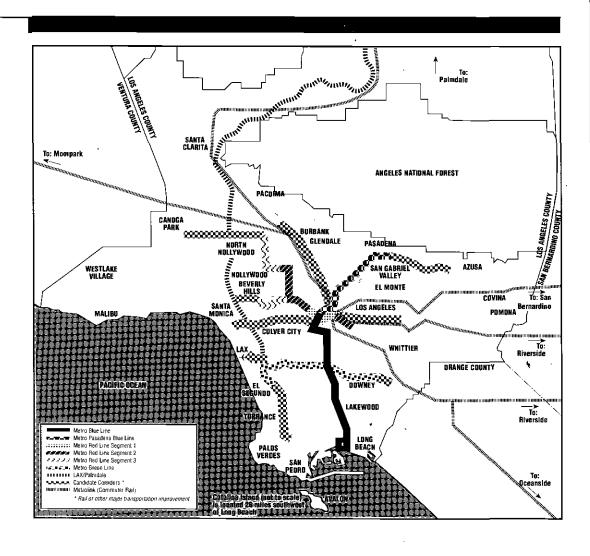
# RAIL CONSTRUCTION CORPORATION



# Executive Report Rail Program Status



### RAIL PROGRAM STATUS SUMMARY

THE LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
RAIL CONSTRUCTION DIVISION

#### RAIL PROGRAM STATUS SUMMARY

Metro Pasadena Blue Line

**Cost Status** (\$000)Original Budget 841,000 Expended to Date

Project Progress Design (Rebaselined)

**Project Progress** 

Construction

Design

Construction

Actual:

Actual: 78%

93%

Current Budget Construction 841,000

91,710 \*

Actual: 0%

**Revenue Operations Date:** 

Schedule Status:

Original November 1997 June 1998 Forecast

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

Cost Status (\$000)

**Original Budget** 671,000

Expended to Date 571,802 \* Design

Current Budget 717,802 Actual: 99%

Schedule Status Construction

Revenue Operations Date: Original October 1994

Forecast May 1995

Metro Red Line Segment 1

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

**Original Budget** 1,249,900 Expended to Date 1,396,372\* Design

**Current Budget** 1,450,019 Actual: 100%

Schedule Status

Original **April 1992** Actual January 1993

Revenue Operations Date: Actual: 99%

Metro Red Line Segment 2

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

Original Budget 1,446,432 Expended to Date 817,036\*

Current Budget 1,517,657 Actual: 99%

Schedule Status: Revenue Operations Dates: Construction

Wilshire Vermont/Hlywd Actual: 44%

Jul '96 Sep '98 Original Mar '99 Forecast Feb '96

Metro Red Line Segment 3 - North Hollywood Extension

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

Original Budget 1,310,822

Expended to Date 135,657\* Design

Current Budget 1,310,822 Actual: 83%

Schedule Status

Revenue Operations Date: Actual: 4.3%

2000 Original

Forecast May 2000

#### 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 8,697\* Design

Current Budget 490,663 Actual: 27%

Schedule Status Construction

Revenue Operations Date: Actual: 0%

Original 1999 Forecast 1999

**Vehicle Acquisition Project** 

Cost Status (\$000) Project Progress

Original Budget 257,597
Expended to Date 28,775\* Design

Current Budget 257,597 Actual: 6%\*\*

Schedule Status: Manufactured

Delivery of Final Cars: Actual: 6%\*\*

Original November 1997

Forecast November 1999 \*\* Based on Milestone Payments

<sup>\*</sup> Expenditure data through Oct 1994

12/02/94

STATUS OATE:

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

SUMMARY BY COST ELEMENT

(IN THOUSANDS)

PROJECT: TOTAL RAIL PROGRAM

Page

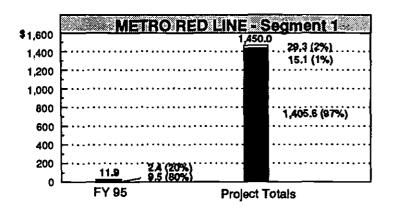
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THOUSEN TO THE THIEF THOU	1 17 1711									
ELEMENT	BUD	GET	COMMI	TMENTS	INCURR	ED COST	EXPEND	DITURES	CURRENT	VARIANCE
DESCRIPTION	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)	FORECAST (9)	(9-2) (10)
T CONSTRUCTION	4,528,953	4,596,834	9,318	3,183,222	42,020	2,310,453	50,692	2,234,171	4,689,466	92,632
S PROFESSIONAL SERVICES	1,466,008	1,768,799	10,777	1,372,248	16,164	1,160,712	16,340	1,158,538	1,804,629	35,830
R REAL ESTATE	453,432	522,489	13,245	336,678	16,870	345,616	16,857	345,526	520,750	(1,740)
F UTILITY/AGENCY FORCE ACCOUNTS	132,187	146,936	181	121,825	3,174	96,199	3,183	95,679	153,988	7,051
D SPECIAL PROGRAMS	11,044	20,884	19	6,374	99	3,246	119	3,266	21,537	653
C CONTINGENCY	465,256	372,247	0	0	0	0	0	0	260,982	(111,265)
A PROJECT REVENUE	(18,115)	(36,585)	0	(1,054)	0	(6,463)	(1,361)	(7,888)	(35,745)	839
PROJECT GRAND TOTAL	7,038,766	7,391,604	33,542	5,019,295	78,327	3,909,765	85,832	3,829,293	7,415,607	24,002

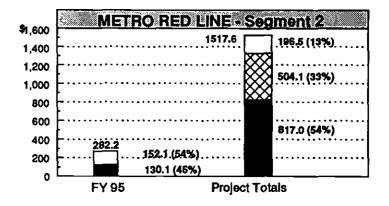
NEW REQUIREMENTS	BUD	GET	соммі	TMENTS	INCURR	ED COST	EXPEND	DITURES	CURRENT	VARIANCE
DESCRIPTION	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	. PERIOD (7)	TO DATE (8)	FORECAST (9)	(9-2) (10)
T CONSTRUCTION	О	52,245	90	43,991	1,328	3,083	60	117	61,020	8,775
S PROFESSIONAL SERVICES	0	15,875	0	10,011	56	9,284	56	9,284	16,297	422
R REAL ESTATE	0	o	0	1	0	1	0	1	0	0
F UTILITY/AGENCY FORCE ACCOUNTS	0	130	0	0	0	0	0	0	130	0
D SPECIAL PROGRAMS	0	0	0	20	0	22	0	22	20	20
C CONTINGENCY	o	2,975	0	0	0	0	0	0	3,040	65
A PROJECT REVENUE	0	0	0	0	0	0	0 :	0	0	0
NEW REQ. SUBTOTAL	0	71,225	90	54,023	1,384	12,392	117	9,425	80,509	9,283
PROJECT GRAND TOTAL	7,038,766	7,462,829	33,632	5,073,318	79,711	3,922,157	85,949	3,838,718	7,496,116	33,285

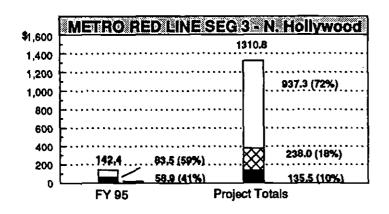
This report includes total project costs for the Metro Blue Line of \$877,271.

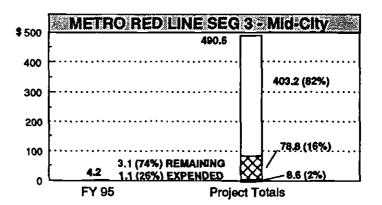
#### BUDGET STATUS - December 2, 1994 (in \$ Millions)



Page

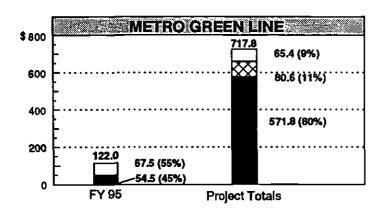


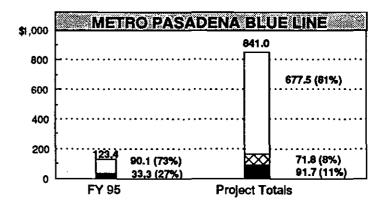


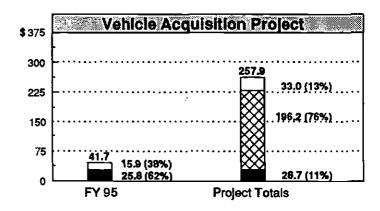


Actual Spent Encumbered Remaining Budget

#### BUDGET STATUS - December 2, 1994 (in \$ Millions)

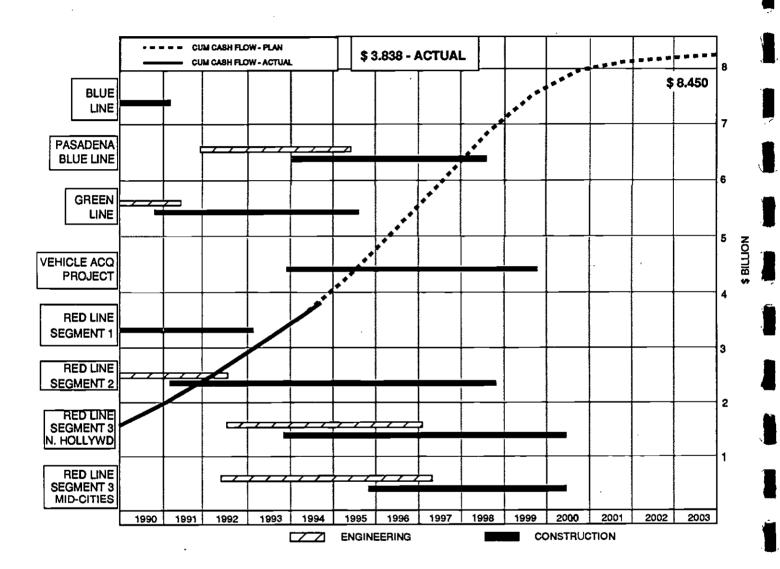






Actual Spent Encumbered Remaining Budget

Figure 1 - Rail Construction Plan



#### METROPOLITAN TRANSPORTATION AUTHORITY FUNDING SOURCES

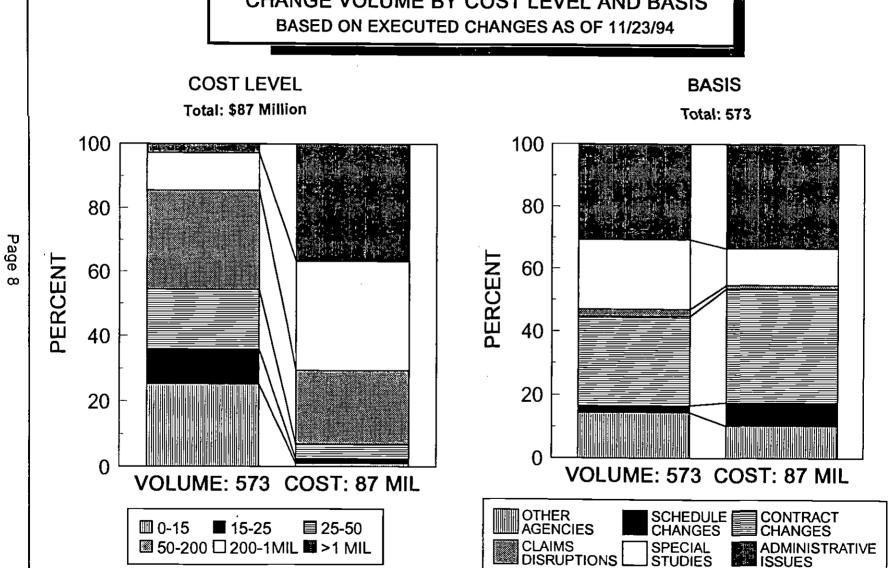
(IN MILLIONS)

	METRO		PASADI				METRO				METRO R				VÉHICLÉ A		TOT	_
	LIN		BLUE I		Lin		SEG		SEG	$\overline{}$	SEG 3		SEG 3		PRO		PROG	
ET SECTION S	\$	%	3	96	-\$-	%	\$	<u>%</u>	- 2	_%	\$	<del>%</del>	\$	<u>%</u>	\$	%	\$	<u>%</u>
FTA-SECTION 3	ļ						605.3	42	667.0	44	681.0	52	242.6	49			2195.9	29
FTA - OTHER							.					- 1			18.0	7	18.0	C
ISTEA-FED SURFACE TRANSIT PROG											25.0	2	55.4	11	90.1	35	170.5	2
FLEXIBLE CONGESTION RELIEF													26.0	5			26.0	o
FTA-SECTION 9							90.6	6		'							90,6	1
STATE			337.8	40	106.4	15	210.3	15	185.1	12	190.9	15	72.3	15	33.6	13	1136.4	15
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	23
PROP A/C (TRANSIT ENHANCEMENT)									59,3	4						į	59.3	1
PROPOSITION C			503.2	60	399.9	56					321.8	25	94.4	19	115.9	45	1435,2	19
PROPIC (AMERICAN DISABILITY ACT)					6.4	1			5.9	0							12.3	o
CITY OF LOS ANGELES							34.0	2	96.0	6	-						130.0	2
BENEFIT ASSESSMENT							130.3	9	58.0	4	17.1	1			1		205.4	3
COST OVERRUN ACCOUNT							200.1	14		-							200.1	3
CITY OF PASADENA																		
TOTAL	877.2	100	841.0	100	717.8	100	<u> 1</u> 450.1]	100	1511.6	100	1310.8	100	490.7	100	257.6	100	7456.8	100

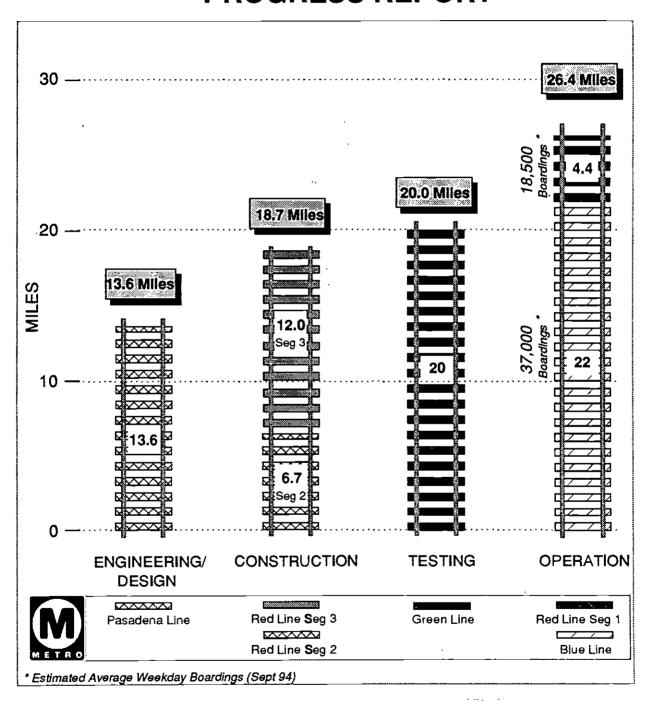
CONSISTS OF LIGHT RAIL LINE (\$847) AND MC-5 WORK (\$30).
 LRT PORTION INCLUDED IN BLUE LINE FORECAST.

Note: Data reflects current budget.

# CONSULTANT CHANGE REQUEST (CCR) CHANGE VOLUME BY COST LEVEL AND BASIS BASED ON EXECUTED CHANGES AS OF 11/23/94



# METRO RAIL SYSTEMS PROGRESS REPORT



#### **REAL ESTATE**

Figure 3 - Real Estate Acquisition Status Summary

		Number of	Parcels Not
	Number of	Parcels	Available
	<u>Pa</u> rcels	Available	(on Schedule)
Pasadena Blue Line	161	11	150
Green Line	39	39	0
Red Line Seg 2	88	86	2
Red Line Seg 3 NH	<u>1</u> 75	42	***
Red Line Seg 3 MC***	61	0	54

Parcels Not Available										
(Behind Schedule)										
Number Avg. Days Behind										
_TBD*	TBD⁺									
0	0									
0	0									
9	***									
7	120									

<sup>\*</sup> Due to project reschedule, need dates are under review.

#### MANAGEMENT ENGINEERING AND ADMINISTRATION COSTS

The goals of the MTA include limitations on the percentage of total project costs which will be spent on project administration and on MTA staff.

The MTA goal for project administration costs is 20%. The current forecast data for project administration costs totals 25.05% which exceeds the MTA goal by 5.05%. The percentage <u>includes</u> all costs previously expended by the SCRTD when the Metro Red Line Segment 1 project was under SCRTD management.

Staff costs are projected at 4.20% of total program costs, which just exceeds the 4% MTA goal by 0.2%. Figure 6 illustrates the forecast figures for each project and for total program.

<sup>\*\*\*</sup> Reporting Suspended.

Figure 6 - Cost Performance Relative to Corporate Goals

IN	TH	OŁ	IS/	۱N	DS	
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	METRO	LUE LINE			METROGE	REEN LINE	METRO RED LINE		METRO RED LINE										COF
	L			LINE	ļ <u></u>			SEGMENT 1		ENT 2		HN ETM	SEGMEN		PROJ		PROGR/		GO
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	ļ
CONSTRUCTION	657,487	74.95%	508,167	58.75%	487,061	67 85%	812,270	56.11%	1,011,665	66.65%	828,461	62.76%	329,211	67.10%	229,759	89.19%	4,864,081	64.89%	۰,
REAL ESTATE	55,592	6.34%	74,308	8.59%	26,047	3.63%	140,000	9,66%	91, <b>00</b> 2	6.00%	85,257	6.46%	48,543	9.89%	٥	0 00%	520,749	6.95%	,
PROFESSIONAL SERVICES:								_											
ENGINEERING/DES	69,587	7.93%	85,116	9.84%	81,794	11.40%	221,659	15 29%	154,177	10.16%	77,781	5 89%	36,706	7.48%	1,700	0 66%	728,520	9.72%	, 
CONSTR MGMT.	91,642	10.45%	72,185	8.35%	72,337	10 08%	116,429	8.03%	137,519	9.06%	103,207	7.82%	35,000	7.13%	٥	0.00%	628,319	8.38%	, 💹
STAFF	17,655	2.01%	38,611	4.46%	27,607	3 85%	95,558	6.59%	53,051	3.50%	57,676	4.37%	19,627	4 00%	5,335	2.07%	315,120	4.20%	6
OTHER	14,222	1.62%	24,905	2.88%	18,020	2.51%	32,671	2.25%	55,411	3.65%	36,459	2.76%	11,647	2.37%	12,263	4.76%	205,598	2.74%	,
SUBTOTAL	193, 106	22.01%	220,817	25.53%	199,758	27.83%	466,317	32.16%	400,158	26.36%	275,123	20.84%	102,980	20.99%	19,298	7.49%	1,877,557	25.05%	2
UTILITY/FORCE ACC													5,088	1.04%			5,088	0.D7%	·
CONTINGENCY	963	0.11%	61,709	7.13%	10,505	1,46%	31,432	2.17%	15,276	1.01%	131,116	9.93%	4,841	0.99%	8,540	3.32%	264,382	3.53%	
PROJECT REVENUE	(29,877)	-3.41%		0 00%	(5,569)	-0.78%		0.00%	(300)	-0.02%	0	0.00%	0	0.00%	0	0.00%	(35,746)	-0.48%	
RAND TOTAL	877,271	100 00%	865,000	100.00%	717,802	100.00%	1,450,019	100.09%	1,517,801	100.00%	1,319,959	100.00%	490,663	100 00%	257,597	100,00%	7,496,112	100.00%	

NOTE: Data reflects Current Forecast,

# METRO CONSTRUCTION PROJECT MANAGEMENT OVERSIGHT CONSULTANT ACTION ITEMS

The following items reflect action requirements identified in the November Project Report submitted by the Project Management Oversight Consultant, Fluor Daniel, Inc.

#### NEW - November 1994

No New Items

#### <u>ONGOING</u>

Concern: The Pasadena Blue Line (PBL) Construction Manager should

complete project controls procedures development.

Action: Procedures for cost estimating, scheduling and portions of cost

control management should be drafted, approved and issued by the

Construction Manager.

Status: Under PBL staff review.

Concern: Pasadena Blue Line (PBL) budget fluctuations and design changes

may impact the designers' ability to complete work elements within

the current estimates.

Action: Each active design contract should be reviewed to determine

current cost status and estimated cost to complete.

Status: Revised baseline cost estimates are being prepared.

Concern: The EMC should complete a Design Management Plan for the PBL

Project.

Action: The PBL staff should direct the EMC to complete this management

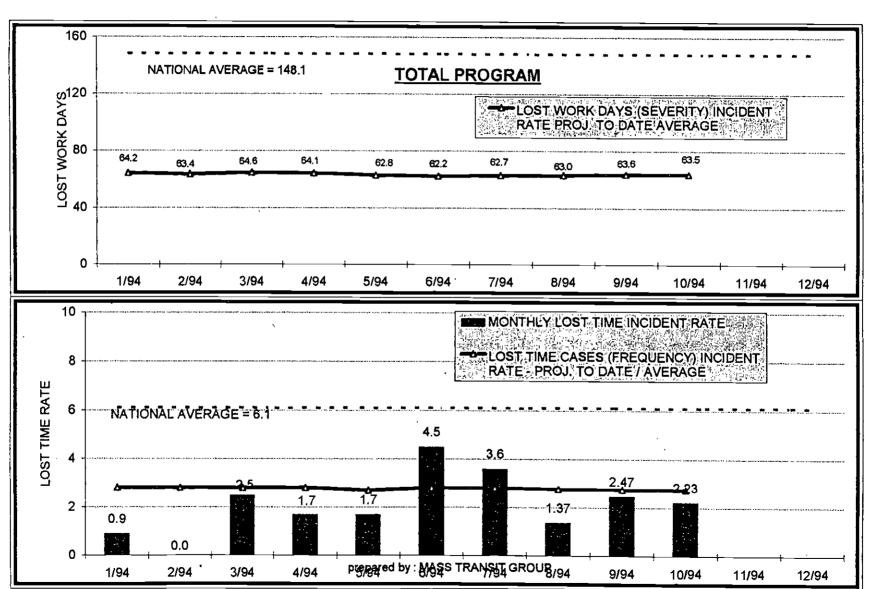
tool.

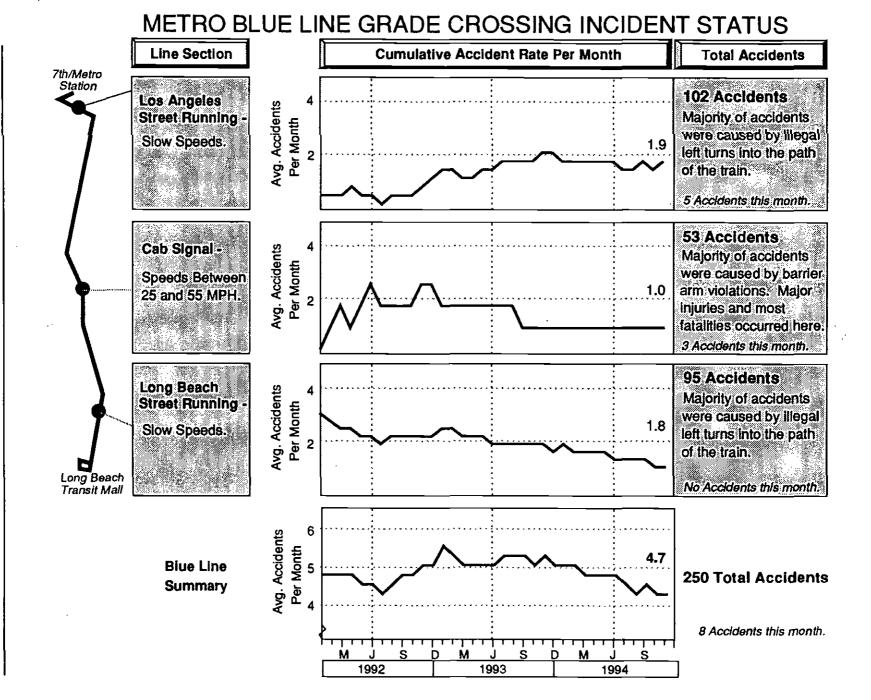
Status: Under Metro Construction review.

#### **RESOLVED**

No New Items

#### Summary of Lost Time Accidents (FREQUENCY) and Lost Work Days (SEVERITY)





Page 14

# METRO CONSTRUCTION PRE CONTRACT STATUS SCHEDULE SUMMARY LOOK AHEAD 90 Days

R05 Pasadena Blue Line

Page:	1
razc.	

UPDATE:06-Dec-94

Cont.	Contractor/	Contract	85% Design	IFB/RFP	Advertise	Pre-Bid	Bid	Bid Report Committee	MTA Board Contracts Lead\Engineering Lead\Project Controls Lead Approval
No.	Description	Type	Approval	Ready	Date	Meeting	Opening	Complete Approval	
P2070	Special Trackwork	FP		•	03/05/95				VRANESH \BALL \PIERCE

# METRO CONSTRUCTION PRE CONTRACT STATUS SCHEDULE SUMMARY LOOK AHEAD 90 Days

R81 Metro Red Line Segment 2

Page: 2

UPDATE:06-Dec-94

	ont.	Contractor/ Description	Contract Type	85% Design Approval	IFB/RFP Ready	Advertise Date	Pre-Bid Meeting	Bid Opening	Bid Report Complete	Committee Approval	MTA Board Approval	Contracts Lead\Engineering L	ead\Project Controls Lead
B:	216	WILSHIRE/VERMONT SITE RESTORATIO	unit		•	01/30/95	02/16/95	03/30/95	04/14/95	05/01/95	05/24/95	CERVANTES\Tamurí	\Brown

# METRO CONSTRUCTION PRE CONTRACT STATUS SCHEDULE SUMMARY LOOK AHEAD 90 Days

Page: 3

Page

15

R82 Metro Red Line Segment 3

Cont.	Contractor/	Contract	85% Design	IFB/RFP	Advertise	Pre-Bid	Bid	Bid Report	Committee	MTA Board	MTA Board Contracts Lead\Engineering Lead\Project Cor		
No.	Description	Type	Approval	Ready	Date	Meeting	Opening	Complete	Approval	Approval	Approval		
C0329	Universal City Demolition for C0311/0321	Unit		•	12/12/94	12/20/94	01/19/95	01/27/95	02/06/95	02/22/95	Mendoza	\Givens	\Williams

#### METRO CONSTRUCTION PRE CONTRACT STATUS SCHEDULE SUMMARY LOOK AHEAD 90 Days

T01 System-wide Projects

Page: 4

UPDATE:06-Dec-94

UPDATE:06-Dec-94

Cont. No.	Contractor/ Description	Contract Type	85% Design Approval	IFB/RFP Ready	Advertise Date	Pre-Bid Meeting	Bid Opening	Bid Report Complete	Committee Approval	MTA Board Approval	Board Contracts Lead\Engineering Lead\Project Controls val			
C0190	Western Ave. Traffic Signal Improvements	FFP		•	01/15/95	01/30/95	02/14/94	02/21/95	03/08/95	03/22/95	Escalle	\Vardanian	\Kendrick	
C6130	Variable Message Signs Installation	FFP			01/01/95	01/10/95	01/31/95	02/07/95	02/15/95	02/22/95	Escalle	\Vardanian	\Kendrick	
MS067	Project Mngmnt Oversight/Assistance				02/15/95						Escalle	· ·	1	

#### **EXECUTIVE SUMMARY**

The Final Design percent complete for the month of November is 78%. Design is progressing according the recently rebaselined plan. The progress represents an increase of 1% from last month's cumulative progress of 78%.

Work continues on defining an ongoing limited construction program for Pasadena. A new baseline budget and schedule is being developed. Contract repackaging continue for C6435, Bridge Retrofit and Reconstructions of Concrete and Steel Bridges. Invitation for bid has been rescheduled for December 20, 1994.

Conformed contract drawings were submitted to MTA Construction Division for Contract C6430, Arroyo Seco Bridge reconstruction. The majority of station designs are continuing toward Pre-Final and Final submittals. Chinatown Station continues to be delayed pending completion of Chinatown pedestrian linkage study scheduled for November 30th. Sierra Madre Villa Station design has been delayed due to moving the station to the Johnson & Johnson site and completion of negotiations with the section designer. The Memorial Park Station design is waiting for further progress on Contract C6450, Del Mar to Memorial Park Line Segment, which was halted due to termination of the section designer's contract.

Contract C6410, Los Angeles River Bridge Construction, is continuing. Work continues on the south bridge retaining wall approach. Erection of falsework has been completed for pier tables which are now under way. Construction of the conventional portion of the bridge has started.

