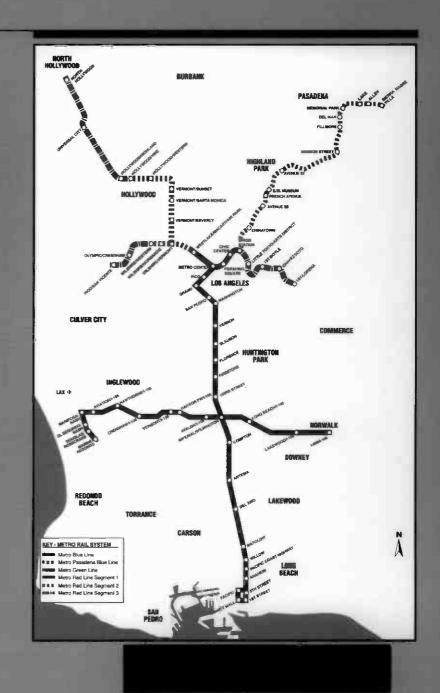
# MTA METRO CONSTRUCTION



Executive Report Rail Program Status



# **RAIL PROGRAM STATUS SUMMARY**

THE LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
METRO CONSTRUCTION DIVISION

# **RAIL PROGRAM SUMMARY**

#### **COST STATUS**

**Current Budget:** 

\$803,868,000

There were no changes to the Current Budget during the period.

#### **SCHEDULE STATUS**

	<u>Design Progress</u>	Construction Progress
Current Plan: May 2001	Plan 100.0% Actual 80.3%	Plan 14.6% Actual 10.1%

• The construction variance is due to delays in the start of final design.

#### **SAFETY STATUS**

	Project Rate	National Average
Lost Time Incident Rate	0.0	4.2

The project is incurring 16,000 work hours per month with no Lost Time Injuries.

#### **MANAGEMENT ISSUES**

- The MTA directed the EMC to cease all work except for services associated with C6390, C6420, C6440, C6450, H0060, H0070, and P2070. This action was taken to allow staff to focus on the completion of scope negotiations of critical activities.
- The EMC has not been performing design support services during construction due to lack of funding.
- The allocation plan, in conjunction with the project forecast completion date, is expected to result in significant overruns in agency costs.

#### MONTHLY HIGHLIGHTS

The MTA suspended design work on non-critical contracts as of May 29, 1997. This
situation may have a negative impact on the project if ceased activities continue for more
than two months.

#### VARIANCE REPORT

**CONTRACT VARIANCE:** (Current Forecast differs from Current Budget by 10% or more and Current is \$50 million or more).

No items to report this period.

LINE ITEM VARIANCE: (Current Forecast differs from Current Budget by 10% or more for the Line Item Total).

#### LINE ITEM 01 - GUIDEWAYS & STATIONS:

 Current Budget:
 \$ 224,959,600

 Forecast:
 \$ 250,987,900

 Variance:
 \$ 26,028,300

 % Variance:
 + 11.6%

Mitigation: This is mainly attributable to the forecast transfer of the Trackwork Installation scope (\$20.1 million) from C6550 into the appropriate line segment contracts. There is no proposed mitigation for this line item inasmuch as this increase merely represents transfer of scope from Line Item T-08 Trackwork into Line Item T-01.

#### **LINE ITEM 04 - UTILITY RELOCATIONS:**

 Current Budget:
 \$ 14,388,300

 Forecast:
 \$ 12,188,500

 Variance:
 (\$ 2,199,800)

 % Variance:
 (15.3%)

Mitigation: The forecast for Utility Relocations was decreased by \$2.2 million after reviewing the scope for this line item with the Pasadena Blue Line Third Party Coordinator. It was felt that the base budget costs were adequate and need not be escalated to mid-point of construction. Therefore, no escalation factor was applied to the \$12.2 million base. There is no proposed mitigation for this line item inasmuch as it represents a forecast savings to the project.

#### LINE ITEM 08 - TRACKWORK:

 Current Budget:
 \$ 35,784,200

 Forecast:
 \$ 15,228,100

 Variance:
 (\$ 20,556,100)

 % Variance:
 (57.4%)

Mitigation: The decrease in forecast is solely attributable to the transfer of the forecast for the Trackwork Installation scope (\$20.1 million) from C6550 into the appropriate line segment contracts. (See T-01.)

#### **LINE ITEM 17 - AFFIRMATIVE ACTION:**

 Current Budget:
 \$ 223,300

 Forecast:
 \$ 266,000

 Variance:
 \$ 42,700

 % Variance:
 +19.1%

Mitigation: The revised costs represent increased escalation due to the forecast slip in the revenue operations date (ROD) from May 2001 to January 2002 (negative 245 days of float. This is attributable to a lack of progress on the redesign effort by EMC.) However, when this budget item was first created, it was assumed that these services were to be provided by an outside consultant. Because this function is now being performed in-house by MTA personnel, this budget will be transferred via PBCR (Project Budget Change request) into line item 19 - MTA Project Administration. Action to be completed by end of 1st -quarter FY1998.

#### **LINE ITEM 19 - PROJECT ADMINISTRATION:**

 Current Budget:
 \$ 46,297,400

 Forecast:
 \$ 52,627,500

 Variance:
 \$ 6,330,100

 % Variance:
 +13.7%

Mitigation: The change in forecast is again attributable to the forecast slip in the ROD from May 2001 to January 2002. Pasadena Blue Line staff is working to provide a revised staffing plan which now supports an August 2001 ROD. It is hoped that possible reductions in staffing requirements can also be identified. The target completion for this task is 1<sup>st</sup>-quarter FY1998. During this timeframe, the interim Project Manager will be briefing the MTA Board as to the overall status of the budget, scope, and schedule for Pasadena Blue Line.

#### LINE ITEM 24 - PROJECT CONTINGENCY:

Current Budget: \$ 46,871,000 Forecast: \$ 27,529,800 Variance: (\$ 19,341,200) % Variance: (41.3%)

Mitigation: The decrease in forecast is attributable to added costs in construction contracts due to escalation (extending the mid-points for construction), as well as extending administration staff for eight months. The project staff is working with EMC to accelerate the design effort. In doing so, it is hoped that the forecast <245> days of negative float can be brought back. This would result in reducing the durations between now and mid-point of construction durations and in reducing administration costs. As with MTA agency costs, the Project Contingency will be addressed by the interim Project Manager in the briefing for the MTA Board. The target completion for this task is 1<sup>st</sup>-quarter FY1998.

#### LINE ITEM 25 - PROJECT REVENUE:

 Current Budget:
 (\$ 1,016,900)

 Forecast:
 \$ 1,213,100)

 Variance:
 (\$ 196,200)

 % Variance:
 +19.3%

Mitigation: The increase in forecast resulted from a higher than expected insurance rebate from the previous OCIP carrier. In addition, this positive trend will continue as MTA receives revenue for the sale of bid documents for the remaining construction contracts. There is no mitigation proposed for this line item inasmuch as all revenues received will be applied to lowering the bottom-line cost of the project.

# **METRO RED LINE Segment 2**

#### **COST STATUS**

**Current Budget:** 

\$1,640,800,000

There were no changes to the Current Budget during the period.

#### **SCHEDULE STATUS**

Wilshire Corridor:

July 13, 1996 (Actual ROD)

Vermont/Hollywood: December 31, 1998 (Current ROD)

Design Progress		Construction Progr		
Plan	100.0%	Plan	93.0%	

Actual 97.1% 86.2% Actual

Construction Progress is behind the plan due to B261 and B610 delays.

#### SAFETY STATUS

	Project Rate	National Average
Lost Time Incident Rate	2.6	4.2

#### **MANAGEMENT ISSUES**

- The B610 Trackwork Contractor's ability to make the IRON-HORSE forming system and progress at the required 600-feet-per-day production rate remains a concern.
- The low-level of remaining unallocated contingency raises concerns that the forecast will exceed the current project budget.
- The allocation plan is expected to result in significant overruns in agency costs.

#### MONTHLY HIGHLIGHTS

The B610 Trackwork Contractor continued plinth concrete placement for Vermont tunnels, completed B252 crossover concrete, and is mobilizing to concurrently begin concrete placement in the Hollywood tunnels.

#### VARIANCE REPORT

CONTRACT VARIANCE: (Current Forecast differs from Current Budget by 10% or more and Current Budget is \$50 million or more):

No items to report this period.

LINE ITEM VARIANCE (Current Forecast differs from Current Budget by 10% or more for the Line Item Total):

#### LINE ITEM 04 - UTILITY RELOCATION:

**Current Budget:** 

\$5,000,000

Forecast:

\$0

Variance:

(\$5,000,000)

% Variance:

Not applicable

Mitigation: The sewer cross connect item was unbudgeted in the original budget. The current budget was established, based upon a rough order of magnitude estimate (ROM) covering the entire scope of the sewer cross connect project scope, to include all engineering installation at all eight Segment 2 stations, permitting, agency and Construction Management costs. The scope has evolved so that the Vermont/Hollywood corridor is covered by the individual stations, the engineering by the E0070 EMC contract and Agency costs by the Agency forecast. The remaining scope for this Line Item is the sewer cross connect for the Wilshire corridor. A PBCR is in progress for the June report which will reduce the budget to cover just the Wilshire leg, the CM costs related to that scope and city permit costs. These values will also be reflected in the forecast.

#### LINE ITEM 10 - OCIP:

#### **CONTRACT MR040 - SEDGEWICK JAMES:**

Current Budget:

\$37,228,000

Forecast:

\$26,950,000

Variance:

(10,277,0000)

% Variance:

(27.6%)

Mitigation: The renegotiations of our insurance coverage as well as the reorganization of the Risk Management Department, has resulted in some confusion of the outlook, specifically with regard to deductible exposure. The present forecast is based upon the costs incurred to date plus the amount budgeted for FY98, at which point construction should have been completed. We continue to work with the Risk Management Department to finalize a viable forecast. When that occurs, if there is still a budget/forecast variance, the budget will be adjusted.

#### LINE ITEM 24 - CONTINGENCY:

Current Budget:

\$4,742,000

Forecast:

\$ 3.098.000

Variance:

(\$ 1,644,000)

% Variance:

(34.7%)

Mitigation: The original budget and forecast for Segment 2 was \$145,743,000. Over the life of the project, this item has seen a tremendous level of activity, both in terms of adding funds to Contingency as excess budget became available from awards, as well as reductions to contingency in order to cover increases in other project costs, such as engineering and construction management. This is reflected in the fact that all the major project line items, totaling well over \$1 billion, are within the 10% variance limit. However, all the line items (except Maintenance Equipment and Passenger Vehicles) presently do have some variance. The sum of these variances is reflected in the Contingency variance. We are presently analyzing the outlook for future demands on contingency. In addition, we are presently in the process of allocating the contingency from only one item into multiple lines which will address the risk for specific areas of the project.

# **METRO RED LINE Segment 3 North Hollywood**

#### **COST STATUS**

**Current Budget:** 

\$1,313,848,000

There were no changes to the Current Budget during the period.

#### **SCHEDULE STATUS**

	<u>Design Progress</u>		Construction Progress	
Current Plan: May 2000	Plan	100.0%	Plan	42.0%
	Actual	93.5%	Actual	42.0%

 Mitigation options to partially recover form delays on the C0311 contract were implemented in the May 1997 Project Master Schedule.

#### **SAFETY STATUS**

	Project Rate	National Average
Lost Time Incident Rate	1.4	4.2

• The project rate continues at approximately one-third of the National Average.

#### **MANAGEMENT ISSUES**

- TBM excavation decreased to an average of 37 feet/day. If the average daily excavation rates fall below 30 feet/day, tumover of the Phase III crossover may be impacted.
- Mitigation efforts to maintain the May 17, 2000, ROD, have left the project schedule with no unallocated contingency for future risks associated with the excavation of the tunnels under the Santa Monica Mountains.
- The allocation plan, in conjunction with the project forecast completion date, is expected to result in significant overruns in agency costs.

#### MONTHLY HIGHLIGHTS

Options to mitigate the risks associated with C0311 TBM production rates were finalized.
 These options included a compressed schedule and resequencing of C610 Trackwork
 Installation, and returning B620 Automatic Train Control to its original contract schedule.

#### VARIANCE REPORT

CONTRACT VARIANCE: (Current Forecast differs from Current Budget by 10% or more and Current Budget is \$50 million or more).

# CONTRACT B251 - TUNNEL SEGMENT HOLLYWOOD/VINE TO ROCK INTERFACE (603+00):

Current Budget:

\$60,500,000

Forecast:

\$44,859,587

Variance: % Variance:

(\$15,640,413) (25.9%)

Mitigation: The Current Budget was updated through PBCR #3 which allocated additional budget to the contract for original contract delays, grouting, work resequencing and potential claims as a result of the tunnel settlement and termination of the SKK contractor. The forecast reflects the last known information prior to the sinkhole and street settlement. It is widely known that the contractor has been terminated and ongoing litigation between MTA, PD and SKK will result in significant claims and insurance damages. However, the attorney client privilege has prevented PD from disclosing a possible claim exposure figure so as not to disclose the possible position of each involved party. The forecast will remain at the status quo until public filings are made.

#### **CONTRACT B351 - NORTH HOLLYWOOD STATION:**

Current Budget:

\$83,742,000

Forecast:

\$74,922,352

Variance:

(\$8,819,648)

%Variance:

(10.5%)

Mitigation: The Current Budget reflects the final engineer's estimate prior to contract award. Forecast is less than the budget due to contract bid coming in at a lower than anticipated value. However, additional claims could occur due to station excavation delays and turnover access from Contract C0331.

LINE ITEM VARIANCE: (Current Forecast differs from Current Budget by 10% or more for the Line Item Total).

#### LINE ITEM 03 - HAZARDOUS MATERIAL HANDLING:

Current Budget:

\$15,058,000

Forecast:

\$6,383,451

Variance:

(\$8,674,549)

%Variance:

(57.6%)

Mitigation: The Current Budget reflects the worst case scenario presented by MTA environmental at the inception of the North Hollywood Project. Forecast is less than the budget due to less than anticipated contaminated soil encountered to date. Adjustments to budget and forecast will occur once the tunnel drives and significant soils excavation are complete.

#### **LINE ITEM 24 - PROJECT CONTINGENCY:**

**Current Budget:** 

\$69,570,800

Forecast:

\$91,081,644

Variance:

\$21,510,844

%Variance:

30.9%

Mitigation: The Current Budget reflects Project Budget Change Request #4 which did not include areas of exposure which have been recently identified. The forecast includes significant areas of growth in the near future including a \$27M increase to project administration, claims exposure in Contract C0311 for approximately \$26M and claims exposure in Contract C0331 for \$40M. Adjustments will be made to both budget and forecast upon further analysis of the proposed cost increases.

# **METRO RED LINE Segment 3 Mid-City**

#### **COST STATUS**

**Current Budget:** 

\$491,000,000

There were no changes to the Current Budget during the period.

#### **SCHEDULE STATUS**

	<u>Design</u>	<u>Progress</u>	Construc	tion Progress
Current Plan: July 2009	Plan	0%	Plan	0%
	Actual	0%	Actual	0%

 The project baseline schedule will be finalized after Preliminary Engineering is completed and the project is adopted.

#### **SAFETY STATUS**

Lost Time Incident Rate

Project Rate	National Average
0%	0%

There was no Construction Safety activity during the period.

#### MANAGEMENT ISSUES

- Finalization of the master schedule for design and construction is on hold pending completion of the draft SEIS/SEIR and Board decision on the preferred alternative.
- Preparation of the SEIS/SEIR document is currently eight weeks behind schedule.
- The allocation plan, in conjunction with the project forecast completion date, is expected to result in significant overruns in agency costs.

#### MONTHLY HIGHLIGHTS

The initial review of the complete Administrative SEIS/SEIR draft commenced.

# **METRO RED LINE Segment 3 East Side Extension**

#### **COST STATUS**

**Current Budget:** 

\$1,049,200,000

There were no changes to the Current Budget during the period.

#### **SCHEDULE STATUS**

	<u>Desiqn</u>	<u>Progress</u>	Constru	ction Progress
Current Plan: May 2004	Plan	77.6%	Plan	0.0%
	Actual	73.3%	Actual	0.0%

The MTA Board approved ROD of November 2004 was improved six months to May 2004.

#### **SAFETY STATUS**

	Project Rate	National Average
Lost Time Incident Rate	0%	0%

• There was no Construction Safety activity during the period.

#### **MANAGEMENT ISSUES**

- Remaining contingency is 5.5% of the remaining project expenditures, however, this may not be adequate for future project unknowns. The MTA is closely monitoring remaining contingency and is identifying cost reduction opportunities.
- The allocation plan, in conjunction with the project forecast completion date, is expected to result in significant overruns in agency costs.

#### **MONTHLY HIGHLIGHTS**

 Continued schedule mitigation studies to improve the ROD better than the six months previously identified.

#### VARIANCE REPORT

**CONTRACT VARIANCE:** (Current Forecast differs from Current Budget by 10% or more and Current Budget is \$50 million or more).

No items to report this period.

LINE ITEM VARIANCE: (Current Forecast differs from Current Budget by 10% or more for the Line Item Total).

#### LINE ITEM 08 - TRACKWORK:

Current Budget: \$26,387,000 Forecast: \$23,291,000 Variance: (\$ 3,296,000) % Variance: (12.5%)

Mitigation: This variance is due entirely to a significant reduction in the forecast for Contract P1616 (Direct Fixation Rail Fasteners). The current budget for this contract was based on conceptual and preliminary engineering. The current forecast includes updated quantities based on progression of design for this work to the pre-final, or 85% complete, stage. Since this is a negative variance, mitigation is not required.

#### **LINE ITEM 24 - PROJECT CONTINGENCY:**

Current Budget: \$74,465,000 Forecast: \$52,721,000 Variance: (\$21,744,000) % Variance: (\$29.2%)

Mitigation: This variance is due to drawdown from contingency to cover increased estimates for various construction elements of the project. The current forecast of \$52,721,000 is \$21.7 million less than the current budget of \$74,465,000. Major impacts have occurred as follows:

- March 1997 net drawdown of \$6.4 million to cover increased estimates for the Little Tokyo Station and Line Section contract.
- April 1997 net drawdown of \$3.1 million to cover increased estimates for the 1st and Lorena Station and the Project Management Assistance contracts.
- May 1997 net drawdown of \$10.4 million to cover increased estimates for the Chavez/Soto station and for the Electrical Equipment Procurement contracts.

The East Side Extension Project Team began reporting in the April Monthly Project Status Report a new "Area of Concern/Management Issue" relating to adequacy of remaining contingency. Mitigation of these rapid depletions of the contingency amounts is a high project priority and depends on a number of factors, including accuracy of the estimates. The Project Team, along with the EMC and the CM continue to investigate Value Engineering/Cost Reduction options and will implement those which are possible and practical. Currently under study for potential savings are the elimination of the Smoke Exhaust Systems, schedule acceleration within funding constraints, and repackaging and re-sequencing of construction work. Concurrent with those efforts, estimate reviews are being undertaken with staff and consultants to verify the scope and content of estimates for design packages, to identify specific areas of increase, and to review those areas for cost reduction potential.

#### **VEHICLE ACQUISITION PROJECT**

#### COST STATUS

**Current Budget:** 

\$257,597,000

There were no changes to the Current Budget during the period.

#### **SCHEDULE STATUS**

		<u>Design Progress</u>	Fabrication Progress
Schedule C 1 <sup>st</sup> Car 52 <sup>nd</sup> Car	ar Delivery May 1998 July 1999	90.0%	35.0%

The current schedule reflects 19 months delay in first car deliveries.

#### **MANAGEMENT ISSUES**

- Carshells No. 202A, 202B, and 301A exhibited symptomatic paint peeling. Preliminary results indicate an almost complete lack of hardener in the primer.
- Vehicle batteries were tested in Sacramento. Initial results indicate that voltage levels and capacity were lower than the specification requirements.
- Wiring installation in the articulation area of Carshell No. 1 was poorly designed, however, STS significantly improved the wiring routing and dress and this issue was resolved.

