

# RAIL CONSTRUCTION CORPORATION



## Executive Report Rail Program Status



  
**Rail  
Construction  
Corporation**

A Subsidiary of  
The Los Angeles County  
Transportation Commission  
LACTC

## RAIL PROGRAM STATUS SUMMARY

## RAIL PROGRAM STATUS SUMMARY

**Metro Red Line Segment 1**

**Cost Status** (\$000)  
 Original Budget 1,249,900  
 Expended to Date 1,387,918 \*\*  
 Current Budget 1,450,019

**Project Progress**

Design:  
 Actual: 100%  
 Construction:  
 Actual: 99%

**Schedule Status**

Revenue Operations Date:

Original April 1992

Actual January 1993

\*\* Expenditure data through May 1993

**Metro Red Line Segment 2**

**Cost Status** (\$000)  
 Original Budget 1,446,432  
 Expended to Date 480,416 \*  
 Current Budget 1,511,682

**Project Progress**

Design:  
 Actual: 95 %  
 Construction:  
 Actual: 23 %

**Schedule Status: Revenue Operations Dates:**

Wilshire Vermont/Hlywd

Original Jul '96 Sep '98

Forecast Jul '96 Sep '98

**Metro Red Line Segment 3 - North Hollywood Extension**

**Cost Status** (\$000)  
 Original Budget 1,310,822  
 Expended to Date 34,660 \*  
 Current Budget 1,310,822

**Project Progress**

Design:  
 Actual: 43%  
 Construction:  
 Actual: 0%

**Schedule Status**

Revenue Operations Date:

Original 2000

Forecast 2000

**Metro Red Line Segment 3 - Mid-City Extension**

**Cost Status** (\$000)  
 Original Budget 490,663  
 Expended to Date 1,307 \*  
 Current Budget 490,663

**Project Progress**

Design:  
 Actual: 24%  
 Construction:  
 Actual: 0%

**Schedule Status**

Revenue Operations Date:

Original 1999

Forecast 1999

**Metro Green Line (Budget and forecast excludes North Coast Segment)**

**Cost Status** (\$000)  
 Original Budget 671,000  
 Expended to Date 370,717 \*  
 Current Budget 722,402

**Project Progress**

Design:  
 Actual: 99%  
 Construction:  
 Actual: 66%

**Schedule Status**

Revenue Operations Date:

Original October 1994

Forecast May 1995

\* Expenditure data through July 1993

**Metro Pasadena Line**

<b>Cost Status</b>	<b>(\$000)</b>
Original Budget	841,000
Expended to Date	18,394 *
Current Budget	841,000

**Project Progress**

Design:	
Actual:	42%
Construction:	
Actual:	0%

**Schedule Status:**

Revenue Operations Date:	
Original	November 1997
Forecast	November 1997

\* Expenditure data through July 1993

RAIL CONSTRUCTION CORPORATION  
PROJECT COST REPORT - TOTAL RAIL PROGRAM  
SUMMARY BY COST ELEMENT

STATUS DATE: 08/27/93

(IN THOUSANDS)

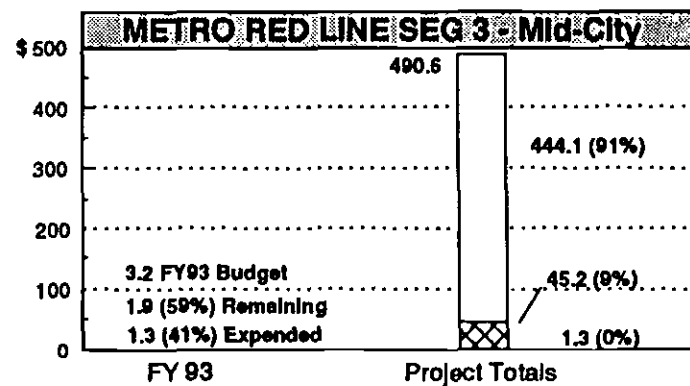
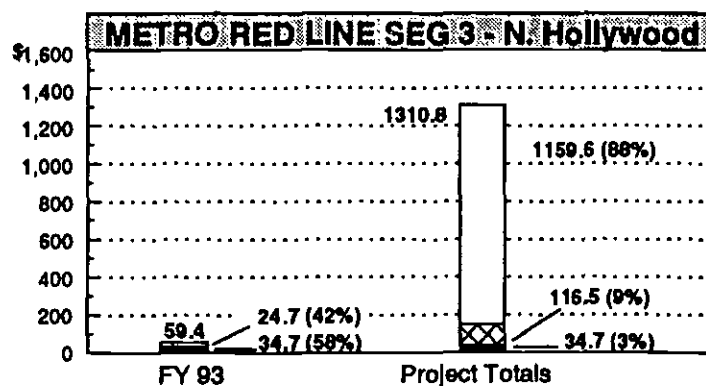
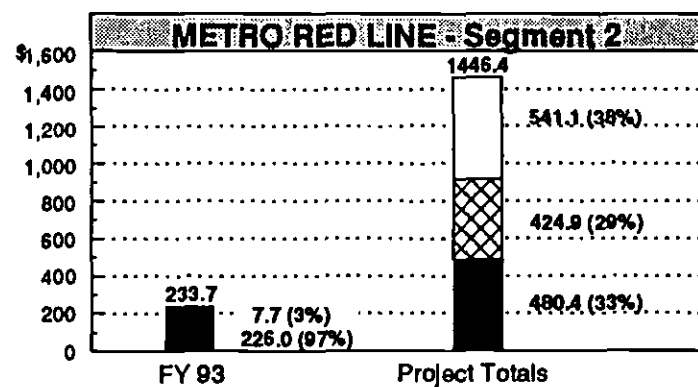
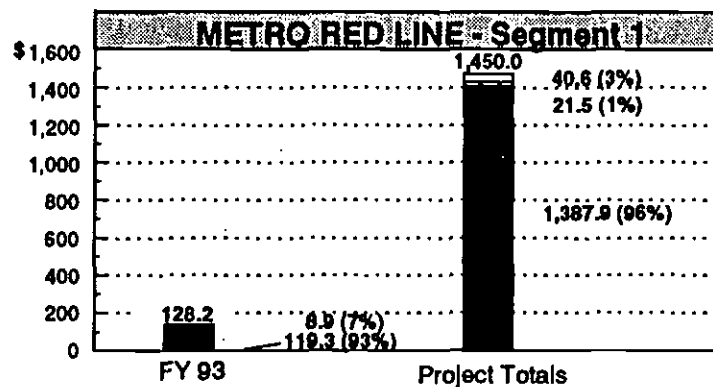
PROJECT: TOTAL RAIL PROGRAM

ELEMENT DESCRIPTION	BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST (9)	VARIANCE (9-2) (10)
	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)		
T CONSTRUCTION	4,296,583	4,507,371	29,954	2,324,290	28,816	1,825,605	15,627	1,768,482	4,466,472	(40,899)
S PROFESSIONAL SERVICES	1,453,048	1,734,283	69,848	1,269,780	6,380	963,270	7,381	953,989	1,727,142	(7,141)
R REAL ESTATE	453,432	517,647	10,297	294,786	27,184	294,886	27,183	294,796	524,126	6,479
F UTILITY/AGENCY FORCE ACCOUNTS	132,187	118,439	299	94,254	1,335	78,889	993	77,115	126,807	8,368
D SPECIAL PROGRAMS	11,044	20,870	110	6,118	45	1,358	50	1,332	28,008	7,138
C CONTINGENCY	452,990	276,392	0	0	0	0	0	0	307,890	31,498
A PROJECT REVENUE	(18,115)	(36,395)	0	(820)	0	(6,410)	(1,312)	(7,722)	(36,695)	(300)
PROJECT GRAND TOTAL	6,781,169	7,138,607	110,508	3,988,409	63,761	3,157,599	49,923	3,087,993	7,143,752	5,145

NEW REQUIREMENTS DESCRIPTION	BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST (9)	VARIANCE (9-2) (10)
	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)		
T CONSTRUCTION	0	55,024	0	15	0	0	0	0	54,705	(319)
S PROFESSIONAL SERVICES	0	8,226	0	4,465	0	4,025	241	2,670	8,226	0
R REAL ESTATE	0	0	0	0	0	0	0	0	0	0
F UTILITY/AGENCY FORCE ACCOUNTS	0	0	0	0	0	0	0	0	0	0
D SPECIAL PROGRAMS	0	0	0	0	0	3	0	3	98	98
C CONTINGENCY	0	2,000	0	0	0	0	0	0	2,000	0
A PROJECT REVENUE	0	0	0	0	0	0	0	0	0	0
NEW REQ. SUBTOTAL	0	65,250	0	4,480	0	4,028	241	2,673	65,029	(221)
PROJECT GRAND TOTAL	6,781,169	7,203,857	110,508	3,992,889	63,761	3,161,627	50,164	3,090,666	7,208,781	4,924

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

**BUDGET STATUS - August 27, 1993**  
(in \$ Millions)



Actual Spent
  Encumbered
  Remaining Budget

**BUDGET STATUS - August 27, 1993**  
(in \$ Millions)

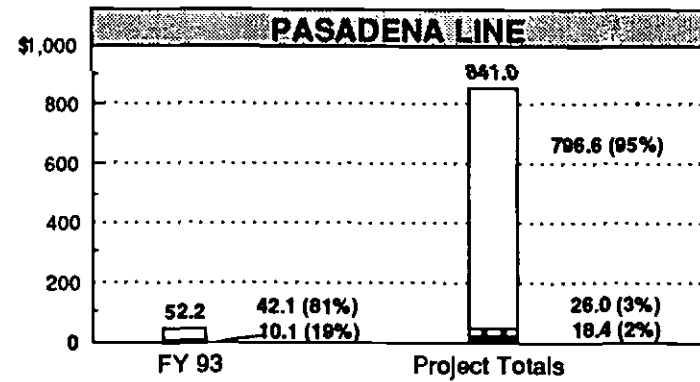
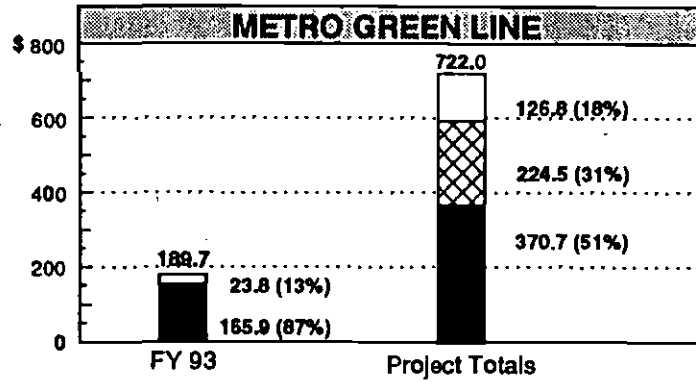
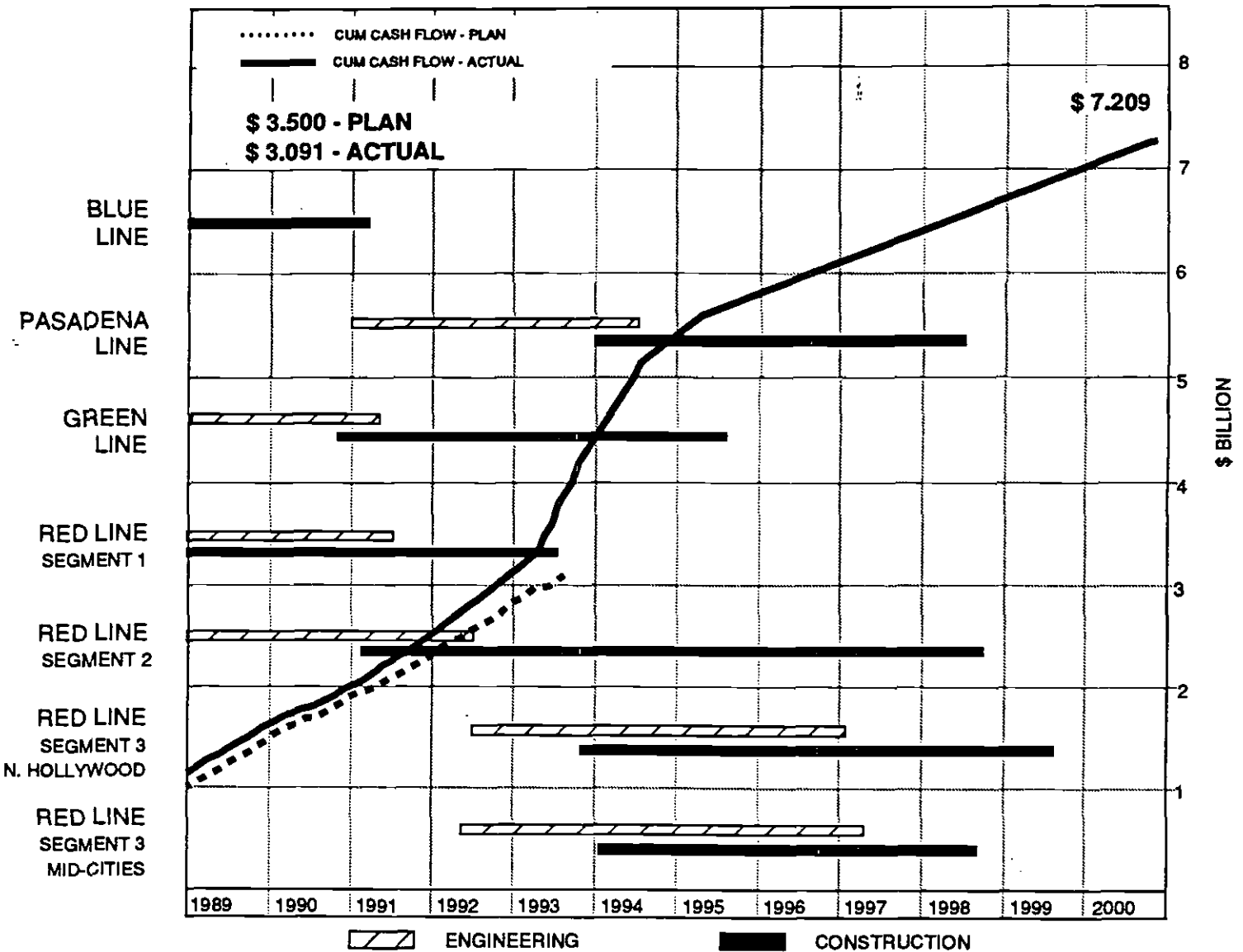


Figure 1 - Rail Construction Plan





## RAIL CONSTRUCTION FUNDING SOURCES

(IN MILLIONS)

	METRO BLUE LINE*		PASADENA LINE		METRO GREEN LINE		METRO RED SEG 1**		METRO RED SEG 2		METRO RED LIN SEG 3 - NH		METRO RED LIN SEG 3 - MC		TOTAL PROGRAM	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
FTA-SECTION 3							605.3	42	667.0	44	681.0	52	242.6	49	2195.9	30
FTA-SEC 3 DEFERRED LOCAL SHARE																
ISTEA											25.0	2	55.4	11	80.4	1
FLEXIBLE CONGESTION RELIEF													26.0	5	26.0	0
FTA-SECTION 9							90.6	6							90.6	1
STATE					106.0		210.3	15	186.0	12	190.0	14	72.3	15	764.6	11
SB 1995 TRUST FUND											53.0	4			53.0	1
PROPOSITION A	877.2	100			205.1	28	179.5	12	439.4	29					1701.2	24
TRANSIT ENHANCEMENT (PROP A/C)									59.9	4					59.9	1
PROPOSITION C			846.1	100	400.4	55					344.7	26	94.4	19	1685.6	23
IMPERIAL HWY GRD SEP (STATE TCI)					4.5	1									4.5	0
AMERICAN DISABILITY ACT (PROP C)					6.4	1			5.1	0					11.5	0
CITY OF LOS ANGELES							34.0	2	96.0	6					130.0	2
BENEFIT ASSESSMENT							130.3	9	58.0	4	17.1	1			205.4	3
COST OVERRUN ACCOUNT							200.1	14							200.1	3
FORECAST																
TOTAL	877.2	100	846.1	100	722.4	85	1450.1	100	1511.5	100	1310.8	100	490.7	100	7208.8	100

\* CONSISTS OF LIGHT RAIL LINE (\$847) AND MC-5 WORK (\$30).

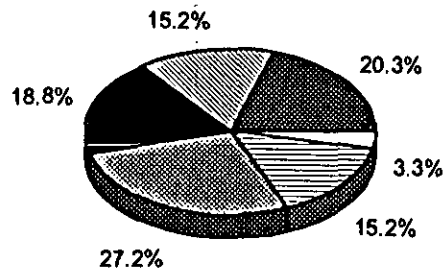
\*\* LRT PORTION INCLUDED IN BLUE LINE FORECAST.

# CONSTRUCTION/PROCUREMENT CHANGE VOLUME BY COST LEVEL AND BASIS BASED ON EXECUTED CHANGES AS OF 08/31/93

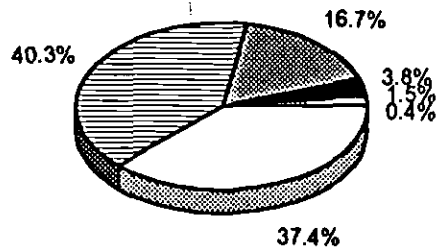
## COST LEVEL

Total: \$49 Million

VOLUME



DOLLARS

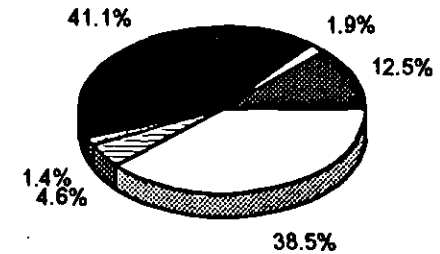
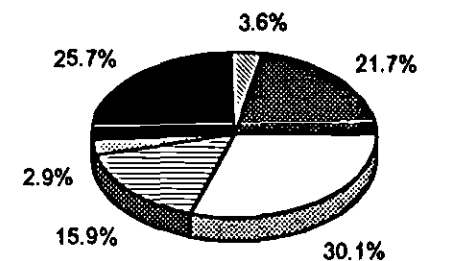


## Legend

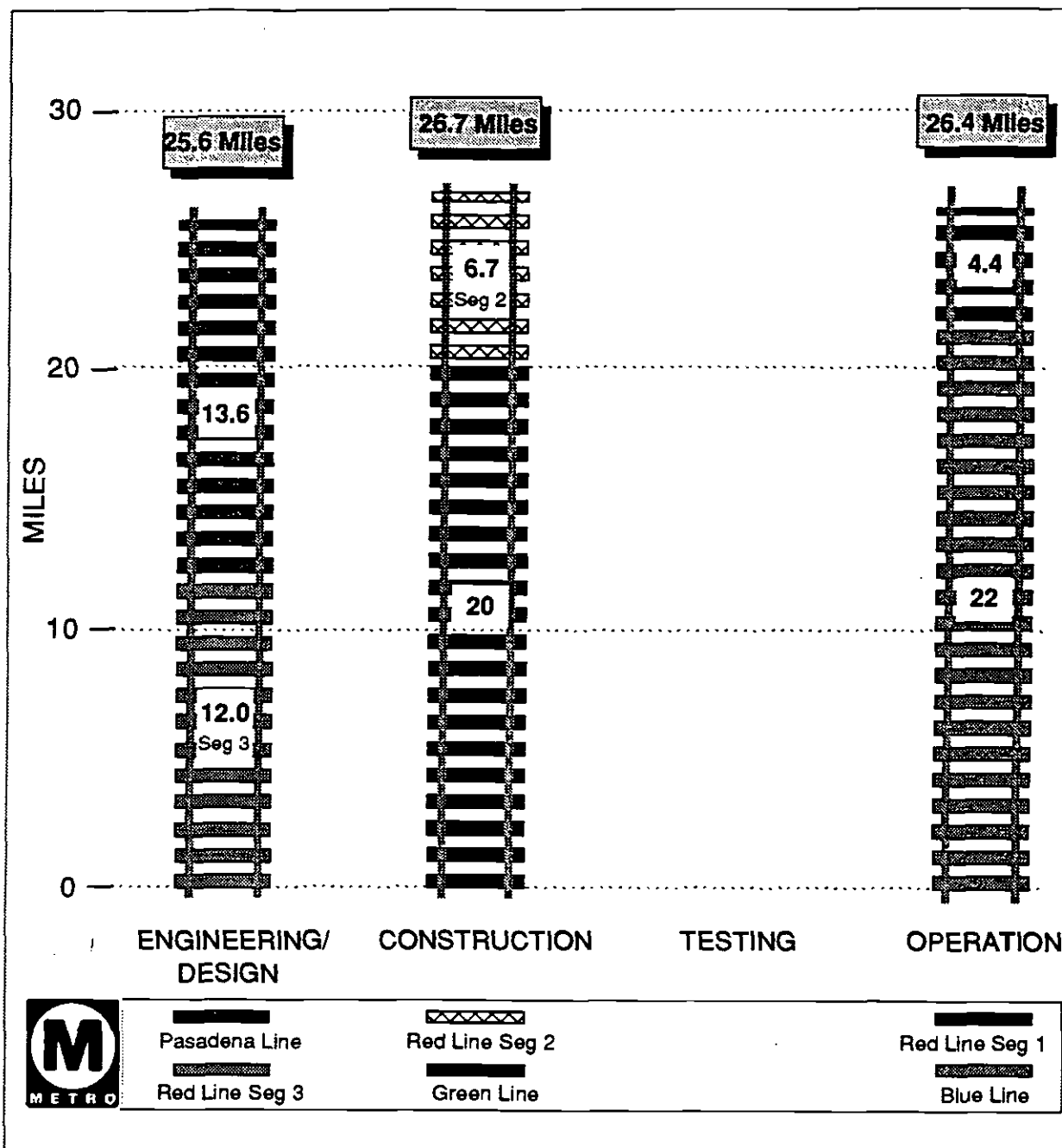
Cost Range		Basis
\$ 0-10K		WORK SCOPE CHANGES
10-25K		SCHEDULE CHANGES
25-50K		DIFFERING CONDITIONS
50-200K		ADMINISTRATIVE
200K-1 MIL		DESIGN CHANGES
ABOVE 1 MIL		MANAGEMENT ISSUES

## BASIS

Total: 276



# METRO RAIL SYSTEMS PROGRESS REPORT



JUNE 1993

TOTAL\_7.DRW

## REAL ESTATE

Figure 3 - Real Estate Acquisition Status Summary

	Number of Parcels	Number of Parcels Available	Parcels Not Available (on Schedule)	Parcels Not Available (Behind Schedule)	
				Number	Avg. Days Behind
Pasadena Line	64	4	11	49	136
Green Line	39	39	0	0	0
Red Line Seg 2	86	71	8	7	104
Red Line Seg 3 NH	178	8	153	25*	60
Red Line Seg 3 MC	59	0	53	6*	160

\* All parcels on the critical path.

## MANAGEMENT ENGINEERING AND ADMINISTRATION COSTS

The corporate goals of the RCC include limitations on the percentage of total project costs which will be spent on project administration and on RCC/LACTC staff.

The RCC corporate goal for project administration costs is 20%. The current cost forecast data for project administration costs totals 24.4% which exceeds the corporate goal by 4.4%. The percentage includes all costs previously expended by the SCRTD when the Metro Red Line Segment 1 project was under SCRTD management.

Staff costs are projected at 4.2% of total program costs, which just exceeds the 4% corporate goal by 0.2%. Figure 6 illustrates the forecast figures for each project and for total program.