Soil remediation work continues by Santa Fe at the Arroyo Seco Bridge site. Full site access to Kiewit Pacific Company is being evaluated and may be delayed until the new year.

The MTA Art-for-Rail Program staff continue to work closely with the station artists and designers as station designs are proceeding to Final and Camera Ready submittals.

#### **EXECUTIVE SUMMARY (cont.)**

#### COST STATUS (in millions)

Current Budget \$841

• Current Forecast \$865 (A)

(A) Includes an estimated \$5 million in grant monies to be sought in FY 95 for the "Urban Greenways" Program and the additional administrative and escalation costs associated with the present forecasted ROD date of June 1998. Both items are not included in the current budget.

#### **SCHEDULE STATUS**

•	Current Approved Revenue Operations Date:	Novembe	r 1997
•	Design Progress		
	Final Design	- Actual	78%
	Overall Design	- Actual	84%
•	Construction Progress		
	Los Angeles River Bridge	- Actual	44%
	Arroyo Seco Bridge (B)	- Actual	0%
	Overall Construction	- Actual	< 01%

(B) Administrative work authorization was issued to Kiewit Pacific for Contract C6430, Arroyo Seco Bridge Reconstruction, on October 21, 1994.

#### **REAL ESTATE STATUS**

MONTH	NUMBER OF PARCELS	PARCELS AVAILABLE	PARCELS NOT	PARCELS NOT (BEHIND SC	
			AVAILABLE (ON SCHEDULE)	NUMBER	AVG DAYS BEHIND
THIS MONTH	161	11	150	TBD *	TBD *
LAST MONTH	163	10	153	TBD	TBD

<sup>\*</sup> Due to project reschedule, need dates are under review.

#### AREAS OF CONCERN

#### ONGOING

Yard Site Location

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

adopted as part of the baseline scope of work. The project has experiencing cost growth in making the yard a more permanent facility

due to the uncertainty of constructing the Glendale-Burbank LRT Line.

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

related to maintenance facility. Value engineering was initiated to reduce

cost growth.

Status: Final design is progressing. Evaluation is continuing on providing wheel

truing and heavy repair at either Long Beach yard or Metrolink's Taylor yard facilities. SCRRA's facilities are preferred due to their close

proximity to Midway Yard.

#### 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 with Ratkovich. Completion of

Chinatown Aerial Structure Camera Ready design submittal is on hold.

Status: Meeting was held with Ratkovich and LADOT on November 30 regarding

the street improvements Vignes Street. An agreement was reached with

all parties. A Memorandum of Understanding is to be prepared.

#### AREAS OF CONCERN (cont.)

#### 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: Certifications are being completed. Appraisals are in progress. A priority

list for real estate acquisitions has been prepared for the project to reflect

the approved fiscal year budget.

#### **Del Mar Station**

Concerns: The transportation center proposed by the City of Pasadena has major

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 on

interface with the station and line segment design and transportation

center.

Status: A consultant has been recommended for design of the transportation

center. The City's planning charette was held November 17 through

November 19. A second design charette is being planned by the City.

Design should begin in January/February 1995.

#### AREAS OF CONCERN (cont.)

#### Sierra Madre Villa Station

Concern: Selection of an alternative station site is required over the original Space

Bank site due to the potential for serious hazardous material on the

property.

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

MTA has submitted an offer to purchase the alternative Johnson and

Johnson station site.

Status: Offer to purchase was declined. MTA has completed a new property

appraisal and will be discussing with Johnson & Johnson. Board action expected in January. MTA Construction Division has submitted advance planning studies to CALTRANS for approval of pedestrian access to the

station and is awaiting review comments.

#### Marmion Way Corridor

Concern: Evaluation of the design of Marmion Way between Avenue 50 and

Avenue 60 as a betterment has increased project design and construction

costs.

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

Status: Notification has been issued to affected City agencies. The City has

responded that the improvements identified by MTA Construction Division as betterments are project mitigation measures. MTA Construction Division continues to work with legal council on betterment.

#### AREAS OF CONCERN (cont.)

#### Chinatown Station

Concern: Selection of Chinatown pedestrian linkage alternative will impact the

Chinatown aerial structure and station design, 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 Chinatown

Station platform.

Status: A community meeting held November 30 at which two alternatives were

presented. Community representatives have requested a 30 day delay to further review MTA's preferred alternative prior to offering support.

Next scheduled meeting is in mid-January 1995.

#### NEW

#### 210 Freeway Stations

Concern: Evaluation of 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 is evaluating whether additional mitigation measures must be added

to the stations to conform to the noise criteria.

#### **RESOLVED**

None.

#### **KEY ACTIVITIES - ACCOMPLISHED IN NOVEMBER**

- MTA Construction Division and EMC continued negotiations on contract change requests on design changes. Initial MTA board action planned for December.
- Completed all foundation and bent construction on Contract C6410, LA River Bridge. Restoration of river channel liner completed. Erection of falsework completed progress for pier tables and back spans for bridge superstructure. Pier table construction is well under way.
- Contract C6430, Arroyo Seco Bridge Reconstruction, Santa Fe proceeded with remediation of lead contaminated soil at site and will complete the work in mid-December.
- Submitted conformed contract drawings and bid documents for C6430, Arroyo Seco Bridge.
- Continued preparation of Contract C6435, Bridge Retrofit and Reconstruction of Concrete and Steel Bridges. Invitation for Bid rescheduled to December 20, 1994.
- Negotiations are under way with new C6450 section designer to restart design on Del Mar to Memorial Park line segment.
- Contract C7300, East Wall, retaining wall construction completed at Union Station separating Metrolink's track improvements from Pasadena's light rail station platform. Clean-up is in progress.
- Contract P2100, Precast Concrete Ties, Contractor submitted early action items.
- Consultants interviewed by MTA and City of Pasadena for design of the Del Mar Transportation Center. Recommendations for selection have been made.
- MTA continues to work on establishing a new baseline budget and schedule for the Pasadena Project.

#### **KEY ACTIVITIES - PLANNED FOR DECEMBER**

- Continue Public Affairs and Art Program meetings with Community Advisory Committees representing the cities of Los Angeles, South Pasadena and Pasadena.
- Submit the Pre-Final submittal for Contract C6400, Yard & Shops.
- Contract C6410, LA River Bridge, place pier tables at main river bents.
   Continue work on erecting travellers to begin segmental bridge superstructure.
- Contract C6430, Arroyo Seco Bridge, Sanţa Fe to complete remediation of lead contaminated soil condition at site. Issue NTP to MTA's bridge contractor, Kiewit Pacific.
- Contract C6435, Retrofit Bridges, issue the invitation for bid for retrofit of 13 bridges along the Pasadena Blue Line alignment.
- Contract C6450, Del Mar to Memorial Park Line Segment, restart final design activities.
- Submit the Camera Ready station design packages for C6490, Union Station Platform.
- Submit the In-Progress submittal for the redesign of Contract C6500, Del Mar Station.
- Clean up construction site on Contract C7300, East Wall at Union Station.
   Terminate use of license area in early December.
- Contract P2100, Precast Concrete Ties, review early submittals for schedule, safety and quality.

Project: R05

MTA CONSTRUCTION DIVISION
PASADENA BLUE UNE
Project Cost by Element

Roport Date: 15-Dec-94

Status Date: 02-Doc-94

(\$ x 000's)

l			Bud	lget	Cammi	tments	jucrate	d Cost	Ехре	nditures	- Current	
ĺ		Description	Original (1)	Current (2)	(3)	To Date (4)	Period (5)	To Date (6)	Period (7)	To Date (8)	Forecast (9)	Variance (9-2)
	Т	Construction	515,171	473,523	2,231	58,695	1,891	14,222	387	11,182	486,008	12,485
İ	s	Professional Services	183,206	197,415	9,083	85,704	2,465	64,999	2,465	64,999	213,913	16,498
1	R	Real Estate	68,100	72,308	14	13,828	22	13,586	22	13,586	74,308	2,000
ᅦ	F	Utility/Agency Force Accounts	8,442	21,997	155	4,919	52	1,657	52	1,657	22,159	162
	D .	Special Programs	3,377	4,402	o	386	15	286	15	286	6,904	2,502
1	С	Contingency	62,705	71,355	0	o	0	0	0	0	61,709	(9,646)
l	Α	Project Revenue	0	0	0	0	o	0	0	0	o	0
l		Project Grand Total:	841,000	841,000	11,482	163,532	4,444	94,750	2,941	91,710	865,000	24,000

#### METROPOLITAN TRANSPORTATION AUTHORITY METRO RAIL PASADENA LINE PROJECT (IN THOUSANDS OF DOLLARS)

27-Dec-94

**NOVEMBER 94** 

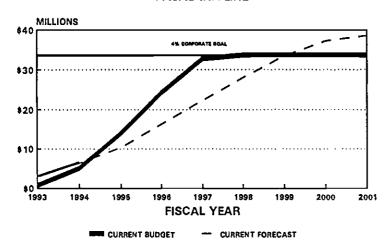
STATUS OF FUNDS BY SOURCE

	TOTAL FUNDS	TOTAL	COMMITM	ENTS	EXPENDIT	URES	BILLED TO SOURCE		
SOURCE	ANTICIPATED	FUNDS AVAILABLE	<b>\$</b> 	%	\$	%	\$	%	
STATE PROP 108	\$21,200	\$0	\$13,192	62%	\$13,192	62%	<b>\$</b> 0	0%	
STATE RAIL BOND	\$316,600	\$0	\$0	0%	\$0	0%	\$0	0%	
PROP C (HIGHWAY 25%)	\$162,698	\$49,189	\$11,268	7% -	\$11,268	7%	\$11,268	7%	
PROP C (40% DISC.)	\$340,502	\$67,250	\$139,072	41%	\$67,250	20%	\$67,250	20%	
TOTAL	\$841,000	<del></del>	\$163,532	19%	\$91,710	11%	<b>\$</b> 78,518	9%	

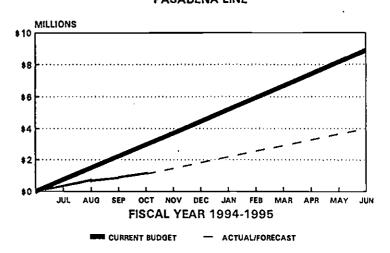
NOTES: EXPENDITURES ARE THROUGH OCTOBER 1994.

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### AGENCY COSTS PASADENA LINE



### FISCAL YEAR 1995 AGENCY COSTS PASADENA LINE

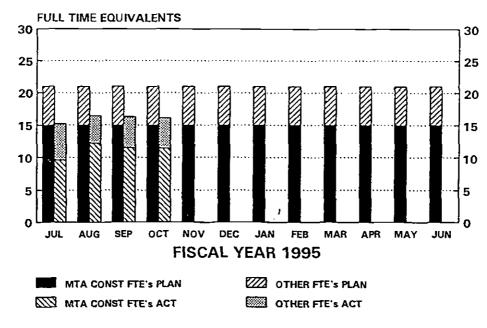


## PROJECT AGENCY COSTS PASADENA LINE (\$000)

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

TOTAL PROJECT BUDGET	\$ 841,000	CURRENT BUDGET	\$8,900
CURRENT BUDGET	\$ 33,640	CURRENT FORECAST	\$4,008
CURRENT FORECAST	\$ 38,611	BUDGET PLAN TO DATE	\$2,967
ACTUAL THROUGH FY 94	\$ 6,338	ACTUAL TO DATE	\$1,086

## MTA STAFFING PLAN VS. ACTUAL PASADENA LINE



FY'95 Budget

## PASADENA LINE STAFFING PLAN FISCAL YEAR 1995

MTA CONSTRUCTION		17 11
OTHER FTE's PLAN OTHER FTE's ACTU	(*) AL	6 5
TOTAL FTE'S PLAN TOTAL FTE'S ACTU	AL	23 16
(*) Other FTE's :	Contract Compliance Minority Outreach Art Program Area Team Contract Accounting	

Risk Management

Real Estate

COSTS SHOWN ARE FOR PROJECT ROS ONLY. (ALLOCATED)

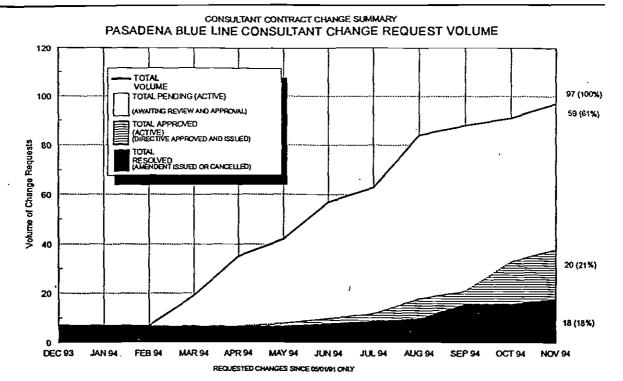
### R05 - Pasadena Blue Line PROJECT CHANGE VALUES ONLY

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

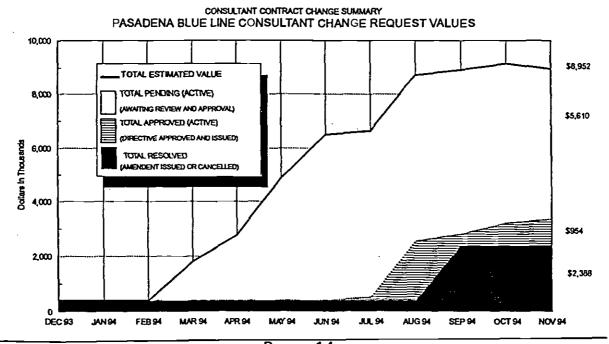
MTA APPI	ROVEO T AWARO	-		TA APPROVED				APPROVEO CHANGES TO DATE				REMAINING* AFE	1	PROJ	ECTED		
CONTRAC	AWARD VALUE		ALLOWED	CURRENT ALLOWED	TOTAL APPROVED AFE (ROS)	1	APPROVEO CHANGES	CURRENT CONTRACT VALUE	% INCR	CTG USED	COMP. LETE	CURRENT UNUSEO ALLOWANCE		PENDING CHANGES	FORECAST	% AFE USED	% INCR
Α.	в.	1	C.	0.	E.(B+O)	ı	F.[1]	G.JB+FJ	H.[2]	l.	J.	K.(D-F)	1	L.[3]	M.(K-LI	N.	Ō.
8611	14,445,450	1	10%	1444,545	14,889,995	1	10	14,445,450	0.0% [	0%	D%	1444,545	1	(#317,975)	¥782,520	-72%	•7.2
C6410	<b>₽12,758,037</b>	1	10%	\$1,275,804	#14,033,B41	1	<b>≱160,082</b>	<b>#12,918,119</b>	1.3%	13%	20%	\$1,115,722	-1	(#82,689)	<b>#1,198,4</b> 10	5%	0 6
C6430	110,359,464	1	10%	11,035,948	\$11,395,410	1	10	\$10,359,464	0.0%	0%	0%	1 \$1,035,948	1	10	#1,035,946	0%	0.0
C7300	10	1	****	10	<b>‡</b> 0	1	**	10	***.*%	×	0%	1 10	-1	#0	10	****	0.0
EN026	10	ŧ	****	10	10	1	#0	10	***.**	×	0%	1 10	1	10	10	%	•••.
EN031	#0	1	****	#0	<b>\$</b> 0	1	#0	10	*****	••••	0%	1 10	1	10	10	****	•••,••
PM601	10	1	****	10	<b>\$</b> 0	1		10	***.**	···×	0%	l to	ļ	40	10	%	•••
	<b>\$27,582,951</b>	1	10%	\$2,758,295	\$30,319,246	1	\$160,082	127,723,033	0.6%	8%	1%	\$2,596,213	7	(\$400,664)	\$2,996,87B	-9%	· O. 9

II - AFE increase required

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

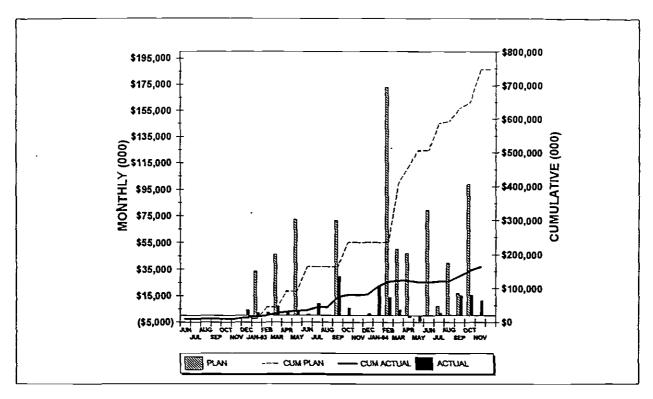


AGE OF UNRESOLVED CONSULTANT CHANGES										
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE					
VOLUME	8	5	20	46	79					
PERCENT	10%	6%	25%	59%	100%					

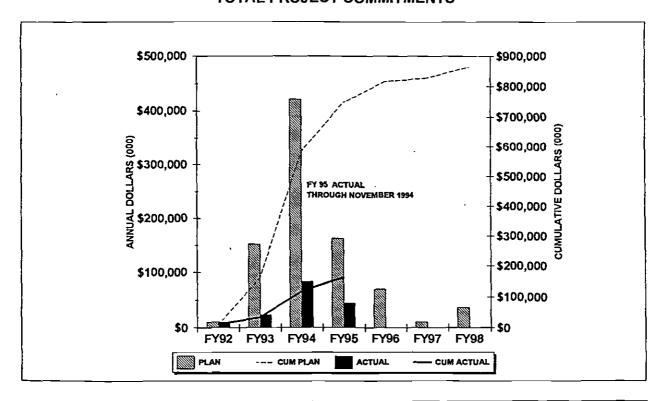


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#### **ANNUAL PROJECT COMMITMENTS**

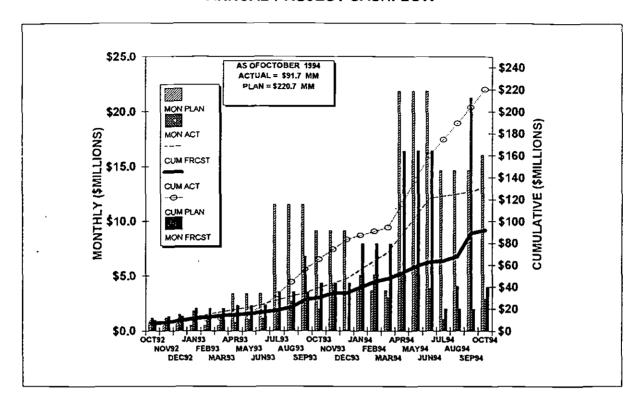


#### TOTAL PROJECT COMMITMENTS

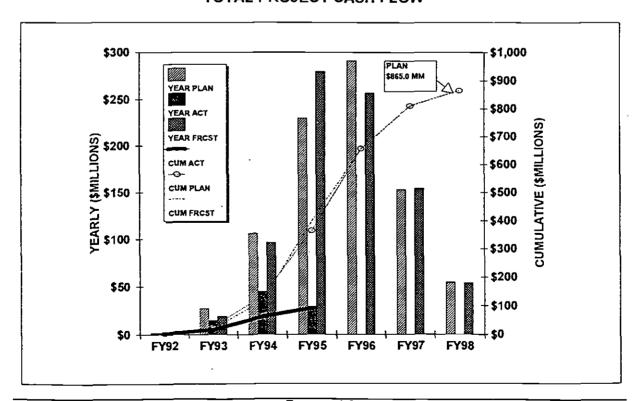


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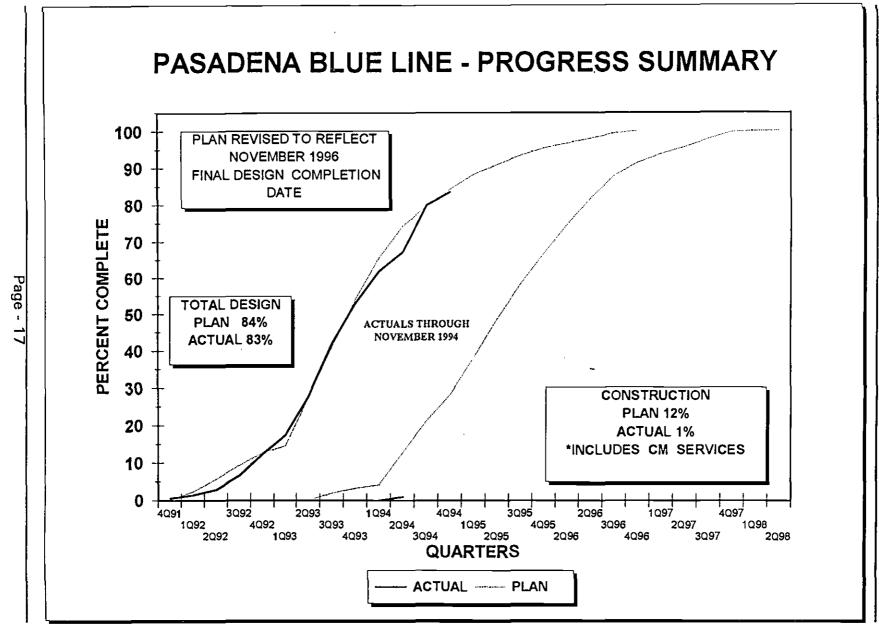
#### **ANNUAL PROJECT CASHFLOW**



#### TOTAL PROJECT CASH FLOW



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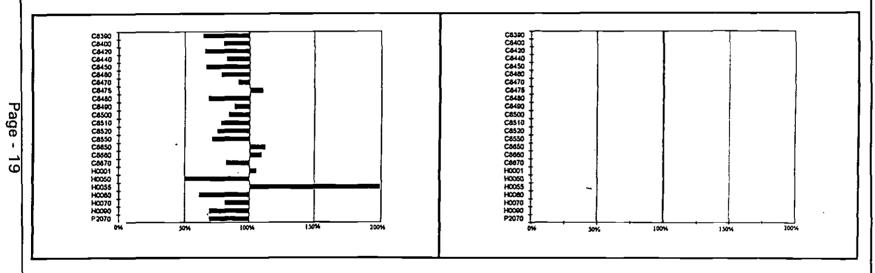
#### CRITICAL PATH DIAGRAM

The Pasadena Blue Line schedule for design and construction is currently being rebaselined. The approved schedule and critical path will be included in the Project Manager's Status Report once they are approved.

### Pasadena Blue Line

**Cost Performance Index** 

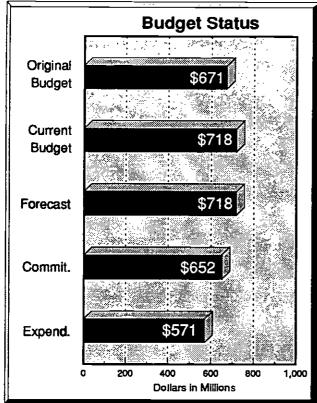
**Schedule Performance Index** 

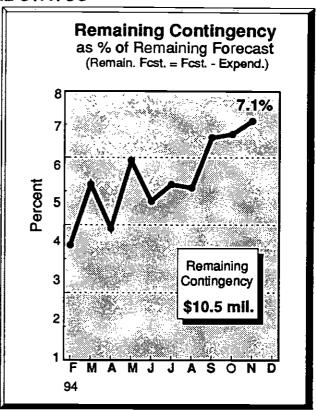


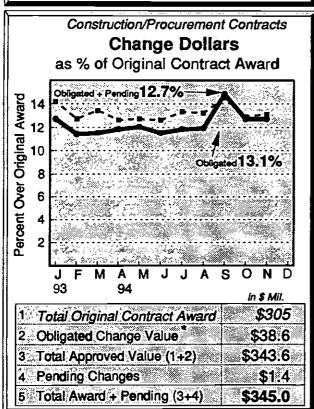
CPI Legend
Under 100% = Over Budget
Over 100% = Under Budget

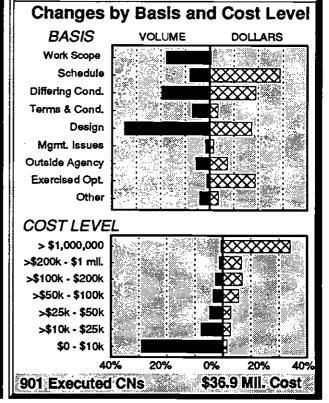
SPI Legend
Under 100% = Behind Schedule
Over 100% = Ahead of Schedule

#### **FINANCIAL STATUS**









R2311941.DRW

\* Includes Approved and NTE Authorizations

#### SCHEDULE AND SAFETY STATUS

# MTA Critical Activities January 1995

✓ AWARD APPROVAL

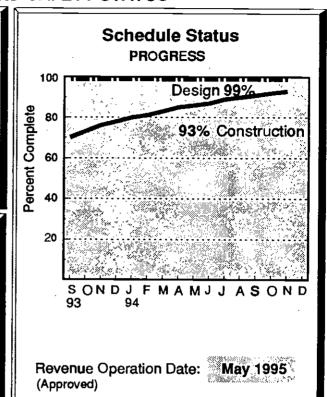
No contract awards this month.

### **Employment Status**

Months of Employment Provided

16,559

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



# Schedule Status CRITICAL PATH - 1 Year Outlook

37 Days Behind (negative float)

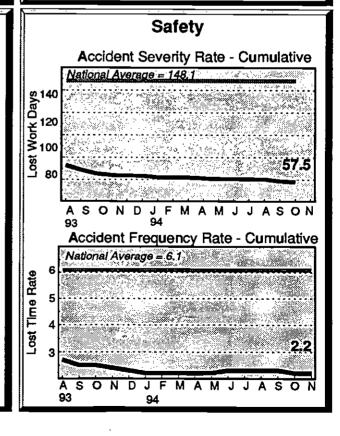
The following contracts are on the Critical Path through June 95:

H0831 Systems

H1100 Systems Automatic Train Control

H0832 Systems Cable Transmission Systems Integrated Test Norwalk-Marine ABS

H0900 Systems Safety Systems



R2311042.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 99%

• Construction Progress - Actual 93%

#### **REAL ESTATE STATUS**

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

#### AREAS OF CONCERN

### <u>NEW</u>

### Contract H1100 (ATC) ATP Scheduled Completion

Concern: The recent H1100 Schedule dates do not support the current MTA program

plan.

Action: Negotiations are ongoing to finalize the outstanding milestone dates.

Status: A phased approach to opening with ATP has been developed. ABS is no

longer considered an option.

### **ONGOING**

### All Contracts Cross Connect Engineering and Installation

Concern: Without the layout and installation of the cross-connects between the

SCADA RTUs to MDF data points and other contract MDF data points, the integrated testing, using SCADA, cannot be performed. Approximately 80

percent of integrated testing requires SCADA.

Action: The EMC was directed to do the cross-connect layout on August 24, 1994.

Change Notice is being written for H0832 to perform the cross-connects.

Status: Contract H0900 interface data sheets are currently being generated by

Sesco. OKA is working with the contractor to finalize this issue.

### Contract H0900 (S & SCS) Schedule Recovery

Concern: The contractor's performance has continually slipped over the past few

months to the point of impacting integrated testing.

Action: The contractor has provided OKA with a recovery schedule that reflects the

January dates established in CO # 9.

Status: High level management meetings have been held to discuss this issue.

MEC has made a commitment to complete the work prior to the January milestone dates. However, the late submission of test procedures, lack of a definitive recovery plan, completion of design submittals, and continued lack of quality workmanship remains a concern. The contractor is cooperating with OKA to create checklists for each site to facilitate

expedient completion.

#### **RESOLVED**

### integrated Testing - Full Utilization of Two Test Crews

Concern:

The delayed completion of systems contracts acceptance testing is preventing full utilization of the two integrated testing crews. In order to complete integrated testing to support a turnover of the Metro Green Line for pre-revenue operations in early 1995, the two crews must be fully utilized beginning September 1994. Turnover for pre-revenue operations slips on a day-for-day basis if the integrated testing crews are not fully utilized.

Action:

Identify those contracts that contain system components needed for integrated testing to proceed. Establish a work plan with the contractors to be sure that the work is completed so that integrated testing may begin as scheduled.

Status:

Integrated Test crews have been monitoring contract acceptance testing in order to identify potential problem areas. In addition, SCADA/Traction Power Integration and Traction Power/Load sharing tests were performed.

#### **KEY ACTIVITIES - NOVEMBER 1994**

- Contract H1100 (ATC) integration and contractor acceptance testing was started.
- Contract H1100 (ATC) installation at the Central Control Facility was started.
- Completed Overhead Catenary System (H1400 OCS) at Norwalk.
- Started Supervisory Control and Data Acquisition (SCADA) and Traction Power Substation integrated testing.