#### MONTHLY HIGHLIGHTS

- Carshell No. 10 was completed and shipped to Sacramento for final assembly.
- A First Article Inspection (FAI) of the battery box, and the power truck was completed.
- The -43 days shown on the April 1997 schedule was eliminated. Siemens is expected to start a two shift operation after the first few cars have reached a stable production rate.

# TOTAL RAIL PROGRAM BUDGET/FORECAST VARIANCE

ORIGINAL SCOPE (IN MILLIONS) STATUS DATE: 05/30/97 **BUDGET/ COST ELEMENT** CURRENT CURRENT **FORECAST** MAY CHANGE BUDGET **FORECAST** VARIANCE IN FORECAST CONSTRUCTION \$5,382.2 \$5,424.7 \$42.5 \$72.0 PROFESSIONAL SERVICES 2156.8 2269.0 112.2 8.3 **REAL ESTATE** 545.7 531.6 -14.1 0.2 UTILITY/AGENCY 171.7 170.4 -1.3 -5.0 FORCE ACCOUNTS SPECIAL PROGRAMS 16.1 17.6 1.5 -0.9 CONTINGENCY 294.6 288.8 -5.8 -75.3 PROJECT REVENUE -39.4 -33.1 6.3 0.0 TOTAL PROJECT \$8,527.7 \$8,669.0 \$141.3 (\$0.7)

#### ADDITIONAL LOCALLY FUNDED ACTIVITIES

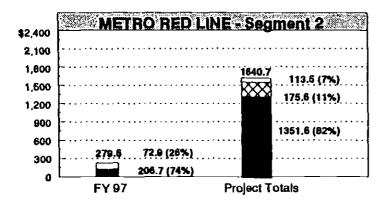
COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	BUDGET/ FORECAST VARIANCE	MAY CHANGE IN FORECAST
CONSTRUCTION	\$49.2	\$60.7	\$11.5	\$0.8
PROFESSIONAL SERVICES	17.5	22.3	4.8	0.3
REAL ESTATE	0.0	0.0	0.0	0.0
UTILITY/AGENCY FORCE ACCOUNTS	0.0	0.0	0.0	0.0
SPECIAL PROGRAMS	0.0	3.1	3.1	0.0
CONTINGENCY	0.4	0.0	-0.4	0.0
PROJECT REVENUE	1.1	-11.5	-12.6	-1.1
TOTAL ADDITIONAL LOCALLY FUNDED ACTIVITIES	\$68.2	\$74.6	\$6.4	(\$0.0)

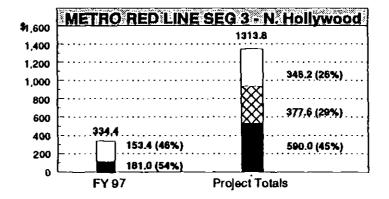
<sup>(1)</sup> The Mid-City budget of \$491 million is pending the selection of a preferred alternative.

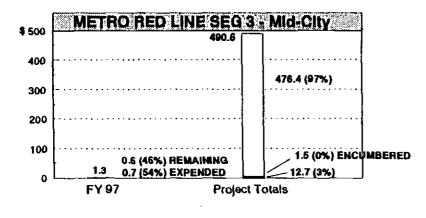
Page 15

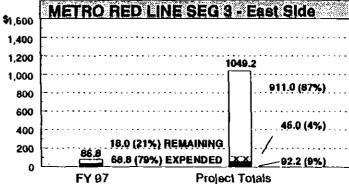
<sup>(2)</sup> The MId-City forecast of \$683 million reflects the proposed alignment in the Rail Recovery Plan.

# BUDGET STATUS - May 30, 1997 (in \$ Millions)



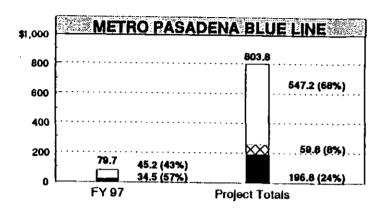


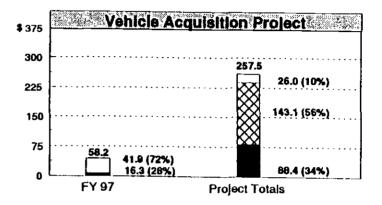




Actual Spent Encumbered Remaining Budget

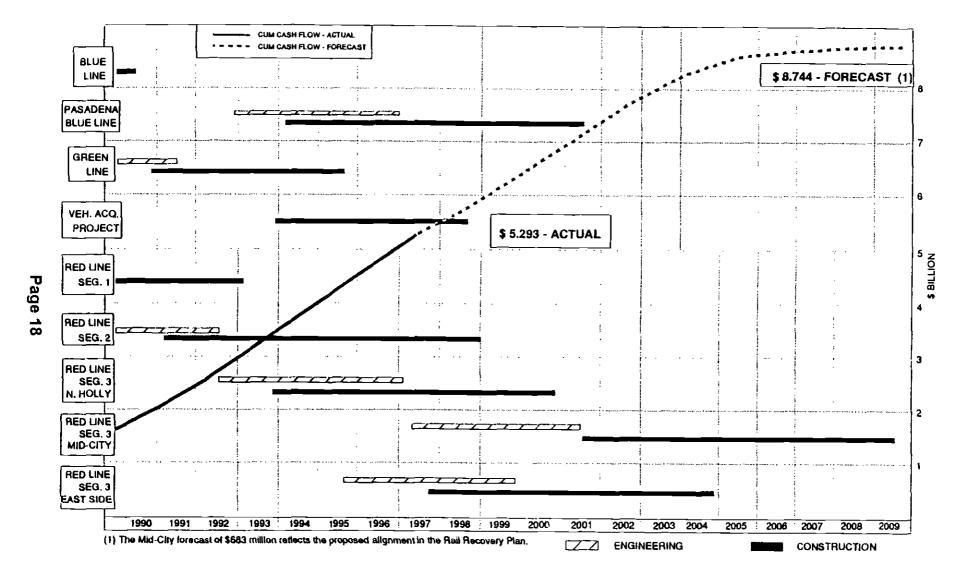
# BUDGET STATUS - May 30, 1997 (in \$ Millions)





Remaining Budget

Actual Spent Encumbered

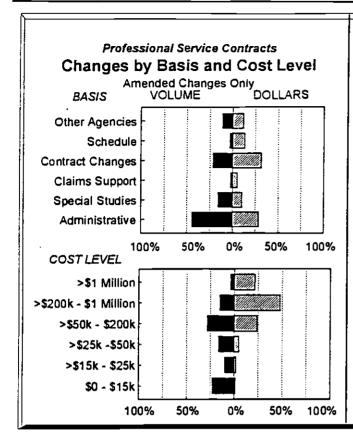


#### METROPOLITAN TRANSPORTATION AUTHORITY

								<u>NG SOL</u>											AY 1997	
		DBLUE	PASA			GREEN			METRO		METRO				METRO			E ACQ.	TOT	
}	LIN	<u> </u>	BLUE	LINE %	LIN	*	SEGM	KNT I	SEGME	NT 2	SEGMEN	1T 3 - NH	SEGMEN				PRC \$	DECT	PROG	
ORIGINAL SCOPE:	•				_•_		-		-		<u> </u>		•	*	8	*	•	*	<u> </u>	*
TA-SECTION 3							605.3	42	867.0	40	681.0	52	242.6	48	492.9	47			2688.8	3.
TA - OTHER	,	<u> </u>			•						<u> </u>									
STEA - FED SURFACE TRANSIT PROG									52.1	3	50.0	4			25.0	2	84.0	33	211.1	
ED-ISTEA RSTP/CMAQ											87.7	7	20.4	,	268.9	27	6.1	2	383.1	ļ
FTA-SECTION 9							90.6	6											90.6	İ
STATE			387.8	48	105.9	15	210.3	15	133.0	8	85.0	6	90.0	14	15.0	1	33.5	13	1060.5	1.
STATE TSM MATCH							ĺ				11.4	1	2.6	,	34.8	3			48.8	
SB 1995 TRUST FUND			ļ								75.0	6							75.0	
PROPOSITION A	877.2	100	202.6	25	205.1	29	179.5	12	602.0	37	 								2066.4	2:
PROPOSITION C			213.5	27	395.3	55					116.5	9	327.3	36	203.3	19	134.0	52	1389.9	10
PROP C (AMERICAN DISABILITY ACT)		•	1		6.0	,													6.0	'
CITY OF LOS ANGELES							34.0	2.	96.0	6	190.7	14			9.3	1			330,0	
BENEFIT ABBESSMENT							130.3	9	25.4	2	13.5	1.							16 <b>9</b> .2	
COST OVERRUN ACCOUNT		·					200.1	14											200.1	
TOTAL	877.2	100	803.9	100	712.3	100	1460.1	100	1575.5	96	1310.8	100	682.9	100	1049.2	100	257.6	100	8719.5	9:
ADDITIONAL LOCALLY FUNDED ACTIVITIES:														_						
PROP C (TRANSIT ENHANCEMENTS)									62.7	4	2.7	o				:			65.4	
FED ISTEA RSTP/CMAQ					'				2.5	o									2.5	(
TOTAL									65.2	4	2.7	0	<del>-</del>						67.91	

[1] The Mid-City budget of \$683 million reflects Total Funds Anticipated pending the effection of a prefetzed elemative.

Page 19



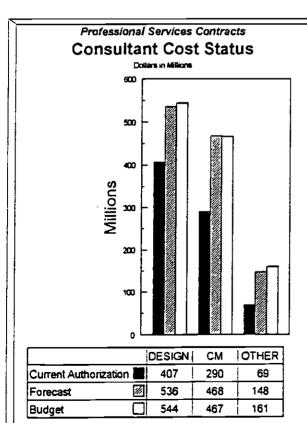
#### CHANGE BASIS ANALYSIS

Administrative changes account for approximately 45% or 361 of the 810 Consultant Change Notices overall. Administrative changes include capital equipment, facilities and extra work requested by the MTA. This represents approximately 28% of the overall change cost of amended changes.

#### CHANGE COST LEVEL ANALYSIS

As shown on the Cost Level Analysis chart opposite, the MTA Board approves 69% of all change costs associated with the Rail Project or \$71.5M of a total change cost of \$103.8M. This equals 20% of the total change volume or 164 of 810 total changes.

Note: Data for Basis and Cost charts includes only MTA Board amended changes.



# PROFESSIONAL SERVICES COST ANALYSIS

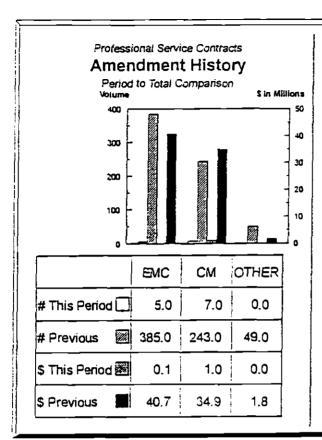
Categories represent all professional services contracts, not individual contracts (i.e. "design" includes all line 11 contracts not just EMC).

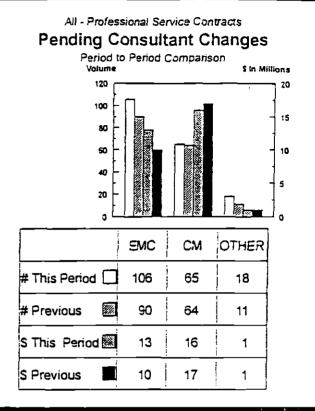
The forecast cost for design and other consultant contracts increased slightly during the period, but remain below the current budget. While the forecast for construction management contracts continues to slightly exceed the budget amount, due to delays in project activities on the Metro Red Line Eastside Extension and Pasadena Blue Line

#### Data Source:

CMS: Consultant Contract Authorization, Forecast and Budget Values.

CHNGSAMP/05/97





#### CONSULTANT CHANGE NOTICE ANALYSIS

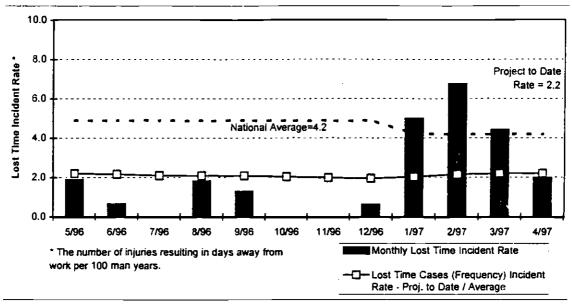
Eight new Requests for Change (RFC's) were received during the period with an estimated value of \$1.2 million.

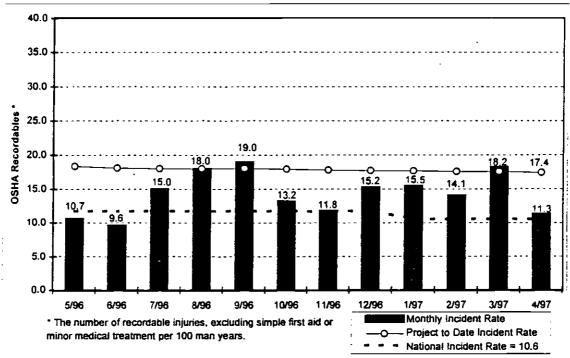
Thirty-three new Consultant Change Notices (CCN's) were issued during the period with an estimated value of \$5,4 million.

Twelve CCN's were reported as being approved for amendment by the MTA Soard during the period with an estimated value of \$1.1 million.

Five CCN's, which had an estimated value of \$325 thousand, were canceled or withdrawn during the period.

# Safety Summary Status





# **EXECUTIVE SUMMARY**

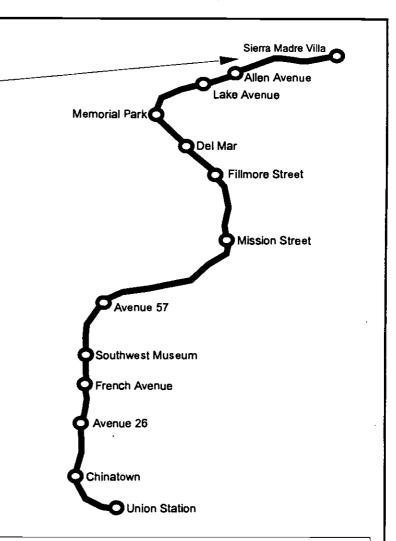
Summary Status Report Period Ending - May 30, 1997



# **MAJOR ACTIVITIES THIS PERIOD (May 1997)**

# C6435 - Reconstruction & Retrofit of Steel & Concrete Bridges

- Lake Ave.: Completed sidewalk and concrete barrier wall construction; finishing work remains to be completed at Stage 1. Completed all electrical work for Stage 1, and the city street lights on the West side are operational. The bridge deck overlay for the bus lane is complete with only final finish to be completed. Completed the placement of the metal beam railing on the concrete barrier for Stage 1. The sidewalk on the West side of Stage 1 is now open for pedestrian access. Completed the Erection of falsework for Stage 2.
- Alien Ave.: Placed concrete for the Abutment 1 column and cap. Installation of the falsework is in progress.
- Foothill Blvd.: Falsework erection is in progress. Modification of the footing at Abutment 1 is complete.
- Lacy St. Bridge: Completed the removal of the existing span 4 and erection on new girders, as part of Change Order 12 work.
- Fremont Ave.: Completed coring at the abutments for installation of high strength cables. Lead abatement is scheduled to be completed next month.



#### SYSTEMWIDE ACTIVITIES

- Continued negotiations with Section Designers for Contracts C6420 (L.A. River to Arroyo Seco Line Segment), and C6450 (Del Mar to Memorial Park Line Segment).
- Continue to support cashflow and funding special studies.
- A partial stop notice was issued to the EMC for non critical work associated with CWO 039 to allow the PBL Project to focus on the completion of scope negotiations of critical activities.
- Willdan Associates, the Section Designer for Contract C6420, has started work on the track alignment effort of the partial work scope issued to them.
- EMC received and incorporated comments from the City of Pasadena on Glenarm and California grade crossings for Contract C6440 (Arroyo Seco to Del Mar).
- EMC completed the ventilation study for Contract C6450.
- EMC continued final design for Contracts H0060 (Train Control System) and H0070 (Train Electrification System). Impacts to these Systems' contracts caused by delays in finalizing Facilities design schedules have been evaluated and reflected in the current detail schedules for Contracts H0060 & H0070.
- Started design effort for C6390 (Chinatown Aerial) on a limited Notice-To-Proceed (NTP) to the Section Designer (Martin Huang).

# Summary Status Report

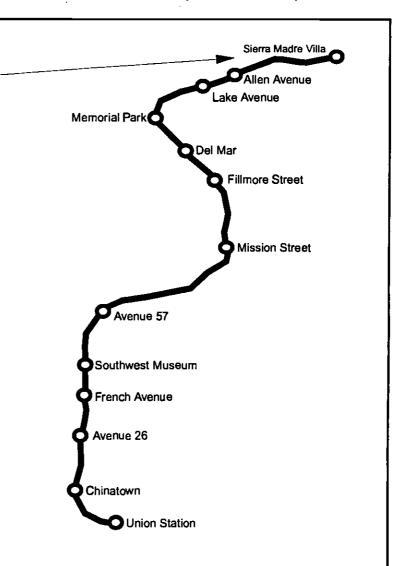
Period Ending - May 30, 1997



# **MAJOR ACTIVITIES NEXT PERIOD (June 1997)**

# C6435 - Reconstruction & Retrofit of Steel & Concrete Bridges

- Lake Ave.: Demolition of the specified section (overhang) of the existing girder and erection of the new pre-cast girders as part of Stage 2.
- Fremont Ave. Bridge: Continue reinforcement placement for the grade beams at the abutments. Lead abatement of areas which are to be cored or welded.
- Lacy St. Bridge: Commence retrofit work on spans 1, 2 and 3.
- Arroyo Seco Parkway: Complete work, including torquing bolts and removing formwork.
- Foothill Blvd. Bridge: Form and place concrete for the new CIP concrete box girders.
- Allen Ave Bridge: Demolition of the existing Abutment 1 footing and the CIDH plies.
- Painting of all column casings at Lake Ave., Allen Ave., and Sierra Madre Blvd. Bridges.
- Complete erection of the falsework at Allen Ave.
   Bridge, Foothill Blvd.
- Punch list items on all bridges.



#### SYSTEMWIDE ACTIVITIES

- Continue to support cashflow and funding special studies.
- Continue EMC portion of final design for Contract C6450 (Del Mar to Memorial Park Line Segment).
- EMC to complete negotiation and issue Notice-To-Proceed (NTP) with Section Designers for Contracts C6420 (L.A. River to Arroyo Seco Line Segment), and C6450 (Del Mar to Memorial Park Line Segment).
- Establish a path forward concerning the partial stop notice on non critical CWO 039 design work and complete negotiations on CWO 039, CWO 041, CWO 042 and CWO 043.
- EMC to submit PIP's for CWO 039 and CWO 043 in preparation for final negotiations.
- EMC to continue work effort on final track alignment and start grading drawings for Contract C6420.
- EMC to continue detail design on Contract C6440 (Arroyo Seco to Del Mar) and development of Train Control and OCS drawings for Contracts H0060 and H0070 respectively.
- EMC to complete schematic design of Vignes St. for Contract 6390 (Chinatown Aerial) and submit to LADOT for review.

