than FY 16 levels. Revenues were also at 99.9% of budget, and .2% above FY 16 levels.

- Antelope Valley Line (AVL) 25% Fare Discount Program

Since this program's inception in July 2015, the AVL fare discount program has been highly successful in attracting new riders to the AVL. Ridership growth for January 2016 thru November 2016 averaged 14% increase in ridership compared to the prior year. Fare revenues have increased, and the program is recovering more than half of the budgeted costs.



• LOSSAN Intercity Rail (Amtrak Pacific Surfliner)

The LOSSAN corridor is the second busiest intercity rail corridor in the nation (see Attachment A). There are 41 stations and more than 150 daily passenger trains, with an annual ridership of 2.9 million on the Amtrak Pacific Surfliner plus 5.1 million on Metrolink and Coaster commuter rail.

For the 12 months ending June 2016, Amtrak Pacific Surfliner intercity rail ridership was 2.9M boardings, a 4% increase over prior year, and the most in fiscal year history since inception in 1977. Revenues on the Pacific Surfliner were also up 3% compared to the prior year. Farebox recovery was 75%, a very strong number, and a 7% increase over FY 2015-16 levels.

In March 2017 the LOSSAN Board adopted the two year LOSSAN Business Plan for FY 2017-18 and FY 2018-19 and submitted it to the California State Transportation Agency by the April 1, 2017 statutory deadline. The Business Plan provides a basis for the annual budget request, outlines operations and service goals, and discusses any proposed changes to the Pacific Surfliner service.

Also in November, LOSSAN had 80,000 boardings on the Pacific Surfliner during the five days of Wednesday thru Sunday of the busy Thanksgiving week. This is a 6% increase in ridership compared to 2015.

LOSSAN and SCRRA agreed to extend the term of the Rail-2-Rail Agreement thru December 31, 2016. A long-term Rail-2-Rail agreement has been reached by Orange County, Ventura County and Metro in March 2017.

- High Speed Rail

The Governor's budget allocates 25% of Cap and Trade funds to high speed rail. This allows acceleration of the program. On April 20, 2017 the State is planning on selling a portion of the nearly \$10 billion in bonds that voters approved in 2008. The Governor has also issued a letter to Metro for a funding commitment of up to \$500 million for the Link Union Station and Rosecrans Marquardt Grade Separation Project (refer to Attachment C).

The Supplemental Alternative Analysis work is underway on the Burbank to Palmdale and Burbank to Anaheim segments in L.A. County. The California High Speed Rail Authority (CHSRA) is evaluating an alternative that partially includes LACMTA owned right-of-way as well as one that takes a more direct route between Palmdale and Burbank. Regional Rail is coordinating with CHSRA on the Brighton to Roxford Double Track Project, Doran and Broadway/ Brazil Grade Separation and LINK US on design options that would be usable under any high speed rail scenario for this corridor to minimize or eliminate throw away work.

