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**REVISED
PLANNING AND PROGRAMMING COMMITTEE
JULY 20, 2011**

**SUBJECT: COUNTYWIDE LIGHT RAIL YARD COST ALLOCATION
AND FIRST DECADE CAPITAL FUNDING**

**ACTION: APPROVE THE BORROWING OF FUNDS PLANNED FOR SPECIFIED
HEAVY RAIL CAPITAL IMPROVEMENTS TO ACCELERATE CAPITAL
FUNDING FOR LIGHT RAIL YARDS AND FACILITIES**

RECOMMENDATION

- A. Approve countywide light rail yard cost allocation percentages and amounts as shown in Attachment A;
- B. Borrow up to \$170 million of funds planned for specified heavy rail capital improvements, as shown in Attachment B, page 2 to enable programming of unmet light rail yard costs; and
- C. Program \$170 million from Proposition A 35% and Measure R 2% sources to complete the current \$718 million funding plan for countywide light rail yard needs.

ISSUE

The Board-adopted 2009 Long Range Transportation Plan (LRTP) for Los Angeles County envisioned one new central Light Rail Transit (LRT) Maintenance facility to be used by all projects. Since the LRTP adoption, substantial progress on light rail system planning and development, including more accurate vehicle assignments, cost estimates, and functional requirements, has led us to conclude that two new LRT yards, an Eastern Yard and a Southwestern Yard, will be necessary.

DISCUSSION

Attachment A summarizes the vehicle assignments, cost estimates, and project cost allocation data for the entire light rail system as identified in the constrained element of the 2009 LRTP. Countywide, the vehicle assignments and project cost allocation data are indicating that \$170 million must be accelerated into the first decade of the LRTP to complete the current \$718 million funding plan for countywide light rail yard needs. We

are recommending that this be made possible by borrowing funds planned for heavy rail (Red and Purple line) projects and that related funding be restored in the LRTP as each new light rail project's yard cost allocation funding becomes available. Over time, the \$170 million in accelerated capital funding from heavy rail projects will be restored to those heavy rail needs from second and third decade light rail projects that stand to benefit from the early acquisition and construction of accelerated light rail yard capacity. Restoring the capital funds at a later point in the LRTP will enable the later implementation of the heavy rail projects shown in Attachment B, page 4.

This recommendation is consistent with and follows an April 2011 Board action to program funds for the Eastern Yard to serve the Gold Line Foothill and other nearby light rail projects. Specifically, this report establishes the obligation and proportional share of each light rail project in the LRTP to directly budget for light rail yard costs or indirectly provide reimbursements for the heavy rail projects later in the Plan. Establishment of the countywide light rail yard cost allocation percentages and amounts in Attachment A is necessary in order to ensure equity and secure funding reimbursements from each project budget as they are considered by the Board for approval.

FINANCIAL IMPACT

There is no net financial impact to this action, other than a transfer of first decade capital funding from heavy rail to light rail needs. While we know that the heavy rail needs will be necessary during the LRTP period, we do not yet know precisely when these needs will become critical. In contrast, the opportunity and need to secure light rail yard capacity is immediate: environmental clearances will soon enable the Los Angeles County Metropolitan Transportation Authority (LACMTA) and the Gold Line Foothill Construction Authority to purchase land and construct the facilities needed to establish a Southwestern Yard (with an ultimate capacity of 81 Light Rail Vehicles [LRVs]) and an Eastern Yard (with an ultimate capacity for 104 LRVs), respectively. The capacity to house 185 LRVs is essential to the long term success of the Measure R light rail program, including accommodation of ridership growth on the existing system.

ALTERNATIVES CONSIDERED

The LRTP contemplated a centrally located, countywide light rail yard instead of the currently recommended Southwestern Yard and Eastern Yard alternative. Two issues arose that made the centrally located yard infeasible: first, a larger centrally located piece of land with sufficient acreage could not be found for a cost-effective price; and second, a central location is only usable after construction of the Regional Connector through the central area. Costly and impractical LRV transfers to a central yard would be required until the Regional Connector is completed. Therefore, this report recommends funding for the Southwestern Yard and Eastern Yard alternative.