Summary Status Report Period Ending - May 30, 1997



### FINANCIAL STATUS

#### Budget/Forecast Variance (\$ in millions)

**Original Scope Activities** 

COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	VARIANCE	MAY CHANGE IN FORECAST
CONSTRUCTION	\$430.3	\$436.7	\$6.4	\$2.5
PROFESSIONAL SERVICES	252.6	269.8	17.2	6.0
REAL ESTATE	59.4	55.5	(3.9)	0.0
UTILITY/FORCE ACCOUNT	13.5	. 13.4	(0.1)	0.1
SPECIAL PROGRAMS	2.2	2.2	0.0	0.0
CONTINGENCY	46.9	27.5	(19.4)	(8.6)
PROJECT REVENUE	(1.0)	(1.2)	(0.2)	0.0
TOTAL PROJECT	\$803.9	\$803.9	\$0.0	\$0.0

Additional Locally Funded Activities

COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	VARIANCE	MAY CHANGE IN FORECAST
CONSTRUCTION	\$0.0	\$1.2	\$1.2	\$0.0
PROFESSIONAL SERVICES	0.0	0.0	0.0	0.0
REAL ESTATE	0.0	0.0	0.0	0.0
UTILITY/FORCE ACCOUNT	0.0	0.0	0.0	0.0
SPECIAL PROGRAMS	0.0	0.0	0.0	0.0
CONTINGENCY	0.0	0.0	0.0	0.0
PROJECT REVENUE	0.0	0.0	0.0	0.0
TOTAL ADDITIONAL LOCALLY FUNDED ACTIVITIES	\$0.0	\$1.2	\$1.2	\$0.0

#### **Budget/Forecast Variance Analysis**

The Current Budget of \$803.9M is based on a May 2001 ROD and incorporates cost reduction items approved by the MTA Board in February 1996, as amended in the Board report submitted in June 1996.

The variance for May reflected the cost impacts associated with revising the forecast ROD date (149 days of negative float in the February 1997 PMSR to the current 245 days of negative float) of January 2002. The results at the element level were:

- an increase of \$2.5M in Construction costs due to escalation;
- a total increase of \$6.0M in Professional Services (5.6M for extending administration levels and \$0.4M for escalation):
- · an increase of \$0.1M for Utility/Force Accounts for extending cooperative agreements with agencies;
- and a decrease in Project Contingency by \$8.6M.

There was no change to the Total Project Forecast.

Commitments to date are \$256,688,000.

Expenditures to date are \$196,804,000.

Additional Locally Funded Activities (ALFA) are defined as work scope not covered under the original scope such as the repair of the fire damaged Lacy St. Bridge at Contract C6435. The cost associated with completing this work is \$1.2M, resulting in an overall Project Forecast of \$805.1M. Recovery from the liable party's insurance company is currently being pursued; with an insurance rebate anticipated to reduce or eliminate this potential overrun.

# FINANCIAL DETAIL STATUS OF FUNDS BY SOURCE

(IN THOUSANDS OF DOLLARS)

SOURCE	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		8ILLED TO SOURCE	
		(1)		\$	%	\$	<u>%</u>	\$	<u>%</u>
STATE PROP 108	\$368,300	\$20,000	\$20,000	\$20,000	100%	\$20,000	100%	\$20,000	100%
STATE PROP 116	\$37,263	\$40,000	\$40,000	\$40,000	100%	\$40,000	100%	\$40,000	100%
STATE HIGHWAY ACCOUNT	\$0	\$327,800	\$28,000	\$28,000	9%	\$28,000	9%	\$28,000	9%
PROP C (HIGHWAY 25%)	\$0	\$152,974	\$123,452	\$128,689	84%	\$68,804	45%	\$68,804	45%
PROP C (40% DISC.)	\$435,437	\$60,534	\$40,000	\$40,000	66%	\$40,000	66%	\$40,000	66%
PROP A (35% RAIL)	\$0	\$202,561	\$0	\$0	0%	\$0	0%	\$0	0%
TOTAL	<b>\$841</b> ,000	\$803,86 <b>9</b>	\$251,452	\$256, <b>689</b>	32%	<b>\$196,8</b> 04	24%	\$196,804	24%

NOTE: (1) Based on Current Budget

Expenditures are through April 1997

F:\COST\PMSR\MAY-1997\5200.DOC



Summary Status Report Period Ending - May 30, 1997



### FINANCIAL DETAIL

# **Funds by Source Analysis**

#### **Status of Funds Anticipated**

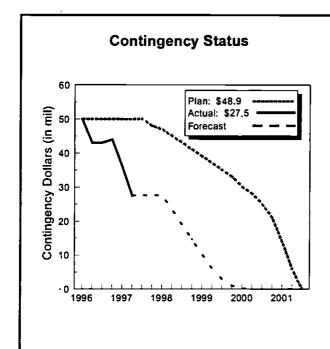
State Highway Account:

The CTC allocated \$48.5M from the State Highway Account Fund at its November 1996 meeting. Execution of the Fund Transfer Agreement by Caltrans is expected in June 1997.

Summary Status Report Period Ending - May 30, 1997



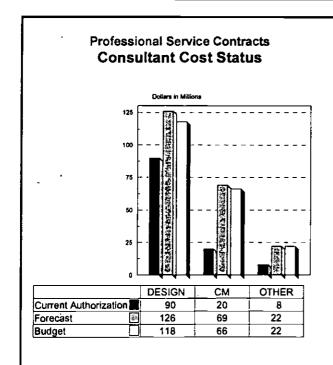
#### FINANCIAL STATUS



#### **Contingency Status Analysis**

The total project unallocated contingency forecast decreased \$8.6M this period from \$36.1M to \$27.5M. This represents the cost impact associated with the continued slippage to the current ROD. The forecast was brought up-to-date from the 149 days of negative float as reported in the February 1997 PMSR to the current forecast of 245 days of negative float.

Additionally, if the ROD continues to slip, there will be a ROM cost impact of \$2.5M to \$3.0M per month due to escalation and extended administration costs. Analysis is underway to determine if this contingency is adequate to complete the balance of the project.



#### **Professional Services Cost Analysis**

The current Forecasts for all Professional Services are based on the project scope, schedule and budget approved by the Board on February 28, 1996 and as amended by the June 1996 Board report submittal. The current forecast has been revised to reflect the delays associated in the commencement of the redesign effort.

The forecast for the Design Consultant increased by \$3.1M to a total of \$125.8M for the May period. This forecast reflects the extension of project management support required for the design effort (CWO 039), as well as extending design support during construction (CWO 025).

The forecast for the Construction Management firm increased by \$1.2M to a total of \$68.7M for the May period. The forecast was brought up-to-date from the 149 days of negative float as reported in the February 1997 PMSR to the current forecast of 245 days of negative float.

DATA SOURCE:

CMS: Consultant Current Authorization, Forecast, and Budget Values.

Summary Status Report Period Ending - May 30, 1997



### **SCHEDULE STATUS**

#### Schedule

		Change from <u>Last Month</u>
Current R.O.D.	May 2001	None
Design Progress*	80.3%	None
Constr. Progress	10.1%	+0.2
Critical Path Float (Calendar Days)	-245 days	-39

\*Based on original design work scope; design will be rebaselined pending an evaluation of design status, detailed definition of new work scope & preparation of an execution plan.

#### **Current Critical Path Analysis**

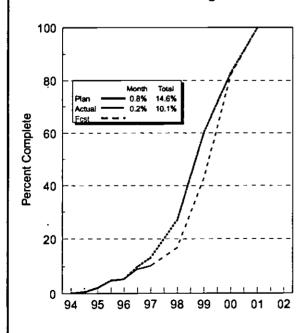
The schedule is being driven by the restart and limited work on design for the critical contracts. Design delays have been caused by contract changes, continued negotiations between EMC and their Section Designers, and lack of community concurrence with cost reduction items.

The schedule continues to slip for critical Contracts C6420 (L.A. River to Arroyo Seco Line Segment) and C6450 (Del Mar to Memorial Park Line Segment). The negative float has increased to 245 calendar days.

MTA suspended design work on non critical contracts as of May 29, 1997. A negative impact to the project will result if ceased activities continue for more than two months. Non critical contracts will become critical due to minimal float; loss of float will result in a stacking effect of contract awards.

The critical path runs through the design, bid cycle and construction of Contracts C6420 and C6450 and continues through installation of trackwork, H0070 (TPSS and OCS), H0060 (Train Control System), integrated Systems, Pre-Revenue Operations and the ROD.

#### **Construction Progress**



#### **Construction Progress Analysis**

The original Plan showed 18 procurement and construction contracts in 1997. The Forecast remains behind the Plan due to the lack of design progress. The forecast shows only 1 major contract ready for bid in December 1997.

The updated schedule for Contract C6435 (Reconstruction & Retrofit of Steel & Concrete Bridges) shows a negative float of forty-six (46) working days resulting from owner controlled delays. A Change Notice is being prepared to grant the contractor a forty-six (46) day time extension.

Summary Status Report Period Ending - May 30, 1997



# **SAFETY STATUS / MANAGEMENT ISSUES**

#### **Construction Safety Statistics**

Change from Last Month

#### Recordable Injury Rate:

The number of recorded injuries excluding simple first aid or minor medical treatment per 100 man years.

1995 National Average

10.6

Project Rate

3.6

-0.1

Lost Time Incident Rate:

The number of injuries resulting in days away-from work per 100 man years.

1995 National Average

4.2

Project Rate

0.0 None

#### **Construction Safety Summary**

- The Project is producing 16,000 work hours per month and has continued with zero Lost Time Cases and no Lost Work Days.
- To date, over 677,000 work hours were completed without a Lost Time Injury.
- OSHA-200 incidence rate is approximately one third of the National Average of 10.6.

NOTE: Based on April 1997 statistics.

#### **MANAGEMENT ISSUES**

#### NEW

Item (Date Initiated: May 1997)

#### **EMC Cease Work**

#### Concern/Impact

MTA directed EMC on May 29, 1997, to cease all work except for services associated with Contracts C6390, C6420, C6440, C6450, H0060, H0070 and P2070. This action was taken to allow the PBL Project to focus on the completion of scope negotiations of critical activities.

#### Status/Action

EMC and MTA held a coordination meeting on May 30, 1997, to discuss and clarify MTA's directive. A plan to negotiate critical work packages in order to reduce further risk impact to critical activities was issued to the EMC at the end of May. Additionally, the EMC was requested to submit a cost proposal in response to this plan.

Summary Status Report Period Ending - May 30, 1997



# **MANAGEMENT ISSUES (Con't)**

#### NEW (Con't)

Item (Date Initiated: May 1997)

Contract C6435 Day for Day Slip

#### Concern/Impact

EMC has not been performing design support services during Construction since February 10, 1997 due to lack of funding.

#### Status/Action

Contractor has provided a 10-day notice stating that effective June 4, 1997, there will be a day for day slip to the schedule for any outstanding submittals. A plan is being developed to transfer disputed charges out of CWO 025 so that the EMC can provide construction support to avoid further impact.

Item (Date Initiated: May 1997)

#### Agency Cost Overrun

#### Concern/Impact

Agency Costs are an element of the Project Budget and incorporate management issues, non-labor administrative costs, fringe benefits and overhead costs. Allocation plan in conjunction with the projects forecast completion date is expected to result in significant overruns to the specific line item budget for "agency" costs.

#### Status/Action

The Project Staff is currently reviewing the forecasted staff manpower levels, plans and the proposed allocation methodology to determine any appropriate revisions. This review, to accurately quantify the magnitude of this potential overrun, is expected to be completed by July 1997.

#### **ONGOING**

Item (Date Initiated: September 1996)

#### Validation of \$803.9M Baseline Estimate

#### Concern/Impact

When the Pasadena Blue Line Project was re-adopted in February 1996, the EMC had not prepared updated estimates which included the proposed Value Engineering/Cost Containment items approved by the MTA Board. Part of the scope of CWO 037 was the development of capital cost estimates based on the new construction work scope.

#### Status/Action

EMC submitted the estimates for the construction work packages in December 1996. Project Staff reviewed these estimates and found that some elements of project scope were not included in the estimates. The scope of these items were identified by EMC in April. The EMC is preparing a proposal identifying manhours required to complete the estimates of these items and to integrate these cost estimates into the total capital cost estimates. The proposal is due on June 13, 1997. Until these issues are resolved, the project budget cannot be validated.

# Summary Status Report Period Ending - May 30, 1997



# **MANAGEMENT ISSUES (Con't)**

### ONGOING (Con't)

Item (Date Initiated: April 1997)

#### **Project Cost Forecast**

#### Concern/Impact

The remaining unallocated contingency of 4.5% raises concerns that the forecast will exceed the total current project budget.

#### Status/Action

Project Management is reviewing each contract work package to determine the adequacy of the remaining unallocated contingency.

#### Item (Date Initiated: April 1997)

#### Yard and Shops

#### Concern/Impact

Design activities on Contract C6400 (Yard and Shops) have been suspended in order to evaluate the necessity of having a full yard and shops. A limited maintenance yard is being evaluated where excess capacity from other yards could be utilized. In order to eliminate delays to the camera-ready submittal, a decision needs to be finalized as to the requirements of service capabilities. In addition, if a decision is not made in a timely manner, system controls will be impacted.

#### Status/Action

Project Staff are working with Operations to conduct an analysis to see whether to authorize a full service or limited service maintenance yard. A Board report recommending adoption of the result from the analysis will be prepared for July's Board Meeting.

#### Item (Date Initiated: March 1996)

#### Start of Final Design

#### Concern/Impact

The current schedule shows 245 calendar days of negative float because final design has not progressed as planned.

#### Status/Action

Final design production continues on a limited basis for C6450 (Del Mar to Memorial Park Line Segment) and C6420 (LA River to Arroyo Seco Bridge Line Segment). Final design for the remaining contracts has not progressed because the EMC continues to experience delays in mobilizing Section Designers. An agreement between EMC and the Section Designers for C6420 and C6450 on scope and contract terms remains outstanding. The delay to the start of engineering has impacted the projected ROD, with corresponding impacts to the Project Forecast for additional escalation and administrative cost. An action has been taken to suspend other non critical work, to allow the PBL Project to focus on the completion of scope negotiations of critical activities.

# **METRO PASADENA BLUE LINE**

Summary Status Report Period Ending - May 30, 1997



# **MANAGEMENT ISSUES (Con't)**

ONGOING (Cont'd)

Item (Date Initiated: August 1996)

**Real Estate Availability** 

# Concern/Impact

In general, real estate availability is a concern to the extent that certain parcels may not be available to support the schedule for contracts on the critical path. The most critical real estate issues are related to:

<u>Terminal Annex Property</u>: A parcel which is owned by the Federal Government and leased by Ratkovich Property is required for the Chinatown Aerial. This property may not be available in sufficient time to support the construction schedule. A resolution must be reached with Ratkovich because this parcel is not eligible for the condemnation process. In order to support the schedule, the property must be available by January 1998.

<u>Certification of Parcels for Underpinning</u>: Certification of parcels required for underpinning associated with Contract C6450 (Del Mar to Memorial Park Line Segment), is required in order to obtain necessary easements for construction. To support the current construction schedule, these parcels must be available by January 1998.

### Status/Action

Ratkovich requested a traffic plan from the MTA for the "Vignes Street access" prior to continuing negotiations concerning their property. The traffic plan study started and a review by the City of Los Angeles is expected in June 1997 prior to a presentation to Ratkovich. The MTA has agreed to commit limited funds for landscaping the property entrance.

The parcels for underpinning were certified in mid-November 1996. The first meeting was held in February with the owners and tenants of the Pasadena Old Town buildings along the alignment requiring underpinning.

# METRO PASADENA BLUE LINE

Summary Status Report Period Ending - May 30, 1997



# **MANAGEMENT ISSUES (Con't)**

Item (Date Initiated: August 1996)

**Community Concurrence With Design** 

# Concern/Impact

Community concurrence with the Chinatown Station redesign and upgrades to Marmion Way between Avenues 50 and 57 remains outstanding. Issues relating to the Chinatown canopy, platform, and plaza design remain to be resolved. However, there is no PBL Construction Budget for these enhancements. These issues may delay the final design of the station and impact the schedule.

In addition, Marmion Way, between Avenues 57 and 61, was never included as part of this redesign and upgrade effort. However, the Highland Park Historic Preservation Overlay Zone Association is pressing for this section to be included along with Avenues 50 and 57. Also, there is no PBL design or construction budget available for this section either.

### Status/Action

In March 1997, the Chinatown Community agreed to the station design concept, allowing the preliminary design work to proceed.

In May 1997, additional conceptual designs for Marmion Way were presented to the community. A follow-up meeting is scheduled for June 1997 where a final configuration of the Marmion Way design should be reached. MTA staff will seek MTA Board authorization and Budget for these construction enhancements.

Additionally, a position paper is being prepared for a redesign and upgrade of the corridor from Avenues 57 to 61. Since the PBL Budget does not include funding for urban design and construction enhancements, staff will seek MTA Board Authorization and Budget for this effort.

# **METRO RED LINE SEGMENT 2**

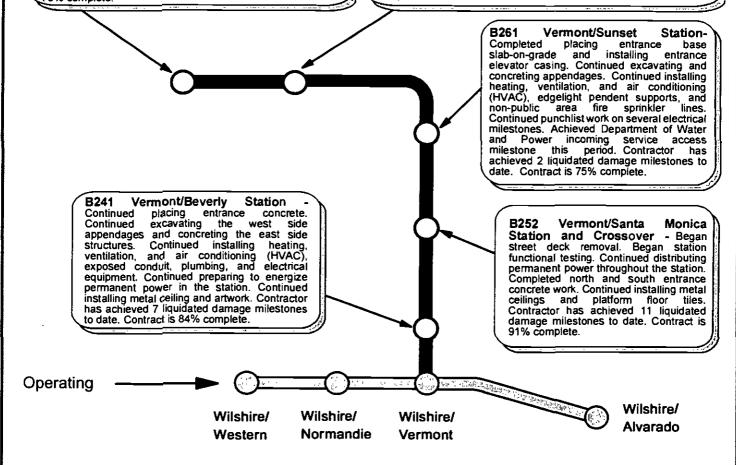
**EXECUTIVE SUMMARY** 



# **Major Activities - This Period**

B281 Hollywood/Vine Station and Crossover - Continued concreting appendages. Continued installing electrical and mechanical equipment in the station. Continued platform level film reel artwork installation and acoustical spray. Continued constructing surface elevator shaft. Contractor has achieved 2 liquidated damage milestones to date. Contract is 75% complete.

B271 Hollywood/Western Station - Completed excavating and continued concreting appendages. Continued waterproofing the main station roof in preparation for backfill. Continued installing electrical and mechanical equipment. The Department of Water and Power began incoming power work in the station. Contractor has achieved 7 liquidated damage milestones to date. Contract is 81% complete.



# SYSTEMWIDE ACTIVITIES

B610, Trackwork, Contractor continued plinth concrete placement for Vermont tunnels, completed B252 crossover concrete, and is mobilizing to concurrently begin concrete placement in the Hollywood tunnels.

B620, Automatic Train Control Installation, Contractor, in advance of formal access, continued installation of communications interface cabinets (CIC) in the crosspassages, trainway feeders conduit and main distribution frame (MDF) in the Train Control rooms.

B631, Traction Power, Contractor completed installation in the B252, Vermont/Santa Monica Station, continued installation in the B241, Vermont/Beverly Station, and began installation in the B271, Hollywood/Western Station.

B641, Radio, Contractor continued installation in the B252 and B271 Stations.

B643 and B644 contracts are currently undergoing a reassignment of contractor and negotiation of the contract terms.

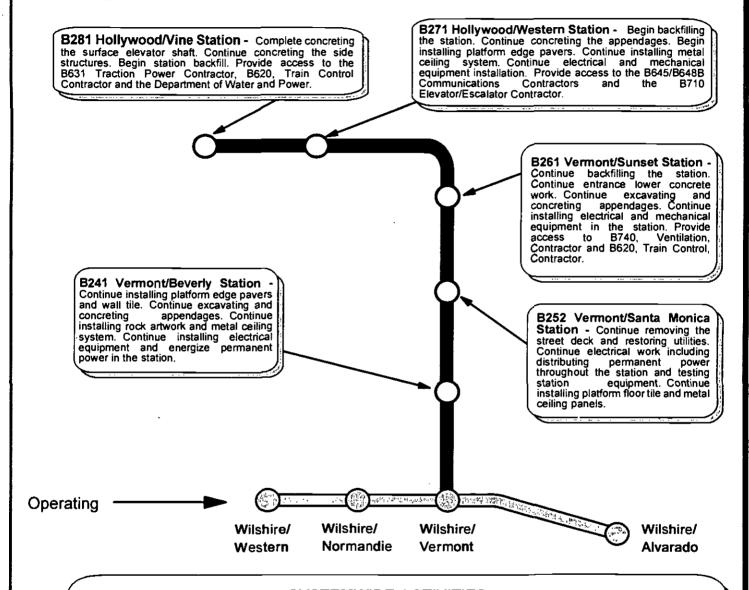
8646, Fire and Emergency Management, Contractor continued design development and assembly of programmable logic controller and emergency system.