Figure 6 - Cost Performance Relative to Corporate Goals

(IN THOUSANDS)

	METRO BLUE LINE		METRO PASADENA LINE		METRO GREEN LINE		METRO RED LINE SEGMENT 1		METRO RED LINE SEGMENT 2		METRO RED LINE SEGMENT 3 NH		METRO RED LINE SEGMENT 3 MC		TOTAL PROGRAM		CORPORATE GOAL
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	
CONSTRUCTION	657,487	74.95%	492,399	58.19%	494,400	68.44%	813,539	56.11%	998,466	66.06%	847,876	64.68%	339,227	69.14%	4,643,394	64.41%	
REAL ESTATE	55,592	6.34%	74,308	8.78%	26,048	3.61%	140,000	9.66%	89,751	5.94%	91,054	6.95%	53,303	10.86%	530,056	7.35%	
PROFESSIONAL SERVICES:																	
ENGINEERING/DES	69,587	7.93%	75,968	8.98%	73,166	10.13%	221,661	15.29%	143,423	9.49%	82,187	6.27%	33,000	6.73%	698,992	9.70%	
CONSTR MGMT.	91,642	10.45%	71,580	8.46%	70,339	9.74%	116,429	8.03%	131,270	8.68%	84,000	6.41%	35,000	7.13%	600,260	8.33%	
STAFF	17,655	2.01%	31,338	3.70%	27,607	3.82%	94,708	6.53%	59,900	3.96%	52,433	4.00%	19,627	4.00%	303,268	4.21%	4%
OTHER	14,222	1.62%	25,885	3.06%	18,073	2.50%	32,610	2.25%	22,192	1.47%	36,127	2.76%	10,506	2.14%	159,615	2.21%	
SUBTOTAL	193,106	22.01%	204,771	24.20%	189,185	26.19%	465,408	32.10%	356,785	23.61%	254,747	19.43%	98,133	20.00%	1,782,135	24.44%	20%
CONTINGENCY	963	0.11%	74,666	8.82%	19,287	2.87%	31,072	2.14%	66,759	4.42%	117,143	8.94%		0.00%	308,890	4.30%	
PROJECT REVENUE	(29,877)	-3.41%		0.00%	(6,518)	-0.90%		0.00%	(300)	-0.02%		0.00%		0.00%	(36,695)	-0.51%	
GRAND TOTAL	877,271	100.00%	846,144	100.00%	722,402	100.00%	1,450,019	100.00%	1,511,461	100.00%	1,310,820	100.00%	490,663	100.00%	7,208,780	100.00%	

RCC PROJECT MANAGEMENT OVERSIGHT CONSULTANT  
ITEMS FOR RCC ACTION

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

NEW - August 1993

**Concern:** The EMC should complete a Design Management Plan for the Pasadena Line Project.

**Action:** The Metro Pasadena Line staff should direct the EMC to complete the management tool.

**Status:** Under RCC review.

ONGOING - March 1993

**Concern:** The design criteria for Metro Pasadena Line is not yet approved by RCC.

**Action:** Review and approve December 1992 Metro Pasadena Line design and performance criteria.

**Status:** Under RCC review.

**Concern:** The Metro Pasadena Line (MPL) staff has not yet developed a Value Engineering Plan.

**Action:** A schedule for conducting Value Engineering should be developed immediately.

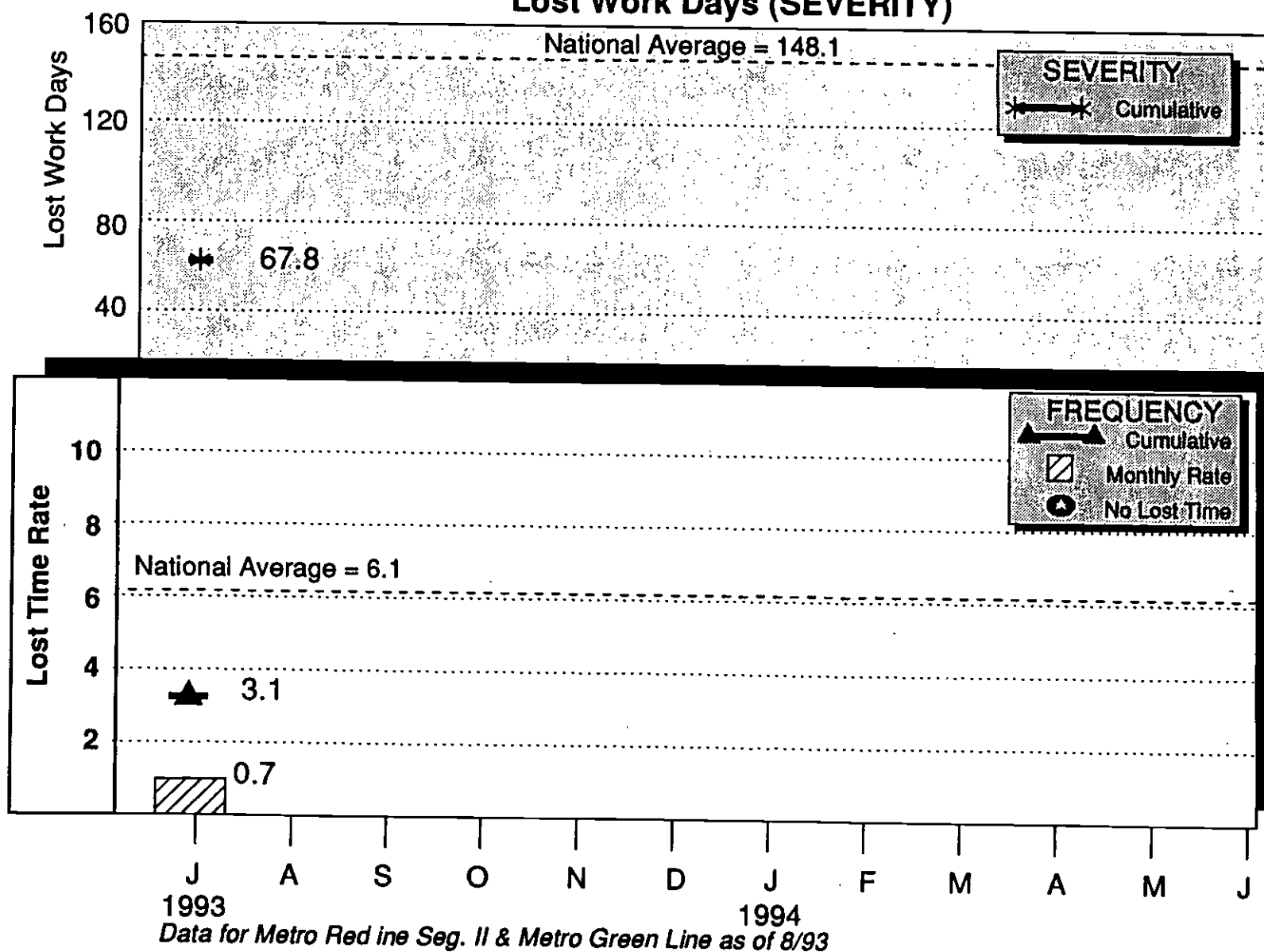
**Status:** The MPL staff has agreed to this recommendation and is preparing an action plan.

RESOLVED -

No New Items

# TOTAL PROGRAM

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



# METRO BLUE LINE GRADE CROSSING INCIDENT STATUS

7th/Metro Station

## Line Section

**Los Angeles Street Running - Slow Speeds.**

**Cab Signal - Speeds Between 25 and 55 MPH.**

**Long Beach Street Running - Slow Speeds.**

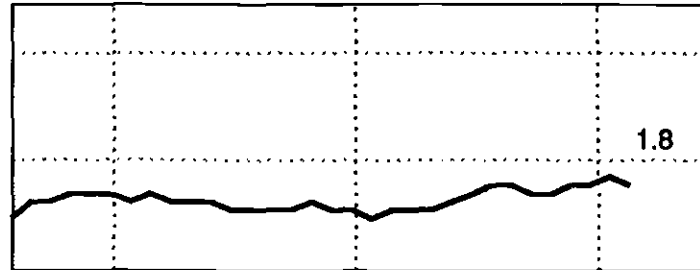
Long Beach Transit Mall

**Blue Line Summary**

## Cumulative Accident Rate Per Month

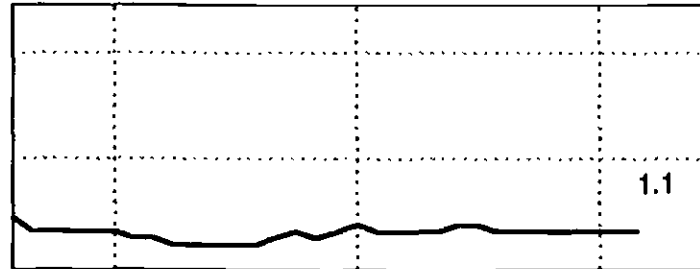
## Total Accidents

Avg. Accidents Per Month



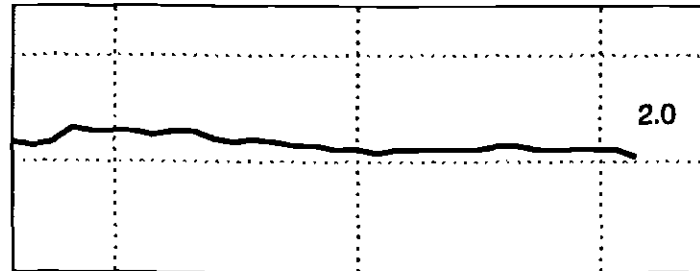
**73 Accidents**  
Majority of accidents were caused by illegal left turns into the path of the train.  
*1 Accident this month.*

Avg. Accidents Per Month



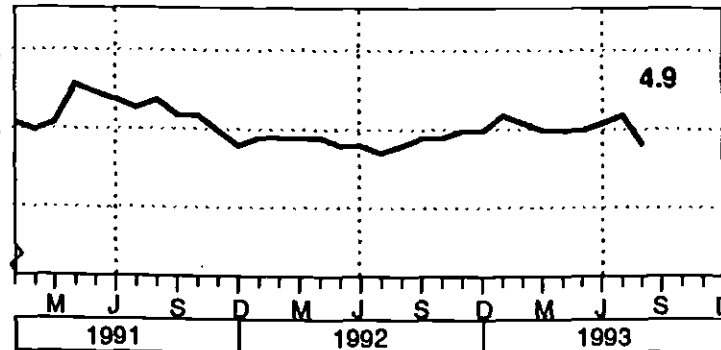
**41 Accidents**  
Majority of accidents were caused by barrier arm violations. Major injuries and most fatalities occurred here.  
*1 Accident this month.*

Avg. Accidents Per Month



**80 Accidents**  
Majority of accidents were caused by illegal left turns into the path of the train.  
*No Accidents this month.*

Avg. Accidents Per Month



**194 Total Accidents**  
*2 Accidents this month.*



## INVOICE PROCESSING

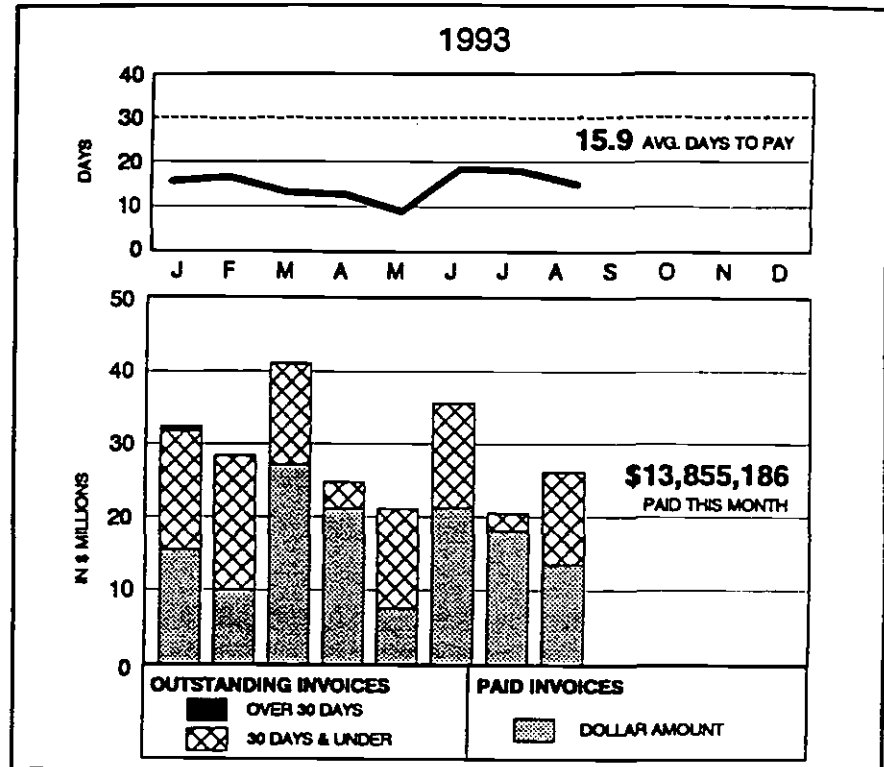
- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 15.9 days.

- 24 invoices were paid this month for a total value of \$13,855,186.

- There were 18 outstanding Construction or Procurement invoices under 30 days old for \$12,652,691.

- There were no outstanding Construction or Procurement invoices over 30 days old.

Construction/Procurement Invoice Status



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

Month	Construction/Procurement Invoices				Other Invoices			
	30 Days and Under		Over 30 Days		30 Days and Under		Over 30 Days	
	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value
APR 1993	10	3,622,751	0	0	58	5,856,361	10	147,990
MAY 1993	13	13,720,341	0	0	70	13,302,747	16	352,691
JUN 1993	18	14,446,028	0	0	62	10,758,129	16	506,138
JUL 1993	9	2,395,472	0	0	60	3,638,763	10	462,440
AUG 1993	18	12,652,691	0	0	59	3,899,361	3	116,132

RAIL CONSTRUCTION CORPORATION  
PRE CONTRACT STATUS SCHEDULE  
SUMMARY LOOK AHEAD  
90 Days  
R05 Metro Pasadena Project

Page: 1

UPDATE:23-Sep-93

Cont. No.	Contractor/Description	Contract Type	85 % Design Approval	IFB/RFP Ready	Advertise Date	Pre-Bid Meeting	Bid Opening	Bid Report Complete	RCC Board Approval	Comm. Approval	Contracts Lead\Engineering Lead\Project Controls Lead
C6410	LA River Bridge	FP			10/13/93	10/20/93	11/24/93	12/08/93	01/10/94	01/26/94	VRANESH \SCALA \HADNETT

RAIL CONSTRUCTION CORPORATION  
PRE CONTRACT STATUS SCHEDULE  
SUMMARY LOOK AHEAD  
90 Days  
R23 Metro Green Line

Page: 2

UPDATE:23-Sep-93

Cont. No.	Contractor/Description	Contract Type	85 % Design Approval	IFB/RFP Ready	Advertise Date	Pre-Bid Meeting	Bid Opening	Bid Report Complete	RCC Board Approval	Comm. Approval	Contracts Lead\Engineering Lead\Project Controls Lead
C0170	ADA Elevators-Civil Work				10/04/93	11/23/93	01/13/94	01/27/94			J. Jackson \A. Griesbach \J. Dale

RAIL CONSTRUCTION CORPORATION  
PRE CONTRACT STATUS SCHEDULE  
SUMMARY LOOK AHEAD  
90 Days  
R81 Metro Red Line Segment 2

Page: 4

UPDATE:23-Sep-93

Cont. No.	Contractor/Description	Contract Type	85% Design Approval	IFB/RFP Ready	Advertise Date	Pre-Bid Meeting	Bid Opening	Bid Report Complete	RCC Board Approval	Comm. Approval	Contracts Lead\Engineering Lead\Project Controls Lead
B261	VERMONT/SUNSET STATION	unit			10/25/93	11/18/93	12/21/93	12/31/93	02/07/94	02/23/94	MAHLER \Carmichael \Brown
B641	Radio System (Design/Furnish/Install)	unit	02/12/92		11/02/93	11/16/93	12/10/93	12/24/93	01/10/94	02/16/94	MARROQUIN\Bennett \Brown
B642	PUBLIC ADDRESS SYSTEM (PROCUREMENT)	unit	02/19/93		10/25/93	11/10/94	12/09/94	12/24/94	01/10/94	01/26/94	MARROQUIN\Morales \Brown
B643	CLOSED CIRCUIT TV (PROCUREMENT)	unit	02/14/93		10/04/93	11/11/93	12/16/93	12/30/93	01/10/94	01/26/94	MAHAFFEY \Bennett \Brown
B647	Gas Monitoring System (Procurement)	unit	02/17/92		10/08/93	11/04/93	12/08/93	12/24/93	01/10/94	01/26/94	MAHAFFEY \Morales \Brown
B650	PASSENGER VEHICLE (DESIGN/SUPPLY)	RFP			11/01/93	12/16/93	01/13/94	01/28/94	02/07/94	02/23/94	Antenucci \Nelson \Brown
B760	SIGNS & GRAPHICS (DESIGN/SUPPLY)	unit	01/06/93		09/27/93	10/12/93	11/11/93	11/19/93	12/06/93	12/15/93	MAHAFFEY \ \

RAIL CONSTRUCTION CORPORATION  
PRE CONTRACT STATUS SCHEDULE  
SUMMARY LOOK AHEAD  
90 Days  
R82 Metro Red Line Segment 3

Page: 5

UPDATE:23-Sep-93

Cont. No.	Contractor/Description	Contract Type	85% Design Approval	IFB/RFP Ready	Advertise Date	Pre-Bid Meeting	Bid Opening	Bid Report Complete	RCC Board Approval	Comm. Approval	Contracts Lead\Engineering Lead\Project Controls Lead
C0311	Line Section: Univ. City to Station 638				12/10/93	01/03/94	02/08/94	02/24/94	03/14/94	03/30/94	Gatewood \Wilson \Pierce
C0328	Universal City Demolition for C0311				10/29/93	11/12/93	12/08/93	12/22/93	01/05/94	01/20/94	Gatewood \Wilson \Pierce
C0411	Line Sec: Wilshire/Western to Pico/S.Vic				12/17/93	01/24/94	03/08/94	03/24/94	04/11/94	04/27/94	Gatewood \Wilson \Williams
C0428	Pico/San Vicente Demolition				11/05/93	11/30/93	01/04/94	01/13/94	01/25/94	02/04/94	Mendoza \Fuks \Williams

## EXECUTIVE SUMMARY

## COST STATUS (in millions)

- Current Budget \$841
- Current Forecast \$846 (A)

(A) Includes an estimated \$5 million in grant monies for "Urban Greenways" Program and widening of College Street in Chinatown which is not included in the current budget.

## SCHEDULE STATUS

- Current Approved Revenue Operations Date November, 1997
- Design Progress
  - Actual 42%
- Construction Progress
  - Actual 00% (B)

(B) Construction planned to begin February 01, 1994

## REAL ESTATE STATUS

MONTH	NUMBER OF PARCELS	PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)	PARCELS NOT AVAILABLE (BEHIND SCHEDULE)	
				NUMBER	AVG DAYS BEHIND
THIS MONTH	64	4	11	49	136
LAST MONTH	63	4	11	48	126

## EXECUTIVE SUMMARY (CONT'D)

Final Design is continuing, with the Pre-Final Los Angeles River Bridge and In-Progress Arroyo Seco to Del Mar Line Segment submittal issued to RCC for review. In-Progress review has been completed for the Chinatown Aerial. Overall design progress, now stands at 42% complete - an increase of 3%.

Public Affairs and the Art-For-Rail Program continued to conduct meetings with the communities of Highland Park, Chinatown, South Pasadena, and Pasadena. This strategy continues to clear a path for future coordination and cooperation with the communities that will be a part of this project.

## 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. Final Design is proceeding to define the scope of work for the Yard & Shops.
- Action:** EMC/RCC to resolve engineering issues related to the provision for an Elysian Park bike path and operational issues in the Yard.
- Status:** Final design is proceeding on the Yard & Shops layout. Track layout has been refined to accommodate MTA Operation and Maintenance issues. Agreement is required from SCRRA and Southern Pacific for moving freight cars to Capitol Milling across Metrolink tracks and LRT yard tracks. New Elysian Park bikeway concepts to be presented to LA Department of Parks and Recreation and LADOT.

**AREAS OF CONCERN (CONT'D)****Catellus/Ratkovich Interface at LAUPT**

- Concern:** Location of the LRT terminus at Union Station involves interface with Catellus Corporation and the Ratkovich Villanueva Partnership. The alignment, with roadway improvements proposed by Catellus, crosses Ratkovich interests at two locations along the Terminal Annex property. Width of the platform beyond the previously defined easement requires further negotiation with Catellus.
- Action:** RCC and Metrolink have met with Catellus and Ratkovich and presented alternative Pasadena and Metrolink Alignments. An alignment has been agreed to in principle by all parties. Final Design has commenced.
- Status:** MTA Facilities and Procurement office is heading the negotiations on policy issues for MTA at Union Station. RCC is providing ongoing technical support and has prepared a modified easement for presentation to Catellus in September 1993. Board action is planned for October 1993.

**Real Estate**

- Concern:** The Real Estate acquisition effort is behind schedule. Full and partial takes still need to be certified.
- Action:** The Pasadena Project team has facilitated weekly Parcel Acquisition schedule meetings between LACMTA and EMC Real Estate personnel.
- Status:** Re-prioritization of full-takes and Site Office/Laydown requirements to support acceleration of certifications have been preliminarily identified in the Right-of-Way acquisition Control Matrix. Additional parcels along the Santa Fe ROW for full or partial takes have been identified. Real Estate acquisition is to be prioritized in lieu of recent budget decisions by MTA.

**AREAS OF CONCERN (CONT'D)**

**Del Mar Station**

- Concern:** Identification of an acceptable concept for the Del Mar Station and park-and-ride facilities.
- Action:** RCC to continue discussions with the City of Pasadena and MTA bus operations on site development and to provide direction to EMC for final design.
- Status:** Regular joint development meetings continue to refine a concept for the transportation center. Cost estimates are in progress for budget status.

**Marmion Way (Avenue 50 to Avenue 60)**

- Concern:** Identification of an acceptable cross section within the narrow right-of-way and parallel frontage roads is required to support final design.
- Action:** RCC has agreed in principle with the City of Los Angeles, Fire/Life Safety, and the CPUC on acceptable cross section through the Marmion Way segment.
- Status:** Certification continues for additional full acquisitions which have been identified for emergency vehicle access. Identification of partial property acquisitions is in progress. RCC will proceed with the required SEIR in September.

**Sierra Madre Villa Station**

- Concern:** Evaluation of alternative Johnson & Johnson station site is required over the original Space Bank site due to potentially serious hazardous material on property.
- Action:** The Real Estate department will complete appraisals on both station site alternatives. RCC will incorporate Johnson & Johnson site into SEIR process.
- Status:** Appraisals have been requested. RCC is reviewing schedule implications on Revenue Operations Date.

**KEY ACTIVITIES - AUGUST**

- Continued certification process for additional full takes and identification of partial takes required along Avenue 50-Avenue 60. Prepared scope of work for the SEIR. Addressed operational issues along corridor with CPUC and LADOT for incorporation into SEIR.
- Submitted preliminary right-of-way certification for modified LRT alignment easement through Union Station.
- Continued final design on at-grade line segments, LA River Bridge, LA River to Arroyo Seco, Arroyo Seco Bridge, Arroyo Seco to Del Mar and the 210 Freeway line segment bridge modifications.

**KEY ACTIVITIES - PLANNED FOR SEPTEMBER**

- Award SEIR services contract, begin SEIR process.
- Finalize close-out of EMC Contract Work Order for PE.
- Obtain MTA Board approval for EMC Final Design budget.
- Finalize special permitting process with the cities of Los Angeles and Pasadena.
- Finalize negotiations for final design with the station and landscape designers.
- Award EMC Final Design sub-contracts for the following: the line segment from Del Mar to Walnut Street, station design contracts and landscape design contracts.
- Finalize right-of-way certifications for LRT alignment easement modifications at Union Station and Terminal Annex.
- Continue Public Affairs and Art Program meetings with Community Advisory Committees representing the cities of Los Angeles, South Pasadena and Pasadena.
- Obtain RCC Board authorization to advertise contract C6410, Los Angeles River Bridge.
- Receive RCC Board approval for Construction Management firm for FY '94.



RCC  
Project: R05

RAIL CONSTRUCTION CORPORATION  
METRO PASADENA PROJECT  
Project Cost by Element

Page: 1  
Report Date: 10-Sep-93  
Status Date: 27-Aug-93

(\$ x 000's)

Description	----- Budget -----		--- Commitments ---		--- Incurred Cost ---		----- Expenditures -----		Current	
	Original (1)	Current (2)	Period (3)	To Date (4)	Period (5)	To Date (6)	Period (7)	To Date (8)	Forecast (9)	Variance (9-2)
T Construction	515,171	480,929	0	708	0	692	0	668	481,078	148
S Professional Services	183,206	197,415	432	42,051	432	20,664	1,675	17,354	195,726	(1,689)
R Real Estate	68,100	72,308	0	6	0	7	0	7	74,308	2,000
F Utility/Agency Force Accounts	8,442	11,321	368	1,564	368	1,564	26	310	11,321	0
D Special Programs	3,377	4,402	0	61	0	61	5	35	9,046	4,644
C Contingency	62,705	74,625	0	0	0	0	0	0	74,608	41
A Project Revenue	0	0	0	0	0	0	0	0	0	0
Project Grand Total :	841,000	841,000	800	44,390	800	22,988	1,706	18,394	846,144	5,144

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS - EXPENDITURES LAG ONE MONTH

RAIL CONSTRUCTION CORPORATION  
METRO RAIL PASADENA LINE PROJECT  
(IN THOUSANDS OF DOLLARS)

15-Sep-93

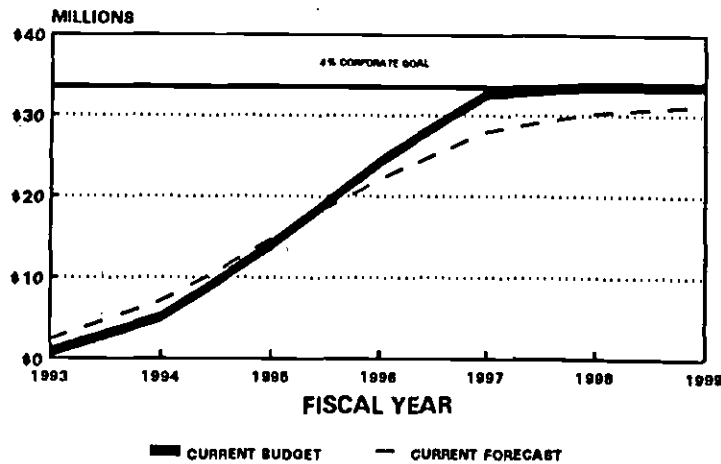
AUGUST 93

## STATUS OF FUNDS BY SOURCE

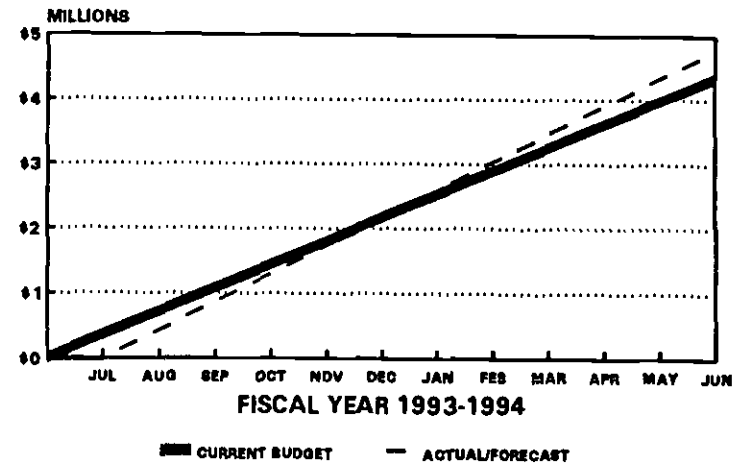
SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
PROP C	\$846,144	\$56,841	\$44,390	5%	\$18,396	2%	\$18,396	2%
TOTAL	\$846,144	\$56,841	\$44,390	5%	\$18,396	2%	\$18,396	2%

NOTES: EXPENDITURES ARE THROUGH JULY 1993.

