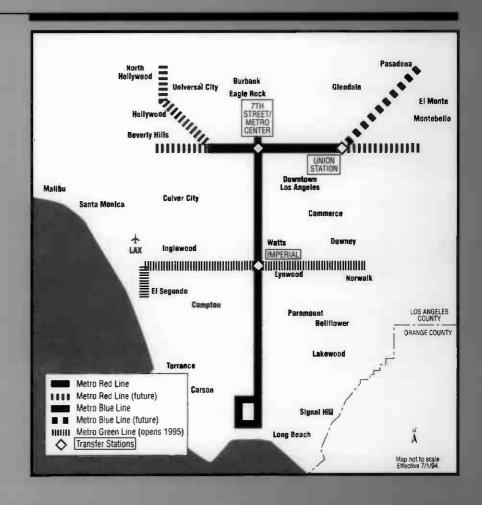
# MTA METRO CONSTRUCTION



Executive Report Rail Program Status



## **RAIL PROGRAM STATUS SUMMARY**

THE LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
RAIL CONSTRUCTION DIVISION

## **RAIL PROGRAM SUMMARY**

82.7%

2%

#### RAIL PROGRAM STATUS SUMMARY

Metro Pasadena Blue Line **Cost Status** (\$000)**Project Progress** 

Original Budget 841,000

Expended to Date 117.848 \* Design (Rebaselined)

**Current Budget** 997,726 Actual: Schedule Status: Construction

Revenue Operations Date: Actual:

November 1997 Original

Revised June 2002

Metro Green Line (Budget and Forecast excludes North Coast Segment)

**Cost Status** (\$000)**Project Progress** 

671,000 Original Budget

Expended to Date 615,626\* Design

Current Budget 717,802 Actual: 100%

Construction Schedule Status

Actual: 98% Revenue Operations Date:

Original October 1994 Forecast May 1995

Metro Red Line Segment 1

Cost Status (\$000) **Project Progress** 

1,249,900 Original Budget Expended to Date 1.396.372\*

Current Budget Actual: 100% 1.450.019

Design

Construction **Schedule Status** 

Revenue Operations Date: Actual: 100%

Original April 1992 Actual January 1993

Metro Red Line Segment 2

**Cost Status Project Progress** (\$000)

Original Budget 1,446,432

952,549\* Expended to Date Design

Current Budget 1.517.854 Actual: 98.9% Construction

Schedule Status: Revenue Operations Dates:

Wilshire Vermont/Hlywd Actual: 56%

Sep '98 Original Jul '96 Mar '99 **Forecast** Apr '96

Metro Red Line Segment 3 - North Hollywood Extension

**Project Progress Cost Status** (\$000)

1,310,822 Original Budget

Design Expended to Date 206,616\*

90% **Current Budget** 1,313,848 Actual:

Construction Schedule Status

10.2% Actual: Revenue Operations Date:

2000 Original May 2000 **Forecast** September

\*Expenditure data through May 1995

#### RAIL PROGRAM STATUS SUMMARY

Metro Red Line Segment 3 - Mid-City Extension

Cost Status (\$000) Project Progress

Original Budget 490,663 Suspended for Reassessment

Expended to Date 9,811\* Design

Current Budget 490,663 Actual: 27%

Schedule Status Construction

Revenue Operations Date: Actual: 0%

Original TBD Forecast TBD

Metro Red Line Segment 3 - East Side Extension

Cost Status (\$000) Project Progress

Original Budget 979,601 Suspended for Reassessment

Expended to Date 11,164\* Design

Current Budget 979,601 Actual: 30%

Schedule Status Construction

Revenue Operations Date: Actual: 0%

Original November 2002 Forecast September 2003

Vehicle Acquisition Project\*\*\*

Cost Status (\$000) Project Progress

Original Budget 257,597 Design

Expended to Date 51,940\* Actual: 6%\*\*

Current Budget 257,597 Manufactured

Schedule Status: Actual: 6%\*\*

Delivery of Final Cars:

Original November 1997 \*\* Based on Milestone Payments

Forecast November 1999

\* Expenditure data through May 1995

06/30/95

STATUS DATE:

## METROPOLITAN TRANSPORTATION AUTHORITY - CONSTRUCTION DIVISION PROJECT COST REPORT - TOTAL RAIL PROGRAM

SUMMARY BY COST ELEMENT

PROJECT: TOTAL RAIL PROGRAM

(IN THOUSAND

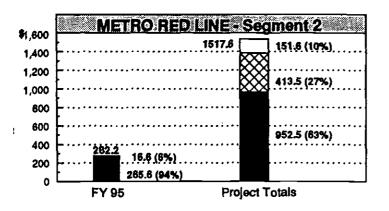
ELEMENT	BUD	GET	COMMI	TMENTS	INCURR	ED COST	EXPEND	DITURES	CURRENT	VARIANCE
DESCRIPTION	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)	FORECAST (9)	(9-2) (10)
T CONSTRUCTION	5,153,508	5,242,918	4,305	3,484,174	33,591	2,477,895	24,656	2,407,160	5,401,256	158,338
S PROFESSIONAL SERVICES	1,685,530	1,985,475	2,241	1,410,147	11,339	1,241,358	11,720	1,249,498	2,075,431	89,957
R REAL ESTATE	480,002	<b>54</b> 9, <b>059</b>	978	370,874	396	372,164	407	372,102	549,875	816
F UTILITY/AGENCY FORCE ACCOUNTS	146,280	146,937	(1,005)	123,275	247	101,693	247	101,173	148,633	1,696
D SPECIAL PROGRAMS	11,044	20,864	0	5, <b>54</b> 7	84	4,150	51	4,150	15,718	(5,146)
C CONTINGENCY	560,118	448,456	0	1	0	1	1	1	354,400	(94,056)
A PROJECT REVENUE	(18,115)	(36,585)	(462)	(1,536)	0	(6,946)	(4)	(8,401)	(31,474)	5,111
PROJECT GRAND TOTAL	8,018,366	8,371,216	6,057	5,392,504	45,658	4,190,316	37,079	4,125,685	8,527,934	156,717

NEW REQUIREMENTS	BUD	GET	СОММІ	TMENTS	INCURR	ED COST	EXPEND	DITURES	CURRENT	VARIANCE
DESCRIPTION	ORIGINAL (1)	CURRENT (2)	PERIOD . (3)	TO OATE (4)	PĒRIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)	FORECAST (9)	(9-2) (10)
T CONSTRUCTION	0	50,866	23	50,1 <b>54</b>	203	13,646	7,271	15,210	62,064	11,198
S PROFESSIONAL SERVICES	0	19,634	. 7	17,746	89	9,771	90	9,773	19,825	191
R REAL ESTATE	0	0	0	1	0	1	0	1	0	o
F UTILITY/AGENCY FORCE ACCOUNTS	0	0	0	0	0	0	0	0	0	o
D SPECIAL PROGRAMS	0	20	o	20	0	20	0	20	20	0
C CONTINGENCY	0	3,720	0	0	. 0	О	0	0	2,059	(1,661)
A PROJECT REVENUE	0	0	0	O'	0	0	0	О	0	o
NEW REQ. SUBTOTAL	0	74,241	31	67,921	328	23,475	7,398	25,041	83,970	9,729
PROJECT GRAND TOTAL	8,018,366	8,445,457	6,088	5,460,425	45,986	4,213,791	44,477	4,150,726	8,611,904	166,446

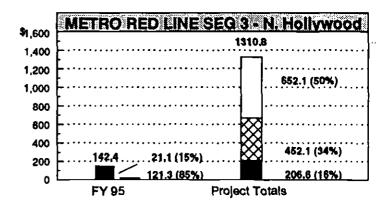
This report includes total project costs for the Metro Blue Line of \$877,271.

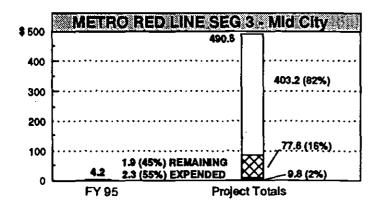
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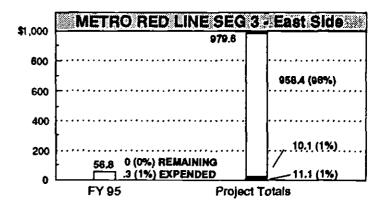
## BUDGET STATUS - June 30, 1995 (in \$ Millions)



Page

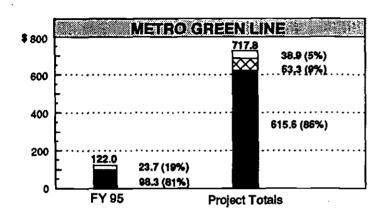


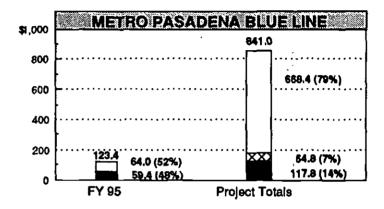


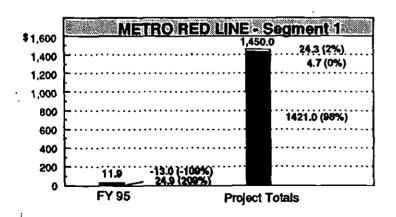


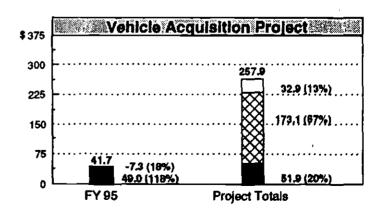
Actual Spent Encumbered Remaining Budget

## BUDGET STATUS - June 30, 1995 (in \$ Millions)









Actual Spent Encumbered Remaining Budget

SEGMENT 3 MID-CITIES

RED LINE SEGMENT 3 EAST SIDE

1991

1990

1992

1993

1994

1995

**ENGINEERING** 

1996

1997

1998

1999

2000

CONSTRUCTION

2001

2002

2003

CUM CASH FLOW - PLAN \$ 4.150 - ACTUAL CUM CASH FLOW - ACTUAL BLUE LINE \$ 8.611 - B **PASADENA BLUE LINE** 7 **GREEN** LINE 6 **VEHICLE ACQ PROJECT** \$ BILLION **RED LINE** SEGMENT 1 RED LINE SEGMENT 2 3 RED LINE SEGMENT 3 N. HOLLYWD 2 **RED LINE** 

Figure 1 - Rail Construction Plan

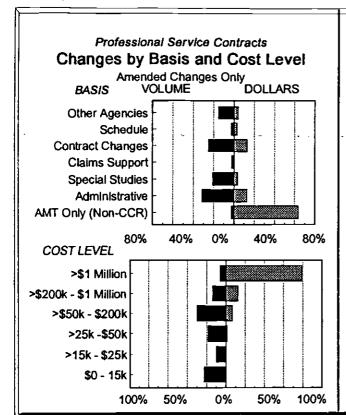
#### METROPOLITAN TRANSPORTATION AUTHORITY **FUNDING SOURCES**

(IN MILLIONS)

	METRO	BLUE	PASADE	ENA	METRO	GREEN	METRO R	ED ]	METRO RE	D I	METRO RE	D LINE	METRO R	ED LIN	METRO R	ED LINE	VEHICLE AC	COUISITIO	IO TOTAL		
<b>\</b>	<u> </u>		BUUEL	INE	UR.	WE.	SEG	,	SEG 2	: }	<u> </u>	N/A	SEG	3-WC	SEG	3 - E3 '	PROJ	ECT	PROGE	NAS	
FTA-SECTION 3	-	%	\$	%	\$	%	\$ 605.3	% 42	\$ 667.0	% 44	\$ 681.0	% 52	242.6	% 49	\$ 492.9	% 50	-	%	\$ 2688.8	% 32	
FTA - OTHER							0.00.0	,-	007,10	,,,	551.5	32	141.0	~	452.5		11.9	5			
ISTEA-FED SURFACE TRANSIT PROGRAM)									52.1	3	69.1	5	40.0	8	25.0	3	1 ·		2 <b>70</b> .2	3	
FED-ISTEA STP/CMAQ (REGIONAL)		ļ							2.5	0	39.9	3	40.4	8	86.1	9	6.1	2	88.9	1	
FTA-SECTION 9		i					90.6	6						i					90.6	1	
STATE			337.8	34	106.4	15	210.3	15	133.0	9	45.9	4			15.0	2	33.6	13	882.0	10	
STATE TSM MATCH											3.2	o	7.2	1	11.1	1			,		
SB 1995 TRUST FUND											75.0	6							75.0	1	
PROPOSITION A	877.2	100			205.1	29	179.5	12	440.3	29									1702.1	20	
PROP A/C (TRANSIT ENHANCEMENT)					!				62.7	4									62.7	1	
PROPOSITION C			659.9	66	400.3	56					192.4	15	151.6	31	349.1	36	122.1	47	1875.3	22	
PROP C (AMERICAN DISABILIT ACT)					5.99	1			5.9	0									. 11.9	0	
CITY OF LOS ANGELES							34.0	2	96.0	6	190.7	15	9.0	2	0.3	0			330.0	4	
BENEFIT ASSESSMENT							130.3	9	58.0	4	13.5	1							201.8	2	
COST OVERRUN ACCOUNT		·					200.1	14											200.1	2	
	077.0	45-	207.7	45-	747.5	105	4.480.1	475	4545-	105											
TOTAL	877.2	100	997.7	100	717.8	100	1450.1	100	_ 1517.5	100	1310.7	100	490.7	100	979.5	100	257.7	100	8491.4	100	

<sup>\*</sup> CONSISTS OF LIGHT RAIL LINE (\$847) AND MC-5 WORK (\$30).
\*\* LRT PORTION INCLUDED IN BLUE LINE FORECAST.
Note: Data reflects current budget.

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#### **CHANGE BASIS ANALYSIS**

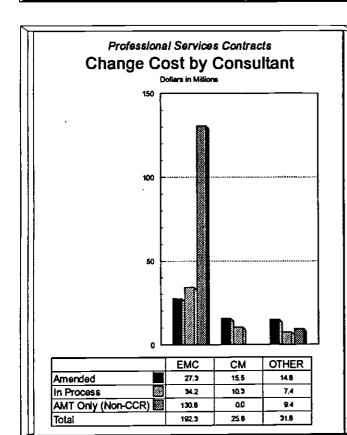
A new basis code has been added to the Change Control System (CCS) for Consultant Change Requests. Basis code series 1600 has been established to document Planned additional scope changes to Professional Services contracts. These are changes to the value of the contract, un-related to CCR.

Record CCR's have been logged in the system to allow for tracking and reporting of these non-CCR amendments. CCS will be able to report on total contract value rather than the change value only.

#### CHANGE COST LEVEL ANALYSIS

Approximately 91% of the total change cost falls within the MTA Board authority level which equates to 20% of the overall change volume.

81% of the change volume falls within the Project Manager's approval authority equating to 9% of the overall change value.



## PROFESSIONAL SERVICES CHANGE ANALYSIS

17 Advanced Work Authorization's (AWA) were assigned this period with a total not-to-exceed obligation of \$1.9M. There were no contract amendments approved this period.

MTA plans to bring the following Amendments (AMT) before the MTA Board at the July 26, 1995 MTA Board Meeting:

EMC Amendment 6 to Contract Work Order (CWO) #004 and Amendment 7 to CWO #003

Obrien-Krietzberg (OKA) Amendment 9

Parsons-Dillingham (PD) Amendment 19

DATA SOURCE:

CCS: CCR REPORTS

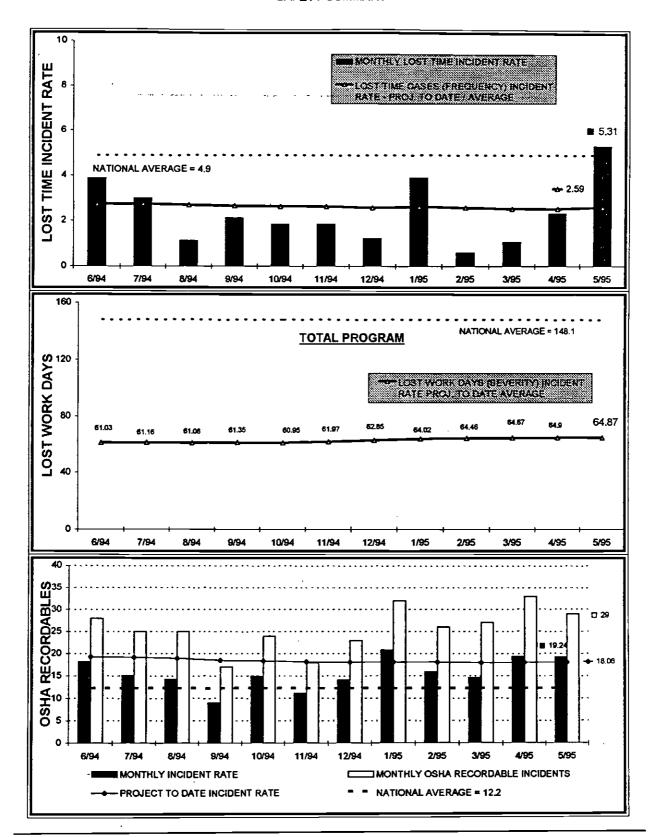
Figure 6 - Cost Performance Relative to Corporate Goals
IN THOUSANDS

	METRO BLUE LINE METRO PA			METRO GI	REEN LINE	METRO R	ED LINE	METRO	RED LINE	METRO	RED LINE	METRO	RED LINE	METRO	REDLINE	VEHICLE A	COUISITIO	TOT	AL -	CORP	
	2011488	DEDOCATE		ELINE	0014494	DED A FRIE	SEGME		SEGM			NT 3 NH	SEGME			NT 3 ES	PROJ		PROGR		GOAL
	DULLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLAR5	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	
CONSTRUCTION	657,487	74.95%	585,747	58.71%	491,223	68.43%	812,270	56.02%	1,048,938	69.11%	816,545	61.70%	333,208	67.91%	638,957	65.23%	229,830	89.22%	5,614,204	65.19%	
REAL ESTATE	55,592	B.34%	77,721	7.79%	26,047	3.63%	140,000	9.66%	88,982	5.86%	86,418	6.53%	48,543	9.89%	26,570	2.71%	٥	0.00%	549,874	6.39%	
PROFESSIONAL SERVICES:																					
ENGINEERING/DES	69,587	7.93%	93,716	9.39%	63,296	11.60%	221,659	15.29%	154,870	10.20%	86,289	6.52%	36,706	7,48%	94,591	9.66%	1,700	0.66%	842,414	9.78%	
CONSTR MGMT.	91,642	10.45%	76,895	7,71%	75,611	10.53%	116,429	8,03%	140,657	9.27%	103,207	7.80%	35,000	7.13%	79,826	8.15%	0	0.00%	719,267	8.35%	
STAFF	17,855	2.01%	51,862	5.20%	24,179	3,37%	95,558	6.59%	53,221	3.51%	57,676	4,36%	19,627	4,00%	36,588	3.73%	5,335	2,07%	361,702	4.20%	4%
OTHER	14,222	1,62%	37,819	3,79%	17,328	2.41%	32,671	2.25%	19,848	1.31%	36,459	2.76%	11,647	2.37%	16,630	1.70%	12,469	4.84%	199,094	2.31%	
SUBTOTAL	193,106	22.01%	260,292	26.09%	200,414	27.92%	486,317	32,16%	368,598	24.28%	283,631	21.43%	102,980	20.99%	227,635	23.24%	19,505	7.57%	2,122,478	24.65%	20%
CONTINGENCY	963	0.11%	74,000	7.42%	1,381	0.19%	31,432	2.17%	11,636	0.77%	136,774	10.34%	5,932	1.21%	85,439	8.82%	8,262	3.21%	356,821	4,14%	
PROJECT REVENUE	(29,877)	-3.41%	(34)	-0.00%	(1,263)	-0.18%		0,00%	(300)	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	(31,473)	-0.37%	
GRANO TOTAL	877,271	100.00%	997,726	100.00%	717,802	100,00%	1,450,019	100,00%	1,517,854	100.02%	1,323,370	100.00%	490,663	100.00%	979,601	100.00%	257,597	100.00%	8,611,905	100,00%	

NOTE: Data reflects Current Forecast.

TOTAL METRO SAFETY SUMMARY

Prepared by: MASS TRANSIT GROUP



## METRO PASADENA BLUE LINE

EXECUTIVE SUMMARY

#### **EXECUTIVE SUMMARY**

EMC's Amendment 4 was presented to the MTA Construction Committee on June 15, 1995 and was not approved for the full amount. In view of the Committee's action, EMC's letter dated June 15, 1995 informed MTA that EMC will suspend all Final Design work starting June 16, 1995 because of unavailability of funds. The MTA Board also deferred action on the Amendment until July 1995 and referred it to the Cost Containment, Contracts and Efficiencies Committee. All Final Design work was effectively suspended as of June 30, 1995.

Because of the suspension of design work, minimal progress was realized for the month of June 1995. The Final Design percent complete for the month of June is 78.9%, up from 78.8% reported last month. Discussions continue on finalizing the scope of work for a new Sierra Madre Villa Station parking lot location at the Johnson & Johnson site, and the 210 Freeway Line Segment design. Discussions are also in progress by MTA for a prospective joint development at the SMV site which may affect pedestrian access to the station platform. Camera Ready documents were submitted for Contract C6490, Union Station. An invitation for bid was received on June 15, 1995. Preparation of updated bid documents are underway for Contract C6420, Los Angeles River to Arroyo Seco. A new date for advertisement of bid documents for this contract has yet to be determined.