## ATTACHMENTS

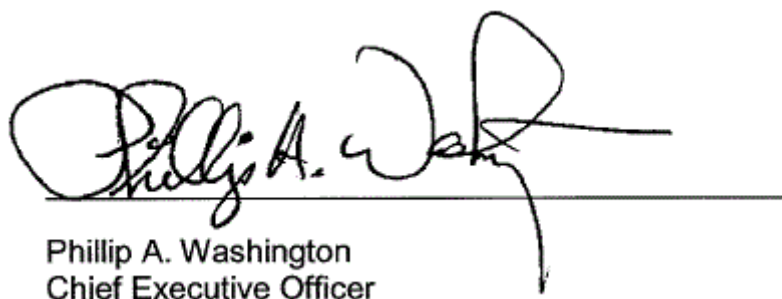
Attachment A -- LOSSAN Corridor Map

Attachment B -- Metrolink Asset Inspection Summary dated March 24, 2017

Attachment C-Office of the Governor Letter, dated March 7, 2017

Prepared by: Jay Fuhrman, Transportation Planning Manager, (213) 922-2810  
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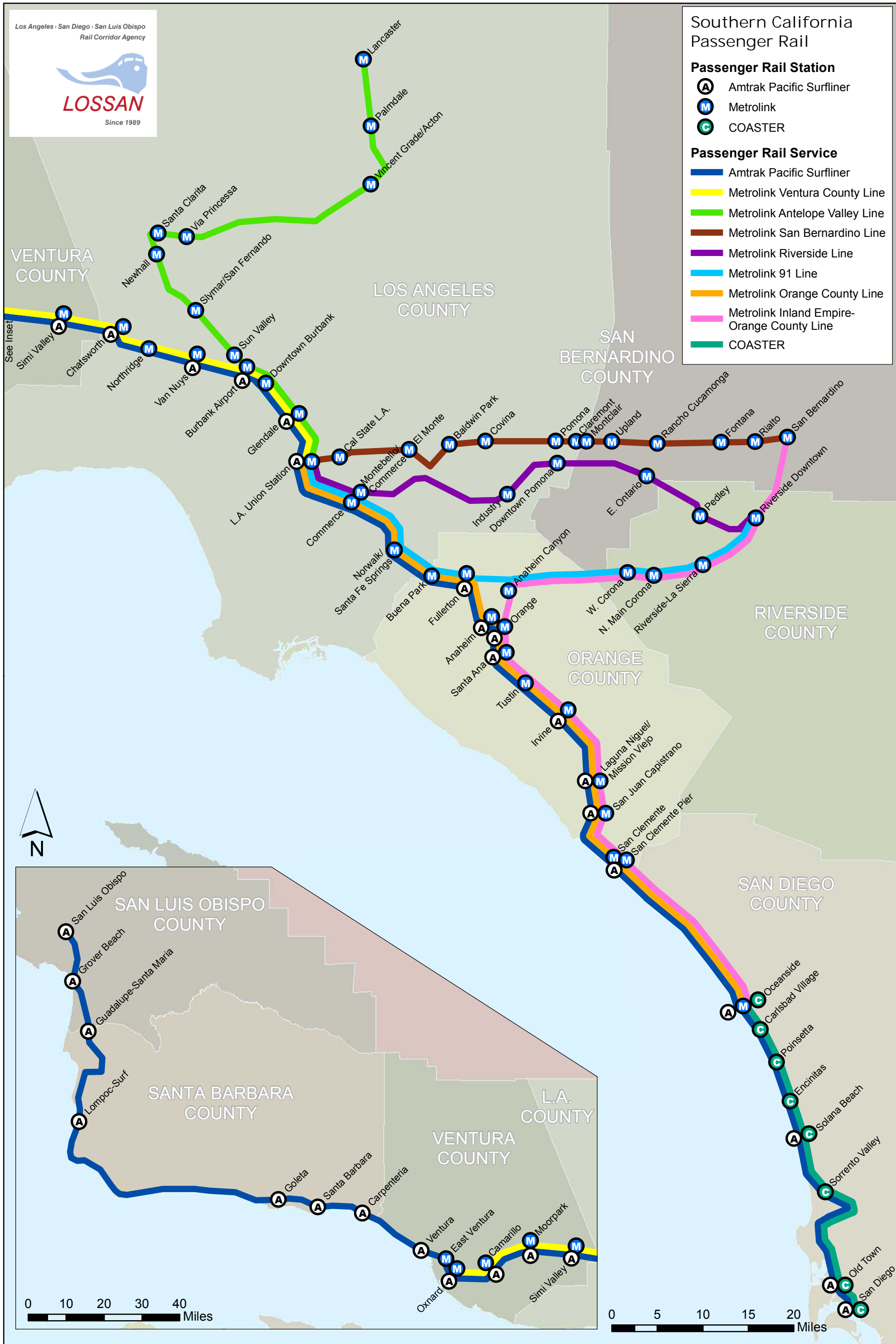
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# Los Angeles – San Diego – San Luis Obispo Rail Corridor Map





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**March 24, 2017**

**ATTACHMENT C**

**SUBJECT: METROLINK ASSET INSPECTION SUMMARY:  
VALLEY, VENTURA & SAN GABRIEL LINES - SUMMARY FINDINGS**

MetroLink is responsible for maintaining approximately 400 miles of track in a State of Good Repair. This includes among other assets, the maintenance of 1.1 million rail ties and fasteners, 261 bridges and 580 culverts. In September 2016, MetroLink informed the Board of their intent to implement slow orders predicated on a request for track and structure rehabilitation funding. At that time, MetroLink produced a list of the structures which they had evaluated were in need of immediate repair (Refer to Attachment A: “Priority List”).