NEXT STEPS

With Board approval of this report, we will work with our project managers and the Southern California Association of Governments to include the capital funding requirements for the Southwestern Yard and Eastern Yard in the applicable Life of Project Budgets and in the 2011 Regional Transportation Improvement Program (TIP), as required by federal law. To accomplish this task, we may need to reprogram funding types for portions of the \$17.7 billion Los Angeles County TIP through FY 2019 according to fund source eligibility rules

ATTACHMENTS

Attachment A: Light Rail Yard Size, Cost, Capacity and Vehicle Assignments with Background

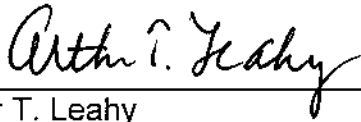
Attachment B:

1. 2011 Transportation Improvement Program Priorities;
2. First Decade Priorities Good Repair Detail;
3. Approved & Proposed Cost Increases; and
4. Heavy Rail System Improvement Repayments.

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Countywide Light Rail Yard Cost Allocation Table						Attachment A July 20, 2011 Revised
Light Rail Yard Size, Cost, Capacity, and Vehicle Assignments						
Yard	Santa Monica	Southwestern	Eastern	Storage at Washington	Countywide Needs	
Size	8.3 acres	17.6 acres	24 acres	Siding Track	49.9 acres	
Est. Cost (Year of Expend.)	\$156M	\$285M (Ft. note 4)	\$265M	\$12 M	\$718 M	
Capacity	48	81 (Ft. note 5)	104	12	245 (Ft. note 7)	
Cars per train assumed	TBD	Two	Three	TBD	Two/Three	
Lines Using Yard in 2035 at 5 minute headways (Vehicles Assigned)	Expo (76)	Crenshaw (22) Green Existing (6) (10) Green/LAX Ph. 1 (5) Green/LAX Ph. 2 (5) Green/So. Bay Ph. 1 (3) Unallocated (4)	Gold Existing (46) Gold/Foothill Ph. 2A (24) Regional Connector (4) Gold Line Sys. Exp. (30)	Expo (12 LRV's also included in Santa Monica Yard column)	273 (Footnote Z 6)	
Function						
Body Shop	Green Line Yard & Shop (Division 22) (Footnote 6)		x		x	
Paint Shop			x		x	
Wheel true	x	x	x		x	
Heavy Maintenance		x	x		x	
Light Maintenance	x	x	x		x	
Cleaning Platform	x	x	x		x	
Car Wash	x	x	x		x	
Wayside		x	x		x	
Storage	x	x	x	x	x	
Offices	x	x	x		x	
Cost Allocation (%)						
Crenshaw		49%			Not Applicable	
Exposition	100%			100% (Expo I)		
Gold Existing (More Serv.)			44%			
Gold Line Foothill 2A*			23%			
Gold Line System Exp.			29%			
Green Existing (More Serv.)		13%				
Green/LAX Ph. 1(Av./Imp. To Aviation /Century)		11%				
Green/LAX Ph. 2 (Av./Cent. To Terminals)		11%				
Green/So. Bay Ph. 1		7%				
Unallocated (potentially for Green/So. Bay Ph.2)		9%				
Regional Connector			4%			
Total	100%	100%	100%	100% (Expo I)		
Cost Allocation (\$'s millions, Year of Expenditure)						
Crenshaw		\$139			\$139	
Exposition (see Footnote 1)	\$156			\$12	\$168	
Gold Line Foothill 2A (see Footnote 2)			\$66		\$66	
Gold Existing (More Serv.)			\$117		\$117	
Gold Line System Expansion			\$71		\$71	
Green Existing (More Serv.)		\$38			\$38	
Green/LAX Ph. 1(Av./Imp. To Aviation /Century) (Ft.3)		\$32			\$32	
Green/LAX Ph. 2 (Av./Cent. To Terminals)		\$32			\$32	
Green/So. Bay Ph. 1		\$19			\$19	
Unallocated (potentially for Green/So. Bay Ph.2)		\$25			\$25	
Regional Connector			\$10		\$10	
Total	\$156	\$285	\$265	\$12	\$718	
Funds in First Decade?	\$156	\$139	\$76	\$12	\$383	
Apply Countywide LRTP Rail Yard Reserves						\$165
Countywide Rail Yard Shortfall						(\$170)

See Attachment A, page 2 for supporting footnotes and background on this table.