### AGENCY COSTS PASADENA LINE



### FISCAL YEAR 1994 AGENCY COSTS PASADENA LINE



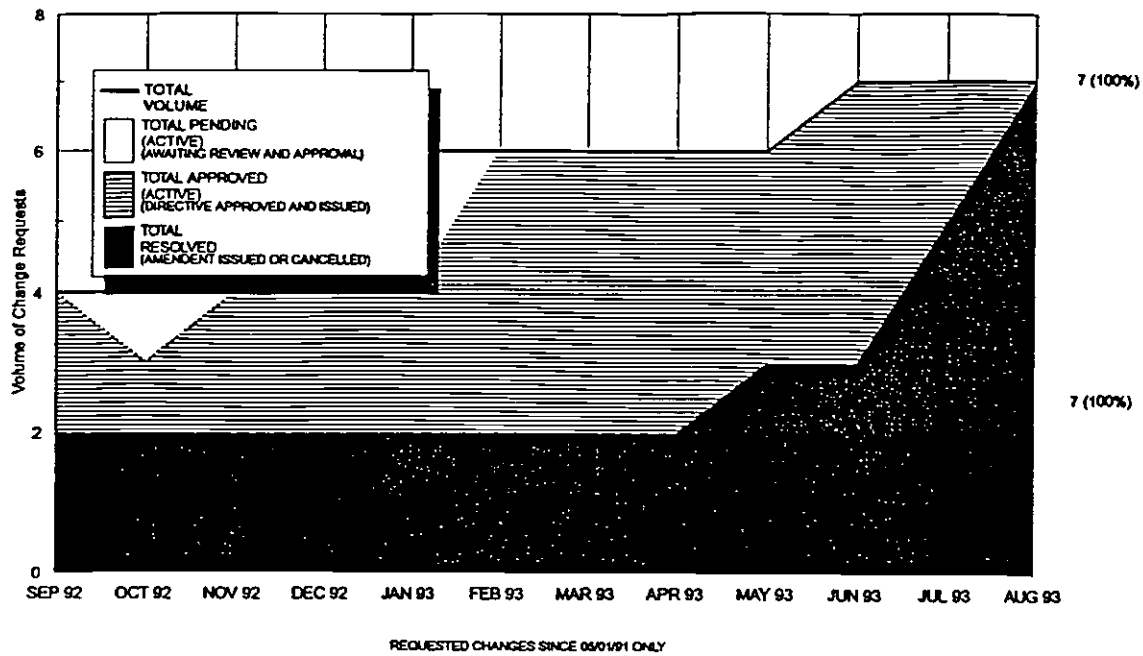
### PROJECT AGENCY COSTS PASADENA LINE (\$000)

TOTAL PROJECT BUDGET	\$ 841,000
CURRENT BUDGET	\$ 33,640
CURRENT FORECAST	\$ 31,354

### FISCAL YEAR 1994 AGENCY COSTS PASADENA LINE (\$000)

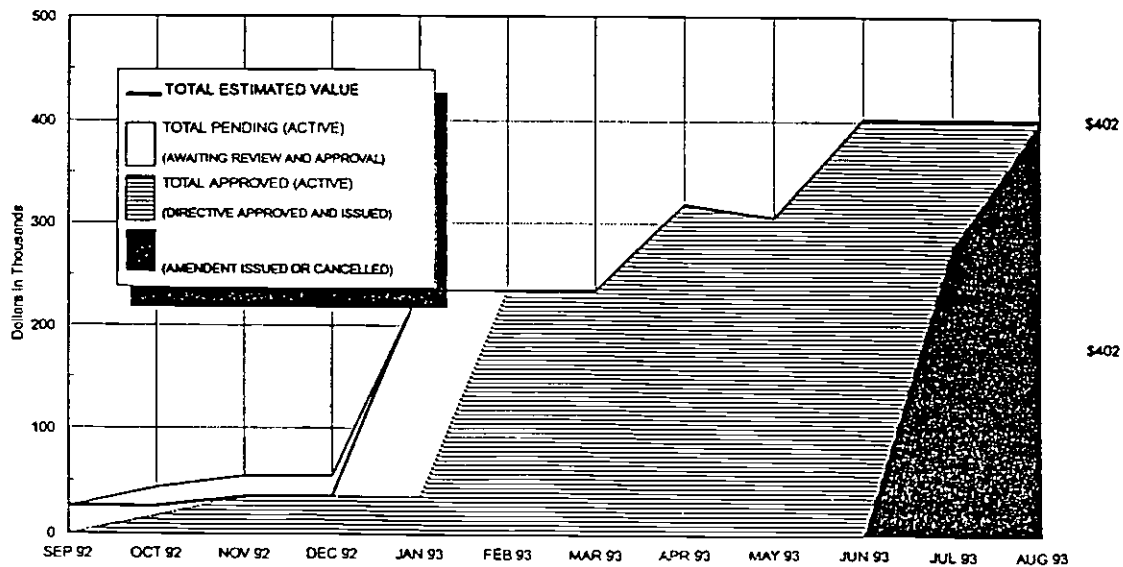
CURRENT BUDGET	\$ 4,347
CURRENT FORECAST	\$ 4,772
ACTUAL TO DATE	\$ 3

CONSULTANT CONTRACT CHANGE SUMMARY  
PASADENA LINE CONSULTANT CHANGE REQUEST VOLUME

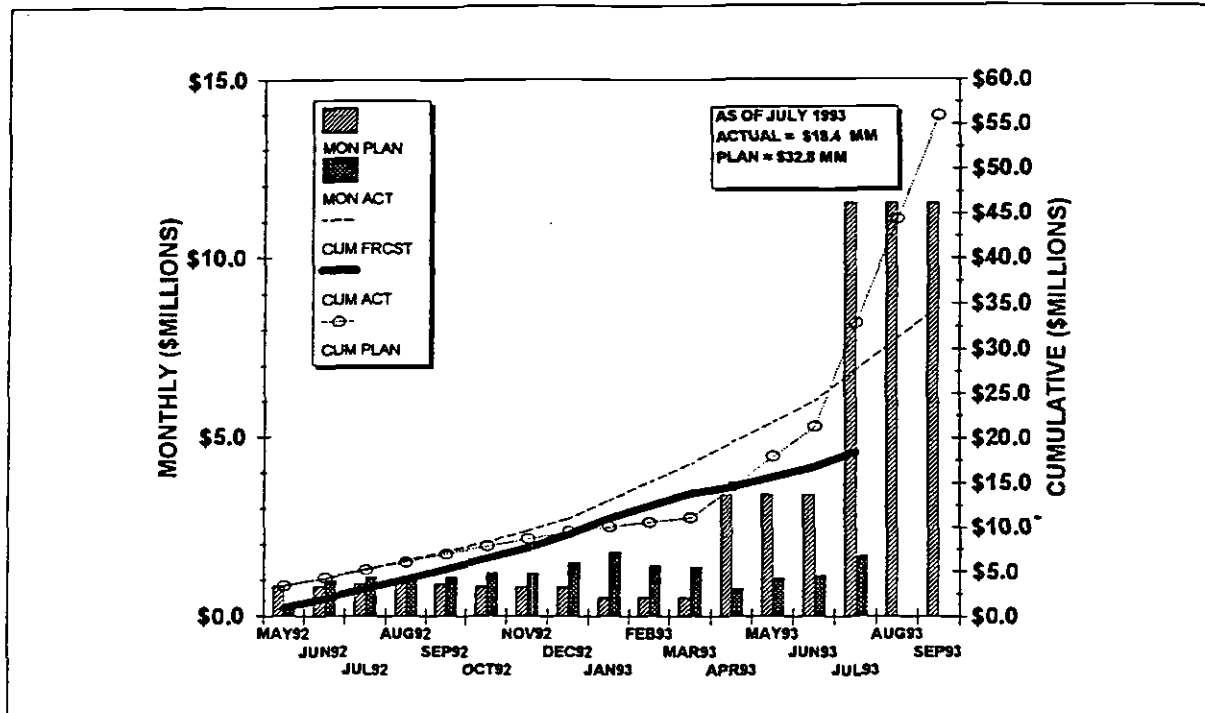


AGE OF UNRESOLVED CONSULTANT CHANGES					
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	0	0	0	0	0
PERCENT	0%	0%	0%	0%	0%

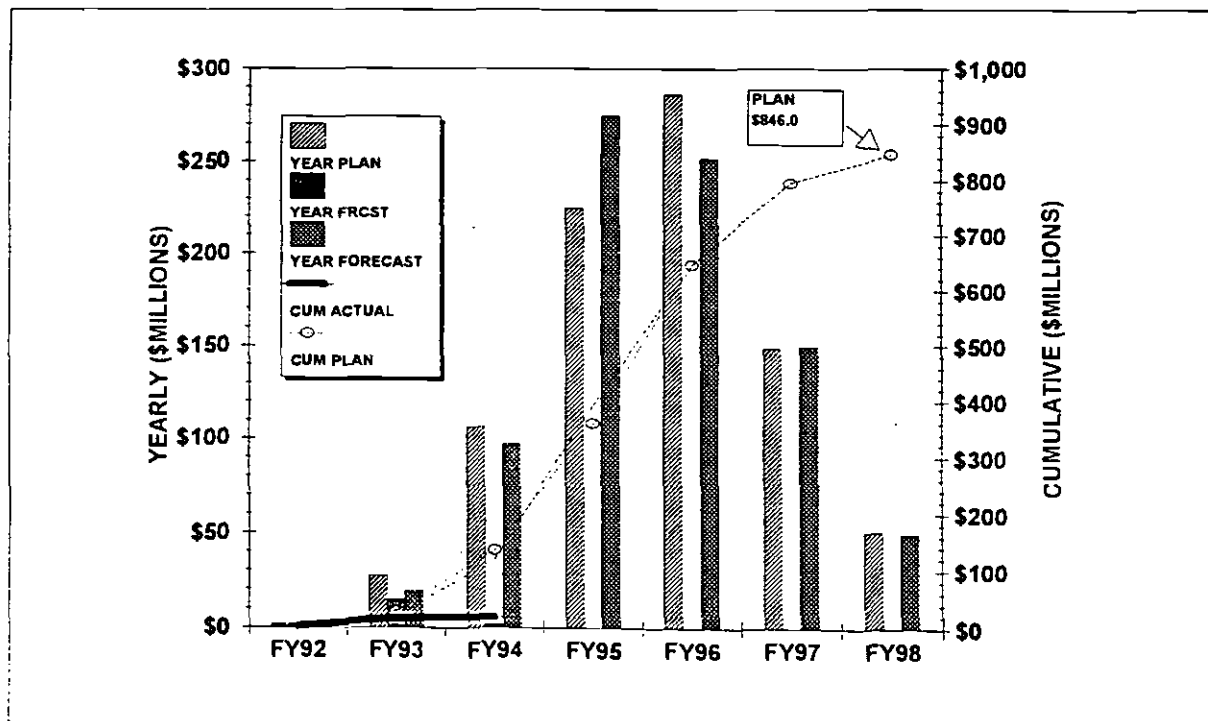
CONSULTANT CONTRACT CHANGE SUMMARY  
PASADENA LINE CONSULTANT CHANGE REQUEST VALUES

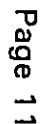


### ANNUAL PROJECT CASHFLOW

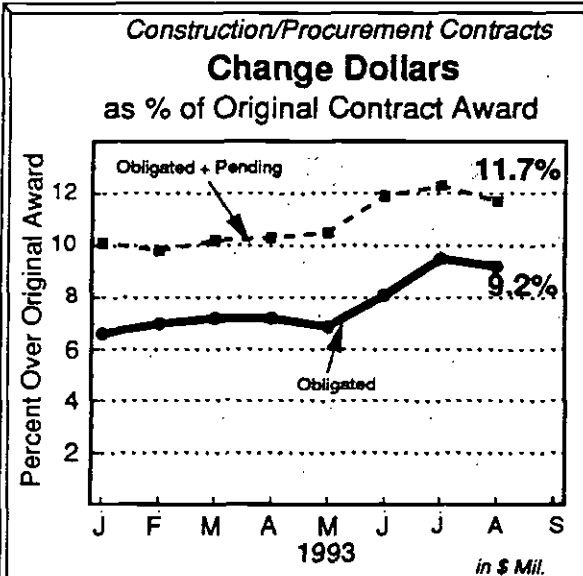
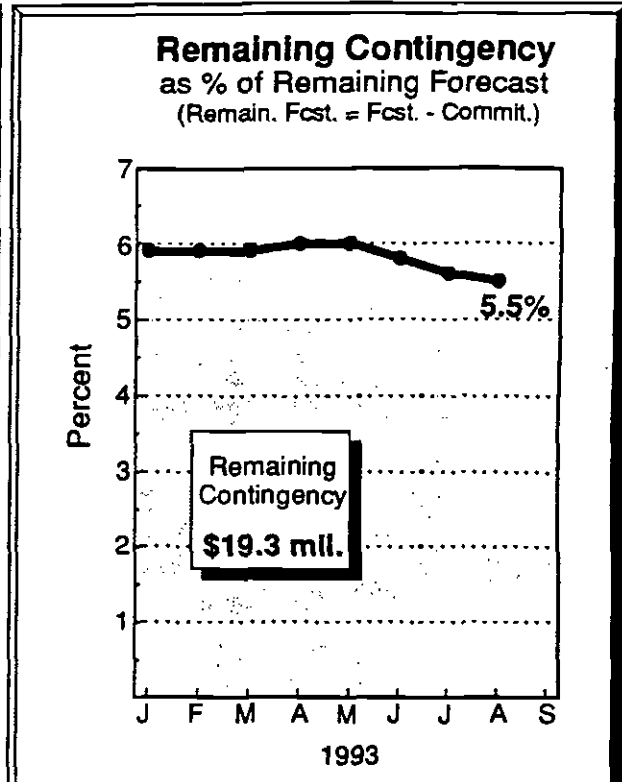
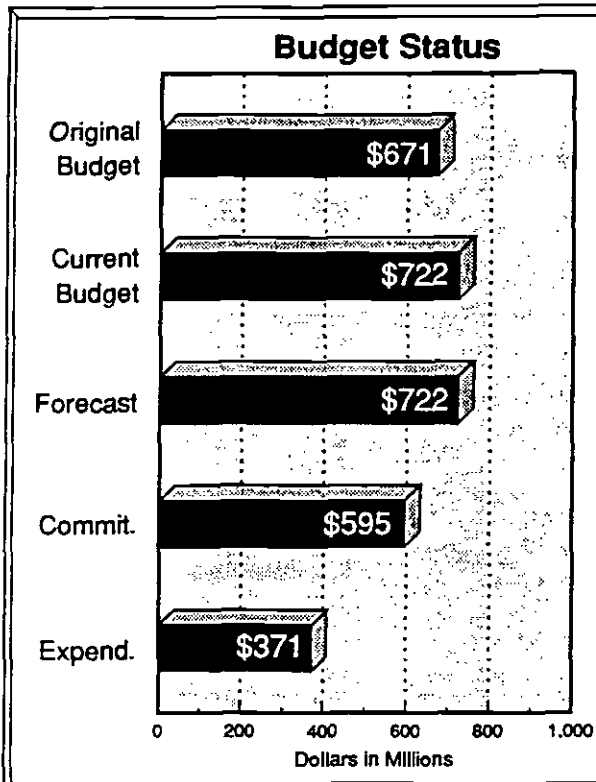


### TOTAL PROJECT CASH FLOW





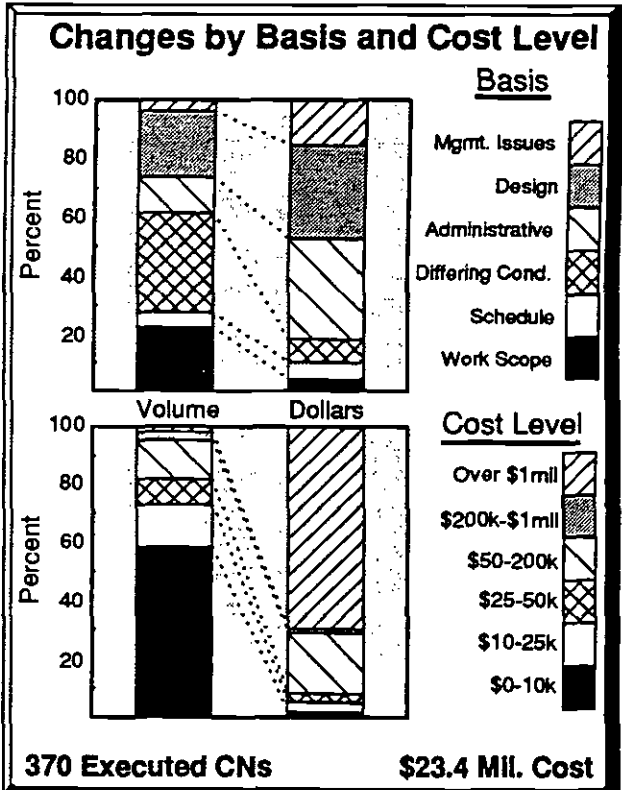
# METRO GREEN LINE FINANCIAL STATUS



1	Total Original Contract Award	\$254.2
2	Obligated Change Value*	\$23.4
3	Total Approved Value (1+2)	\$277.6
4	Pending Changes	\$6.3
5	Total Award + Pending (3+4)	\$283.9

R2308231.DRW

\* Includes Approved and NTE Authorizations



# METRO GREEN LINE SCHEDULE AND SAFETY STATUS

## MTA Critical Activities

October 1993

- ✓ **AWARD APPROVAL**  
No contract awards this month.

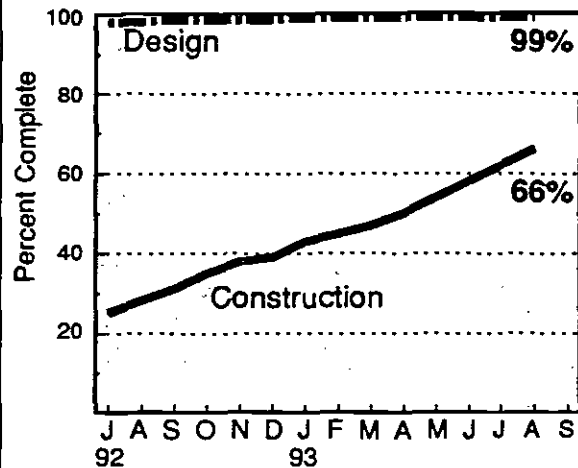
## Employment Status

Months of Employment Provided

**10,759**

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

## Schedule Status PROGRESS

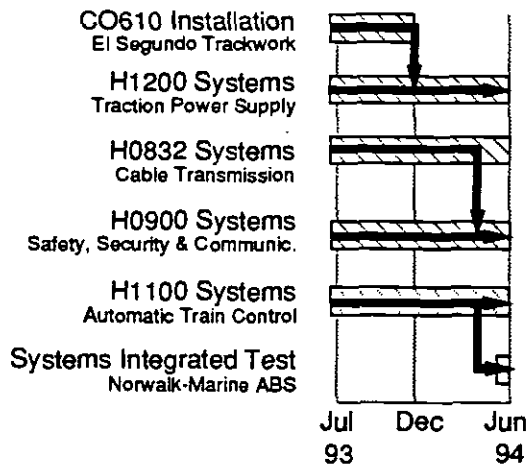


Revenue Operation Date: **May 1995**  
(Approved)

## Schedule Status

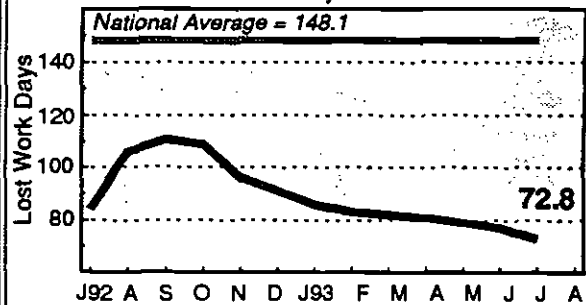
CRITICAL PATH - 1 Year Outlook

**On Schedule**  
(0 days of float)

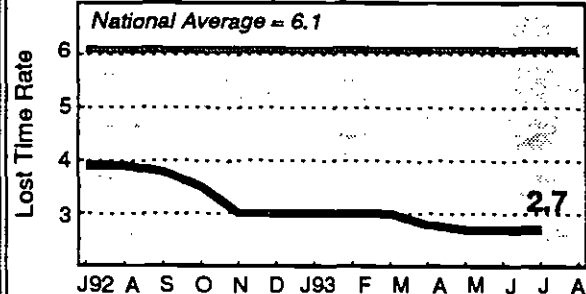


## Safety

Accident Severity Rate - Cumulative



Accident Frequency Rate - Cumulative





## EXECUTIVE SUMMARY

### COST STATUS (in millions )

- Current Budget \$722.4
- Current Forecast \$722.4

### SCHEDULE STATUS

- Current Approved Revenue Operations Date May, 1995
- Design Progress - Actual 99%
- Construction Progress - Actual 66%

### REAL ESTATE STATUS

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

## AREAS OF CONCERN

### ONGOING

#### **Caltrans Station Phase II Contracts Schedule Impacts to Contract H0900 (Safety and Security Communication System ) Access Dates**

- Concern:** Nine Phase II Caltrans stations contracts will impact Contract H0900 completion if turnover dates are not maintained.
- Action:** Workaround scenarios to expedite turnovers to the Contract H0900 contractor are being developed. Progress is being closely monitored for all Caltrans Phase II station construction.
- Status:** Meetings are being held with the contractors to review progress and to determine workarounds as needed.

#### **Caltrans Projects Schedule Impacts to Contract H1400 (Overhead Contact System) Access Dates**

- Concern:** The delayed access along the Century Freeway has caused work inefficiencies for the contractor.
- Action:** The contractor submitted a resequenced schedule.
- Status:** Change Notice 15.01 has been issued to the contractor with revised access and milestone dates.

#### **Caltrans Project CT033 (Wilton to Vermont)/Contract C0600 (Century Trackwork Installation) Access Date Conflict**

- Concern:** Site access for Century trackwork installation, originally scheduled November 1, 1992, has been withheld until the contract milestone is satisfied and construction is completed. Complete access is forecast for September 1, 1993. Several systems contracts may also be affected.
- Action:** Caltrans is working aggressively with its contractor, Ball, Ball & Brosamer, to overcome problems associated with soil exportation.
- Status:** The contractor accepted the partial access plan and the western portion of the project was turned over on August 16, 1993. The remainder of the western portion is scheduled for turnover the first week of September, 1993.

**Contract C0501 (Systems Facilities Sites) Schedule Delays**

- Concern:** Inability of the contractor to meet schedule dates and unavailability of Caltrans sites are impacting Contract H1100 (Automatic Train Control) interface dates.
- Action:** The punchlist for beneficial occupancy on 14 TCCBs/DWPs has been developed. All sites are available to the contractor and he is currently completing the remaining TCCB/DWP buildings.
- Status:** The contractor is working on punchlist items and installing sitework such as driveways, landscaping and irrigation. Final contract completion schedule is slipping and conclusion of beneficial occupancy punchlist has not been achieved within the 30-day requirement after turnover to Contract H1100 (Automatic Train Control) for each site.

**Caltrans Project CT043-2 (I-105 to Studebaker)/Contract C0600 (Century Trackwork Installation) Access Dates**

- Concern:** A later than anticipated LRT access date to this segment may have significant cost impact to some follow-on systems contracts.
- Action:** Workaround scenarios to expedite turnover to the Contract C0600 contractor have been developed. The monitoring of the contractor's construction schedule has been increased to better assess delays and time extensions.
- Status:** Potential schedule impacts to the Metro Green Line opening have been mitigated by resequencing the follow-on activities. However, potential cost impacts due to the projected turnover of this segment for December 15, 1993 are still being addressed.

**KEY ACTIVITIES - AUGUST 1993**

Issued NTP for Contract H1310 (Signage and Graphics) on August 16, 1993.

**KEY ACTIVITIES - PLANNED FOR SEPTEMBER 1993**

No key activities are planned this period.