In response, Metro Engineering staff was directed to inspect as many ties, bridges and culverts to as possible to corroborate and validate the MetroLink Priority List. It was not possible for Metro staff to visit and inspect each asset listed on the Priority List produced by MetroLink due to the urgent nature of the request. Instead, between November 23, 2016 and February 28, 2017 Metro staff inspected twenty nine (29) “Priority A” bridges or culverts from the MetroLink provided Valley, Ventura and San Gabriel Subdivision Line Lists as well as rail ties within the locations visited. In addition to this summary, staff produced individual inspection & observation reports for each of these twenty nine assets inspected.

The following two tables present Metro’s independently derived Condition Ratings and Recommendations for each of the inspected assets. Table 1 below, presents the list of inspected structures which Metro Engineering staff have rated as being in ‘Poor’ structural condition. These ten (10) structures have been identified by Metro staff as requiring replacement within the next 3 years and should be programmed for replacement in the next fiscal cycle. Table 2 below, provides the assessed structural conditions of the remaining 19 structures which were inspected. The structures listed in Table 2 were determined, at the time of inspection, to be in fair to satisfactory condition. (*Individual inspection reports for these 29 structures are available separately upon request*):

**Table 1: Subdivision Structures – Identified for Replacement within 3 years:**

<b>Line:</b>	<b>Mile Point:</b>	<b>Name:</b>	<b>Age:</b>	<b>Metro Condition Rating:</b>	<b>Metro Recommendation:</b>
Valley	47.45	Bridge 5	79 yrs.	3 (POOR)	Replace.
Valley	50.46	Bridge 6	108 yrs.	3 (POOR)	Replace.
Valley	50.51	Bridge 2	107 yrs.	3 (POOR)	Replace.
Valley	50.64	Bridge 1	107 yrs.	3 (POOR)	Replace.
Valley	50.77	Bridge 4	107 yrs.	3 (POOR)	Replace.

Valley	53.84	Culvert 2	113 yrs.	3 (POOR)	Replace.
Valley	54.13	Culvert 8	95 yrs.	3 (POOR)	Replace.
Valley	55.91	Culvert 1	94 yrs.	3 (POOR)	Replace.
Valley	66.78	Culvert 10	96 yrs.	3 (POOR)	Replace.
Ventura	458.71	Bridge 1	91 yrs.	3 (POOR)	Replace.

**Table 2: Subdivision Structures – Which do not Require Immediate Replacement:**

Line:	Mile Point:	Name:	Age:	Metro Condition Rating:	Metro Recommendation:
Valley	44.16	Culvert 4	78 yrs.	4 (FAIR)	Replace or reinforce timber ballast & headwalls. Recondition downstream channel.
Valley	44.38	Bridge 8	73 yrs.	5 (SATISFACTORY)	Recondition ballast over bridge due to excessive fine soils deposited.
Valley	46.91	Bridge 3	79 yrs.	4 (FAIR)	Continue monitoring. Consider replacement within ten years.
Valley	47.03	Bridge 10	79 yrs.	4 (FAIR)	Continue monitoring. Consider replacement within ten years.
Valley	47.33	Bridge 11	79 yrs.	4 (FAIR)	Continue monitoring. Consider replacement within ten years.
Valley	48.08	Bridge 12	79 yrs.	5 (SATISFACTORY)	Maintain bridge approach and channel.
Valley	49.53	Culvert 13	117 yrs.	4 (FAIR)	Maintain north bridge approach.
Valley	49.69	Culvert 12	29 yrs.	4 (FAIR)	Maintain bridge approach and channel.
Valley	49.99	<i>Culvert 3</i>	95 yrs.	<i>N/A</i>	<i>Could not inspect – culvert buried.</i>
Valley	50.57	Culvert 5	66 yrs.	4 (FAIR)	No specific recommendation.
Valley	52.32	Culvert 14	117 yrs.	5 (SATISFACTORY)	No specific recommendation.
Valley	52.38	Culvert 15	117 yrs.	4 (FAIR)	Remove downstream excessive vegetation.
Valley	52.66	Bridge 7	86 yrs.	4 (FAIR)	Maintain approach channel.
Valley	52.99	Culvert 11	117 yrs.	5 (SATISFACTORY)	No specific recommendation.
Valley	54.05	Bridge 13	71 yrs.	4 (FAIR)	Maintain bridge approach and channel.
Valley	55.19	Bridge 9	72 yrs.	5 (SATISFACTORY)	No specific recommendation.
Valley	55.42	Culvert 9	95 yrs.	4 (FAIR)	Clear culvert debris within 1 year.
Valley	55.75	Culvert 6	90 yrs.	4 (FAIR)	No specific recommendation.
Ventura	452.1	Bridge 2	100 yrs.	4 (FAIR)	Clear debris within channel and approach.