Countywide Light Rail Yard Cost Allocation Table Footnotes and Background

Footnotes

1. The Exposition Phase 2 life-of-project budget of \$1,511 million already includes at least \$156 million for the Santa Monica Yard. No additional funding is required for these already budgeted costs due to the actions recommended in this report.
2. The Gold Line Foothill 2A proportional share is \$61 million. However, the Gold Line Foothill Authority has agreed to pay \$66.1 million. No additional funding is required for these already budgeted costs due to the actions recommended in this report.
3. Requires funding in first decade for service to Aviation/Century terminal.
4. The Southwestern Yard allocation is based upon the need for 45 cars in 2035. However, the \$285.2 million cost estimate corresponds to the cost of maintenance facility capacity for 70-81 cars. In the near term, only 45 cars can be stored on the yard. For the long term, the \$285.2 million also includes unimproved land for future expansion of storage to 81 cars (necessary for ultimate operation of 5 minute headways with three car trains). This report does not yet allocate the cost of future long term storage improvements.
5. Ultimate build-out capacity is 81 cars. Initial build-out is for maintenance facility capacity for 81 cars and storage for 45 cars.
6. It is anticipated that all light rail lines served by the Southwestern Yard are to locate their body and paint shop functions at the Green Line Shops and Yards in Lawndale (Division 22). Since these body and paint shop costs are to be separately included in the light rail projects served by the Southwestern Yard, it is not necessary to include them in this Cost Allocation Table.
7. Long term light rail system needs are forecasted to exceed the available capacity of 245 Light Rail Vehicles discussed in this report. The capacity needs not met in this report will be addressed in future updates of the Long Range Transportation Plan.

Background

In April 2011, we informed the Board that there was an estimated \$123 million light rail yard funding shortfall. That analysis assumed that \$31 million in funds could be found from project cancellations or savings and would be utilized for the light rail yard shortfall. Since that time, we have concluded that such funds are not yet available. Without the \$31 million in project cancellation or savings funds, the originally reported

\$123 million light rail yard shortfall became \$154 million, as was reported in our May 19, 2011 in our Board Box item entitled “Analysis of Financial Impacts of Proposed Cost and Scope Changes for Crenshaw/LAX Corridor Project”.

Since May 19, 2011, we have updated our vehicle allocation assumptions for the Southwestern Yard with respect to ridership demand for the portion of the Crenshaw/LAX project that is contiguous with the Green Line to LAX extension project. We now assume that this contiguous ridership demand, and the vehicles necessary to support it, is more appropriately allocable to the Green Line to LAX project budget. This change means that \$16 million in vehicle costs once assumed to be allocable to the Crenshaw/LAX project are now attributed to the Green Line to LAX project instead.

As the Green Line to LAX project is not in the first decade of the LRTP, this shift of \$16 million, when coupled with the lack of project cancellation or savings funds, increases the light rail yard shortfall to \$170 million (as shown on the bottom line of the table on page 1 of this attachment). This additional \$16 million is recommended to come from cost reductions through value engineering processes or by borrowing funds planned for use on Metrolink or heavy rail capital improvements such as Division 20 upgrades or ventilation. Metro rail operations and planning personnel are preparing studies that will make the final recommendation about what costs could be eliminated or what other funds can be used to close this \$16 million gap.

2011 Transportation Improvement Prog.

Attachment B-1

Priorities:

FY 2011 to FY 2019

- 1. Projects already under construction: \$ 2.76 B
- 2. Projects with bids advertised: \$ 2.35 B
- 3. Right-of-way activities/purchases: \$ 0.35 B
- 4. Begin or continue all 1st decade project development phases: \$ 1.97 B

5. Projects seeking funds to begin or continue project development	\$10.23B .42 B \$10.65 B	Deferred
6. Other projects/not included above	\$ 2.03 B	Deferred
Total	\$20.11 B	

This analysis includes MTA project funding for projects over \$7 million in total cost.