#### **KEY ACTIVITIES - PLANNED FOR DECEMBER 1994**

- Start Contract H1100 (ATC) preliminary control line testing.
- Complete Contract H1100 (ATC) cable pulling at all locations, Norwalk-Marine
- Complete all contractual installation and testing, Contract H1200 (TPS) and Contract H1400 (OCS)
- Install Contract H0840 (Fare Collection Equipment) ticket vending machine cabinets at Vermont, Harbor and Avalon Stations.
- Complete Contract H0900 (S &SCS) Testing of PA and CCTV Systems at CCF
- Deliver first shipment of VMS signs and cabinets; start installation (H0900-S & SCS)
- Start load sharing and pull away test at TPS-04.

Page No. 1

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

Project: R23 METRO GREEN LINE

Period: Oct 28, 1994 to Dec 12, 1994

Run Oate: Dec 12, 1994

Units: \$ in Thousands (Truncated)

	ORIGINAL BUDGET	CURRENT	BUDGET	C04411	MENTS	INCUI	RRED	EXPEN	DITURES	CURRENT	FORECAST	FORECAST VARIANCE
ELEMENT / DESCRIPTION	<u> </u>	Period	To Dete	Period	To Pate	Period	To Date	Period	To Date	Period	To Date	
T CONSTRUCTION	470, 191	1,200	485,898	1,847	431,495	5,797	381,883	6,447	368,757	10	475,548	• <b>10,3</b> 50
PROFESSIONAL SERVICES	108,562	Ô	180,477	803	181,266	3,781	167,357	3,781	167,357	0	194,967	14,490
REAL ESTATE	36,927	0	28,522	247	24,847	247	24,843	247	24,843	0	26,047	•2,479
UTILTY/AGENCY FORCE ACCOUNTS	7,656	0	10,500	3	11,594	- 173	9,610	-173	9,610	0	11,512	1,01
SPECIAL PROGRAMS	4,675	0	4,790	19	4,561	24	1,838	24	1,838	0	4,790	
PROJECT RESERVE	59,613	-1,200	14,131	0	0	0	0	0	0	-10	10,505	• 3,626
PROJECT REVENUE	-16,626	. 0	-6,518	0	-1,264	0	-604	\ 0	-604	0	-5,569	949
GRAND TOTAL	671,000	0	717,802	2,922	652,461	9,677	584,928	10,327	571,802	0	717,802	

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

07-Nov-94

OCTOBER 94

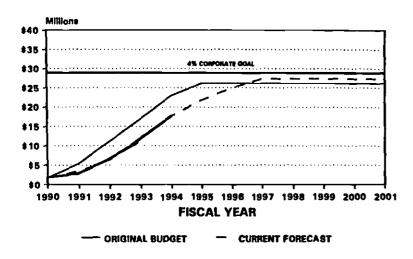
# STATUS OF FUNDS BY SOURCE

	TOTAL Funds	TOTAL FUNDS	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
SOURCE	ANTICIPATED	AVAILABLE		*	\$	%		*
PROP A	\$205,136	\$205,138	\$205,136	100%	\$205,136	100%	\$205,136	1009
PROP C (40% ALLOCATION)	\$200,368	\$200,368	\$200,368	100%	\$201,763		\$212,668	-
PROP C (25% ALLOCATION)	\$199,498	\$132,422	\$199,498		\$114,818		\$114,818	1069
STATE PROP 108	\$22,400	\$22,400	\$22,400		\$22,400			589
STATE PROP 118	\$84,000	\$84,000	\$16,202		\$14,701		\$22,400	1009
PROP C (AMERICAN DISABILITY ACT)	\$6,400	\$2,657	\$5,935	-	\$2,657		\$3,798 \$2,657	69 429
TOTAL	\$717,802	\$646,983	\$649,539	90%	<b>\$</b> 561,475	78%	\$561,475	78%

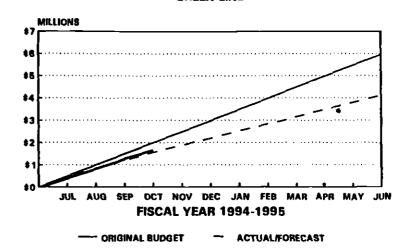
NOTE: EXPENDITURES ARE CUMULATIVE THROUGH SEPTEMBER 1994.

\*\*\*Please note that due to lack of availability this is last month's information.

# AGENCY COST GREEN LINE



# FISCAL 1995 AGENCY COSTS GREEN LINE



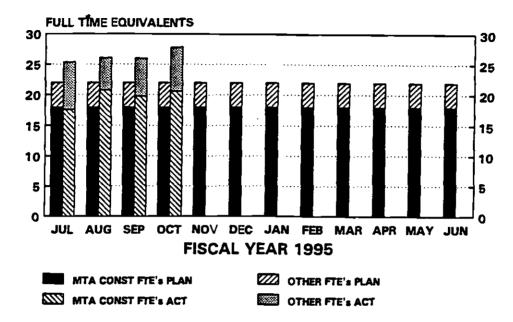
# PROJECT AGENCY COSTS GREEN LINE (\$000)

TOTAL PROJECT BUDGET	<b>\$717,802</b>
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	<b>\$5,965</b>
CURRENT FORECAST	\$4,117
BUDGET PLAN TO DATE	\$1,988
ACTUAL TO DATE	\$1,559

# STAFFING PLAN VS. ACTUAL GREEN LINE



**FY'95 BUDGET** 

# GREEN LINE STAFFING PLAN FISCAL YEAR 1995

MTA CONSTRUCTION FTE's PLAN	18
MTA CONSTRUCTION FTE's ACTUAL	21
OTHER FTE's PLAN	4
OTHER FTE's ACTUAL	7
TOTAL FTE's PLAN	22
TOTAL FTE's ACTUAL	28

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

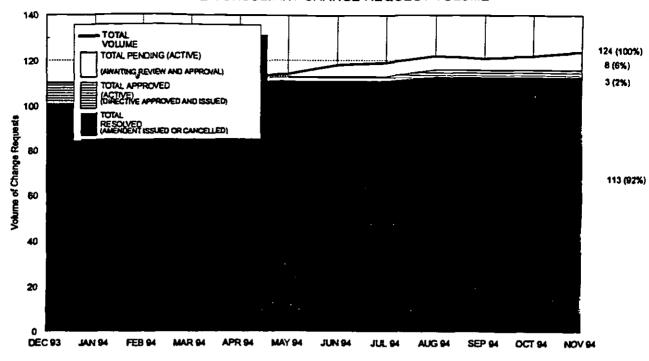
	PPROVED ACT AWARD	c	MTA APPRO	1	cı	APPROVED	re	_	REMAINING CONTINGENCY	PRO.	JECTED
CONTRACT	AWARD VALUE	ALLOW- ANCE	CURRENT APPROVED CONTINGENCY	TOTAL APPROVED AFE	APPROVED CHANGES*	CURRENT CONTRACT VALUE	CTG USED	COMP- LETE	CURRENT UNUSED CONTINGENCY	OTHER LOGGED PENDING CHANGES	FORECAST % REMAINING CTG CONTINGENCY USED
A.	В.	C.	D. =  BxC	E. 18+D	F.	G = (B+F)	l H	<b>[</b> ].	J. (D-F)	ĸ I	L. U-KI \ M.
C0090	13,739,910	13%		<b>84.212,901</b>	101	<b>43,739,91</b> 0	0%	0%	[ [472,981]	1100,000	1372,991   21%
C0096	19.673,083	16%	01,468,617	111,061,700	01,142,982	410,718,066	77%	77%	1 1345,835	(30,000	1315,635 79%
C0100	060.020,710	15%	\$6,971,290	168,800,000	07,138,092 <b> </b>	169,969,002	80%	88%	41,833,198	1218,954	11.814.244   82%
C0101	011 <u>,279,960</u>	63%	17,120,040	#18,400,000 <b> </b>	(6,104,027	417,384,887	88%	100%	1 41,018,113	101	\$1,015,113   B6%
C0110	17,321,637	28%	41,878,403	(8,200,000	(1,220,282	49,547,810	65%	1 100%	1662,181	101	1852,181   85%
C0170	11,130,971	10%	1113,087	11,244,066	(4.708	41,135,700	4%	0%	§ \$100,200 j	186,000	122,299   80%
C0400	\$19,320,000	14%	12,735,538	122,065,638	1 308,3081	419,925,905	22%	1 89%	42,129,033	£85,228	12,054,407   25%
C0501	\$6,008,B41	10%		(5,894,985	4788,986	45,706,827	69%	99%	400,158	\$14.175 <b>\</b>	184,983   90%
C0600	815,614,000	39%	16,028,000	(21,542,000 <b> </b>	14,064,512	419,578,812	67%	1 09%	11,043,488	(#31,358)	11,994,848   87%
C0610	\$10,248, <del>\$</del> 12	25%	02,665,181	012,814,103 <b>[</b>	12,649,690	412.888,602	103%	99%	[ (464,499) ]	(1435,0631	1350,564   86%
H0831	41,480,450	169%	12,497,474	(3,977,924	42,226,134	43,700,584	89%	07%	[ 4249,340 ]	\$218,315	151,025   98%
H0832	13,884,088	220%	10,558,412	812,442,600 T	07,570,35 <mark>2</mark> j	011,464,440	88%	71%	1989,040	\$225,527 <b> </b>	1782,533   91%
H0888	13,938,769	11%	4438,876	14,377,635	1280,196	44,219,754	64%	46%	157,691	101	1157,881   64%
H0900	19,948,160	10%	[	\$10, <b>\$</b> 43,000	4514,586	410,462,778	52%	15%	1480,222	\$357,500 <b> </b>	1122,722   88%
H0901	43,298,329	10%	1329,833	(3,628,162	195,344	13,393,673	29%	39%	1234,489	\$18,500	1215,989   35%
H1100	167,786,000	8%		162,407,800	41,515,638	459,300,838	33%	41%	1 43,106,962	<b>#146,034</b>	12,960,928 36%
H1200	016,796,123	15%	12,619,418	121,615,541	01,651,56D	120,447,492	50%	04%	11,167,849	1138,780	11,029,069   64%
H1310	<b>\$1,298,500</b>	15%	1194,776	11,493,275	(011,686)	41,286,615	-6%	8%	1 1206,660	136,252	1170,408   13%
H1400	\$11,43B,000	10%	1 11,143,800 ]	\$12,581,800	4788,452	112,220,452	69%	78%	4355,348	183,830	1271,517   76%
P1800	15,678,208	5%		(6,667,118	(4766,149)	94,912,069	·275%	100%	1,045,059	10	11,045,059   -275%
P2020	144,625,000	12%	1 15,375,000 [	(60,000,000	1964,094	445,589,094	15%	74%	<b>\$4,410,906</b>	101	14,410,906   18%
rotal:	1306,034,542	20%	(59,515,480)	1364,550,050	(38,667,618	4343,502,080	66%	03%	420,967,870	#1,272,872 <b>[</b>	119,685,299   87%

<sup>! =</sup> AFE increase may be required to cover pending changes
!! = AFE increase required to cover obligated changes

NOTE: DATA CUT-OFF DATE MAY VARY FROM OTHER REPORTS SHOWING APPROVED CHANGE VALUES

<sup>\*</sup> CONTRACT COSTS SHOWN MAY INCLUDE COSTS ALLOCATED TO OTHER METRO PROJECTS.
\*\* Potential change costs DO NOT include claims which have not been allowed ment as changes or other trend items.

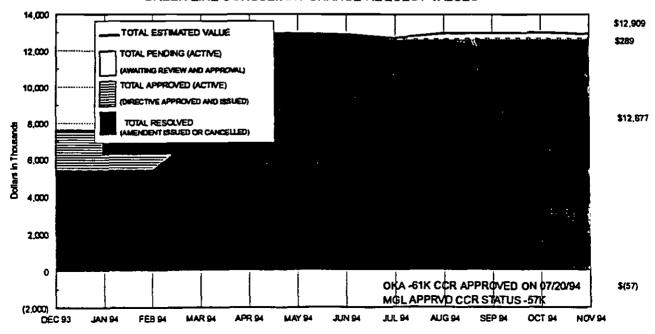
# CONSULTANT CONTRACT CHANGE SUMMARY GREEN LINE CONSULTANT CHANGE REQUEST VOLUME



REQUESTED CHANGES SINCE 05/01/91 ONLY

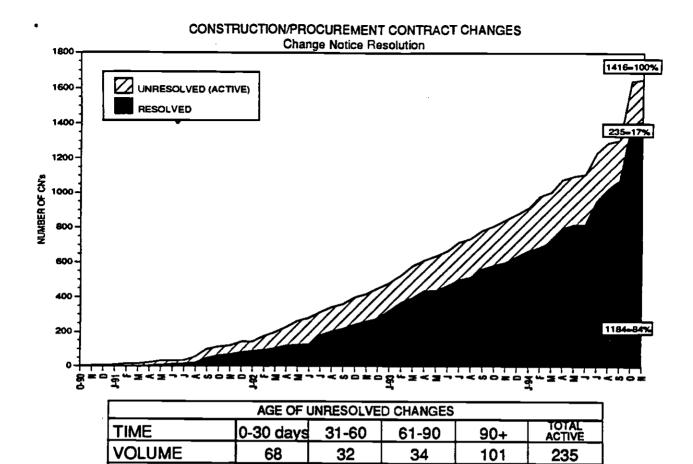
	AGE OF UNRESOLVED CONSULTANT CHANGES											
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE							
VOLUME	2	0	3	6	11							
PERCENT	18%	0%	27%	55%	100%							

CONSULTANT CONTRACT CHANGE SUMMARY
GREEN LINE CONSULTANT CHANGE REQUEST VALUES



Page 10

**PERCENT** 



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

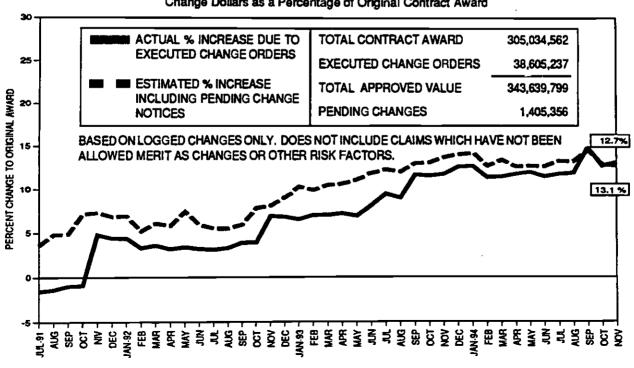
14%

15%

43%

100%

28%



#### R23 - Metro Green Line

#### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

#### CHANGE COST LEVEL BREAKDOWN

#### **EXECUTED CHANGES AS OF 12/06/94**

COST RANGE (ABSOLUTE VALUE)	# CN'S	% Total Volume	Change Cost	% Total Change Cost
				<del></del>
> 1 MILLION	11	1.22%	\$17,677,708.46	47.83%
>200 - 1 MILLION	25	2.77%	\$4,896,062.78	13.25%
>100-200	47	5.22%	<b>\$5,124,527.49</b>	13.87%
>50-100K	64	7.10%	\$4,164,637.33	11.27%
> 25-50K	87	9.66%	\$2,059,137.32	5.57%
0-25K	141	15.65%	\$1,962,429.47	5.31%
-10K	526	58.38%	\$1,074,450.16	2.91%
ROJECT TOTALS:	901	100.00%	<b>\$36,958,953.01</b>	100.00%

### R23 - Metro Green Line

#### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

UST ALL CHANGES TO CONTRACTS AWARDED UNDER: R23C0090 - R23P2020

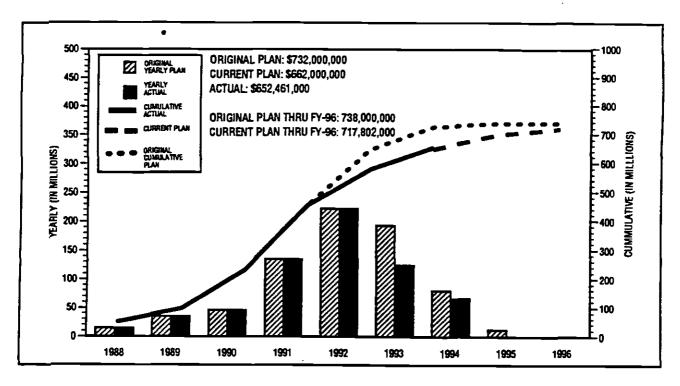
# CHANGE NOTICE BASIS BREAKDOWN EXECUTED CHANGES AS OF 12/06/94

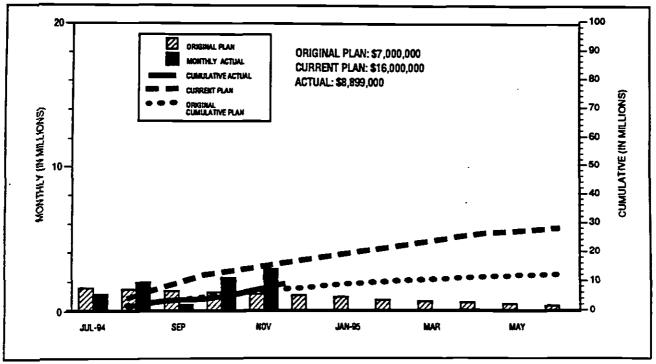
		# CN'S	% Total Volume	Change Cost	% Total Change Cost
WOR	K SCOPE		-		
110	EXTRA WORK	113	12.54%	<b>\$1,967,41</b> 9.19	5.32%
115	ADDITIONAL/NEW WORK	10	1.11%	\$213,006,43	0.58%
120	DELETION OF WORK	36	4.00%	(#1,984.625.26)	-5.37%
130		1	0.11%	\$0.00	0.00%
		160	17.76%	\$195,600.37	0.53%
SCH	EDULE CHANGES				
210	DELAY OF WORK (COMPENSABLE)	24	2.66%	<b>\$8,978,467.08</b>	24.29%
220	ACCELERATION OF WORK	14	1.55%	\$1,305,686,00	3.53%
230	MILESTONE REVISIONS (NON-COMPENSABLE)	35	3.88%	\$345,300.00	0.93%
		70	0.400	******************************	00 70-
DIFFE	ERING CONDITIONS	73	8.10%	\$10,629,453.08	28.76%
310	DIFFERING SITE CONDITIONS	175	19.42%	<b>09,155,676.26</b>	24.77%
320	HAZARDOUS MATERIALS	1	0.11%	(#2,313,704.64)	-6.26%
33U	SAFETY CONDITIONS	1	0.11%	\$103,000.00	0.28%
	•	177	19.64%	\$6,944,970.62	18.79%
TERM	IS AND CONDITIONS	,		**********	14.7474
410	TERMS AND CONDITIONS (OWNER ORIGINATED)	30	3.33%	\$1,272,694.67	3.44%
430	EDITORIAL CLARIFICATIONS/DOCUMENT MAINTENANCE	34	3.77%	<b>60.00</b>	0.00%
DEGIA	IN CHANGES	64	7.10%	\$1,272,694.67	3.44%
DE310	SN CHANGES				
510	DESIGN CHANGES/ENHANCEMENTS (OWNER ORIGINATED	120	13.32%	94,369,466.31	11.82%
515	DESIGN CHANGES/ENHANCEMENTS (EMC ORIGINATED)	12	1.33%	<del>15</del> 1 <i>9,</i> 491.92	1.41%
	DESIGN CHANGES/ENHANCEMENTS (MTA OPERATIONS O	3	0.33%	60.00	0.00%
30	CORRECTIONS TO PLANS AND SPECIFICATIONS	171	18.98%	<b>\$2,106.656.08</b>	5.70%
40	VALUE ENGINEERING CHANGES (CONTRACTOR ORIGINA	9	1.00%	(#631,799.76)	-1.71%
		315	34.98%	\$6,363,014.55	17.22%
MAN/	AGEMENT ISSUES		04.00%	V0,000,0 . V.00	
310	DISRUPTION/INEFFICIENCY (CLAIMS ONLY)	2	0.22%	<b>\$2,375.00</b>	0.01%
20	COMPREHENSIVE CLAIMS	13	1.44%	\$672,374.00	1.55%
אדן ור	IDE AGENCY REQUESTS	15	1.66%	\$574,749.00	1.56%
JU 13	IVE AGENUT REQUESTS				
720	DESIGN CHANGES (OUTSIDE AGENCY ORIGINATED)	42	4.66%	\$2,668.172.77	7.21%
730	TERMS AND CONDITIONS (OUTSIDE AGENCY ORIGINAT	9	1.00%	\$44,118.62	0.12%
		51	5.66%	\$2,710,292.39	7.33%
CONT	RACT OPTIONS	•	4.44 N	+=1. (Al=4=:40	- 144 /4
00	CONTRACT OPTIONS	10	1.11%	#6.936.932.00	18.77%
.00	CONTRACT OFFICES		1.1170	10,938,834.00	******
	_	10	1.11%	<b>\$6,938,932.00</b>	18.77%
THE	R				
100	OTHER	36	4.00%	\$1,329,246.33	3.60%
		38	4.00%	\$1,329,246.33	3.60%
			7.44 A	* : , <del>** * * * * * * * * * * * * * * * * *</del>	4.54 kg

R23 - BASIS SUMMARY REPORT

NIKKA CHANEY 12/06/94 12:40:13

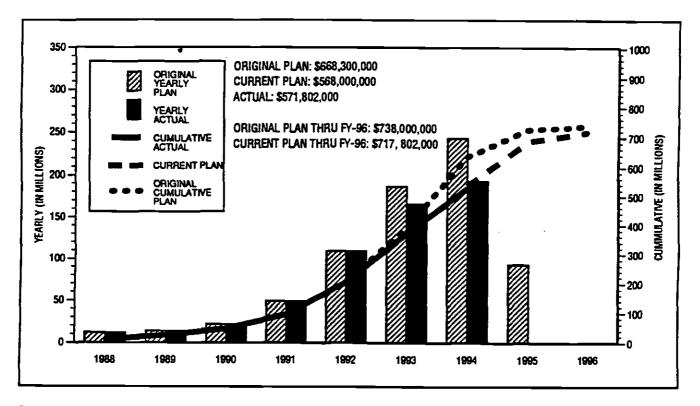
### **PROJECT COMMITMENTS**

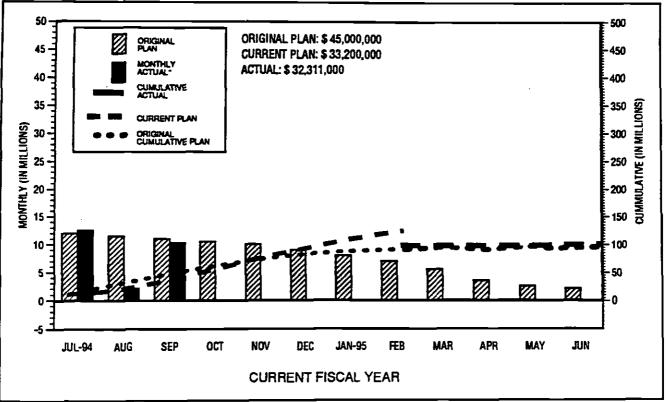




**CURRENT FISCAL YEAR** 

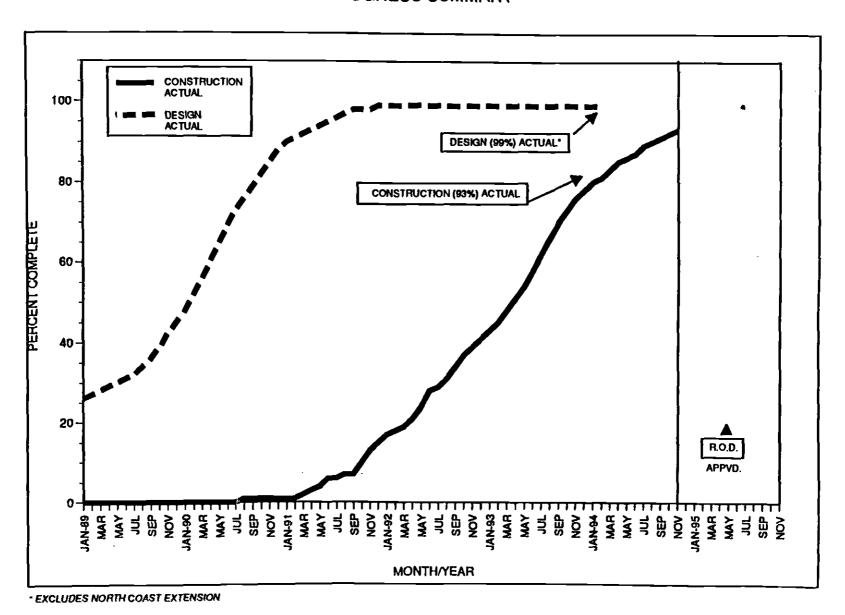
#### PROJECT CASH FLOW



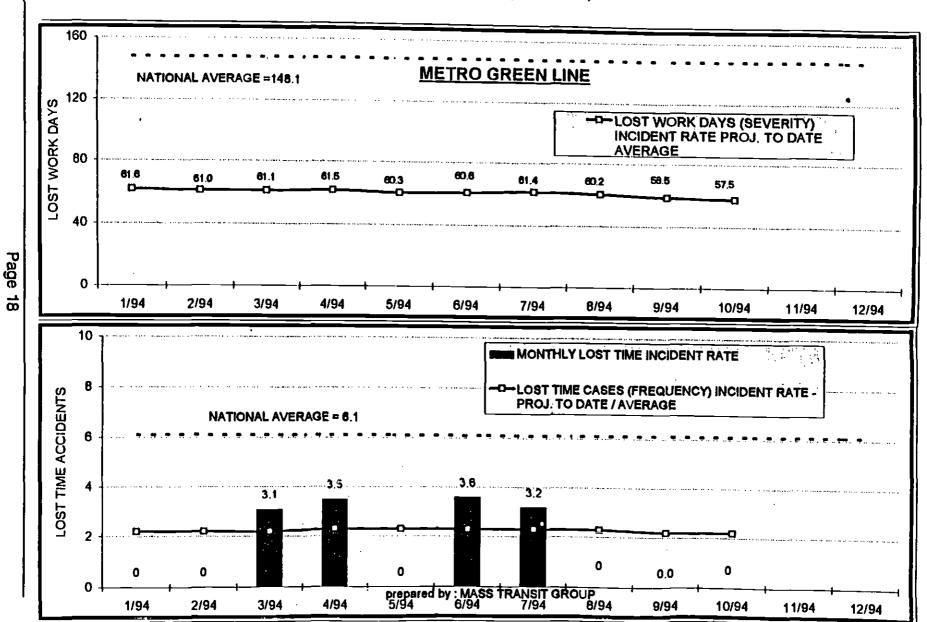


<sup>\*</sup> ACTUAL EXPENDITURES ARE THROUGH PREVIOUS MONTH END.

# **PROGRESS SUMMARY**



# Summary of Lost Time Accidents (FREQUENCY) and Lost Work Days (SEVERITY)



# **LEGEND**

0	Open. Action still required.
	Completed or Not Applicable

# CONTRACT CLOSE OUT STATUS METRO GREEN LINE

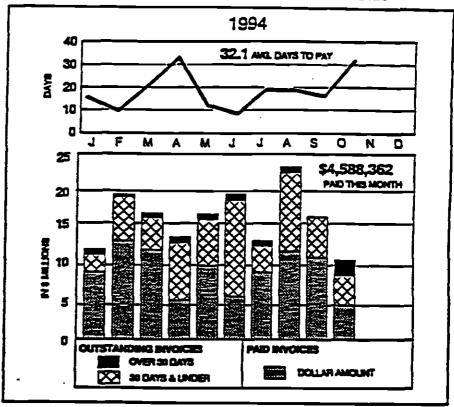
			CLOS	E OUT STA	ATUS		1	
		CLĀĪMS/	FINAL		FINAL	EQUIP.		PROJECTE
CONTRACT		CHANGE		FINAL	ACCEPT.	FINAL		CLOSE-OU
NUMBER	DESCRIPTION	ORDERS	PAYMENT	RELEASE	CERTIF.	DELIV.	COMMENTS	DATE
C0600	Trackwork I-105			0	0			Dec 94
C0610	Trackwork - El Segundo				0			Dec 94
C0400	Main Yard & Shop	0	0	0	0			Dec 94
C0501	Systems Facilities Sitework	0	0	0	0			Dec 94
C0095	Fencing/WIDS	0	0	0	0			Feb 95
H0831	SCADA	0	0	0	0			Feb 95
H1200	TPSS	0	Ō	0	0			
H1400	ocs	ō	Ō	0	0			Feb 95 Feb 95
H0901	PIDS	ō	Ō	Ö	0			Mar 95
H1310	Signs & Graphics	· ŏ	ŏ	0	<del>_</del> <del>0</del>	0		
C0090	Miscellaneous Construction		ō	Ö	0	800 X 2003		Mar 95
C0100	Guideway Construction	Ō	Ō	0	0			Apr 95
C0170	ADA Elevators	Ō	Ō	0	0			Apr 95
H0832	CTS	ō	0	<del>- 0</del>	<del>_</del> 0			Apr 95
H0840	Fare Collection Equipment	Ö	ō	<del>0</del>	$-\frac{\sigma}{\sigma}$	0	<del></del>	Apr 95
H0900	SSCS	0	o d	<del>0</del>	_	0		Apr 95
H0889	Radios	<u> </u>	0	0	0			May 95
		0			<u>=</u>	0		Jun 95
P2020	LRV's - 15 cars		0	0	0	0	15 cars received; Undergoing testing	<b>Jul 95</b>
H1100	ATC	<u> </u>	0	0	0	0		Mar 96

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#### INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 32.1 days.
- 14 invoices were paid for a total value of \$4,588,362.
- There were 12 outstanding Construction or Procurement invoices under 30 days old for \$4,054,393.
- There were 3 outstanding Construction or Procurement invoices over 30 days old for \$2,199,397.