## ANALYSIS: BRIDGES & CULVERTS

For the twenty-nine (29) ‘Priority A’ assets inspected, Metro believes that ten (10) of these structures (Table 1) are candidates for near term replacement (within 3 years). The remaining 19 structures (Table 2) were, in Metro’s opinion of “fair to satisfactory” condition and do not require immediate replacement within the next three years. Appropriate recommendations for the structures in Table 2 are presented in the right hand column.

Of the ten (10) structures identified for replacement in Table 1, six (6) of these structures are bridges and four (4) are culverts. Metro Cost Estimating Staff has contributed their experience in developing a Rough Order of Magnitude (ROM) cost estimate required to replace these ten assets. Once Design,

Construction and Administrative (Soft) Costs are factored in, Metro’s cost estimate did not significantly differ from the amounts requested by Metrolink on a per asset basis. Therefore, Metro agrees with the estimated Life of Project costs for replacement of these 10 structures which are presented in Table 3 below.

**Table 3: Estimated Replacement Cost for Structures Identified for Near Term Replacement:**

<b>Line:</b>	<b>Mile Point:</b>	<b>Name:</b>	<b>Metrolink’s Total: (Dollars)</b>
Valley	47.45	Bridge 5	\$ 500,000
Valley	50.46	Bridge 6	\$ 840,000
Valley	50.51	Bridge 2	\$ 840,000
Valley	50.64	Bridge 1	\$ 840,000
Valley	50.77	Bridge 4	\$ 840,000
Valley	53.84	Culvert 2	\$ 350,000
Valley	54.13	Culvert 8	\$ 280,000
Valley	55.91	Culvert 1	\$ 350,000
Valley	66.78	Culvert 10	\$ 420,000
Ventura	458.71	Bridge 1	\$ 1,960,000
<b>Total:</b>			<b>\$ 7,220,000</b>

**ANALYSIS: RAIL TIES, RAIL, RAIL TURNOUTS, CROSSINGS & COMPONENTS**

Metro’s Director of Track Work Engineering, Zoric Sheynman, observed the condition of the ties along the Valley Subdivision and agrees that the ties within the zones indicated by Metrolink in *Attachment A*, do require replacement. This would include the 8,450 ‘Group A’ ties and 8,000 Group B Ties identified. The ties are spaced at approximately 20 inches on center; therefore this would result in a total of 5 miles of replacement on the Valley Subdivision. Replacement of these ties would be in compliance with FRA Track Safety Standards Compliance Manual. Therefore, Metro agrees with the estimated costs for replacement of the rail ties for Priority A projects as shown in Attachment A. Staff will work with Metrolink as part of the second phase due diligence review for rail ties on Priority B projects. Elements not inspected by Metro staff during the site visits include track turnouts, crossings, rail tie replacement. Metro staff did not generate independent cost estimates for these components or for the requested new rail spikes, tie plugs, anchors, surfacing and stabilizing procedures required during installation of the ties. These amounts are listed in the Metrolink report.