#### COST STATUS (in millions)

Current Adopted Budget \$841

Current Forecast \$998

#### **SCHEDULE STATUS**

Current Revised Revenue Operations Date: June 2002

Design Progress

Final Design - Actual 78.9% Overall Design - Actual 82.7%

Construction Progress

Los Angeles River Bridge - Actual 95.6% Arroyo Seco Bridge - Actual 32.5% Overall Construction - Actual 2.0%

#### **REAL ESTATE STATUS**

MONTH	NUMBER OF PARCELS	PARCELS AVAILABLE	PARCELS NOT	PARCELS NOT	elektrologiak elektrika elektrika elektrika elektrika elektrika elektrika elektrika elektrika elektrika elektri
			AVAILABLE (ON SCHEDULE)	NUMBER	AVG DAYS BEHIND
THIS MONTH	163	1B	141	4	90
LAST MONTH	163	17	142	4	80

#### **AREAS OF CONCERN**

#### Yard Site Location

Concern: A temporary maintenance facility at the Midway Yard has been formally

adopted as part of the baseline scope of work. In making the yard a more permanent facility per MTA Operations' requirements, the project has been experiencing cost growth due to the uncertainty of constructing

the Glendale-Burbank LRT Line.

Action: MTA Construction Division and EMC have identified the budget issues

related to the maintenance facility. Value engineering was initiated to

reduce cost growth.

Status: Final design is currently on hold. Final Design will resume upon

negotiation of the recovery plan and further direction from the MTA Board on cost containment and acceptance of the EMC amendment covering design cost increases. Evaluation by MTA is continuing on providing wheel truing and heavy repair at either Long Beach Yard or Metrolink's Taylor Yard facilities. Other heavy repair alternatives have also been considered as part of an independent value engineering

process.

#### Ratkovich Interface at LAUPT

Concern: Location of the LRT terminus at Union Station and aerial guideway

alignment on Vignes Street involves interface with the Ratkovich Villanueva Partnership. The alignment crosses Ratkovich's interests at

two locations along the Terminal Annex property.

Action: Negotiation of the easement is required by MTA with Ratkovich.

Completion of Chinatown Aerial Structure Camera Ready design submittal is on hold pending approval of the EMC CCR 188 by the MTA

Board.

#### AREAS OF CONCERN (cont.)

#### Ratkovich Interface at LAUPT (cont.)

Status:

Meeting was held with Ratkovich and LADOT on November 30, 1994 regarding the street improvements on Vignes Street. A tentative agreement was reached with all parties. Final concept drawings were issued by the MTA. MTA is waiting for written concurrence by LADOT and Ratkovich. Adoption of value engineering/cost containment proposals by the MTA Board may affect the project alignment and scope of work.

#### Real Estate

Concern:

The real estate acquisition effort is behind schedule. In-Progress and Final designs include additional parcels to be certified and acquired.

Action:

The Pasadena Project team has facilitated bi-weekly parcel acquisition schedule meetings with LACMTA and EMC real estate personnel.

Status:

Appraisals are continuing. A priority list for real estate acquisitions has been prepared for the project to reflect the approved fiscal year budget.

The delay in real estate acquisitions is being evaluated on line segment Contract C6420. A new date for advertisement of bid documents has yet to be determined.

#### **EMC** Design Cost Amendment

Concern:

The final design costs are expected to exceed the approved Contract

Work Order 21 budget by approximately \$14 million.

Action:

MTA project staff members continue to negotiate the reported scope

changes.

#### AREAS OF CONCERN (cont.)

#### **EMC** Design Cost Amendment (cont.)

Status:

Staff continues to negotiate outstanding CCRs. EMC's Amendment 4 was presented to the MTA Construction Committee on June 15, 1995 and was not approved for the full amount. In view of the Committee's action, EMC's letter dated June 15, 1995 informed MTA that EMC will suspend all Final Design work starting June 16, 1995 because of unavailability of funds. All Final Design Work was effectively suspended as of June 30, 1995.

The MTA Board deferred action on the Amendment until July 1995. A revised Amendment 4 to include all CCRB approved CCR's, based on recommendations of the Construction Committee, is being prepared to be presented to the Cost Containment, Contracts and Efficiencies Committee in July 1995.

#### **Del Mar Station**

Concerns:

The transportation center proposed by the City of Pasadena has major potential impacts on the Del Mar park-and-ride facility, final station design and line segment design for Del Mar to Memorial Park.

Action:

MTA Construction Division is continuing discussions with the City of Pasadena on interface with the station and line segment designs and transportation center. The City of Pasadena has a consultant on board to design the transportation center.

Status:

Final designs are based on the assumptions shown on the In-Progress drawings for C6500, Del Mar Station, for the transportation center. The design enhancements of the City's sponsored workshop have been estimated by MTA for design and construction cost impacts. All cost impacts identified outside of the scope of the baseline design are being assigned as City of Pasadena responsibilities. Discussions are continuing with the City.

#### AREAS OF CONCERN (cont.)

#### Sierra Madre Villa Station

Concern: Selection of a station site alternative to the original Space Bank site is

required, due to the potential existence of serious hazardous material at

that site.

Action: The MTA Board has approved the selection of the SMV station site.

MTA needs to conclude the offer to purchase the Johnson & Johnson

station site.

Status: Condemnation proceedings are continuing. Monies have been paid into

escrow. MTA continues to discuss joint development options with the Best Buy Company. The final scope of work for the SMV Station is

dependent on completion of negotiations with Best Buy.

#### Marmion Way Corridor

Concern: Results of the evaluation of the design of Marmion Way between Avenue

50 and Avenue 60 as a betterment have led to increased project design

and construction costs.

Action: Agreement is required from City of Los Angeles for betterment issues.

Status: MTA Construction Division is considering to reopen and renegotiate the

master cooperative agreements with the City of Los Angeles. Arbitration

remains an option.

#### AREAS OF CONCERN (cont.)

#### Union Station Platform #1

Concern: Engineer's Estimate and Addenda preparation to support bid opening date

of August 23, 1995 for Contract C6490.

Action: The MTA needs to authorize expenditure in the absence of the Board

approved Design Support During Construction PIP.

Status: EMC prepared a draft PIP and submitted to the MTA for review.

Comments were received and scope and budget negotiations are underway. The PIP is scheduled to be presented to the MTA Board in

September 1995.

#### Chinatown Station

Concern: Selection of Chinatown pedestrian linkage alternative will impact the

Chinatown Aerial Structure and stations designs, and may require

additional property acquisition.

Action: MTA Construction Division is working closely with Central Area Team on

defining suitable pedestrian access from Broadway Street to the

Chinatown Station platform.

Status: Follow-up community meeting was held April 19 with a consensus

reached by Chinatown representatives on April 20 to support the elevated pedestrian alternative along the north side of College Street. Further progress on design is pending the approval of the EMC's CCR 188 by MTA Board and adoption of any value engineering/cost

containment proposals.

#### AREAS OF CONCERN (cont.)

#### 210 Freeway Stations

Concern: Noise impacts at Lake, Allen and Sierra Madre Villa Stations from

adjacent freeway traffic.

Action: Review of noise criteria and conformance to EIR.

Status: EMC has completed noise readings at the freeway station sites and has

reported that no specific mitigation was used by other transit properties with freeway stations. Lake Avenue Station was recommended for deletion by the Pasadena Peer Group. Further action is pending for adoption of any value engineering/cost containment proposals by the MTA Board which will affect the upcoming start of construction on Contract C6435. Lake Avenue overpass bridge widening and retrofit is

included in C6435.

#### **KEY ACTIVITIES - ACCOMPLISHED IN JUNE**

- MTA Construction Division and EMC continued negotiations on outstanding Consultant Change Requests for design changes. An EMC amendment was discussed at the June MTA Board with Board action deferred until July.
- MTA continued to evaluate 1999 ROD based on MTA Board motion.
- Contract C6410, L.A. River Bridge: Work continues on schedule. Ductbank installation completed on south bridge approach. Construction work of final segmental bridge spans completed. Preparation of progress for final closure pour. Removal of bridge falsework is 100% complete.
- Contract C6420, LARB to Arroyo Seco Line Segment: Continued coordination of action items preceding advertisement. Continued with estimating quantities and constructability review of contract documents.
- Contract C6430, Arroyo Seco Bridge Reconstruction: Contractor has completed retaining wall pile foundations. Construction of retaining walls continue for bridge abutments and bridge towers. Work continued on drilled pile foundations at bridge tower locations. Work continues on stripping, painting and strengthening the bridge towers in the park laydown area.
- Contract C6435, Reconstruction and Retrofit of Steel and Concrete Bridges: Award of contract approved at the May 24 MTA Board meeting. Bid protest was resolved.
- Final design continued on C6450, Del Mar to Memorial Park, below-grade line segments. Pre-Final submittal is pending approval of EMC's Amendment 4 by the MTA Board and resolution of Cost Containment/Value Engineering issues.
- Contract C6490, Union Station Platform #1: Submitted Camera Ready bid documents and issued Invitation for Bid.
- Final Design activities were effectively suspended as of June 30, 1995.

#### **KEY ACTIVITIES - PLANNED FOR JULY**

- Continue to negotiate remaining EMC CWO #21 Consultant Change Requests received from EMC and Section Designers.
- Contract C6410, LA River Bridge: Begin contract closeout procedures.
   Complete closure pours in segmental bridge. Continue on miscellaneous work items. Identify punch list items.
- Contract C6430, Arroyo Seco Bridge Reconstruction: Continue retaining wall construction on east side of 110 freeway. Complete remaining CIDH pile foundations for bridge towers. Complete stripping and painting of towers and bents.
- Contract C6435, Reconstruction and Retrofit of Steel and Concrete Bridges: Issue Notice to Proceed.
- Start work on addendum for Contract C6490, Union Station and prepare Engineer's Estimate following receipt of MTA's work authorization.
- Contract P2100, Precast Concrete Ties: Process change requests from contractor and Authority.

Project: R05

Page -

## MTA CONSTRUCTION DIVISION PASADENA BLUE LINE Project Cost by Element

Page: 1
Report Date: 07-Jul-95
Status Date: 30-Jun-95

(\$ x 000's)

		Bu	dgat	Commi	tments	Incurre	ed Cost	Ехре	nditurés	Current		
	D escription .	Original (1)	Current (2)	Period (3)	To Date (4)	Period (5)	To Date (6)	Period (7)	To Date (8)	Forecast (9)	Variance (9-2)	
Т	Construction	515,171	475,116	969	60,169	3,228	22,916	1,648	18,647	585,747	110,631	
\$	Professional Services	183,206	199,213	260	90,026	. 1,027	78,682	1,027	78,682	245,000	45,787	
R	Real Estate	68,100	72,308	, 5	18,172	49	17,781	49	17,781	77,721	5,414	
F	Utility/Agency Force Accounts	8,442	21,997	(1,031)	3,930	2	2,472	2	2,472	12,925	(9,072)	
D	Special Programs	3,377	4,402	0	390	0	285	0	285	2,367	(2,035)	
С	Conlingency .	62,705	67,964	0	0	٥	0	0	. 0	74,000	6,036	
A	Project Revenue	0	0	0	(18)	0	(18)	o	(18)	(34)	(34)	
	Project Grand Total ;	841,000	841,000	202	172,669	4,305	122,117	2,723	117,848	997,726	156,726	

## FINANCIAL DETAIL

14-Jul-95

METRO RAIL PASADENA LINE PROJECT (IN THOUSANDS OF DOLLARS)

JUNE 95

STATUS OF FUNDS BY SOURCE

•	TOTAL FUNDS	TOTAL	EXPENDI	URES	BILLED TO SOURCE			
SOURCE	ANTICIPATED	FUNDS AVAILABLE	<b>\$</b>	%	\$	%	<b>\$</b>	% 
STATE PROP 108	\$20,000	\$20,000	\$20,000	100%	\$20,000	100%	\$20,000	100%
STATE PROP 116	\$40,000	<b>\$9</b> `	\$0	0%	\$0	0%	\$0	0%
STATE HIGHWAY ACCOUNT	\$277,800	\$0	\$2,917	1%	\$2,917	1%	\$0	0%
PROP C (HIGHWAY 25%)	\$189,568	\$115,800	\$109,752	58%	\$54,931	29%	\$54,931	29%
PROP C (40% DISC.)	\$470,358	\$40,000	\$40,000	9%	\$40,000	9%	\$40,000	9%
TOTAL	\$997,726	\$175,800	<b>\$172,669</b>	17%	\$117,848	12%	\$114,931	12%

NOTES: EXPENDITURES ARE THROUGH MAY 1995.

Page -

## FINANCIAL DETAIL METRO RAIL PASADENA LINE PROJECT

**FUNDS BY SOURCE ANALYSIS** 

#### STATUS OF FUNDS ANTICIPATED

STATE HIGHWAY ACCOUNT:

AT ITS MAY 95 MEETING, THE CTC AGREED TO ALLOCATE \$28M FROM THE STATE HIGHWAY ACCOUNT FUND.

HOWEVER, DUE TO STATE FUNDING SHORTFALL, CALTRANS HAS INDICATED WE MAY NOT RECEIVE FULL

CASH REIMBURSEMENT DURING THIS FISCAL YEAR.

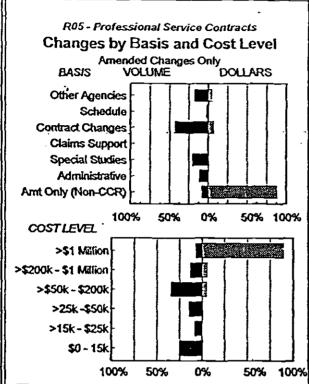
CALTRANS IS DEVELOPING THE FUND TRANSFER AGREEMENT NOW TO PROVIDE US WITH A SCHEDULE

FOR REIMBURSEMENT.

STATE PROP 116:

AT ITS JUNE 95 MEETING, THE CTC AGREED TO ALLOCATE \$40M OF PROP 116 FUNDS. MTA IS CURRENTLY NEGOTIATING THE FUND TRANSFER AGREEMENT.

#### **FINANCIAL STATUS**



#### **CHANGE BASIS ANALYSIS**

Pasadena Consultant Change Request's (CCR) are primarily due to changes during the design phase of non-awarded construction contracts.

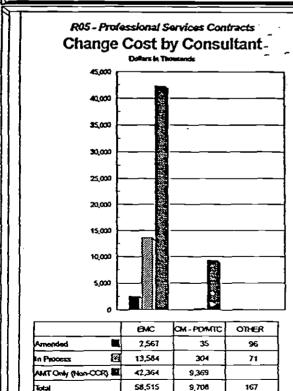
Starting in June 1995, MTA is tracking Non-CCR
Amendments to Professional Services Contracts. Record
CCR's have been logged into the CCS System
documenting any Non-CCR, MTA Board approved
amendments.

Planned Additional Scope Record CCR's account for 8% of the total CCR volume and 87% of the total CCR value.

#### CHANGE COST LEVEL ANALYSIS

94.5% of the total change cost falls within the MTA Board authority level which equates to 18% of the overall change volume.

82% of the change volume falls within the Project Managers approval authority which equates to 5.5% of the overall change value.



## PROFESSIONAL SERVICES CHANGE ANALYSIS

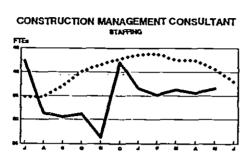
2 Advanced Work Authorization's (AWA) were assigned this period with a not-to-exceed obligation of \$181k. There were no contract amendments approved this period.

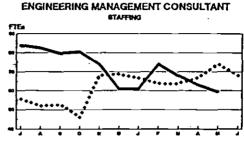
MTA Contracts plans to present amendment 4 to EMC Contract Work Order #0021 at the August 23, 1995 MTA Board meeting.

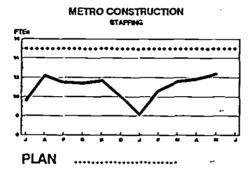
DATA SOURCE:

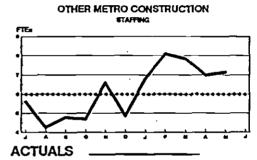
CCS: CCR REPORTS

## PASADENA BLUE LINE STAFFING PLAN VS. ACTUALS









## STAFFING ANALYSIS

## **Construction Management Consultant**

The actuals are lower than planned due to funding constraints and resulting changes to the project schedule.

### **Engineering Management Consultant**

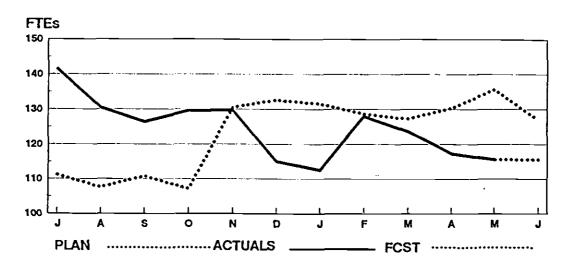
The actuals are lower than planned due to the system and station design contracts being placed on hold.

## **Metropolitan Transportation Authority**

The actuals are lower than planned due to delays in project implementation because of funding constraints and value engineering studies.

## **PASADENA BLUE LINE**

**TOTAL STAFFING** 



## STAFFING ANALYSIS

The total staffing actuals are lower than planned due to funding constraints and value engineering studies.

Note: Total Staffing Chart includes EMC, CM and MTA staffing only.

COSTS SHOWN ARE FOR PROJECT ROS ONLY. INLLOCATED!

## RO5 · Pasadena Blue Line PROJECT CHANGE VALUES ONLY

## PROJECT CHANGE ACTIVITY SUMMARY: CHANGES V. BOARD APPROVED CHANGE CONTINGENCY

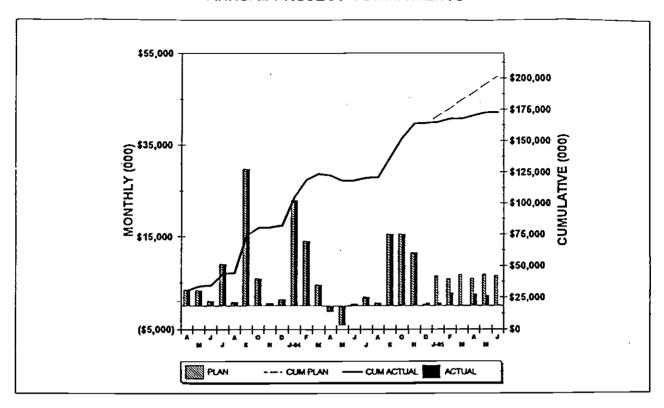
MTA APP	PROVED CT AWARD		CONTINGENCY			C1-	APPROVED IANGES TO DATE				REMAINING AFE	1	RÓJ	ECTEO		
CONTRA	CT VALUE	ALLOWED	CURRENT ALLOWED	TOTAL APPROVEO AFE (ROS)	1	APPROVED CHANGES	CURRENT CONTRACT VALUE	INCR	X CTG USEQ	COMP- LETE	CURRENT UNUSED ALLOWANCE	PENDING			% AFE USEO	% INCR
A.	B.	1 C.	0.	E.(8+0)	Ţ	F.(1)	G.(B+F)	H.[2]	] [.	J.	K.(0-F)	L.(3)		M.[K-L]	N,	<u>о,</u>
8611	14,448,450	10%	1444,848	14,889,995	1	10	14,445,450	0.0%	0%	0%	8444,548	1 (13)	13,085	1787.610	-77%	17.7
C6410	#12,758,037	10%	11,276,804	#14,033,841	Т	1314,856	113,072,896	2.6 %	25%	90%	#960,946	13	74,82,8	0800,121	54%	5.4
C6430	#10,359,464	10%	\$1,035,946	#11,396,410	Т	#214,009	10,873,473	2.1%	21%	28%	0021,937	1 143	3,253	1388,684	62%	5.2
C6435	10	***%	10	10	Τ	10	, 10	***,*%	****	0%	1 10	Ī	#0	10	••••	0.0
C6525		1 * * * %	10		1	10	10	•••	****%	%	1 10	Ī	10	10	****	• • • • • •
C7300	10	111%	10	10	1	10	; +0	***,**	****	0%	1 10	ī	10	10	****	<del>, ,,,</del> ,,
EN028	10	1 ****	10	10	1	10	<b>#</b> 0	***,*%	****	0%	1 10	1	10	. 10	*****	
ENOST	- 10	1 ***%	10	10	1	. 10	10	****	****	0%	10	T	10	10		<del>, ,,,</del> ,,,
P0050		1 *** %	10		1	#0	10	*;***	****	%	1 10	1	10	10	****	777,19
P2100	12,469,300	10%	1246,930	02,718,230	Т	10	12,469,300	0.0%	0%	0%	1246,930	[ [01	0,000)	1288,130	-4%	• • • •
PM421	10	1 ***%	10	10	ı	10	10	***,**	****	0%	1 10	1	10	10	****	0.01
PM801	10	1 ****	10	10	١	10	10	******	***%	0%	1 10	1	10	10	****	<del></del>
	130,032,281	J 10%	13,003,228	#23,038,478	ī	1828,807	130,561,116	1.8%	18%	2%	1 12,474,388		5,013	\$2,019,348	33%	

U - AFE loavenue required

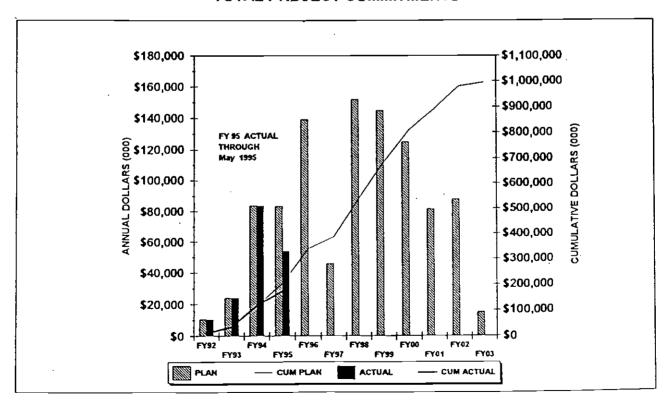
Page

I - AFE increase MAY be required to cover pending changes.