# **RAIL CONSTRUCTION CORPORATION PROJECT COST REPORT COST BY ELEMENT**

Project: R23 METRO GREEN LINE

Period: Jul 30, 1993 to Aug 27, 1993  
Run Date: Sep 1, 1993  
Units: \$ in Thousands (Truncated)

ELEMENT / DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		INCURRED		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	
T CONSTRUCTION	470,191	0	492,391	3,330	407,303	12,130	243,742	20	214,283	-4,877	483,899	-8,491
S PROFESSIONAL SERVICES	108,562	0	180,477	4	150,547	9	125,902	9	125,902	0	184,341	3,864
R REAL ESTATE	36,927	0	28,522	149	23,994	658	23,985	658	23,985	0	26,047	-2,475
F UTILITY/AGENCY FORCE ACCOUNTS	7,656	0	10,500	5	10,422	0	6,816	0	6,816	0	10,500	0
D SPECIAL PROGRAMS	4,675	0	4,790	0	4,222	2	333	2	333	0	4,844	54
C PROJECT RESERVE	59,613	0	12,238	0	0	0	0	0	0	1,779	19,267	7,048
A PROJECT REVENUE	-16,626	0	-6,518	0	-1,264	0	-605	0	-605	0	-6,518	0
GRAND TOTAL - R23 METRO GREEN LINE	671,000	0	722,402	3,489	595,226	12,801	400,175	690	370,717	-3,097	722,402	0

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

09-Sep-93

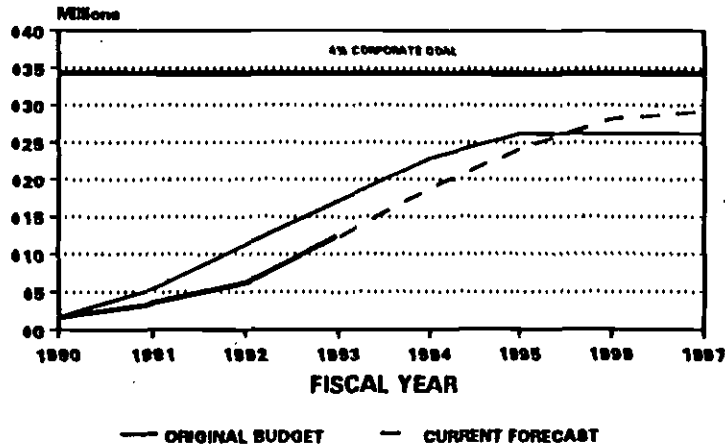
AUGUST 93

STATUS OF FUNDS BY SOURCE

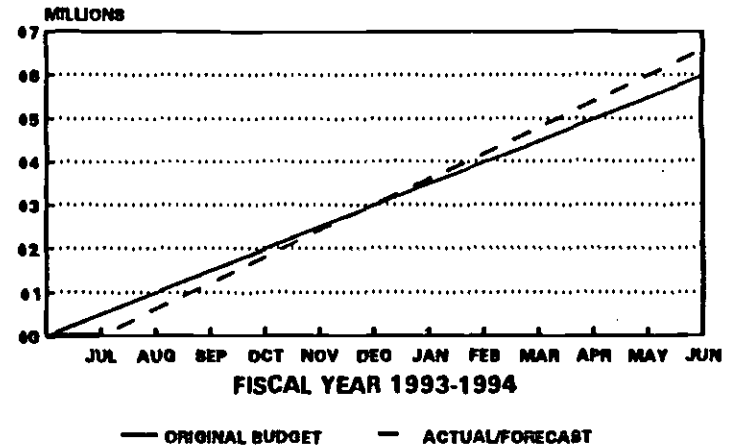
SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
PROP A	\$205,136	\$205,136	\$205,136	100%	\$205,136	100%	\$205,136	100%
PROP C	\$92,368	\$165,582	\$165,582	179%	\$165,582	179% (1)	\$165,582	179%
PROP C (HIGHWAY 25%)	\$158,000	\$0	\$158,000	100%	\$0	0%	\$0	0%
TDM RESERVE REALLOCATION (PROP C 25%)	\$100,000	\$0	\$66,508	67%	\$0	0%	\$0	0%
TOS PROGRAM REALLOCATION (PROP C 25%)	\$50,000	\$0	\$0	0%	\$0	0%	\$0	0%
STATE PROP 108	\$106,000	\$0	\$0	0%	\$0	0%	\$0	0%
ISTEA/PROP C (IMPERIAL HWY GRADE SEPARATION)	\$4,500	\$1	\$0	0%	\$0	0%	\$0	0%
PROP C (ADA)	\$6,400	\$0	\$0	0%	\$0	0%	\$0	0%
TOTAL	\$722,402	\$370,719	\$595,226	82%	\$370,716	51%	\$370,716	51%

NOTE : (1) PROP C HIGHWAY 25% WHEN AVAILABLE WILL REIMBURSE PROP C 40% ADVANCE ALLOCATIONS.  
EXPENDITURES ARE CUMULATIVE THROUGH JULY 1993.

### AGENCY COST GREEN LINE



### FISCAL 1994 AGENCY COSTS GREEN LINE



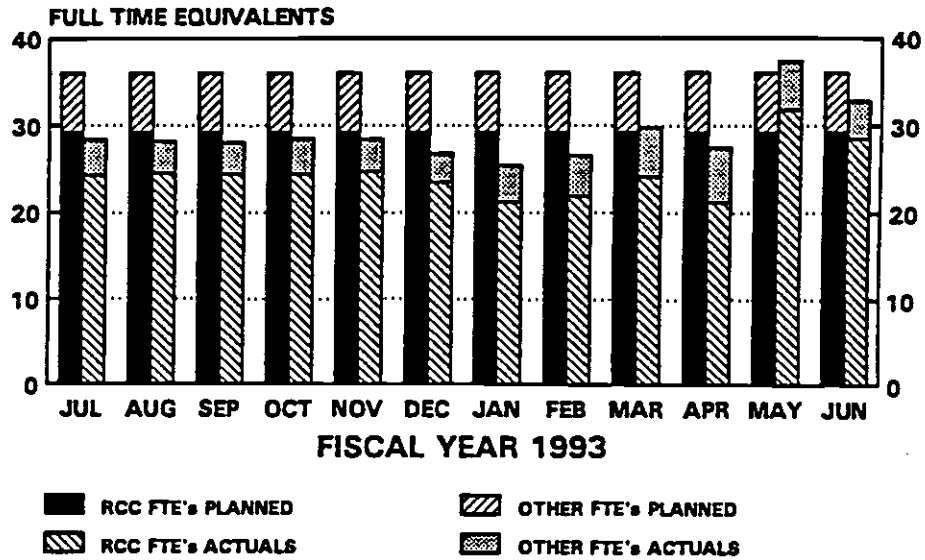
### PROJECT AGENCY COSTS GREEN LINE (\$000)

TOTAL PROJECT BUDGET	\$722,400
ORIGINAL BUDGET	\$ 26,189
BUDGET % OF TOTAL PROJECT	3.6%
CURRENT FORECAST	\$ 29,234
FORECAST % OF TOTAL PROJECT	4.1%
4% CORPORATE GOAL	\$ 28,896

### FISCAL YEAR 1994 AGENCY COSTS GREEN LINE (\$000)

ORIGINAL BUDGET	\$5,965
FORECAST	\$6,577
ACTUAL \$ TO DATE	\$ 18

## STAFFING PLAN VS. ACTUAL GREEN LINE

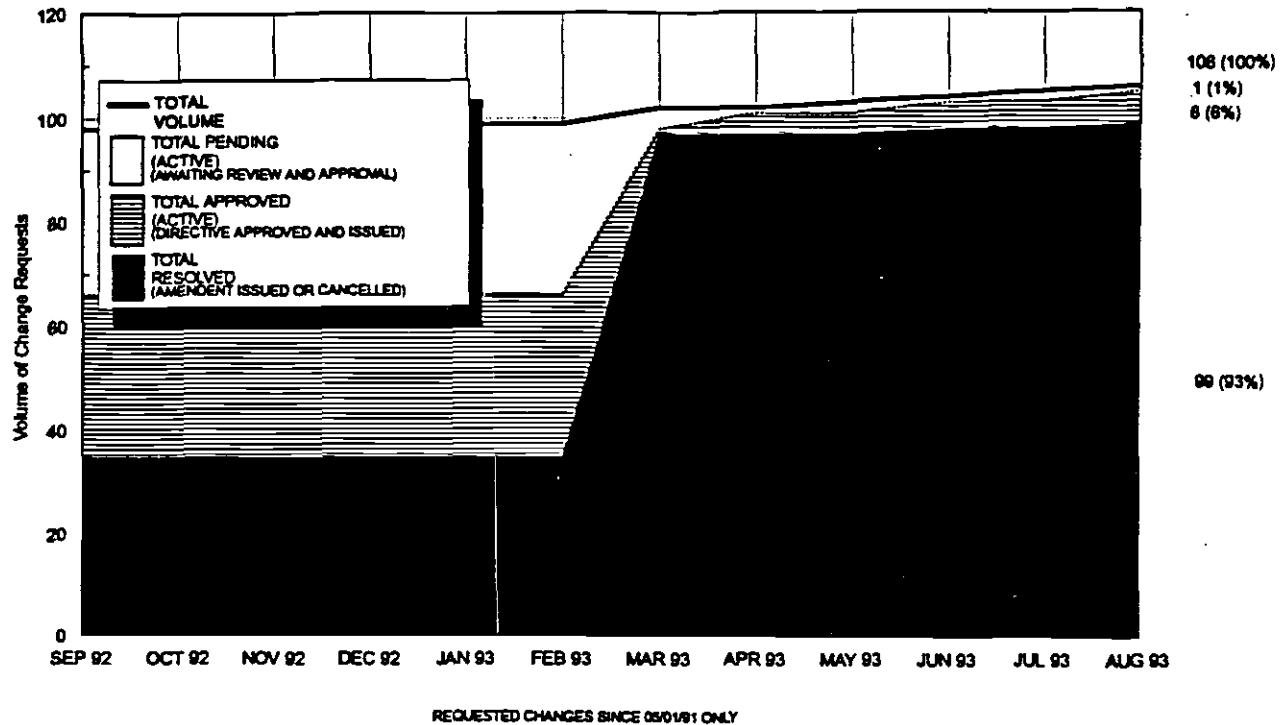


FY'93 BUDGET

## GREEN LINE STAFFING PLAN FISCAL YEAR 1993

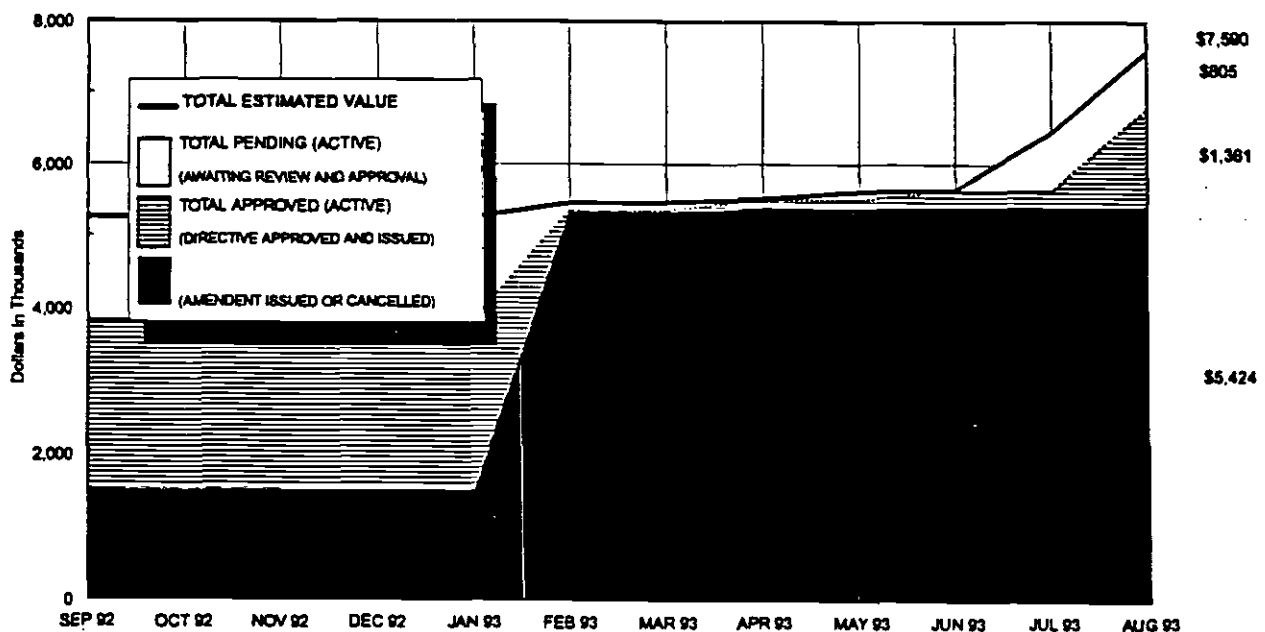
RCC FTE's PLANNED	29
RCC FTE's ACTUAL	29
OTHER FTE's PLANNED	7
OTHER FTE's ACTUAL	4
TOTAL FTE's PLANNED	36
TOTAL FTE's ACTUAL	33

**CONSULTANT CONTRACT CHANGE SUMMARY  
GREEN LINE CONSULTANT CHANGE REQUEST VOLUME**



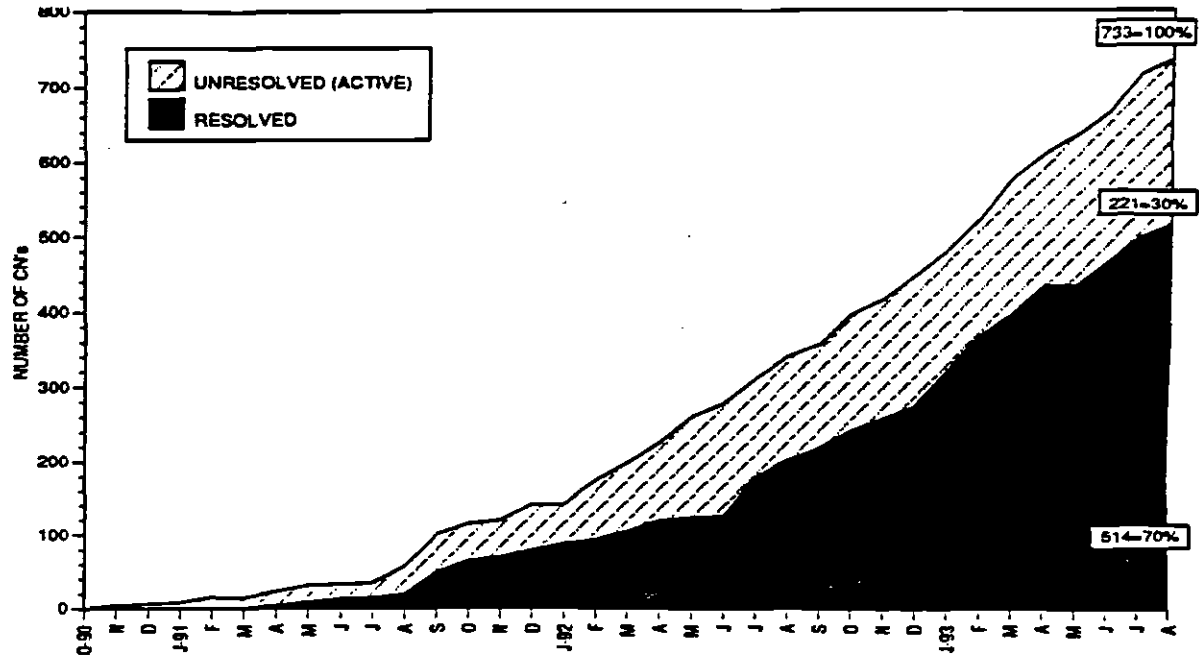
AGE OF UNRESOLVED CONSULTANT CHANGES					
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	2	0	1	4	7
PERCENT	28%	0%	14%	58%	100%

**CONSULTANT CONTRACT CHANGE SUMMARY  
GREEN LINE CONSULTANT CHANGE REQUEST VALUES**



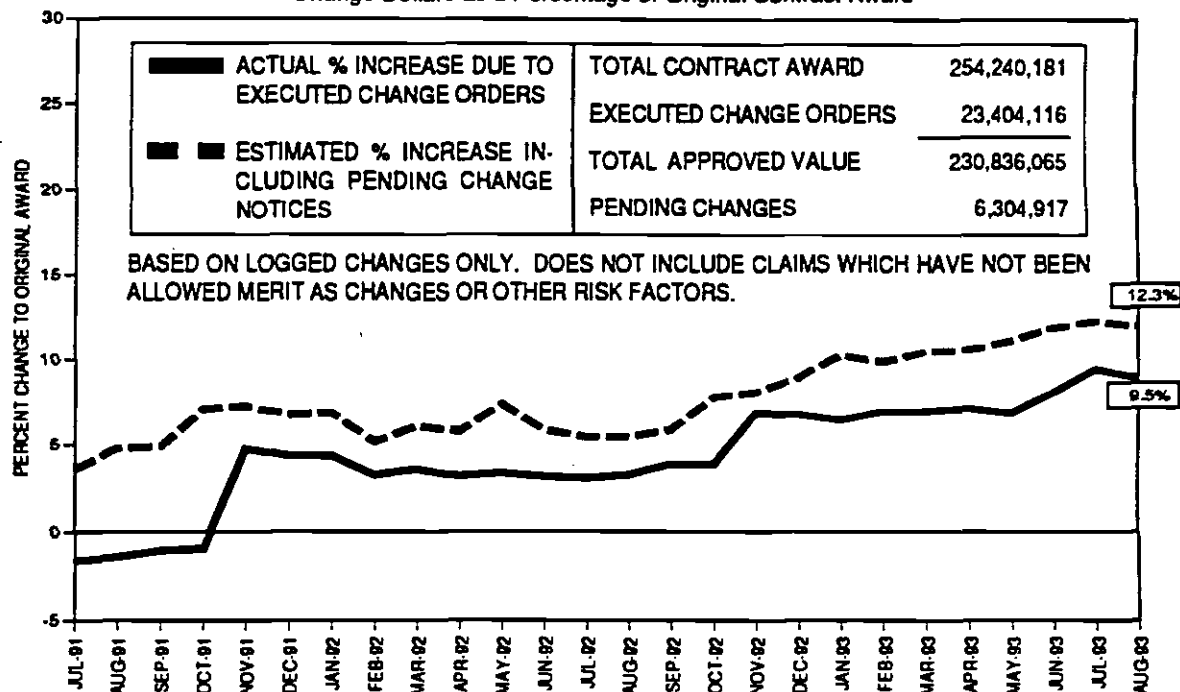


### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Notice Resolution



AGE OF UNRESOLVED CHANGES					
TIME	0-30 days	31-60	61-90	90+	TOTAL ACTIVE
VOLUME	60	28	25	108	221
PERCENT	27%	12%	11%	49%	99%

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

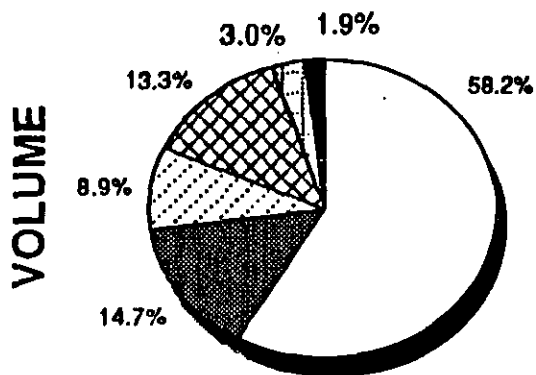


# CONSTRUCTION/PROCUREMENT CHANGE VOLUME BY COST LEVEL AND BASIS

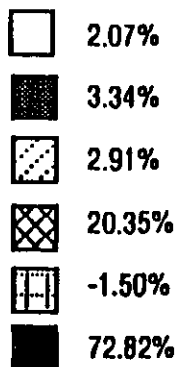
Executed Changes as of 8/27/93

## COST LEVEL

Total: \$23,404,166



**DOLLARS**

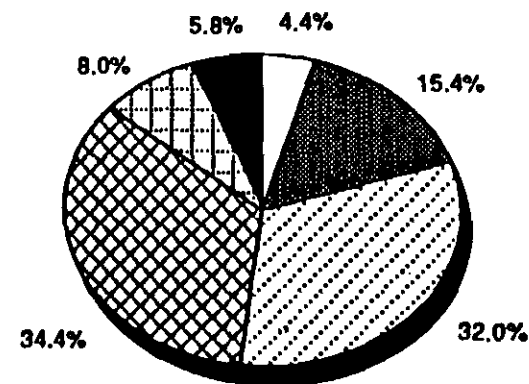
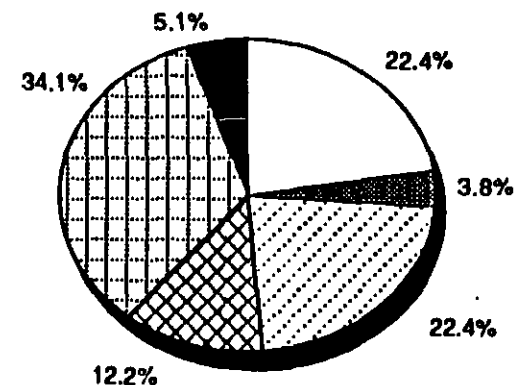


## LEGEND

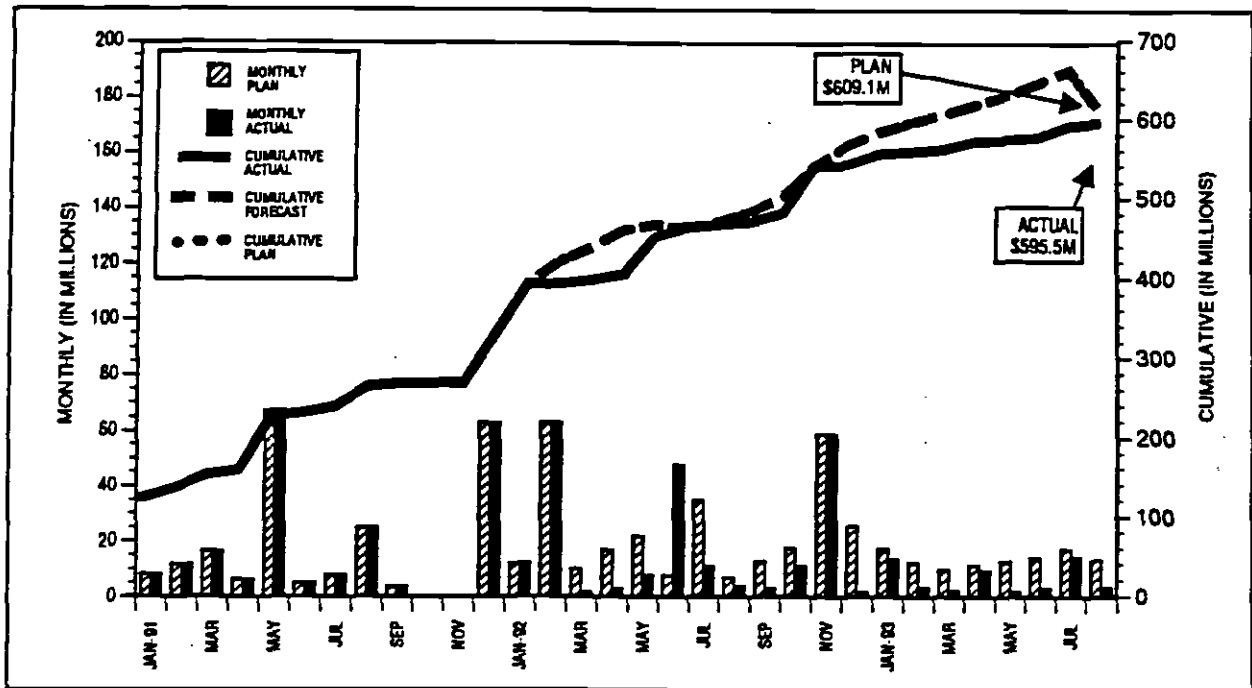
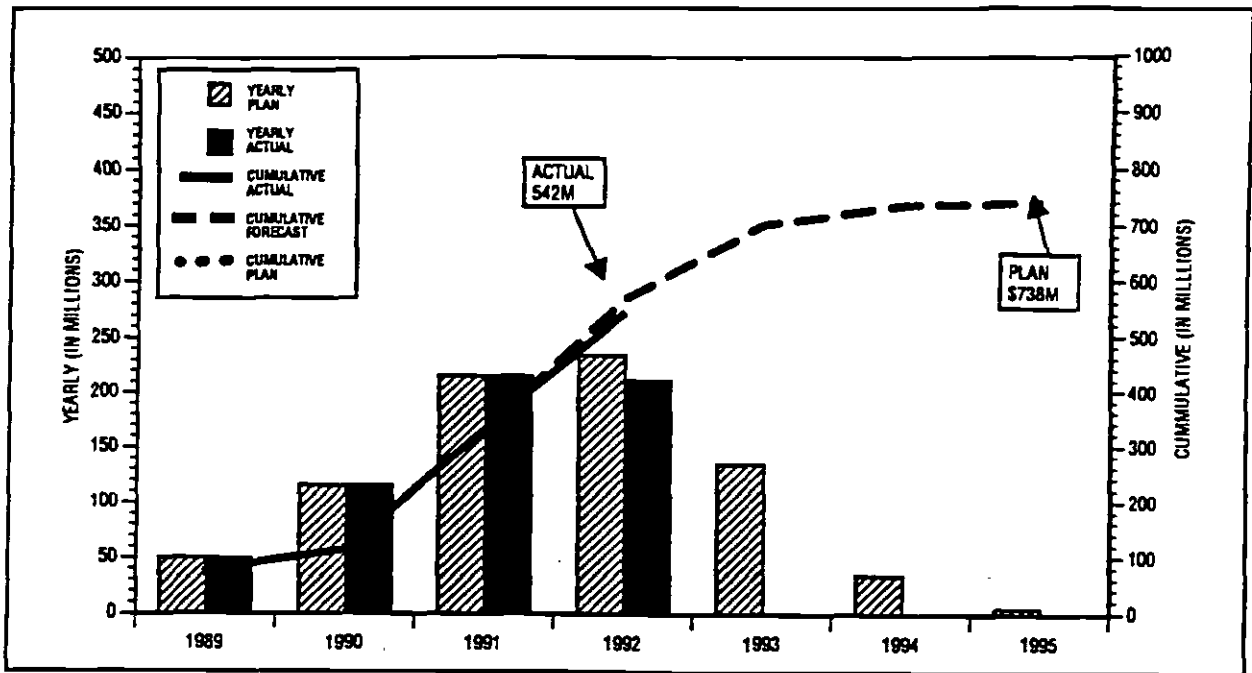
Cost Range		Basis
\$ 0-10K		WORK SCOPE CHANGES
10-25K		SCHEDULE CHANGES
25-50K		DIFFERING CONDITIONS
50-200K		ADMIN. CHANGES
200K-1 MIL		DESIGN CHANGES
ABOVE 1 MIL		MANAGEMENT ISSUES