Note: The average days to pay is the time from when the Resident Engineer approves a progress payment (Invoice) to when Accounting issues a check for this invoice.

#### **OUTSTANDING INVOICES**

	Con	struction/Proce	rement invok	203	Other Invoices						
l	30 Days	and Under	Over 30	) Days	30 Days	and Under	Over 30 Days				
ł	Number of Dotter		Number of	Dollar	Number of	Doilar	Number of	Dollar			
Month	Invoices	Vaiue	Invoices	Value	Invoices	Vaiue	Invoices	Value			
JUL 1994	19	3,578,811	4	867,507	22	2,812,573	27	(52,322			
AUG 1994	22	10,640,436	7	861,644	31	3,558,797	31	337,788			
SEP 1994	14	5.513.716	3	40,417	36	2,664,438	18	203,040			
OCT 1994	121	4,054,393	3	2,199,397	30	3,461,168	19	245,139			
		, ,			] 1		]				
	i i				i :		i l				

\*\*\*Please note that due to lack of availability this is last month's information.

#### **EXECUTIVE SUMMARY**

#### **COST STATUS**

The current forecast remains at \$1,450 million.

#### **CONTRACT CLOSEOUT**

Continue closeout of the following construction contracts:

LEGEND								
0	Open. Action still required.							
4.54.34	Completed or Not Applicable							

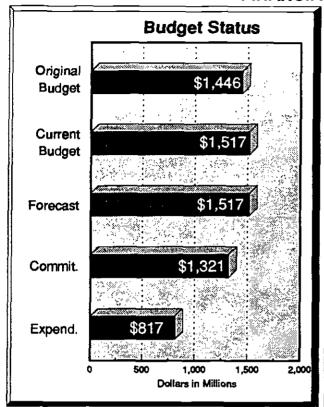
#### CONTRACT CLOSE OUT STATUS METRO RED LINE SEGMENT 1

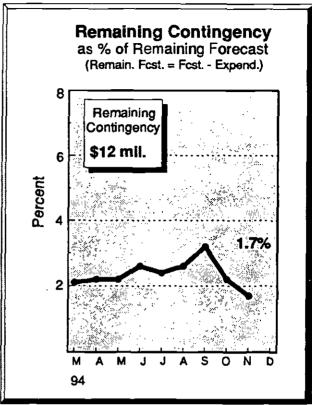
			CLOS	E OUT STA	ATUS			
		CLAIMS/	FINAL	-	FINAL	EQUIP.		PROJECTED
CONTRACT	ļ	CHANGE	PROG.	FINAL	ACCEPT.	FINAL		CLOSE-OUT
NUMBER	DESCRIPTION	ORDERS	PAYMENT	RELEASE	CERTIF.	DELIV.	COMMENTS	DATE
A165	7th & Flower Station			125 THE RES	200		Closed,	Nov 94
A620	Automatic Train Control					********	Closed.	Nov 94
A640	Communications		10 m		100		Closed.	Nov 94
A610/115	Track Installation	0	0	0	0	0	Final closeout pending claims litigation.	Mar 95

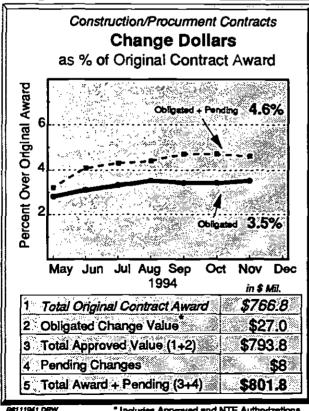
#### **REMAINING ACTIVITIES**

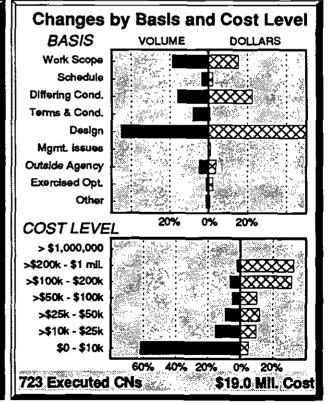
- Continue support and test of Breda vehicles.
- Continue supporting Grant closeout activities.
- Negotiate closeout of professional services contracts.
- Continue closeout of third party work orders.

#### FINANCIAL STATUS









Includes Approved and NTE Authorizations

### **SCHEDULE AND SAFETY STATUS**

# **MTA Critical Activities** January 1995

✓ AWARD APPROVAL

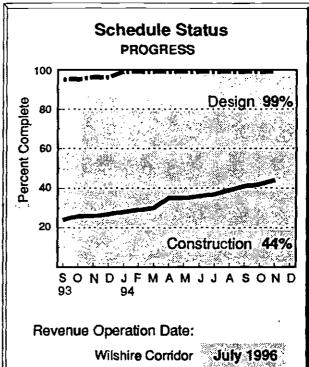
No contract awards this month.

### **Employment Status**

Months of Employment Provided

23,693

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



Vermont/Hollywood Corridor

Sep 1998

# **Schedule Status CRITICAL PATH - 1 Year Outlook**

Wilshire

144 days ahead (positive float)

Jul

**B710 Construction** Elevators/Escalators

> Dec Jun

Vermont/Hollywood

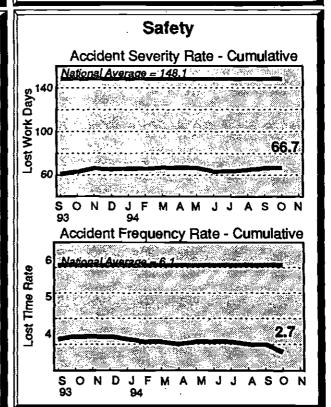
R\$111942.DRM

180 days behind (negative float)

**B251 Construction** Vermont/Hollywood Tunnel

Dec

Jun Jul 95



#### **EXECUTIVE SUMMARY**

#### **COST STATUS**

in \$ million

Current Budget \$1,517.6

• Current Forecast \$1,517.8

(including new requirements)

This reflects a budget increase of \$5.9 million authorized funding due to the Kaiser Permanente Station entrance.

#### **SCHEDULE STATUS**

Revenue Operation Dates:

Wilshire Corridor Planned: July 1996

Forecast: February 1996

Vermont/Hollywood Corridor Planned: September 1998

Forecast: March 1999

Design Progress Planned: 99%

Actual: 99%

• Construction Progress Planned: 46%

Actual: 44%

#### **REAL ESTATE**

	NUMBER OF PARCELS	NUMBER OF PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)	<b></b>	T AVAILABLE
	·  -			NUMBER	AVG. DAYS BEHIND
		<u> </u>		NUMBER	BEHIND _
THIS MONTH	88	86	2	0	0
LAST MONTH	88	86	2	0	0

• 88 parcels of land are required for the Segment 2 Project. The acquisition breakdown for this land is as follows: 31 full takes, 44 subsurface easements, 3 temporary construction easements, and 3 part-takes. Six additional parcels have been added for temporary Rights of Entry and one temporary license.

Two of the full take parcels are not required for construction.

### **EXECUTIVE SUMMARY (CON'T)**

To date, 86 parcels have been acquired. Forty-two of the 86 parcels were acquired through condemnation and the remaining 45 parcels were negotiated acquisitions.

#### AREAS OF CONCERN

#### **ONGOING**

Contract B610, Trackwork Installation, Realignment Impact - Wilshire Corridor

Concern: Contract B610 concrete operations between Wilshire/Normandie

Station and Wilshire/ Western Station were delayed due to track

realignment issues.

Action: Corrective measures should be formulated and forwarded to the

Contractor for implementation.

Status: Change Notice 23, the realignment of tracks between Stations

335+29 to 337+60 and Stations 338+70 to 348+80 has been given to the Contractor. The Contractor has indicated that re-work activities will require approximately three weeks to complete. The Contractor is currently projecting the AR alignment to be ready by mid-January 1995. Contract B620, access has been coordinated,

allowing train control installation to proceed as scheduled.

Contract B610, Delays Trackwork Installation - Wilshire Corridor

Concern: The Contractor may not be able to achieve the original planned rate of

concrete installation for the overall contract. There are potential

impacts to follow-on system contract access dates.

Action: Develop work around plan to minimize delays to follow on contracts.

Status: Mitigation efforts are underway to facilitate coordinated access, to

ensure the timely completion of follow-on contractor's work. Contract B620, Automatic Train Control, installed all conduit for the 34.5 kV line. The Contractor is currently installing lift walkway slabs

and will follow with ATC cable installation.

### AREAS OF CONCERN (CON'T)

Contract B251, Vermont/Hollywood Tunnel Concrete Placement - Vermont/Hollywood Corridor

Concern: Delays to the start of concrete placement in the Vermont tunnels.

Action: The MTA, the CM and the Contractor should develop a detailed path forward plan to ensure the start and continuation of tunnel invert, arch concrete operations and coordinate lower station excavation

access by station contractors.

Status: A detail path forward has been developed. Tunnel invert concrete

placement started on the Vermont Corridor on September 12, 1994. The CM and the B251 contractor have established a concrete placement schedule utilizing the B221 turnout structure and the 60 foot access at the south side of the Vermont Stations. The lower excavation can take place after the arch concrete placement. This new mitigation plan will improve the stations lower excavation milestones by several months. The arch concrete placement schedule has been delayed due to lower concrete placement rates per day. The CM continues to meet with B241, B252, and B261 the station

contractors to coordinate the station lower excavation access.

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

Concern: The Vermont/Hollywood Corridor Revenue Operation Date (ROD)

forecast has continued to slip and the negative float to the September 1998 planned ROD has increased due to the Contract B251, Hollywood Tunnel shutdown. Tunnel mining operations under Hollywood Boulevard have been on hold since August 18, 1994, and will not re-commence until the requirements of the implementation plan have been met. The critical path runs through the Hollywood Boulevard implementation plan; restart of HAR and HAL tunneling; tunnel concrete placement and turnover to Contract B271,

Hollywood/Western Station.

Action: The MTA directed the EMC and Parsons-Dillingham to prepare an

implementation plan and schedule. Direct the B251 contractor's

activities and revise sequence of tunnel concrete placement.

### AREAS OF CONCERN (CON'T)

Status:

Implementation schedule baseline was finalized on November 2, 1994. The start of the HAR tunnel is currently scheduled for December 21, 1994, two weeks behind the baseline implementation schedule. A Hollywood tunnel concrete placement mitigation schedule was developed on November 18, 1994. Meetings were set up between the CM, B251 and B271 contractors to evaluate potential delays and to develop possible alternative courses of action.

#### **RESOLVED**

Contract B251 Tunneling Shut Down - Vermont/Hollywood Corridor

Concern:

Tunnel mining operations under Hollywood Boulevard have been on hold since August 18, 1994, and will not re-commence until the requirements of the implementation plan have been met. The Hollywood tunneling operation is on the Vermont/Hollywood critical path.

Action:

The MTA directed the EMC and Parsons-Dillingham to prepare an implementation plan. If approved, the implementation plan will allow mining operations to resume.

Status

The details of the status are addressed under "Forecasted Delay to ROD" Areas of Concern, above.

# FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR MTA ACTION

The following items reflect action requirements identified in the October Monthly Project Report submitted to FTA by their Project Management Oversight Consultant, Hill International.

#### <u>NEW</u>

#### NONE

#### **ONGOING**

August 1994, Grantee Staffing

Concern:

Spot report No. 1 contains several recommendations for MTA action.

Action:

The grantee should respond to the recommendations outlined in the

Spot Report within the one month time period allowed by FTA.

Status:

The MTA has responded to the recommendations in Spot Report No.

1 and is waiting for the FTA to finish its review.

#### **RESOLVED**

NONE

#### **KEY ACTIVITIES - NOVEMBER**

#### <u>Design</u>

- Contract B216, Wilshire/Vermont Site Restoration and Landscaping, completed Final Design and submitted for review.
- Contract B251, Vermont/Hollywood Tunnel, continued meeting with Inspector General's staff and Bureau of Engineering, City of Los Angeles; all issues were resolved. Continued analysis of conditions at Hollywood Boulevard, particularly tunnel misalignment and rebar placement at invert and arch.
- Contract B263, Vermont/Sunset Station, Kaiser Permanente Building Second Entrance, completed Kaiser Remodel CN-20. Awaiting final comments from MTA before issuing.
- Contract B271, Hollywood/Western Station, Design Change Notices (DCNs)
   12.00 and 13.00 completed, and revision of Change Notice 3.00 (DCN-93-101.01 Automatic Sprinkler System) partially completed.
- Contract B646, Fire and Emergency Management, participated in negotiation meeting for Change Notice 13, Expanded Programmable Logic Controller Expansion.
- Contract B710, Escalators and Elevators, prepared a DCN for Wilshire/Vermont
  Station escalator intermediate support cladding and interfacing scope of
  elevator machine room and escalator pit wiring to Communications Interface
  Cabinet (CIC).
- Contract B740, Ventilation Equipment, testing stopped due to failure of damper actuators. Temporary repairs are being made by B740 to avoid delaying B231 testing. New actuators to be installed by February 1995. At that time, testing of B740 equipment will resume. Testing and inspection by EMC of failed damper actuators at the factory have been completed. Manufacturer has developed revised design to correct defects. Existing equipment at B231 and B221 will be replaced.

### **KEY ACTIVITIES - NOVEMBER (CON'T)**

#### Construction

- Contract B215, Wilshire/Vermont Station, Stage 2, completed concrete placement for the columns and exterior walls of the lower track level of the station entrance structure.
- Contract B221, Wilshire/Normandie Station and Line, completed installation
  of terrazzo tile at the platform level and installation of tunnel walkway
  handrails. Began installation of mezzanine floor terrazzo tile, mezzanine
  ceramic wall tiles, and platform edge lights. Coordinated access for
  Elevator/Escalator and Train Control and Communication contracts.
- Contract B241, Vermont/Beverly Station, the main station, main entrance, and side structure piles were completed. The installation of deck beams and mats on the traffic side was completed. Excavation and support of utilities is continuing and is about 25% complete.
- Contract B251, Vermont/Hollywood Tunnel, completed concrete placement for the VAR invert Sunset Boulevard (B261) to the B221 turnout structure. Completed the AR Adit for crosspassage #19 and continued concrete finish work in crosspassage #18. Hollywood Boulevard chemical grouting replacement of drypack and supplemental support work continued to support the restart of mining operations.
- Contract B252, Vermont/Santa Monica Station, completed West Vermont tangent soldier pile installation, excavation and support of north and south muck pits. Installed concrete deck planks behind K-rails, Bays 43-45, and completed supporting of the electrical ductbank to DWP satisfaction. Began main station excavation, along western side of station from south pit.
- Contract B261, Vermont/Sunset Station, erected pedestrian/canopy walkway at Kaiser Hospital. Completed water main relocation work, installation of temporary street lights and ATSAC camera. Began drilling inclinometer wells on east side of Vermont Boulevard.
- Contract B271, Hollywood/Western Station, completed installation of deck beams and precast decking along Hollywood Boulevard. All piling installation has been completed. Commenced with the support of utilities from the installed decking system.

### **KEY ACTIVITIES - NOVEMBER (CON'T)**

- Contract B281, Hollywood/Vine Station, completed installation of piles on the north side of Hollywood Boulevard. Completed installation of inclinometers and observation wells on the north side of Hollywood Boulevard.
- Contract B610, Trackwork Installation, completed de-stressing on all yard tracks. Final line and surface of rail on the AR/BR is completed and awaiting survey and punch list.
- Contract B620, Automatic Train Control, submittal process continued.
   Delivered MacArthur Park relay and equipment racks to Contractor's warehouse.
- Contract B630, Traction Power Substation Equipment, continued submittal process. Delivered rectifier transformer to Wilshire/Western and AC switchgear to Wilshire/Normandie.
- Contract B631, Traction Power Installation, continued the installation of TPSS equipment in Wilshire/Western and Wilshire/Normandie Stations.
- Contract B740, Ventilation Equipment, has been installed in Wilshire/ Western Station.

#### **KEY ACTIVITIES - PLANNED FOR DECEMBER**

#### Design

- Contract B215, Wilshire/Vermont Station, Stage II, complete Change Notices on Emergency Generator Building, Variable Message Signs (VMS), relocation of fire valve pit, and roll-up grille revisions.
- Contract B251, Vermont/Hollywood Tunnel, design for Contingency Compaction Grouting Plan is being prepared for the La Reina Building at 7803 Hollywood Boulevard. Continue technical and construction support for the concreting operations at the Vermont and Hollywood distressed segment. Continue to provide field support for start of tunneling on Hollywood Boulevard. Continue tunnel realignment analysis for Hollywood Boulevard tunnels.
- Contract B263, Vermont/Sunset Station, Kaiser Permanente Building Second Entrance, following receipt of MTA final comments, EMC will issue Change Notice 20. Continue working on cost estimates for CNs and Contract B263.
- Contract B281, Hollywood/Vine Station, continue resolution for station appendages to avoid conflict with unforeseen foundations of Pantages and Taft buildings projecting into public right-of-way. In support of Hollywood Construction Impact Program (HCIP), assist in preparation of Change Order for parking lot design on site of former Hastings Hotel to include asphalt paving and temporary lighting.

#### Construction

- Contract B215, Wilshire/Vermont Station, Stage 2, continue installation of reinforcement steel and formwork for the upper track level slab. Continue installation of HVAC ducts, fire sprinkler system, electrical conduits, masonry walls, lathing, and acoustic spraying at the lower and upper track levels.
- Contract B221, Wilshire/Normandie Station and Line, continue installation of perforated ceiling panels, major electrical, HVAC equipment, and porcelain enamel column cladding. Street restoration at South Ardmore to be completed in December 1994.

#### **KEY ACTIVITIES - PLANNED FOR DECEMBER**

- Contract B241, Vermont/Beverly Station, continue with main station excavation and support of utilities.
- Contract B251, Vermont/Hollywood Tunnel, continue concrete finish in the crosspassages. Start the arch concrete placement from Sunset toward turnout structure in the right alignment.
- Contract B252, Vermont/Santa Monica Station, continue with main station excavation and support of utilities.
- Contract B261, Vermont/Sunset Station, continue installation of soldier piles, cap wales and cap beams, and relocation of underground utilities.
- Contract B271, Hollywood/Western Station, continue with support of utilities.
- Contract B281, Hollywood/Vine Station, continue with the cap wale, cap beam installation on the north side of Hollywood Boulevard, and pile installation on El Centro Avenue.
- Contract B610, Trackwork Installation, continue punch list work. Continue the yard's final line and surface on tracks #4 through #8 and installation of flange material on road crossings A and D. Begin installation of contact rail pedestals. Begin rail installation in AL/BL tunnel.
- Contract B620, Automatic Train Control, continue the submittal process and begin installation process of ATC cable in walkway between Wilshire/Alvarado and Wilshire/Vermont Station.
- Contract B630, Traction Power, continue the manufacturing of the equipment for Wilshire/Vermont Station.
- Contract B631, Traction Power Installation, continue with the TPSS equipment install in Wilshire/Western and Wilshire Normandie Stations.

Page No. 1

# MTA CONSTRUCTION DIVISION PROJECT COST REPORT COST BY ELEMENT WITH NEW REQUIREMENTS

Project: R81 METRO RED LINE - SEGMENT 2

Page 11

Period: Oct 28, 1994 to Dec 2, 1994

Run Date: Dec 13, 1994

Units: \$ in Thousands (Truncated)

								` <del></del>				
	ORIGINAL BUDGET	CURREN	T BUDGET	COHHI	TMENTS	I NCUR	RED	EXPEN	LTURES	CURRENT	FORECAST	FORECAST VARIANCE
ELEMENT / DESCRIPTION		Period	To Oate	Period	To Date	Period	To Date	Period	To Date	Period	To Date	
TOTAL PROJECT							ļ					
T CONSTRUCTION	893,000	0	943,224	1,327	857,736	15,132	520,845	19,057	478,241	3,026	958,628	15,404
S PROFESSIONAL SERVICES	289,150	0	351,981	0	308, 157	3,796	229,970	3,796	229,994	-3,398	348, 127	-3,853
R REAL ESTATE	79,827	} 0	87,300	0	75, 176	1,132	82,653	1,132	82,653	4,142	91,002	3,702
F UTILTY/AGENCY FORCE ACCOUNTS	36,668	0	31,122	0	26,229	1,951	16,475	1,951	16,475	0	34,035	2,913
D SPECIAL PROGRAMS	2,044	0	4,416	0	560	24	463	44	483	0	2,647	-1,768
C PROJECT CONTINGENCY	145,743	0	28,579	0	0	0	0	0	0	-3,769	12,290	-16,288
A PROJECT REVENUE	0	0	- 190	0	-234	D	- 234	0	-234	0	-300	-110
TOTAL PROJECT	1,446,432	200 - CO	1,446,432	1,327	1,267,625	22,037	850,174	25,982 ×	807,614	3862-825-00	1,446,432	348,135,555,553 0
T CONSTRUCTION S PROFESSIONAL SERVICES R REAL ESTATE F UTILITY/AGENCY FORCE ACCOUNTS D SPECIAL PROGRAMS	0 0 0	5,616 1,450 0 130	52,245 15,875 0 130 0	90 0 0 0	43,891 9,600 1 0 20	1,328 56 0 0	3,060 9,284 1 0	60 56 0 0	113 9,284 1 0 22	169 0 0 0	53,037 15,199 0 130 20	792 -676 (
C PROJECT CONTINGENCY	0	-1,220	2,975	0	D .	0	0	0	0	- 154	2,985	10
TOTAL HEW REGUL REMERTS	2.000 0 -000 <b>0</b> -	5,976	71,225	(000000 <b>90</b> 00	×: 53;512	1,384	12,368	116	<i>∞</i> : 9,421	.aa::::15°	::7 <u>1,372</u>	32.447
		ļ										
			·						, `			<u> </u>   

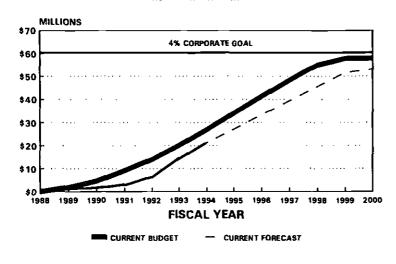
### METRO RAIL PROJECT SEGMENT 2 (IN THOUSAND OF DOLLARS)

### STATUS OF FUNDS BY SOURCE

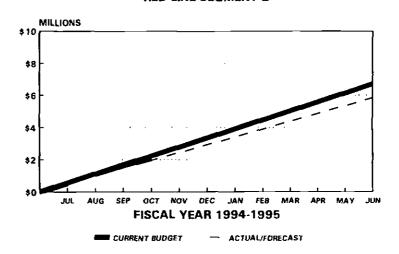
	TOTAL FUNDS	TOTAL FUNDS	* COMMITM	ENTS	EXPENDIT	JRES (4)	BILLED TO SO	URCE
SOURCE	ANTICIPATED	AVAILABLE	\$	%	\$	%	\$	%
TA-SECTION 3	\$667,000	\$597,653	\$608,304	91%	\$348,932	52%	\$335,664	509
TA-SECTION 3 DEFERRED LOCAL SHA	RE (1)		\$0		\$86,783		\$82,360	
STATE	\$185,129	\$133,000	\$184,665	100%	\$133,000	72%	\$133,000	729
PROPOSITION A	\$440,303	\$158,043	\$357,313	81%	\$148,290	34%	\$152,687	359
CITY OF L.A.	\$96,000	\$67,300	\$83,783	87%	\$56,510	59%	\$51,708	54
BENEFIT ASSESS.	\$58,000	\$0	\$34,126	59%	\$34,126	59%	\$0	0
COST OVERRUN ACCOUNT (2)	\$0	\$19,635	\$0	0%	\$0	0%	\$0	0
BENEFIT ASSESS. SHORTFALL (3)	\$0	<b>\$</b> 0	\$0	0%	\$0	0%	\$34,126	
TOTAL	\$1,446,432	\$975,631	\$1,268,191	88%	\$807,641	56%	\$789,545	55
PROP C (AMERICAN DISABILITY ACT)	\$5,996	\$610	\$3,993	67%	\$610	10%	\$610	10
PROP A (TRANSIT ENHANCEMENTS)	\$59,254	\$8,785	\$48,954	83%	\$8,785	15%	\$8,785	15
GRAND TOTAL	\$1,511,681	\$985,026	\$1,321,138	87%	\$817,036	54%	\$798,940	53

FTA Section 3 Deferred Local Share. Commitments and expenditures are effective starting July 1st. 1992.
 The Cost Overrun Account includes CAPRA funds only.
 The current Benefit Assessment District revenue shortfall is being funded by MTA.
 Expenditures are cumulative through October 1994.