## **ANNUAL PROJECT COMMITMENTS**

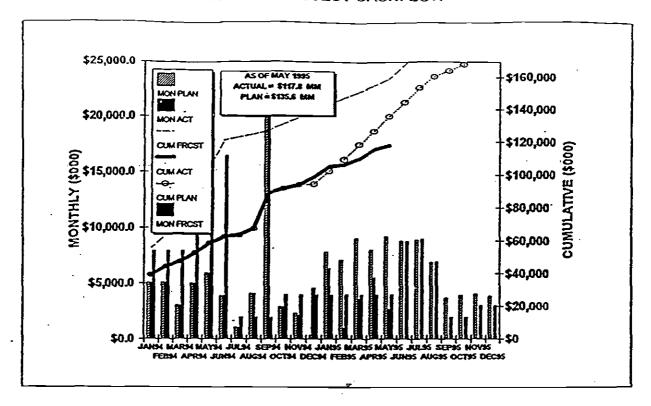


#### TOTAL PROJECT COMMITMENTS

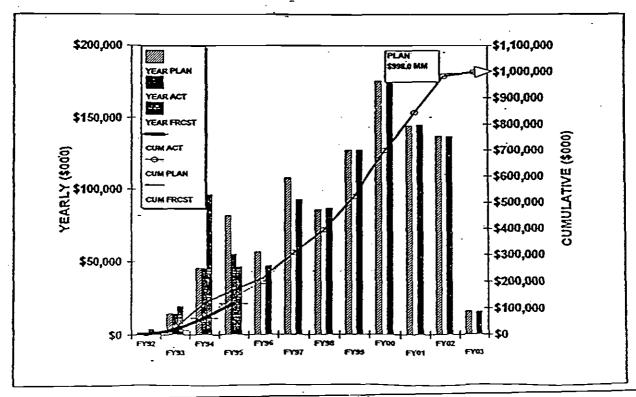


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## ANNUAL PROJECT CASHFLOW

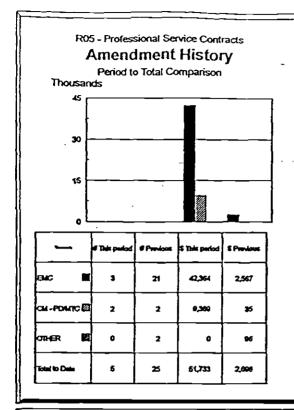


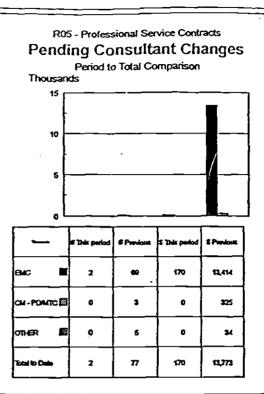
## TOTAL PROJECT CASH FLOW



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#### **COST STATUS**





## **CONSULTANT CHANGE REQUEST ANALYSIS**

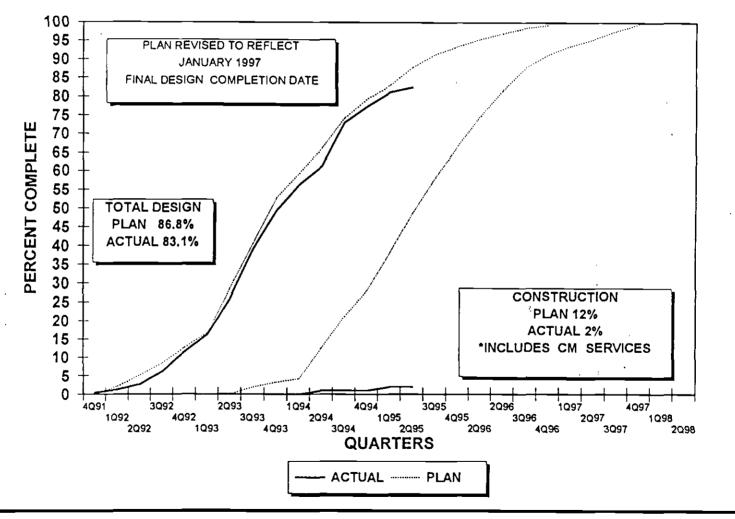
Amendments approved this period are record only CCR's to document Planned Additional Scope items previously amended to Professional Services Contracts.

Cost recovery on changes due to outside agencies is currently under review. A cost recovery estimate will be reported on when available.

2 new CCR's were submitted this period both are within the Project Manager's authority level.

2 CCR's were rejected/cancelled by the MTA this period with an approximate rough value of \$181K.

## PASADENA BLUE LINE - PROGRESS SUMMARY



Page -

#### CRITICAL PATH DIAGRAM

EMC's Final Design activities were effectively suspended as of June 30, 1995 in view of the MTA Board actions and directions given during their June 1995 meeting.

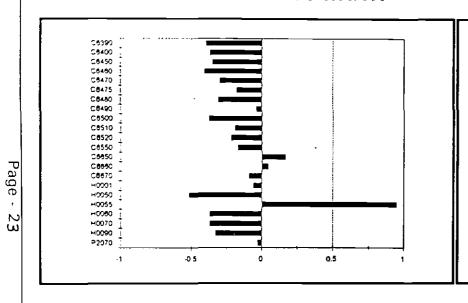
The Project critical path goes through C6460, Memorial Park to Sierra Madre Villa Line Segment; C6550, Trackwork Installation; H0090, Traction Electrification System Overhead Contact System; H0060, Train Control; Integrated Systems; Pre-revenue Operations and ROD.

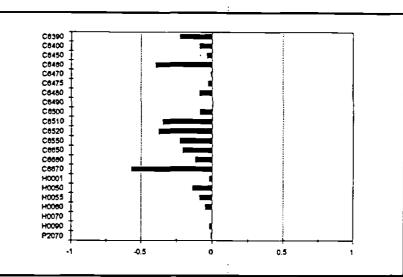
# Pasadena Blue Line

Final Design Work Only

# **Cost Performance Index**

# Schedule Performance Index





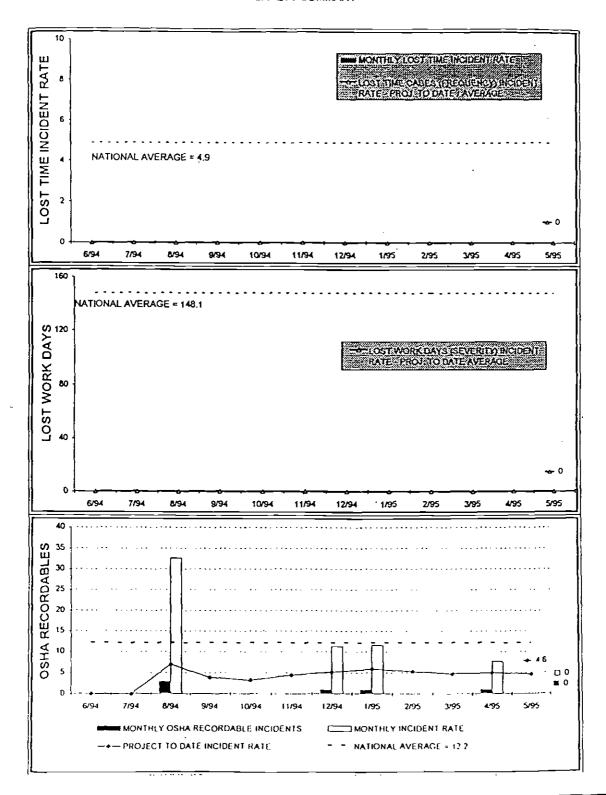
CPI Legend
Under 100% = Over Budget
Over 100% = Under Budget

SPI Legend
Under 100% = Behind Schedule
Over 100% = Ahead of Schedule

Systems design work is on hold with anticipation to resume in early 1998.

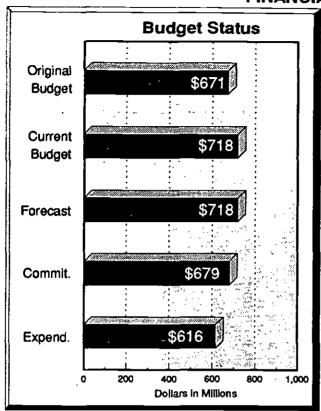
### METRO PASADENA BLUE LINE SAFETY SUMMARY

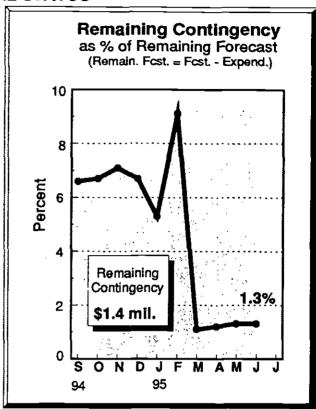
Prepared by.

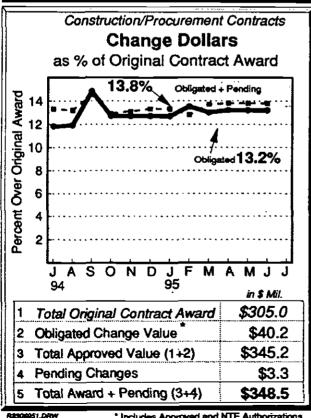


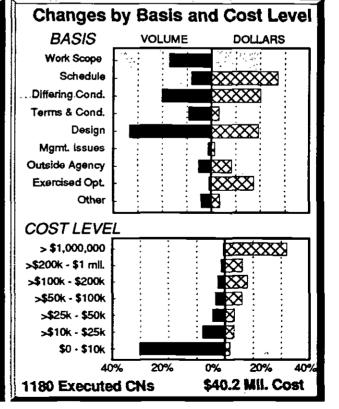
# METRO GREEN LINE

**EXECUTIVE SUMMARY** 









Includes Approved and NTE Authorizations

# SCHEDULE AND SAFETY STATUS

# **MTA Critical Activities** August 1995

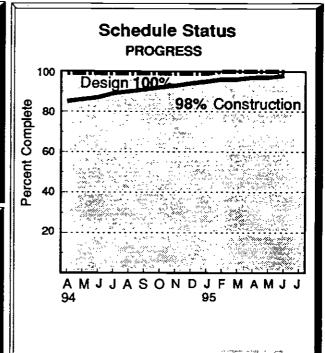
✓ AWARD APPROVAL No contract awards this month,

# **Employment Status**

Months of Employment Provided

17,835

Based on an average 29 job-months provided per million expended



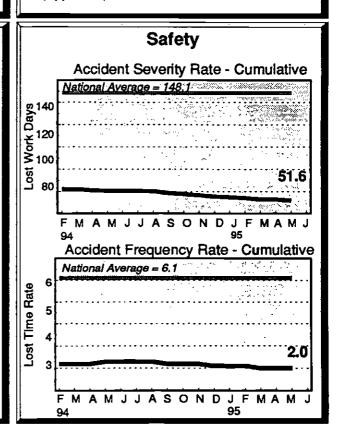
Revenue Operation Date: May 1995 (Approved)

Schedule Status CRITICAL PATH - 1 Year Outlook

The following contracts are on the Critical Path through July 95:

CT044-12 Construction Elevators/Escalators

Systems Integrated Test Norwalk-Marine ABS



R2306052.DRW

# **EXECUTIVE SUMMARY**

COST STATUS (in millions)

• Current Budget \$717.8

• Current Forecast \$717.8

# **SCHEDULE STATUS**

Current Approved Revenue Operations Date
 May 1995

Design Progress - Actual 100%

Construction Progress - Actual 98%

# **REAL ESTATE STATUS**

монтн	NUMBER OF PARCELS	PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)		OT AVAILABLE SCHEDULE) AVG DAYS BEHIND
THIS MONTH	39	39	0	0	0
LAST MONTH	39	39	0	0	0

# **AREAS OF CONCERN**

# **OPENED**

Concern: Construction items not completed by Caltrans Phase I/II contractors could

delay state certification of elevators/escalators on Century Freeway Stations.

Action: Identify items that need to be corrected and/or completed and coordinate

with MTA, Caltrans and OK to identify the most expedient method to

complete necessary items.

Status: Meeting is scheduled between EMC, Caltrans, Montgomery, OK and MTA

to identify outstanding items. C0090 has begun working on these outstanding items at all Caltrans Stations. Expected completion by mid July.

which will support current forecast ROD of August 12, 1995.

# **KEY ACTIVITIES -JUNE 1995**

- C0095 (Fencing Wayside Intrusion Detection System) completed SFATs
- Caltrans (CT44-12 Elevators/Escalators) began Pre-Testing of Elevators for State Certification

# **KEY ACTIVITIES - PLANNED FOR JULY 1995**

- C0095 (Fencing Wayside Intrusion Detection System) complete all contract work
- H0889 (Light Rail Radios) install upgraded repeaters at Mt. Lukens
- H1100 (Automatic Train Control) complete Static testing at Hawthorne Yard
- Start-Up complete SCADA/Fare Collection Integrated Test
- Start-Up commence EMP/Elevator Integrated Test
- Start-Up commence EMP/Escalator Integrated Test

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### MTA CONSTRUCTION DIVISION PROJECT COST REPORT COST BY ELEMENT

Project: R23 METRO GREEN LINE

Page 4

Period: May 26, 1995 to Jun 30, 1995

Run Date: Jul 6, 1995

Units: \$ in Thousands (Truncated)

	ORIGINAL BUDGET	CURRENT	BUDGET	COMPLET	MENTS	INCUI	RED	EXPEN	SITURES	CURRENT	FORECAST	FORECAST VARIANCE
ELEMENT / OESCRIPTION		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	
T CONSTRUCTION S PROFESSIONAL SERVICES R REAL ESTATE F UTILITY/AGENCY FORCE ACCOUNTS D SPECIAL PROGRAMS C PROJECT RESERVE A PROJECT REVENUE	470,191 108,562 36,927 7,656 4,675 59,613 -16,626	0 0	485,898 180,477 28,522 10,500 4,790 14,131 -6,518	-3 0 0	447,848 192,083 24,992 111,574 3,713 0	4,506 1,485 -3 34 51 0	413,328 18T,160 24,992 9,796 2,685	2,940 1,511 -3 34 51	181,240 24,992 9,796 2,685	0	196,590 26,047 12,043 3,824	-6,719 -6,113 -2,475 1,543 -965 -12,751 5,254
·						·						
GRAND TOTAL	671,000	0	717,802	2,432	678,949	6,074	631,358	4,534	615,626	0	717,802	٥

# FINANCIAL DETAIL

14-Jul-95

# METRO RAIL GREEN LINE PROJECT (IN THOUSANDS OF DOLLARS)

**JUNE 95** 

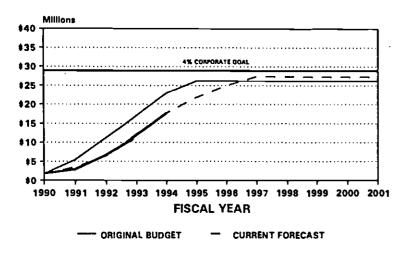
# STATUS OF FUNDS BY SOURCE

	TOTAL FUNDS	TOTAL FUNDS	COMMITMENTS		EXPENDIT	URES	BILLED TO SOURCE	
SOURCE	ANTICIPATED		<b>\$</b>	%	<b>\$</b>	%	\$	% ——
PROP A	\$205,136	\$205,136	\$205,136	100%	\$205,136	100%	\$205,136	100%
PROP C (40% ALLOCATION)	\$153,872	\$153,872	\$153,872	100%	\$153,872	100%	\$153,872	1009
PROP C (25% ALLOCATION)	\$246,400	\$185,277	\$207,652	84%	\$185,277	75%	\$185,277	759
STATE PROP 108	\$22,400	\$22,400	\$22,400	100%	\$22,400	100%	\$22,400	1009
STATE PROP 116	\$84,000	\$84,000	\$84,000	100%	\$43,841	52%	\$41,642	509
PROP C (AMERICAN DISABILITY ACT)	\$5,994	\$5,100	\$5,889	98%	\$5,100	85%	\$5,100	859
TOTAL	\$717,802	\$655,785	\$678,949	95%	\$615,626	86%	\$613,427	859

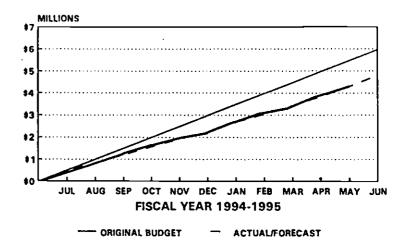
NOTE: EXPENDITURES ARE CUMULATIVE THROUGH MAY 1995.

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# **AGENCY COST GREEN LINE**



# **FISCAL 1995 AGENCY COSTS GREEN LINE**



# **PROJECT AGENCY COSTS**

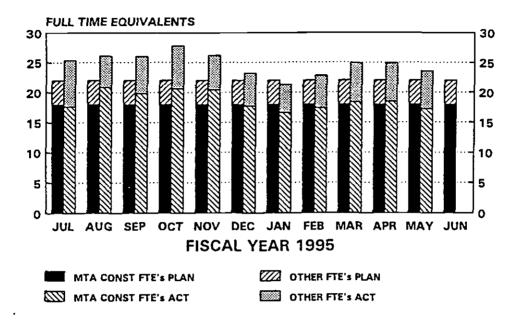
GREEN LINE (\$000)

TOTAL PROJECT BUDGET	\$717,802
ORIGINAL BUDGET	\$26,189
BUDGET % OF TOTAL PROJECT	3.6%
CURRENT FORECAST	\$27,407
FORECAST % OF TOTAL PROJECT	3.8%
ACTUALS THROUGH FY 94	\$17,711

# **FISCAL YEAR 1995 AGENCY COSTS** GREEN LINE (\$000)

**ORIGINAL BUDGET** \$5,965 **CURRENT FORECAST** \$4,797 **BUDGET PLAN TO DATE** \$5,468 \$4,296 **ACTUAL TO DATE** 

# STAFFING PLAN VS. ACTUAL GREEN LINE



FY'95 BUOGET

# GREEN LINE STAFFING PLAN FISCAL YEAR 1995

MTA CONSTRUCTION FTE's PLAN	18
MTA CONSTRUCTION FTE's ACTUAL	18
OTHER FTE's PLAN	4
OTHER FTE's ACTUAL	6
TOTAL FTE's PLAN	22
TOTAL FTE's ACTUAL	24

# Metro Green Line CONTRACT CHANGE ACTIVITY SUMMARY: CHANGES V. BOARD APPROVED CHANGE CONTINGENCY

	PPROVED CT AWARD	c	MTA APPR HANGE CONTING		<u> </u>	APPROVED HANGES TO DAT	E		REMAINING CONTINGENCY	PRO.	IECTED	
ONTRACT	AWARO VALUE	ALLOW-	CURRENT APPROVEO CONTINGENCY	TOTAL APPROVEO AFE	APPROVEO CHANGES*	CURRENT CONTRACT VALUE	X CTG USEO	COMP- LETE	CURRENT UNUSED CONTINGENCY	OTHER LOGGED PENDING CHANGES	REMAINING CT	% CTO USED
A.	В.	C.	O. = (BxC)	E. (B+O)	F.	G = [B+F]	Н.	L	J. (D-F) 1	κ 1	L (J-K)   A	М.
C0090	\$3,739,910 <b>[</b>	13%	#472,991	<b>#4</b> ,212,901	ŧ239,623	43,979,633	61%	68%	6233,368	#186,508 <b>]</b>	\$46,860   90	90%
C0096	19.573,083	16%	11,488,617	611,061,700	11,326,845	410,899,928	89%	99%	6161,772	<b>#</b> 81,842	\$79,929   98	95%
C0100	159,828,710	15%	68,971,290	168,800,000	47,427,927	467,256,637	83%	99%	61,543,363	(490, 795)	#1,634,158   83	82%
C0101	11,279,960	63%	\$7,120,040	<b>#</b> 18,400,000	46,104,927	417,384,887	86%	100%	61,015,113	10	\$1,015,113   Bo	86%
C0110	67,321,637	26%	61,878,463	49,200,000	61,226,282	48,547,819	65 %	100%	4652,181	<b>#0</b>	4652,181   68	65%
C0170	61,130,971	10%	\$113,097 <b>\$</b>	41,244,06B	\$10,45B	61,141,429	9%	100%	6 102,639 ]	196,445	\$6,194   9:	95%
C0400	619,320,000	14%	42,735,538	622,056,638	<b> 688,077</b>	420,008,077	25%	100%	62,047,461	. #01	\$2,047,461   2t	25%
C0501	45,006,841	18%	(686,144	45,894,985	1668,466	45,876,306	98%	99%	1 419,679 ]	#17,589 <b> </b>	#2,091   10	00%
COCOO	#15,514,000 <b> </b>	39%	46,02B,000	121,542,000	44,030,154	419,544,154	67%	] 100%	61,997,846	<i>f0</i>	\$1,997,846   6	67%
C0610	10,248,912	26%	42,665,191	<b>412,814,103</b>	42,227,906	<b>412,476,818</b>	87 %	100%	4337,286	#1,900	4335,385   8	87%
E0001	44,388,095	-100%	(44,388,095)	101	60	44,388,095	0%	0%	(44,388,096)	<i>f0</i> ]	(#4,388,095)   + (	0%
HOBST	\$1,480,450	169%	1 62,497,474	43,977,924	42,347,373	43,827,823	94%	99%	4150,101	\$148,891	#1,210   10	00%
H0832	43,884,088	220%	10,668,412	#12,442,500	<b>#8,</b> 015, <b>69</b> 6	411,899,784	94%	99%	4542,716	<b>#43,810</b>	#498,905   9-	94%
H0889	43,938,759	11%	4438,876	44,377,635	<b>4307,495</b>	44,246,264	70%	93%	1131,381	#433,600	(#302,219)   16.	69%
H0900	19,948,180	10%	1994,820	610,943,000	4949,727	4 10,897,90 <u>7</u>	95%	89%	445,093	#169,762 <b> </b>	(1124,669)   11	13%
H0901	63, 298, 329	10%	4329,833	13,628,162	1127,561	43,426 <u>,</u> 890	39%	<b>  99%</b>	1 4202,272	<b>#57,611</b>	#144,662   5	56%
H1100	457,785,000	8%	44,622,800	#62,407,B00 <b>*</b>	<b>41,789,073</b>	469,67 <u>4,073</u>	39 %	] 88%	<b>  42,833,727  </b>	#117,609 <b>[</b>	. #2,716,118 4	417
H1200	<b>#18,796,123</b>	15%	42,819,418	421,616,641	61,756,352	420,662,476	62%	99%	<b>  41,063,066</b>	#190,500 T	#872,566   6	69%
H1310	61,298,500	42%	4650,604	\$1,849,004 <b>]</b>	1226,169	41,524,690	41%	66%	1 4324,314	1627,849	(4303,535)   15	55%
H1400	\$11,43B,000	10%	1 11,143,800	612,581,800	11,024,265	12,462,265	90%	99%	4119,636	<b>#632,300</b>	(4512,765)   14	45%
MC008	435,529,460	106%	437,828,528	173,357,988	40	435,529,460	0%	1 0%	1 437,828,628	<i>‡0</i> ]	¢37,828,528	03
P1800	45,678,208	<b>6%</b>	4278,910	45,857,118	[4766,149]	44,812,069	-276%	100%	1 41,045,059 ]	<b>#0</b>	#1,045,059   -27	75%
P2020	\$44,625,000	12%	[ 45,375,000]	450,000,000	4964,094	1 445,589,094	18%	74%	1 44,410,906	<i>‡0</i>	\$4,410,906   1	18%
OTAL:	4344,952,117	27%	493,311,661	4438,263,767	440,892,341	4385,844,457	44%	97%	462,419,310	\$2,715,421	#49,703,888   4	47%

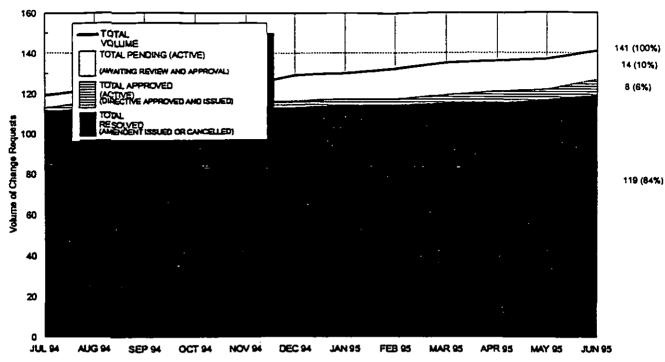
I = AFE increase may be required to cover pending changes II = AFE increase required to cover obligated changes

NOTE: OATA CUT-OFF OATE MAY VARY FROM OTHER REPORTS SHOWING APPROVED CHANGE VALUES

KATHY BLEVINS 06/30/95 08:44:13

CONTRACT COSTS SHOWN MAY INCLUDE COSTS ALLOCATED TO OTHER METRO PROJECTS.
 Potential change costs DO NOT include claims which have not been allowed merit as changes or other trend items.