## BASIS

Total: 370

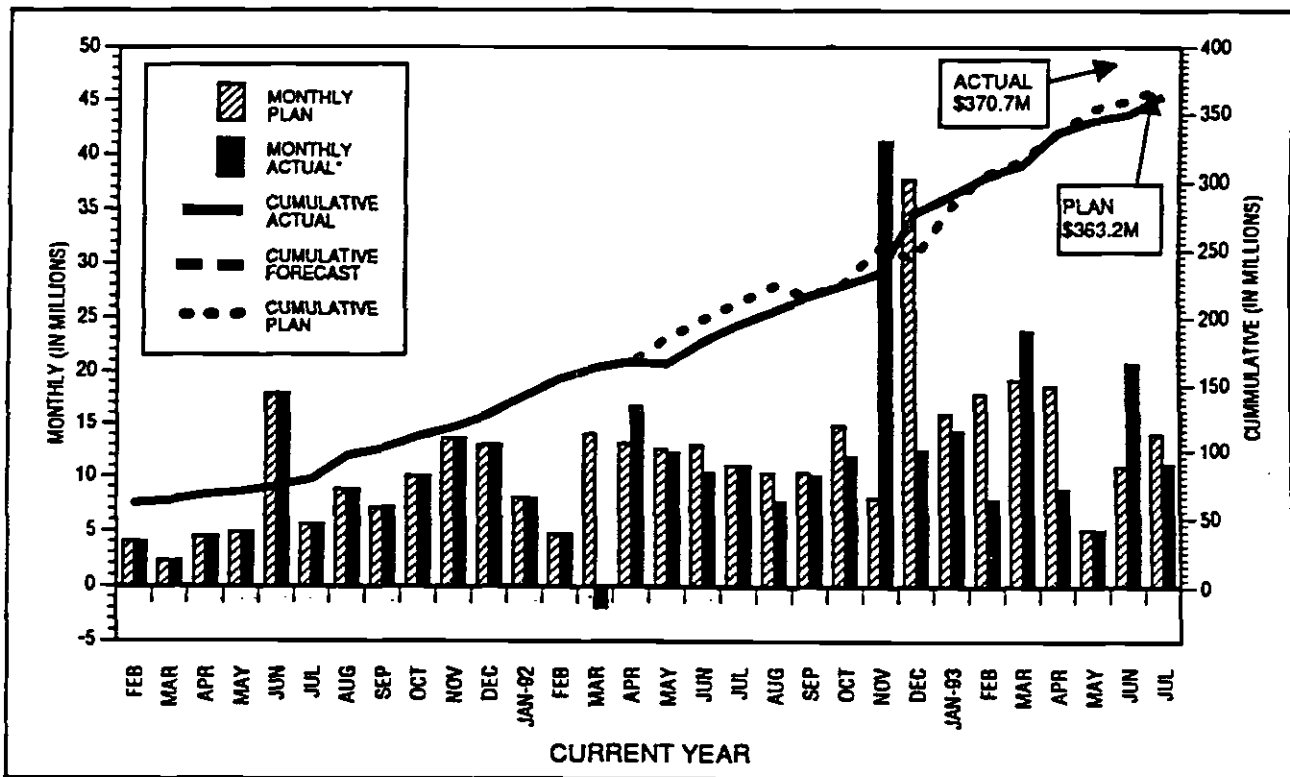
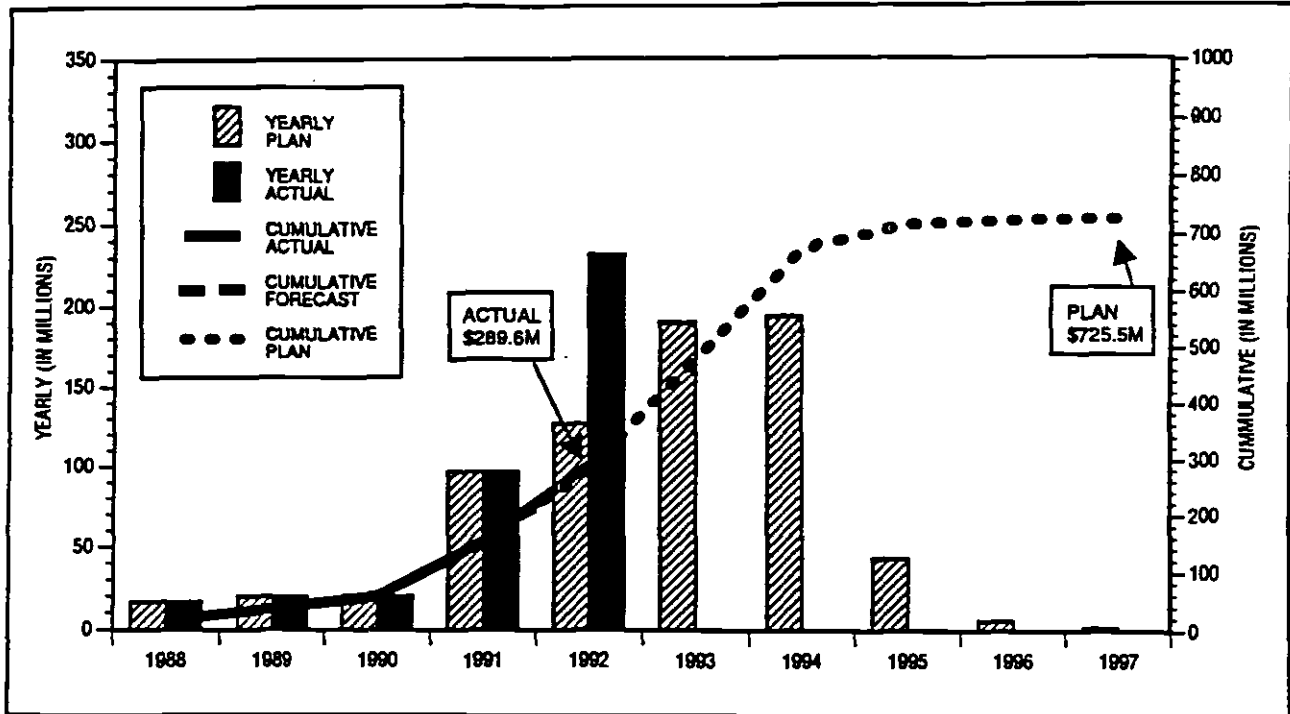


# PROJECT COMMITMENTS



CURRENT YEAR

PROJECT CASH FLOW



\* ACTUAL EXPENDITURES ARE THROUGH PREVIOUS MONTH END.



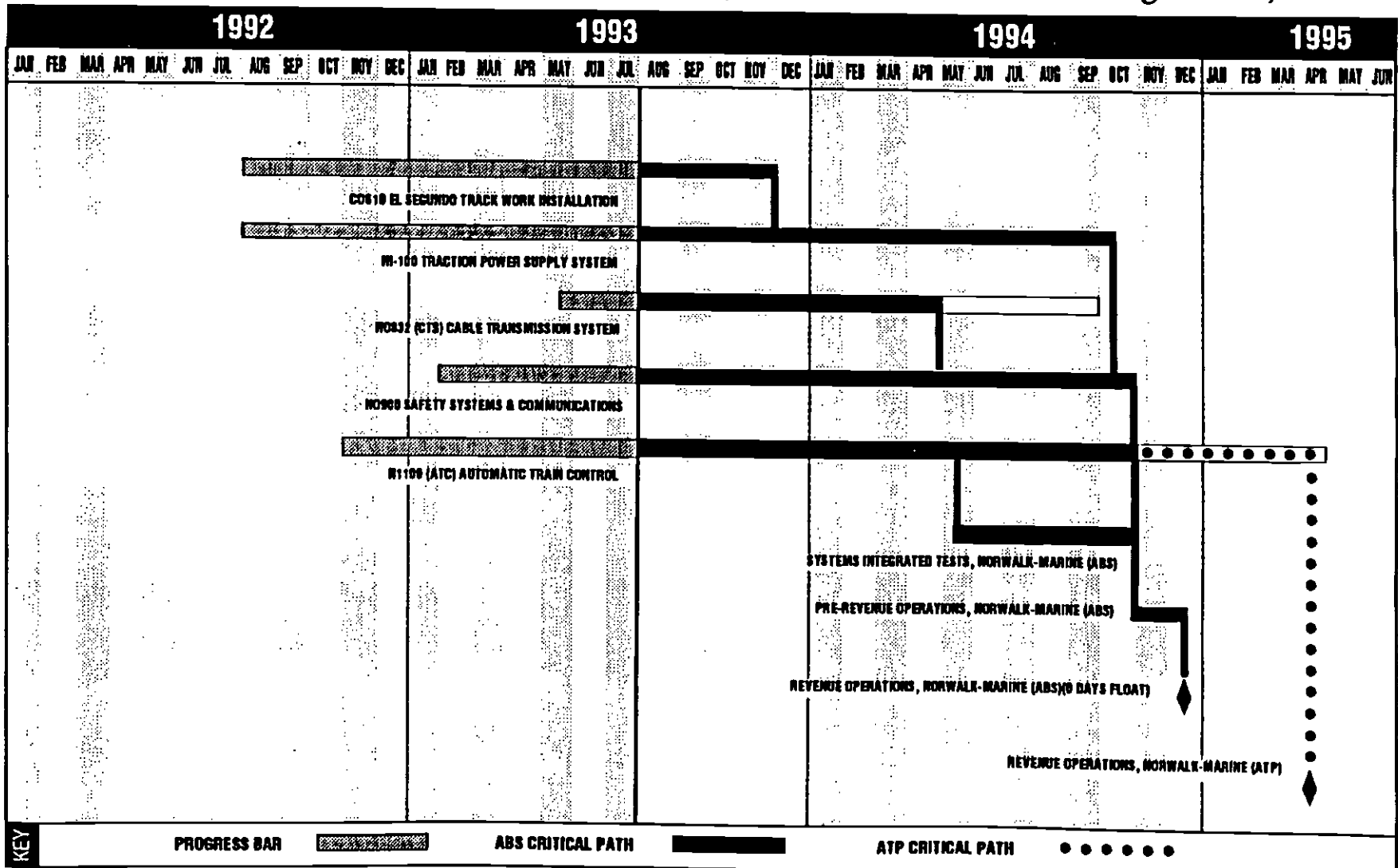
# METRO GREEN LINE

## Norwalk-El Segundo Rail Transit Project

*Critical Path Summary*  
*Data Date: August 28, 1993*

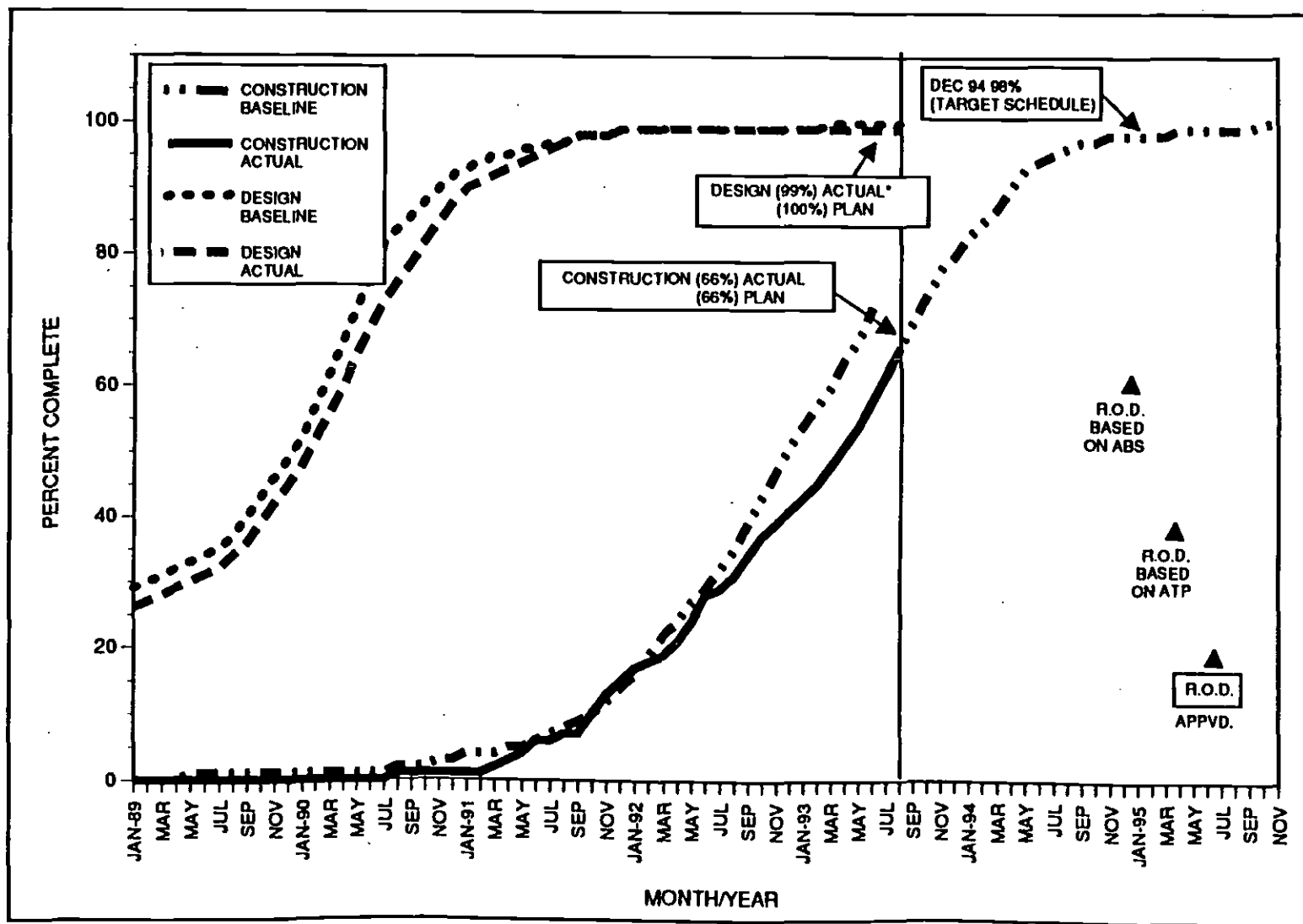
METRO GREEN LINE

AUGUST 1993



MOLE96 CRITICAL PATH MONTHLY 8/31/93

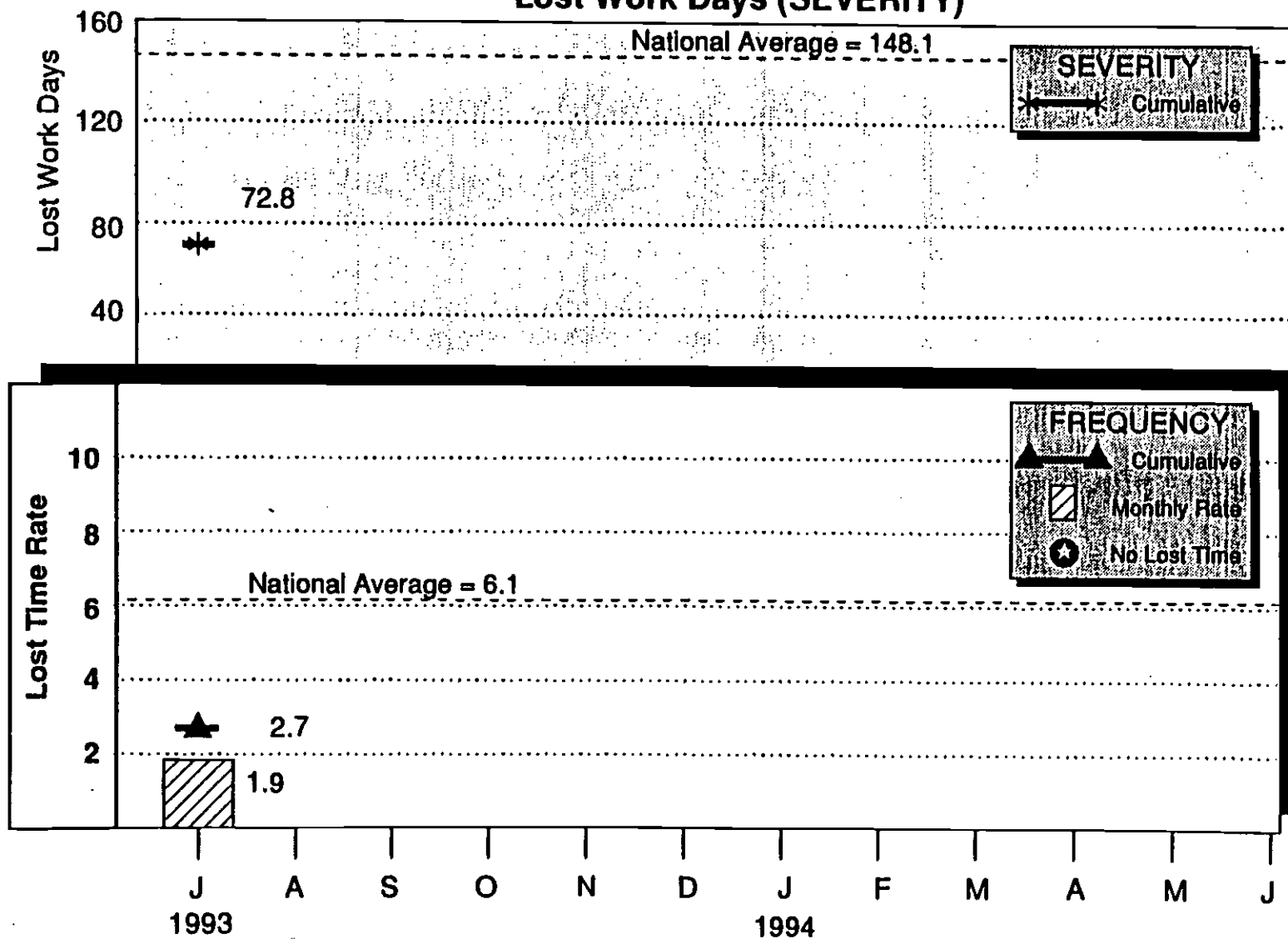
# PROGRESS SUMMARY



\* EXCLUDES NORTH COAST EXTENSION

# METRO GREEN LINE

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



## INVOICE PROCESSING

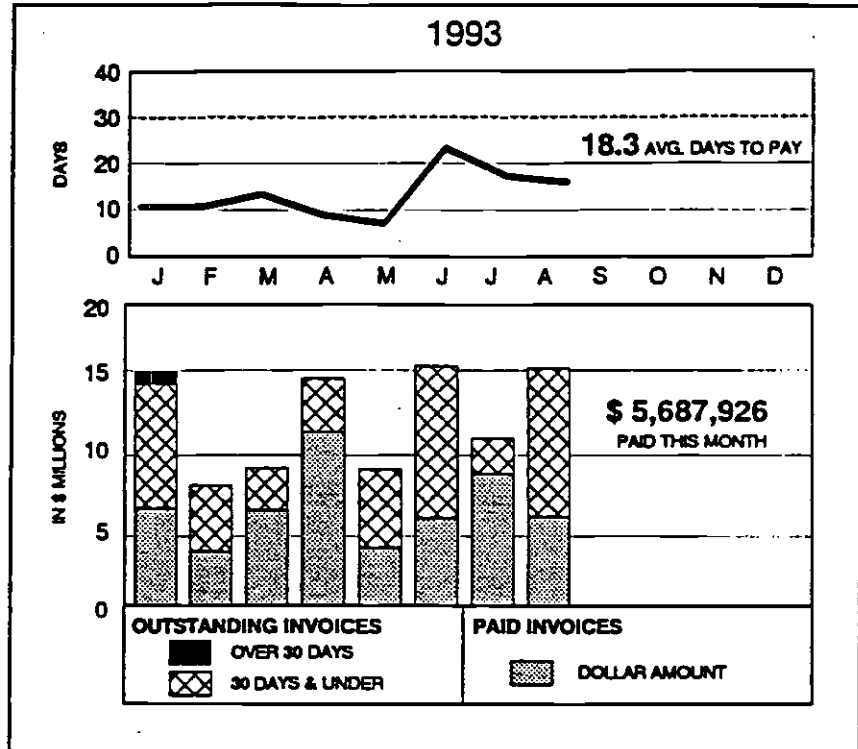
- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 18.3 days.

- 11 invoices were paid for a total value of \$ 5,687,926.

- There were 11 outstanding Construction or Procurement invoices under 30 days old for \$ 9,658,386.

- There were no outstanding Construction or Procurement invoices over 30 days old.

Construction/Procurement Invoice Status



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

Month	Construction/Procurement Invoices				Other Invoices			
	30 Days and Under		Over 30 Days		30 Days and Under		Over 30 Days	
	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value
APR 1993	7	3,450,254	0	0	22	2,482,619	3	34,358
MAY 1993	8	5,068,890	0	0	26	5,097,205	5	47,916
JUN 1993	14	9,833,458	0	0	31	6,104,977	9	97,388
JUL 1993	5	2,331,274	0	0	26	2,799,970	8	88,540
AUG 1993	11	9,658,386	0	0	27	1,907,917	2	15,879



## 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.
	Completed or Not Applicable

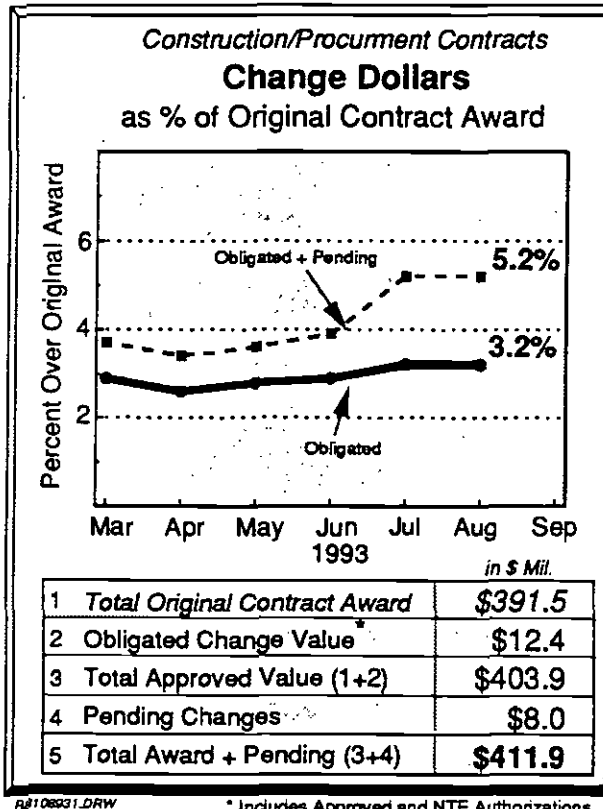
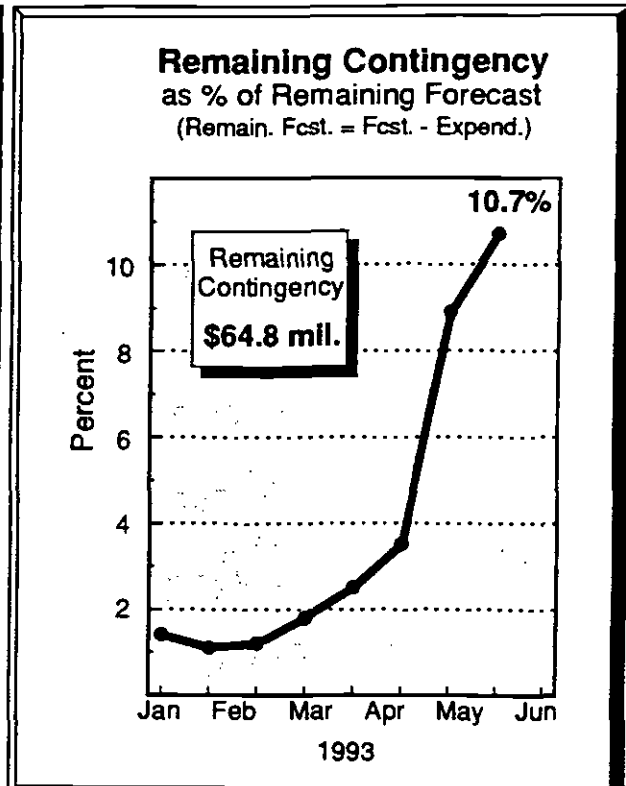
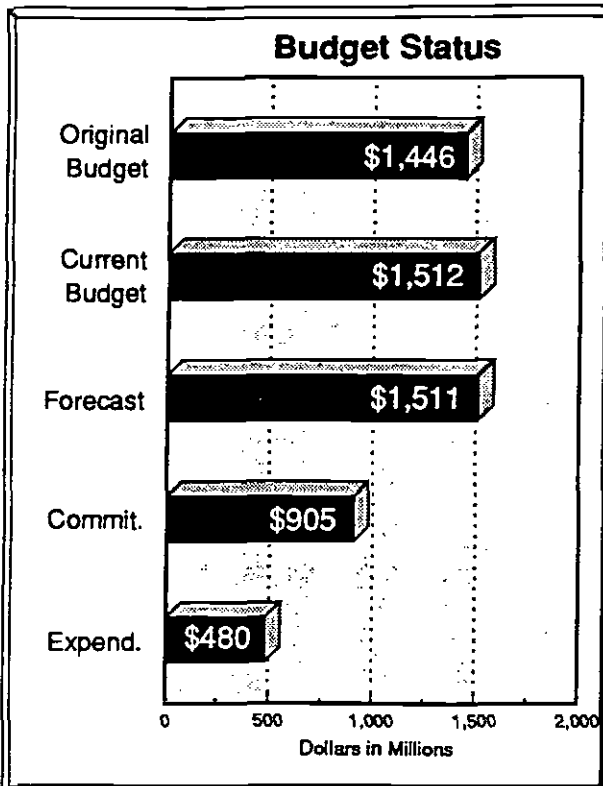
CONTRACT CLOSE OUT STATUS  
METRO RED LINE SEGMENT 1

CONTRACT NUMBER	DESCRIPTION	CLOSE OUT STATUS					COMMENTS	PROJECTED CLOSE-OUT DATE
		CLAIMS/CHANGE ORDERS	FINAL PROG. PAYMENT	FINAL RELEASE	FINAL ACCEPT. CERTIF.	EQUIP. FINAL DELIV.		
A130	Yard Lead Transfer Zone	0	0	0	0	0	Contract closed - pending final release.	Sept 93
A141	U/S - 5th & Hill Tunnels						Contract closed.	
A190	Misc. Const/Ancillary Serv.	0	0	0	0	0	Finalizing closeout package.	Oct 93
A610/115	Track Installation	0	0	0	0	0	Final closeout pending claims litigation.	TBD
A612	Contact Rail			0			Contract closed - pending final release.	
A615	C.R. Coverboard						Contract closed.	
A620	Automatic Train Control	0	0	0	0		Outstanding claims.	Aug 93
A630	Traction Power Equipment		0	0			Contract closed - pending final release.	
A631	TPE Install			0			Contract closed - pending final release.	
A640	Communications	0	0	0	0	0	Active contract.	Jan 94
A650	Passenger Vehicles	0	0	0	0	0	Active contract.	TBD
A710	Escalators & Elevators		0	0			Contract closed - pending final release.	
A740	Ventilation Equipment						Contract closed.	
A760B	Edge Lights						Contract closed.	