**CONCLUSION:**

In conclusion, Metro Engineering’s Assessment of Metrolink’s provided “Rehabilitation Project Priority List” of ‘Priority A’ structures (bridges and culverts) is in Metro’s opinion, that approximately one-third (33%) of the structures inspected are in “poor” structural condition and should be programmed for replacement (*within 3 years*). However, it should be noted that despite the observed condition ratings, the majority of the inspected structures presented in both Tables 1 and 2 are approaching or exceeding a service life of 100 years and should be programmed for replacement within the next ten years (10).

Metro does not intend the list of 10 structures (Table 1) recommended for replacement to be a binding requirement for Metrolink. Instead, this list is meant to provide guidance for programming of funds for the replacement of these assets. Metrolink shall provide an independent assessment to determine which structures should be replaced and in which order. Metro's Independent Cost Estimates (ICE) for these elements did not significantly vary with the estimates provided by Metrolink and Metro agrees with the amounts requested by Metrolink on an asset by asset basis.

Metro agrees that an investment is required to achieve a state of good repair for the areas inspected. As a first investment in a multiyear state of good repair program, Metro recommends the initial allocation of funds to replace the highest priority structures and rail ties requiring remediation. Additional funding can be allocated in future fiscal cycles as needed. The specific assets requiring replacement shall be determined and managed by Metrolink.

Metro has recently contacted (as of early March 2017) a Consultant (WSP/Parsons Brinkerhoff) who will provide a separate independent assessment to further validate the amount of requested structure rehabilitation funding. In the coming months, their effort will further refine the scope required for this SOGR issue.

Regards,

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Attachments:

**Attachment A:**

Bridge & Rail Tie Rehabilitation Project Priority List (As Provided by Metrolink, November 2016).

**Attachment B:**

SCRRA: Bridge and Safety Management Condition and Priority Defect Rating System.

ATTACHMENT A:

## Bridge & Culvert - Rehabilitation Project Priority List (As Provided by Metrolink, November 2016):

Bridge Rehab Projects Priority List																	
Subdivision	Category	Priority	M/P	Cost	Scope	Year Built	Engineer's Assessment Rating	Inspector's Condition Rating	Inspection Date	Begin Contract	Finalize Contract Pkg	Advertise Contract	Award Contract	Begin Construction	End Construction		
Valley	Priority A Bridges	1		50.64	\$840,000	Replace rail top	1909	3.2	5	7/14/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		2		50.51	\$840,000	Replace rail top	1909	3.3	5	7/14/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		3		46.91	\$840,000	Replace rail top	1938	3.3	5	7/22/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		4		30.77	\$840,000	Replace rail top	1909	3.4	5	7/13/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		5		47.45	\$500,000	Replace rail top	1909	3.5	5	7/15/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		6		30.46	\$840,000	Replace rail top	1909	3.5	5	7/15/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		7		52.66	\$500,000	Replace rail top	1930	3.5	5	7/12/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		8		44.38	\$500,000	Replace rail top	1944	3.5	5	8/4/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		9		55.19	\$500,000	Replace rail top	1944	3.5	5	7/11/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		10		47.03	\$840,000	Replace rail top	1938	3.6	5	7/21/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		11		47.33	\$1,120,000	Replace rail top	1938	3.6	5	7/21/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		12		48.08	\$500,000	Replace rail top	1938	3.6	4	7/19/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		13		54.05	\$500,000	Replace rail top	1946	3.6	5	7/12/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
					Subtotal	\$9,160,000											
		Priority B Bridges	1		8.41	\$500,000	Replace rail top	1906	3.9	5	9/20/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018
			2		10.69	\$1,260,000	Replace rail top	1906	3.9	5	9/19/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018
					Subtotal	\$1,760,000											
		Priority A Culverts	1		55.91	\$350,000	Replace clay pipe - collapsed	1922	3.2	4	8/13/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	6/3/2017	8/1/2017
			2		53.84	\$350,000	Replace timber box	1904	3.3	4	8/17/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	6/3/2017	8/1/2017
			3		49.99	\$280,000	Replace timber box	1922	3.4	4	11/9/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	6/3/2017	8/1/2017
			4		44.16	\$280,000	Replace timber box	1939	3.4	4	1/5/16	11/1/2016	1/31/2017	2/28/2017	4/30/2017	7/1/2017	9/1/2017
			5		50.57	\$280,000	Replace timber box	1950	3.4	4	10/30/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	7/1/2017	9/1/2017
			6		55.75	\$280,000	Replace timber box	1927	3.5	5	8/13/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	7/1/2017	9/1/2017
			7		48.74	\$280,000	Replace clay pipe - joint displacement	1900	3.5	4	11/11/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	8/1/2017	10/1/2017
			8		54.13	\$280,000	Replace clay pipe - crushing, displacement	1922	3.6	5	8/17/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	8/1/2017	10/1/2017
			9		55.42	\$350,000	Replace cast iron pipe - cracking, displacement	1922	3.6	5	8/13/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	8/1/2017	10/1/2017
			10		66.78	\$420,000	Replace RCP - separated joints	1921	3.7	4	8/4/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	9/1/2017	11/1/2017
			11		52.99	\$700,000	Replace aged cast iron pipe	1900	3.7	3	10/26/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	9/1/2017	11/1/2017
			12		49.69	\$280,000	Replace CMP - deflected; strut added	1988	3.8	4	11/9/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	9/1/2017	11/1/2017
			13		49.53	\$420,000	Replace aged cast iron pipe	1900	3.8	5	11/10/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	10/1/2017	12/31/2017
	14			52.32	\$350,000	Replace aged cast iron pipe	1900	3.9	5	10/27/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	10/1/2017	12/31/2017	
	15			52.38	\$420,000	Replace aged cast iron pipe	1900	3.9	5	10/27/15	11/1/2016	1/31/2017	2/28/2017	4/30/2017	10/1/2017	12/31/2017	
				Subtotal	\$5,320,000												
Ventura	Priority A Bridges	1		458.71	\$1,950,000	Replace Timber Trestle - major cracking	1925	3.0	4	3/8/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		2		452.1	\$840,000	Replace rail top	1916	3.5	5	3/16/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
				Subtotal	\$2,800,000												
	Priority B Bridges	1		436.96	\$655,200	Replace rail top	1939	3.9	5	4/1/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
		2		434.32	\$655,200	Replace rail top	1901	3.9	5	4/4/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	11/1/2017	2/1/2018	
				Subtotal	\$1,310,400												
Priority B Culverts	1		436.46	\$150,000	Replace culvert - part rail top	1925	3.9	4	10/16/14	11/1/2016	1/31/2017	2/28/2017	4/30/2017	10/1/2017	12/31/2017		
			Subtotal	\$150,000													
San Gabriel	Priority A Bridges	1		40.12	\$1,400,000	Replace rail top - Under xing	1930	3.4	5	6/29/16	11/1/2016	7/1/2017	8/1/2017	10/1/2017	2/1/2018	5/1/2018	
				Subtotal	\$1,400,000												

## Rail Tie - Rehabilitation Project Priority List (As Provided by Metrolink, November 2016):

Track Projects Priority List					
Priority Designation	Priority A Projects	Value	Condition Notes	Timeline	
1	2500 Ties between MP 46 - MP 48, MP 63 - MP 64	\$500,000	Over 30% of the wood ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
2	3000 Ties between MP 52 - MP 54	\$825,000	Approximately 25% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
3	Lang Station Rd Crossing	\$400,000	Crossing and track structure need to be replaced (Main Track and Siding)	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
4	2950 Ties between MP 54 - MP 59	\$787,500	Up to 20% of the wood ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
5	Acton Spur Turnout	\$500,000	Spur was constructed in 1966. Speed in siding was just raised due to Acton Project. Turnout needs to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
	<b>Total Priority A Track Projects:</b>	<b>\$3,012,500</b>			
	<b>Priority B Projects</b>				
1	4000 Ties Between MP 9 - MP 11	\$1,000,000	Over 30% of the wood ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
2	4000 Ties Between MP 6 - MP 8	\$1,000,000	Approximately 25% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
	<b>Total Priority B Track Projects:</b>	<b>\$2,000,000</b>			