### **AGENCY COSTS RED LINE SEGMENT 2**



### **FISCAL YEAR 1995 AGENCY COSTS RED LINE SEGMENT 2**



# **PROJECT AGENCY COSTS**

### RED LINE SEGMENT 2 (\$000)

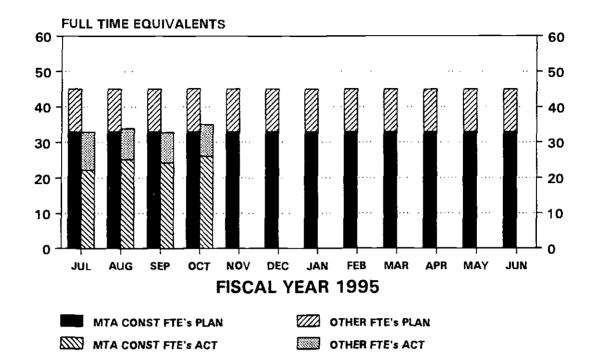
TOTAL PROJECT BUDGET	\$1,511,682
CURRENT BUDGET	\$57,840
BUDGET % OF TOTAL PROJECT	3.8%
CURRENT FORECAST	\$53,051
FORECAST % OF TOTAL PROJECT	3.7%
ACTUAL THROUGH FY 94	\$21,324

### **FISCAL YEAR 1995 AGENCY COSTS**

**RED LINE SEGMENT 2 (\$000)** 

ORIGINAL BUDGET	\$6,692
CURRENT BUDGET	\$5,841
BUDGET PLAN TO DATE	\$2,230
ACTUAL TO DATE	\$1,958

# STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 2



FY'95 Budget

# RED LINE (SEGMENT 2) STAFFING PLAN FISCAL YEAR 1995

MTA CONSTRUCTION FTE's PLAN	33
MTA CONSTRUCTION FTE's ACTUAL	26
OTHER PTEL BLAN	40
OTHER FTE's PLAN	12
OTHER FTE's ACTUAL	9
TOTAL FTE's PLAN	45
TOTAL FTE's ACTUAL	35

NOVEMBER 1994

# R81 - Metro Red Line Seg-2 PROJECT CHANGE VALUES ONLY

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

NITA API	PROVED CT AWARD	CHANG	MTA APPROVE SE CONTINGENC			CH	APPROVED IANGES TO DATE				REMAINING AFE	PROJ	ECTED	<b></b>	
CONTRA	AWARD CT VALUE	ALLOW	CURRENT ED 1 ALLOWED	TOTAL APPROVED AFE (RB1)		APPROVED CHANGES	CURRENT CONTRACT VALUE	INCR	CTG USED	COMP	CURRENT UNUSED ALLOWANCE	PENDING CHANGES		X AFE USED	% INCR
A,	В.	l c.	D.	E.(8 + D)	1	F.[1]	G.{B+F	H.[2]	[ ]t.		K 10 F1	[ F13]	M IK LI	N.	0
IIA 640		1%	10		1	844,635	144,635	***.*%		*	[ [844,835]	1 10	1844,635		00
· A 850	157,589,082	5%	\$2,879,398	160,467,460	1	10	157,588,062	00%	0%	0%	1 \$2,879,398	1 10	\$2,879,398	0%	
8201	144,577,273	20%	18,922,727	\$53,500,000	ı	15,674,021	160,251,894	12.7%	64%	100%	13 248 106			64%	12 /
8211	138,487,177	13%	14,958,818	143,415,995	1	12,184,644	140,671,821	5.7%	44%	100%	12,774,174	(\$110,357)	12,884,531	42%	5 45
B216	126,177,700	10%	\$2,611,830	128,789,530	1	1435,731	\$25,613,431	1.7%	17%	38%	\$2,176,099	1301,931	11,874,168	26%	289
B218	\$64,000	135%	186,600	\$150,800	1	\$B0,194	\$144,194	125 3%	93%	100%	\$6,406	10	16,406	93%	125.39
( B221	179.812,793	1 14%	110,884,531	190,677,324	1	17,354,475	187,167,268	9 2 %	68%	91%	\$3,510,058	13,946,096	18436 040	104%	14 21
B229	1957,428	10%	195,742	\$1,053,170	1	\$53,648	\$1,011,074	56%	56%	63%	\$42,096	1 124,873	117,223	82%	8 2 9
8231	#53,645,201	10%	15,364,520	159,009,721	1	\$4,902,8B2	158,548,083	5 1%	91%	99%	\$461,638	[ \$681,916	(\$270,278	104%	10 45
B241	\$40.957,557	10%	\$4,095,758	145,053,313	ı	\$166,000	141,123,557	04%	4%	22%	\$3,929,756	\$640,832	\$3,28B 924	20%	20
·B251	\$129,055,578	10%	112,965,658	1142,621,136	ı	14,482,109	6134,137,687	3 5%	35%	77%	#8,483,450	1 12,736,340	15,747,109	56%	5 6 9
B262	150,879,831	11%	15,851,168	\$56,730,789	1	\$103,434	\$50,983,065	0.2%	2%	12%	15,747,724	11,004,800	14,742,924	19%	2 25
B281	144,960,998	1 10%	14,496,700	149,483,898	1	1195,032	\$45, 102, 030	0 4%	4%	13%	\$4,301,668		\$4 248,848		0 69
B268	188,000	1 10%	\$9,BQ0	195,800	I	18,550	196,550	97%	97%	100%	\$250			97%	9 79
8271	138,948,000	1 10%	\$3,894,B00	142,842,600	ī	(\$50,020)	\$38,897,980	01%	-1%	6%	\$3,944,820	1 112,500	13,957,320	2%	0 25
B281	149,287,000	1 12%	15,914,440	155,201,440	i	\$465,615	\$49,752,815	0.9%	8%	10%	15,449,825	1 \$109,128	15,339,699	10%	1 29
8289	\$76,478	14%	10,622	187,100	1	19,045	\$95,323	12.9%	93%	100%		1 80		93%	12 95
8280	\$0	1 **** %	10	10	ı	10	10	***,*%	****	0%				****	009
·8610	\$15,689,652	10%	\$1,668,965	118,359,617	i	1164,145	118,653,797	1.0%	10%	28%	1 \$1,504,920	(\$ 1,046,585)	12,551,405	.53%	~ · · · · · ·
·B011	12,719,049	10%	1271,905	12,990,954	ı	10	12,719,049	00%	0%	34%	1271,905	[1176,925]	\$448,830	65%	-6 5 5
·B612	13,994,355	1 10%	1399.438	14,393,791	ī	10	13,994,355	00%	0%	26%	\$399,436	10	\$399,438	0%	009
·B614	12,646,829	10%	\$254,583	12,911,512	ı	1800	12.647,629	00%	0%	41%	[ \$263,883	10	\$283,883	0%	00
·B616	1759,503	1 10%	175,958	1035,541	1	\$0	1759,583	0.0%	0%	0%	175,958	1 118,720	157.238	25%	2 5 7
·8620	118,031,265	13%	\$2,326,033	\$20,357,298	1	(\$124,565)	\$17,905,700	-0.7%	-5%	48%	1 \$2,450,598	[ [839,343]	\$2,489,941	.7%	0 99
· B630	18,157,160	1 10%	1615,715	16,772,865	ı	1103,231	16,260,381	1.7%	17%	18%	1 1512,484	j to	1512,484	17%	1 29
8831	14,467,165	1 10%	1446,717	14.913,882	t	10	\$4,487,165	00%	0%	14%	1 \$446,717	\$395,586	\$51,131	89%	8 93
·B641	\$10,230,169	1 10%	11,023,018	\$11,253,175	t	10	\$10,230,159	00%	0%	0%	\$1,023.015	[81,800]	\$1,024,816	0%	0 0
·B642	11,102,267	21%	1234,242	11,336,609	1	10	11,102,287	00%	0%	0%	1 1234,242	1 10	1234,242	0%	000

1°1 Costs shared with other projects. Costs shown are for R81 DNLY. [1] Includes both executed CO's and authorized [WACN] changes [2] % increase over original award [3] Logged contract changes ONLY

R81 - Metro Red Line Beg-2 RSEV 2.0 09/15/94 too

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PAGE 1

PROJECT VALUE SUMMARY 11/18/94

COSTS SHOWN ARE FOR PROJECT R81 ONLY. (ALLOCATED)

## R81 - Metro Red Line Seg-2 PROJECT CHANGE VALUES ONLY

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

		MTA APPROVED MTA APPROVED CONTRACT AWARD CHANGE CONTINGENCY [AFE]				1	a	APPROVED IANGES TO DATE			I	REMAINING AFE		PROJECTED				
CONTRACT	AWARD VALUE		OWED	CURRENT \$ ALLOWED	TOTAL APPROVED AFE 1881		ROVED NGES	CURRENT CONTRACT VALUE	INCR	% CTG USED	COMP	CURRENT UNUSED ALLOWANCE		PENDING CHANGES		% Afe USED	% INCR	
A.	В.	1 0		D.	E.(B + D)	[ F.[1]		G.(B + F1	H.[2]	j 1.	J	K.ID FI	i	L [3]	MUNT	N		
8643	<b>\$780,127</b>	10	*	\$78,013	1858,140	1	<b>\$</b> 0	\$780,127	00%	0%	0%	į \$78,013		10	\$78,013	0%	00	
B644	13,260,988	13	*	1435,017	13,696,005	i	156,000)	\$3,254,988	0 2%	1%	0%	\$441,017	Ī	(\$900,847)	\$1 341,864	208%	27.8	
B846	12,566,871	1 5	×	1117,258	12,684,129	1	10	12,566,871	00%	0%	0%	1 117,258	¨ i	(1126,000)	\$243,256	107%	49	
B846	12.547.768	10	×	1254,777	12,802,543	T	\$25,000	12,572,766	10%	10%	0%	1229,777	ī	<b>\$</b> 146,700	\$83.077	67%	6.75	
8848A	12,208,354	10	*	\$220,636	12,425,990	ı	\$0	\$2,206,354	00%	0%	0%	1 1220,636	1	(\$26,781)	\$247,417	12%	r 25	
B846B	10	1	×	10	10	1	10	10	***.*%	****	0 %	1 \$0	ï	10	\$0	%	00	
B710	114.412,962	19	×	12,715,277	\$17,158,239	ı	\$10,000	\$14,452,962	01%	0%	5%	1 12,705,277	Ì	<b>\$826 433</b>	\$1,878,844	31%	••••	
B740	10.526.288	Į 10°	×	11,052,627	\$11,57B,895	1	1251,307	\$10,777,575	2 4%	24%	39%	1 \$801,320	ī	(\$154,705)	1956.025	9%	0 9	
B745	\$1,808,381	46'	*	1825, 136	12,633,517	1	1405,019	\$2,213,400	22 4%	49%	40 %	1 \$420,117	i	\$0	\$420,117	49%	22 4	
B760	\$484,849	10	*	148,485	1533,334	1	10	1484,849	00%	0%	0%	1 148,485	i	(000,001)	\$76,485	62%	-6 2	
B761	13,226,672	10	*	1322,667	13,549,339	i	174,846	13,301,518	2.3%	23%	30%	1 \$247,821	Ī	\$59,082	\$188.739	42%	4 29	
B 795	12,004,683	10	*	\$200,468	\$2,205,151	T	\$0	\$2,004,683	00% [	0%	15%	\$200,468	_ i _	10	\$200,466	0%	00	
F815M		1	*	10		1	10	\$0	***.*%	****	%	1 10	ı	\$0	\$0	****	009	
PM601	10	1 ****	*	\$0	10	1	\$0	10	*****	****	0%	1 10	1	\$0	\$0	****		

\$793,837,447

\$59,603,855 |

\$8,312,611

11 - AFE increase required

\$766,822,271 | 11%

127,015,176

186,619,031

1-1 Costs shared with other projects. Costs shown are for R81 ONLY. [1] Includes both executed CD's and authorized (WACN) changes 121 % increase over original award. [3] Logged contract changes ONLY

\$51,291,244 41%

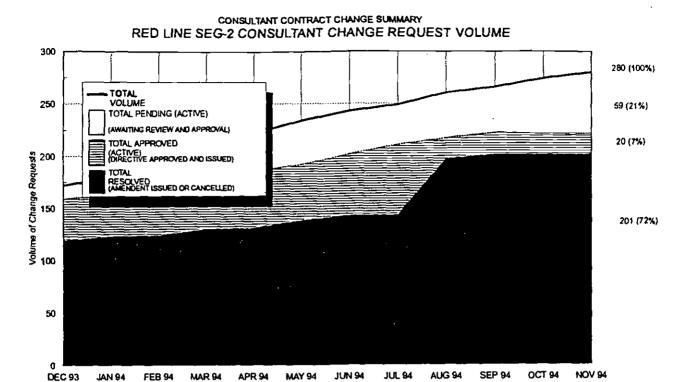
<sup>1853,441,302</sup> 1 - AFE increase MAY be required to cover pending changes.

LEGEND

Open. Action still required.
Completed or Not Applicable

# CONTRACT CLOSE OUT STATUS METRO RED LINE SEGMENT 2

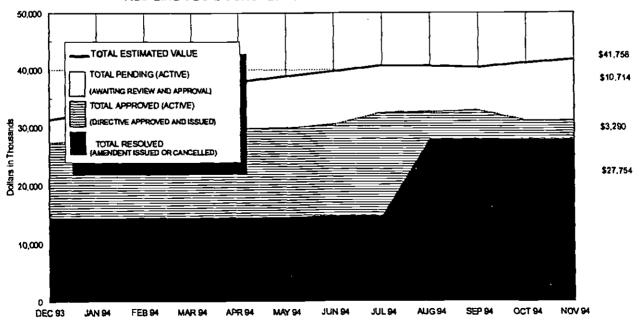
	· 1		CLOS	E OUT ST	ATUS				ı	
			CLAIMS/	FINAL	FINAL		EQUIP.	FINAL		PROJECTE
CONTRACT	1	iN	CHANGE			FINAL	FINAL	ACCEPT.	ł	CLOSE-OU
NUMBER	DESCRIPTION	AUDIT	ORDERS	LISTITEN	PAYMENT	RELEASE	DELIV.	CERTIF.	COMMENTS	DATE
	Metcalf & Eddy	0								Dec 94
B754	Dames & Moore	0								Dec 94
B756	Barsotti	0						T		Dec 94
B211	Wilshire/Vermont Station		0	0		0		T		Feb 95
B201	Pocket Track & Tunnel	0	0	0				1		May 95
B231	Wilshlre/Western Station	0	0	0						Feb 95
B221	Wilshire/Normandie Station	0	0							Jul 95
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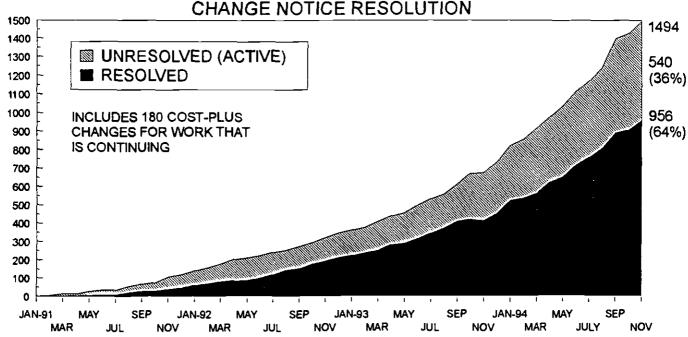
REQUESTED CHANGES SINCE 05/01/01 ONLY

_	AGE OF U	JNRESOLVED C	ONSULTANT CH	IANGES	
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	10	7	12	50	79
PERCENT	13%	9%	15%	63%	100%

CONSULTANT CONTRACT CHANGE SUMMARY
RED LINE SEG-2 CONSULTANT CHANGE REQUEST VALUES



# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES



AGE OF UNRESOLVED CHANGES									
TIME	0-30 DAYS	31-60	61-90	OVER 90	TOTAL ACTIVE				
VOLUME	160	<b>7</b> 5	41	264	540				
PERCENT	30%	14%	<b>7</b> %	49%	100%				

### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE DOLLARS AS A PERCENTAGE OF ORIGINAL CONTRACT AWARD 6 5.5 5 ESTIMATED PERCENTAGE INCREASE INCLUDING PENDING CHANGE NOTICES. 4.6% 4.5 ACTUAL PERCENTAGE INCREASE DUE TO (EST.) EXECUTED CHANGE ORDERS AND APPRVD. WORK AUTH. 4 3.5% 3.5 BASED ON LOGGED CHANGES ONLY DOES NOT INCLUDE CLAIMS THAT HAVE NOT BEEN ALLOWED MERIT AS CHANGES OR OTHER RISK FACTORS. (ACTUAL) 3 2.5 2 1.5 TOTAL CONTRACT AWARD \$766,822,271 **OBLIGATED CHANGE VALUE** 27,015,176 TOTAL APPROVED VALUE 793,837,447 0.5 8,312,511 PENDING CHANGES 0 SEP SEP JAN-94 MAY JAN-91 MAY SEP **JAN-92** MAY SEP JAN-93 MAY MAR JUL MAR JULY NOV NOV JUL NOV MAR JUL NOV MAR

### R81 - Metro Red Line Seg-2

### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

### CHANGE NOTICE BASIS BREAKDOWN

EXECUTED CHANGES AS OF 11/18/94

		# CN'S	% Total Volume	Change Cost	% Total Change Cost
WOR	K SCOPE				
110 115 120	EXTRA WORK ADDITIONAL/NEW WORK DELETION OF WORK	104 22 10	14.38% 3.04% 1.38%	\$2,267,093.43 \$598,250.22 \$45,926.05	11.90% 3.14% 0.24%
SCHE	EDULE CHANGES	136	18.81%	\$2,911,269.70	15.28%
210 220 230	DELAY OF WORK (COMPENSABLE) ACCELERATION OF WORK MILESTONE REVISIONS (NON-COMPENSABLE)	12 4 11	1.66% 0.55% 1.52%	\$329,886.00 \$87,932.07 {\$13,575.00}	1.73% 0.46% -0.07%
DIFFE	ERING CONDITIONS	27	3.73%	\$404,243.07	2.12%
310 320 330	DIFFERING SITE CONDITIONS HAZARDOUS MATERIALS SAFETY CONDITIONS	95 9 13	13.14% 1.24% 1.80%	\$3,244,306.87 \$491,576.74 \$538,877.86	17.03% 2.58% 2.83%
TERM	AS AND CONDITIONS	117	16.18%	\$4,274,761.27	22.44%
400 410 430	TERMS AND CONDITIONS TERMS AND CONDITIONS (OWNER ORIGINATED) EDITORIAL CLARIFICATIONS/DOCUMENT MAINTENANCE	1 32 26	0.14% 4.43% 3.60%	(\$2,000.00) {\$39,960.00} \$176,497.50	-0.01 % -0.21 % 0.93 %
DESI	GN CHANGES	59	8.16%	\$134,537.50	0.71%
510 515 520 530 540	DESIGN CHANGES/ENHANCEMENTS (OWNER ORIGINATED DESIGN CHANGES/ENHANCEMENTS (EMC ORIGINATED) DESIGN CHANGES/ENHANCEMENTS (MTA OPERATIONS CORRECTIONS TO PLANS AND SPECIFICATIONS VALUE ENGINEERING CHANGES (CONTRACTOR ORIGINA	144	10.24% 19.92% 4.56% 9.41% 0.97%	\$2,620,783.82 \$5,259,491.12 \$2,119,844.43 \$616,351.04 {\$728,651.10}	13.76% 27.61% 11.13% 3.24% -3.83%
MAN.	AGEMENT ISSUES	326	45.09%	\$9,887,919.31	51.91%
610	DISRUPTION/INEFFICIENCY (CLAIMS ONLY)	3	0.41%	\$179,584.76	0.94%
OUTS	SIDE AGENCY REQUESTS	3	0.41%	\$179 <b>,</b> 584.76	0.94%
710 720 730	WORK SCOPE CHANGES (OUTSIDE AGENCY ORIGINATED DESIGN CHANGES (OUTSIDE AGENCY ORIGINATED) TERMS AND CONDITIONS (OUTSIDE AGENCY ORIGINAT	31 2 3	4.29% 0.28% 0.41%	\$544,673.05 \$16,675.00 \$159,130.40	2.86% 0.09% 0.84%
CON	TRACT OPTIONS	36	4.98%	\$720,478.45	3.78%
800	CONTRACT OPTIONS	9	1.24%	\$426,505.36	2.24%
отне	ER	9	1.24%	\$426,505.36	2.24%
900	OTHER	10	1.38%	\$110,372.18	0.58%
		10	1.38%	\$110,372.18	0.58%
PROJ	ECT TOTALS:	723	100.00%	\$19,049,671.60	100.00%

R81 - BASIS SUMMARY REPORT rrev. 2.6 06/12/94 lag

T RUBIO

### R81 - Metro Red Line Seg-2

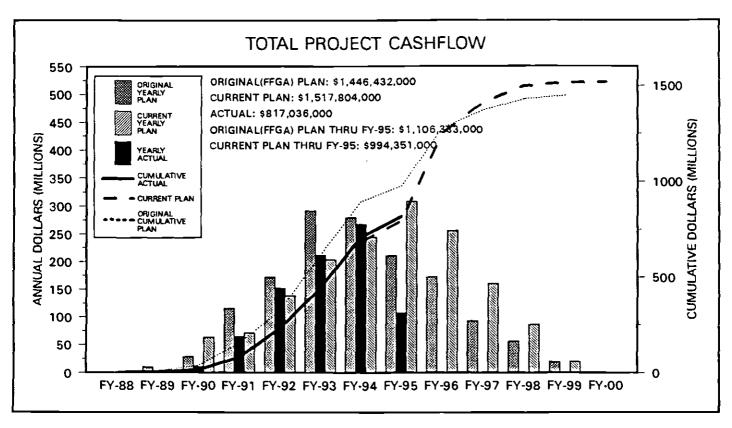
### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

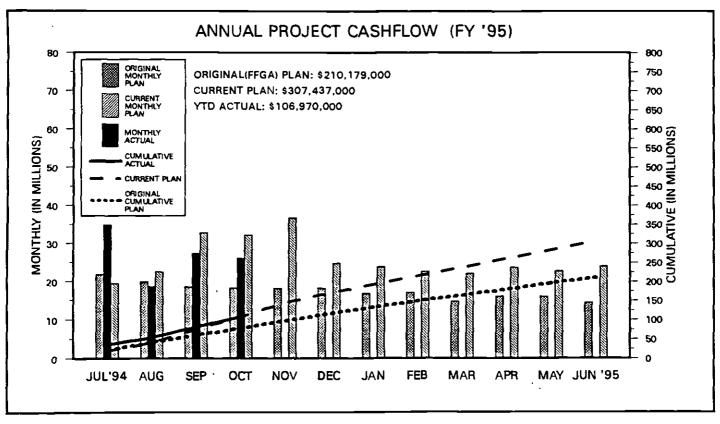
### CHANGE COST LEVEL BREAKDOWN

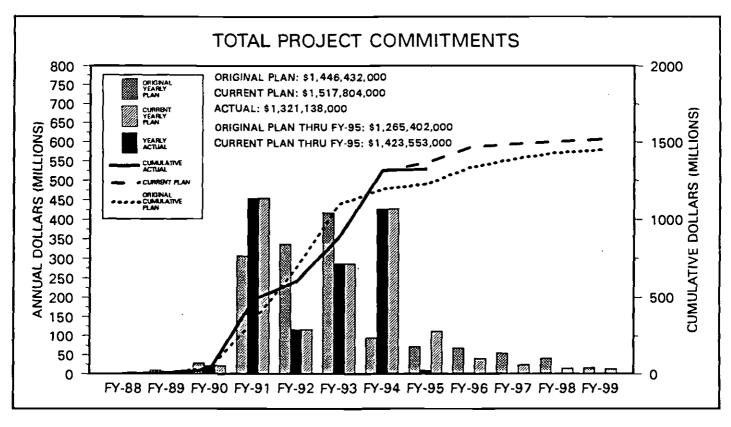
### **EXECUTED CHANGES AS OF 11/18/94**

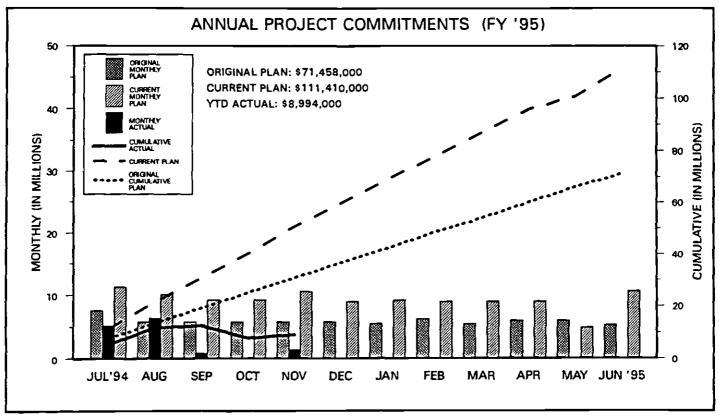
	EXECUTED CHANGEO			
COST RANGE (ABSOLUTE VALUE)	# CN'S	% Total Volume	Change Cost	% Total Change Cost
>200 - 1 MILLION	15	2.07%	\$6,202,153.20	32.56%
> 100-200	46	6.36%	\$5,934,084.26	31.15%
> 50-100K	37	5.12%	\$1,885,525.39	9.90%
> 25-50K	66	9.13%	\$2,275,814.79	11.95%
10-25K	112	15.49%	\$1,812,113.18	9.51%
0-10K	447	61.83%	\$939,980.78	4.93%
PROJECT TOTALS:	723	100.00%	\$19,049,671.60	100.00%

PAGE 1 COST LEVEL BREAKDOWN DETAIL 170v 2.1 07/07/93 dbp

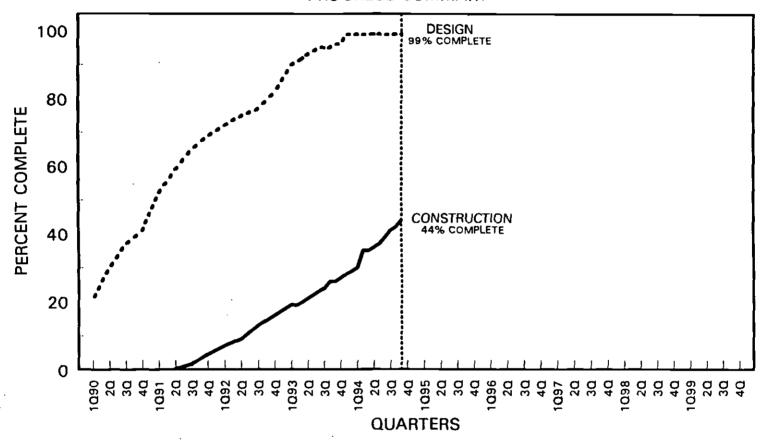








# METROPOLITAN TRANSPORTATION AUTHORITY METRO RED LINE SEGMENT 2 PROGRESS SUMMARY.



DESIGN % COMPLETE

CONSTRUCTION % COMPLETE

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Activity

Description

8710 ELEVATORS/ESCALATORS FAB & DEL - 9216

**B710 ESCALATOR/ELEVATOR** 

Forecast

Start

08FEB94A

Forecast

Finish

28JUN95

Activity

Description

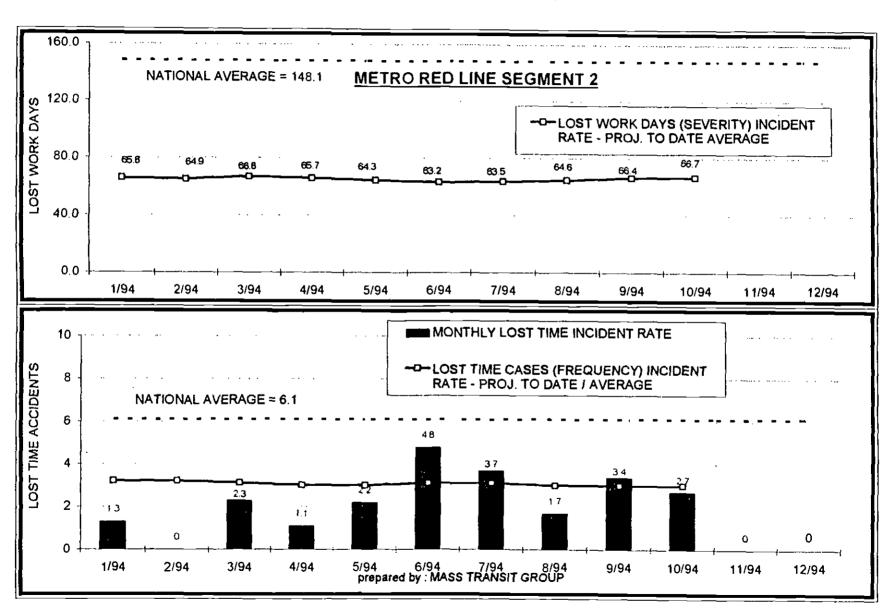
Forecast

Start

Forecast

Finish

# Summary of Lost Time Accidents (FREQUENCY) and Lost Work Days (SEVERITY)



Page

### **EXECUTIVE SUMMARY**

### **COST STATUS**

North Hollywood Extension	(\$000's)
<ul> <li>Current Budget</li> </ul>	\$1,310,822
<ul> <li>Current Forecast</li> </ul>	\$1,319,959
Mid City Extension	•
<ul> <li>Current Budget</li> </ul>	\$490,663
<ul> <li>Current Forecast</li> </ul>	\$490,663
East Side Extension	
<ul> <li>Current Budget</li> </ul>	\$650,000
<ul> <li>Current Forecast</li> </ul>	\$650,000
Total	
<ul> <li>Current Budget</li> </ul>	\$2,451,485
Current Forecast	\$2,460,622

### **SCHEDULE STATUS**

### North Hollywood Extension

•	Design Status:	83%
•	Construction Status:	4.3%

### Mid City Extension

• Design Status: 27	2/	%
---------------------	----	---

### **East Side Extension**

•	FEIS/FEIR Planning Project:	93.7%
•	Preliminary Engineering:	100.0%

### **EXECUTIVE SUMMARY (CON'T)**

### **REAL ESTATE**

### North Hollywood Extension

CCU	NUMBER OF	NUM CERT	IBER IFIED	JUST APPR		OFF MA		AGREE	MENT NED	CONDEM	INATION .	PAR AVAII		NUMBER OF PARCELS PROJECTED NOT TO BE
	PARCELS	FLAN	ACT	PLAN	ACT	PLAN	ACT	PLAN	ACT	FLAN	ACT	F.A	ACT	AVAILABLE BY NEED DATE
8261	16	16	16	16	16	16	16	16	6	12	11	15	16	0
C0301	3	3	3	3	3	3	3	3	2	3	3	2	2	0
C0311	109	109	109	12	12	12	12	8	1	4	4	6	6	3
C0321	26	26	26	12	12	12	12	4	4	2	1	10	9	2
C0331	11	11	11	11	10	11	10	10	6	0	0	8	7	0
C0351	12	12	12	8	8		8	6	8	3	2	4	4	4
TOTAL	176	176	176	81	60	61	60	48	28	24	21	44	42	9

 To date, 42 parcels have been acquired. Twenty-one parcels were acquired through negotiated acquisition and the remaining parcels were acquired through condemnation.