## REMAINING ACTIVITIES

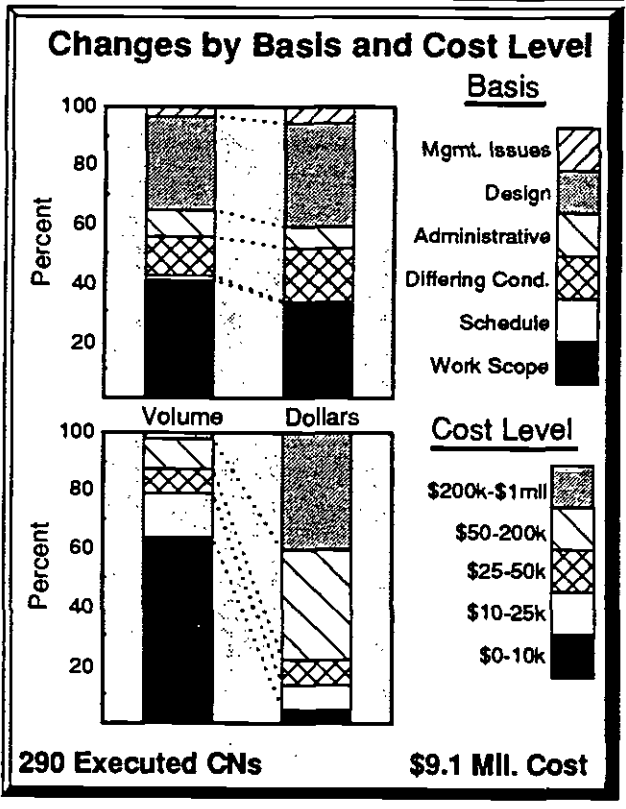
- Continue support and test of Breda vehicles.
- Continue supporting Grant closeout activities.
- Negotiate closeout of professional services contracts.
- Continue closeout of third party work orders.

## METRO RED LINE SEGMENT 2 FINANCIAL STATUS



R#108931.DRW

\* Includes Approved and NTE Authorizations



## METRO RED LINE SEGMENT 2

### SCHEDULE AND SAFETY STATUS

#### MTA Critical Activities

October 1993

- ✓ **AWARD APPROVAL**  
No contract awards this month.

#### Employment Status

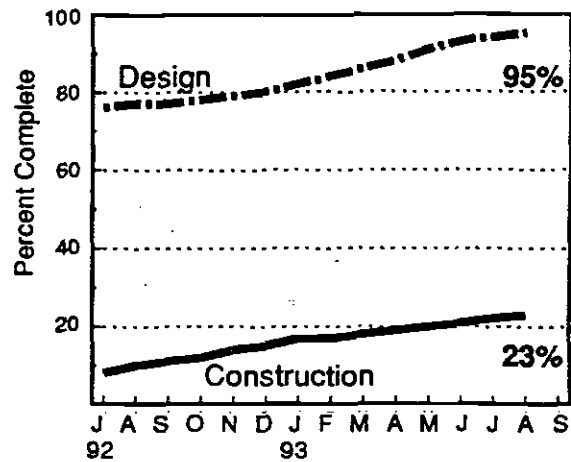
Months of Employment Provided

**13,932**

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

#### Schedule Status

PROGRESS



Revenue Operation Date:

Wilshire Corridor **July 1996**

Vermont/Hollywood Corridor **Sept 1998**

#### Schedule Status

CRITICAL PATH - 1 Year Outlook

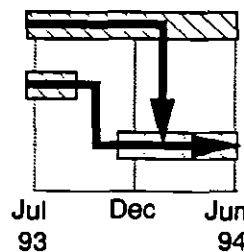
Wilshire

**19 days ahead  
(positive float)**

B211 Construction  
Wilshire/Vermont Station (Stage I)

B215 Design/Contract  
Wilshire/Vermont Sta. (Stage II)

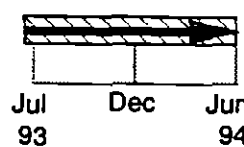
B215 Construction



Vermont/Hollywood

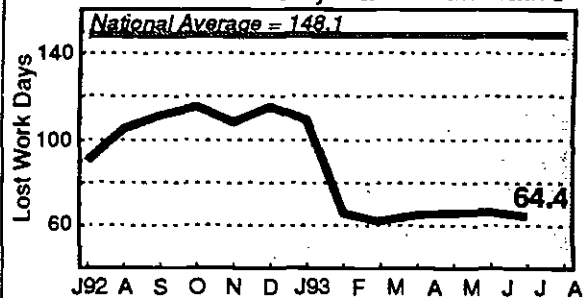
**16 days behind  
(negative float)**

B251 Construction  
Vermont/Hollywood Tunnel

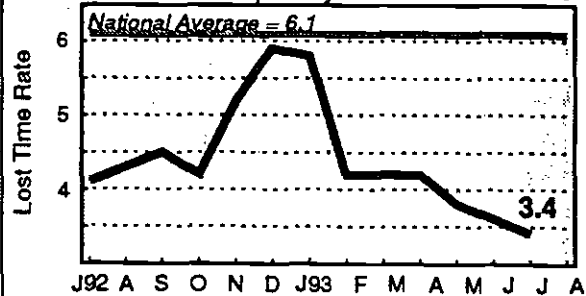


#### Safety

Accident Severity Rate - Cumulative



Accident Frequency Rate - Cumulative



## EXECUTIVE SUMMARY

## COST STATUS

- in \$ million
- Current Budget \$1511.7
  - Current Forecast \$1511.5  
(including new requirements)
  - The current forecast is less than the current budget by \$200 thousand to reflect a \$3.3 million dollar reduction in the Transit Enhancements forecast for several unawarded contracts.

## SCHEDULE STATUS

- Current Revenue Operation Dates
 

Wilshire Corridor	July	1996
Vermont/Hollywood Corridor	September	1998
- Design Progress 95%
- Construction Progress 23%

## REAL ESTATE

	NUMBER OF PARCELS	NUMBER OF PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)	PARCELS NOT AVAILABLE (BEHIND SCHEDULE)	
				NUMBER	AVG. DAYS BEHIND
THIS MONTH	86	71	8	7	104
LAST MONTH	86	68	9	9	72

## EXECUTIVE SUMMARY (CON'T)

- There are now 86 parcels of land 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 2 part-takes. Six additional parcels have been added for temporary right-of-entry.

To date, there have been 71 parcels acquired. Forty-two of these parcels were acquired through condemnation and the remaining were negotiated acquisitions.

## PUBLIC AFFAIRS

- On the Wilshire Corridor, the community surrounding Contract B221, Wilshire/Normandie Station and Line, was apprised of the impending 10 month closure of Ardmore Avenue during side structure activities. A proposal regarding trucking issues at Contract B251, Vermont/Hollywood Tunnel was presented to the Los Angeles Unified School District. Staff also met with the Hollywood Chamber of Commerce and Trust to discuss display options during the temporary removal and storage of the Hollywood Walk of Fame stars during construction activities on Vine Street.

## AREAS OF CONCERN

### ONGOING

#### Contract B251, Vermont/Hollywood Tunnels - Dewatering Operations

**Concern:** A halt in tunneling operations in the HAR tunnel was called on July 8, 1993, due to encountering excessive ground water. The HAL tunnel, which had not begun at the time, has since been driven to within 100 feet of the HAR tunnel. Both tunnels remain inactive until the groundwater elevation can be lowered.

**Action:** A total of 39 wells are currently installed to alleviate the problem: 29 wells are pumping and 10 wells are being developed.

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

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

**Status:** The dewatering process is proceeding and the current pumping rate is 900 gallons per minute.

**Delay in Real Estate Acquisitions**

**Concern:** There are 7 parcels currently being projected in the worst case scenario as not being available by the scheduled "need dates."

Of the 7 parcels showing a negative float, 4 are in negotiations and the remaining were in the appraisal process.

There remains a good probability that all parcels will be available before they are needed for construction to proceed.

**Action:** Maintaining schedule to avoid negative float.

**Status:** It remains a high probability that all parcels will be acquired by the need dates.

**Contract B251, Vermont/Hollywood Tunnels - Sixth and Vermont Channel**

**Concern:** Initial drilling for geotechnical instrumentation indicated a channel filled with trash and rubble. There are indications of hydrocarbon contamination and wet, unstable soil conditions at the tunnel level.

**Action:** Technical Services devised a plan for drilling test holes to investigate the condition.

**Status:** Specialty driller has drilled test holes and a report on the findings is being prepared.

**AREAS OF CONCERN (CON'T)****RESOLVED****Contract B251, Vermont/Hollywood Tunnels - Real Estate**

**Concern:** Difficulties continue in securing a rental real estate parcel from PacBell at 1255 North Vermont Avenue. The installation of the contaminated water treatment plant (to treat the dewatering well discharge) and delays in obtaining city required permits may prevent complete dewatering in advance of tunnel excavation.

**Action:** The MTA's Environmental Department obtained the required rental agreements and installed the water treatment plant.

**Status:** A dewatering system is currently in operation.

**Contract B251, Vermont/Hollywood Tunnels - Tunnel Shield Machine Damage**

**Concern:** The Vermont AR tunnel shield machine became damaged during initial mining operations (245 ft), effectively halting tunnel operations.

**Action:** The Contractor and the shield designer investigated the cause of the out-of-round deformity and determined a repair procedure in order to determine a solution and repair procedure.

**Status:** The repair of the tunnel machine was completed on August 16, 1993.

## FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

### ONGOING

#### March 1993, Financial Management Information System

Concern: The MTA should focus on the integration of the accounting systems and integration with the RCC's cost management system.

Action: The plans for the FIS integration are being reviewed and specific actions are being defined at this time.

Status: A team assigned to this project has been meeting and plans to issue a request for bids before the end of October.

NEW NONE

RESOLVED NONE



## KEY ACTIVITIES - AUGUST

### Design

- Issued the prefinal design submittals for Contract B642, Public Address Procurement.
- Issued the final design submittals for Contract B261, Vermont/Sunset Station; Contract B643, Close Circuit Television Procurement; and Contract B644, Cable Transmission Equipment Procurement.
- Issued camera ready submittals for Contract B215, Wilshire/Vermont Station, Stage II; Contract B271, Hollywood/Western Station; and Contract B610, Trackwork Installation.

### Construction

- Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line, completed placement of the pump house. Continued placement of embankment fill and reinforced concrete service road in the lake bottom.
- Contract B211, Wilshire/Vermont Station Stage I, placed upper track level concrete through slab #8, and completed lower track level interior walls.
- Contract B213, Wilshire/Vermont Station Stage II Site Demolition, concluded demolition procedures.
- Contract B221, Wilshire/Normandie Station and Line, completed the BL tunnel walkway and proceeded with the BR tunnel walkway. The placement of the north and south mezzanine walls progressed.
- Contract B231, Wilshire/Western station and Crossover, continued station appendages work, concreting activities in the station entrance and structural backfill.
- Contract B251, Vermont/Hollywood Tunnels, began underpinning pile installation, production of precast segments is 61% complete and tunnel operations continued along the Vermont Corridor. The Hollywood Corridor tunnels remain on hold while dewatering continues.
- Contract B630, Traction Power Substation Equipment, several submittals were approved.

- Contract B740, Ventilation Equipment, efforts focused on resubmitting several drawings or data; purchase orders were placed, and the initial quality control audit of the subcontractors' shop was completed.
- Contract B745, Air Handlers & TPSS Fans, progressed with the approval of various submittals and air handling unit components (fans, actuators motors) are being procured.

**KEY ACTIVITIES - PLANNED FOR SEPTEMBER****Design**

- Issue in-progress design submittal to Contract B216, Wilshire/Vermont Site Restoration.
- Issue re-configured final design submittal for Contract B641, Radio.
- Issue final design submittals for Contract B642, Public Address Procurement; Contract B647, Gas Monitoring Equipment; Contract B648A, Communications Installation for Wilshire Corridor.
- Issue camera ready submittals for Contract B261, Vermont/Sunset Station; Contract B643, Close Circuit Television Procurement, and Contract B644, Cable Transmission Equipment Procurement.

**Construction**

- Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line, continue to place asphalt lake lining, excavate and placement activities at the emergency exit, and continue with the restoration of the lake bottom.
- Contract B211, Wilshire/Vermont Station Stage I, continue to work on shoring and rebar in preparation for the placement of the ancillary slabs.
- Contract B221, Wilshire/Normandie Station and Line, continue roof slabs and interior walls of the station and shafts. Conclude the service walkways in the tunnels and the installation of the support system in the turnout structure.
- Contract B231, Wilshire/Western station and Crossover, continue side structure support and excavation, electrical and finishing work in the Station.
- Contract B251, Vermont/Hollywood Tunnel, continue with the VAR and VAL tunnel excavation. Continue the excavation of crosspassage #18.
- Contract B630, Traction Power Substation Equipment, continue with the review of switchgear data sheets.
- Contract B740, Ventilation Equipment, proceed with the fabrication of the sound attenuators and ventilation equipment for Contract B231.
- Contract B745, Air Handlers & TPSS Fans, conclude the final assembly of the air handling components by Governair.

RAIL CONSTRUCTION CORPORATION  
METRO RAIL PROJECT SEGMENT 2  
(IN THOUSAND OF DOLLARS)

STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	* COMMITMENTS		EXPENDITURES (4)		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
FTA-SECTION 3	\$667,000	\$597,653	\$374,102	56%	\$190,140	29%	\$188,408	28%
FTA-SECTION 3 DEFERRED LOCAL SHARE (1)			\$44,546		\$33,852		\$32,608	
STATE	\$185,985	\$133,000	\$133,000	72%	\$133,000	72%	\$133,000	72%
MTA	\$439,447	\$76,377	\$268,851	61%	\$83,922	15%	\$65,167	15%
CITY OF LA	\$96,000	\$49,600	\$59,016	61%	\$35,432	37%	\$31,456	33%
BENEFIT ASSESS.	\$58,000	\$0	\$21,397	37%	\$21,397	37%	\$0	0%
COST OVERRUN ACCOUNT (2)	\$0	\$19,635	\$0	0%	\$0	0%	\$0	0%
BENEFIT ASSESS. SHORTFALL (3)	\$0	\$0	\$0	0%	\$0	0%	\$21,397	
<b>TOTAL</b>	<b>\$1,446,432</b>	<b>\$876,265</b>	<b>\$900,912</b>	<b>62%</b>	<b>\$477,743</b>	<b>33%</b>	<b>\$470,036</b>	<b>32%</b>
PROP C: AMERICAN DISABILITY ACT	\$5,109	\$0	\$351	7%	\$167	3%	\$167	3%
PROP A: TRANSIT ENHANCEMENTS	\$59,920	\$0	\$4,129	7%	\$2,506	4%	\$2,506	4%
<b>GRAND TOTAL</b>	<b>\$1,511,461</b>	<b>\$876,265</b>	<b>\$905,392</b>	<b>60%</b>	<b>\$480,416</b>	<b>32%</b>	<b>\$472,709</b>	<b>31%</b>
(1) FTA Section 3 Deferred Local Share. Commitments and expenditures are effective starting July 1st. 1992. (2) The Cost Overrun Account includes CAPRA funds only. (3) The current Benefit Assessment District revenue shortfall is being funded by MTA. (4) Expenditures are cumulative through July 1993.								

RAIL CONSTRUCTION CORPORATION  
PROJECT COST REPORT  
COST BY ELEMENT

Project : METRO RED LINE SEGMENT 2

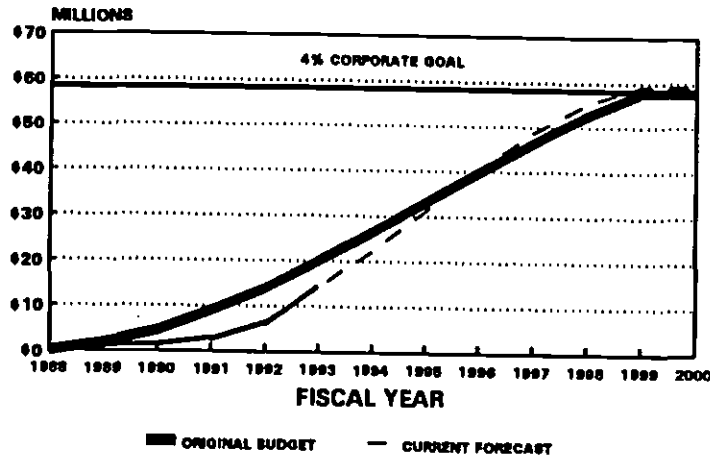
Status Period: 30-July-93 to 27-August-93  
Status Date : 27-August-93  
Units : Dollars in Thousands

ELEMENT / DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		INCURRED COSTS		EXPENDITURES (1)		CURRENT FORECAST		FORECAST VARIANCE
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
T Construction	893,000	0	948,352	21,453	495,329	6,102	257,072	3,632	243,375	(8,585)	915,489	(32,863)
S Professional Services	289,150	0	354,803	(1,491)	323,284	1,620	165,371	1,378	161,829	348	341,538	(13,265)
R Real Estate	79,827	0	83,568	(3,733)	68,441	186	66,849	186	66,849	0	89,751	6,183
F Utility/Agency Force Accounts	36,668	0	18,775	(76)	12,890	567	5,567	567	5,567	0	28,272	9,497
D Special Programs	2,044	0	4,402	110	968	7	305	7	305	(800)	6,923	2,521
C Contingency	145,743	0	36,532	0	0	0	0	0	0	9,037	84,759	28,227
A Project Revenue	0	0	0	0	0	0	(182)	0	(182)	0	(300)	(300)
<b>PROJECT TOTAL</b>	<b>1,446,432</b>	<b>0</b>	<b>1,446,432</b>	<b>18,263</b>	<b>900,912</b>	<b>8,482</b>	<b>494,982</b>	<b>5,770</b>	<b>477,743</b>	<b>0</b>	<b>1,448,432</b>	<b>0</b>

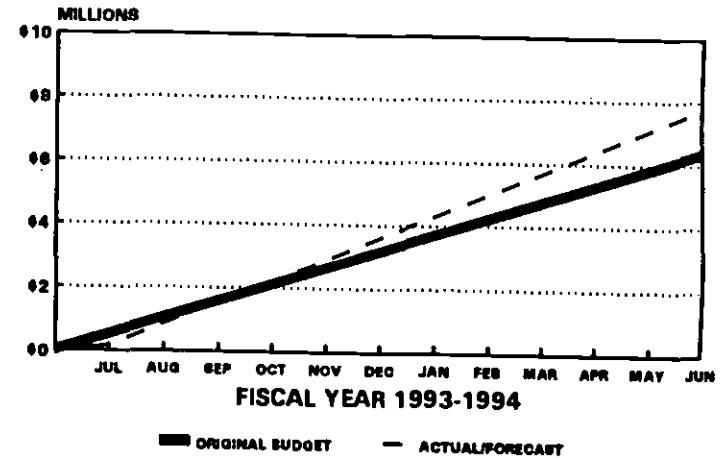
<b>NEW REQUIREMENTS</b>												
T Construction	0	0	55,024	0	15	0	0	0	0	(5,309)	54,705	(319)
S Professional Services	0	0	8,226	0	4,465	0	4,025	241	2,870	0	8,226	0
R Real Estate	0	0	0	0	0	0	0	0	0	0	0	0
F Utility/Agency Force Accounts	0	0	0	0	0	0	0	0	0	0	0	0
D Special Programs	0	0	0	0	0	0	3	0	3	0	98	98
C Contingency	0	0	2,000	0	0	0	0	0	0	2,000	2,000	0
A Project Revenue	0	0	0	0	0	0	0	0	0	0	0	0
<b>NEW REQUIREMENTS TOTAL</b>	<b>0</b>	<b>0</b>	<b>65,250</b>	<b>0</b>	<b>4,480</b>	<b>0</b>	<b>4,028</b>	<b>241</b>	<b>2,873</b>	<b>(3,309)</b>	<b>65,029</b>	<b>(221)</b>
<b>SEGMENT 2 PROJECT TOTAL</b>	<b>1,446,432</b>	<b>0</b>	<b>1,511,682</b>	<b>18,263</b>	<b>905,392</b>	<b>8,482</b>	<b>499,010</b>	<b>6,011</b>	<b>480,416</b>	<b>(3,309)</b>	<b>1,511,461</b>	<b>(221)</b>

(1) EXPENDITURES ARE FOR THE PERIOD OF 25-JUN-93 TO 30-JUL-93  
NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS.

### AGENCY COSTS RED LINE SEGMENT 2



### FISCAL YEAR 1994 AGENCY COSTS RED LINE SEGMENT 2



### PROJECT AGENCY COSTS RED LINE SEGMENT 2 (\$000)

TOTAL PROJECT BUDGET	\$1,446,432
ORIGINAL BUDGET	\$57,840
BUDGET % OF TOTAL PROJECT	4.0%
CURRENT FORECAST	\$59,506
FORECAST % OF TOTAL PROJECT	4.1%

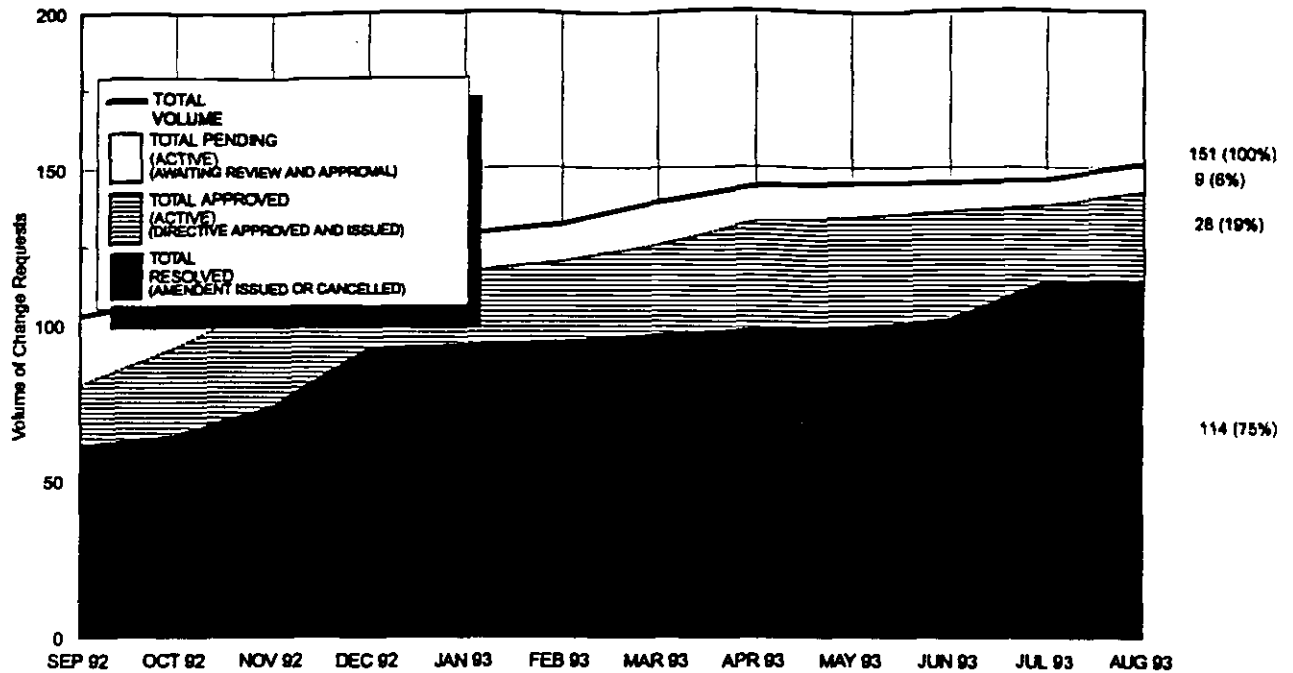
### FISCAL YEAR 1994 AGENCY COSTS RED LINE SEGMENT 2 (\$000)