B740/B745, Air Handling/Ventilation, Contractors continued installation of fan equipment at available stations.

Fabrication of remaining systemwide equipment continued.



# **Major Activities - Next Period**



# SYSTEMWIDE ACTIVITIES

B610, Trackwork, Contractor to continue plinth concrete placement for the Vermont tunnels and to prepare to concurrently begin concrete placement in the Hollywood tunnels.

B620, Automatic Train Control Installation, Contractor to continue installation in tunnels and available station areas.

B631, Traction Power, Contractor to make final connections to energize permanent power in the B241 Vermont/Beverly Station and to continue installing equipment and cabletray in the B271 Hollywood Western Station.

B641, Radio, Contractor to continue installing radio cable in the B252 and B271 stations.

B740/B745, Air Handling/Ventilation, Contractors to continue installation of fan equipment at available stations.

Fabrication of remaining systemwide equipment to continue.



# FINANCIAL STATUS

# **Budget/Forecast Variance (in millions)**

Original Scope

COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	BDGT/FCST VARIANCE	MAY CHANGE IN FORECAST
Construction	\$1,060.5	\$1,053.3	(\$7.2)	\$2.9
Professional Services	389.0	401.0	12.0	(0.3)
Real Estate	88.1	88.3	0.2	0.0
Utility/Force Account	31.8	28.3	(3.5)	(5.0)
Special Programs	2.5	2.4	(0.1)	(0.1)
Contingency	3.7	3.1	(0.6)	2.5
Project Revenue	0.0	(0.8)	(0.8)	0.0
Total Project	\$1,575.6	\$1,575.6	\$0.0	\$0.0

# Additional Locally Funded Activities

COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	BDGT/FCST VARIANCE	MAY CHANGE IN FORECAST
Construction	\$47.3	\$48.1	0.8	0.8
Professional Services	16.8	17.1	0.3	0.3
Real Estate	0.0	0.0	0.0	0.0
Utility/Force Account	0.0	0.0	0.0	0.0
Special Programs-	0.0	0.0	0.0	0.0
Contingency	1.1	0.0	(1.1)	(1.1)
Total Additional Locally Funded Activities	65.2	65.2	0.0	0.0

# **Budget/Forecast Variance Analysis**

**Original Scope** 

Expenditures to date for Original Scope are \$1,310.9 million or 83% of current total forecast.

Commitments to date for Original Scope are \$1,472.9 million or 93% of current total forecast.

The forecast changes this period consist of a Construction increase of \$2.9 million, a Professional Services decrease of \$0.3 million, a Utility/Force Account decrease of \$5.0 million, and a Special Programs decrease of \$0.1 million. These changes resulted in a decrease of \$2.5 million, which was offset by an increase of \$2.5 million from project unallocated contingency. There was no change to the Total Project forecast cost.

The \$2.5 million decrease is due to:

Construction-an increase of \$2.9 million, including:

 B241, Vermont/Beverly Station-The forecast increased due to an allowance for rebar quantity overruns and temporary decking of the station entrance.

Continued on ES-4



# FINANCIAL STATUS

- B261, Vermont/Sunset Station-The forecast increased due to an allowance for temporary decking quantity overruns.
- B281, Hollywood/Vine Station-The forecast increased due to an allowance for pending and potential changes, concerning concrete specification issues, suspension/acceleration impacts, etc.
- B285, Barnsdall Construction Site Restoration-This new scope of work was added to the forecast to complete the restoration of the Barnsdall construction site to its original condition for return to the City of Los Angeles Parks and Recreation department.

Professional Services-decrease of \$0.3 million:

L0013, Jones Day Reavis and Pogue-The forecast decreased as a result of an adjustment to the funding distribution.

Utility/Force Account-decrease of \$5.0 million:

The analysis of cost to date plus anticipated value of work to complete has resulted in a decrease in the overall Third Party/Master Agreements forecast.

Special Programs-decrease of \$0.1 million:

Budget and forecast for the Art Department's engineering and installation in the stations are now included in other line item forecasts.

# **Budget/Forecast Variance Analysis**

Additionally Locally Funded Activities

Expenditures to date for Additionally Locally Funded Activities are \$40.7 million or 62% of current total forecast.

Commitments to date for Additionally Locally Funded Activities are \$54.3 million or 83% of current total forecast.

The forecast changes this period consist of a Construction increase of \$0.8 million and a Professional Services increase of \$0.3 million. These changes resulted in an increase of \$1.1 million, which was offset by a decrease of \$1.1 million from project unallocated contingency. There was no change to the Total Project forecast cost.

The \$1.1 million increase is due to:

Construction-increase of \$0.8 million:

B241, Vermont/Beverly Station—The forecast increased due to an allowance for rebar quantity overruns and temporary decking of the station entrance.

B261, Vermont/Sunset Station-The forecast increased due to an allowance for temporary decking quantity overruns.

Professional Services-increase of \$0.3 million:

L0013, Jones Day Reavis and Pogue-The forecast increased as a result of an adjustment to the funding distribution.

Note: The real estate acquired to support the Transit Enhancement covered under Additionally Locally Funded Activities Budget and Forecast is \$38.1 million.

STATUS OF FUNDS BY SOURCE

# **FINANCIAL DETAIL**

METRO RAIL PROJECT SEGMENT 2 (IN THOUSAND OF DOLLARS)

### STATUS OF FUNDS BY SOURCE

	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS	(C) TOTAL FUNDS	(D) COMMIT	(D/B) MENTS	(E) EXPEN	(E/B) IDITURES	(F) BILLED TO	(F/B) O SOURC
SOURCE		ANTICIPATED (5)	AVAILABLE	\$	%	<b>\$</b> (6)	%	\$	%
ORIGINAL SCOPE:					•				
FTA-SECTION 3	\$667,000	\$522,396	\$522,396	\$522,396	100%	\$522,396	100%	\$522,396	100%
FTA-SECTION 3 DEFERRED LOCAL SH	ARE (1)	\$144,604	\$144,604	\$144,604	100%	\$144,604	100%	\$144,604	100%
FED ISTEA STP (STATE)	\$0	\$52,100	\$52,100	<b>\$</b> 52,100	100%	\$52,100	100%	\$52,100	100%
STATE	\$185,985	\$133,029	\$133,029	\$133,029	100%	\$133,029	100%	\$133,029	100%
PROPOSITION A	\$439,447	\$478,899	\$302,704	<b>\$</b> 449,138	94%	\$301,219	63%	\$301,219	63%
CITY OF L A.	\$96,000	\$96,000	\$89,600	\$96,000	100%	\$85,746	89%	\$85,746	89%
BENEFIT ASSESS.	\$58,000	\$25,400	\$0	\$25,400	100%	\$25,400	100%	\$0	0%
BENEFIT ASSESS. SHORTFALL (2)	\$0	\$0	\$25,400	\$0	0%	\$0	0%	\$25,400	
COST OVERRUN ACCOUNT (3)	\$0	\$123,123	\$23,045	\$50,198	41%	\$46,440	38%	\$46,440	38%
TOTAL	\$1,446,432	\$1,575,551	\$1,292,878	\$1,472,863	93%	\$1,310,934	83%	\$1,310,934	83%
OTHER LOCALLY FUNDED ACTIVITIES	(4):								
PROP C (TRANSIT ENHANCEMENTS)	\$0	\$62,702	\$37,904	\$54,265	87%	\$40,678	65%	\$40,678	65%
ISTEA CMAQ/RSTP (TRANSIT ENH.)	\$0	\$2,528	\$0	\$0	0%	\$0	0%	\$0	0%
TOTAL	\$0	\$65,230	\$37,904	\$54,265	83%	\$40,878	82%	\$40,678	62%

- (1) FTA Section 3 Deferred Local Share, Commitments and expenditures are effective starting July 1st. 1992.
- (2) The current Benefit Assessment District revenue shortfall is being funded by Proposition A 35% Rail Capital.
- (3) The Cost Overrun Account includes CAPRA funds as well as MTA Proposition A to cover cost overruns.
- (4) This includes approximately \$8M for the Kaiser Portal scope which is anticipated to receive \$2.5M from Federal ISTEA CMAQ/RSTP funds.
- (5) Based on Current Budget
- (8) Expenditures ere cumulative through April 1997.





# STATUS OF FUNDS BY SOURCE

# **Funds by Source Analysis**

Status of Funds Anticipated

Benefit Assessment:

No funds are expected to be available until Fiscal Year 2003.

Cost Overrun Account:

The amount of funds available (\$23,045,378) reflects the CAPRA

account cash balance as of April 30, 1997.

The revised budget growth is funded as follows:

CAPRA

\$21.6M

Proposition A

\$101.5M

# **METRO RED LINE Segment 2**

Summary Status Report Period ending-May 30, 1997



# SCHEDULE STATUS

# **Schedule**

		Change from Last Month
Current ROD	Dec. 31, 1998	None
Design Progress	97.1%	0.7
Critical Path Float	-98 Days	-17
Const. Progress	86.2%	0.2%

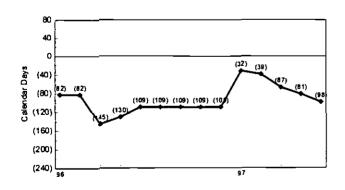
# **Current Critical Path Analysis**

The 98 calendar days of negative float forecast this period reflect the B610 contractor's limited ability to progress concrete plinth work as planned. The additional 17 days of negative float this period is attributable to the B610 Contractor's work through a learning curve for revised concrete installation methods, resulting in a loss of 15 days, and the increased time needed for system integration train routing and train tracking algorithm tests, resulting in an increase of 2 days.

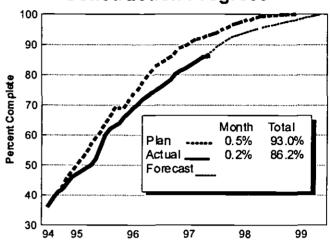
Strategies to mitigate these delays are being evaluated to increase concrete production rate, concurrent trackwork, train control work, and accelerating train control dynamic tests.

The project critical path continued to be controlled by the progress of the B610 Trackwork Contractor's efforts.

# Float Trend



# **Construction Progress**



# **Construction Progress Analysis**

Recent progress has advanced at an average rate of 1.0% per month to bring the overall construction progress to 86.2%. This progress compares to the planned progress of 93.0%.

The progress this period was 0.3% less than planned, mainly due to B261 and B610 less-than-planned progress.

The difference in the cumulative progress-to-date can be attributed to past station and tunnel progress affected by unforeseen conditions (conflicts of utilities with station piles and decking, contaminated soil, rain delays, stop work notices, and termination of B251 tunnel activities), design changes, and later-than-planned placement of station and tunnel concrete.

Although actual progress is behind plan, most work is being accomplished prior to late program schedule requirements. To maintain overall schedule objectives mitigations are under evaluation for the B610 and B620 contracts.



# **SAFETY STATUS**

# **Construction Safety Statistics**

Project-to-Date Rates	Change Fron Last Montl				
Recordable Injury Rate					
The number of recorded injuries, excluding simple first aid or minor medical treatment, per 100 man years.					
1995 National Average	10.6				
Project Rate	19.3	-0.1			
Lost Time Incident Rate (Frequency)					
The number of injuries resulting in days away from work per 100 man years.					
1995 National Average	4.2				
Project Rate	2.6	0.0			

# **Construction Safety Summary**

 The Project-to-Date Lost Time Injury Rate is 2.6. This rate is slightly above one-half the 1995 National Average of 4.2.

(Based on April 1997 statistics)

# **MANAGEMENT ISSUES**

# **NEW**

### *Item*

Agency Cost Overrun

# Concern/Impact

Agency costs are an element of the project budget and incorporate management issues, non-labor administrative costs, fringe benefits, and overhead costs. The allocation plan is expected to result in significant overruns to the specific line item budget for "agency" cost.

### Status/Action

The Project Office is currently reviewing the forecasted staff manpower levels, plans, and the proposed allocation methodology to determine any appropriate revisions. This review, meant to accurately quantify the magnitude of this potential overrun, is expected to be completed by July 1997.



### **ONGOING**

# Item (Initiated March 1997)

Trackwork Concrete Plinth (B610) progress

# Concern/Impact

As a result of several test sections being placed, major concerns have been raised about the contractor's ability to make the IRON-HORSE forming system work and progress at the 600-feet-per-day required production rate.

# Status/Action

The Project Office is working to establish a path forward to minimize impact to the project critical path, such as six-day work week, mobilization of an additional 300 feet of concrete forms at the Hollywood/Vine Station, and overlap of critical activities (such as plinth concrete with running rail installation).

# **ONGOING**

# Item (Initiated March 1997)

**Project Cost Forecast** 

# Concern/Impact

The low-level of remaining unallocated contingency raises concerns that the forecast will exceed the current project budget.

### Status/Action

Project management is conducting a thorough review and risk analysis at the individual line item and contract level to determine if the remaining unallocated contingency is adequate. The analysis is under final review by the MTA, and presentation to the MTA Board is anticipated in the first quarter of fiscal year 1998.

# **ONGOING**

# Item (Initiated December 1996)

Vermont/Sunset Station (B261) interim and final milestone completion

### Concern/Impact

The level of contractor cooperation in addressing settlement of time and safety-related issues over the past several months has been limited. As a result, the Construction Manager (CM) is concerned that the contractor is not proceeding with the work in a timely fashion to support interim system milestones and overall contract completion requirements.

### Status/Action

The CM and the contractor are implementing the developed path forward plan. Partnering meetings were conducted this month by the CM. Several schedule review and coordination meetings have been conducted to establish a realistic schedule to complete work as early as possible. The contractor has put more emphasis on completing critical areas and rooms for turnover access. However, significant progress has not been made by the contractor.

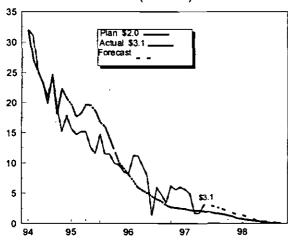


# **COST STATUS**

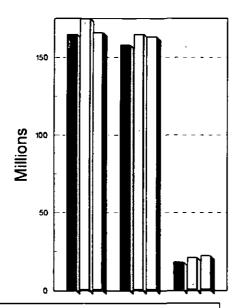
# **Contingency Status**

Original and Locally Funded Activities

Dollars (millions)



# Professional Service Contracts Consultant Cost Status



		DESIGN	1 į	СМ	OTHER
Authorizati	on 📕	165		158	18
Forecast		177	1	165	21
Budget		166		163	22

# **Contingency Status Analysis**

The actual unallocated contingency this period is \$3.1 million, an increase of \$1.4 million from last period.

The total project unallocated contingency forecast increased this period, due to a net forecast decrease in the Professional Services, Utility/Force Account, and Special Programs contracts:

### **Professional Services**

L0013, Jones Day Reavis and Pogue

### Utility/Force Account

- F0102, Department of Water and Power (DWP), Power Relocation
- F0103, DWP, Water Relocation
- F0104, City of Los Angeles

### Special Programs

B0715, Art in Transit

For details refer to ES-3, Budget/Forecast Variance Analysis.

# Professional Services Cost Analysis

# **Design Services**

There were no adjustments made this month.

The design forecast through the Revenue Operations Date exceeds the budget because of the cumulative effect of changes to the sprinkler system, sanitary sewer cross-connects, the Kaiser Hospital second entrance, additional effort by the rail activation group, increases in the volume of Requests for Information and submittals, the B251 contract repackaging, and other activities.

# **Construction Management Services**

There were no adjustments made this month.

The MTA and the CM are still working toward finalizing the estimate at complete cost forecast and developing a reasonable amount. No change is being reported to the forecast this period. A cost evaluation effort is underway by MTA and PD to determine realistic cost mitigation opportunities at this point in the project.

# Other Professional Services

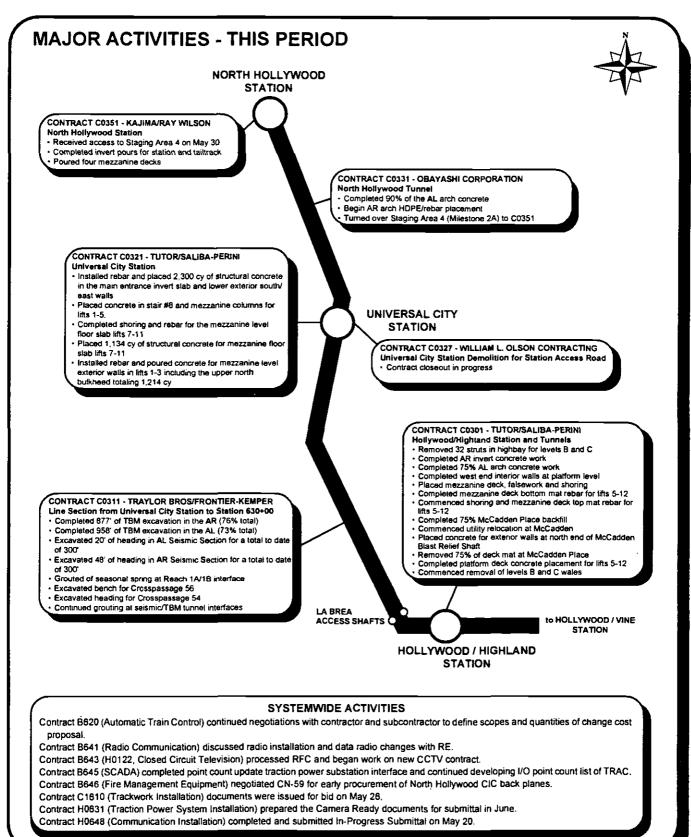
There were no adjustments made this month.

For Other Professional Services, Authorization will be revised as the scope becomes more defined.

# METRO RED LINE SEGMENT 3 NORTH HOLLYWOOD EXTENSION

**EXECUTIVE SUMMARY** 





EXE 4 ES-1

# METRO RED LINE - Segment 3 North Hollywood Summary Status Report

Period Ending - May 30, 1997



### **MAJOR ACTIVITIES - NEXT PERIOD** NORTH HOLLYWOOD STATION CONTRACT C0351 - KAJIMA/RAY WILSON North Hollywood Station Complete lower exterior walls Start upper exterior walls Complete mudmat in Staging Area 4 CONTRACT C0331 - OBAYASHI CORPORATION North Hollywood Tunnel Begin AR concrete Complete AL arch concrete Begin MVS base slab concrete placement CONTRACT C0321 - TUTOR/SALIBA-PERINI Universal City Station Place structural concrete in lifts 1 and 2 mezzanine interior load bearing walls Install the shoring system for the ancillary level floor slab **UNIVERSAL CITY** in lifts 1 and 2 Install rebar, mechanical/electrical, and miscellaneous STATION metal embeds in the mezzanine extenor walls of lifts 7-11 east/west CONTRACT C0327 - WILLIAM L. OLSON CONTRACTING Place structural concrete in mezzanine level exterior east/ Universal City Station Demolition for Station Access Road west walls of lifts 7, 8, 9 and columns B1-B6, C10-C13 in Finalize contract closeout Phase 2 CONTRACT C0301 - TUTOR/SALIBA-PERINI Hollywood/Highland Station and Tunnels Commence HDPE and concrete placement for exterior walls at mezzanine level lifts 5-12 Complete concrete placement for mezzanine deck lifts 5-12 Commence pile installation for main entrance and plaza Complete AL arch concrete Commence AR arch concrete Commence AL walkway concrete Commence rebar and concrete placement on mezzanine to CONTRACT C0311 - TRAYLOR BROS/FRONTIER-KEMPER Line Section from Universal City Station to Station 630+00 - Continue TBM excavation in the AR and AL tunnels roof columns Commence rebar and stair concrete from platform to - Continue mechanical excavation of 300' in the AR end AL seismic mezzanine Remove hard closure on Hollywood Boulevard Continue backfill at McCadden Place and remaining concrete Continue grouting of seasonal spring at Reach 1A/1B interface Complete excavation of Crosspassages 56 and 5 Remove remaining deck mat at McCadden Place Continue removing levels B and C struts and wates Start excavation of heading for Crosspassages 50, 53 and 55 Complete grouting at seismic turinel faces Install drop hole for concrete at Sycamore Avenue and Hollywood Boulevard LA BRFA Refurbish invert concrete form for CN-41 work to HOLLYWOOD / VINE Start concrete work at Crosspassages 39, 39A and 40 per CN-41 ACCESS SHAFTS C STATION HOLLYWOOD / HIGHLAND STATION SYSTEMWIDE ACTIVITIES Contract B620 (Automatic Train Control) complete negotiation of CCN and provide construction design support as required. Contract B641 (Radio Communication) provide support for approval of Change Notice and Board Report preparation. Contract B642 (Public Address) support RE with issuance of CN to delete Zone 4 at vent shaft. Contract B644 (Cable Transmission Equipment) support RE with issuance of CN to delete vent shaft equipment. Contract B645 (SCADA) continue preparing technical update for external subsystem interface. Contract B646 (Fire Management Equipment) compile revised facilities reference drawings and facilitate CCB Board approval. Contract C1610 (Trackwork Installation) prepare addenda and attend pre-bid meeting. Contract H0122 (B643, Closed Circuit Television) continue with Contract H0122 preparation. Contract H0631 (Traction Power System Installation) submit the Camera Ready documents on June 20. Contract H0648 (Communications Installation) work toward Pre-Final Submittal and hold design review meetings.