### AREAS OF CONCERN

### <u>NEW</u>

Contract C0311, Line Section Universal City Station to STA 613+00

Concern:

This contract is currently in the Bid/Award cycle and is part of the current project schedule critical path. The apparent low bid recommendation was brought for review to the MTA Committee meeting held on November 9, 1994. The Committee did not decide to act upon the MTA staff recommendation. The delay in awarding and issuing Notice to Proceed (NTP) for this contract results in a day-for-day slip in the ROD milestone and potential cost increases.

Action:

The MTA staff and its consultants are ready to resubmit the issue at

the December 14, 1994, Committee meeting.

Status:

Awaiting the decision of the upcoming MTA Committee meeting.

Contract C0331, Line Section North Hollywood to Universal City

Concern: The start of tunnel mining has been 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 on the project schedule critical path. In addition, the mining operation must be conducted to ensure against ground

settlement.

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.

Status: Tunnel mining is planned to begin in January. The first increment of

excavation will be closely monitored. At the time a schedule impact

assessment will be prepared.

Contract C0351, North Hollywood Station with Crossover & Tailtrack

Concern: This contract is currently in the Bid/Award cycle. There are two real

estate parcels that may not be available for turnover to the C0351 Contractor as currently stated in the bid documents. This is due to the fact that the parcels require environmental clean-up and demolition (by C0358) to be completed prior to the turnover. The parcels are C3-804 and C3-809. These two parcels are to be available (per Appendix B of the Contract Bid Documents, Part C -

Special Provision) 90 calendar days after NTP.

Action: The MTA and its consultants are studying the progress of acquiring the properties in an effort to see if the environmental clean-up and

demolition efforts can be accomplished to meet the C0358 need date. In addition, the Bid/Award cycle is being closely monitored to see if Contract C0358 will be issued NTP in late February 1995 as currently

planned.

Status: The MTA is coordinating Real Estate and Environmental activities

associated with the parcels. The MTA's consultant is preparing a Contract addendum addressing the parcel availability dates to be

issued by MTA to the bidders if necessary.

### **ONGOING**

Contract B251, Line Section from the Hollywood/Vine Station to Station 630+00 - Tunneling Shut Down - North Hollywood Extension

Concern: Tunnel mining operations on the Hollywood Boulevard have not

resumed as of the report date, and the latest study indicates the

tunneling to start no earlier than December 1994.

Action: The MTA directed the EMC and Parsons-Dillingham to prepare an

implementation plan.

Status An implementation plan was developed. The prerequisite activities

required prior to the start of tunnel mining are underway.

Additional Contracts for the Universal City Area - North Hollywood Extension

Concern: The MTA requested the EMC to assist them in defining scope for

repackaging the site restoration at Universal City Station into a number of smaller construction contracts. Multiple contracts could have an adverse effect on the schedule due to limited site availability for several contractors, and to the resultant complications of

maintaining traffic.

Action: Identify scheduling/interfacing for various contractors and apportion

use of the properties as staging areas for the different contractors.

Status: MTA/EMC/P-D are jointly identifying potential solutions to discuss

with Caltrans, the City and MCA. Preliminary Design of the overall

work scope is being advanced, and will assist in the process.

Contract C0312 Mid-line Vent Structure Construction - North Hollywood Extension

Concern: There is currently no provision for a Mid-line vent structure. This

scope was deleted from Contract C0311.

Action: Determine the Mid-line vent shaft requirements, design, and

construction.

Status:

Currently there is a study underway to determine a vertical or

horizontal Mid-line vent shaft design approach

Contract C0321 Universal City Station - Section Designer Recovery Plan

Concern:

Insufficient mobilization and apparent organizational problems contributed to an incomplete In-Progress submittal from the Section designer. Subsequent value engineering changes to the entrance and appendages have further increased the amount of coordination and

time required to complete Final Design.

Action:

With the Section Designers' input, EMC submitted to MTA a recovery

plan which requires an approximately five week schedule extension.

Status:

The design team is executing the recovery plan in anticipation of a

December Pre-Final submittal.

Contract C0322 Universal City Station MCA Entrance - North Hollywood Extension

Concern:

The addition of a pedestrian tunnel (under Lankershim Boulevard and portals on the east side of the boulevard on MCA, Inc. property) could impact the cost forecast, follow-on systems contracts and

Contract C0326 (C1326, C2326, and C3326).

Action:

Proceed with design activities to determine the detail scope, utility

relocation, systemwide and real estate requirements.

Status:

The process of developing a design schedule and construction

schedule continue.

Presence of hazardous gas and contaminated water on alignment - Mid City Extension

Concern:

The presence of hazardous gases and contaminated water along the

alignment is impacting design and construction premises.

Action:

An alignment reassessment study has been conducted to determine the feasibility of tunneling, construction and operations under these

conditions.

Status:

Mid City final design efforts are suspended. The study report was presented to the MTA and MTA Boards during July, 1994, and an environmentally focused follow-on program approved for implementation. The EMC is supporting MTA staff who are responsible for preparing additional environmental impact assessments. This level of effort activity for the EMC is expected to continue until mid 1995.

### **RESOLVED**

Contact C0301R, Hollywood/Highland Stations and Tunnels, Construction Planning

Concern: Due to the bid protest, the MTA is concerned about minimizing

impacts to Hollywood Boulevard businesses due to construction

activities.

Action: The MTA and its consultants are preparing a set of mitigation

measures to minimize the impacts.

Status: The mitigation measures were finalized in early November and

confirmed with the Hollywood community.

# FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR MTA ACTION

The following items reflect action requirements identified in the October Monthly Project Report submitted to FTA by their Project Management Oversight Consultant, Hill International.

### <u>NEW</u>

### NONE

### **ONGOING**

### August 1994, Grantee Staffing

Concern: Spot report No. 1, Grantee Staffing, contains several recommendations

for MTA action.

Action: The Grantee should respond to the recommendations outlined in the spot

report within the one month time period allowed by the FTA.

Status: The MTA has submitted its response to the FTA for its review.

### August 1994, Segment 1 Grant Close-out

Concern: The MTA agreed to close out the grant by June of 1994. That due date

has passed and the grant remains open.

Action: The projected date of September 1994 seems optimistic to the PMOC.

MTA needs to focus more attention on the close-out process.

Status: At the quarterly meeting with the FTA, The MTA projected a Close-out

completion date in line with the FTA deadline of January 1995. In

addition, an updated status report was distributed in November.

### <u>NEW</u>

### NONE

# FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT (CON'T) ITEMS FOR MTA ACTION

### **RESOLVED**

August 1994, Project Management Plan

Concern: The FTA required completion of a PMP inclusive of the East Side

organization, in its June 3, 1994, letter to the MTA.

Action: The Grantee responded by producing a draft report.

Status: The MTA has produced the PMP and delivered it to the PMOC for

review.

### **KEY ACTIVITIES - NOVEMBER**

### **North Hollywood Extension**

### **Design**

- As of December 2, 1994, Facilities Design for the North Hollywood Extension was 88% complete versus 93% planned. Systems Design was 19% complete versus 58% planned. The total design progress is 83% actual compared to 91% planned.
- Completion of design for contract C0352, North Hollywood Sitework, remains on hold. Work has started on contract B630, Traction Power Procurement and on B620, Final Design for Automatic Train Control.

### Bid/Award

- Contract C0301R, Hollywood/Highland Station and Tunnel Finishes, was advertised on November 7, 1994. A pre-bid conference was held November 22, 1994.
- Contract C0311, Line Section Universal City Station to STA 613+00, the apparent low bidder was submitted to the MTA Committee for review on November 9, 1994. The Committee did not recommend approval at the meeting. The subject will be brought before the Committee in December.

### Construction

• Contract C0303, Hollywood/Highland Utility Relocation, substantial work was completed in November 1994.

### **KEY ACTIVITIES - PLANNED FOR DECEMBER**

### North Hollywood Extension

### Design

- Demolition to support Universal City Sitework, C0329, Camera Ready is planned for December 5, 1994.
- Addendum #4, the re-bid for C0351, North Hollywood Station, completion date is scheduled for December 9
- Pre-Final submittal for contract C0321, the Universal City Station is targeted for December 22, 1994.

### Bid/Award

- Contract C0301R, Hollywood/Highland Station and Tunnels Finishes, the bid opening is planned for December 22, 1994.
- Contract C0311, Line Section Universal City Station to 613+00, the apparent low bidder will be submitted to the MTA Committee for review on December 14, 1994.
- Contract C0329, Universal City Station Demolition for C0321, advertise for bid is planned for December 12, 1994.
- Contract C0358, North Hollywood Demolition, contract NTP is expected to be issued effective December 29, 1994.

### **Construction**

- Contract B251, Line Section Hollywood/Vine Station to STA 630+00, preparations are underway so that tunnel mining can be resumed starting in late December 1994.
- Contract C0328, Universal City Demolition for C0311, has completed Stage I demolition.
- Contract C0331, Line Section North Hollywood Station to Universal City, is currently assembling the tunnel shield machine (TSM) in preparation to begin tunnel excavation.
- Contract C0358, North Hollywood Demolition for C0351, will commence mobilization and start Stage I demolition.

### **KEY ACTIVITIES - NOVEMBER**

### **East Side Extension**

- Continued discussion with the State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), the Federal Transit Administration (FTA), and the MTA to facilitate mutual acceptance of Memorandum Agreement.
- Continued to review legal strategies for community outreach efforts and development of linkages programs and issues relating to construction of the Little Tokyo Station.
- Completed the Final Task 3.2 Report, Transit Connections, and the Final Task 3.3 Report, Economic Development. Continued to finalize Local Employment and DBE Participation reports for the MTA, as well the Urban Design Analysis report.
- Continued to monitor progress on the ROD and FFGA negotiations.

### **KEY ACTIVITIES - PLANNED FOR DECEMBER**

### East Side Extension

- The final Little Tokyo Station Area Advisory Committee (SAAC) meeting will take place during the month of December. In addition, the Review Advisory committee will also meet in December to elect a new chair person and review the station area concept plans.
- The summary document and the supporting technical documents for the Community Linkages task will be finalized during the month of December.
- Work will continue in December to complete the remaining tasks for the Cultural Needs Assessment.
- Barrio Planners will continue to work towards completion of the final Urban Design Report.
- The consultant team and MTA will begin to discuss close-out of the contract.

Page No. 1

# MTA CONSTRUCTION DIVISION PROJECT COST REPORT COST BY ELEMENT WITH NEW REQUIREMENTS

Project: R82 METRO REO LINE - SEGMENT 3 - NORTH HOLLYWOOD

Period: Oct 28, 1994 to Dec 2, 1994

Run Date: Dec 15, 1994

Units: \$ in Thousands (Truncated)

	ORIGINAL BUDGET	· CURREN	T BUDGET	COMMI	TMENTS	1 NCUI	RREO	EXPE	IO I TURES	CURRENT	FORECAST	FORECAST VARIANCE
ELEMENT / DESCRIPTION		Period	To Oate	Period	To Date	Period	To Date	Period	To Date	Period	To Date	AWKTANCE
TOTAL PROJECT	8								-			
T CONSTRUCTION	890,729	0	766,847	836	229,522	8,666	50,452	12,451	47,065	7,852	797,674	30,827
S PROFESSIONAL SERVICES	254,747	0	279,125	15	100,547	3,257	51,210	3,207	51,210	0	274,024	-5,100
R REAL ESTATE	84,534	0	85,644	2,442	33,967	2,442	33,967	2,442	•	689	85,257	-387
F UTILTY/AGENCY FORCE ACCOUNTS	13,237	0	18,711	0	8,976	945	3,390	945	3,390	0	22,804	4,09
C PROJECT CONTINGENCY	67,575	0	160,495	0	. 0	0	0	0	0	-8,541	131,061	-29,43
A PROJECT REVENUE	0	0	. 0	0	0	0	0	-49	-113	0	0	-,
TOTAL PROJECT	310,822	Similar D	310,822	37275	373,014	1880   Po   1880	139.021	18:997		3:35:69-0.6990 0.3	1.310.822	sainteasainn
T CONSTRUCTION S PROFESSIONAL SERVICES C PROJECT CONTINGENCY	0	0	0	0	99 410	0	23 0	0	4	155	7,983 1,098	7,983 1,098
	U	0	0	U	0	0	0	0	0	0	55	5
TOYAL MEM RESULTEMENTS	0	•	0	0	509	0	23	Properties D	<b>4</b> .	155	9,137	9,13
•												
GRANO TOTAL	1,310,822	0 1	1,310,822	3,295	373,524	15,311	139,044	18,997	135,525	154	1,319,959	9,13

Page No. 1

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

Project: RB3 METRO RED LINE - SEGEMNT 3 - HID CITY

Page 13

Period: Oct 28, 1994 to Dec 2, 1994

Run Date: Dec 8, 1994

Units: \$ in Thousands (Truncated)

	ORIGINAL BUDGET	CURRENT	BUDGET	COMMI	IMENTS	LNCUI	RRED	EXPEN	) I TURES	CURRENT	FORECAST	FORECAS VARIANCI
ELEMENT / DESCRIPTION		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	YAKIANU
T CONSTRUCTION	334,139	0	334,139	0	43,335	9	807	10	222	0	329,211	-4,92
S PROFESSIONAL SERVICES	98, 133	0	98,133	101	43, 134	378	8, 191	378	B, 195	Ó	102,980	4,84
R REAL ESTATE	53,303	0	53,303	-1	128	0	128	0	128	0	48,543	-4,76
UTILITY/AGENCY FORCE ACCOUNTS	5,088	0	5,088	21	874	ÿ	151	9	151	ö	5,088	
PROJECT CONTINGENCY	0	0	0	0	0 [	0	0	0	0	0	4,841	
N PROJECT REVENUE	0	0	0	0	0	0	0	0	0	0	0	
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RAND TOTAL	490,663	0	490,663	120	87,473	396	9,279	397	8,697	<del></del>	490,663	

# METRO RED LINE SEGMENT 3 PROJECT COST REPORT COST BY ELEMENT

PROJECT : METRO RED LINE SEG 3. EAST SIDE EXTENSION

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STATUS PERIOD	:	29-Oct-94	to	02-Dec-94
STATUS DATE	:	07-Dec-94		
UNITS	<u>:</u>	DOLLARS IN T	HOUSANDS	

1		ORIGINAL BUDGET		BUDGET	COMMIT		INCURRE	D COST	EXPENDI	TURES	CURRENT	FORECAST	VARIANCE (11-3)
	SCRIPTION STRUCTION	<u>(i)</u> 0	PERIOD (2)	TO DATE (3)	PERIOD (4)	TO DATE (5)	PERIOD (6)	TO DATE (7)	PERIOD (8)	TO DATE (9) 0	PERIOD (10)	TO DATE (11)	(12)
S PROF	FESIONAL SERVICES L'ESTATÉ	11,998 0	0	11,998 0	0 18		624 18	8,814 18	0 624 18	8,814 18	241 18	0 11,299 18	(699)
	PARTY TINGENCY	0	0 0	2 0	0	0	0	0	0 0	2 0	0 0	2	0
										:			
				<u> </u>									
				i									
	ND TOTAL	12.000		43.000					, .	.,			(581)
GRAF	ND TOTAL	12,000	0	12,000	18	11,466	842	8,834	642	8,834	259	11,319	

### METROPOLITAN TRANSPORTATION AUTHORITY METRO RAIL RED LINE NORTH HOLLYWOOD PROJECT (IN THOUSANDS OF DOLLARS)

### **NOVEMBER 1994**

Page

### STATUS OF FUNDS BY SOURCE

	TOTAL FUNDS	TOTAL FUNDS	СОММІТМ	ENTS	EXPENDIT	URES	BILLED TO SO	URCE
SOURCE	ANTICIPATED	AVAILABLE	<b>\$</b>	%	<b>\$</b>	%	\$	%
FTA-SECTION 3	\$681,037	\$33,862	\$271,861	40%	\$33,862	5%	\$33,862	59
ISTEA FED SURFACE TRANSIT PROG	\$25,000	\$19,908	\$19,908	80%	\$19,908	80%	\$19,908	809
SB 1995 TRUST FUND	\$75,000	<b>\$7</b> 5, <b>000</b>	\$30,264	40%	\$30,264	40%	\$30,264	409
STATE ARTICLE XIX	\$20,855	\$20,855	\$20,855	100%	\$20,855	100%		09
STATE PROP 108	\$95,000			0%		0%		09
STATE TCI	\$75,000			0%		0%		09
PROP C	\$321,830	\$30,636	\$30,636	10%	\$30,636	10%	\$30,636	109
BENEFIT ASSESS. DISTRICT	\$17,100			0%		0%		09
TOTAL	\$1,310,822	\$180,261	\$373,524	28%	\$135,52 <b>5</b>	10%	<b>\$114,670</b>	

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH OCTOBER 1994.

### METROPOLITAN TRANSPORTATION AUTHORITY METRO RAIL RED LINE MID CITY PROJECT (IN THOUSANDS OF DOLLARS)

### **NOVEMBER 94**

### STATUS OF FUNDS BY SOURCE

	TOTAL FUNDS	TOTAL FUNDS	СОММП	MENTS	EXPEND	TURES	BILLED TO SO	DURCE
SOURCE	ANTICIPATED	AVAILABLE	\$	%	<b>\$</b>	%	<b>\$</b>	%
FTA-SECTION 3	\$242,563	\$5,838	\$84,614	35%	\$5,838	2%	\$5,838	2%
ISTEA - FED SURFACE TRANSIT PROG	\$55,400	\$1,418	\$1,418	3%	\$1,418	3%	\$1,418	3%
STATE ARTICLE 116	\$72,300			0%		0%		0%
FLEXIBLE CONGESTION RELIEF	\$26,000			0%		0%		0%
PROP C	\$94,400	\$4,469	\$1,441	2%	<b>\$</b> 1,441	2%	\$1,441	2%
TOTAL	\$490,663	\$11,725	\$87,473	18%	\$8,697	2%	<b>\$8,69</b> 7	2%

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH OCTOBER 1994.

### METROPOLITAN TRANSPORTATION AUTHORITY METRO RAIL RED LINE EAST SIDE EXTENSION PROJECT PRELIMINARY ENGINEERING (IN THOUSANDS OF DOLLARS)

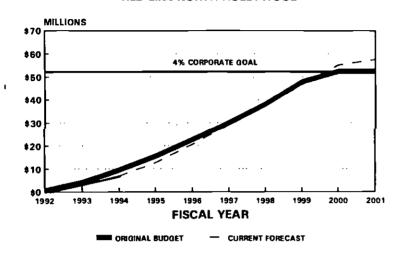
**NOVEMBER 94** 

STATUS OF FUNDS BY SOURCE

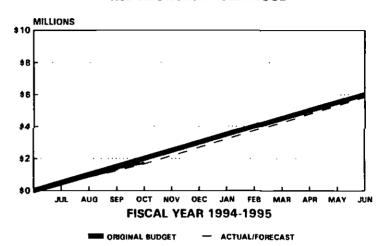
	TOTAL FUNDS	TOTAL FUNDS	COMMITM	ENTS	EXPENDIT	URES	BILLED TO SO	URCE
SOURCE	ANTICIPATED	AVAILABLE	\$	<b>%</b> 	\$	%	\$	%
FTA-SECTION 3	\$19,850	\$19,850	\$10,899	55%	\$8,398	42%	\$7,674	39
PROP A	\$18,150	\$18,150	\$566	3%	\$436	2%	\$436	2
TOTAL	\$38,000	\$38,000	\$11,465	30%	\$8,834	23%	\$8,110	219

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH OCTOBER 1994.

# AGENCY COSTS RED LINE NORTH HOLLYWOOD



# FISCAL YEAR 1995 AGENCY COSTS RED LINE NORTH HOLLYWOOD



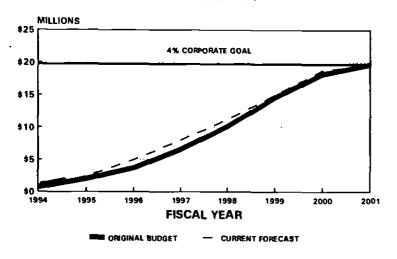
# PROJECT AGENCY COSTS RED LINE NORTH HOLLYWOOD (\$000)

# TOTAL PROJECT BUDGET \$ 1,310,822 ORIGINAL BUDGET \$ 52,433 BUDGET % OF TOTAL PROJECT 4.0% CURRENT FORECAST \$ 57,560 FORECAST % OF TOTAL PROJECT 4.4% ACTUAL THROUGH FY 94 6,891

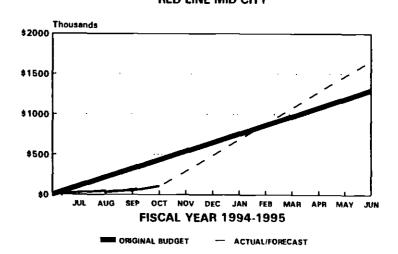
# FISCAL YEAR 1995 AGENCY COSTS RED LINE NORTH HOLLYWOOD (\$000)

ORIGINAL BUDGET	\$6,005
CURRENT FORECAST	\$5,809
PLAN BUDGET TO DATE	\$2,002
ACTUAL TO DATE	\$1,656

# AGENCY COSTS RED LINE MID CITY



# FISCAL YEAR 1995 AGENCY COSTS RED LINE MID CITY

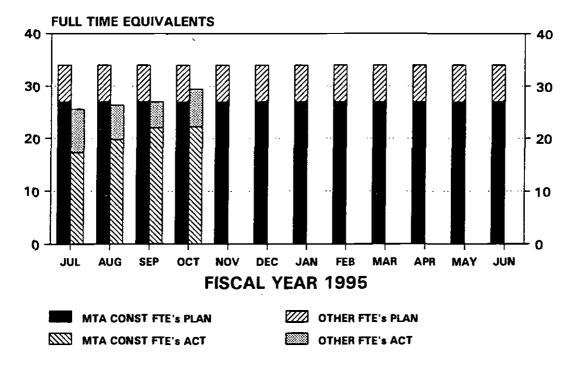


# PROJECT AGENCY COSTS RED LINE MID CITY (\$000)

# FISCAL YEAR 1995 AGENCY COSTS RED LINE MID CITY (\$000)

TOTAL PROJECT BUDGET	\$ 490,663	ORIGINAL BUDGET	\$1,295
ORIGINAL BUDGET	\$ 19,627	CURRENT FORECAST	\$1,668
BUDGET % OF TOTAL PROJECT	4.0%	BUDGET PLAN TO DATE	\$432
CURRENT FORECAST	\$19,627	ACTUAL TO DATE	\$96
FORECAST % OF TOTAL PROJECT	4.0%		
ACTUAL THROUGH FY 94	\$740	·	

# STAFFING PLAN VS. ACTUAL RED LINE NORTH HOLLYWOOD

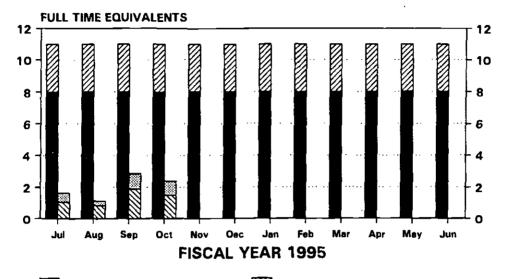


FY'95 Budget

# RED LINE (NTH HOLLY.) STAFFING PLAN FISCAL YEAR 1995

MTA CONSTRUCTION FTE's PLAN	28
MTA CONSTRUCTION FTE's ACTUAL	22
OTHER FTE's PLAN	7
OTHER FTE's ACTUAL	7
TOTAL FTE's PLAN	35
TOTAL FTE's ACTUAL	29

# STAFFING PLAN VS. ACTUAL RED LINE MID CITY



MTA CONST FTE PLAN

MTA CONST FTE's ACT

OTHER FTE'S PLAN

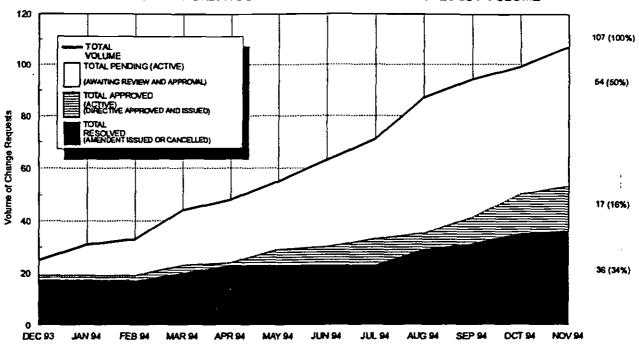
OTHER FTE's ACT

FY'95 Budget

# RED LINE (MID CITY) STAFFING PLAN FISCAL YEAR 1995

MTA CONSTRUCTION FTE'S PLAN	8
MTA CONSTRUCTION FTE's ACTUAL	1
OTHER FTE's PLAN	3
OTHER FTE's ACTUAL	1
TOTAL FTE's PLAN	11
TOTAL FTE's ACTUAL	2

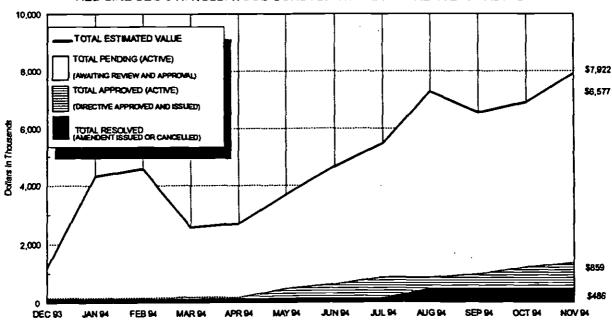
CONSULTANT CONTRACT CHANGE SUMMARY
RED LINE SEG-3 N. HOLLYWOOD CONSULTANT CHANGE REQUEST VOLUME



RECIJESTED CHANGES SINCE 05/01/91 ONLY

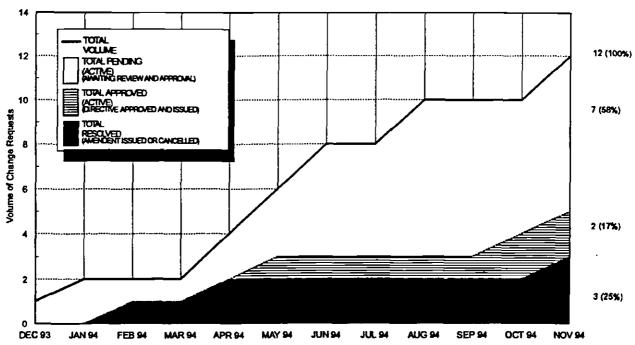
AGE OF UNRESOLVED CONSULTANT CHANGES								
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE			
VOLUME	12	5	16	38	71			
PERCENT	17%	7%	23%	53%	100%			

CONSULTANT CONTRACT CHANGE SUMMARY
RED LINE SEG-3 N. HOLLYWOOD CONSULTANT CHANGE REQUEST VALUES



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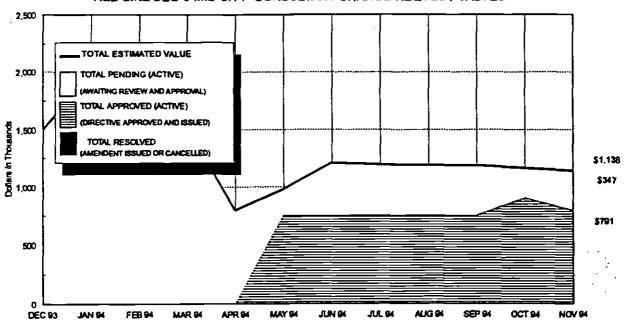




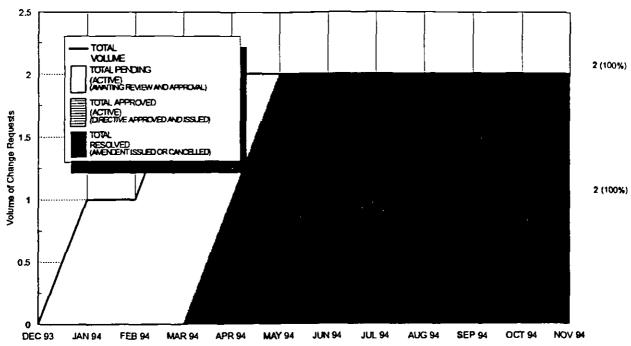
REQUESTED CHANGES SINCE 05/01/01 ONLY

AGE OF UNRESOLVED CONSULTANT CHANGES								
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE			
VOLUME	2	0	2	5	9			
PERCENT	22%	0%	22%	56%	100%			