ORIGINAL BUDGET	\$6,376
CURRENT FORECAST	\$7,776
ACTUAL TO DATE	\$ 153

**STAFFING PLAN VS. ACTUAL**  
**RED LINE SEGMENT 2**

**THIS INFORMATION WAS UNAVAILABLE AT THE TIME OF PUBLICATION**

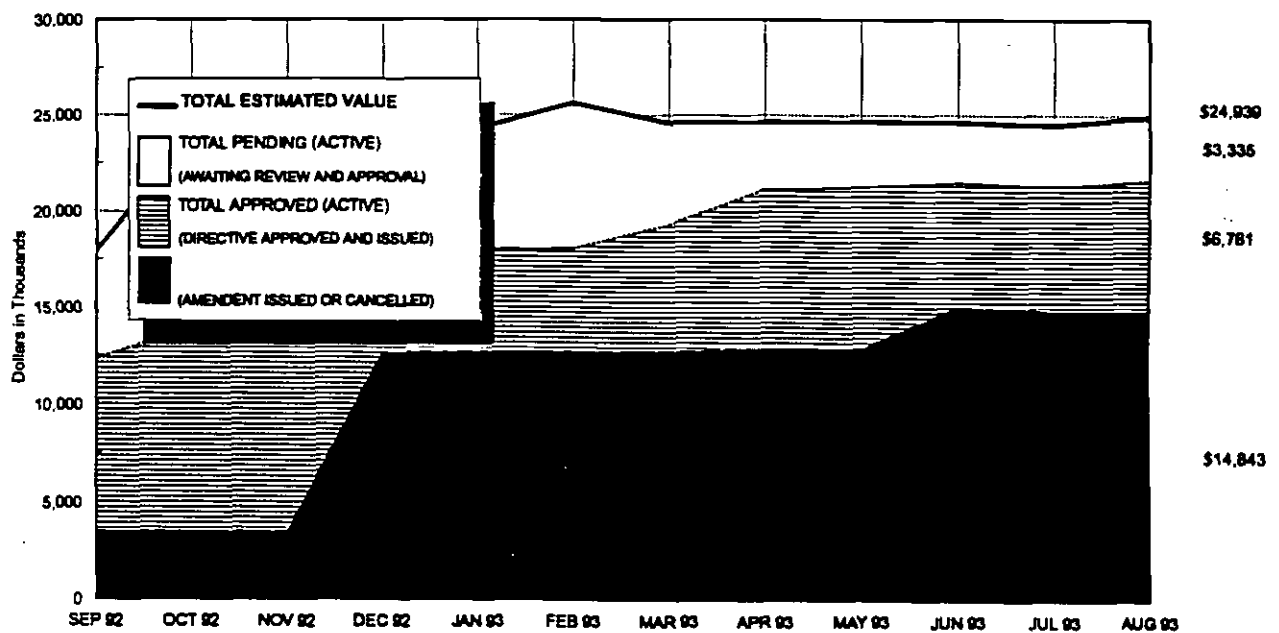
CONSULTANT CONTRACT CHANGE SUMMARY  
RED LINE SEG-2 CONSULTANT CHANGE REQUEST VOLUME



REQUESTED CHANGES SINCE 05/01/91 ONLY

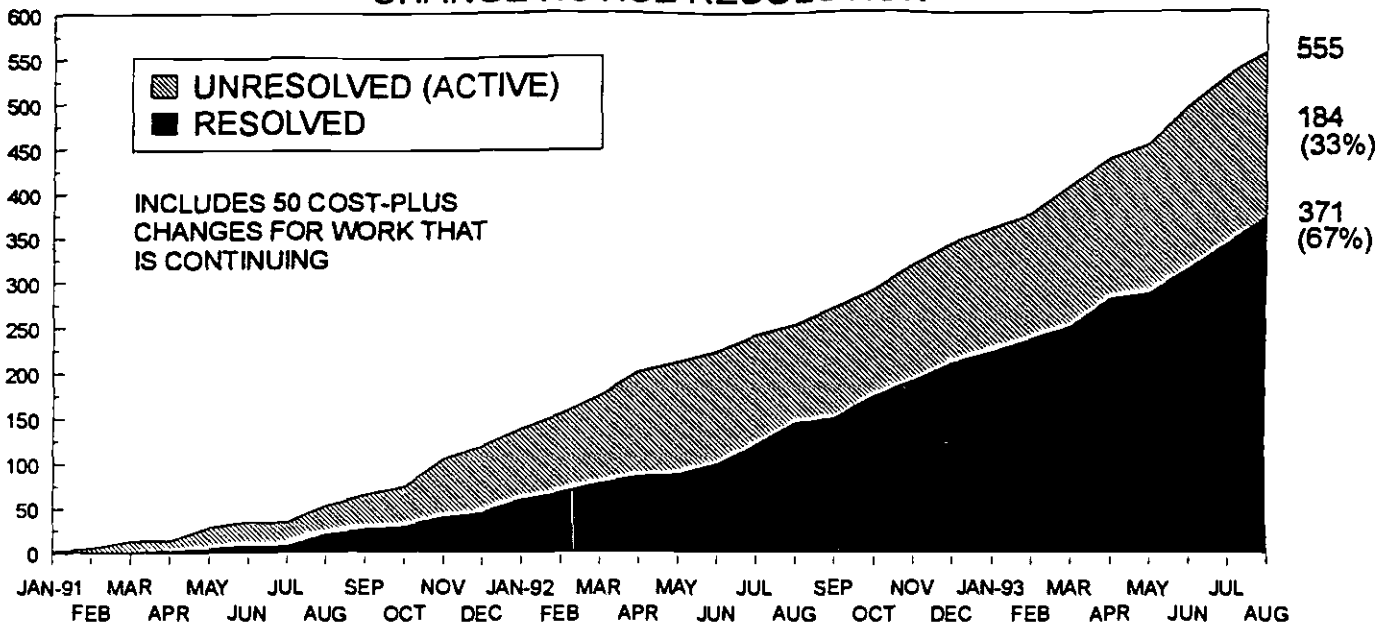
AGE OF UNRESOLVED CONSULTANT CHANGES					
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	5	1	1	30	32
PERCENT	14%	3%	3%	80%	100%

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



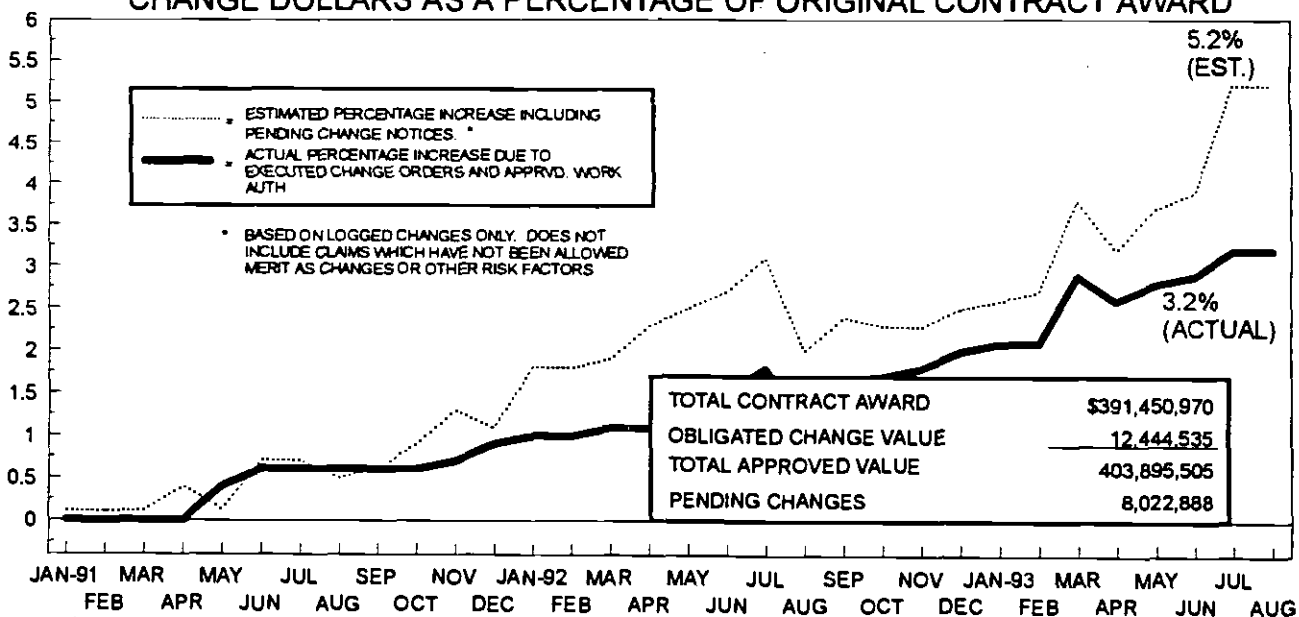


### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE NOTICE RESOLUTION



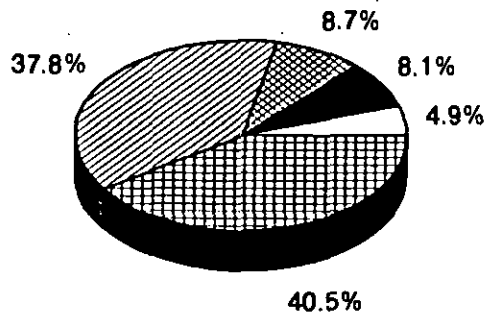
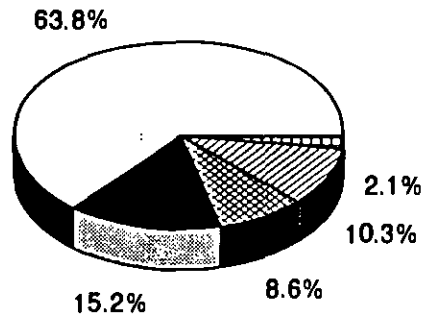
AGE OF UNRESOLVED CHANGES					
TIME	0-30 DAYS	31-60	61-90	OVER 90	TOTAL ACTIVE
VOLUME	73	23	16	72	184
PERCENT	40%	12%	9%	39%	100%

### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE DOLLARS AS A PERCENTAGE OF ORIGINAL CONTRACT AWARD



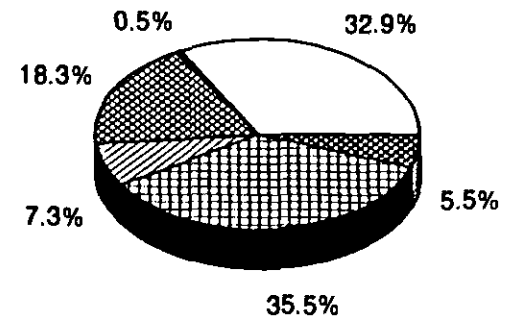
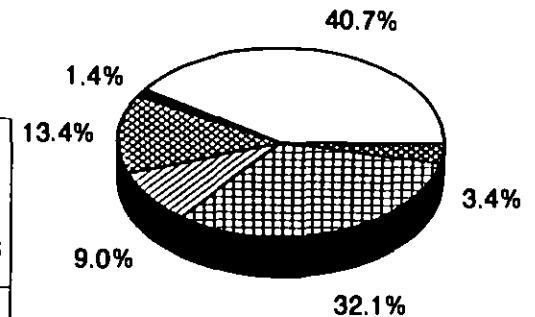
# CONSTRUCTION/PROCUREMENT CHANGE VOLUME BY COST LEVEL AND BASIS BASED ON EXECUTED CHANGES AS OF 08/27/93

**COST LEVEL**  
Total Cost: \$9,143,236\*



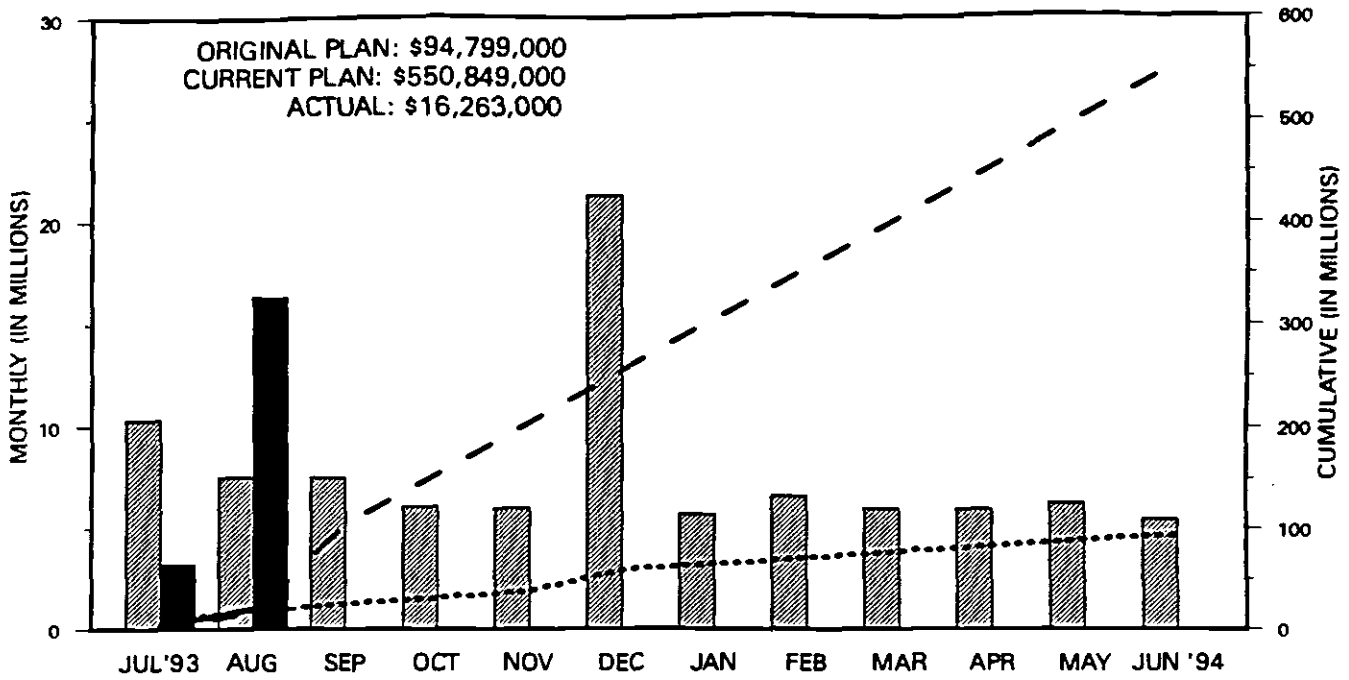
## Legend

Cost Range		Basis
\$ 0-10K		WORK SCOPE CHANGES
10-25K		SCHEDULE CHANGES
25-50K		DIFFERING CONDITIONS
50-200K		ADMINISTRATIVE
200-1 MIL		DESIGN CHANGES
ABOVE 1 MIL		MANAGEMENT ISSUES

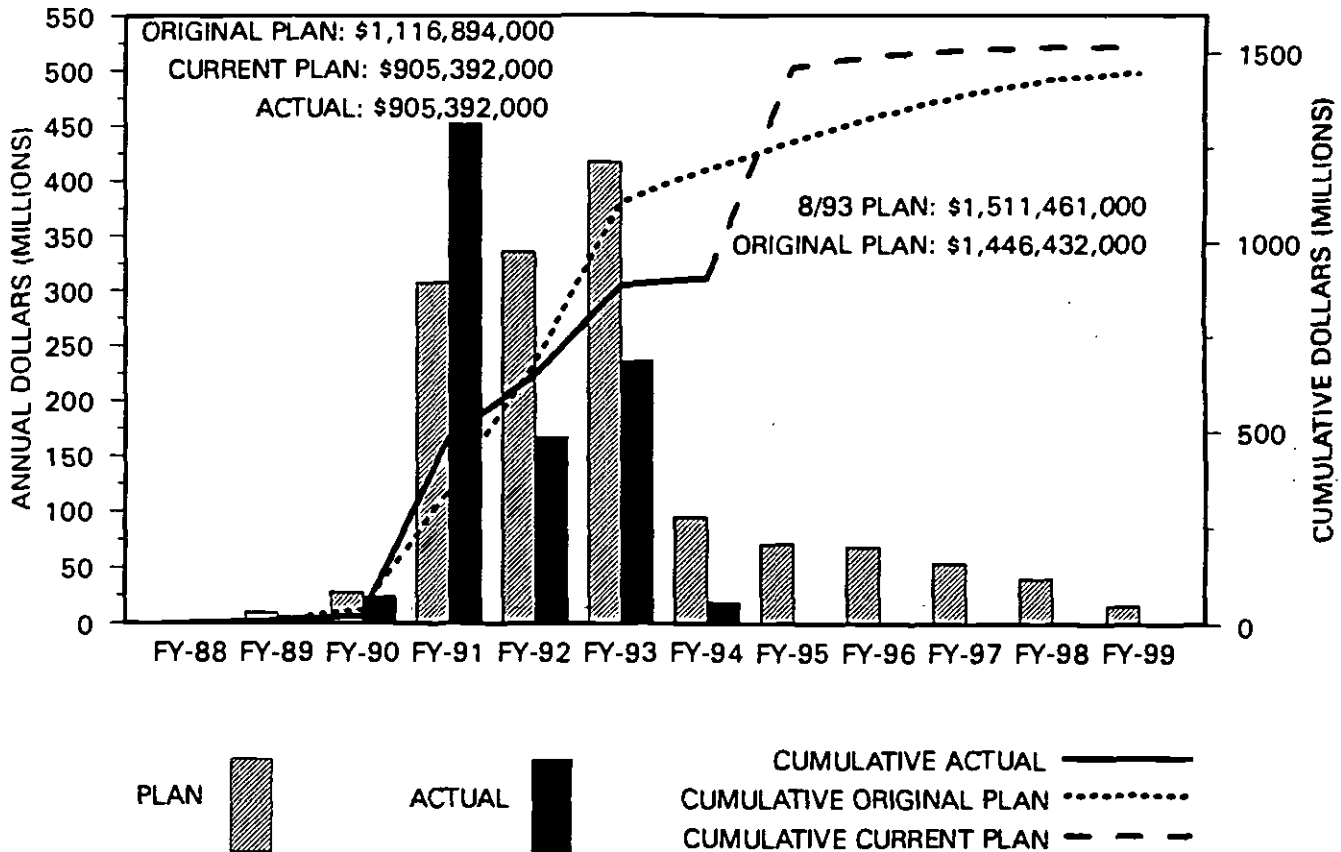


\* INCORPORATES SOME SEGMENT 3 COSTS

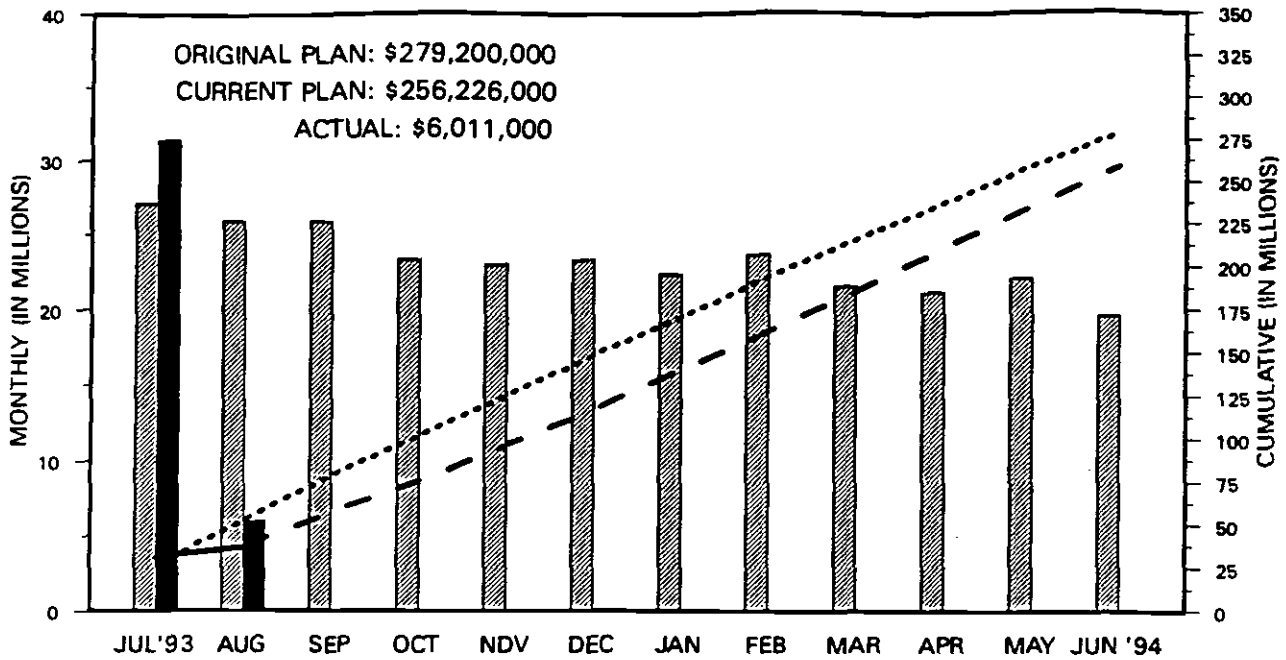
ANNUAL PROJECT COMMITMENTS (FY '94)



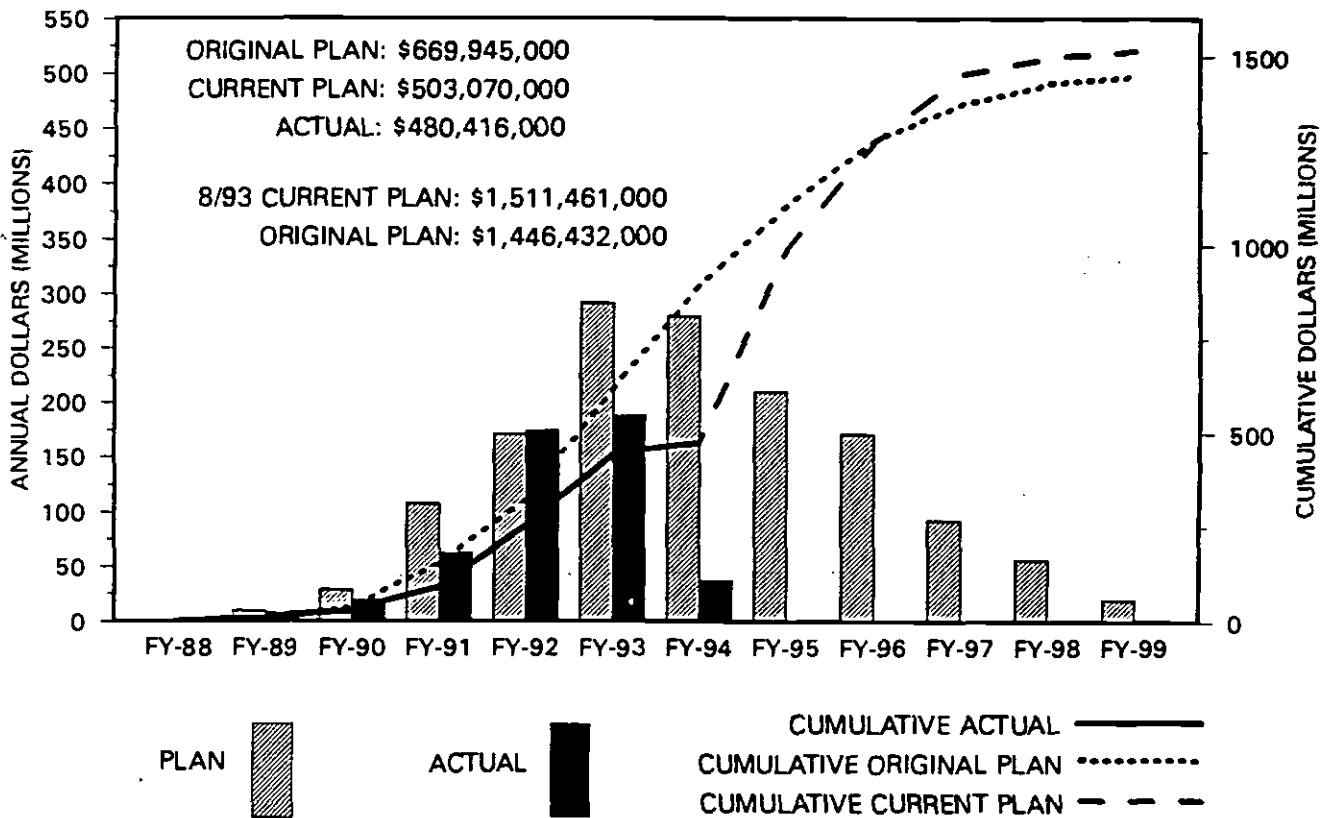
TOTAL PROJECT COMMITMENTS



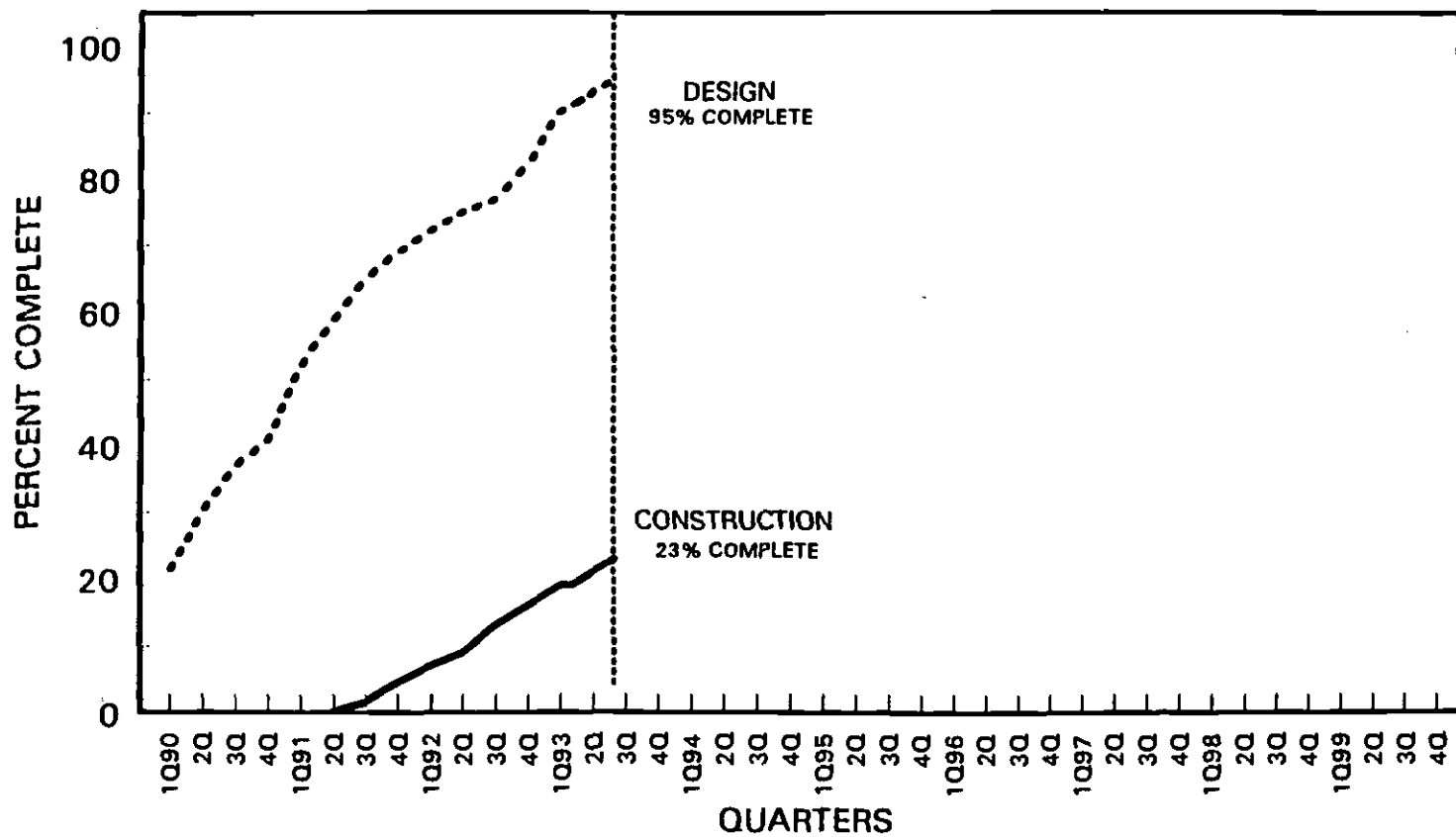
ANNUAL PROJECT CASHFLOW (FY '94)