# FINANCIAL STATUS

# **Budget / Forecast Variance (in millions) Original Scope Activities**

				MAY
COST ELEMENT	CURRENT	CURRENT	BDGT/FCST	CHANGE IN
	BUDGET	FORECAST	VARIANCE	FORECAST
CONSTRUCTION	\$825.1	\$808.6	(\$16.5)	\$5.7
PROFESSIONAL SERVICES	300.8	298.3	(2.4)	0.0
REAL ESTATE	89.0	87.3	(1.8)	0.0
UTILITY/AGENCY FORCE ACCOUNTS	26.3	25.5	(0.8)	1.0
SPECIAL PROGRAMS	0.0	0.0	0.0	0.0
PROJECT CONTINGENCY	69.6	91.1	21.5	(6.7)
PROJECT REVENUE	0.0	0.0	0.0	0.0
TOTAL PROJECT	\$1310.8	\$1310.8	\$0.0	\$0.0

# **Additional Locally Funded Activities**

CONSTRUCTION	\$1.9	\$11.4	\$9.5	\$0.0
PROFESSIONAL SERVICES	0.7	0.9	0.2	0.0
REAL ESTATE	0.0	0.0	0.0	0.0
UTILITY/AGENCY FORCE ACCOUNTS	0.0	0.0	0.0	0.0
SPECIAL PROGRAMS	0.0	0.0	0.0	0.0
PROJECT CONTINGENCY	0.4	0.0	(0.4)	0.0
PROJECT REVENUE	0.0	(11.5)	(11.5)	0.0
TOTAL ADDITIONAL LOCALLY FUNDED ACTIVITIES	\$3.0	\$0.8	(\$2.2)	\$0.0

### **Budget / Forecast Variance Analysis**

### Original Scope Activities

EXE 6

The Current Budget and Current Forecast totals remain unchanged at \$1,310.8 million.

However, there were a number of forecast changes within the Project Elements which were offset by Project Contingency as follows: Contract B620 (Automatic Train Control) - Forecast increased \$1.2 million due to CN #70-Stage 2B Design Update, CN #72-Economic Price Adjustment, and contract contingency adjustment.

• Contract B641 (Radio) - Forecast increased \$1.2 million due to installation of Radio System work scope transferred from Contract H0648.

· Contract C0301 (Hollywood/Highland Station) - Forecast increased \$0.1 million due to installation of Air Handling Equipment work scope transferred from Contract B745.

\*\*Contract C2326 (L.A. River Bridge Widening) - Forecast decreased \$2.3 million because Lankershim widening moved to C04326, increased \$1.2 million for escalation, added sheet piling and added utility relocations, for net decrease of \$1.1 million.

\*\*Contract C4326 (Lankershim Blvd. Widening) - Forecast increased \$2.3 million transfer from C02326, \$0.4 million for escalation, and

\$1.6 million for utility relocation and traffic management, for net increase of \$4.3 million.

• Contract F103 (DWP - Water) - Forecast increased \$0.9 million due to issuance of work orders for valve operation, leak detection, and

construction services

• Contract F208 (L.A. County - Fire) - Forecast increased \$0\_1 million due to the adjustment of the 1995 and 1996 Annual Work Program work orders and the issuance of a work order for Design Review Support.

Contract PC000 (Project Contingency) - Forecast decreased \$6.7 million due to cumulative contract forecast increases.

### Additional Locally Funded Activities (ALFA)

"Additionally Locally Funded Activities" (ALFA) are defined as work scope not originally covered under the FFGA such as Station Artwork, Hollywood Boulevard Settlement, Non Revenue Connector, etc. The Current Budget contains approximately \$3.0 million in ALFA categories under the Construction, Professional Services and Contingency elements.

The Current Forecast carries \$12.3 million in total for the ALFA work scope. In addition, Project Revenue is anticipated in the amount of (\$11.5 million) which reduces the ALFA work scope costs to \$0.8 million. This cumulative Current Forecast total compared to the Current Budget accounts for the (\$2.2 million) variance.

The ALFA Scope Forecast did not change for the May 1997 period.

- Total Original Scope and ALFA Expenditures to date are \$590.0 million
- Total Original Scope and ALFA Commitments to date are \$967.6 million

**Summary Status Report** Period Ending - May 30, 1997 **METRO RED LINE - Segment 3 North Hollywood** 

FINANCIAL STATUS

METRO RAIL RED LINE NORTH HOLLYWOOD PROJECT (IN THOUSANDS OF DOLLARS)	
---	--

	(A) ORIGINAL	(B) TOTAL	(C) TOTAL FUNDS	(D)	(D/B) MITMENTS	(E) EXPEN	(E/B) IDITURES	(F) BILLED TO	(F/B) SOURCE
SOURCE	BUDGET	FUNDS ANTICIPATED (1)	AVAILABLE	\$	%	\$	%	\$	%
ORIGINAL SCOPE:			<del>_</del>					<u>_</u>	
FTA-SECTION 3	\$681,037	\$544,830	\$291,388	\$544,830	100%	\$291,388	53%	\$291,388	53%
FTA-SECTION 3 DEFERRED LOCAL SHA	ARE	\$136,207	\$72,847	\$136,207	100%	\$72,847	53%	\$72,847	53%
FED ISTEA STP (STATE)	\$0	\$50,000		•	0%		0%		0%
FED ISTEA STP/CMAQ (REGIONAL)	\$25,000	\$70,143	\$47,743	\$47,743	68%	\$47,743	68%	\$47,743	68%
FED ISTEA RSTP DEFERRED LOCAL SH	<b>IARE</b>	\$17,536	\$11,936	\$11,936	68%	\$11,936	68%	\$11,936	68%
SB 1995 TRUST FUND	\$53,000	\$75,000	\$75,000	\$75,000	100%	\$66,901	89%	\$66,901	89%
STATE SHA/ARTICLE XIX	\$115,000	\$60,000	\$20,855	\$20,855	35%	\$20,855	35%	\$20,855	35%
STATE PROP 116	\$0	\$25,000	\$25,000	\$25,000	100%	\$25,000	100%	\$25,000	100%
STATE TSM Match	\$0	\$11,360	\$7,732	\$7,732	68%		0%		0%
CITY OF LA	\$101,500	\$190,703			0%		0%		0%
PROP C	\$318,185	\$116,543	\$53,327	\$96,731	83%	\$53,327	46%	\$53,327	46%
BENEFIT ASSESS. DISTRICT	<b>\$</b> 17,10 <u>0</u>	\$13,500			0%		0%		0%
TOTAL	\$1,310,822	\$1,310,822	\$605,828	\$966,034	74%	\$589,997	45%	\$589,997	45%
OTHER LOCALLY FUNDED ACTIVITIES	: .							<del>-</del>	
PROP C (ARTWORK)	\$0	\$2,435	\$610	\$536	22%	\$0	0%	\$0	0%
PROP C (NON-REV. CONNECTOR)	\$0	\$285	<b>\$</b> 3	\$1,035	363%	\$3	1%	\$3	1%
TOTAL	\$0	\$2,720	\$613	<b>\$</b> 1,571	58%	<b>\$</b> 3	0%	<b>\$</b> 3	0%

STATUS OF FUNDS BY SOURCE

(1) Based on Current Budget

**MAY 1997** 

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH APRIL 1997.



**MAY 1997** 

# Period Ending - May 30, 1997 **Summary Status Report** METRO RED LINE - Segment 3 North Hollywood

METRO RAIL RED LINE TOTAL SEGMENT 3 PROJECT

(IN THOUSANDS OF DOLLARS)

	ORIGINAL BUDGET	TOTAL FUNDS	TOTAL FUNDS	COMMI	TMENTS	EXPE	NDITURES	BILLED TO	SOURCE
SOURCE		ANTICIPATED (1)	AVAILABLE	\$	*	\$	%	\$	%
ORIGINAL SCOPE:		· · ·					-		
FTA-SECTION 3	\$1,230,000	\$1,133,192	\$352,572	\$642,799	57%	\$352,572	31%	\$352,572	31%
FTA-SECTION 3 DEFERRED LOCAL SHARE	\$0	\$283,298	\$88,143	\$160,699	57%	\$88,143	31%	\$88,143	31%
FED ISTEA STP (STATE)	\$0	\$75,000	<b>\$</b> 0	\$0	0%	\$0	0%	\$0	0%
FED ISTEA STP/CMAQ (REGIONAL)	\$166,400	\$301,538	\$49,060	\$49,060	16%	\$49,060	16%	\$49,060	16%
FED ISTEA RSTP DEFERRED LOCAL SHARE	\$0	\$75,385	\$12,266	\$12,268	16%	\$12,266	16%	\$12,266	16%
SB 1995 TRUST FUND	\$53,000	\$75,000	\$75,000	\$75,000	100%	\$86,901	89%	\$66,901	89%
STATE SHAVARTICLE XIX	\$115,000	\$100,000	\$20,855	\$20,855	21%	\$20,855	21%	\$20,855	21%
STATE PROP 116	\$144,600	\$40,000	\$25,000	\$25,000	63%	\$25,000	63%	\$25,000	63%
STATE FLEXIBLE CONGESTION RELIEF	\$52,000	\$50,000	\$0	\$0		\$0		\$0	
STATE TSM Match	\$0	\$48,834	\$10,537	\$7,946	16%	\$0	0%	\$0	0%
CITY OF LA	\$177,000	\$200,000	\$0 ,	\$0	0%	\$0	0% -	\$0	0%
PROP C	\$496,385	\$647,131	\$80,035	\$124,753	19%	\$80,035	12%	\$80,035	12%
BENEF ASSESS. DISTRICT	\$17,100	\$13,500	\$0	\$0	0%	\$0	0%	\$0	0%
TOTAL	\$2,451,485	\$3,042,878	\$713,468	\$1,118,378	37%	\$694,832	23%	\$894,832	23%
OTHER LOCALLY FUNDED ACTIVITIES:	_	<del></del>		-	·	,	<del>-</del>		
PROP C (ARTWORK)	\$0	\$2,435	\$610	\$536	22%	\$0	0%	. \$0	0%
PROP C (NON-REV. CONNECTOR)	\$0	\$285	\$3	\$1,035	363%	\$3	1%	. \$3	1%
TOTAL	\$0	\$2,720	\$613	\$1,571	58%	<b>\$</b> 3	0%	<b>\$</b> 3	0%

(A)

(B)

STATUS OF FUNDS BY SOURCE

(D)

(D/B)

(E)

(E/B)

(F)

(F/B)

(C)

(1) BASED ON CURRENT BUDGET

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH APRIL 1997.





# FINANCIAL STATUS

Metro Red Line Segment 3 Project Funds by Source Analysis

### STATUS OF FUNDS ANTICIPATED

### FTA SECTION 3:

MTA submitted a grant application to the FTA on December 13, 1996, for \$69,475,000. Grant award is expected around June 1997.

### FTA SECTION 9, FED ISTEA/CMAQ:

MTA submitted a grant application to the FTA on December 23, 1996 for \$40,000,000 (this included \$20 million of FY 96 funds and \$20 million of FY 97 funds). Grant award is expected around June 1997.

### FTA SECTION 9, FED ISTEA/STP:

The State allocated \$75 million at the May 1996 California Transportation Commission meeting. Those funds have been allocated as Federal STP funds. MTA submitted a grant application to the FTA on December 23, 1996. Grant award is expected around June 1997.

### **STATE PROP 116**

MTA submitted on April 8, 1997 a grant application and an allocation request to the California Transportation Commission for \$15 million of Prop 116 Rail Bond Fund. Fund transfer agreement is expected around August 1997.

### STATE TSM MATCH:

The State awarded \$10,536,645 of TSM funds for Fiscal Years 1994, 1995, 1996, and 1997. MTA executed the Program Supplement Agreements on October 24, 1996. MTA received fully executed copies of the agreement on November 8, 1996. MTA can now submit invoices to Caltrans for reimbursement.

### **BENEFIT ASSESSMENT:**

No funds are expected to be available until Fiscal Year 2003.

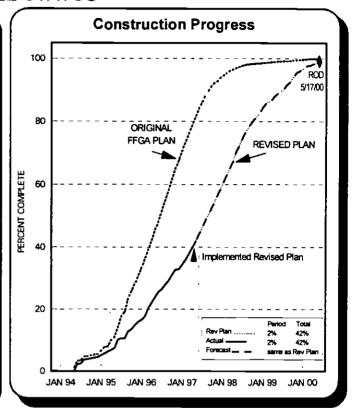
ES-6



# SCHEDULE STATUS

Schedule								
		Change from Last Month						
Current ROD	May 17, 2000	0						
Design Progress	93.5%	+0.2%						
Construction Progress (estimated)	42%	+2.0%						
Critical Path Float		0						

To provide a more useful plan for the completion of this project, in March 1997 it was decided to adopt a revised plan that represents the updated facilities forecast completion dates for the remaining work without affecting ROD. These forecast completion dates include all delays and mitigation work for Contracts C0301, C0331, and C0351 through March 1997. Several mitigation options to partially recover current delays on the C0311 contract were negotiated and implemented in the May 1997 Project Master Schedule.



# Current Critical Path Analysis

The May 1997 Project Master Schedule includes C0311 schedule mitigation plan, revisions to schedule impacts to C0301 Hollywood/Highland Station due to CN-63, Tunnel Deletion, and C0351 (North Hollywood Station) mitigation schedule. These changes had no impact to ROD. The project completion date forecast remains May 17, 2000.

Critical path runs through Contract C0311 (Line Section from Universal City Station to Station 630+00), C1610 (Trackwork Installation), B620 (Automatic Train Control), B645 (SCADA) and Integration Testing/Pre-Revenue Operations.

Focus continues on the risks associated with the tunnels under the Santa Monica Mountains, Contract C0311, Six different mitigation options to recover some of the lost time and to add contingency back into the program have been identified and discussions with the contractor are proceeding. See page ES-9.

Additionally, the continuing goal of further schedule improvements are being pursued on downstream contracts, i.e., C1610 (Trackwork Installation), B620 (Automatic Train Control), B645 (SCADA) and Integration Testing and Startup.

Construction Progress Analysis
The overall construction progress through May 30, 1997 is 42% complete. The plan has been rebaselined as of January 31, 1997. Project completion forecast date remains May 17, 2000. Current facilities contracts delays do not impact program schedule, nor ROD of May 2000.

Contract C0301 (Hollywood/Highland Station and tunnel work) remains behind contract schedule. The total forecast delay for station completion is 210 workdays which includes CN-63 impacts. After mitigation, delays will be 180 workdays. Interim milestones are being revised to better coordinate follow-on system contracts and establish a better sequence for testing and commissioning of the station. There is no impact to ROD.

Contract C0311 (Line Section from Universal City Station to Station 613+00) now includes an additional 36 workdays allowance because of delays for present ground conditions and ground stabilization grouting. Other changes include the implementation of the contractor's approved Mitigated Schedule. After these changes, a float of 18 workdays for AR and AL trackwork turnover dates was generated. New forecast delay for AR and AL is 126 and 118 workdays, respectively. There is no impact to ROD.

Contract C0321 (Universal City Station) continues to stay on schedule. The contract critical path starts at Phase 3 access in November 1997 and runs through contract completion with a total float of zero. The contractor is progressing out of sequence work in Phase 2 and the main entrance to increase the overall field efficiency. This work is being done concurrently with the north mezzanine activities in lifts 1-3. There is no impact to ROD.

Contract C0331 (North Hollywood Tunnel) schedule delays have impacted C0351 access. However, construction as per the mitigation plan is on schedule. Crossover, Phase II, was turned over to C0351 on May 30. Phase III access to C0351 is planned by July 31, 1997. Mitigation plan is based on a concrete lining average rate of 220 if a day, six days a week.

Contract C0351 (North Hollywood Station) scheduled rate of progress was not met in May due to the mezzanine work not starting as planned. However, the contractor will work additional shifts in June, and the Rebaselined schedule milestone dates will be met



# SAFETY STATUS

# **Construction Safety Statistics**

# Project-to-Date Rates

Change from Last Month Recordable Injury Rate The number of recorded injuries excluding simple first aid or minor medical treatment per 100 man years. 1995 National Average 10.6 **Project Rate** 14.3 0.0 Lost Time Rate (Frequency) The number of injuries resulting in days away from work per 100 man years. 1995 National Average 4.2 **Project Rate** 0.0

(Based on April 1997 statistics)

# **Construction Safety Summary**

 Project-to-Date Lost Time Injury Rate continues at approximately one-third of the National Average of 4.2.

EXE 11 ES-8



# MANAGEMENT ISSUES

### **NEW**

Item (Date initiated: May 1997)

Agency Cost Overrun

### Concern/Impact

Agency Costs are an element of the Project Budget and incorporates management issues non-labor administrative costs, fringe benefits and overhead costs. Allocation plan in conjunction with the projects forecast completion date is expected to result in significant overruns to the specific line item budget for "agency" costs.

### Status/Action

The Project Staff is currently reviewing the forecasted staff manpower levels, plans and the proposed allocation methodology to determine any appropriate revisions. This review to accurately quantify the magnitude of this potential overrun is expected to be completed by July 1997.

### **NEW**

Item (Date initiated: May 1997)

Ground Conditions and TBM Production in Reaches 1A and 1B

Contract C0311 (Line Section from Universal City Station to Station 630+00)

Concern/Impact

TBM excavation this period decreased to an average rate of 37 feet/day because of poorer ground conditions, ground stabilization and seeping water. If average daily excavation rates fall below 30 feet/day for the remaining 6,000 feet of tunnel (3,000 feet each for AL and AR), turnover of the Phase III crossover to Contract C0321 (Universal City Station) scheduled for November 18, 1997 may be impacted. Even slower excavation rates could impact the Revenue Operations Date (ROD) of May 17, 2000.

### Status/Action

To add some contingency into the program, six mitigation schedule studies have been reviewed with the contractor. The six options are: (1) shotcrete north and south crossover transition; (2) resequence track level room excavation and concrete work; (3) concrete lining south of La Brea Shaft to be done immediately following the seismic section excavation; (4) accelerate TBM drive, (5) accelerate tunnel concrete lining south of track level room; and (6) accelerate north/south crossover shotcrete and concrete.