CONSULTANT CONTRACT CHANGE SUMMARY
RED LINE SEG-3 MID CITY CONSULTANT CHANGE REQUEST VALUES



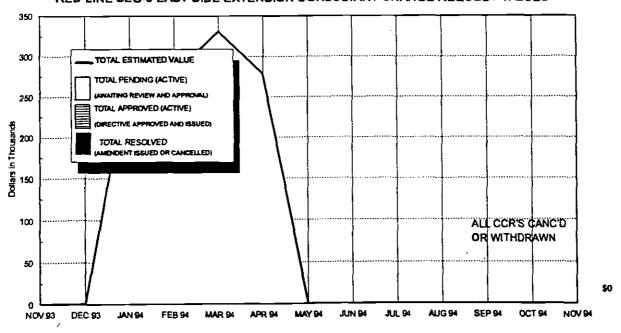
CONSULTANT CONTRACT CHANGE SUMMARY
RED LINE SEG-3 EAST SIDE EXTENSION CONSULTANT CHANGE REQUEST VOLUME



REQUESTED CHANGES SINCE 05/01/91 ONLY

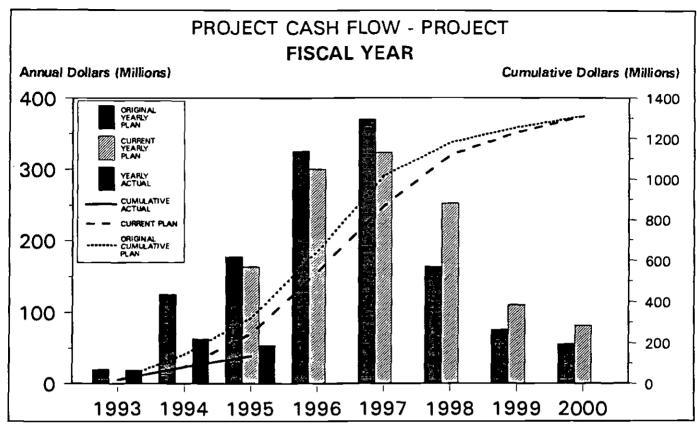
AGE OF UNRESOLVED CONSULTANT CHANGES								
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE			
VOLUME	0	0	0	0	0			
PERCENT	0%	0%	0%	0%	0%			

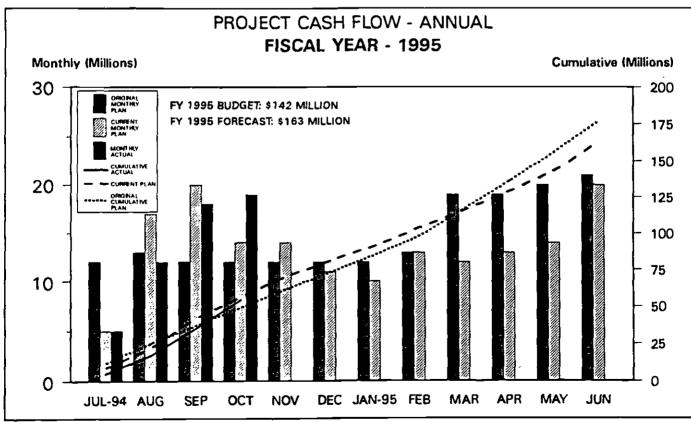
CONSULTANT CONTRACT CHANGE SUMMARY
RED LINE SEG-3 EAST SIDE EXTENSION CONSULTANT CHANGE REQUEST VALUES



Page 24

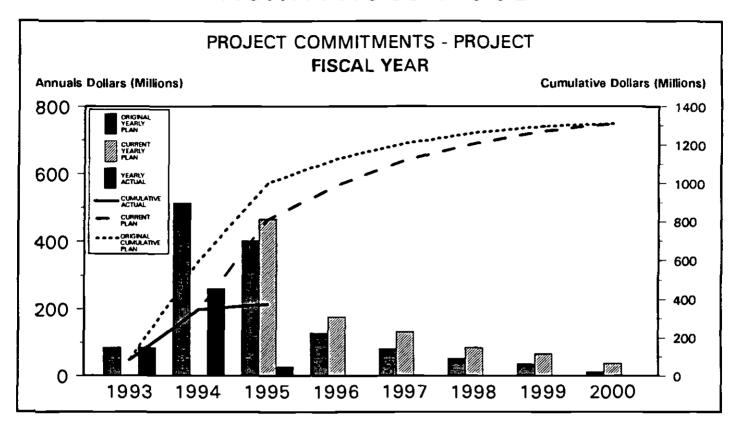
#### NORTH HOLLYWOOD

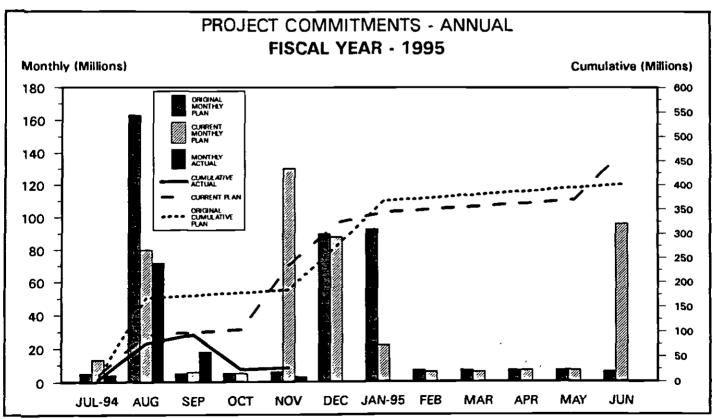




NOTES: THESE CHARTS ARE BASED ON ACTUAL EXPENDITURES CURRENT THROUGH OCTOBER 1994.
THE PLAN WAS REVISED IN SEPTEMBER.

#### NORTH HOLLYWOOD

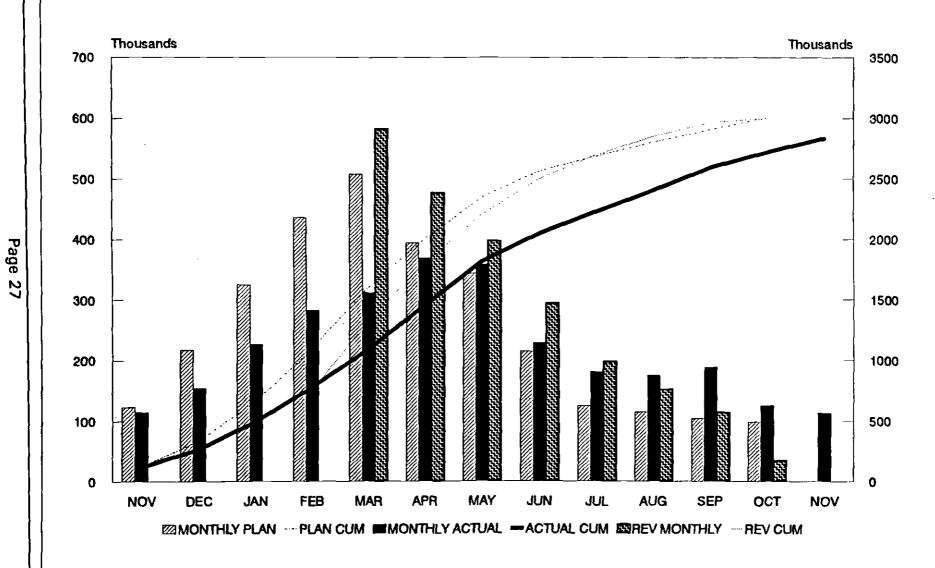




## METRO RED LINE EAST SIDE EXTENSION

#### FEIS/FEIR/PLANNING PROJECT CASH FLOW

FISCAL YEARS 1994 & 1995

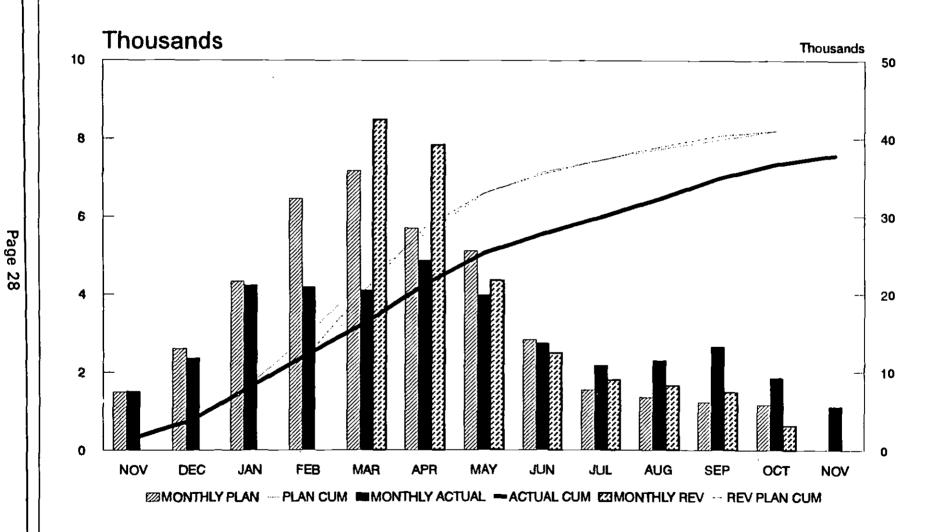


Through 31 October 94

# METRO RED LINE EAST SIDE EXTENSION

# FEIS/FEIR/PLANNING PROJECT

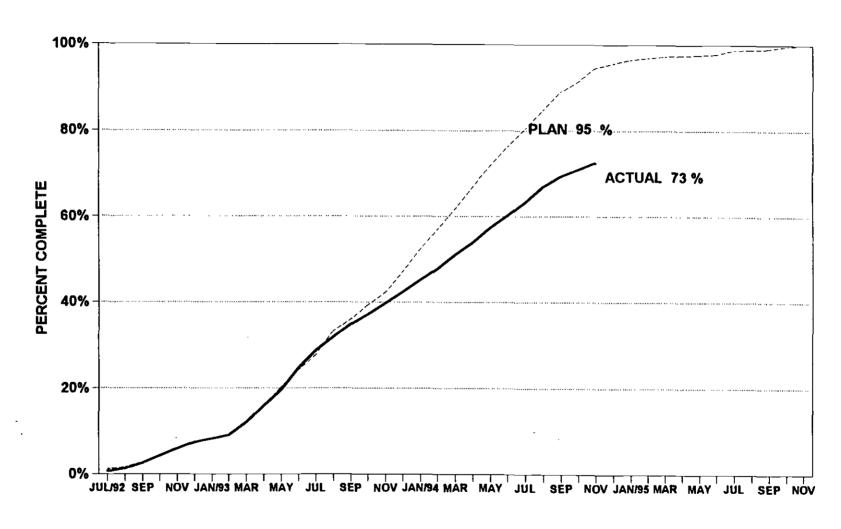
**TOTAL WORKHOURS** 



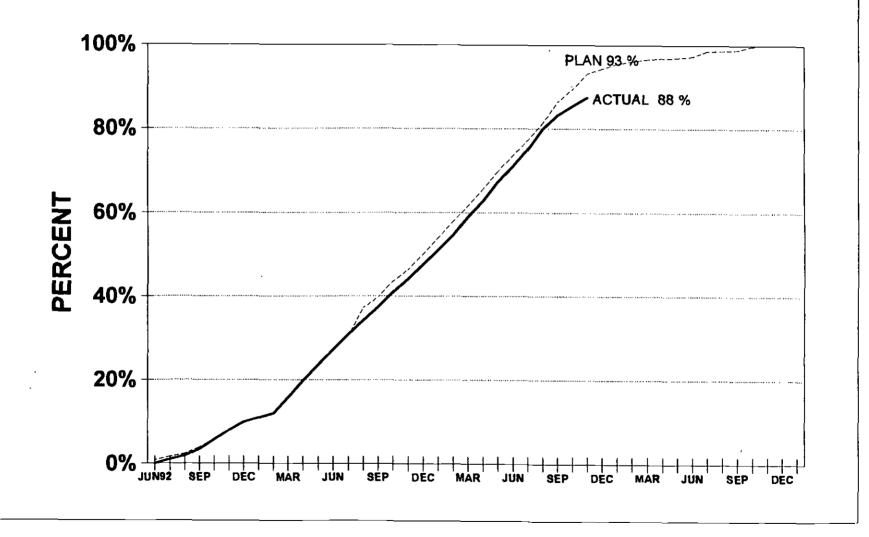
THROUGH 30 NOVEMBER 1994

# **NOVEMBER 1994**

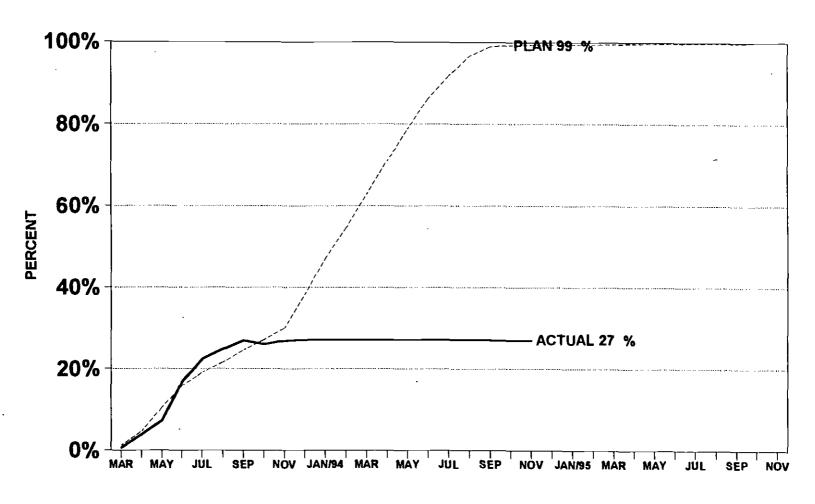
## METRO RED LINE SEGMENT 3 NH/MC FACILITIES DESIGN



### **METRO RED LINE SEGMENT 3 NORTH HOLLYWOOD - FACILITIES DESIGN**



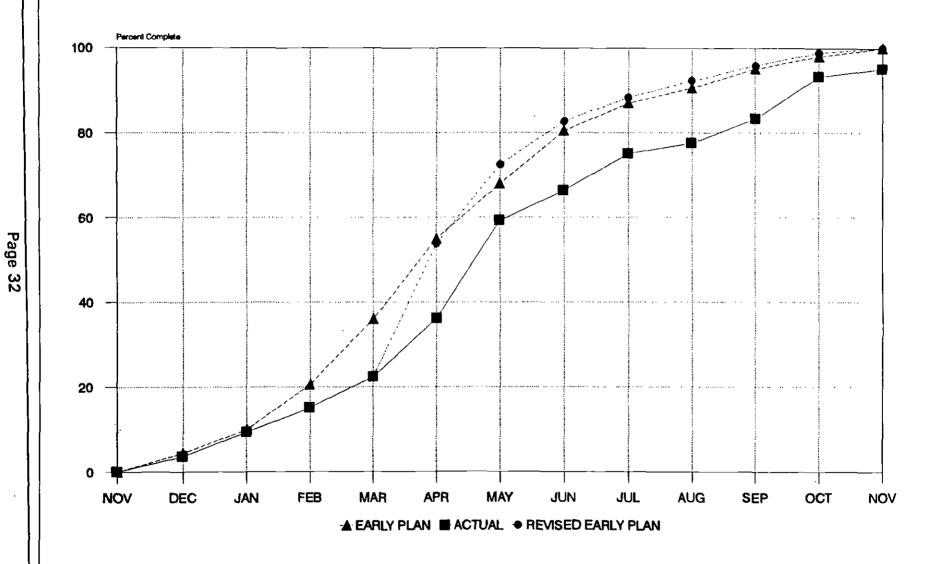
# METRO RED LINE SEGMENT 3 MID CITY - FACILITIES DESIGN



# METRO RED LINE EAST SIDE EXTENSION

### FEIS/FEIR/PLANNING PROJECT

**RESCHEDULED PROGRESS** 



Through 30 November 94

Page 33

ACTIVITY ID	DESCRIPTION		EARLY START	FARL Y FINISII	1993	J					1994 JUN ] JU					
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#### **EXECUTIVE SUMMARY**

Siemens submitted two invoices in November. Invoice No. 3904 (\$539,700) was for an Economic Price Adjustment and is scheduled to be paid on 28DEC94. Invoice No. 3943 (\$200,655) was for ATPDP work, and is scheduled to be paid on 23DEC94. [Reference SMC-95 and SMC-99.]

The MTA has agreed that, insofar as the Caltrans bridge structures are concerned, a 33% center truck loading is acceptable. SDC is still contractually obligated to limit total AW4 weight to 142,508 lbs, however. SDC must also demonstrate that a 33% center truck loading will not preclude specified propulsion and braking performance. [Reference MSE-242.]

SDC's first submittal of the Integrated Schematic and Narrative program document was unsatisfactory. Although the specification cautions against the carbuilder merely assembling a package of disparate vendor submittals, this is *precisely* what Siemens did. LTK disapproved this submittal, and forwarded a "checklist" of specification requirements for SDC to use in drafting future editions of the *Integrated Schematic and Narrative*. [Reference MSE-245.]

To date, SDC's efforts at systems' integration have been disappointing. Evidence of their lack of performance includes the following:

- Lack of drawings produced and submitted, and poor quality of those which have been submitted.
- · Lack of adequate interface definition.
- Lack of design progress evidenced by SDC's subcontractors base.

The root cause for most of the above problems is SDC's inexperienced P2000 staff. Most of the SDC Engineers assigned to this program are "entry level", and do not have an adequate transit background. Compounding this problem is Siemens' view of themselves as "Systems' Integrator". They have minimized the role of the carbuilder as Systems' Integrator to the point where they are acting more as a "facilitator", coordinating, not integrating, the efforts of their many subcontractors. This approach is not bearing fruit; interfaces are going unattended, and specification requirements or other systems' needs.

In and effort to mitigate this problem, LTK drafted letters MSE-245 and MSE-254 detailing problems in this area, and pointing out that SDC needed to augment their staff in the critical area of Systems' Integration. The following suggestions were put forth:

Hire experienced transit engineers as soon as possible.

#### **EXECUTIVE SUMMARY (CON'T)**

- Supplement the existing, entry-level staff with more experienced engineers from SDC's parent companies, Duewag A.G. and Siemens A.G.
- Station Kevin Manuele, the LTK Systems' Engineer, at Sacramento for several days a week. Kevin would be available to the SDC Staff to provide counsel as necessary.

SDC, in return correspondence and in a meeting [reference SME-156 and MOC38], acknowledged that their staff needed more experience, and that efforts were underway to supplement same. Additionally, they welcomed the part time assistance from Kevin Manuele.

We have only recently been made aware that SDC has changed it's plans with regard to tool fabrication in Baltimore, and now intends to subcontract the majority of the carshell assembly tooling to local (Los Angeles) firms. This, combined with a very evident late start-up of the facility, has given the MTA reason for concern. These concerns were expressed in MSE-259:

- SDC shift in plans to fabricate tooling in Los Angeles, rather than Baltimore, especially without prior notification to the MTA.
- The apparent reduced work scope for AAI.
- The lack of progress in refurbishing the Carson Facility, as much as 8 months behind the schedule given in Siemens' BAFO.

SDC responded in SME-157. In this letter, they made unconvincing arguments that all this disruption was somehow to the MTA's advantage; in fact, each disruptive change in plans was really the result of either workarounds to schedule slippage, or AAI's continuing reluctance to accept fiscal responsibility for the Carson Facility investment. More reassuring was our meeting in Carson with both SDC and CCI personnel responsible for the operation. The intent of this meeting was to convince the MTA that plans for the Carson facility were both well documented (in a schedule format) and reasonable. Evidence presented at that meeting by Dave Franckowiak served to allay most of our concerns. Mr. Franckowiak appeared well organized, and was able to field questions with ease and confidence. Less impressive was the actual fabrication facility, which will need extensive rework in order to become usable. Structural renovation will be the responsibility of Heinz Flugge, a former Duewag Manager. [Reference MOC 43]

The Specification requires the Carbuilder to remain within specific conducted EMI limits. These limits are expressed as a function of frequency. SDC, motivated by their propulsion supplier AEG, has been petitioning to reduce these limits (thereby increasing emissions),

#### **EXECUTIVE SUMMARY (CON'T)**

permitting AEG to provide a smaller, lighter line reactor. At the 1.5 millihenry size AEG would prefer to provide, total car weight savings would be on the order of 400 to 600 lbs. In order to permit the increased emission level, however, it must be confirmed that increased emissions will not interfere with track circuit design on the Blue, Green, or Pasadena lines. At a meeting on this topic, wherein SDC proposed increased emission levels to a level where AEG's 1.5 millihenry reactor would be sufficient, it was stated that Union Switch and Signal would approve SDC's proposed new limits for the Green Line. It is assumed, however, that adoption of the new limits would reduce the margin between what the car is permitted to emit, and the worst case sensitivity of the track circuits. (This must be confirmed with USS). The MTA asked what they can expect in return for this margin reduction, say, for example, a reduction in the allowable car weight. SDC was unwilling, however, to agree with any reduction in car weight. This ended discussion of the matter, and SDC was instructed to comply with the Specification requirements as presently stated. [Reference SME-132; SME-154; MSE-277; and MOC 45]

SDC had petitioned for relief from the requirement that a between-car protective device ("motion detector and audible warning") be installed to protect against visually-impaired individuals falling between cars when a train is stopped at a station. Absent direction to the contrary from the MTA, SDC was instructed to proceed with the design as specified. It should be noted that for a variety of reasons, it is not practical to design and equip the vehicles with such protective devices. It is our understanding that the MTA is presently considering the use of platform barriers as a solution to this problem. We encourage pursuit of this option.

The following meetins were held during the month of November:

Meeting No.	Meeting Description
35	ACT/LRV Interface Meeting No. 6
36	Transtech Pantograph Preliminary Design Review
37	WABCO Disc Interface Design Review
38	P2000 Program Review Meeting
39	Change Order No. 3 Negotiations
40	AEG Propulsion Critical Design Review
41	Review of Selected Design Issues with MTA Operations Division

#### **EXECUTIVE SUMMARY (CON'T)**

42	VH (Communications) Preliminary Design Review
43	Review of SDC/CCI Carson Facility Plans
44	Luminator (Vehicle Lighting) Preliminary Design Review
45	AEG EMI line Reactor Presentation
46	P2000/E0350 Cost and Schedule Review

Note ("MOC's") for each of the above meetings are available on file in the LTK office.

#### **AREAS OF CONCERN**

Concern: Construction of the CCI Facility and Carshell Tooling in Carson.

Status: Meetings were held in Sacramento with SDC upper management, and in Carson with CCI plant management. In each case, Carbuilder management insisted that although some schedule slippage had occurred, workarounds had been either planned or implemented which would result in performance to the original schedule. SDC's assessment seems optimistic. Key in the next series of activities are the fabrication of tooling in the Los Angeles Area, and the timely renovation of the Carson fabrication facility. These activities will

bear close watching.

Action: CCI to commence renovation of Carson fabrication facility. CCI to commence

carshell assembly tooling at local suppliers' facilities

Concern: Equipment space problem on the motor trucks.

Status: A solution to the interference problem was presented at Meeting No. 37 in

Sacramento. Basically, the actuator arm will be rotated upward about 6 degrees, and the disc will be sized appropriately to preclude interference. This may necessitate different sized discs on the end v. the center truck; however, this is not seen as a significant inconvenience by the MTA's

Operations Division.

Action: Awaiting formal submittal of drawings indicating how the brake actuator/track

brake interference problem is resolved.

#### **AREAS OF CONCERN (CON'T)**

Concern:

SDC Technical Staffing Problem.

Status:

SDC has little depth in their technical staff. Most engineers are "entry level", with little, if any, transit engineering experience. SDC needs to supplement this staff with more experienced personnel. Some progress has been made since this problem was last reported; including:

- A new Chief Mechanical Engineer, Norm Halden, has been hired and is working full time on the P2000 program. Mr. Halden is very experienced and should work well in this position.
- Both Norm Halden, and the Chief Electrical Engineer, Gunter Kristan (also very experienced), are being used in the capacity of System's Engineers on a temporary basis.
- Kevin Manuele, LTK Systems' Engineer, has been assigned to Sacramento on a part time basis.

Action:

SDC to supplement their staff with either outside sources, or rollover from ongoing transit programs, such as Portland.

Concern:

It is not practical to mount the ADA mandated "between car protective barrier" on the vehicles.

Status:

The P2000 specification requires that SDC provide "Motion detectors and audible warnings" to meet the ADA requirement. In a recent demonstration in Sacramento, SDC mocked up a proximity detector and pointed out that the concept, given the present state of the art, is not applicable for the intended use on a transit vehicle. LTK agrees. It is our understanding that the MTA is presently studying the application of platform mounted barriers to meet the ADA requirements.

Action:

MTA to determine if platform barriers are an acceptable solution.

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

Project: RCL LOS ANGELES RAIL VEHICLE PROCUREMENT

Period: Oct 28, 1994 to Dec 2, 1994

Run Date: Dec 16, 1994

Units: \$ in Thousands (Truncated)

	ORIGINAL	CURREN	BUDGET	COMMI	MENTS	1 NCUR		EVOF	D. I. I. I. I. I.	Subbet!		T
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ELEMENT / DESCRIPTION		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	4
T CONSTRUCTION  S PROFESSIONAL SERVICES C PROJECT CONTINGENCY A PROJECT REVENUE	232,370 12,960 12,266	0	232,370 12,960 12,266	27	0	0 0 0 0	3,526 0	l n	3,752	0	19,298	1
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GRAND TOTAL	257,597	0	257,597	27	224,959	0	28,126	648	28,775		257,597	}

<sup>1)</sup> REFER TO APPENDIX FOR REPORT DEFINITIONS 2) EXPENDITURES ARE THROUGH OCTOBER 31, 1994 3) INCURRED COSTS ARE THROUGH SEPTEMBER 30, 1994.

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

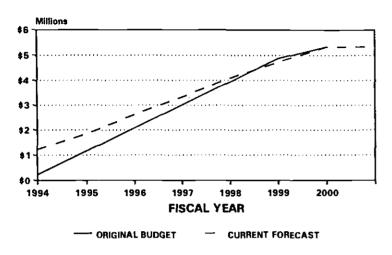
STATUS OF FUNDS BY SOURCE

NOVEMBER 94

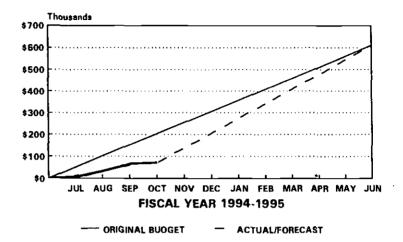
	TOTAL FUNDS	TOTAL FUNDS	COMMIT	MENTS	EXPEN	DITURES	BILLED TO	SOURC
SOURCE	ANTICIPATED	AVAILABLE	<b>\$</b>	<b>%</b> 	<b>.</b>	%	\$	%
FTA RSTP (ISTEA)	\$6,077	\$0	\$5,579	92%	\$0	0%	\$0	0%
FTA - OTHER	\$18,000	\$0	\$0	0%	\$0	0%	\$0	0%
ISTEA FED SURFACE TRANSIT	\$84,000	\$0	\$77,533	92%	\$0	0%	\$0	0%
STATE PROP 116	\$33,550	\$16,398	\$31,831	95%	\$12,979	39%	\$12,656	38%
PROP C	\$115,970	\$26,118	\$110,016	95%	\$15,796	14%	\$15,796	14%
TOTAL	\$257,597	\$42,516	\$224,959	87%	\$28,775	11%	\$28,452	11%

NOTES: EXPENDITURES ARE THROUGH OCTOBER 1994.