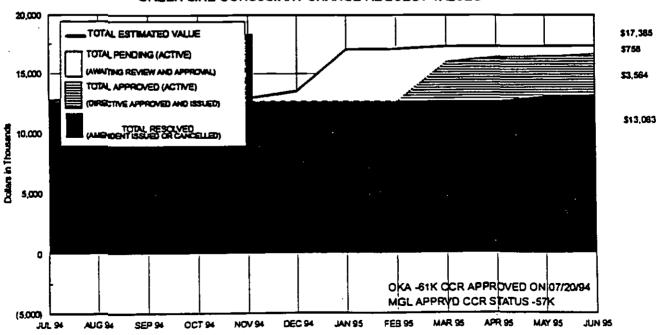




REQUESTED CHANGES SINCE 05/01/91 ONLY

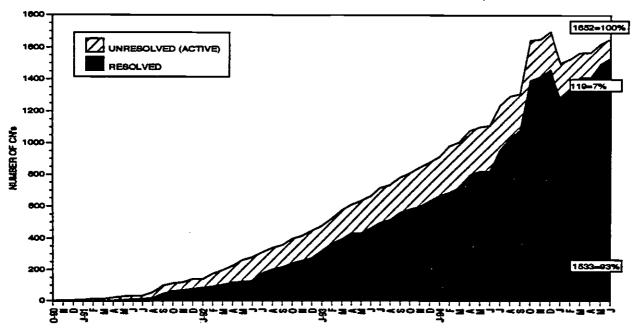
AGE OF UNRESOLVED CONSULTANT CHANGES									
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE				
AOLUME	1	1	1	19	22				
PERCENT	5%	5%	5%	85%	100%				

CONSULTANT CONTRACT CHANGE SUMMARY
GREEN LINE CONSULTANT CHANGE REQUEST VALUES



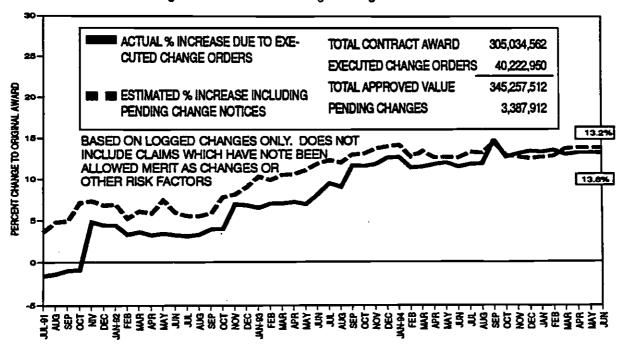
Page 9

# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Notice resolution



AGE OF UNRESOLVED CHANGES										
TIME	TIME 0-30 days 31-60 days 61-90 days 90+ days ACTIVE									
VOLUME	46	10	13	50	119					
PERCENT	39%	8%	11%	42	100%					

# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Dollars as a Percentage of Original Contract Award



# R23 - Metro Green Line

# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

# CHANGE COST LEVEL BREAKDOWN

# **EXECUTED CHANGES AS OF 06/30/95**

COST RANGE (ABSOLUTE VALUE)	# CN'S	% Total Volume	Change Cost	% Total Change Cost
> 1 MILLION	11	0.93%	\$17,677,708.46	43.95%
> 200 - 1 MILLION	31	2.63%	\$4,910,947.78	12.21%
> 100-200	57	4.83%	\$6,385,116.81	15.87%
> 50-100K	78	6.61%	\$4,755,931.60	11.82%
> 25-50K	103	8.73%	\$2,552,773.36	6.35%
10-25K	186	15.76%	\$2,539,751.30	6.31%
D-10K	714	60.51%	\$1,400,720.68	3.48%
PROJECT TOTALS:	1180	100.00%	\$40,222,949.99	100.00%

### R23 - Metro Green Line

LIST ALL CHANGES TO CONTRACTS

# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE NOTICE BASIS BREAKDOWN

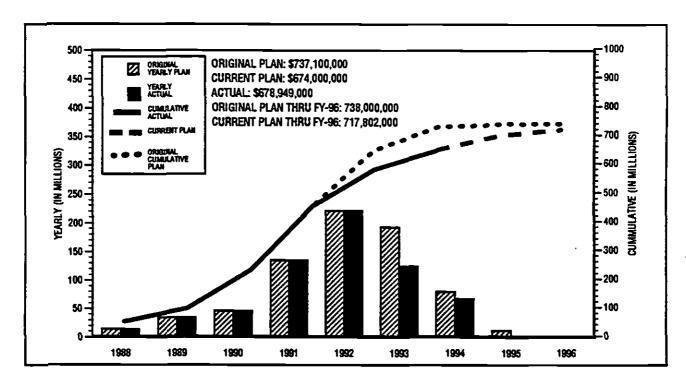
R23C0090 - R23P2020

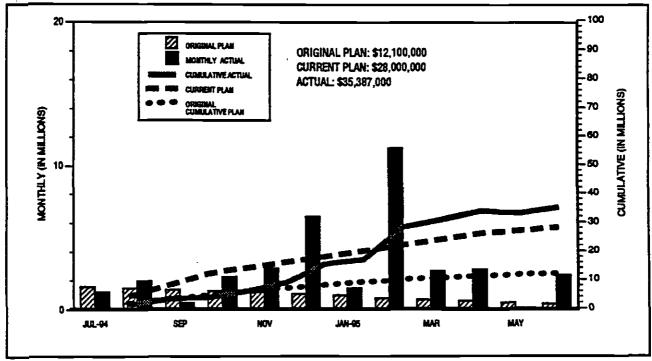
### **EXECUTED CHANGES AS OF 06/30/95**

_		# CN'S	% Total Volume	Change Cost	% Total Change Cost
WOR	K SCOPE				
110 115 120 130	EXTRA WORK ADDITIONAL/NEW WORK DELETION OF WORK	140 13 49 1	11.86% 1.10% 4.15% 0.08%	\$2,467,857.56 \$347,968.16 (\$2,731,572.26) \$0.00	6.11% 0.87% -6.79% 0.00%
SCHE	EDULE CHANGES	203	17.20%	\$74,253.47	0.18%
210 220 230	DELAY OF WORK (COMPENSABLE) ACCELERATION OF WORK MILESTONE REVISIONS (NON-COMPENSABLE)	34 18 45	2.88% 1.53% 3.81%	\$9,564,691.26 \$1,315,408.00 \$16,300.00	23.78% 3.27% 0.04%
DIFFE	RING CONDITIONS	97	8.22%	\$10,896,399.26	27.09%
310 320 330	DIFFERING SITE CONDITIONS HAZARDOUS MATERIALS SAFETY CONDITIONS	235 1 4	19.92% 0.08% 0.34%	\$10,063,521.95 (\$2,313,704.64) \$312,989.00	25,02% -5.75% 0.78%
TERM	IS AND CONDITIONS	240	20.34%	\$8,062,806.31	20.05%
410 430	TERMS AND CONDITIONS (OWNER ORIGINATED) EDITORIAL CLARIFICATIONS/DOCUMENT MAINTENANCE	48 62	4.07% 5.25%	\$1,272,694.67 \$0.00	3.16% 0.00%
DESIG	GN CHANGES	110	9.32%	\$1,272,694.67	3.16%
510 515 520 530 540	DESIGN CHANGES/ENHANCEMENTS (OWNER ORIGINATED) DESIGN CHANGES/ENHANCEMENTS (EMC ORIGINATED) DESIGN CHANGES/ENHANCEMENTS (MTA OPERATIONS OF CORRECTIONS TO PLANS AND SPECIFICATIONS VALUE ENGINEERING CHANGES (CONTRACTOR ORIGINA)	18 3 220 11	12.03% 1.53% 0.25% 18.64% 0.93%	#5,373,303.22 #683,686.39 #0.00 #2,606.427.13 (#843,084.76)	13.36% 1.45% 0.00% 6.48% -2.10%
MANA	AGEMENT ISSUES	394	33.39%	\$7,720,311.98	19.19%
610 620	DISRUPTION/INEFFICIENCY (CLAIMS ONLY) COMPREHENSIVE CLAIMS	2 13 15	0.17% 1.10% 	\$2,376.00 \$672,374.00	0.01% 1.42% 1.43%
OUTS	SIDE AGENCY REQUESTS	15	1.2770	\$574,749.00	1.43 70
720 730	DESIGN CHANGES (OUTSIDE AGENCY ORIGINATED) TERMS AND CONDITIONS (OUTSIDE AGENCY ORIGINAT	52 9	4.41% 0.76%	\$3,272,580.13 \$44,119.62	8.14% 0.11%
CONT	TRACT OPTIONS	61	<b>5.17%</b> ,	\$3,316,699.75	8.25%
800	CONTRACT OPTIONS	10	0.85%	<b>\$6,938,932,00</b>	17.25%
OTUE	<del>.</del>	10	0.85%	\$6,938,932.00	17.25%
OTHE	ik Other	50	4.24%	<b>\$1,388,103.5</b> 5	3.40%
		50	4.24%	\$1,366,103.55	3.40%
PROJE	CT TOTALS:	1180	100.00%	<b>\$40,222,949.99</b>	100.00%

Include all records where (CHGNOTCE-> STAT\_CODE is not equal to "0") and where (CHGORD-> EXECTNDATE is not equal to "\_\_/\_\_\_") and where (WORKPKG-> AWARD\_AMT is not equal to "0")

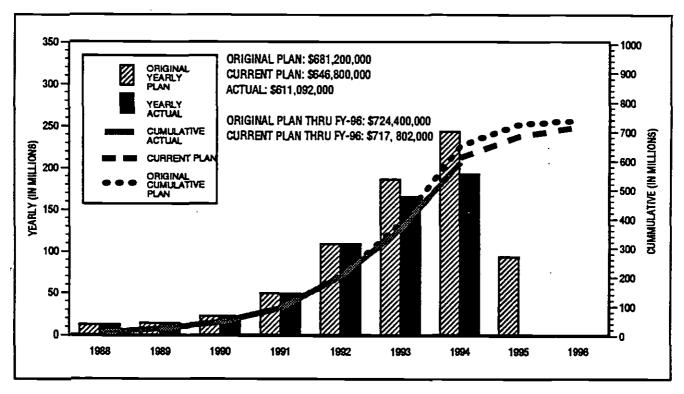
# PROJECT COMMITMENTS

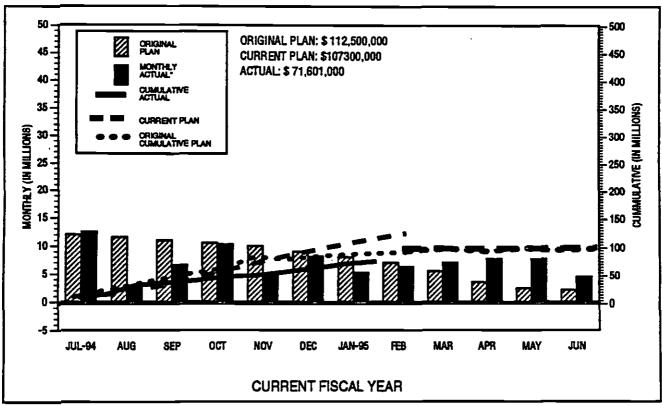




**CURRENT FISCAL YEAR** 

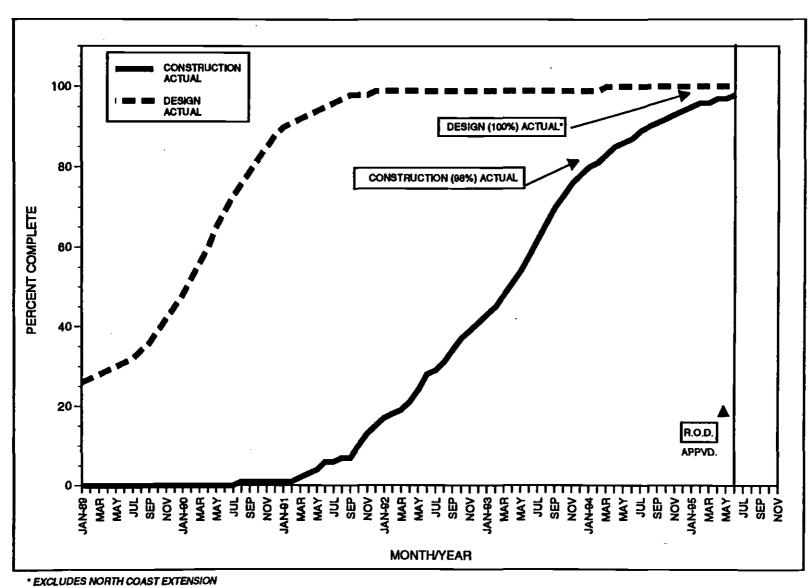
# PROJECT CASH FLOW





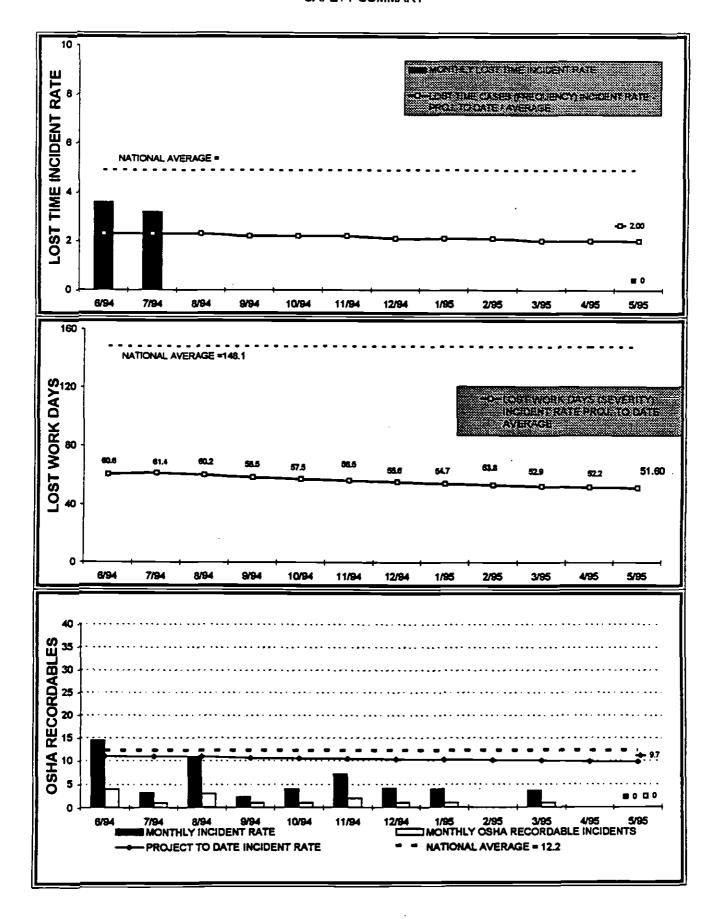
<sup>\*</sup> ACTUAL EXPENDITURES ARE THROUGH PREVIOUS MONTH END.

# PROGRESS SUMMARY



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JUNE 1995



# **LEGEND**

Open. Action still required.
Completed or Not Applicable

# CONTRACT CLOSE OUT STATUS METRO GREEN LINE

	•		CLOS	E OUT STA	ATUS		]	
		CLAIMS/	FINAL		FINAL	EQUIP.		PROJECTED
CONTRACT		CHANGE		FINAL	ACCEPT.	FINAL		CLOSE-OUT
NUMBER	DESCRIPTION	ORDERS	PAYMENT	RELEASE	CERTIF.	DELIV.	COMMENTS	DATE
C0170	ADA Elevators	0	0	0	0			Jul 95
C0400	Main Yard & Shop		0					Jul 95
H1200	TPSS	0	0	0	0			Jul 95
	OCS	0	0 -	0	0			Jul 95
C0095	Fencing/WIDS	0	0	0	0			Jul 95
C0501	Systems Facilities Sitework	0	0	0	0			Jul 95
H0831	SCADA	0	0	0	0			Aug 95
H0832	СТЅ	0	0	0	0			Aug 95
H0840	Fare Collection Equipment	0	0	0	0			Aug 95
H1310	Signs & Graphics	0	0	0	O			Aug 95
H0889	Radios	0	0	0	0			Aug 95
C0100	Guideway Construction	0	0	0	0			Aug 95
H0901	PIDS	0	0	0	0			Sep 95
H0900	SSCS	0	0	0	O			Sep 95
P2020	LRV's - 15 cars	0	0	0	0			Sep 95
C0090	Miscellaneous Construction	0	0	0	0			Oct 95
H1100	ATC	0	0	0	0			Mar 96
				<u> </u>				

# **METRO RED LINE SEGMENT 1**

**EXECUTIVE SUMMARY** 

# **METRO RED LINE SEGMENT 1**

The current forecast remains at \$1,450 million. The final Grant Closeout documentation was submitted to the Federal Transit Administration on January 30, 1995.

The following activities are still remaining:

- Continue support and test of Breda vehicles.
- Negotiate closeout of professional services contracts.
- Continue closeout of third party work orders.

# **Contract Closeout Status**

CONTRACT	DESCRIPTION	PROJECTED CLOSEOUT DATE	
A610/115	Track Installation	Sep 95	
		_	

Closeouts In Process 1

Closeouts Remaining 1

# **Contract Closeout Analysis**

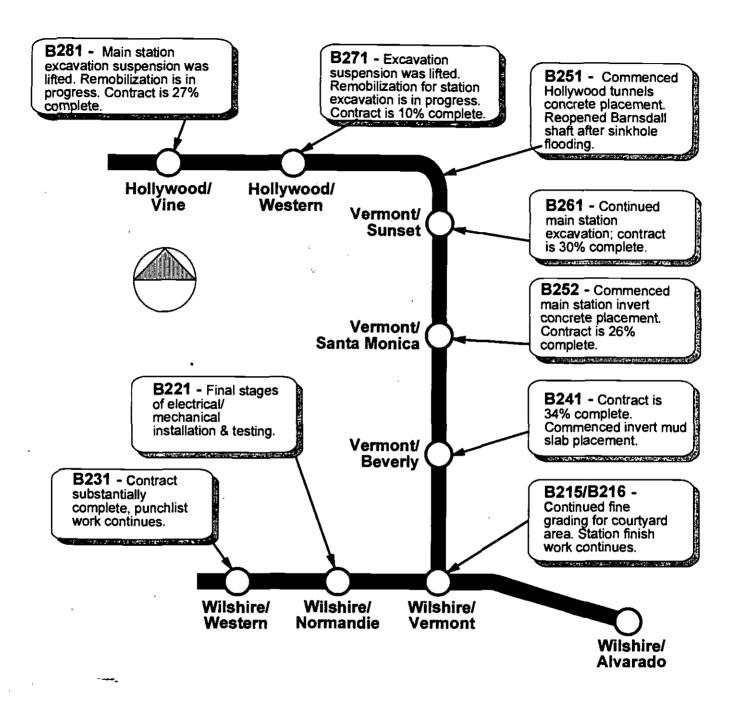
Final closeout of Contract A610/115 is pending claims litigation.

SEGMENT

# **METRO RED LINE SEGMENT 2**

**EXECUTIVE SUMMARY** 

# **Major Accomplishments**



# SYSTEMWIDE ACCOMPLISHMENTS

Completed pulling, testing, and termination of fiber/optic cable in both Wilshire tunnels (B620). DWP completed work at Wilshire/Normandie, which allows permanent power activation by the B631 contractor. Public address equipment delivered (B642). Installation of closed circuit television is complete (B648A).