Negotiations with the contractor for mitigation options 1, 2 and 3 were completed this period. The contractor presented a submittal schedule which included these mitigation options. The mitigated schedule submittal was approved. The Project Master Schedule was changed to reflect C0311 mitigated schedule sequence and dates. Option 4 was cancelled. Decisions on Options 5 and 6 may be implemented on an as needed basis in the future.

TBM excavation in Reach 1A has been delayed by the face probing and grouting procedure adopted to protect seasonal springs in compliance with the Consent Decree. The procedure was reassessed at the end of May and grouting ahead of the face will be replaced by supplementary grouting performed from staging behind the TBMs to minimize the impact on tunneling progress.

ES-9



# MANAGEMENT ISSUES\_

### **ONGOING**

Item (Date initiated: April 1997)

TBM Junction with Special Seismic Section

Contract C0311 (Line Section from Universal City Station to Station 630+00)

### Concern/Impact

A long probe hole has established that the last 280 feet of tunnel north of the Special Seismic Section may not be suitable for TBM excavation.

### Status/Action

A program of ground strengthening by micro-fine cement grouting has been agreed with the contractor. This will be carried out during May and June with the hope that this may enable the TBM to excavate all the way to the Special Seismic Section.

Cement grouting started as planned this period and was completed to a distance of approximately 300 feet north of the Special Seismic Section in the AR tunnel. Further grouting may be performed in the AL tunnel after completion of the Special Seismic Section bench in June.

# **ONGOING**

Item (Date initiated: October 1996)
Project Schedule Contingency

### Concern/Impact

Mitigation efforts to maintain ROD of May 17, 2000, have left the project schedule with no unallocated contingency. Allowances for all C0311 known schedule impacts through October 1996 due to ground conditions encountered in Reach 6C, seasonal springs protection, enclosure at La Brea shafts, additional 429 feet of standard tunnel excavation, and Special Seismic Section redesign were incorporated into the schedule in October 1996. However, no other project contingency allowances exist for future risks associated with the excavation of the tunnels under the Santa Monica Mountains.

### Status/Action

The six options to mitigate future risks associated with C0311 TBM production rates, as described in Areas of Concern on page ES-11, were finalized. Options 1, 2 and 3 were negotiated with the contractor and a mitigation schedule was approved and incorporated into the Project Master Schedule.

Other efforts to maintain ROD of May 2000 included a compressed schedule and resequencing of C1610 (Trackwork Installation), and returning Contract B620 (Automatic Train Control) to its original contract schedule. The acceleration of Contract B620 will be maintained as an option to mitigate future delays, if needed. Efforts continue to further refine downstream systems contracts such as B645 (SCADA) and start-up with no results to report as yet.

EXE 13 ES-10



V	1/	۱٧	IΑ	Gl	ΞΝ	1E	NT	TIS	SU	IES
---	----	----	----	----	----	----	----	-----	----	-----

# **ONGOING**

Item (Date initiated: February 1996)
MTA Board Motion Dated January 24, 1996

### Concern/Impact

The MTA Board Motion to adopt community protection measures due to tunneling under the Santa Monica Mountains has added additional cost and time to Contract C0311 and to the project. The protective measures instituted by the Board are being implemented on the tunneling Contract C0311 and include reducing the amount and intensity of blasting, increasing tunnel grouting to prevent surface springs leaking into the tunnel, and monitoring tunneling effects on the surrounding public and private property ecosystems.

### Status/Action

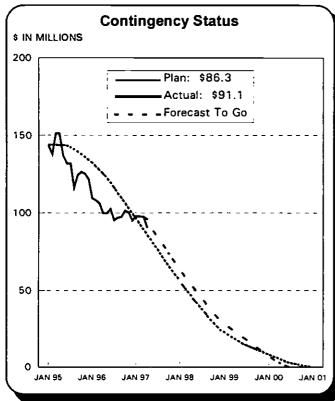
The forecast cost and schedule impacts to Contract C0311 have been incorporated into the program. The seasonal springs protective measures included cost and schedule contingencies for four known spring zones and two unknown spring zones. As planned, the six spring zones are being grouted ahead of the tunnel face with supplemental grouting as tunneling progresses. Supplemental water sources have been installed for Nichols Canyon Creek to mitigate the decline of perennial springs.

A hydrogeological study is being conducted to assess water infiltration through the tunnel lining and to ascertain if additional protective measures are needed. A final report of the study will be published at the end of July.

EXE 14 ES-11



# **COST STATUS**



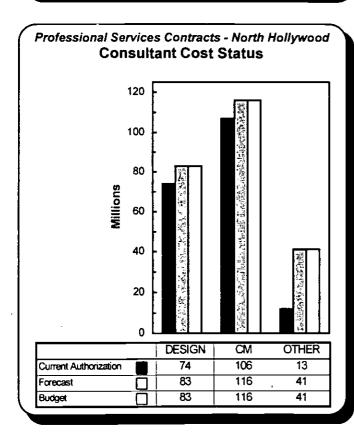
# **Contingency Status Analysis**

# May 1997 Period Status

The Contingency Forecast decreased \$6.7 million this period to offset a net increase of \$5.7 million in the Construction Element and \$1.0 million in the Utility/ Agency Force Accounts Element.

# **Cumulative Contingency Status**

The variance between the actual and planned contingency of \$4.8 million is primarily due to a timing difference of early completions of the facilities contracts. The corresponding schedule to the original planned contingency curve shows the facility contracts finishing, on average, EIGHT months earlier than the current schedule. It also reflects earlier expenditures anticipated for potential CNs, DCNs and claims.



# **Professional Services Cost Analysis**

The Construction Management current authorization for P-D and JMA was increased this period by \$1 million. Two CCNs totaling \$0.9 million for C0331 claim team and their office expense amended P-D's contract; and three CCNs totaling \$0.1 million for added services, C0321 design/construct integration and probe installation in B251 amended JMA's contract.

The EMC Forecast at Completion is currently being reevaluated.

Other specialty consultant forecasts include costs for Configuration Management Services, Systems Engineering and Analysis, Rail Vehicle Procurement Services, Environmental Services, Legal Services, Construction Support Services, and Project Management Assistance.

# DATA SOURCE:

CMS: Consultant Contract Authorization, Forecast, and Budget Value.

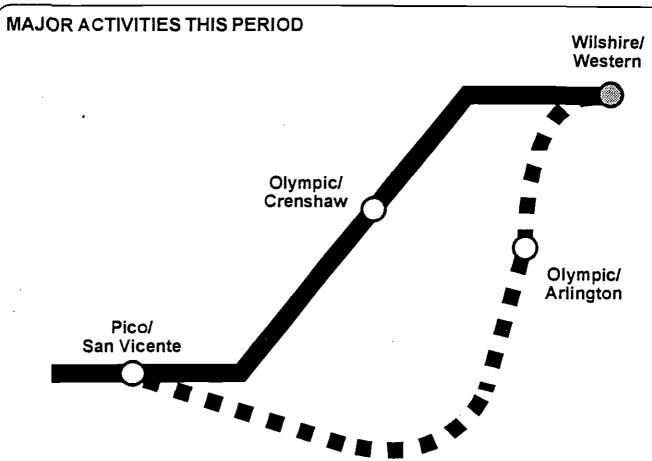
**EXE 15** 

METRO RED LINE SEGMENT 3
MID-CITY EXTENSION

**EXECUTIVE SUMMARY** 

# METRO RED LINE - Segment 3 / Mid-City Extension Summary Status Report Period Ending - May 30, 1997



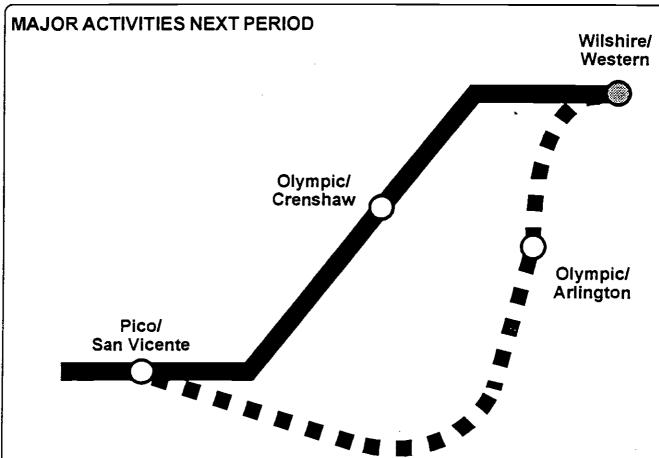


# SYSTEMWIDE ACTIVITIES

- Public outreach efforts continued with a tour of the Red Line facilities for the Harvard Heights Home Owner's Association (HOA), a briefing for Supervisor Burke's staff regarding alternatives, a presentation to the Victoria Park HOA, and a meeting with the leadership of the Country Club Park HOA.
- The Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR) effort continued; individual sections from the initial draft were reviewed and an initial review of the complete Administrative Draft began.

# METRO RED LINE - Segment 3 / Mid-City Extension Summary Status Report Period Ending - May 30, 1997





# SYSTEMWIDE ACTIVITIES

- Public outreach efforts will continue with a briefing for Councilman Nate Holden's Office regarding alternatives, three public information meetings for areas not represented by HOA's, a meeting with apartment building owners along the alignment, and completion of a video regarding construction issues.
- The SEIS/SEIR preparation process will continue; the initial draft will be completed by June 16, the draft will be transmitted to the FTA for review, and the second review of the complete Administrative Draft will begin.

### FINANCIAL STATUS

# Budget/Forecast Variance (in Millions)

Original Scope Activities

			-	MAY
	CURRENT	CURRENT		CHANGE IN
COST ELEMENT	BUDGET	FORECAST	VARIANCE	FORECAST
CONSTRUCTION	\$334	\$377	\$43	\$0
PROFESSIONAL SERVICES	98	187	89 i	0
REAL ESTATE	54	44	(10)	o
UTILITY/FORCE ACCOUNTS	5	9	4	0
SPECIAL PROGRAMS	0	2	2	0
CONTINGENCY	0	64	64	0
PROJECT REVENUE			i	
TOTAL PROJECT	\$491	\$683	\$192	\$0

Additional Locally Funded Activities

				MAY
	CURRENT	CURRENT		CHANGE IN
COST ELEMENT	BUDGET	FORECAST	VARIANCE	FORECAST
CONSTRUCTION	so so	\$0	\$0	\$0
PROFESSIONAL SERVICES	0	o	0	` o
REAL ESTATE	0	0	0	0
UTILITY/FORCE ACCOUNTS	0	0	0	0
SPECIAL PROGRAMS	0	0	0	0
CONTINGENCY	0	0	0	0
PROJECT REVENUE				
TOTAL ADDITIONAL LOCALLY FUNDED ACTIVITIES	\$0	\$0	\$0	\$0

# Budget/Forecast Variance Analysis

The Budget is based on the original Project alignment and a July 1999 ROD; the Forecast is based on the alignment contained in the Rail Recovery Plan and July 2009 ROD. The Rail Recovery Plan was approved by the MTA in January 1997 and is based on the Wilton/Arlington underground alignment alternative and cash flow constraints. A revision to the Rail Recovery Plan which results in a July 2008 ROD was approved by the MTA Board during the first week of June 1997. (The revised date is conditional on receipt of anticipated ISTEA funding.) This information will be incorporated into the Forecast next period.

A trend will be prepared to formally adjust the forecast when the preferred alternative is selected, currently forecast for Fall 1997. The budget baseline will be finalized after the Preliminary Engineering is completed and the Project is adopted, which is scheduled to occur in Spring 1998.

Commitments to date are \$14.2M; Expenditures to date are \$12.7M. These costs are primarily associated with engineering management services, project administration, and environmental engineering services. The Expenditures were reduced this period to adjust for a reconciliation to the expenditure data contained in the FIS reports.

# VEST AWM

# FINANCIAL DETAIL METRO RED LINE - SEGMENT 3 PROJECT TOTAL

STATUS	OF FUND	S BY SOURCE	E (in thous	ands of dol	lars)							
	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)			
	ORIGINAL	TOTAL FUNDS	TOTAL FUNDS	COMMITME	NTO	EVACUAL	up5e	BILLED TO SOURCE				
SOURCE	BUDGET	ANTICIPATED (1)	AVAILABLE	\$	NIS %	EXPENDIT	URES_	10 SOU	RCE /			
ORIGINAL SCOPE:		, ,										
FTA - SECTION 3	\$1,230,000	\$1,133,192	\$352,572	<b>\$</b> 642,799	57%	\$352,572	31%	\$352,572	31%			
FTA - SECTION 3 DEFERRED LOCAL SHARE	0	283,298	88,143	160,699	57%	88,143	31%	88,143	31%			
FED ISTEA STP (STATE)	0	75,000	0	0	0%	o	0%	0	0%			
FED ISTEA STP/CMAQ (REGIONAL)	166,400	301,538	49,060	49,060	16%	49,060	16%	49,060	16%			
FED ISTEA RSTP DEFERRED LOCAL SHARE	0	75,385	12,266	12,266	16%	12,266	16%	12,266	16%			
SB 1995 TRUST FUND	53,000	75,000	75,000	75,000	100%	66,901	89%	66,901	89%			
STATE ARTICLE XIX	115,000	100,000	20,855	20,855	21%	20,855	21%	20,855	21%			
STATE PROP 116	144,600	40,000	25,000	25,000	63%	25,000	63%	25,000	63%			
STATE FLEXIBLE CONGESTION RELIEF	52,000	50,000	0	0		0		0				
STATE TSM MATCH	0	48,834	10,537	7,946	16%	0	0%	0	0%			
CITY OF LOS ANGELES	177,000	200,000	0	0	0%	0	0%	0	0%			
PROP C	496,385	647,131	80,035	124,753	19%	80,035	12%	80,035	12%			
BENEF ASSESS. DISTRICT	17,100	13,500	0	0	0%	o	0%	0	0%			
TOTAL	\$2,451,485	\$3,042,878	\$713,468	\$1,118,378	37%	\$694,832	23%	\$694,832	23%			
OTHER LOCALLY FUNDED ACTIVITIES:												
PROP C (ARTWORK)	\$0	\$2,435	\$610	<b>\$</b> 536	22%	\$0	0%	\$0	0%			
PROP C (NON-REV CONNECTOR)	0	285	3	1,035	363%	3	1%	3	1%			
GRAND TOTAL	<b>\$</b> 0	\$2,720	\$613	\$1,571	58%	\$3	0%	\$3	0%			

<sup>(1)</sup> Anticipated Funds information as available at time of closing; funding information to be reconciled with Board approved schedule and budget for Mid-City.

ES-5

# FINANCIAL DETAIL METRO RED LINE - SEGMENT 3 / MID-CITY EXTENSION

	(A) ORIGINAL	(B) TOTAL FUNDS	(C) TOTAL FUNDS	(D) COMMITM	(D/B) MENT	(E) EXPENDIT	(E/B)	(F) BILLEI TO SOUR	
SOURCE	BUDGET	ANTICIPATED (1)	AVAILABLE	\$	%	\$	%	\$	%
FTA - SECTION 3	\$242,563	<b>\$</b> 194,050	\$4,107	\$4,107	2%		2%	\$4,107	2%
FTA - SECTION 3 DEFERRED LOCAL SHARE	0	48,513	1,027	1,027	2%	1,027	2%	1,027	2%
FED ISTEA STP (STATE)	0	0							
FED ISTEA STP/CMAQ (REGIONAL)	55,400	16,320	1,134	1,134	7%	1,134	7%	1,134	7%
FED ISTEA RSTP DEFERRED LOCAL SHARE	0	4,080	284	284	7%	284	7%	284	79
STATE ARTICLE XIX	0	40,000	1	1	1	i .	1 1		
STATE PROP 116	72,300	0						•	
STATE FLEXIBLE CONGESTION RELIEF	26,000	50,000	1 '	1	1	1		,	
STATE TSM MATCH	0	2,643	184	184					
CITY OF LOS ANGELES	34,400	0	1	1	1	l	1 1		1
PROP C	60,000	327,252	6,109	7,423	2%	6,109	2%	6,109	2'
TOTAL	<b>\$</b> 490,663	\$682,858	<b>\$</b> 12,845	<b>\$</b> 14,159	2%	<b>\$</b> 12,661	2%	<b>\$</b> 12,661	29

<sup>(1)</sup> Anticipated Funds information as available at time of closing; funding information to be reconciled with Board approved schedule and budget.

# FINANCIAL DETAIL

# **FUNDS BY SOURCE ANALYSIS**

Status of Funds Anticipated (Segment 3 Projects)

FTA Section 3 A Grant Application was submitted to the FTA on December 13, 1996 for

\$69.5M. Grant award is anticipated around June 1997.

FTA Section 9
FED ISTEA/CMAQ

A Grant Application for \$40.0M was submitted to the FTA on December 23, 1996.

(This amount includes \$20.0M of FY 96 funds and \$20.0M of FY 97 funds.) The

grant award is anticipated in the June 1997 time frame.

FTA Section 9
FED ISTEA STP

The state allocated \$75.0M at the May 1, 1996 California Transportation Commission meeting. Those funds have been allocated as Federal STP

funds. A Grant Application was submitted to the FTA on December

23, 1996; the Grant award is expected around June 1997.

State Prop. 116 MTA submitted a Grant Application and an Allocation Request on April 8, 1997

to the California Transportation Commission for \$5.0M of Proposition 116
Rail Bond Funds. A Fund Transfer Agreement is anticipated around August

1997.

Benefit Assessment No funds are expected to be available until FY 2003.

# SCHEDULE STATUS

SCHEDULE			SCHEDULE ANALYSIS
		Change From	The Supplemental Environmental Impact Statement/
		Last Month	Subsequent Environmental Impact Report (SEIS/SEIR) document preparation which addresses the Wilton/
Current ROD	July 28, 2009	None	Arlington & Crenshaw alignment alternatives is on the critical path for the overall Mid-City Project. Currently,
Design Progress	0%	None	preparation of the draft for FTA review is eight weeks
Construction Progress	0%	None	behind schedule, pushing the August 1997 planned date for Board LPA selection to October. The Project Adoption and Record of Decision milestones have
Critical Path Float	N/A	None	also been pushed out two months.
			The Wilton/Arlington underground option was incorporated into the Rail Recovery Plan in January 1997 and shows a July 2009 ROD. The Rail Recovery Plan was revised during the first week in June 1997 to show a conditional RCD of July 2008. The Current ROD will be revised accordingly next period.
			The Project baseline schedule will be finalized after Preliminary Engineering is completed and the Project is adopted in Soring 1998.

This section intentionally left blank

This section intentionally left blank

Task	Task	Rem	Total	%									i							ii iyi i							::::::::::::::::::::::::::::::::::::::			
Start	Finish	Dur	Float	Comp	AIMI	1.1	1996 A	S	σIi	v i n		ΙF	М	Δ	M	19	97	A	8 (	i I K	'n		1 e 1	NA I	: A : 1	998	3	7.1	A	
	RING FEASI	BILITY	STUDY		2.4	-	1.54.	<u>-</u> -	<u> </u>		- 1.5	3 3 4	-171	-23			10:1		3 1 1	2 11	1:0					191		J	-	<u>.</u>
:	180CT96A	0		100			2000																							
	VINAL SITE	<u>PLAN F</u>	EASIB	LITY							_		-							1-	1					_		7		_
11NOV96A		0		100					<b> </b>	330000								*************************										11 14 14 14 14 14 14 14 14 14 14 14 14 1		}
	RLINGTON S		EIR PRO	CESS		ļ			Ĭ		_										1	1						<u>-</u>		
15JUL96A	20NOV96A	0.		100			TA P			nviro 	nme	ental	Соп	sulta	nt													1	-	
	20NOV96A	0		100					•	MT/ ◆ 2	A Bo	ard #	\ppr	oves	εħ	vire	nme	ental	Con	sulta	nt									
03DEC96A	13JUN97	10'	6	85								re Dr			SE	R	***************************************													
23JUN97	25JUL97	24	-9	0										8888		F	TA F	tevle	w Dr	aft					A merebran (16 merebran 1			Abbenderderderde abs verseen ver		
04AUG97	17SEP97	32	-14	0										-			i	Circ	ulate	Drai	t SE	ISISI	EIR		***************************************			***************************************	***************************************	
	220CT97*	0	-39	ō													***************************************	•	•	MT/	Bo	ard :	ele	cts (	-PA					
23OCT97	23FEB98	84	2	0							ļ										pare		ISE	1S/S	EIR					
	20MAY98*	0	-60	-0						***************************************													•		***************************************	FI	nai	SEIF	Ad	ppt
	24JUN98*	ō	-64	0					14	16 Bys 22 44 ( 2 2 2 4 4 4 4 4 4 4 7 18 4 2 4														•			8	TA F	Reco	rd
Project Start Project Finish Date Date Pfot Date	24APR94 25MARS5 25MARS7 15JAR97		arly ther arget Early Sta 18 groot Ser	(Fr.			<u> </u>		asib	ility	Stu	Arling	SE	IS/S						1	(Dread		orto	Engli	esring Rovisi	Kanage en	ement C	ensult, Check	ed App	

# CONSTRUCTION SAFETY

• There is no construction activity at this time.