## AGENCY COST LA LIGHT RAIL VEHICLE PROCUREMENT



## FISCAL 1995 AGENCY COSTS LA LIGHT RAIL VEHICLE PROCUREMENT



## PROJECT AGENCY COSTS LA LIGHT RAIL VEHICLE PROCUREMENT (\$000)

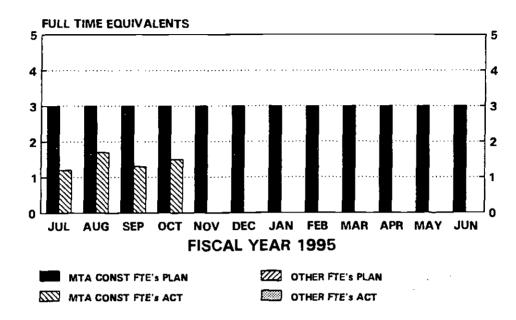
TOTAL PROJECT BUDGET	\$257,597
ORIGINAL BUDGET	\$ 5,335
BUDGET % OF TOTAL PROJECT	2.1%
CURRENT FORECAST	\$ 5,335
FORECAST % OF TOTAL PROJECT	2.1%
ACTUALS THROUGH FY 94	\$ 1,229

#### **FISCAL YEAR 1995 AGENCY COSTS**

LA LIGHT RAIL VEHICLE PROCUREMENT (\$000)

ORIGINAL BUDGET	\$ 611
CURRENT FORECAST	\$ 611
BUDGET PLAN TO DATE	\$ 204
ACTUAL TO DATE	\$ 70

# STAFFING PLAN VS. ACTUAL LA LIGHT RAIL VEHICLE PROCUREMENT



FY'95 BUDGET

# LA LIGHT RAIL VECHICLE PROCUREMENT FISCAL YEAR 1995

MTA CONSTRUCTION FTE's PLAN 3

MTA CONSTRUCTION FTE's ACTUAL	1
OTHER FTE's PLAN	0
OTHER FTE's ACTUAL	0
TOTAL FTE's PLAN	3
TOTAL FTE's ACTUAL	1

COSTS SHOWN ARE FOR PROJECT RCL ONLY. (ALLOCATED)

#### RCL - LA CAR - Design & Procurement PROJECT CHANGE VALUES ONLY

# PROJECT CHANGE ACTIVITY SUMMARY: CHANGES V. BOARD APPROVED CHANGE CONTINGENCY AS OF 12/12/94

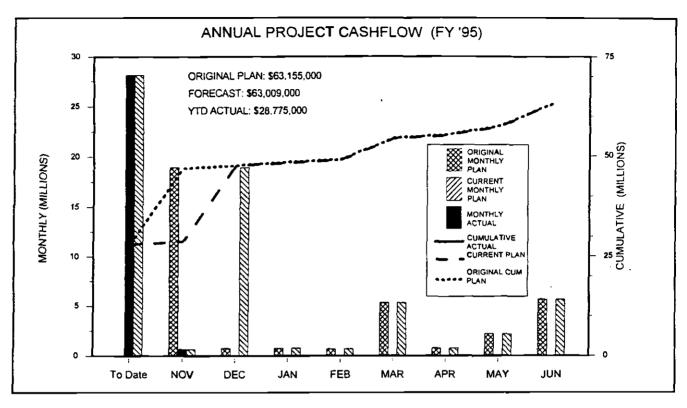
	PROVED CT AWARD	-		ATA APPROVED CONTINGENCY		1	СН	APPROVED ANGES TO DATE		•			REMAININO AFE		PR	0 J E	CTED			
CONTRA	CT VALUE		ALLOWED	CURRENT \$ ALLOWEO	TOTAL APPROVED AFE (RCL)	1	A PPROVEO CHANGES	CURRENT CONTRACT VALUE	% INCR	CTG USEO	COMP-	1	CURRENT UNUSED ALLOWANCE	1	PENOINO CHANGES		REMAINING FORECAST AFE	% AFE USEO	*	NCR
Α.	B.		l C.	О.	E.IB+O}	1	F.111	G.IB+FI	14.121	[ L	J.	ī	K.ID-FI	ī	L.131		M.(K-L)	N.		O.
P2000	\$215,370,31	•	10%	\$21,587,330	\$236,957,644	I	1\$1,000,0001	\$214,370,314	·O.5%	-5 <b>%</b>	0%	I	\$22,587,330	T		50	\$22,587,33	30 ·5	×	-0.5%
	\$215,370,31	•	10%	\$21,587,330	1236,957,644	1	[\$1,000,000]	5214,370,314	·0 5%	-5%	*	1	122,587,330	T		\$0	\$22,587, 33	30 5	*	-0.5%

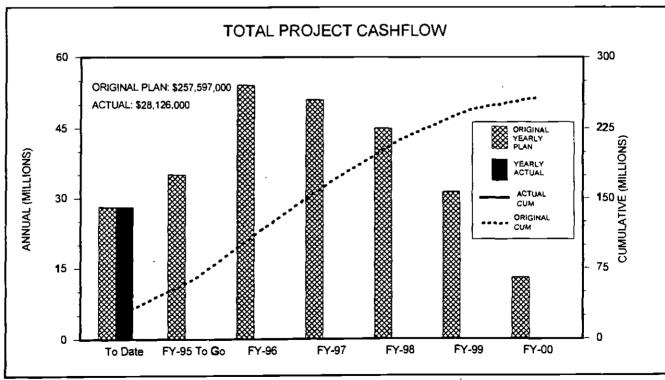
<sup>11 -</sup> AFE Increase required

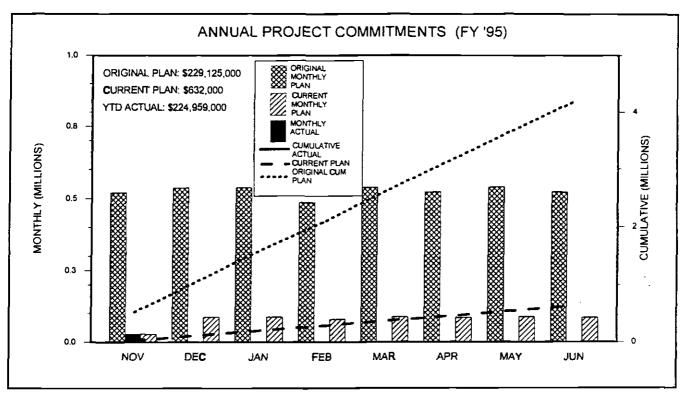
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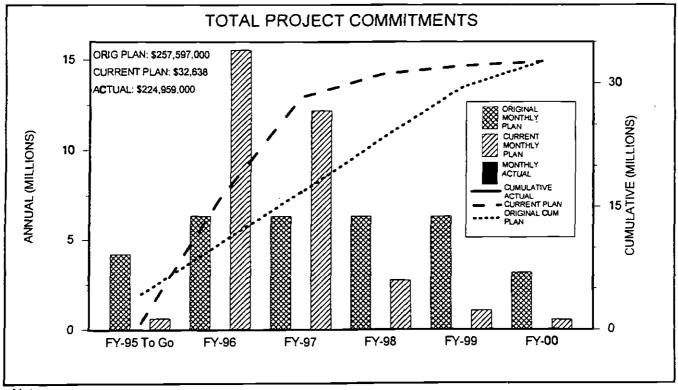
1\*1 Caste shared with other projects. Caste shown are for RCL ONLY. [1] includes both executed CO's and authorized (WACNI changes [2] % increase over original sward. [3] Lagged contract changes ONLY

I . AFE Increase MAY be required to cover pending changes.









Notes:

- 1) These charts are based on uncommitted amounts only.
- 2) Actual commitments are through November 1994.

#### **COST SUMMARY**

#### **COST REPORT**

The Project Budget is \$258 million with a current forecast of \$258 million. The Forecast includes all trends (#001 - #009).

#### **BUDGET/FORECAST VARIANCE**

COST ELEMENT	CURRENT BUDGET (\$000's)	CURRENT FORECAST (\$000's)	VARIANCE (\$000's)	NOVEMBER CHANGE IN FORECAST (\$000's)
CONSTRUCTION	\$232,370	\$229,759	(\$2,611)	. \$0
PROFESSIONAL SERVICES	12,960	19,298	6,338	ο
PROJECT CONTINGENCY	12,267	8,540	(3,727)	0
PROJECT REVENUE	0	_ 0	0	. 0
TOTAL PROJECT	\$257,597	\$257,597	\$0	N/A

#### RECONCILIATION

The following list is a reconciliation of the forecast changes in November. Project Contingency remained the same.

(\$000's)

Current Total

Budget Forecast

\$257,597 \$257,597

October 1994 Status

November 1994 Changes

There are no trends for the month of November 1994.

November 1994 Status \$257,597 \$257,597

#### **COST SUMMARY (CON'T)**

#### COMMITMENTS

Project Commitments are \$225 million, or 87.3% of the total forecast. These commitments are primarily due to cost associated with Contract P2000, LA Standard Light Rail Vehicles, Owner Controlled Insurance Program (OCIP), General Engineering, Specialty Services, and Project Administration.

#### **INCURRED COSTS**

Incurred costs are \$28 million or 10.9% of the total forecast. These costs were incurred in relation to Contract P2000, General Engineering, Specialty Services, and Project Administration. Please note that incurred costs are through the month of October 1994.

#### **CASH FLOW**

Project expenditures ending October 31, 1994, were \$29 million or 11.2% of the total forecast. These expenditures are accounted for mainly by Contract P2000, General Engineering, Specialty Services, and Project Administration.

#### **CHANGE ORDERS**

There were no Change Orders executed this period.

#### **CLAIMS**

To date, there are no pending claims.

#### CONTINGENCY

The Project Contingency for the LA Standard Light Rail Vehicle Project remains unchanged for November 31, 1994. Project Contingency is currently \$9 million.

#### MTA CONSTRUCTION DIVISION PROJECT COST REPORT COST BY ELEMENT & LINE ITEM

Project: RCL LOS ANGELES RAIL VEHICLE PROCUREMENT

Element: T CONSTRUCTION

Period: Oct 28, 1994 to Dec 2, 1994

Run Date: Dec 16, 1994

Units: \$ in Thousands (Truncated)

·	DR1G!NAL BUDGET	CURREN	T BUDGET	COHM1 1	MENTS	1 NC	JRRED	EXPEND	ITURES	CURRENT	FORECAST	FORECAST VARIANCE
LINE ITEM / DESCRIPTION		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	
05 RAIL PASSENGER VEHICLES 10 OUNER BURSURANCE	231,970 400	0	231,970 400	o 	214,370 80	0	24,602 0	422 0	25,025 0	0 	229,359 400	-2,611 0
	:											
					_							
Element Total - T CONSTRUCTION	232,370	0	232,370	0	214,450	0	24,602	422	25,025	0	229,759	-2,611
						<u></u> _						

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1) REFER TO APPENDIX FOR REPORT DEFINITIONS.
2) EXPENDITURES ARE THROUGH OCTOBER 31, 1994
3) INCURRED COSTS ARE THROUGH SEPTEMBER 30, 1994

# LOS ANGELES LIGHT RAIL VEHICLE PROCUREMENT

# **NOVEMBER 1994**

# MTA CONSTRUCTION DIVISION PROJECT COST REPORT COST BY ELEMENT & LINE ITEM

Project: RCL LOS ANGELES RAIL VEHICLE PROCUREMENT

Element: S PROFESSIONAL SERVICES

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Period: Oct 28, 1994 to Dec 2, 1994

Rum Date: Dec 16, 1994

Units: \$ in Thousands (Truncated)

Period 0 0	7,625	0	1,700 6,969 1,840	0	913	0 224	1,315 1,337 1,299	D	1,700 12,263 5,335	1,700 4,638 0
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0	12,960	27	10,509	. 0	3,526	225	3,752	0	19,298	6,338
	0	0 12,960	0 12,960 27	0 12,960 27 10,509	0 12,960 27 10,509 0	0 12,960 27 10,509 0 3,526	0 12,960 27 10,509 0 3,526 225	0 12,960 27 10,509 0 3,526 225 3,752	0 12,960 27 10,509 0 3,526 225 3,752 0	0 12,960 27 10,509 0 3,526 225 3,752 0 19,298

# LOS ANGELES LIGHT RAIL VEHICLE PROCUREMENT

# **NOVEMBER 1994**

# MTA CONSTRUCTION DIVISION PROJECT COST REPORT COST BY ELEMENT & LINE ITEM

Project: RCL LOS ANGELES RAIL VEHICLE PROCUREMENT

Element: C PROJECT CONTINGENCY

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Period: Oct 28, 1994 to Dec 2, 1994

Run Date: Dec 16, 1994

Units: \$ in Thousands (Truncated)

	ORIGINAL BUDGET	CURRENT	BUDGET	COMMIT		INCL	JRRED	EXPEND			FORECAST	FORECAS VARIANCE
NE TIEM / DESCRIPTION		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	
PROJECT CONTINGENCY	12,266	O	12,266	σ	a	0	٥	0	0	0	8,540	-3,72
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ement Total - C PROJECT CONTINGENCY	12,266	0	12,266	0		0	0	0	0	0	8,540	-3,7

# LOS ANGELES LIGHT RAIL VEHICLE PROCUREMENT

# **NOVEMBER 1994**

# MTA CONSTRUCTION DIVISION PROJECT COST REPORT COST BY ELEMENT & LINE ITEM

Project: RCL LOS ANGELES RAIL VENICLE PROCUREMENT

Element: A PROJECT REVENUE

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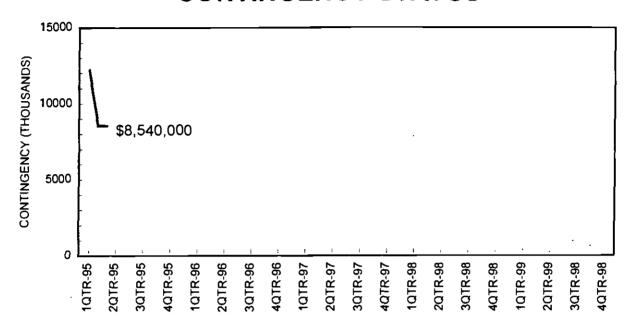
Period: Oct 28, 1994 to Dec 2, 1994

Run Date: Dec 16, 1994

Units: \$ in Thousands (Truncated)

	ORIGINAL	CURREN	T BUDGET	COMMI	THENTS	jwo	URREO	EXPEND			FORECAST	
	BUDGET			i				EAT END	IOKES	CURKENT	FURECASI	FORECAST VARIANCE
LINE ITEM / DESCRIPTION		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	
25 PROJECT REVENUE	· 0	0	0	0	o	0	-2	0	-2	0	0	0
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Element Total - A PROJECT REVENUE	0	0	D	0	0	0	-2	0	-2	. 0	0	0
GRAND TOTAL	257,597	0	257,597	27	224,959	0	28, 126	648	28,775		257,597	0

#### **CONTINGENCY STATUS**



			CONTINGENCY
		VARIANCE	<b>FORECAST</b>
DATE	TREND NO.	(\$000)	(\$000)
05/25/94	Original Budget		12,267
10/28/94	T001 - T008	(3,727)	8,540
11/30/94	N/A	0	8,540

The Project Contingency for the Los Angeles Light Rail Vehicle Procurement Project remains unchanged for November 30, 1994.

#### SCHEDULE SUMMARY

The subject schedule has been revised significantly from the 01NOV94 Data Date version. Key discussion areas include the following:

- The Design and Engineering subproject has been modified extensively, including the addition of a number of additional activities. Siemens Duewag Corporation (SDC) reports that their previously undersized staff is now at full complement, and the design and engineering effort is at the 100% manpower level.
- The CCT- Carshell subproject has been modified to differentiate between tool design at Duewag (Dusseldorf), and tool fabrication in Los Angeles. Although comprehensive, the schedule is tight, with many optimistic assumptions regarding duration and/or completion dates of activities. Those key activities where the durations and/or completion dates could be more realistically assigned are:
  - Completion of the structure and tooling design at Duewag
  - The amount of time it will take to effect renovation of the Carson facility
  - The amount of time it will take for SDC subcontractors to build the assembly tooling, and the length of time it will take to set the tooling up in the renovated Carson facility.
  - The amount of time that will be required for the set up and structural testing of Carshell #01.
- The Duewag - Trucks and Carshell Design subproject has been modified to incorporate more testing activities. A potential problem with this sub project is the delay in submitting the truck frame and bolster stress analyses. The specification requires approval of these analyses prior to manufacture. Per the present schedule, the MTA will not receive these analyses for approval until 01FEB95, whereas Duewag is scheduled to commence "Truck Component Manufacturing" on 25JAN95.
- The Vapor - Door System subproject now contains a number of activities on the critical path. Vapor has turned out to be a troublesome subcontractor for SDC. Vapor door equipment is needed for carshell structural testing, but to date SDC has not approved the design. Open items include packaging, interface with the vehicle structure, and evidence that Vapor can meet the reliability requirements.
- The Sutrak - HVAC subproject offers cause for concern. To date, we have received no drawing submittals, nor has the Preliminary Design Review been held,

#### SCHEDULE SUMMARY (CON'T)

although it is presently scheduled for sometime in January of 1995. We are aware that Sutrak is having problems meeting the capacity requirements of the R134a system specified in Portland. Indicators from SDC are that structural modifications to the roof may be necessary in order to achieve the requisite R134a capacity on the Standard Cars.

- The Auxiliary Power Supply subproject contains a significant number of activities
  with low or zero float. The procurement of the APS has been a thorny issue from
  the onset of the Standard Car program. Now that a coalition has been formed
  between Power Rail and Transtechnik ("Transrail"), it appears that a solution is in
  hand. SDC has yet to formally propose Transrail as a DBE substitution, however.
- Second only to the CCI Carshell subproject, the Standard Light Rail Vehicles subproject carries the most risk. Generally speaking, the CCI Carshell subproject describes the tooling and fabrication of the carshells. The end product of this subproject is the shipment of the carshells to Sacramento for assembly. This is where the Standard Light Rail Vehicle subproject picks up. This subproject details the assembly, shipping, testing and delivery of each vehicle from the point at which the carshell arrives at the Sacramento assembly facility.

The assembly for the first five cars is critical. Not only will the assembly process be proven on these cars, but all five LRV's will be needed for Design Conformance testing on the MTA's property. Presently, almost all of the assembly activities associated with these cars show zero or negative float; in fact, the arrival of the second LRV on the MTA's property shows a -19 day float. Compounding the problem, SDC has not demonstrated awareness of the Design Conformance Testing requirements as evidenced in their schedule. A number of tests will require one, two, and three cars, which their present schedule does not adequately address. Once SDC has finally sorted out their testing needs, and the availability of the first five cars, we may see more negative float linked to delivery of the first few carsets.

ACTIVITY DESCRIPTION	EARLY EARLY START FINISH	1994 1995 1996 1996 1997 1990 1990 1999 1999 1999 1999 1999
NOTICE TO PROCEED	28FEB94A	OF TABLE TO PROCEED
SPECIFICATION REVIEW CONFERENCE	16481948	◆SPECIFICATION REVIEW CONFERENCE
SUBMIT CARSHELL FEA HODEL	140CT94A	♦ SUBHIT CARSHELL FER MODEL :
REG COR PROPULSION SYSTEM	18NDV91A	AEG COR PROPULSION SYSTEM
DUENAG COR CAR SHELL	24JnN95	♦ DUENAG COR CAR SHELL
DUEMAG CDR TRUCKS	24JAN95	♦ DUEWAG COR TRUCKS
CAR SHELL FACILITY MANUFACTURING DCCUPANCY	22FE895	◆CAR SHELL FACILITY MANUFACTURING OCCUPANCY
SACRAMENTO ASSEMBLY FACILITY READY FOR OCCUPANCY	31H9R95	SACRAMENTO ASSEMBLY FACILITY READY FOR OCCUPANCY
CAR SHELL FACILITY TOTAL OCCUPANCY	1APR95	OCAR SHELL FACILITY TOTAL OCCUPANCY
DECISION POINT FOR ATPOP PRODUCT A	30aPR95	ODECISION POINT FOR ATPOP PRODUCT A
DECISION POINT FOR DRIVERLESS CONFIGURATION	28AUG95	◆DECISION POINT FOR DRIVERLESS CONFIGURATION
COMPLETE CAR BODY STRUCTURAL TESTING	200195	OCOMPLETE CAR BODY STRUCTURAL TESTING
COMPLETE TRACTION MOTOR TESTING	305EP95	◆COMPLETE TRACTION MOTOR TESTING
COMPLETE INTEGRATED SYSTEMS CONFORMANCE TEST	1810795	♦ COMPLETE INTEGRATED SYSTEMS CONFORMANCE TEST
ARRIVAL OF LRY #D1	20HAY96	○ARRIVAL DF LRV ±01
ARRIVAL OF LRV 102	15JUN96	♦ARRIVAL OF LRV 102
ARRIVAL OF PROTOTYPE +D1	10,000	♦ARRIVAL OF PROTOTYPE #01
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DECISION POINT FOR ATPOP PRODUCT B	3000496	♦ DECISION POINT FOR ATPOP PRODUCT B
DECISION POINT FOR ATPOP PRODUCT C	30/10/196	◆DECISION POINT FOR ATPOP PRODUCT C
DELIYERY LRV 401	2400196	. ODEL EVERY LRY #01
DELIVERY LRY #02	. 2400196	ODELIVERY LRV #02
DELIVERY OF PROTOTYPE BOI	240CT96	ODELIVERY OF PROTOTYPE #01
DELIVERY OF PROTOTYPE 402	2400196	ODELIVERY OF PROTOTYPE ■05
DELIVERY LRV 103	300cT96	◆DELIVERY LRY #03
DELIVERY LRV #04	300CT96	◆DELIVERY LRV 104
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ACTIVITY E	ARLY EARLY	1994 1995 1996 1997 1998 1999
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DELIYERY LRV 107	14DEC96	ODELIVERY LRY 107
DELIVERY LRV +08	5405046	ODELIVERY URV 408
DELIYERY LRY 109	13JAN97	ODELIVERY LRY 109
DELIVERY LRY 010	28JAN97	ODELIVERY LRV #10
DELIYERY LRV 111	12FE897	ODELIVERY LRV #11
DELIYERY LRY 112	27FEB97	· ODELIVERY LRY #12
DELIVERY LRY 113	1486897	ODELIVERY LRY 113
DELIVERY LRV 414	29HAR97	♦DELIVERY LRY #14
DELIVERY LRV +15	13APR97	ODELIVERY LRV #15
DELIYERY LRV 116	29APR97	ODELLYERY LRV #16
DELIVERY LRV 417	13HAY97	ODELIVERY LRY \$17
DELIVERY LRY #18	29HAY97	ODELIVERY LRY #18
DELIVERY LRY 019	12JUN97	ODELIVERY LRV #19
DELIVERY LRV 120	27,10,197	♦ DECLIVERY LRV +20
DELIVERY LRV #21	12,00,97	ODELIVERY LRY #20
DELIVERY LRY 122	27.JUL97	ODELIVERY LAV #22
DELIVERY LRV #29	1140697	ODELIVERY LRV #23
DELIYERY LRY #24	26AUG97	
DELIVERY LRV 425	10SEP97	ODELIVERY LRV 124
DELIVERY 1RV 126	25SEP97	OPELIVERY LRV \$25
DELIYERY LRV \$27	1000197	ODELIYERY LRV \$26
DELIVERY LRV 128	2500197	ODELIYERY LRY \$27
DELIVERY LRV 129	910497	ODELIVERY LRV 128
DELIVERY LRY 430	2400497	♦ DELIVERY LRY 129
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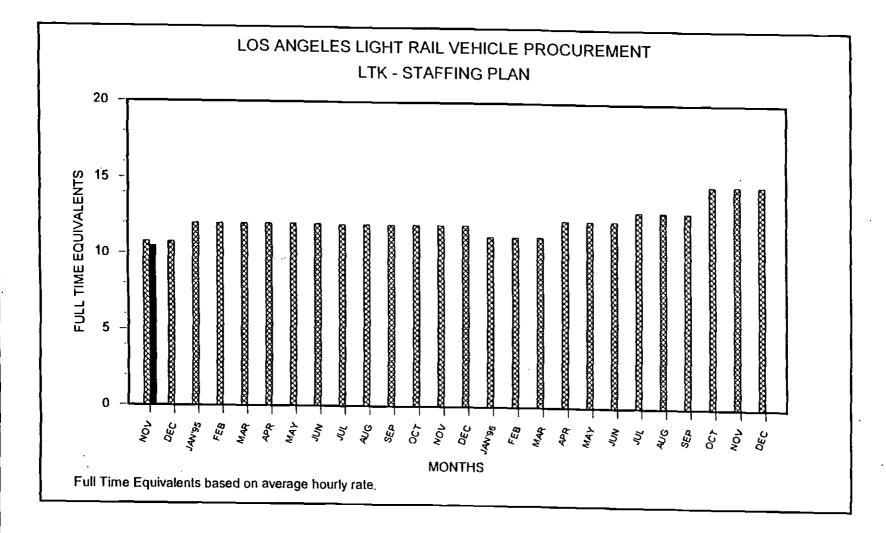
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ACTIVITY	<del></del>	<del></del>					
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DELIVERY LRV #32	240EC97	1		•	(	DELIVERY LRV #32	
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DELIVERY LRV 134	23JnN48					ODELIVERY LRV #3	1
DELIVERY LRV 135	7FE898					ODELIVERY LRV +3	<i>5</i>
DELIVERY LRV #36	22FEB98	-	:			ODELIVERY LRY :	:36
DELIYERY LRV #37	9HAR98	-				ODELIVERY LRY	137
DELIVERY LRV +38	24MAR98	-				ODELIVERY LRV	£38
DELIYERY LRV 139	8APR18					ODELIVERY LRY	/ 139
DELIYERY LRY #40	23APR98	-				ODELIVERY LA	(V 140
DELIVERY LRV #41	SP YAPES	-	•			◇DELIVERY L	RY #41
DELIVERY LRV #42	23MAY4 <b>8</b>	-				<b>◇DELIVERY</b>	LRV =42
DELIYERY LRY 143	7JUN98	-				<b>♦DEL (VER</b> Y	LRY #43
DELIVERY LRY #44	SSJUNGS	-				ODEL I VERY	r LRY #44
DELIVERY LRV #45	7JUL 98					ODEL I VER	RT LRV 145
DELIVERY LRY 146	22JUL98	-				OBELIVE	RY LRV ±46
DELIVERY LRV #47	6AUG 98	-				<b>◇DELIV</b>	ERY LRY #47
DELIYERY LRV 148	21AUG98	-	:			ODEL]	VERY LRY #48
DELIYERY LRY 149	55EP 98	7		•		♦ PEL1	IVERY LRV #49
DELIYERY LRY 150	205EP98	-				<b>⋄</b> DEL	.IVERY LRY 150
DELIVERY LRY #51	500149	7				<b>♦DE</b>	LIVERY LRV #51
DELIVERY LRV #52	2000198	-				<b>♦</b> 0	ELIVERY LRV +52
DELIVERY LRV #53	4N0V98					٥١	DEL [VERY LRV +53
DELIYERY LRV #54	1910498			•		<b>•</b>	DELIVERT LRV #54
DELIYERY LRV #55	4DEC 98	7	i			•	ODELIVERY LRY :55
DELIVERY LAV #56	140,50,48	1	I				ODELIVERY LRV #56
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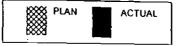
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ACTIVITY DESCRIPTION	EARLY EARLY START FINISH	1994 1995 1996 1997 1998 1999
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#### **COST REPORT TERMINOLOGY - Cost Descriptions**

ORIGINAL BUDGET The Original Project Budget as established by the Los Angeles County Metropolitan Transportation Authority (LACMTA) to commence design and procurement.

CURRENT BUDGET The Current Budget reflects the Original Budget plus all budget amendments adopted by formal LACMTA action. The Project Manager has the authority to approve budget fund shifts from one budget category to another via the Project Budget Change Request (PBCR) procedure as long as the "bottom line" project total is maintained.

AUTHORIZED FOR EXPENDITURE (AFE) The maximum amount of funds authorized for expenditure by the LACMTA for each contract or work order.

COMMITMENTS The total of actual contract awards, executed change orders or amendments, approved work orders of Master Cooperative Agreements, and other LACMTA actions which will result in specific expenditures at a future time.

INCURRED COSTS The total value of work performed to date of services received, and acquired materials.

EXPENDITURES The total dollar amount of checks written by LACMTA's Accounting department for contractor or consultant invoices, third party invoices, staff salaries, and closing payments for escrow accounts.

CURRENT FORECAST The best estimate of the final cost of the project when all checks have been issued and the project is closed out. The current forecast is composed of actual costs incurred to date, the best estimate for work remaining, and a current risk assessment for each budgeted cost item.

VARIANCE The difference between the *current forecast* and the *current budget*. A positive variance indicates a project cost overrun while a negative variance indicates a project cost underrun.

#### **COST REPORT TERMINOLOGY - Budget Categories**

CONSTRUCTION Includes procurement contract, and premiums for owner's insurance.

PROFESSIONAL SERVICES Includes general engineering, procurement management, project management oversight, special counsel, and staff costs.

CONTINGENCY A fund established at the beginning of a project to provide for additional costs which may arise during the course of the project.

PROJECT REVENUE Includes all revenue receivable to the LACMTA as a direct result of project activities. This includes cost sharing of construction items, insurance premium rebates, and the like.