# **Budget/Forecast Variance**

COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	VARIANCE	JUNE CHANGE IN FORECAST
CONSTRUCTION	\$963.2	\$961.7	\$(1.5)	\$1.0
PROFESSIONAL SERVICES	347.3	349.5	(2.2)	0.0
REAL ESTATE	87.3	89.0	1.7	0.0
UTILITY/FORCE ACCOUNT	31.1	34.6	3.5	0.0
SPECIAL PROGRAMS	4.4	2.3	(2.1)	0.0
CONTINGENCY	13.3	9.6	(3.7)	(1.0)
PROJECT REVENUE	(0.2)	(0.3)	(0.1)	0.0
TOTAL PROJECT	\$1,446.4	\$1,446.4	\$0.0	\$0.0
NEW REQUIREMENTS				
CONSTRUCTION	\$49.0	\$50.3	\$1.3	\$0.0
PROFESSIONAL SERVICES	18.9	19.1	0.2	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	3.3	2.0	(1.3)	0.0
TOTAL NEW REQUIREMENTS	\$71.2	\$71.4	\$0.2	\$0.0
GRAND TOTAL	\$1,517.6	\$1,517.8	\$0.2	\$0.0

# **Budget/Forecast Variance Analysis**

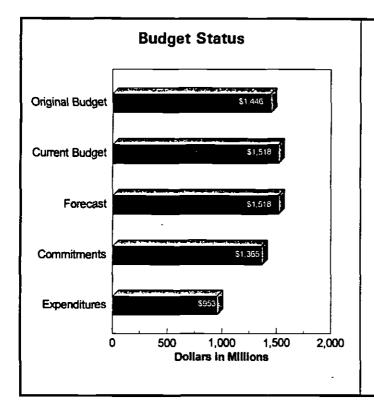
This month Project Budget Change Request (PBCR) #14 was implemented. The budget value for individual contracts was adjusted to reflect the AFE value.

The forecast increase of \$1.0 million in construction for June is attributed to contracts B215 and B646. This increase was caused by:

- -B215--added \$878.9 thousand, consisting of revisions to fire smoke dampers, overage
  of exterior wall concrete unit line item, potential claims, a Design Change Notice, and
  Work Authorized Change Notices.
- 2. B646--added \$163.3 thousand is based on fair cost estimates, pre-negotiated position for Programmable Logic Circuit (PLC) capability, and revisions to sprinkler systems.

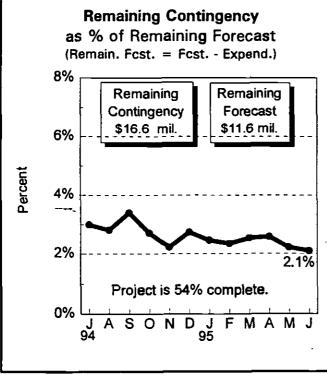
Note: The Real Estate acquired to support the Transit Enhancement covered under new requirements Budget and Forecast remains at \$39.0M.

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# **Budget Status Analysis**

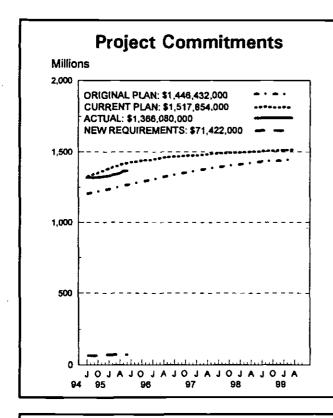
The earlier budget growth from original budget was due to the addition of Transit Enhancement, ADA, and earthquake repair programs. The Transit Enhancement and ADA programs total \$71.2 million, which is included in the current budget as new requirements, and \$71.4 million in the forecast. The budget was realigned to bring it more in line with the present forecast.



# **Remaining Contingency Analysis**

The remaining contingency percentage from January to April 1995 has remained constant, averaging 2.5%, with a decrease in May 1995 to 2.2% and in June 1995 to 2.1%. This is primarily due to offset cost associated with forecast increase to construction contract B215, added cost consisting of revisions to fire smoke dampers, overage of exterior wall concrete unit line items, potential claims, design Change Notice, and Work Authorized Change Notice. Also, construction contract B646 increased forecast based on fair cost estimates, prenegotiated position for PLC capability expansion, and revisions to sprinkler systems. Analysis is underway to determine if this contingency is adequate to complete the balance of work.

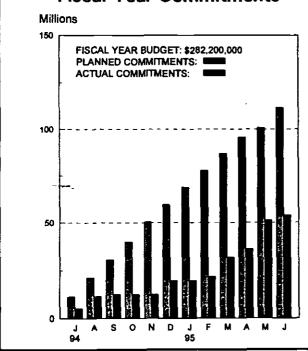
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# **Project Commitments Analysis**

**Project** accumulated planned commitments are \$1,423.6 million; actual commitments are \$1,366.1 million or 90.0% of the total forecast. The total increase for June commitments are \$2.8 million. This primarily consists of the construction contracts B215. Wilshire/Vermont Station Stage II, and B646, Fire and Emergency Management, approved changes. Also professional services contracts E0060 and FM014 increased to bring commitments into balance with expenditures. The project is behind the planned schedule.

# **Fiscal Year Commitments**

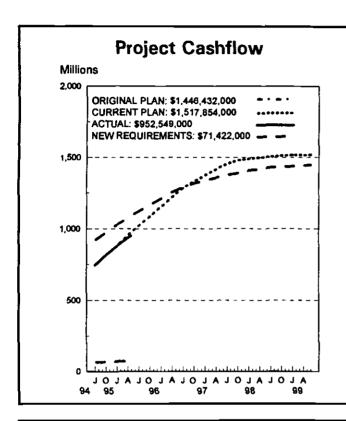


# **Fiscal Year Commitment Analysis**

Accumulated planned commitments are \$111.4 million; actual commitments are \$53.9 million\*. The variance is due to cost forecast redistribution because of schedule delays. The commitment plan will be reevaluated next month for Fiscal Year '96.

Final Change Orders along the Wilshire Corridor and final execution of Change Orders for the B251 contract leads to under commitment.

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# **Project Cashflow Analysis**

Project cumulative planned expenditures are \$978.5 million; actual expenditures are \$952.5 million or 97% of the total to date forecast. The total increase for June expenditures is \$16.3 million. This primarily consists of expenditures for construction and professional services contracts. The project will be within 90 to 95% of the 1995 fiscal year budget by the end of the fiscal year, partly due to a slow down of construction caused by rain toward the end of the calendar year.

Cashflow reporting lags behind one month due to billing cycle.

# Fiscal Year Project Cashflow Millions 300 FISCAL YEAR BUDGET: \$282,200,000 PLANNED EXPENDITURES: ACTUAL EXPENDITURES: 250 200 150 J A S O N O J F M A M J 94

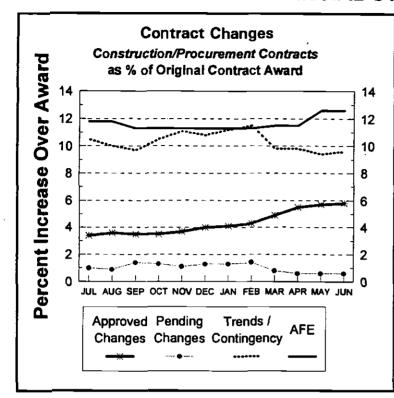
# Fiscal Year Cashflow Analysis

Planned cumulative expenditures for the fiscal year are \$268.5 million; actual expenditures are \$242.5 million\*. The underrun is associated with delays in tunneling, delays with continuing excavation along the Hollywood Corridor, and final closeout of station contracts along the Wilshire Corridor.

\*This section includes new requirements.

Cashflow reporting lags behind one month due to billing cycle.

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# Contract Changes Analysis

The pending changes and AFE percentages remained the same in June. The approved changes had a slight increase in June of 0.1%, and trends/contingency had a slight increase of 0.2%. The 1.1% May increase to the AFE is due to construction contract B221, Wilshire/Normandie Station and Line. There was a Board-approved AFE increase of \$8 million.

# Construction Procurement Contracts Contract Cost and Forecast

Comparison to Budget

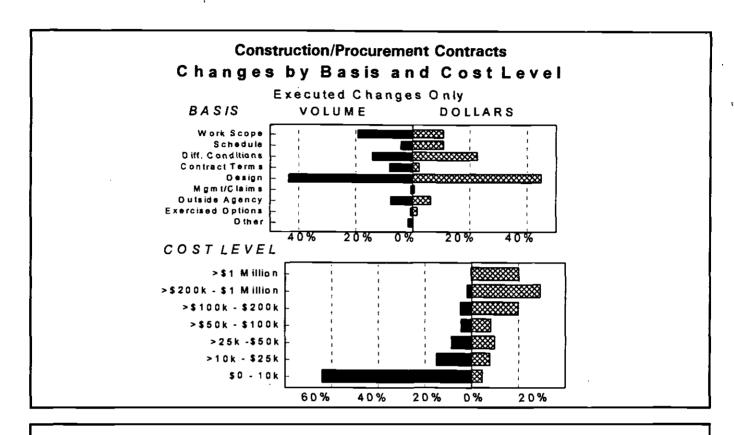
Dollars in Millions	Current	Previous	Variance
Original Contract Award	\$776.4	\$776.4	\$0.0
Approved Change Value *	\$42.7	\$42.2	\$0.5
Current Value	\$819.1	\$818.6	\$0.5
Pending Logged Changes	\$4.3	\$4.8	<\$0.5>
Trends and Contingency	\$67.7	\$66.8	\$0.9
Total Forecast	\$891.1	\$890.2	\$0.9
Constr. Budget	\$875.8	\$847.8	\$28.0

<sup>\*</sup>Includes by executed Change Orders and Approved Not-to-Exceed Costs; forecast and budget for awarded contracts only.

# **Contract Forecast Analysis**

The increase of \$0.5 million in June in the approved contract and current value is due Contract B215, Wilshire/Vermont Station Stage II, largely due to an increase of \$375.3K, which consisted of several executed Change Notices and Work Authorization Change Notices. Also contributing to the increase is Contract B646, Fire and Emergency Management, largely due to an increase of \$174.9K, due to an executed Change Notice. Trends/Contingency and Total Forecast increase of \$0.9 million in June is attributed to Contracts B215 and B646 (refer to Budget/Forecast Variance for details). The construction budget increase of 28.0 million in June is attributed to Project Budget Change Request (PBCR) #14. The budget values for individual contracts was adjusted to reflect the AFE value.

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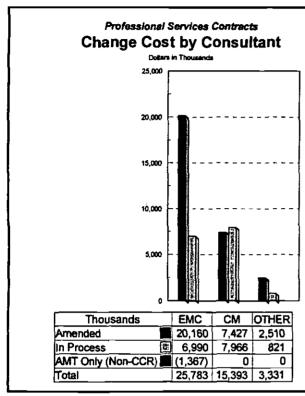
### Change Basis Analysis

Design changes represent approximately 44% of the basis for change and 45% of the total change cost. Changes in work scope and differing site conditions combined represent approximately 33% of the basis for changes and 34% of the total change cost.

# **Change Cost Level Analysis**

- 49% of the total change cost falls within the MTA Board authority, which equals 2% of the change volume
- 29% of the total change cost falls within the MTA CCB authority, which equates to 10% of the change volume
- 10% of the total change cost falls within the CM authority, which equates to 9% of the change volume
- 12% of the total change cost falls within the RE authority, which equates to 79% of change volume

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# **Professional Services Change Analysis**

No significant variances occurred this period.

**DATA SOURCE:** 

CCS: CCR REPORTS

# **Professional Service Contracts** Changes by Basis and Cost Level Amended Changes Only DOLLARS BASIS Other Agencies Schedule **Contract Changes** Claims Support **Special Studies** Administrative AMT Only (Non-CCR) 25% 25% 50% COST LEVEL >\$1 Million >\$200k - \$1 Million >\$50k - \$200k >25k -\$50k

25%

50%

25%

50%

# **Change Basis Analysis**

Approximately 43% of Red Line Segment -2 Consultant Change Requests (CCRs) total basis value is due to changes during the design phase of nonawarded construction contracts. 30% of the total basis volume is due to administrative issues, such as equipment requirements and staffing.

Starting in June 1995, the MTA is tracking non-CCR amendments to professional services contracts. Record CCRs have been logged into the CCS, documenting any non-CCR, MTA Board approved amendments. As shown on the Basis Analysis chart, the MTA Board approved Amendment 3 to CWO #003, which directed a 5% decrease on December 27, 1994.

### Change Cost Level Analysis

80% of the total change cost falls within the MTA Board authority level, which equates to approximately 26% of the change volume.

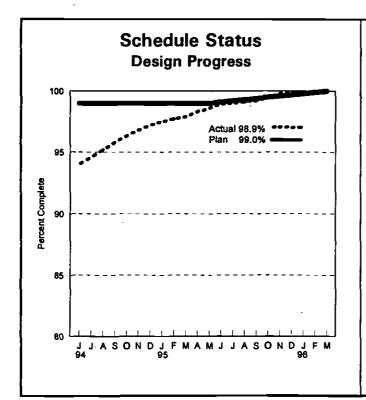
24% of the change volume falls within the Project Manager's approval authority, which equates to only 20% of the total change value.

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>15k - \$25k

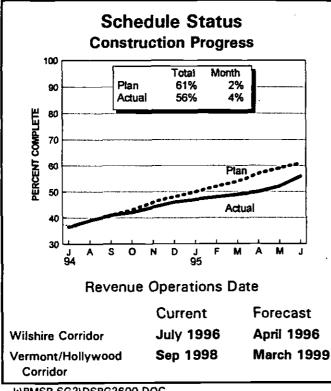
\$0 - 15k

# SCHEDULE STATUS



# **Design Schedule Progress Analysis**

The EMC design progress at the end of June is 98.9% complete, with two active contracts remaining in design. Preliminary engineering is underway on Contract B648B. Communications Installation--Vermont/Hollywood corridor, with expected completion in March 1996. Contract B263, the second entrance at Kaiser Hospital has been temporarily suspended due to funding restrictions with the design work nearing completion. The remaining work is currently rescheduled to start September 1 and complete by the end of December 1995.



# **Construction Schedule Progress Analysis**

The overall construction progress is 5% behind the original baseline schedule due to tunnel delevs under Hollywood Boulevard. In addition, Vermont/Hollywood station contracts are behind schedule due to unforeseen conditions (conflict of utilities with station piles, decking; contaminated soil, rain delays, stop work notices, LADOT added restrictions), design changes, and slower production rates for station excavation and support of utilities than planned. For detailed contract by contract Section construction variance, refer to procurement pages.

Wilshire Corridor is 2.5 months ahead of schedule due to better than planned facility and system progress. However, this month 10 days were lost from last month (compared to the early forecest date) due to lete electrical communications design changes.

Vermont/Hollywood Corridor is behind schedule by 5 months due to Contract B251 tunneling delays and subsequent station delays end systems work. Please refer to Areas of Concern for further details.

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# **SCHEDULE STATUS**

# **Current Critical Path**

### Wilshire Corridor

The critical path currently is 78 days ahead of schedule (positive float).

B648A, Communication Installation, Change Notice 20 (DCN 18) installing and testing through 08/30/95.

B646, Fire & Emergency Management, interface testing, system integration testing and prerevenue operations.

# Vermont/Hollywood Corridor

The critical path currently is 147 days behind of schedule (negative float).

B271 Hollywood/Western Station is on the critical path through FY 1996.

# **Current Critical Path Analysis**

Wilshire Corridor forecasted ROD was changed from 04/19/96 to 04/29/96, due to Design Change (DCN 18) to the MCC and CICs' at Wilshire/Western Station.

<u>Vermont/Hollywood Corridor</u> overall forecast ROD delay is due to late Notice to Proceed of station contracts, delay in tunnel mining, and tunnel concrete work.

Forecasted ROD was changed from 03/02/99 to 02/22/99 due to early release of B271 excavation suspension.

Other critical path contracts are Contract B610, Trackwork Installation, concrete plinth, rail installation and testing; Contract B620, Automatic Train

Control, wayside installation, operation tests, and dynamic testing.

### 3-Month Contract Schedule

### **Contract Description**

**Advertise Date** 

None

N/A

### 3-Month Contract Schedule Analysis

There are 2 remaining contracts for Vermont/Hollywood Corridor: B263, Second Entrance Vermont/Sunset Station, and B648B, Communication Installation for Vermont/Hollywood Corridor. These contracts will be advertised in 1996.

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Activity		<b></b>							
Description	Forecast Start	Forecast Finish	APR HAY JUN	1995 JUL   AUG   SEP   OC	T NOV DEC	JAN FER	1998 MAR APR	T WAY I JU	
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HW 271 TRACKWORK ACCESS (B610)		31JAN97	<b>↓</b>
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Project Start 91,5/L.12 Early Bar Project Finish 21,FE598 Data 91,5/L.98 Critical Activity Plot Data 28,5/L.98  © Printervara Systems, Inc.	320a	•	MTA - SEGMENT 2 /ERMONT/HOLLYWOOD CORRIDOR CRITICAL PATH

ES-12

### **SCHEDULE STATUS**

#### Real Estate Status

	Number of parcels	Number of parcels available
This month	89	89
Last month	89	89

# Real Estate Analysis

The number of parcels acquired is 89.

The number of parcels to be acquired is 0.

### **Contract Closeout Status**

Contract Number	Description	Projected Closeout Date
B201	Pocket Track & Tunnel	Jul. 1995
B231	Wilshire/Western Stat.	Aug. 1995
B211	Wilshire/Vermont Stat.	Sept. 1995
B221	Wilshire/Normandie Stat.	Nov. 1995
B752~_	Metcalf & Eddy	тво
B754	Dames & Moore	TBO
B756	Barsotti	TBO

Closeouts completed

4

Closeouts in process

7

Closeouts remaining

31

# **Contract Closeout Analysis**

The closeout of Contracts B201, B211 and B231 is delayed by change orders and claims.

The closeout of Contracts B752, B754, and

B756 is pending final audits.

Closed out contracts are demolition contracts B213, B219, B268, and B288.

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#### **AREAS OF CONCERN**

#### NEW

#### Item

Late Design Changes, DCN 18.0 and 18.1, Facility MCC/CIC.

#### Concern/Impact

Changes to the completed facilities require re-work, and impacts the Wilshire Corridor critical path.

#### Status/Action

Determine if the changes are required for ROD and which contractor should perform the work.

All changes are going through a detail cost and schedule impact analysis and are being coordinated by Parsons-Dillingham. DCN 18.0 has a 10 day impact on the Wilshire critical path.

#### Item

**Collapsed Hollywood Tunnel** 

#### Concern/Impact

Contract B251 critical path was impacted by the collapse of the HAL tunnel and flooded Barnsdall shaft.

#### Status/Action

Assess scope of damage and develop scope of work, detail repair plan, cost and schedule impact. Implement the repairs and recovery plan.

Tunnel repair is estimated to take more than two months. The scope and method of the repairs being defined. To avoid impact to the project critical path, both B271 and B281 excavation suspensions have been lifted. The alternative sequence of construction allows tunnel concrete work from both B281 and B271 access points.

#### ONGOING

#### Item ----

Contract B221, Wilshire/Normandie Station & Contract B215, Wilshire/Vermont Station, Permanent Power Availability

#### Concern/Impact

The potential for the earliest completion of the Wilshire Corridor depends upon beginning systems integration testing at the earliest window of availability. Many of the tests require the use of permanent power. Any new electrical changes to Wilshire Corridor Stations could impact the permanent power availability.

### AREAS OF CONCERN (CON'T)

#### Status/Action

Strong communication with DWP needs to be made to stress the importance of its contribution to the overall Wilshire completion.

Contract B221: DWP completed their installation of permanent power early June 1995 and B631 contractor has completed permanent power.

Contract B215: DWP has accepted and is working in the room with condition that the door hardware must be installed before energization. DWP is scheduled to complete work to facilitate permanent power by mid-July 1995. The B631 contractor is scheduled to have permanent power activation by late-July 1995.

#### Item

Vermont/Hollywood Corridor Cost Containment

#### Concern/Impact

Wilshire Corridor station contracts experienced an average rate of cost growth in excess of ten percent. Continued escalation at the present rate would jeopardize remaining contingency.

#### Status/Action

Develop a cost containment plan for Vermont/Hollywood station contracts to maintain the budget and the ten percent cost growth limit.

Parsons-Dillingham developed and submitted to MTA a list of proposed cost reduction items. MTA has established a panel to review recommendations and select candidate items to pursue with management. Parsons-Dillingham is compiling the cost recoverable items and MTA is preparing procedure for charge backs.

#### **Item**

Forecasted Delay to Revenue Operation Date (ROD) - Vermont/Hollywood Corridor

#### Concern/Impact

The Vermont/Hollywood Corridor Revenue Operation Date (ROD) forecast continues to be later than the planned date of September 28, 1998. This is primarily due to Hollywood tunnel excavation delays. The critical path has been through the Hollywood Boulevard implementation activities, HAR and HAL tunneling, tunnel concrete placement between Vine and Western, and Contract B271, Hollywood/Western Station, lower station excavation access.

### AREAS OF CONCERN (CON'T)

#### Status/Action

Perform detailed program review based on current production rates to forecast minimum ROD slippage.

DWP sinkhole/Contract B251 caused the shutdown of the critical tunnel work. The method and sequence of tunnel construction has been changed to mitigate any future schedule slippage to the follow-on critical path B271 contract. Both B271 and B281 excavation suspensions have been lifted. The alternative sequence of construction allows tunnel concrete work from both B281 and B271 access points. Schedule for the work west of Hollywood/Vine Station remains unchanged (removal of the trailing gear, rail, utilities, and clean-up from La Brea shaft after access is provided by C0301 contractor).

#### **RESOLVED**

#### **Item**

Contract B646, Fire and Emergency Management

#### Concern/Impact

Delivery of equipment delayed by four months, impacting B648A contractors installation schedule, and start of System Integrated Testing.

#### Status/Action

The Contractor is implementing the approved recovery plan.

#### AREAS OF OPPORTUNITY

#### **ONGOING**

#### Item

Wilshire Corridor ROD

#### **Opportunity**

Achieve earliest possible ROD without incurring additional cost.

#### Status/Action

Continue to manage current master schedule. Current master schedule forecasts that Wilshire Corridor pre-revenue operations could commence in March 1996, with ROD as early as April 1996.