# MANAGEMENT ISSUES

### NEW

### *Item*

**Agency Cost Overrun** 

### Concern/Impact

Agency costs are an element of the Project Budget and incorporate management issues, non-labor administrative costs, fringe benefits, and overhead costs. The allocation plan, in conjunction with the project's forecast completion date, is expected to result in significant overruns to the specific line item budget for "agency" cost.

### Status/Action

The Project staff is currently reviewing the forecasted staff manpower levels, plans, and the proposed allocation methodology to determine any appropriate revisions. This review to accurately quantify the magnitude of this potential overrun is expected to be completed by July 1997.

### ONGOING

### **Item**

Finalization of Mid-City Cost Estimate & Master Schedule (initiated 8/95)

# Concern/Impact

The Mid-City Project cost and schedule baseline cannot be finalized until an alignment alternative is selected. Finalization of the master schedule for design and construction is on hold pending completion of the draft SEIS/SEIR and Board decision on the preferred alternative.

### Status/Action

MTA is proceeding with a draft SEIS/SEIR to incorporate the Wilton/Arlington & Crenshaw alignment alternatives. When the draft SEIS/SEIR is completed, the Board can make a decision on the alignment. Preliminary engineering and a final SEIS/SEIR will be done after the Board has selected the alignment. The Project Master Schedule and budget baseline will be finalized when the preliminary engineering is completed and the Project is adopted.

# **MANAGEMENT ISSUES (continued)**

#### ONGOING

#### ltem.

Draft SEIS/SEIR Preparation Schedule Variance (initiated 4/97)

#### Concern/Impact

The Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR) document preparation must be completed as scheduled in order for the Board to formally select the preferred alignment and configuration alternative in August 1997. This effort is eight weeks behind schedule.

#### Status/Action

Currently, the forecast is to provide a draft SEIS/SEIR for FTA review in mid-June, eight weeks later than plan. The MTA Board selection of the Locally Preferred Alternative (LPA) will be impacted, as will the Final SEIR Adoption and FTA Record of Decision milestones. The FTA Record of Decision is now forecast for late June 1998.

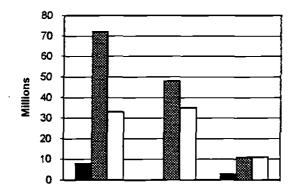
#### • RESOLVED

No outstanding issues were resolved this period.

# FINANCIAL STATUS



# Professional Service Contracts Dollars in Millions



	Ì	DESIGN !	CM	OTHER
Current Authorization	:	8 (	0	3
Forecast	i	72	48	11
Budget	ļ	33	. 35	11

# Professional Services Cost Analysis

There were no changes to Professional Service Contract values in May. The Forecast information on the chart reflects data contained in the Rail Recovery Plan. The Budget and Forecast information will be finalized after Preliminary Engineering is completed and the project is adopted in the Spring of 1998.

# DATA SOURCE:

CMS: Consultant Contract Authorization, Forecast, and Budget values.

This section intentionally left blank

This section intentionally left blank

METRO RED LINE SEGMENT 3

EAST SIDE EXTENSION

**EXECUTIVE SUMMARY** 

# METRO RED LINE - Segment 3 East Side Summary Status Report

Period Ending - May 30, 1997



# **MAJOR ACTIVITIES THIS PERIOD**

#### C0502

# LITTLE TOKYO STATION and LINE SECTION

The Segment 1 construction records were reviewed for potential underground construction obstacles. Completion of Final Design efforts continued through May. Primary effort placed on seismic redesign of station and finalization of construction staging and phasing at the station site.

# C0521

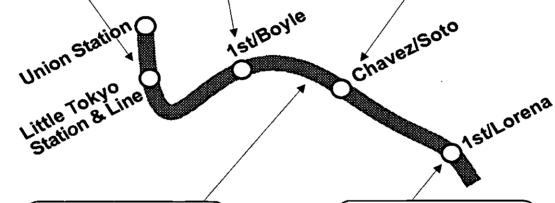
#### 1ST/BOYLE STATION

EMC and Section Designer continued design to meet Final Submittal. Reviewed comments from MTA, Third Parties, Fire Life Safety Committee, and constructability comments from CM.

#### C0531

#### CHAVEZ / SOTO STATION

EMC and Section Designer reviewed/dispositioned the MTA Design Review Comments. The Interim Design Review Presentation & Workshop was held with MTA, EMC and Third Parties. EMC Estimating completed the Section Designer's Construction Cost Reconciliation. Estimated costs are within EMC's Budget Estimate. CCN-613 WACN on Seismic Redesign was issued as a CWO to the Section Designer. As of May 30, 1997, the Section Designer is 72.6% complete.



# C0541

# 1st / BOYLE to 1st / LORENA LINE SECTION

Contract C0541 is on hold at the Camera Ready level. Worked on preparation of a proposal to MTA, to combine C0531 station and C0541 tunnels into one package (C0541). Final report for pressure meter testing was forwarded to MTA.

#### C0551

#### 1st / LORENA STATION

Section Designer submitted their Camera Ready package. EMC is proceeding with the electrical and systems final design of the Tail Track.

# SYSTEMWIDE ACTIVITIES

MTA APPROVED AMENDMENT #12 FOR CONTINUATION OF FINAL DESIGN SERVICES THROUGH JULY 22, 1997.

MTA PUBLIC AFFAIRS CONDUCTED SCHOOL OUTREACH PROGRAMS, NEIGHBORHOOD AND COMMUNITY ORGANIZATION MEETINGS, PARTICIPATED IN CHAMBER OF COMMERCE MEETINGS, CO-SPONSORED ROOSEVELT HIGH SCHOOL AWARENESS DAY, AND COORDINATED PARENT TOURS OF RED LINE CONSTRUCTION SITES.

# **METRO RED LINE - Segment 3 East Side**

# **Summary Status Report**

Period Ending - May 30, 1997



# **ACTIVITIES PLANNED FOR NEXT PERIOD**

#### C0502

# LITTLE TOKYO STATION and LINE SECTION

Continue the Final Design, including completion of the seismic redesign effort, and intradiscipline and interdiscipline quality audits. Revise 20 certifications to include temporary construction easements for type IIA structures. Since the bulk of the remaining work includes a number of outstanding changes and design issues requiring MTA Board authorization, the work will be determined by receipt of NTE and/or contract amendment. Current schedule calls for issuance of Final Design Submittal on June 30, 1997.

#### C0521

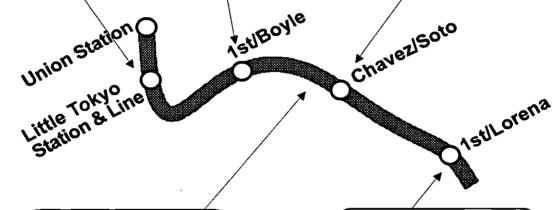
# 1st / BOYLE STATION

Resolve Design Review comments from MTA, Third Parties and CM on Pre-Final Submittal. Hold the Design Review Comment Resolution Workshop.
Continue design towards Final Submittal expected 6/30/97.

#### C0531

# **CHAVEZ / SOTO STATION**

Start of draft contract specifications by EMC and Section Designer. Submission of Hydrology report and Drainage Plans to City of Los Angeles.



# C0541

## 1st / BOYLE to 1st / LORENA LINE SECTION

Submission of Cost and Schedule proposal to combine Contracts C0531 and C0541. Submission and negotiation of Final Cost and Schedule Proposal on the Seismic Redesign of the Station Box. Await MTA approval for certification of Type IIA structures.

#### C0551

# 1st / LORENA STATION

Section Designer's contract will be closed out. EMC will complete work for approved CCNs by June 18th. Camera Ready Submittal is postponed until a future date yet to be determined.

# SYSTEMWIDE ACTIVITIES

CONCLUDE NEGOTIATIONS WITH CM CONTRACTOR. BEGIN NEGOTIATIONS WITH EMC FOR DESIGN SERVICES DURING CONSTRUCTION.

MTA PUBLIC AFFAIRS TO CONDUCT/PARTICIPATE IN 16 PUBLIC MEETINGS AND EVENTS INCLUDING PARENT, SENIOR CITIZEN, RESIDENT AND MERCHANT GROUP MEETINGS, CHAMBER OF COMMERCE MEETINGS, DOWNTOWN ARTS DISTRICT FESTIVAL, AND BOYLE HEIGHTS COMMUNITY CLEAN UP DAY.



# **FINANCIAL STATUS**

Budget/Forecast Variance (In Millions)									
COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	VARIANCE	MAY CHANGE IN FORECAST					
Construction	\$668.4	\$690.1	\$21.8	\$10.4					
Professional Services	\$247.6	\$247.6	\$0.0	\$0.0					
Real Estate	\$34.8	\$34.8	\$0.0	\$0.0					
Utility/Force Account	\$23.9	\$23.9	\$0.0	\$0.0					
Special Programs	\$0.0	\$0.0	\$0.0	\$0.0					
Contingency	\$74.5	\$52.7	(\$21.7)	(\$10.4)					
Project Revenue	\$0.0	\$0.0	\$0.0	\$0.0					
Total Project	\$1049.2	\$1049.2	\$0.0	\$0.0					

Other Locally Funded Activities									
COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	VARIANCE	MAY CHANGE IN FORECAST					
Construction Professional Services Real Estate		\$4.3	\$4.3	\$0.0					
Utility/Force Account Special Programs Contingency	\$0.0	\$3.1	\$3.1	\$0.0					
Total Other Locally Funded Activities	\$0.0	\$7.4	\$7.4	\$0.0					

# **Budget/Forecast Variance Analysis**

# May Forecast Variance

In January 1997, the MTA Board adopted a revised schedule which moved the R.O.D. to November 2004 and changed the East Side Extension current budget and forecast to \$1,049.2M. In May there was no change in either the current budget or the current forecast, however contingency was reduced from \$63.1M to \$52.7M due primarily to trends T-083, T 084 and T-086, (please see page ES-11 for further discussion). The MTA & EMC continue analyzing the project for cost reduction measures to reduce overall project costs.

Total Expenditures To Date Are: \$92.2M
Total Commitments To Date Are: \$138.2M

"Other Locally Funded Activities" are defined as work scope not covered under the Full Funding Grant Agreement (FFGA). During the month of April, the expenditures and current forecast for Professional Services under "OLFA" increased by \$4.3M due to reconciliation with the FIS General Ledger expenditure account. Prior to the reconciliation, these expenditures were kept in a separate account, apart from the project cost, as they were not eligible for federal funding because they occurred before the FTA's issuance of the Letter of No Prejudice (LONP dated 9/7/93). The current forecast of \$7.4M also includes the MTA Art Program forecast of \$3.1M. MTA is awaiting Board approval to update the current budget to reflect these commitments and forecast.

# FINANCIAL STATUS METRO RED LINE - SEGMENT 3 PROJECT TOTAL

	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL	TOTAL FUNDS	TOTAL FUNDS	0011111111	· 1.170			BILLED TO SOURCE	
SOURCE	BUDGET	ANTICIPATED (1):	1.02	COMMITME	N15	EXPENDIT \$	URES	\$	RCE
ORIGINAL SCOPE:							-		<u> </u>
FTA - SECTION 3	\$1,230,000	\$1,133,192	\$352,572	\$642,799	57%	\$352,572	31%	\$352,572	31%
FTA - SECTION 3 DEFERRED LOCAL SHARE	0	283,298	88,143	160,699	57%	88,143	31%	88,143	31%
FED ISTEA STP (STATE)	0	75,000	0	0	0%	0	0%	0	0%
FED ISTEA STP/CMAQ (REGIONAL)	166,400	301,538	49,060	49,060	16%	49,060	16%	49,060	16%
FED ISTEA RSTP DEFERRED LOCAL SHARE	0	75,385	12,266	12,266	16%	12,266	16%	12,266	16%
SB 1995 TRUST FUND	53,000	75,000	75,000	75,000	100%	66,901	89%	66,901	89%
STATE SHA/ARTICLE XIX	115,000	100,000	20,855	20,855	21%	20,855	21%	20,855	21%
STATE PROP 116	144,600	40,000	25,000	25,000	63%	25,000	63%	25,000	63%
STATE FLEXIBLE CONGESTION RELIEF	52,000	50,000	0	0		0		0	
STATE TSM MATCH	0	48,834	10,537	7,946	16%	0	0%	0	0%
CITY OF LOS ANGELES	177,000	200,000	0	0	0%	0	0%	0	0%
PROP C	496,385	647,131	80,035	124,753	19%	80,035	12%	80,035	12%
BENEF ASSESS. DISTRICT	17,100	13,500	0	0	0%	0	0%	0	0%
TOTAL	\$2,451,485	\$3,042,878	<b>\$</b> 713,468	<b>\$1,118,</b> 378	37%	\$694,832	23%	\$694,832	23%
OTHER LOCALLY FUNDED ACTIVITIES:									
PROP C (ARTWORK)	\$0	\$2,435	\$610	<b>\$</b> 536	22%	\$0	0%	\$0	0%
PROP C (NON-REV CONNECTOR)	0	285	3	1,035	363%	3	1%	3	1%
GRAND TOTAL	\$0	\$2,720	<b>\$</b> 613	\$1,571	58%	<b>\$</b> 3	0%	<b>\$</b> 3	0%

(1) Based on Current Budget

NOTE: Expenditures are cumulative through April 1997.



# FINANCIAL STATUS METRO RED LINE - SEGMENT 3 / EAST SIDE EXTENSION

	(A) ORIGINAL	(B) Total Funds	(C) Total Funds	(D) COMMITME	(D/B)	(E)	(E/B)	(F) BILLEI TO SOUF	
SOURCE	BUDGET	ANTICIPATED (1)	AVAILABLE	\$	%	\$	<u>%</u>	\$	%
FTA - SECTION 3	\$306,400	\$394,312	<b>\$</b> 57,077	\$93,862	24%	<b>\$</b> 57,077	14%	<b>\$</b> 57,077	14
TTA - SECTION 3 DEFERRED LOCAL SHARE	0	98,578	14,269	23,465	24%	14,269	14%	14,269	14
FED ISTEA STP (STATE)	0	25,000							
FED ISTEA STP/CMAQ (REGIONAL)	86,000	215,075	183	183	0%	183	0%	183	(
FED ISTEA RSTP DEFERRED LOCAL SHARE	0	53,769	46	46	0%	46	0%	46	(
STATE SHA/ARTICLE XIX	0	o		:	i				
STATE PROP 116	72,300	15,000		ı			:		
STATE FLEXIBLE CONGESTION RELIEF	26,000	0		ı					
STATE TSM MATCH	0	34,831	2,621	30	0%				
CITY OF LOS ANGELES	41,100	9,297							
PROP C	118,200	203,336	20,599	20,599	10%	20,599	10%	20,599	10
TOTAL	\$650,000	<b>\$</b> 1,049,198	<b>\$</b> 94,795	<b>\$138,185</b>	13%	\$92,174	9%	<b>\$</b> 92,174	,

<sup>(1)</sup> Based on Current Budget

NOTE: Expenditures are cumulative through April 1997.



<sup>(2)</sup> Expenditures include actuals spent prior to FTA issuance of their Letter of No Prejudice (LONP) dated 9/7/93.



## FINANCIAL STATUS

# **FUNDS BY SOURCE ANALYSIS**

# Status of Funds Anticipated

FTA Section 3 MTA submitted a grant application to the FTA on December 13,1996 for

\$69,475,000. The Grant Award is expected around June 1997.

FTA Section 9
FED ISTEA/CMAQ

MTA submitted a grant application to the FTA on December 23, 1996 for \$40,000,000 (this includes \$20,000,000 of FY '96 and \$20,000,000 of

FY '97 funds). The Grant Award is expected around June 1997.

FTA Section 9
FED ISTEA STP

The state allocated \$75,000,000 at the May 1996 California Transportation Commission meeting. Those funds have been allocated as Federal STP funds. MTA submitted a grant application to the FTA on December 23, 1996.

The Grant Award is expected around June 1997.

State Prop 116 MTA submitted a grant application and an allocation request on April 8, 1997

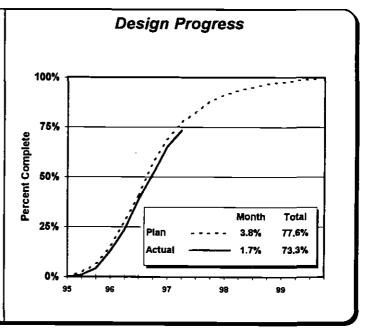
to the California Transportation Commission for \$15,000,000 of Prop 116 Rail Bond Fund. The fund transfer agreement is expected around August 1997.

Benefit Assessment No funds are expected to be available until FY 2003.



# **SCHEDULE STATUS**

Schedule							
		Change from Last Month					
Current R.O.D.	May 2004	-6 Months					
Final Design progress	73.3%	1.7%					
Construct. Progress	N/A	N/A					
Critical Path Float	0	0					



# **Current Critical Path Analysis**

The FFGA ROD is November 2002. This month, the forecast ROD has improved by six (6) months, from the Board approved November 2004 to May 2004. This improvement results from repackaging and re-sequencing the tunnel and station work to provide earlier access to the trackwork contractor. Specifically, the Chavez/Soto Station, contract C0531, has now been combined with the second tunnel contract, C0541. This mitigation also eliminates a key construction interface by combining the work into one contract.

The critical path includes the tunnel work (design and construction), the Chavez/Soto Station, Trackwork, Automatic Train Control, SCADA, Communications and Testing and Pre-Revenue Operations to ROD.

MTA and Consultant Staff continue conducting various schedule mitigation studies to improve the ROD even more than the six months identified.

# Design Progress Analysis

The plan reflects the Design Baseline Schedule as approved by the MTA in October 1996 and amended by approved changes.

Through May, overall final design was 73.3% complete versus a plan of 77.6%. Revisions to the scope of work since March 1995 were negotiated and finalized in a revised PIP to the MTA dated August 2, 1996. With the addition of Amendment #7 for \$331,500 to prepare contract documents for bulk procurement of running rail, direct fixation rail fasteners, signs and graphics, elevators and ventilation equipment, and \$1,077,483 in WACNs, the latest final design cost baseline stands at \$59,197,226.

EMC is slightly behind schedule for several reasons. Changes in direction of the tunnel tiner configuration resulted in a certain amount of rework, and therefore, delays in tunnel contracts C0502 and C0541. The effect of this delay, coupled with such factors as a more extensive quality assurance program and incorporation of other technical changes, caused C0502 submittal dates to shift and begin to conflict with those of other contracts. Therefore, in order to distribute the sequence of submittals more evenly and solve a potential staffing shortfall, EMC elected to delay submittals for C0551 and C0521 by two weeks and three weeks respectively. Also, at MTA's direction, contracts C0541 and C0551 were placed on hold prior to the camera ready submittals.

An additional factor is beginning to influence the design progress numbers. Each month, as WACNs are added to the project, percent complete is measured against a larger total. Since overall percent complete is determined on a "bottoms up" basis, the incremental number will rise more slowly. EMC's production work on CCNs may also deviate somewhat from plan as more CCNs are added and the work is re-prioritized.