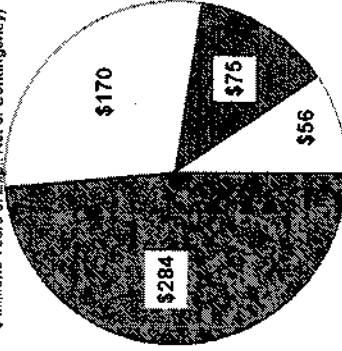
Attachment B-2 1st Decade Priorities Good Repair Detail (171-176)

2011 Trans. Improvement Program Priorities Category 5 (\$ Millions)

Group of Projects	Att. A Line #'s	Amount
Safety/Disc. Grants	78-82	\$2,735
Readiness/Equity	83-92	\$575
Good Repair	93-99	\$704
Highway Mobility	100-104	\$194
Good Repair	105-107	\$69
Highway Mobility	108-115	\$515
Transit Mobility	116-125	\$1,807
Highway Mobility	126-134	\$410
Transit Mobility	135-136	\$230
Highway Mobility	137-156	\$958
Good Repair	157-165	\$943
Highway Mobility	166-170	\$509
Good Repair	171-176	\$585
Sub Total		\$10,234
Mobility Highway	177-185	\$423
Total 2011 TIP Cat. 5		\$10,650

Approved and Proposed Cost Increases Priority Lines 171-176

\$ Millions Years of Exp., Net of Contingency



- Good Repair
- Light Rail Vehicle Yards
- ▒ Union Station Purchase(1)
- (1) Expo I, Pass. Info. Sys., Express Lanes, Misc.

Metrolink Rehabilitation	\$62.6
Rail System Improvements:	
Ventilation North Hollywood	\$160.0
Red Line Train Control	\$60.0
North Hollywood Terminal	\$94.2
Red Line traction power imp.	\$94.2
Red Line Upgrade Div. 20	\$113.6
Good Repair (171-176)	\$584.6
Total	\$585

(1) Assumes anticipated revenues are not available for capital purposes.

← Previously Deferred



Approved & Proposed Cost Increases

Light Rail Yard Shortfall - Add \$154 M for Eastern and South Western Yards

Project	Board Action Date and Report #	Amount
Metro Gold Line Eastside Quad Gates	May 2010, Report #29	\$ 3.30
US-101 Freeway Ramp Realignment	July 2010, Report #6	\$ 2.90
Expo Phase I	July 2010, Report #26	\$ 36.59
Expo Phase I (Partial)	Dec 2010, Report #6	\$ 17.21
Subtotal Approved, Applied to Contingency		\$ 60.00
Expo Phase I (Balance)	Dec 2010, Report #6	\$ 11.29
MBUMGL Transit Passenger Info System	Sept 2010, Report #30	\$ 5.99
Metro Express Lanes	Dec 2010, Report #22	\$ 37.20
Miscellaneous Projects (less than \$1 million)	June 10, #28; July 10, #6 September 10, #3	\$ 2.00
Union Station Purchase	Closed Session	\$ 75.00
Subtotal Approved, Applied by Deferring Projects		\$ 131.48
Light Rail Vehicle Yards Shortfall	June 2011	\$ 170.00
Subtotal Proposed Programming		\$ 170.00
TOTAL		\$ 361.48



Attachment B-4

Heavy Rail System Improvement Repayments

PROJECT TO BE DEFERRED	FISCAL YEARS	AMOUNT
Red/Purple Line – Traction Power to support headways	2015-18	\$94 M
Red/Purple Line – Train Control- 2.5 min headways	2015-18	\$60 M
Combination of Metrolink rehabilitation, heavy rail ventilation, and Division 20 upgrade (TBD)	2015-19	\$16 M
Total		\$170 M

PROJECT TO REIMBURSE HEAVY RAIL SYSTEM IMPROVEMENTS	FISCAL YEARS	AMOUNT
Green Line to LAX	2024-28	\$64 M
South Bay Green Line Extension	2029-32	\$20 M
Systemwide	2023	\$86 M
Total		\$170 M



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Note: The figures in this table are from documents supporting the 2009 Long Range Transportation Plan. As such, our preliminary recommendation is to use funds from the planned heavy rail traction power and train control projects in the L RTP because doing so will have less impact than using funds from the Metrolink, heavy rail ventilation, or heavy rail terminal/division improvement projects. These funds from heavy rail traction power and train control are not enough as \$16 million in light rail yard need still could not be met. Metro rail operations and planning personnel are to prepare studies that will make the final recommendation about what other funds are to be used or what costs could be eliminated to close this \$16 million gap.