### AREAS OF OPPORTUNITY (CON'T)

#### **Item**

Systemwide Installation and Testing

#### Opportunity

Ability for systems integration testing to begin as early as possible.

#### Status/Action

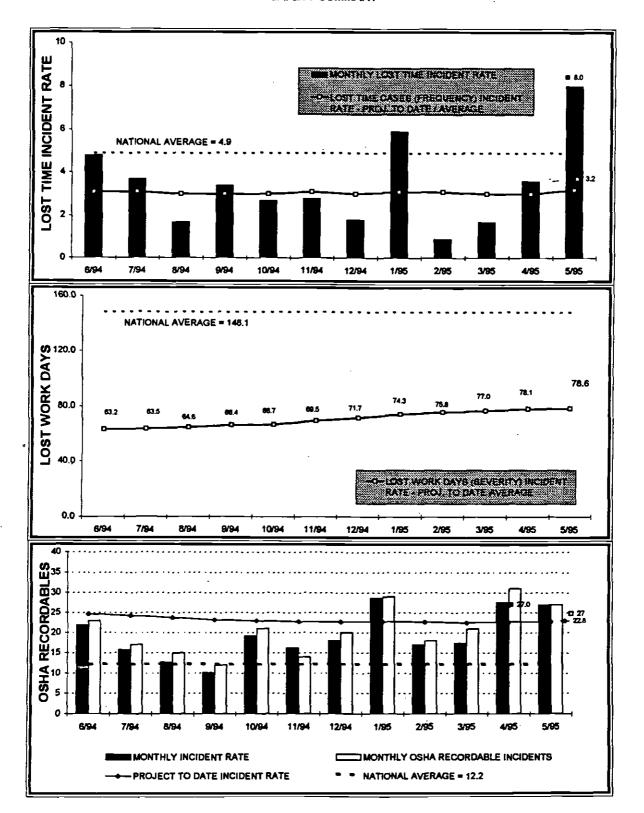
Ensure MTA Operations staff is available to support early August 1995 systems integration testing.

Required MTA operations staff is planned to be available for all tests. Back-up plan is to use available contractor support to maintain test schedule. B290, B620, and B631 contractors installation to be ready to support initial systems testing July 1995. First integrated test - car mover clearance test scheduled for mid-July 1995.

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# METRO RED LINE SEGMENT II SAFETY SUMMARY

Prepared by: MASS TRANSIT GROUP



### SAFETY SUMMARY STATUS

#### SAFETY SUMMARY ANALYSIS

#### General

MRL Segment 2 achieved reasonable to favorable statistics during the month of June. The OSHA 200 Case Rate for the segment (including P-D and MTA hours) was 12.2; this rate for the Contractors only was 16.2, approximately one third above the national average of 12.2. Contributors to the above average rate included Contract B251 with 5 Recordable Cases producing an Incident Rate of 17.5 and Contract B620 with 1 Recordable Case in only 4,338 work hours for an incident rate 46.1. Lost Time Cases were significantly improved from May with the Contractors producing a rate of 2.7, close to one half the national average. Lost Time Case were reported by Contracts B251 and B241 (one each).

#### Monthly MRL Safety Meeting

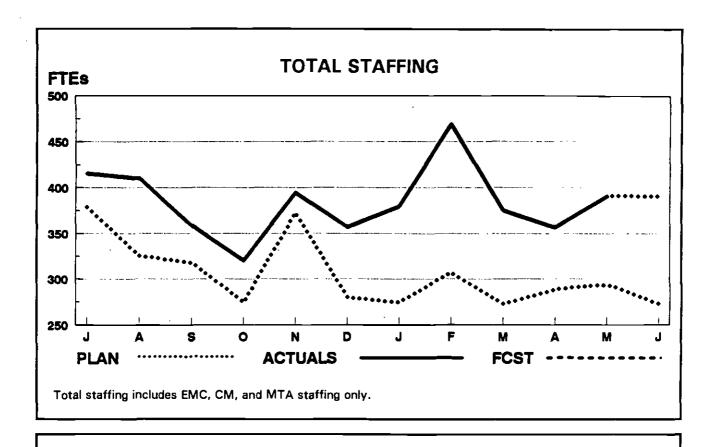
Due to organizational changes and scheduling conflicts, a projectwide safety meeting was not held in June.

#### Safety Engineers Monthly Meeting

The monthly safety engineers meeting began with comments presented by Lou Hubaud, MTA. Mr. Hubaud discussed a variety of issues, including the changing of the scope and purpose of the monthly projectwide meeting. Mr. Hubaud's comments were followed by a roundtable discussion of the issues at hand and methods for making the various project meetings more productive for all. Randy McBurnett then presented information on Diesel Health Hazards in Underground Construction. The meeting closed after some additional open forum-comments. The next meeting is scheduled for July 12, 1995.

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### PROJECT STAFFING STATUS



#### STAFFING ANALYSIS

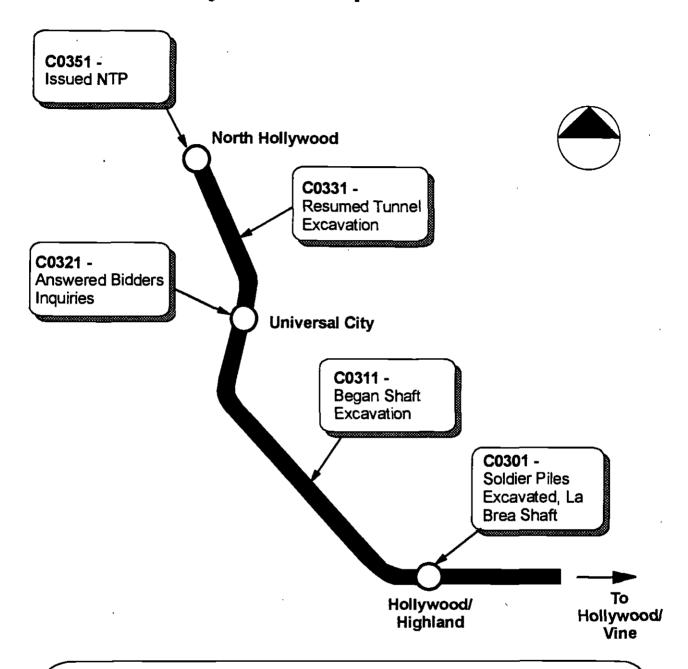
The total staffing actuals are greater than planned due to Parsons-Dillingham's increased support for inspection, geotechnical, and survey activities caused by ground settlement on Hollywood Boulevard, which are partially offset by MTA actual staffing being lower than planned due to the imposed temporary hiring freeze. The Project Manager is conducting a review of manpower staffing requirements in order to implement a plan reduction.

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# METRO RED LINE SEGMENT 3 NORTH HOLLYWOOD EXTENSION

**EXECUTIVE SUMMARY** 

# **Major Accomplishments**



### SYSTEMWIDE ACCOMPLISHMENTS

Tunnel excavation in Hollywood was completed to the foot of the Hollywood Hills.

Work began on the C0301 Contract, Hollywood/Highland Station and tunnels with issuance of Notice To Proceed.

Excavation began at the C0311 crossover shaft and at the C0301 La Brea Shaft. Tunnel excavation resumed in the C0331 tunnel.

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

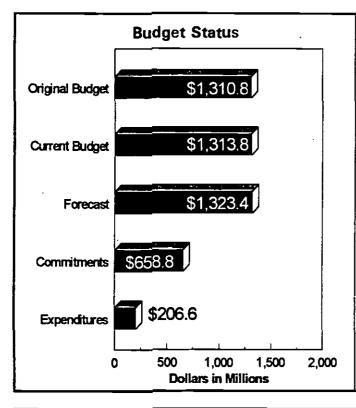
COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	VARIANCE	JUNE CHANGE IN FORECAST
CONSTRUCTION	\$766.9	\$779.2	\$12.3	8.9
PROFESSIONAL SERVICES	279.1	282.9	3.8	3.3
REAL ESTATE	85.6	86.4	8.0	0.0
UTILITY/FORCE ACCOUNT	18.7	25.6	6.9	2.3
SPECIAL PROGRAMS	0.0	0.0	0.0	0.0
CONTINGENCY	160.5	136.7	(23.8)	(14.5)
PROJECT REVENUE	0.0	0.0	0.0	0.0
TOTAL PROJECT	\$1,310.8	\$1,310.8	\$0.0	\$0.0
NEW REQUIREMENTS			-	
CONSTRUCTION	\$1.9	\$11.7	\$9.8	\$0.0
PROFESSIONAL SERVICES	0.7	0.8	0.1	0.0
REAL ESTATE	0.0	0.1	0.1	0.0
UTILITY/FORCE ACCOUNT	0.0	0.0	0.0	0.0
SPECIAL PROGRAMS	0.0	0.0	0.0	0.0
CONTINGENCY	0.4	0.0	(0.4)	0.0
TOTAL NEW REQUIREMENTS	\$3.0	\$12.6	\$9.6	\$0.0
GRAND TOTAL	\$1,313.8	\$1,323.4	\$9.6	\$0.0

# Forecast Variance Analysis

The forecast variance is primarily due to Construction, Professional Services, and Utility/Force account contracts. The increase to Construction Contract C0331 (\$9.0 million) is due to a re-evaluation of contract contingency based on large delays to date and issuance of change for grouting several hundred feet of tunnel ahead of mining machines. In Professional Services, increase (\$8.4 million) is due to trend for Joint Procurement Cost Allocation (which is being transferred from Segment 2), and a concurrent decrease (\$5.1 million) which reflects re-evaluation of remaining work for EMC on CWO #4. Utility/Force Accounts increased (\$2.3 million) for additional work, pile installation, shoring costs, additional street lights pole, and cabling K-rail transportation, track removals, and additional traffic control.

Incorrect incurred values throughout the report are being corrected.

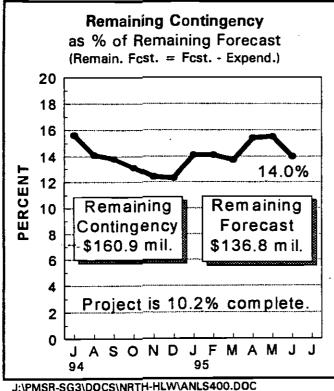
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#### **Budget Status Analysis**

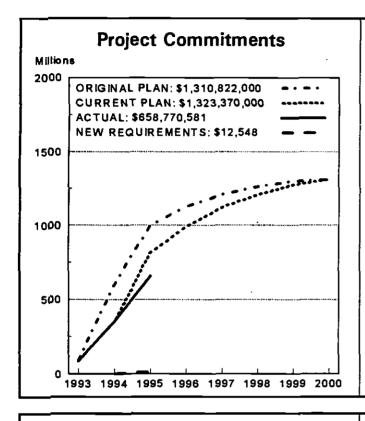
Increase to current budget in amount of \$3.0 million to New Requirements for the Non revenue Connector, the Art Program, and Northridge Earthquake impacts. There is no schedule impact. No budget increase for tunnel settlement.

Forecast increase primarily due to reevaluation of C0331 Contingency, Joint Procurement Cost Allocation (E0071) and additional work in the Utility/Force Account (F102).



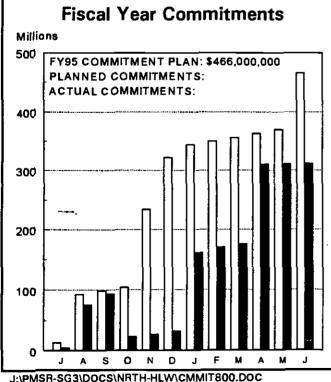
#### Remaining Contingency Analysis

The remaining contingency percentage from January 1995 to June 1995 has averaged 14.5%. Status has remained constant throughout Fiscal Year 1995.



### **Project Commitments Analysis**

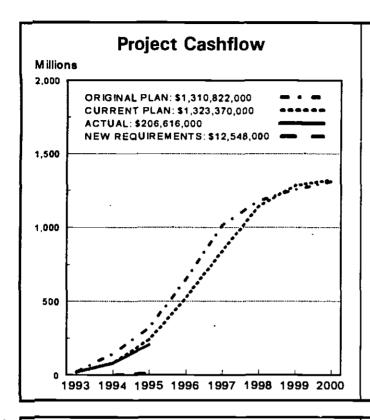
Project planned cumulative commitments through June 1995 are \$688.8 million; actual cumulative commitments are \$658.8 million or 50.1% of the total forecast. Activity predominantly from C0331 grouting, conduit, power relocation and installation of grout drills covered by CN numbers 39.00, 44.00, 47.00, and 58.00, respectively and an increase due to Real Estate contracts. Commitments will be more in line with planned as contracts are awarded in 1996 and 1997.



# **Fiscal Year Commitment Analysis**

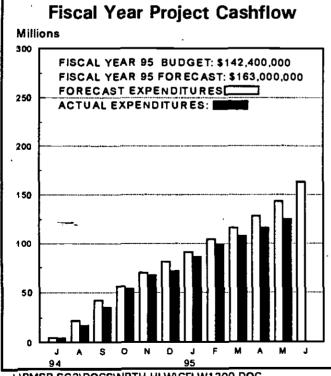
Planned FY95 cumulative commitments are \$466.0 million; actual FY95 cumulative commitments are \$311.7 million.\* Underrun in commitments is due to schedule delays and final change orders which have not been executed.

<sup>\*</sup>This section includes new requirements.



### **Project Cashflow Analysis**

Project planned cumulative expenditures for the month are \$242.8 million; actual cumulative expenditures are \$206.6 million or 15.6% of the total forecast. Expenditures are expected to peak Fiscal Years 1996 and 1997 because the major contracts are just now being awarded.

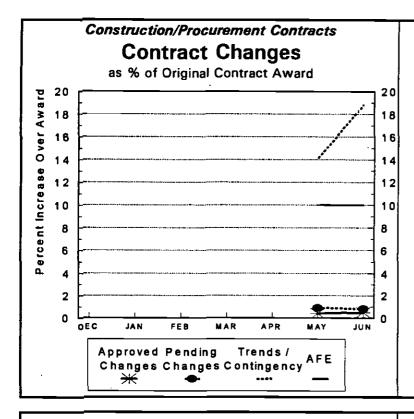


### Fiscal Year Cashflow Analysis

Planned cumulative FY95 expenditures are \$143.4 million; actual cumulative FY95 expenditures are \$124.9 million.\* The underrun during the past couple of months is primarily from Construction Contract C0331, which is experiencing delays in tunnel mining progress.

\*This section includes new requirements.

Cashflow reporting lags behind one month due to billing cycle.



#### **Contract Changes Analysis**

The history for the Approved Changes, Pending Changes, Trends/ Contingency, and AFE is unavailable. The figures for June 1995 are as follows:

# Construction Procurement Contracts Contract Cost and Forecast

Comparison to Budget Dollars in Current **Previous** Variance Millions \$0.0 \$433.8 \$433.8 Original Contract Award \$2.1 \$1.9 \$0.2 Approved Contract Value\* \$435.9 \$435.7 \$0.2 Current Value \$3.6 \$2.2 \$1.4 Pending Logged -----Changes \$68.5 \$61.0 \$7.5 Trends and Contingency \$508.0 \$498.9 \$9.1 Total **Forecast** \$544.3 \$543.0 \$1.3 Constr. **Budget** 

\*Includes Executed Change Orders and Approved Not-to-Exceed Costs. '
Forecast and Budget for Awarded contracts only.

# Contract Forecast Analysis

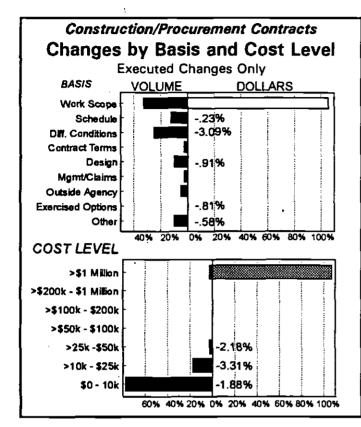
Increase of \$0.2 million in the Approved Contract and Current Value is primarily due to Contract C0331, CN #39.00, grouting initial 40 ft. Of left tunnel.

Increase in pending due to CO331, CN #62.00, Contingency re-evaluated because of large delays and issuance of change to contractor for grouting.

Increase in Trends and Contingency due to CO331, re-evaluation of Contingency to cover extras such as grouting, schedule delays, schedule accelerations, electrical/mechanical changes, quantity overruns, and groundwater (additional volume or contamination).

Increase in Construction budget due to PBCR #2 (for R82) which establishes New Requirements for Non-Revenue Connector, the Art Program, and Northridge Earthquake impacts.

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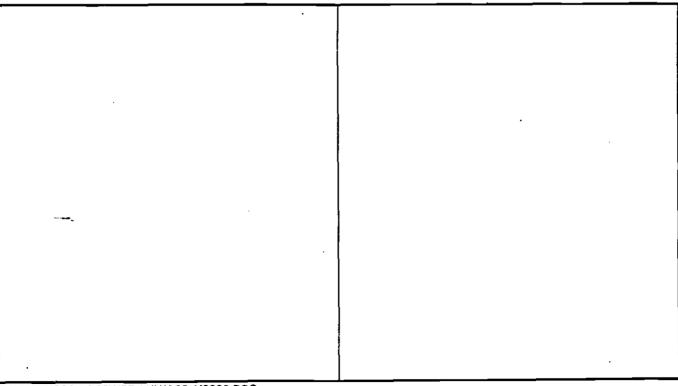


#### **Change Basis Analysis**

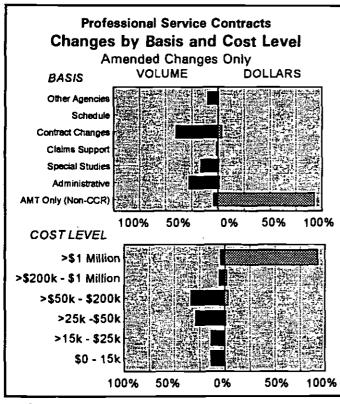
Changes in work scope represent approximately 33% of the basis for change and 105% of the total change cost. Differing site conditions represent 25% of the basis for change and -3% of the total change cost.

#### **Change Cost Level Analysis**

- · No significant issues this report period.
- Negative values indicate credit changes within the RE's authority.
- 107% of the total change cost falls within the MTA Board Authority, which equals 2.5% of the change volume



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#### **Change Basis Analysis**

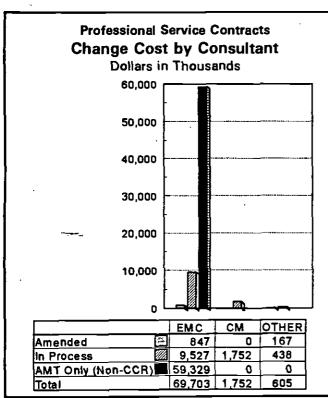
North Hollywood Consultant Change Requests (CCR) are primarily due to changes during the design phase of non-awarded construction contracts accounting for approximately 41% of the total contract change volume yet only 4% of the total contract change value.

Starting June 1995, MTA is tracking Non-CCR Amendments to Professional Services Contracts. Record CCRs have been logged into the CCS System documenting any Non-CCR, MTA Board approved amendments.

#### **Change Cost Level Analysis**

95% of the total change cost falls within the MTA Board authority level which equates to 10% of the overall change volume.

90% of the change volume falls within the Project Manager's approval authority which equates to 5% of the overall change value.



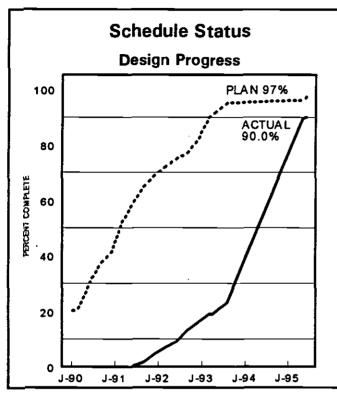
### **Professional Services Change Analysis**

Eight Advanced Work Authorizations (AWA) were assigned this period with a total not-to-exceed obligation of \$1.4M. No contract amendments were approved this period.

**DATA SOURCE:** 

CCS: CCR REPORTS

# SCHEDULE STATUS NORTH HOLLYWOOD EXTENSION

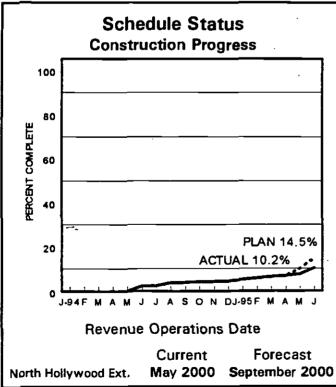


# Design Schedule

#### **Progress Analysis**

The overall design through June 30, 1995, was 90.0% complete. Active design efforts are underway for the following contracts: C0352, C1610, B612, B620 and H0631. Work is underway to repackage Contract C0326.

Remaining design work is taking place on the above contracts and the various Systems contracts.



# Construction Schedule Progress Analysis

Design progress is behind by 6.5% as a result of design changes at Universal City contracts and deferral of the system design to a later date.

Construction progress has slipped due to C0331 tunnel shut down, delay of Notice to Proceed to C0301, C0311, C0321, and C0351 contracts. MTA, P-D and EMC staff continue to develop a revision to the access at the North Hollywood Station to allow more flexible access for the trackwork installation.

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# SCHEDULE STATUS NORTH HOLLYWOOD EXTENSION

#### **Current Critical Path**

The critical path currently is 133 days behind (negative float)

CO311 is on the critical path through March 30, 1998.

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

Currently, the critical path begins with Contract CO311, the tunnel between Station 630+00 and Universal City Station. The late design and award of this contract has left the Project over four months behind schedule.

Efforts are underway to mitigate the delays by resequencing the trackwork activities. We expect the resequencing to put the revenue operations date back on schedule.