Ventura Subdivision	Priority Designation	Priority A Projects	Value	Condition Notes	Timeline
	1	2700 Ties between MP 447 - MP 450	\$675,000	Over 30% of the wood ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	2	1300 Ties between MP 444 - MP 446	\$325,000	Approximately 25% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	3	Turnout at MP 460	\$375,000	Turnout needs to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	4	800 Ties Between MP 451 - MP 452	\$200,000	Up to 20% of the wood ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	5	3600 Ties Between MP 458 - MP 462	\$900,000	Approximately 15% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	6	3600 Ties Between MP 454 - MP 458	\$900,000	Approximately 10%-15% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
		<b>Total Priority A Track Projects:</b>	<b>\$3,375,000</b>		
Ventura Subdivision	Priority Designation	Priority B Projects	Value	Condition Notes	Timeline
	1	3400 Ties between MP 434 - MP 439	\$850,000	Over 30% of the wood ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	2	2400 Ties Between MP 430 - MP433	\$600,000	Approximately 25% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	3	Rail Replacement - Curve 439.24 (1650')	\$247,500	Curve needs to be transposed from high side to low side, with new rail on the high side. Low Rail has already been transposed and was originally placed in 1966. High Rail is experiencing some gauge and head wear and still has some life in it. Head-Free rail to be replaced as well.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	4	1200 Ties Between MP 427 - MP 429	\$300,000	Approximately 20% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	5	Turnout at CP Santa Susana	\$375,000	Turnout needs to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	6	Katherine Rd Crossing	\$400,000	Crossing and track structure need to be replaced (Main Track and Siding)	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	7	Rail Replacement - Curve 433.1 (1100')	\$165,000	Curve needs to be transposed.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	8	Hidden Ranch Drive Crossing	\$400,000	Crossing is 33 years old and needs to be rehabilitated.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	9	600 Ties Between MP 433 - MP 434	\$150,000	Approximately 15% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	<b>Total Priority B Track Projects:</b>	<b>\$3,487,500</b>			
			<i>Note: 2350' of rail on another project was removed from the list resulting in a reduction for the Subdivision of \$150,000.</i>		

San Gabriel Subdivision	Priority Designation	Priority A Projects	Value	Condition Notes	Timeline
	1	3500 Ties between MP 34 - MP 38	\$875,000	Over 30% of the wood ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	2	2800 Ties Between MP 47 - MP 51	\$700,000	Approximately 25% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	3	1200 Ties Between MP 52 - MP 54	\$300,000	Approximately 20% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	4	1500 Ties Between MP 42 - MP 45	\$375,000	Approximately 15% of the Wood Ties in this segment need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
	<b>Total Priority A Track Projects:</b>	<b>\$2,250,000</b>			
San Gabriel Subd.	Priority Designation	Priority B Projects	Value	Condition Notes	Timeline
	1	Lark Ellen Crossing	\$400,000	Crossing needs rehabilitation.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
		<b>Total Priority B Track Projects:</b>	<b>\$400,000</b>		