# Construction Safety Statistics

Not applicable at this time

# Construction Safety Summary

Not applicable at this time

# **MANAGEMENT ISSUES**

# **NEW**

Item [Initiated May 1997]

**Agency Costs** 

# Concern/Impact

Agency Costs are an element of the Project Budget and incorporate management issues, non-labor administrative costs, fringe benefits, and overhead costs. The allocation plan, in conjunction with the project's forecast completion date, is expected to result in significant overruns to the specific line item budget for "agency" costs.

# Status/Action

The project staff is currently reviewing the forecast staff manpower levels, plans, and the proposed allocation methodology to determine any appropriate revisions. This review to accurately quantify the magnitude of this potential overrun is expected to be completed by July 1997.



# **MANAGEMENT ISSUES (Continued)**

# **ONGOING**

*Item* [Initiated April 1997]
Adequacy of Remaining Contingency

# Concern/Impact

Substantial drawdowns on contingency have occurred in the past two months as more detailed estimates of construction work based on advancing stages of design completion have become available. Remaining contingency is about 5.5% of remaining project expenditures. With no construction underway and Final Design about 73% complete, this may not be an adequate contingency for future project unknowns.

#### Status/Action

MTA will closely monitor remaining contingency and continue to assess the adequacy of this amount. The first major construction work will be bid in the 1st Quarter of 1998, at which time a more realistic analysis of remaining contingency can be completed. In the interim, MTA continues with the EMC and the CM to pursue identification and implementation of cost reduction opportunities.

# **ONGOING**

Item [Initiated February 1996]

Real Estate acquisition for the parcel EB-037 is critical.

# Concern/Impact

Acquisition of parcel EB-037 at C0502 may not be complete in time to meet MTA's target construction NTP of January 28, 1998. Note that the MTA Board-adopted schedule has eliminated from the critical path all other previously critical parcels, because of the one-year time extension to complete the project.

# Status/Action

The Camera Ready submittal now stands at July 31, 1997. This has pushed the C0502 NTP date to January 28, 1998. Acquisition of Parcel EB-037 is now forecast to be complete on February 3, 1998. This parcel continues to be critical with respect to contract C0502 NTP.



# **MANAGEMENT ISSUES (Continued)**

# **ONGOING**

*Item* [Initiated September 1996] EIS/EIR Addendum Approval Process

# Concern/Impact

Twenty full take property acquisitions cannot be authorized by the MTA Board until the EIS/EIR Addendum has been approved. The EIR Addendum is expected to be approved by the Board in June 1997. This delay at present is not impacting the critical path and the current R.O.D. of May 3, 2004; however, further delays could impact the project schedule.

# Status/Action

The earliest date foreseen for approving the EIS/EIR Addendum is June 1997. The Addendum has been submitted for FTA comments and MTA is responding to comments as they are received. MTA is proceeding with property appraisals but purchase offers cannot be made until the addendum is fully approved.

# **ONGOING**

*Item* [Initiated December 1996] Design is critical for C0502 NTP.

# Concern/Impact

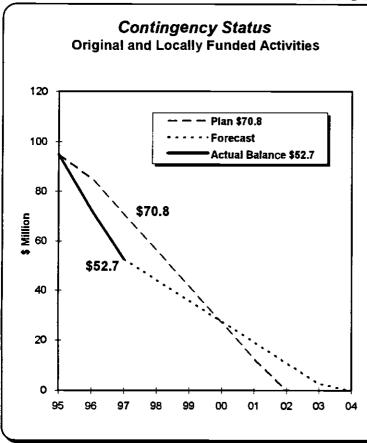
Due to continued slippage in the Final and Camera Ready submittals on contract C0502, design for this contract is critical for NTP of C0502. The initial delay was related to the "Two Pass" vs. "One-Pass with Option" tunnel liner and realignment of the CR tunnel at the Unocal Tank Farm. The additional delay is due to receipt of about 2,000 Pre-Final design comments within the last 48 hours of the comment submittal period, Third Party issues not completely resolved, and seismic redesign due to changes in MTA's design criteria. At present, it appears the Final Design Submittal will be June 30, 1997, and Camera Ready on July 31, 1997.

## Status/Action

C0502, as the first major construction contract, remains vital to project success and the EMC and MTA are working to resolve comments as quickly as possible to assure a quality product and to avoid further delays. Potential schedule impact to R.O.D. is being reviewed and mitigation strategies developed.



# **COST STATUS**



# Contingency Status Analysis

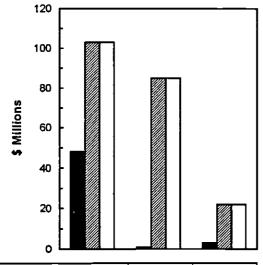
(Excludes non-construction allocated contingency)
Contingency balance this month decreased overall
due to the following major trends:

T-083 (\$7.5M) Based on the Interim Estimate, capital costs for contract C0531 Chavez/Soto increased by \$7.7M which was offset by \$175K reduction for the deletion of the smoke exhaust ducts. This trend reduced Project Contingency by \$7.5M.

T-084 (\$3.5M) The forecast was adjusted to include the estimated cost of \$3.5M for the P0650 Electrical Equipment Procurement Contract. This trend reduced Project Contingency by \$3.5M.

T-086 \$0.6M Based on the completed Pre-Final Estimate, the forecast for contract C0521 1st/Boyle Station was reduced by \$617K. This trend increased Project Contingency by \$617K.

# Professional Services Contracts Consultant Cost Status



	-	DESIGN	CM	OTHER
Current Authorization		48	1	3
Forecast		103	85	22
Budget		103	85	22

# Professional Services Cost Analysis

Categories represent all professional services contracts, not individual contracts ("Design" includes all Line Item 11 contracts. CM is Line Item 12 and Other is Line Item 13).

Professional Services budgets and forecasts have been revised in accordance with the Board's approved \$1,049.2M budget.

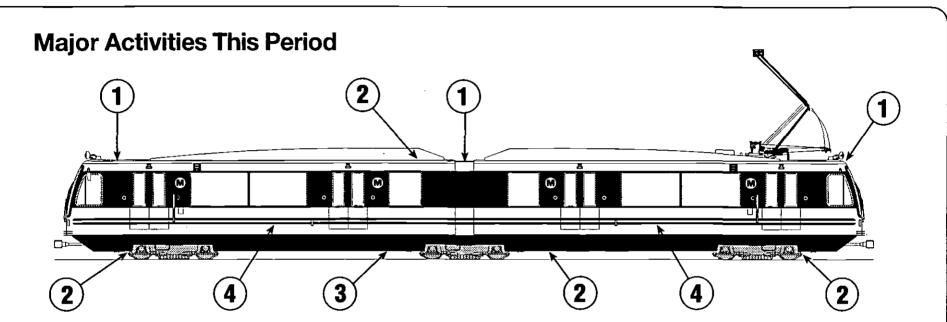
There remain several areas where differences of opinion still exist between EMC and MTA over scope of work. These include the tunnel liner configuration, and demolition contract repackaging. These issues are being resolved through the Change Control process.

# VEHICLE ACQUISITION PROJECT EXECUTIVE SUMMARY

# L.A. Light Rail Vehicle

Summary Status Report Period Ending - May 30, 1997



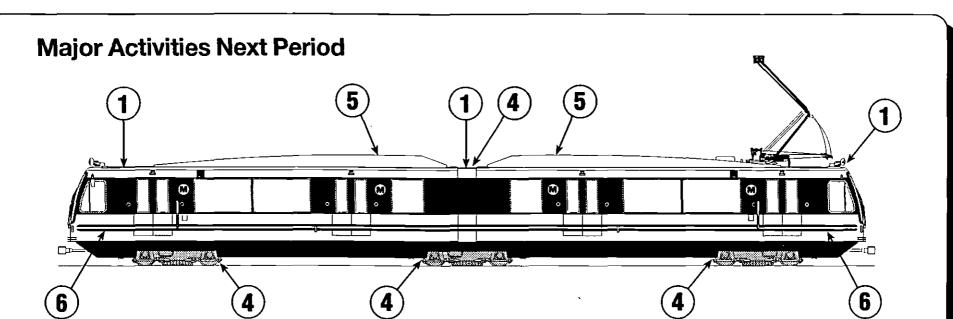


- 1. Carshell No. 10 was completed and shipped to Sacramento for final assembly. Carshell No. 11 was completed and is scheduled for shipment by June 6, 1997.
- 2. Completed a First Article Inspection (FAI) on the battery box, and power truck. Conducted a post-FAI on the communications system.
- 3. Problems associated with undercar wiring were resolved by Siemens.
- 4. A paint adhesion problem was discovered on Car No. 202 and on one half of Car No. 301. Other cars were checked with no apparent problems. Lack of hardner was identified as the primary cause of the problem and corrective action has been initiated.
- 5. MTA Inspectors reported procedural issues regarding Engineering Change Requests (ECR's) at the Siemens Facility in Carson. A meeting to resolve these issues is scheduled for June 18, 1997.

# L.A. Light Rail Vehicle

Summary Status Report Period Ending - May 30, 1997





- 1. Complete and ship Carshell No. 12 and 13 to Sacramento for final assembly. Continue the assembly of first 11 cars in Sacramento.
- 2. Meet with Siemens new executive management team on June 20, 1997.
- 3. Meet with Siemens Carson facility Quality Control and Project Management staff to review procedural issues concerning Engineering Change Requests (ECR's).
- 4. Conduct a First Article Inspection (FAI) on the EMI detector and complete the brake system endurance test.
- 5. Conduct a quality audit of the HVAC supplier.
- 6. Finalize the newly adopted MTA color striping design for implementation on L.A. Cars.



# **FINANCIAL STATUS**

Budget/Forecast Variance	( in millions)					
Out of a second						

COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	VARIANCE	MAY CHANGE IN FORECAST
CONSTRUCTION	\$232.4	\$180.6	(\$51.7)	0
PROFESSIONAL SERVICES	\$12.9	\$14.8	\$1.8	0
CONTINGENCY	\$12.3	\$5.9	(\$6.3)	0
PROJECT REVENUE	\$0	\$0	\$0	0
TOTAL PROJECT	\$257.6	\$201.4	(\$56.2)	\$0.0

# **Budget/Forecast Variance Analysis**

The Budget/Forecast Variance chart includes only those elements for the project as initially adopted by the MTA Board.

Expenditures to date are \$88,441,911.

Commitments to date are \$231,522,973. Once the cost impact of the reduced car order is approved by the MTA, a reduction in project commitments will occur.

The Current Project Budget is \$257.6 million. The Total Project Forecast for May 1997 remained unchanged at \$201.4 million. The \$56.2 million variance between the current forecast and the current budget is a result of the reduction of the P2000 Contract from 74 cars to 52 cars, and a reduction in the forecast of indirect costs.

STS' claim is still under review. Findings will be reported once termination liability is negotiated.

# **FINANCIAL DETAIL**

# LA LIGHT RAIL VEHICLE PROCUREMENT (IN THOUSANDS OF DOLLARS)

# STATUS OF FUNDS BY SOURCE

**MAY 97** 

	ORIGINAL	TOTAL FUNDS	TOTAL FUNDS	СОММІТМЕ	ENTS	EXPENDIT	JRES	BILLED TO	SOURCE
SOURCE	BUDGET	ANTICIPATED (1)	AVAILABLE	\$	%	\$	%	\$	%
FTA RSTP (ISTEA)		\$6,077	\$6,077	\$6,077	100%	\$0	0%	\$0	0%
FTA - OTHER	\$18,000	\$0	\$0	\$0	0%	\$0	0%	\$0	0%
FED ISTEA STP	\$84,000	\$84,000	\$55,100	\$84,000	100%	\$41,741	50%	\$41,741	50%
STATE PROP 116	\$33,550	\$33,550	\$16,398	\$33,550	100%	\$16,398	49%	\$16,398	49%
PROP C	\$118,450	\$133,970	\$30,303	\$107,896	81%	\$30,303	23%	\$30,303	23%
TOTAL	\$254,000	\$257,597	\$107,878	\$231,523	90%	\$88,442	34%	\$88,442	34%

# (1) BASED ON CURRENT BUDGET

NOTES: EXPENDITURES ARE THROUGH APRIL 1997.





# FINANCIAL DETAIL

# **FUNDS BY SOURCE ANALYSIS**

# STATUS OF FUNDS ANTICIPATED

# **FED ISTEA STP**

MTA submitted a grant application to the FTA for \$28.9 million of Federal STP funds in March 1997.

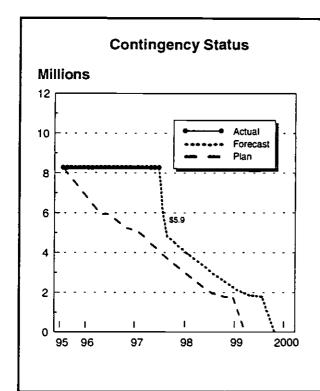
Grant award is expected in August 1997.

# L.A. LIGHT RAIL VEHICLE PROCUREMENT

Summary Status Report Period Ending - MAY 30, 1997



# FINANCIAL / SCHEDULE STATUS



# **Contingency Status Analysis**

The Project Contingency remained unchanged this period. The forecasted decrease in contingency from \$8.2 million to \$5.9 million is due to the reduction of the P2000 Contract from 74 cars to 52 cars.

# Schedule

#### Change from Last Month

# Schedule Car Delivery

1 <sup>st</sup> Car	May 1998	-21 Days
52 <sup>nd</sup> Car	July 1999	-15 Days
Design Progress	90-95% complete	N/C
Fabrication Progress	35-40% complete	N/C
Critical Path	Car assembly	N/C
Delay (1 <sup>st</sup> Car)	-19 months	-1 Month
Data Date	May 1, 1997	

# **Schedule Analysis**

The Contractor's last forecast schedule reflected a total of 19 months delay in 1<sup>st</sup> car deliveries. The schedule further indicated a -43 days shown on the April schedule has been eliminated, and the delivery date schedule has been allowed to shift (slip). Subsystems with potential impact on delivery are air conditioning and communications equipment. Car assembly is still on the critical path. Acceleration of the delivery schedule for the first several cars is unlikely, however, the delivery schedule is projected to improve for later units.

In recent schedules, STS assumed that the MTA can accept cars at a higher rate than specified (2 cars per month).



# **MANAGEMENT ISSUES**

# NEW

Item (Date Initiated: May 1997)

Side Exterior Paint Failure

# Concern/Impact

Recently, a 3" x 5" section of paint detached from Carshell No. 202 when the masking tape protecting the window was removed. Subsequent tests, on Carshell No. 202A, 202B, and 301A, revealed very little paint adhesion between the carshell and the primer (as opposed to good adhesion between the primer and the finish coat).

## Status/Action

Nine carshells in Sacramento were paint-tested in sixteen locations. Currently, Carshell No. 202A, 202B and 301A exhibited symptomatic paint peeling. Paint samples were sent to BASF, the paint manufacturer, for analysis. Preliminary results indicate an almost complete lack of hardener in the primer as well as a too thick primer coat (.008" compared to .002") and a lack of sanding scratches on the carshell (putty) surface. It appears that the lack of hardener is the primary reason for the failure, however, other discrepancies are being investigated. The results of these tests will be reviewed with Siemens at the earliest opportunity.

Item (Date Initiated: May 1997)

## **Battery Capacity**

# Concern/Impact

The first set of vehicle batteries were informally tested in Sacramento. Initial results indicate that voltage levels and capacity were lower than the specification requirements.

#### Status/Action

STS is investigating measures to reduce the voltage drop (1.56 volts at 135 amps) between the Auxiliary Power Supply and the loads. A significant portion of the voltage is the forward drop in the Battery Isolation Diode. One possible solution is to place a shunting contractor in parallel with the diode and energize the contractor when current is output from the battery to the loads. Another possible solution involves selecting a diode with less forward drop in combination with increasing the current carrying capacity of key distribution wires. Siemens is investigating these concerns and is scheduled to make recommendations shortly.

# L.A. LIGHT RAIL VEHICLE PROCUREMENT **Summary Status Report**

Period Ending - MAY 30, 1997



# **MANAGEMENT ISSUES (Con't)**

Item (Date Initiated: May 1997)

## Manufacturing Concerns at the Carson Facility

#### Concern/Impact

A number of procedural discrepancies have been noted recently in the Carson operation. For example, manufacturing does not wait for Engineering sign-off on Engineering Change Notices (ECR's) before implementing changes. Additionally, configuration control recording is inconsistent between Engineering and Manufacturing. Finally, Inspection Problem Reports are being used as the controlling document to resolve configuration discrepancies.

#### Status/Action

A meeting is scheduled with Siemens on June 18, 1997, to resolve these issues.

Item (Date Initiated: May 1997)

# **Articulation Area Wiring Installation**

#### Concern/Impact

Wiring installation in the articulation area of Carshell No. 1 is poorly designed and does not follow standard wiring practices.

#### Status/Action

STS has significantly improved the wiring routing and dress in the articulation section of Carshell No. 1. This issue has been resolved and is no longer a concern.

## **ONGOING**

Item (Date Initiated: September 1996)

# Lack of Progress in the Development of Manuals and Training

#### Concern/Impact

Lack of progress in both the development of Repair and Parts Manuals and the Vehicle Training Program.

#### Status/Action

Progress has been made in this area. STS has submitted Running Maintenance, Heavy Repair, and Parts Manuals for 4 of 16 subsystems. The quality of the submitted sections is good. A schedule for future submissions has also been submitted, but STS has begun to slip from this schedule.



# **MANAGEMENT ISSUES (Con't)**

Item (Date Initiated: June 1996)

#### Vehicle Weight

### Concern/Impact

Vehicle Weight Report, No. 13, indicates a margin of approximately 1,800 pounds under the specified weight. This news is encouraging in that the new estimate increased the margin by approximately 1,000 lbs. The total margin is now 1.3%. The estimate reflects actual equipment weights.

#### Status/Action

STS continues to monitor vehicle weight during the assembly of the first car and make improvements wherever possible. Vehicle Weight Report No. 14 is currently under development.

Item (Date Initiated: February 1996)

# Schedule Slippage

## Concern/Impact

The May 1997 delivery schedule indicates a delay of 19 months for the first car with delivery of the last car approximately 8 months late.

# Status/Action

Siemens is expected to start a two shift operation after the first few cars have reached a stable production rate.

Item (Date Initiated: November 1995)

# Carborne Signal Equipment for 16 Standard Cars

# Concern/Impact

The current plan calls for 16 LA Standard Cars to be assigned to the Metro Blue Line (LA→Long Beach Branch). The Standard Cars require on-board signal equipment compatible with the Blue Line wayside equipment before they can enter revenue service. STS was requested to provide a proposal for the supply of on-board equipment. MTA is finalizing a Light Rail Fleet Plan which may alter the number of cars assigned to various lines and the quantity of on-board signal equipment required for purchase.

#### Status/Action

Siemens submitted a revised ROM cost which is under review by MTA. An MTA Board Report is being prepared to authorize staff to negotiate procurement of the required Carbome Signal Equipment.



# **MANAGEMENT ISSUES (Con't)**

Item (Date Initiated: July 1995)

# Cancellation of 22 Standard Cars

# Concern/Impact

STS requested \$10 million in damages from the cancellation of 22 cars. This claim must be validated before payment can be made.

#### Status/Action

Back-up data from STS has been evaluated by technical staff and submitted to the Audit Department for final determination. The final determination is scheduled for release by the Audit Department by June 30, 1997.

# Item (Date Initiated: March 1995)

# **HVAC Design**

#### Concern/Impact

Although Sutrak has completed a Prototype Unit, which we have physically inspected, we have yet to complete the Design Conformance Test or the First Article Inspection due to a number of postponements by Sutrak.

#### Status/Action

Sutrak has shipped two production HVAC units to STS in Sacramento. The balance of the Design Conformance Tests and First Article Inspection of the HVAC unit on Car 201 will be completed at the Siemens Facility.