#### 3 Month Contract Schedule

#### **Contract Description**

#### **Award Date**

C0321

09/27/95

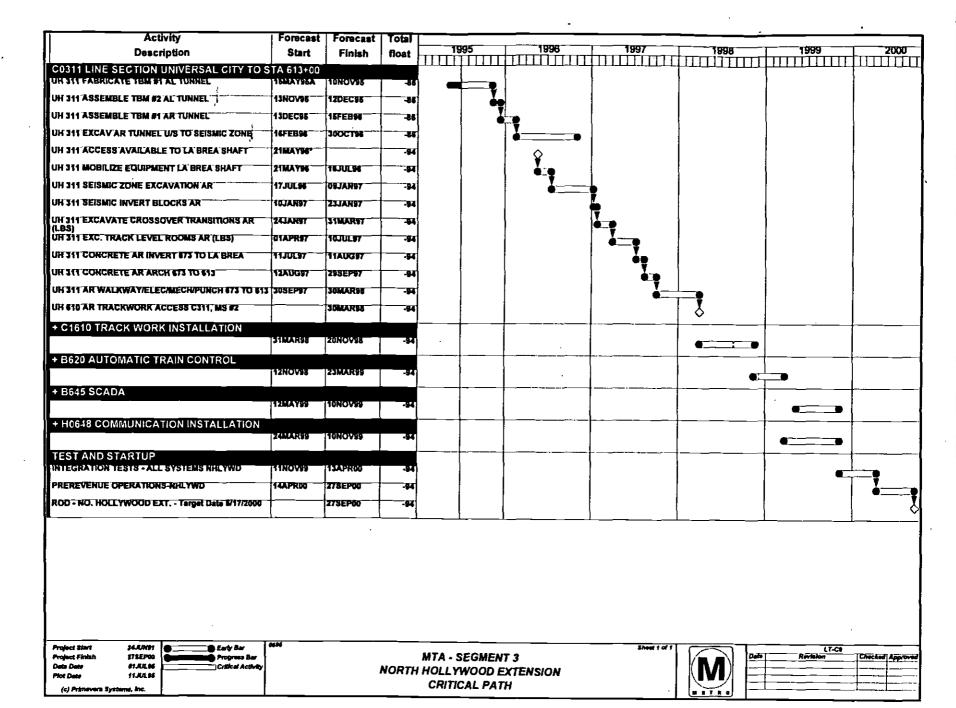
# 3 Month Contract Schedule Analysis

Contract C0321, Universal City Station, bids are scheduled to be opened on July 19, 1995. The contract is scheduled to be awarded at the September MTA Board meeting.

No other contracts are scheduled for bidding during the next ninety days.

Contract C0351 received Notice to Proceed on June 1, 1995.

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# SCHEDULE STATUS NORTH HOLLYWOOD EXTENSION

#### Real Estate Status

	Number of parcels	Number of parcels available
This month	232	80
Last month	232	78

### Real Estate Analysis

Number of parcels acquired is 80.

Number of parcels to be acquired is 152.

There are three parcels currently projected in the worse case scenario not to be available by the scheduled needs dates. All parcels showing negative float are expected to be available prior to the Contractor's need dates.

Maintaining schedule for meeting Contractor's need dates.

There is a high probability that all parcels will be acquired by the date they are needed for construction.

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# AREAS OF CONCERN NORTH HOLLYWOOD EXTENSION

#### **NEW**

#### **Item**

Construction Management Services transition from Parsons-Dillingham (P-D) to Jacobs Management & Associates (JMA)

### Concern/Impact

Ensure coverage of on-going construction projects.

#### Status/Action

MTA, P-D, and JMA will commence coordination in the month of July and August 1995 at the managment and staff levels.

#### **ONGOING**

#### Item

Contracts C0301R, Hollywood/Highland Station and Tunnels; C0321, Universal City Station; C0351, North Hollywood Station with Crossover and Tailtrack

# Concern/Impact

Re-design of selected ventilation shafts can save construction costs estimated at \$1-2 million. Design must be completed in time to avoid delays to Contractor's station excavation.

#### Status/Action

EMC to complete analysis and potential cost savings estimate for MTA evaluation in a timely manner so that re-design can commence.

EMC and P-D have prepared cost and construction schedule analysis. The MTA must authorize the re-design and construction prior to any action by EMC and Parsons-Dillingham.

#### Item

Systems Schedule Re-baseline

### Concern/Impact

The EMC has developed a new baseline for Systems procurement contracts and for the remaining Systems design contracts. The new schedules reflect delays and changes in the Facilities contracts and establish a viable baseline to accomplish the work. There exist differences of opinion between the MTA and the EMC as to the timing and validity of the plan to accomplish this work.

#### Status/Action

The EMC prepared the schedule for submittal to the MTA for approval in early April.

Systems is currently proceeding with the baseline work as described in the record of negotiations and the CUD based on the revised schedule. Negotiations with the MTA for the remaining work and approval the revised schedule are continuing. The out-of-scope work due to iterations in the facilities design changes, technical changes to the Systems contracts brought on by these changes and work now considered unavoidable in completing the Systems contracts has been identified. EMC has transmitted this scope along with an estimate of the man-hours to complete the work to MTA. The MTA will advise EMC as to when to proceed and will define the work authorized.

#### Item

Contract C0331, Line Section North Hollywood to Universal City

#### Concern/Impact

The start of tunnel mining was delayed due to the Contractor's delay in assembling the tunnel shield machines (TSM). There is a concern that continued delays will further erode schedule "float" for this contract and follow-on integrated contracts. In addition, the mining operation must be conducted to ensure against ground settlement.

# AREAS OF CONCERN (CON'T) NORTH HOLLYWOOD EXTENSION

#### Status/Action

The MTA and its consultants are taking all necessary steps to ensure that the mining operation is started and progresses in a manner to ensure against ground settlement. This is to ensure the mining operation is implemented per specification procedures.

Tunnel mining has been repeatedly halted due to Contractor's technical difficulties. The Contractor modified one of the tunneling machines to prevent loss of ground. The Contractor has also begun grouting from the surface to prevent loss of ground.

#### Item

Contract C0351, North Hollywood Station with Crossover and Tail track

### Concern/Impact

Access to crossover area, the C0331 Contractor must complete mining operations and this operation is encountering difficulties and delays.

#### Status/Action

The C0351 Contractor could be directed to delay taking access.

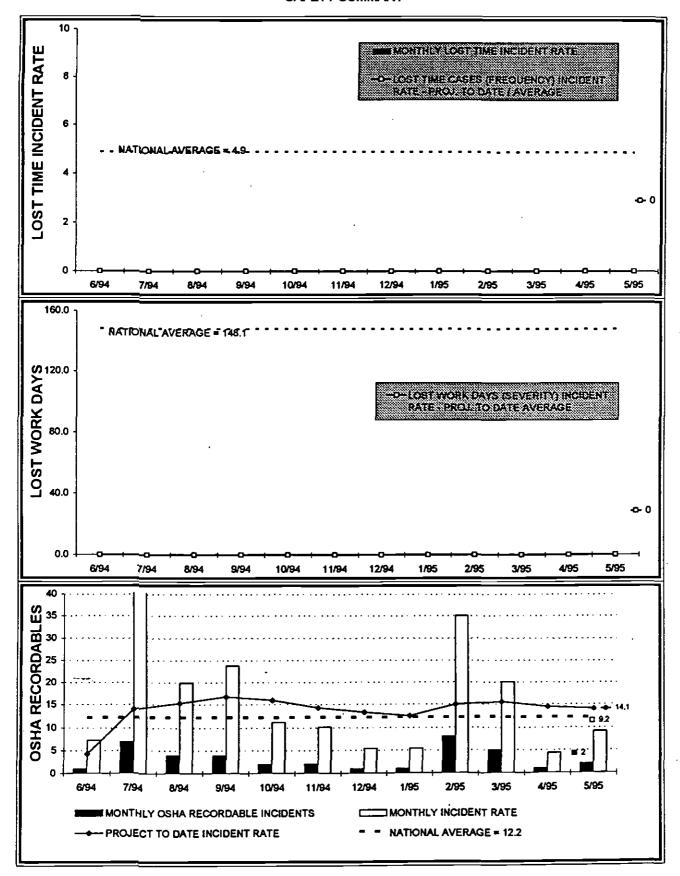
The C0331 Contractor's mining operation is being closely monitored and the Contractor has been requested to provide a mitigation plan to recover schedule delays. The MTA and Contractor have agreed to modify the tunneling machine to prevent loss of ground. The C351 access milestones will need to be adjusted after the Contractor submits the baseline schedule.

#### RESOLVED FROM LAST MONTH

NONE

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METRO RED LINE SEGMENT III SAFETY SUMMARY Prepared by: MASS TRANSIT GROUP



# SAFETY SUMMARY STATUS NORTH HOLLYWOOD EXTENSION

#### SAFETY SUMMARY ANALYSIS

#### <u>General</u>

MRL Segment 3 continued to produce superior injury and illness statistics during the month of June. For the month the Segments' OSHA 200 case rate was 9.2, approximately 25% below the national average. The segment avoided any lost time cases for the fifth consecutive month this year and continued the record of zero lost time cases since the beginning of the segment.

#### Monthly MRL Safety Meeting

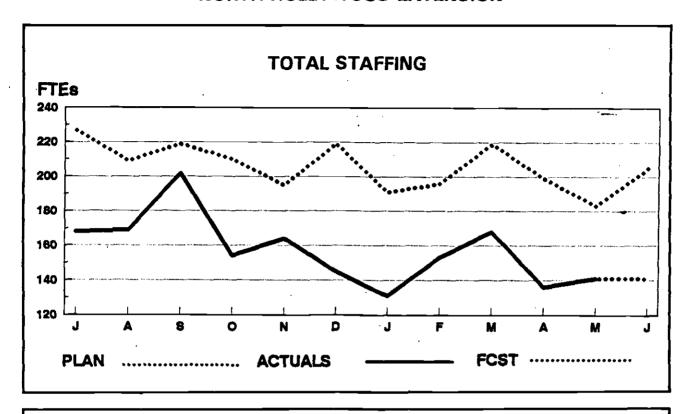
Due to organizational changes and scheduling conflicts, a project-wide safety meeting was not held in this month.

#### Safety Engineers Monthly Meeting

The monthly Safety Engineers meeting began with comments presented by Lou Hubaud, MTA. Mr. Hubaud discussed a variety of issues including the changing of the scope and purpose of the monthly project-wide meeting. Mr. Hubaud's comments were followed by a roundtable discussion of the issues at hand and methods for making the various project meetings more productive for all. Randy McBurnett then presented information on Diesel Health Hazards in Underground Construction. The meeting closed after some additional open forum comments. The next meeting is scheduled for July 12, 1995.

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# PROJECT STAFFING STATUS NORTH HOLLYWOOD EXTENSION



#### STAFFING ANALYSIS

The total staffing actuals are lower than planned due to a six month delay in the award of the Construction Management contract, Segment 3 actual start-up, MTA temporary hiring freeze, and implementation of the work force reduction. However, the hiring freeze is lifted and recruitment is in process.

CM staffing has been consistently under the plan due to delays in the start of several construction projects. The CM staffing plan will be revised as Parsons-Dillingham and Jacobs Management & Associates review staff requirements.

Note: Total Staffing Chart includes EMC, CM, and MTA staffing only.

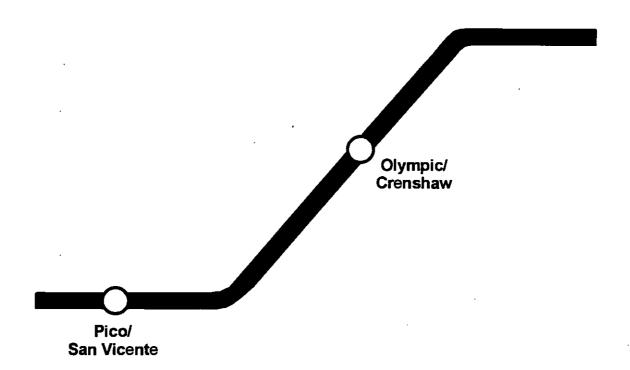
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METRO RED LINE SEGMENT 3
MID CITY EXTENSION

**EXECUTIVE SUMMARY** 

# **Major Accomplishments**





### **SYSTEMWIDE ACCOMPLISHMENTS**

Mid City Extension status is in the a supplemental EIR/EIS phase. A number of charts have not been furnished at this time since Mid City has not gone into full engineering and development.

# FINANCIAL STATUS MID CITY EXTENSION

# **Budget/Forecast Variance**

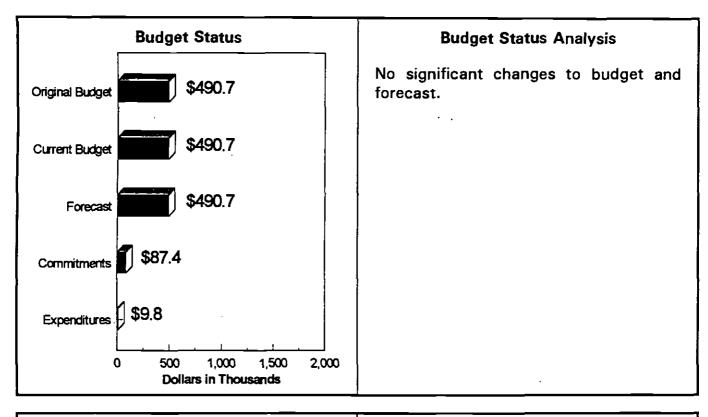
COST ELEMENT	CURRENT BUDGET	CURRENT FORECAST	VARIANCE	MAY CHANGE IN FORECAST
CONSTRUCTION	\$334,139	\$328,119	(\$6,020)	\$0
PROFESSIONAL SERVICES	98,133	102,980	4,847	. 0
REAL ESTATE	53,303	48,543	(4,760)	0
UTILITY/FORCE ACCOUNT	5,088	5,088	0	0
SPECIAL PROGRAMS	0	·o	0	0
CONTINGENCY	0	5,933	5,933	o
PROJECT REVENUE	0	0	0	0
TOTAL PROJECT	\$490,663	\$490,663	\$0	\$0
NEW REQUIREMENTS				-
CONSTRUCTION	\$0	\$0	\$0	\$0
PROFESSIONAL SERVICES	0	o	0	0
REAL ESTATE	0	0	0	0
UTILITY/FORCE ACCOUNT	0	0	0	0
SPECIAL PROGRAMS	0	o	0	0
CONTINGENCY	0	o	0	0
TOTAL NEW REQUIREMENTS	\$0	\$0	\$0	\$0
GRAND TOTAL	\$490,663	\$490,663	\$0	\$0

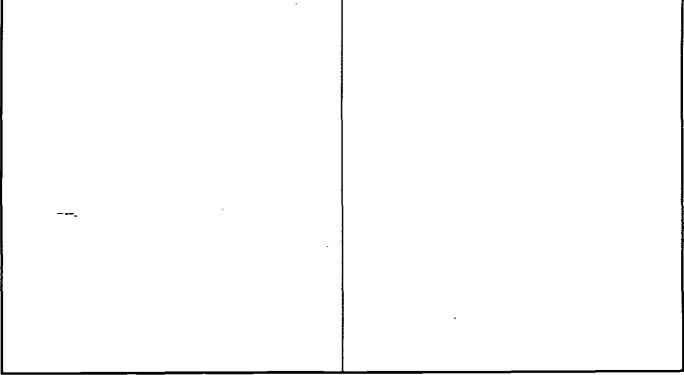
# **Budget/Forecast Variance Analysis**

No changes were applicable for this period.

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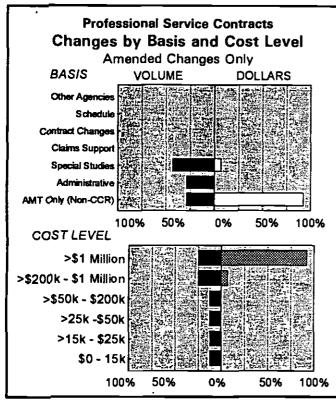
# FINANCIAL STATUS MID CITY EXTENSION





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# FINANCIAL STATUS MID CITY EXTENSION



#### **Change Basis Analysis**

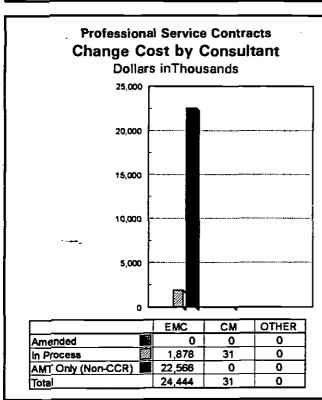
Approximately 43% of Red Line Segment Mid City change volume is due to Special Studies and 92% of the change value is due to Planned Additional Scope amendments.

Starting in June 1995, MTA is tracking Non-CCR Amendments to Professional Services contracts. Record CCRs have been logged into the CCS system documenting any Non-CCR, MTA Board-approved amendments.

#### **Change Cost Level Analysis**

99% of the total change cost falls within the MTA Board authority level which equates to 50% of the change volume.

50% of the change volume falls within the Project Manager's approval authority which equates to only 1% of the total change value.



### **Professional Services Change Analysis**

No Advanced Work Authorization (AWA) was assigned this period. No contract amendments were approved this period.

**DATA SOURCE:** 

CCS: CCR REPORTS

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# AREAS OF CONCERN MID CITY EXTENSION

**NEW** 

NONE

#### **ONGOING**

#### Item

Systems Schedule Re-baseline

### Concern/Impact

The EMC has developed a new baseline for Systems procurement contracts and for the remaining systems design contracts. The new schedules reflect delays and changes in the Facilities contracts and establish a viable baseline to accomplish the work. There exist differences of opinion between the MTA and the EMC as to the timing and validity of the plan to accomplish this work.

#### Status/Action

The EMC prepared the schedule for submittal to the MTA for approval in early April.

Systems is currently proceeding with work based on the revised schedule. Negotiations with the MTA are underway to identify the out-of-scope work efforts and to establish budgets for them. After settlement EMC will review the schedule.

#### Item

**SEIS/SEIR Study** 

# Concern/Impact

The Segment 3 Mid City Extension SEIS/SEIR is 38% complete as of June 30, 1995. Upon completion of the draft SEIS/SEIR, the environmental study will run concurrent with the preliminary design effort by the EMC.

#### Status/Action

The MTA Board authorized the evaluation of two safe and constructable alternatives. The draft SEIS/SEIR is based upon two MTA approved alternatives, where the environmental impacts and mitigations are being developed.

#### Item

**Critical Path** 

### Concern/Impact

The MTA Board authorized an eighteen-month time frame for the completion of the Mid City SEIS/SEIR. As mentioned in the March 1995 PMSR, the SEIS/SEIR is currently behind the planned schedule due to various hold-ups in the study.

#### Status/Action

The draft report will be delayed due to the delay in issuing the contract work order which allows the EMC to proceed with the Preliminary Design effort to support the study. The planned completion for MTA Board approval may slip from October 1995 to January 1996.

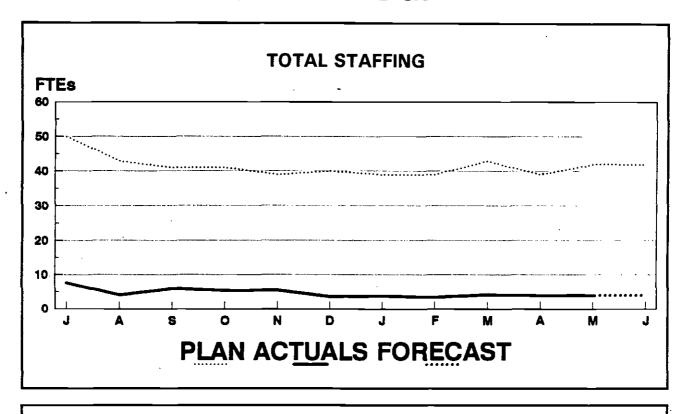
Enviro-Rail is continuing with the items of work that can proceed without the preliminary engineering completed. As soon as the preliminary engineering is available, Enviro-rail will re-evaluate the remaining task and develop a recovery plan. Enviro-Rail will then implement the recommended schedule mitigation and will complete the SEIS/SEIR as quickly as possible.

#### **RESOLVED**

NONE

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# PROJECT STAFFING STATUS MID CITY EXTENSION



#### STAFFING ANALYSIS

The total staffing actuals are lower than planned because the approved Project Implementation Plan (PIP) assumed that Final Design activities would be completed in FY95, however actual staffing is being provided on an "as needed" basis to support the ongoing supplemental EIS/EIR..

Note: Total Staffing Chart includes EMC, CM, and MTA staffing only.

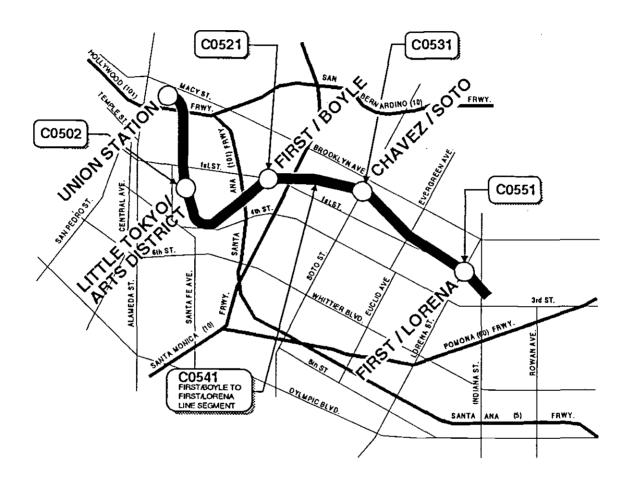
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METRO RED LINE SEGMENT 3

EAST SIDE EXTENSION

**EXECUTIVE SUMMARY** 

# **Major Accomplishments**



# SYSTEMWIDE ACCOMPLISHMENTS

Concluded the evaluation of Fluor Daniel's cost containment study. Continued right-of-way certification, advanced utilities relocation contracts and researching building plans at the station sites. Geotechnical borings began on the alignment from Union Station to Little Tokyo/Art District Station including the station site.