River Sub	Priority Designation	Priority A Projects	Value	Condition Notes	Timeline
	1	Replace Leads into Union Station	\$225,000	Leads into union station have curve wear and need new rail.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017
2	Replace 5300 Ties on West Bank	\$1,325,000	Approximately 21% of the wood ties on the West Bank need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
3	Replace Turnouts at CP Taylor	\$550,000	2 Turnouts at CP Taylor already replaced, 2 more need to be replaced.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017	
		<b>Total Priority A Track Projects:</b>	<b>\$2,100,000</b>		
River Subdivision	Priority Designation	Priority B Projects	Value	Condition Notes	Timeline
	1	Replace 3 miles of Rail and 25% Ties	\$5,210,000	MT2 several areas that are susceptible for rail defects due to the high density of train traffic, the amount of plugged rail through the years, and the age of the existing 133 lb rail which does not meet SCRRA standards. This project was initially proposed as rail and ties separately, and the agency only received funding for 2/3's of the ties needed and none of the rail. Ideally we would complete these projects together, along with the funding for FY15, where we are doing the same scope of work for MT1. Funding for this project is efficient use of member agency funds due to high UPRR contribution percentages. However, it does take	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017 If funding is not approved on this project it delays progress with UPRR for obtaining funds. It takes 1-2 years to get an agreement from UP for this rehabilitation work. Slow orders or weight restrictions will be implemented on MT2 by June 30, 2019 if project remains unfunded.
2	Replace 5 turn outs on East Bank *	\$1,622,400 \$2,622,400 *	Turnouts on the East Bank are heavily used, and some are over 50 years, while others haven't been replaced since Metrolink began service. Ideally, funding for these would be lined up with the rail and ties, so projects can be completed concurrently.	Advertise Contract - 2/2017; Award Contract/NTP - 4/2017; Begin Construction - 6/2017; End Construction - 12/2017 If funding is not approved on this project it delays progress with UPRR for obtaining funds. It takes 1-2 years to get an agreement from UP for this rehabilitation work. Slow orders or weight restrictions will be implemented on MT2 by June 30, 2019 if project remains unfunded.	
		<b>Total Priority B Track Projects:</b>	<b>\$7,832,400</b>		

ATTACHMENT B:

**SCRRRA: Bridge and Safety Management Policy 7.4.1 Condition and Priority Defect Rating System:**

**Condition Codes:**

<b>1</b>	<b>Failed, Stop Trains.</b>
<b>2</b>	<b>Imminent Failure, Take appropriate action. Provide detailed inspection.</b>
<b>3</b>	<b>Poor, Defects are sound with serious or advancing defects. Interim inspections warranted.</b>
<b>4</b>	<b>Fair, Defects are sound with minor problems. Interim inspections warranted.</b>
<b>5</b>	<b>Satisfactory, Minor defects or exceptions.</b>
<b>6</b>	<b>Good, No defects or exceptions noted.</b>

**Priority Codes:**

<b>Code:</b>	<b>Correction Period:</b>	<b>Description:</b>
<b>A</b>	<b>15 days</b>	Imminent safety issue (non-redundant failure or failure of direct load path)
<b>B</b>	<b>1 year</b>	Early or Pre-failure (redundant systems or indirect load path)
<b>C</b>	<b>3 years</b>	Non-critical defects (not immediate safety concern).
<b>D</b>	<b>5 years</b>	Monitor Defects.



OFFICE OF THE GOVERNOR

March 7, 2017

The Honorable John Fasana  
Chair, Los Angeles County Metropolitan Transportation Authority  
One Gateway Plaza  
Los Angeles, CA 90012

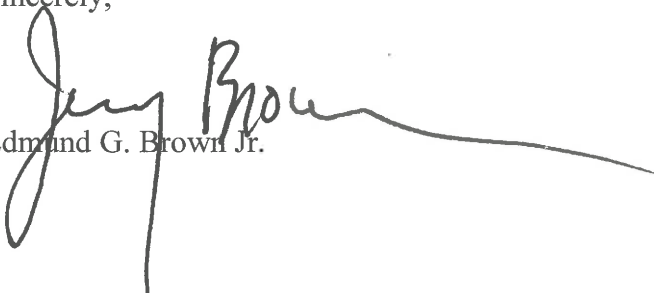
Dear Chairman Fasana:

I understand that the Metro Board of Directors is considering an expanded environmental review and design document for improvements to Union Station that will accommodate high-speed rail service. I write today to affirm my commitment to high-speed rail, including early investments for the Burbank-to-Anaheim segment.

Our actions reflect this commitment. The budget I signed in 2012 put \$500 million toward early-benefit projects in southern California, including the Rosecrans-Marquardt grade separation and the Link Union Station project. The High-Speed Rail Authority will consider new investments in the project this month. I also asked the White House to expedite any necessary environmental review for the Burbank-to-Anaheim segment and have requested new funding.

High-speed rail will strengthen our economy, promote mobility, and protect our environment. As you consider improvements to Union Station, I urge you to plan for a future with high-speed rail.

Sincerely,

  
Edmund G. Brown Jr.