Budget/Forecast Variance (x \$1,000) JUNE CURRENT CURRENT CHANGE IN **COST ELEMENT BUDGET FORECAST VARIANCE FORECAST** CONSTRUCTION \$624,556.0 \$624,865.0 \$309.0 \$0.0 PROFESSIONAL SERVICES 219,522.0 227.635.0 8.113.0 452.0 REAL ESTATE 26,570.0 26,570.0 0.0 0.0 UTILITY/FORCE ACCOUNTS 14,092.0 14,092.0 0.0 0.0 SPECIAL PROGRAMS 0.0 0.0 0.0 0.0 CONTINGENCY 94,861.0 (452.0)86,439.0 (8,422.0)PROJECT REVENUE TOTAL PROJECT \$979,601.0 \$979,601.0 \$0.0 \$0.0 **NEW REQUIREMENTS** CONSTRUCTION PROFESSIONAL SERVICES **REAL ESTATE** UTILITY/FORCE ACCOUNTS SPECIAL PROGRAMS

## **Budget/Forecast Variance Analysis**

\$0.0

\$979,601.0

\$0.0

\$979,601.0

\$0.0

\$0.0

\$0.0

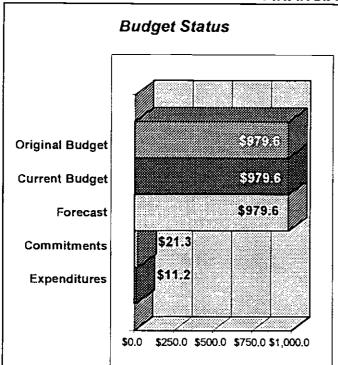
\$0.0

A trend was written for the sum of \$452,000 for inclusion of final design in-progress estimates and to support the change of the final estimate take-off status to full estimate status. Earlier during final design negotiations between MTA and EMC, the scope of these estimates had been reduced. Subsequent to negotiations, MTA direction was given to add these estimates into the budget based upon a recent Arthur Andersen audit report.

CONTINGENCY .
PROJECT REVENUE

GRAND TOTAL

TOTAL NEW REQUIREMENTS



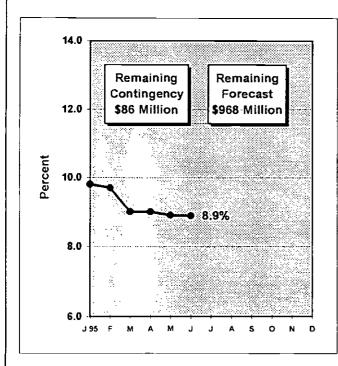
## **Budget Status Analysis**

No change in Budget for current reporting period.

# Remaining Contingency

**Dollars in Millions** 

as Percent of Remaining Forecast (Remaining Forecast = Forecast - Expenditures)



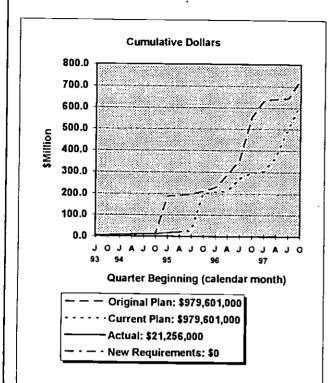
# Remaining Contingency Analysis

To date, project trending has reduced contingency by \$8,422 million.

During the reporting month, contingency was reduced by \$452,000 by adding in-progress estimates to the final design forecast and changing the requirements for final design estimates.

Preliminary design is 100% complete which relates to 30% complete of the total design effort.

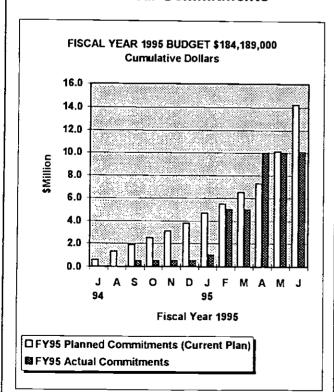
# **Project Commitments**



# **Project Commitments Analysis**

No new project commitments for the current reporting period. Commitments delayed due to the delay in NTP for final design. Original plan is impacted because of delayed award for final design.

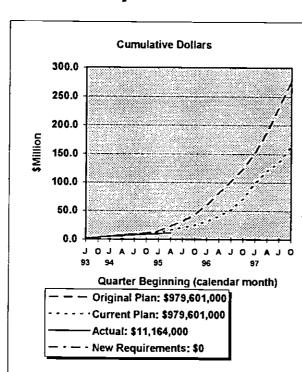
# Fiscal Year Commitments



# Fiscal Year Commitments Analysis

Commitments delayed due to the delay in NTP for final design.

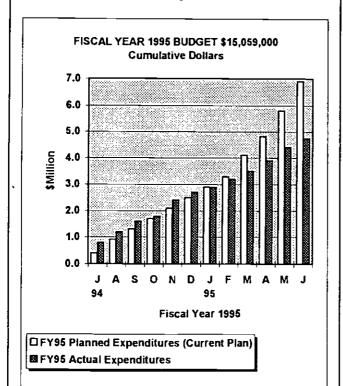




# **Project Cashflow Analysis**

Original plan is impacted because of delayed award for Final Design.

## Fiscal Year Project Cashflow

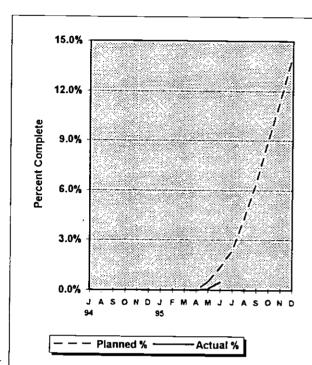


# Fiscal Year Cashflow Analysis

The planned expenditures have not been met because of the delayed start for final design.

#### **SCHEDULE STATUS**

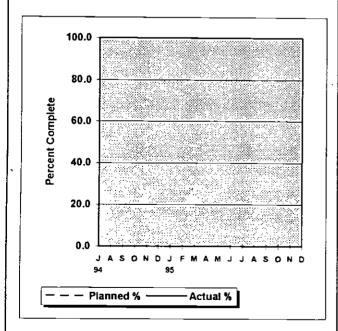




## Final Design Schedule Progress Analysis

Design began 5/15/95 with a "Limited Notice to Proceed" with limited scope authorization. Full Notice to Proceed is expected 8/1/95.

# Schedule Status Construction Progress



Revenue Operations Date: Planned Forecast 11/9/02 5/23/03

## Construction Schedule Progress Analysis

Not applicable at this time.

#### Current Critical Path

- 1st/Boyle to 1st/Lorena Line Section
- Chavez/Soto Station

The Critical Path is currently 140 days behind schedule (negative float)

C0541 1st/Boyle - 1st/Lorena Line Section is on the critical path 8/1/95 through 4/20/99.

C0531 Chavez/Soto Station is on the critical path 4/21/99 through 7/13/00.

#### Current Critical Path Analysis

Design of both C0531 and C0541 is on the critical path starting at NTP for design 8/1/95. The critical path then becomes the C0541 bid, award, and tunneling process. When tunneling is complete, access to the Chavez/Soto station box is transferred from the C0541 contractor to the C0531 contractor, as is the critical path. When station concrete is substantially complete, trackwork access is provided and the critical path becomes trackwork installation.

With the continuing delays to start of final design, the ROD has thus far been pushed 140 days, and now stands at 5/23/03.

Eighty-six days of negative float was mitigated by moving the start of final design services (full funding) from 11/29/95 to 8/1/95.

#### 3-Month Contract Schedule

**Contract Description** 

**Advertise Date** 

## 3-Month Contract Schedule Analysis

No contracts for advertisement at this time.

# SCHEDULE STATUS

## Real Estate Status

			PARCELS	PARC	CELS NOT
		NUMBER	NOT	AV	ALABLE
	NUMBER	OF	AVAILABLE	(BEHIND	SCHEDULE)
	OF	PARCELS	(ON		AVG. DAYS
	PARCELS	AVAILABLE	SCHEDULE)	NUMBER	BEHIND
THIS MONTH					
LAST MONTH	_				

# Real Estate Analysis

To date, 19 full-take parcels have been certified. No parcels were scheduled to be acquired during this period.

#### **AREAS OF CONCERN**

#### NEW

#### **Item**

Protest to the Section Designer selection was received by MTA in March 1995.

### Concern/Impact

If the selected Section Designers are not approved because of the protest, the process of selecting new Section Designers will have a minimum three month impact to the schedule.

#### Status/Action

MTA Board action is scheduled for July 1995.

#### AREAS OF CONCERN

#### RESOLVED FROM LAST MONTH

#### **Item**

The Record of Decision was approved with a Revenue Operations Date of November 2002. This date was based upon a scheduled start date for Final Design services in January 1995. On April 25, 1995, MTA Board approved EMC to start limited design services for geotechnical, advanced utilities, right-of-way and to negotiate a fixed price contract for final design services with a Notice-to-Proceed amount of \$5 million. Authorization was given to EMC on May 15, 1995 to begin with the aforementioned scope and to include the review of a cost reduction recommendation study as prepared by Fluor Daniel Engineering for \$2.6 million.

### Concern/Impact

Schedule impacts include re-opening negotiations for Final Design Services, new selection of Section Designers and additional delay to start Final Design Services. Two hundred twenty-six working days of negative float have resulted. The outcome of the Fluor Daniel cost containment study could further result in additional delays to the Project Schedule.

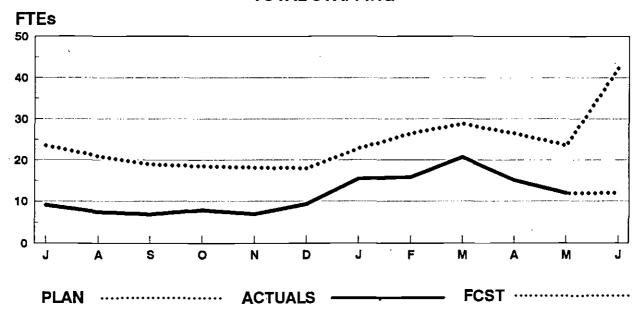
#### Resolution

Fluor Daniel, Inc. after performing the Cost Containment Study, concluded that they could not recommend the tunneled station concept for the East Side Extension. Plus, MTA management has placed as a July agenda item for MTA Board approval the full funding for start of Final Design, August 1, 1995 to be based upon cut-and-cover stations. With these decisions in place the schedule float of 226 negative working days has been reduced to 140.

SAFETY SUMMARY (N/A AT THIS TIME)

# **RED LINE SEGMENT 3**

# EASTERN EXTENSION TOTAL STAFFING



# **STAFFING ANALYSIS**

The total staffing actuals are lower than planned due to delays in Final Design.

Note: Total Staffing Chart includes EMC, CM and MTA staffing only.

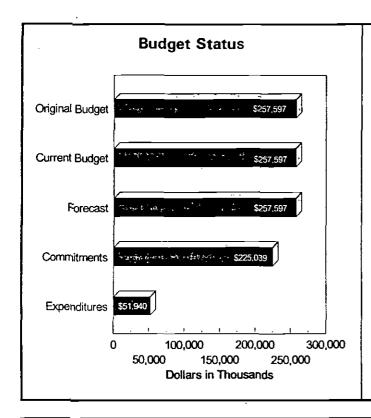
# **VEHICLE ACQUISITION PROJECT**

# **EXECUTIVE SUMMARY**

Bu	dget/Forecas	t Variance	)	
COST ELEMENT	CURRENT BUDGET (\$000)	CURRENT FORECAST (\$000)	VARIANCE (\$000)	JUNE CHANGE IN FORECAST (\$000)
CONSTRUCTION	\$232,370	\$229,830	(\$2,539)	\$0
PROFESSIONAL SERVICES	12,960	19,505	6,544	0
PROJECT CONTINGENCY	12,267	8,262	(4,004)	0
PROJECT REVENUE	0	0	0	0
TOTAL PROJECT	\$257,597	\$257,597	\$0	\$0

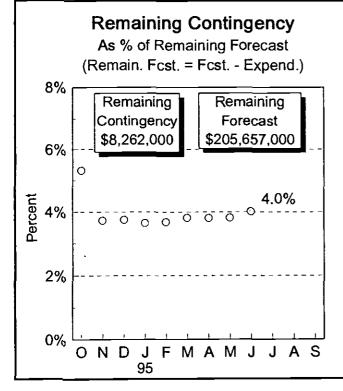
# **Budget/Forecast Variance Analysis**

There was no reconciliation for the month of June 1995 because there were no trends. The \$6.5 million variance in Professional Services is mainly due to the incorporation of a Project Budget Change Request (PBCR) for the E0350 contract, LTK Engineering Services (Trend #4). This PBCR is in the process of being finalized.



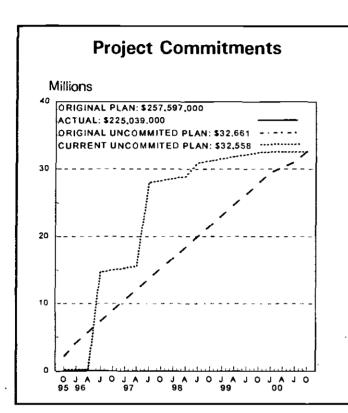
### **Budget Status Analysis**

The Current Project Budget is \$258 million with a current forecast of \$258 million. The Forecast includes all trends (#001 - #013).



## **Remaining Contingency Analysis**

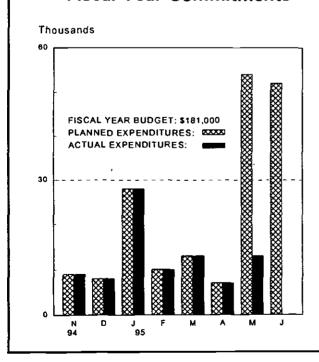
The remaining Project Contingency for the Los Angeles Light Rail Vehicle is 4.0% of the remaining forecast for the period of June 1995. Currently, Project Contingency stands at \$8.26 million.



# **Project Commitments Analysis**

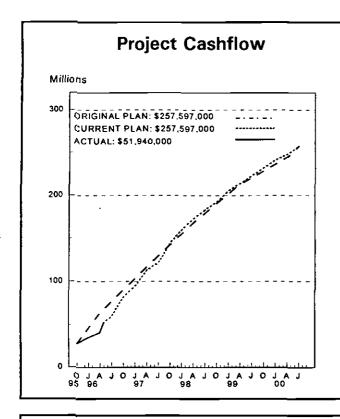
Project planned commitments are \$257.6 million; actual commitments are \$225.0 million or 87.4% of the total forecast. The total increase for June commitments for the period \$13,000. The are **Project** Management Oversight contract, FM014, increased commitments \$13,000 to bring commitments into balance expenditures. The chart is based on uncommitted amounts. Actual commitments are through May 1995.





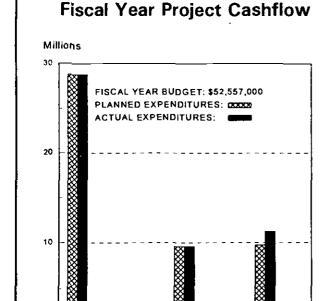
# Fiscal Year Commitment Analysis

Planned commitments are \$181 thousand; actual commitments are \$88 thousand. The reason for the variance is due to the uncommitted forecasts of the Project Management Oversight Contract (FM014) and the LTK Engineering Services Contract (E0350). The chart is based on uncommitted Actual amounts. commitments are through May 1995.



# **Project Cashflow Analysis**

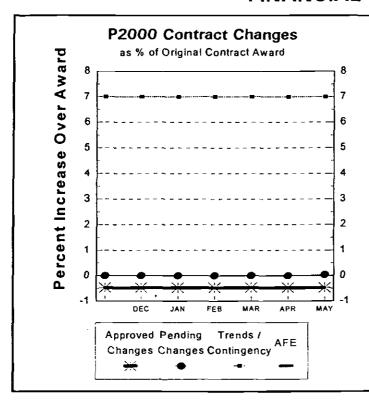
Project planned cumulative expenditures are \$257.6 million; actual expenditures to date are \$51.9 million or 20.2% of the total forecast. These expenditures are accounted for mainly by Contract P2000, General Engineering, Specialty Services and Project Administration.



To Date N

# Fiscal Year Cashflow Analysis

Planned fiscal year cumulative expenditures for the month are \$52.6 million; actual expenditures are \$51.9 million.



#### **Contract Changes Analysis**

The figures for June 1995 are as follows:

Approved Changes.....(0.5%)

Pending Changes.....0.04%

Trends/Contingency......7.0%

## P2000 Contract

# **Contract Cost and Forecast**

Comparison to Budget

Dollars in Thousands	Current	Previous	Variance
Original Contract Award	\$215,370	\$215,370	\$0
Approved Contract Value*	(\$1,000)	(\$1,000)	\$0
Current Value	\$214,370	\$214,370	\$0
Pending Logged Changes	\$71.7	\$71.7	\$0
Trends and Contingency	. \$14,988	\$14,988	\$0
Total Forecast	\$229,430	\$229,430	\$0
Constr. Budget	\$232,370	\$232,370	\$0

\*Includes by Executed Change Orders and Approved Not-to-Exceed Costs. forecast and Budget for Awarded contracts only.

# P2000 Contract Contract Forecast Analysis

The approved change value decrease is primarily due to a testing location change and the addition of three (3) options.

The pending logged changes increase is due to changes as a result of the Specification Review Conference.

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### AREAS OF CONCERN

#### **NEW**

There were no new Areas of Concern identified this month.

#### **ONGOING**

#### *Item*

Vehicle Weight

Concern/Impact

#### Status/Action

Although the most vehicle weight report suggests that the car weight is right on target, there is apparently no contingency at this relatively early stage of the program. This lack of margin is cause for concern itself, and will be addressed in design reviews with the Carbuilder.

#### **Item**

Axle Design

#### Concern/Impact

SDC has submitted an axle design drawing consistent with the axle stress analysis; however, there are a number of other inconsistencies that must be resolved before the design *per se* can be approved. From the information we have received thus far, it appears that due to the enhanced strength of the steel proposed, we will be able to use the lighter, smaller axle proposed by Duewag. This will be carried as an Area of Concern until final resolution.

#### Status/Action

No change from last month.

# AREAS OF CONCERN (CON'T)

Item
Vehicle Structure and Truck Design
Concern/Impact
The progress of Duewag's structure and truck design to date.
Status/Action
No Change from last month.
Mana
Item EMI (Electromagnetic Interference) Limits
Concern/Impact
Some time ago, SDC had petitioned the MTA to modify the specified Conducted EMI limits in order to reduce the weight of the AEG Line Reactor. LTK reviewed the request, and, following an exchange of correspondence, new limits were mutually agreed to between the MTA Vehicle Design Group, the H1100 (Green Line) contractor, and SDC. All that remained was confirmation from the Pasadena Signal Designer (the "Engineering Management Consultant") that the new limits were acceptable as applied to the Pasadena Line.
On 27JUN95, we received such concurrence from the EMC, with certain provisos. These stipulations include the following:
□ Satisfactory completion of tests on the Green Line demonstrating the new limits will not cause interference with the signal system □ That there may be some risk that future developments in signal work may necessitate change to the vehicle at some later date □ That there is some risk in that the analytical processes used in verifying that the new limits will not interfere with the signal system may not be precise
Status/Action ·

These stipulations have been forwarded to SDC for their review and comment.

# AREAS OF CONCERN (CON'T)

#### Item

Schedule Slippage

#### Concern/Impact

SDC is revising and rebaselining their schedule, and no update was available for June. As indicated previously, however, schedule performance remains one of the program's key concerns. One specific concern is the lack of progress being made at SDC's Carson Facility. Although the production of detail parts and subassemblies continues, CCI's vendor base has started to complain about the lack of steel (CCI supplies steel to all their subcontractors in order to control material quality and grade). Moreover, no work has been started on the actual carshell. Tooling is for the most part complete, and the shop organization is well established (CCI moved their staff into the Carson Shop offices this month), but no steel for the major substructures (underframe, end underframe, ends, side frames, roof frames, etc.) has yet been laid in any tooling.

#### Status/Action

N/A

#### *Item*

**SDC Quality Assurance Program** 

#### Concern/Impact

Although we have not received any formal transmissions from SDC this month with regard to the problems uncovered during our QA Audit in February, SDC has stated that they will be complying with our requirements. They will formalize their position next month in a written response to our QA Audit findings.

#### Status/Action

SDC's QA approach will be kept as an Area of Concern until we receive documentation verifying that the policy and procedure problems found during our audit have been corrected.

# AREAS OF CONCERN (CON'T)

#### Item

**HVAC** Design

#### Concern/Impact

SDC had originally scheduled a Critical Design Review for the Sutrak R-22 design on 12/13JUL95. The MTA noted that the term *Critical Design Review* was actually a misnomer, in that no *Preliminary Design Review* of the Sutrak R-22 design had ever been conducted. Regardless, SDC was informed that unless substantive design data was forwarded for review *prior* to the conduct of the design review, there would be no value in the MTA attending same.

#### Status/Action

LTK will, however, send a representative to Sutrak's design and fabrication facility to audit progress of the design. This audit has been scheduled for 12/13JUL95.

#### Item

**Decision on Driverless Technology** 

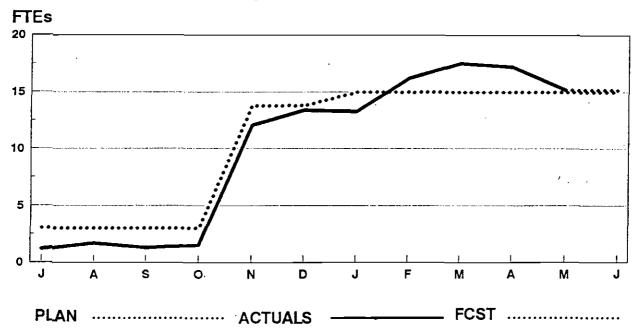
#### Concern/Impact

#### Status/Action

No decision has been made as yet. If driverless technology (P2000 Contract Option No. 3) is to be selected for the first 34 cars, it must be approved by the MTA Board no later than 18 months following NTP; that is, by 28AUG95.

# LIGHT RAIL VEHICLE PROCUREMENT

**TOTAL STAFFING** 



# STAFFING ANALYSIS

No significant variance.

Note: Total Staffing Chart includes EMC, CM and MTA Staffing only.

Actuals are through May 1995