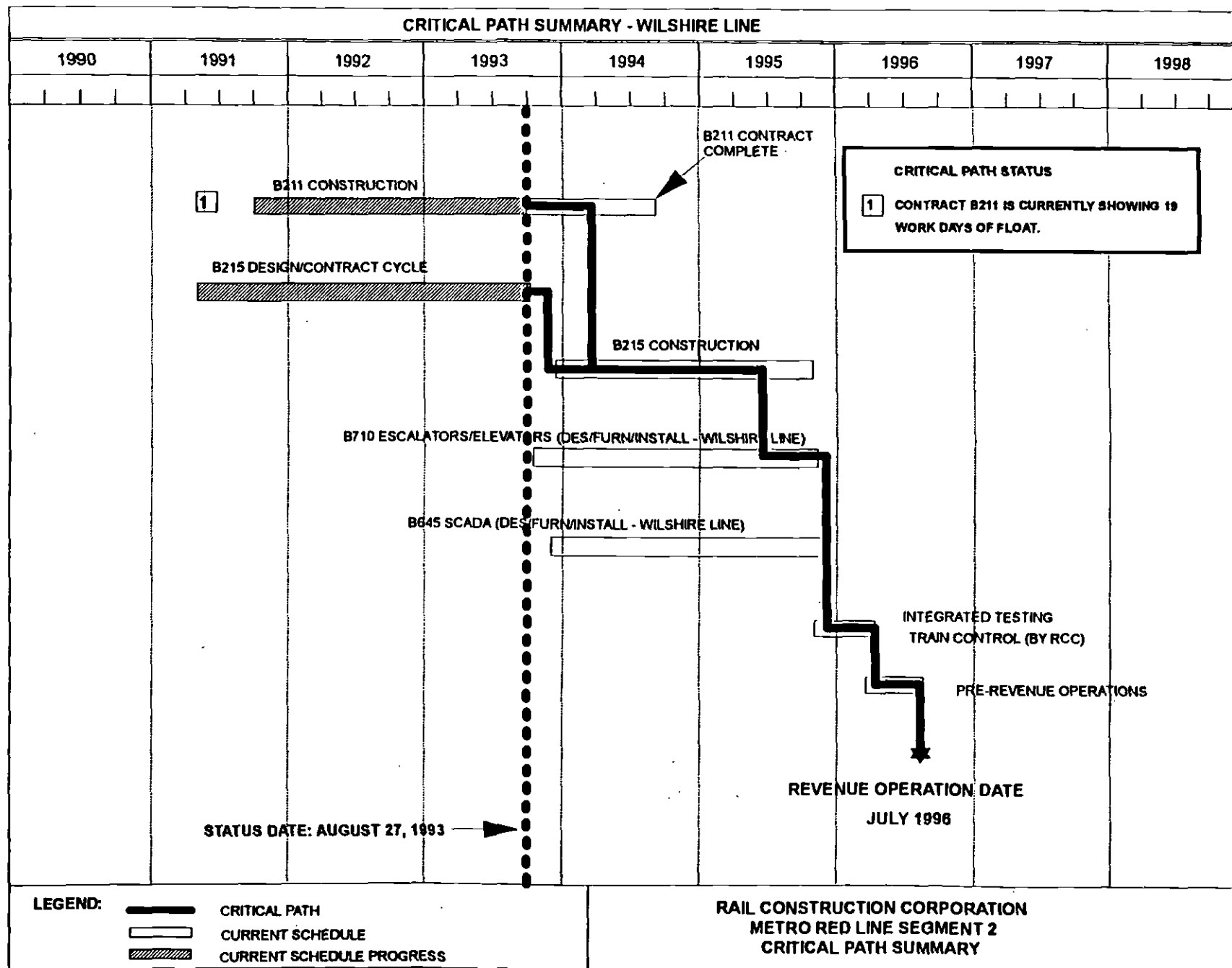
TOTAL PROJECT CASHFLOW

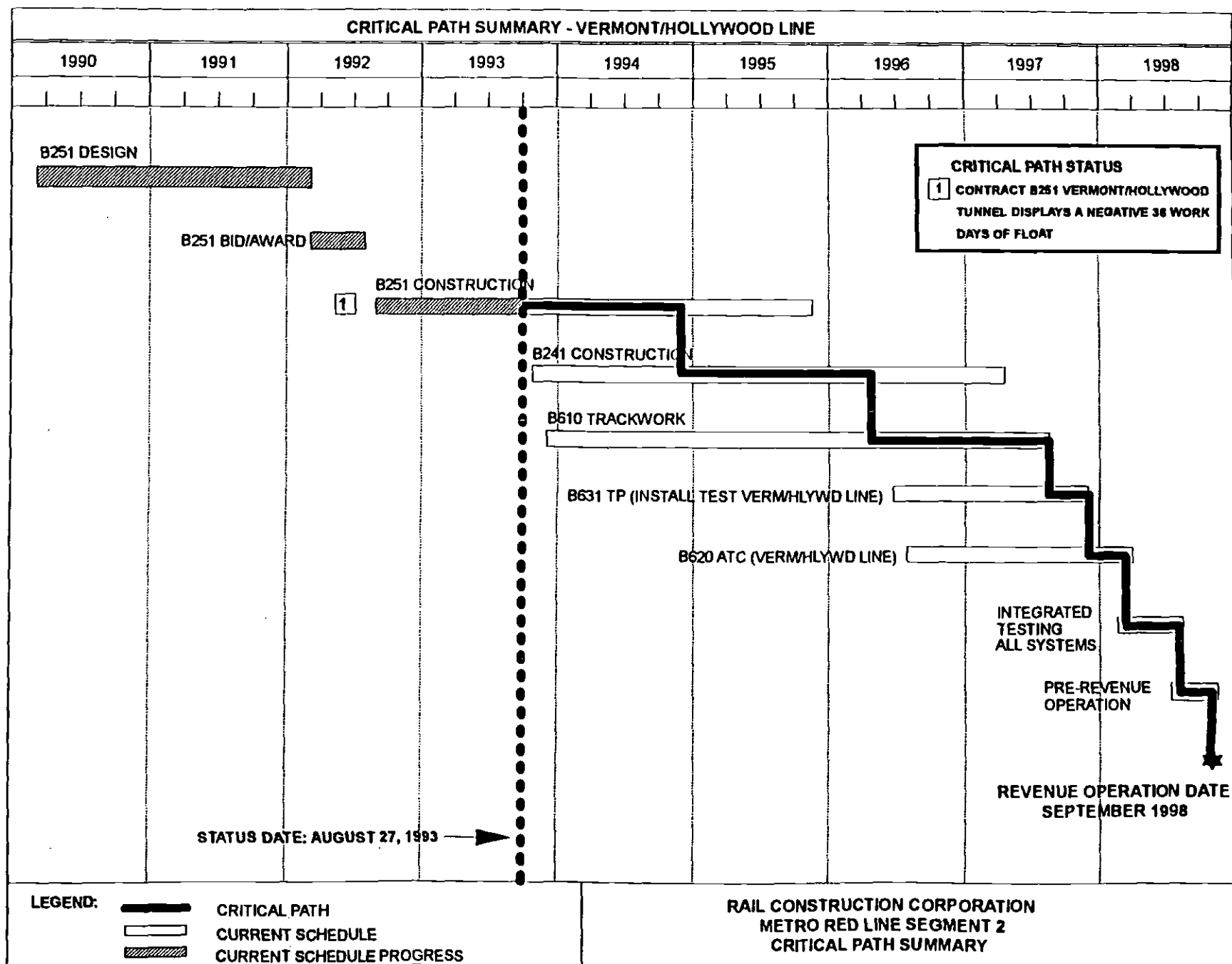


# RAIL CONSTRUCTION CORPORATION METRO RED LINE SEGMENT 2 PROGRESS SUMMARY

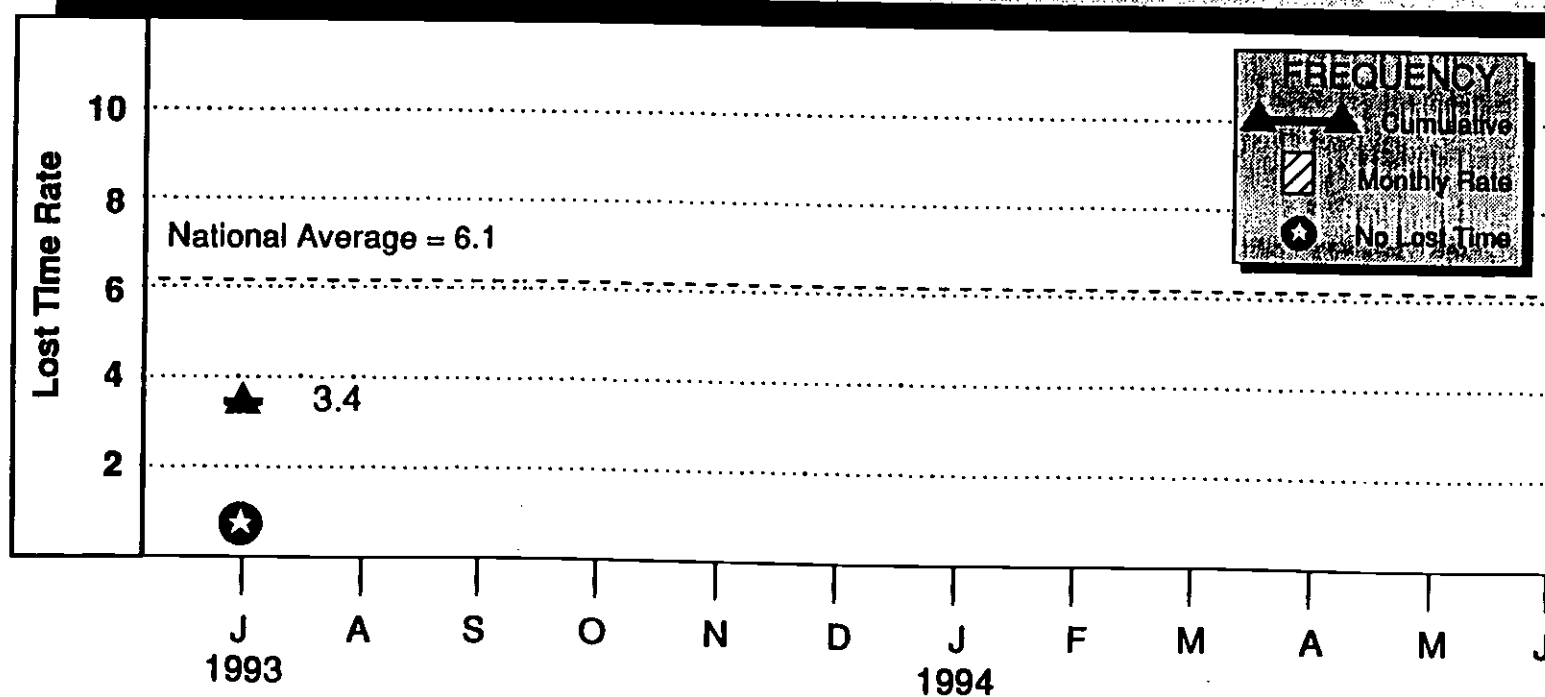
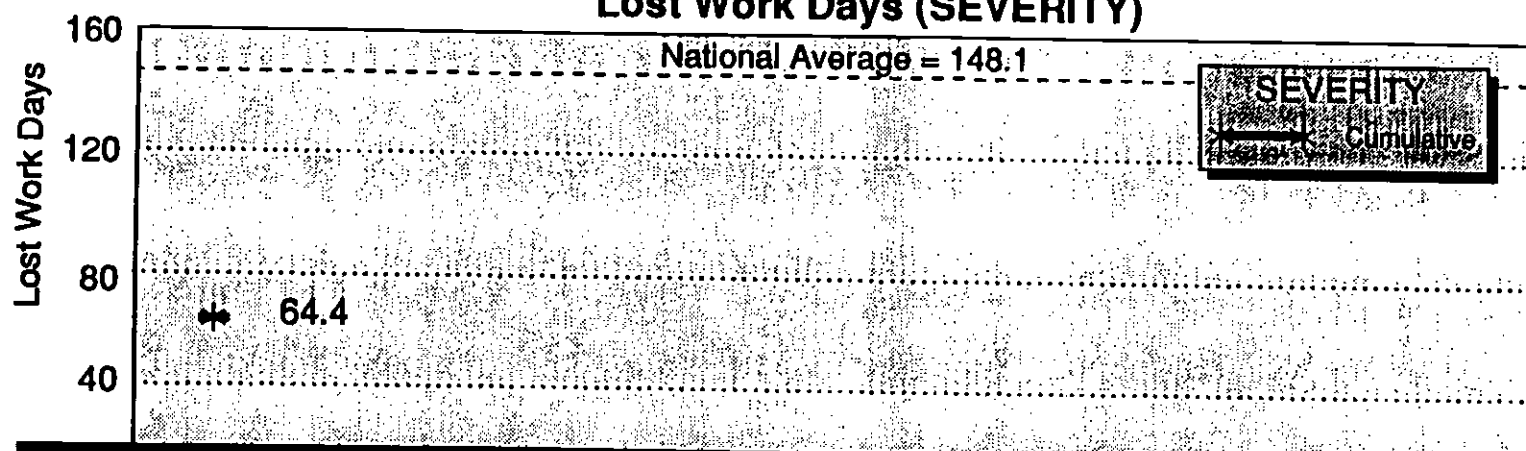


DESIGN % COMPLETE .....  
CONSTRUCTION % COMPLETE —————





# METRO RED LINE SEGMENT 2 Summary of Lost Time Accidents (FREQUENCY) and Lost Work Days (SEVERITY)

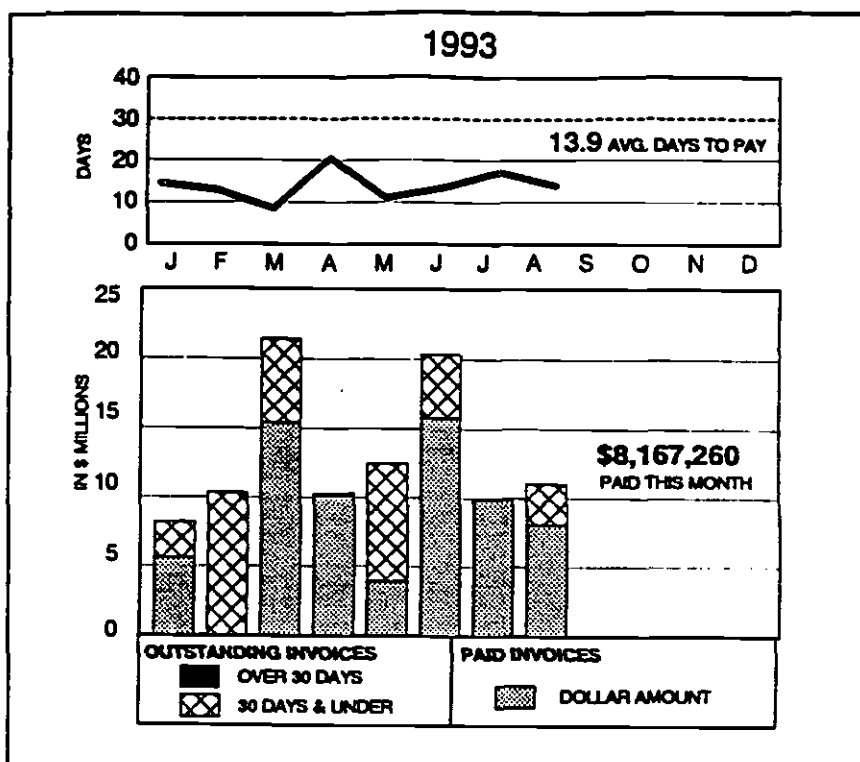




## INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 13.9 days.
- 13 invoices were paid for a total value of \$ 8,167,260.
- There were 7 outstanding Construction or Procurement invoices under 30 days old for \$ 2,994,305.
- There were no outstanding Construction or Procurement invoices over 30 days old.

Construction/Procurement Invoice Status



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

Month	Construction/Procurement Invoices				Other Invoices			
	30 Days and Under		Over 30 Days		30 Days and Under		Over 30 Days	
	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value
APR 1993	3	172,497	0	0	36	3,373,742	7	113,632
MAY 1993	5	8,651,451	0	0	44	8,205,542	11	304,775
JUN 1993	4	4,612,570	0	0	31	4,653,152	7	408,750
JUL 1993	4	64,198	0	0	34	838,793	2	373,900
AUG 1993	7	2,994,305	0	0	32	1,991,444	1	100,253

## EXECUTIVE SUMMARY

- **NORTH HOLLYWOOD EXTENSION** - In August, the prefinal design continued for Contract C0311, Line Section from Universal City Station to 630+00; including alternative locations of the ventilation shaft, access to the vent structure site and the roadway design. Contract C0321, Universal City Station, Notice to Proceed to the Section Designer and MTA Board approval of the appointment of a Section Designer for North Hollywood Station are both scheduled for September 15, 1993. Contract C0331, Line Section: North Hollywood to Universal City, is scheduled for bid opening on September 15, 1993. The design portion of the System contracts which have been awarded to date (B611, B614, B630, B740 and B745) include the basic design for Segment 3, North Hollywood Extension.
- **MID CITY EXTENSION** - Delays to Contract C0411 Line Section design due to environmental concerns is the main cause for lagging progress. Progress for Real Estate acquisitions continues behind target schedules. Impacts to demolition and tunnel contracts are expected.

Two significant cost trends were identified in August:

- Increased costs for treatment of hydrogen sulfide and methane gases expected to be found along the alignment. Safety and reduced production rates are addressed in this trend.
- Decreased costs were identified for projected Real Estate acquisition which offset the above increase.

The scope for Contract C0411 Line Section was increased to include excavation and support for the Olympic/Crenshaw Station and a portion of the bus facility at Pico/San Vicente Station. The latter is funded entirely outside of the Segment 3 Full Funding Grant and accounted for accordingly.

The staff received proposals for construction management services for the Mid City and East Side Extensions. A staff recommendation for the contract award is expected in October, 1993.

## EXECUTIVE SUMMARY (CON'T)

- EAST SIDE EXTENSION** - The LACMTA received the FTA's concurrence that the required alternatives analysis process has been completed. With the concurrence, the LACMTA is permitted to initiate Preliminary Engineering efforts with use of federal funds. The Engineering Management Consultant (EMC) presented their proposal for providing complete Preliminary Engineering Services. Negotiations for an all inclusive Contract Work Order are now underway. The EMC has concluded subconsultant services negotiations for Aerial Mapping, Geotechnical Surveying, and Noise and Vibration Studies. Full release of all sub consultants is awaiting Rail Construction Corporation (RCC) and MTA concurrence. The 1:40 scale plan and profile map has been completed and forwarded to RCC for advice and comment. The vertical alignment is under review and development. Completion is pending station, geotechnical and utility input. Civil Engineering and Architectural review and design of the Locally Preferred Alternative alignment and station configurations continue. Review for real estate requirements and construction staging areas are underway.

## COST STATUS

North Hollywood Extension	(\$000's)
• Current Budget	\$1,310,822
• Current Forecast	\$1,310,822
Mid City Extension	
• Current Budget	\$490,663
• Current Forecast	\$490,663
East Side Extension	
• Current Budget	\$650,000
• Current Forecast	\$650,000
Total	
• Current Budget	\$2,451,485
• Current Forecast	\$2,451,485

The above information reflects no changes to the budget or forecast.

## EXECUTIVE SUMMARY (CON'T)

### SCHEDULE STATUS

#### North Hollywood Extension

- Overall progress based on planned expenditures for the North Hollywood Extension, for the month of August 1993, is 2.29% actual versus 1.98% planned.

The critical path for the North Hollywood Extension is currently showing zero days of float. The acquisition of a necessary real estate parcel at the tunnel excavation site in Universal City is of concern, although the schedule forecast shows not impact to the Project completion date at this time. Design progress of the major facilities for the North Hollywood Extension is 43.3% actual versus 47.9% planned. The variance between actual and planned is due to delays in the appointment of section designers for Contracts C0321, Universal City Station, C0351, North Hollywood Station and C0311, Line Section: Universal City to Hollywood scope changes. Contract C0331, Line Section: North Hollywood to Universal City is expected to receive bids September 15, 1993. Contract award is anticipated in late October.

A description of the critical path is as follows: The critical path is through Contract C0311, Line Section from Universal City Station to Station 630+00, Design, Bid Cycle, Construction of the Tunnels; completion of C0321, Universal City Station, Crossover and Trackwork Access; and Contract C0610, Trackwork. The critical path continues through Contract B620, Automatic Train Control; Contract B645, TRACS; Contract H0648, Communication Installation; System Integration Testing; Pre-revenue Operations; and Revenue Operations Date, planned for May 17, 2000.

#### Mid City Extension

- The critical path for the Mid City Extension is currently showing zero days of float. Delays in real estate acquisitions have resulted in contingency being removed from the Project Schedule in order to maintain the Revenue Operations Date. Design Progress of the major facilities for the Mid City Extension is 23.6% actual versus 27.3% planned. The variance between actual and planned is due primarily to delays in the availability of environmental information and the approval of section designers.

## EXECUTIVE SUMMARY (CON'T)

A description of the critical path is as follows: Ensuing with the acquisition of Real Estate, the critical path proceeds through Contract C0428, Pico/San Vicente Demolition and Contract C0401, Crenshaw/Olympic Station, continuing through Contract C0610, Trackwork Installation, Contract B620, Automatic Train Control, Contract H0648, Communications Installation, Contract B645, TRACS, and through Integrated Testing and Pre-revenue Operations to the Revenue Operations Date of July 1999.

## East Side Extension

The overall design schedule has been established in support of the February 1, 1994, completion date. Specific inter-discipline interfaces have been identified to highlight critical activities.

## REAL ESTATE

## North Hollywood Extension

	NUMBER OF PARCELS	NUMBER OF PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)	PARCELS NOT AVAILABLE (BEHIND SCHEDULE)	
				NUMBER	AVG. DAYS BEHIND
THIS MONTH	178	8	153	25*	60
LAST MONTH	178	8	163	15*	70

\*NINE PARCELS ARE ON THE CRITICAL PATH

## Mid City Extension

	NUMBER OF PARCELS	NUMBER OF PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)	PARCELS NOT AVAILABLE (BEHIND SCHEDULE)	
				NUMBER	AVG. DAYS BEHIND
THIS MONTH	59	0	53	6*	160
LAST MONTH	64	0	55	6*	150

\*SIX PARCELS ARE ON THE CRITICAL PATH

## EXECUTIVE SUMMARY (CON'T)

### PUBLIC AFFAIRS

Staff responded to media inquiries regarding the anticipated construction site of the ventilation shaft in the Santa Monica Mountains. A Santa Monica Mountains community meeting is scheduled for late October to better inform local residents about the Metro Red Line Project. Community Affairs efforts were also conducted in connection with the construction of the Universal City Station and the future site of the North Hollywood Station.

Construction notices were distributed regarding the preliminary work activities on the Mid City Extension and staff responded to public inquiries concerning route alignments. A community meeting is planned for September 21, 1993, to review construction plans.

A special tour was conducted in the East Side for MTA and RCC board members on August 16, 1993, to familiarize them with the adopted LPA.

## AREAS OF CONCERN

### NEW

**C0311, Line Section: Delays and Impacts to Project Critical Path - North Hollywood Extension**

**Concern:** There are several issues related to this contract that could impact the Project schedule including design changes and delays in the acquisition of needed real estates parcels.

**Action:** Expedite the real estate acquisition process and design efforts.

**Status:** Various studies are being conducted to mitigate delays.

## AREAS OF CONCERN (CON'T)

### Universal City Roadways Design - North Hollywood Extension

**Concern:** The geometrics of a roadway layout plan adopted in 1984 and modified in 1989, is in conflict with the design speed of 50 mph required by the City of Los Angeles. Evaluation of alternative designs will delay the completion of the Project Study Report for CalTrans. This will subsequently delay section designer procurement, construction implementation and may possibly affect the Revenue Operation Date (ROD).

**Action:** Expedite data collection, approvals from agencies and finalization of design.

**Status:** Investigations of alternative designs regarding a freeway under crossing and the possible widening of Lankershim Boulevard, are ongoing in preparation for a preliminary discussion with CalTrans and the City of Los Angeles.

### Safety, Cost, Constructibility, and Environmental Concerns - Mid City Extension

**Concern:** Ongoing concerns relative to safety, cost, constructibility, and environmental issues are hampering progress. Concentrations of hydrogen sulfide and methane are of particular concern.

**Action:** Identify alternative construction methodologies to address contaminants.

**Status:** RCC Environmental Consultant is reviewing the data. An alternatives report is due September 22, 1993.

### Added Parking Structure - Mid City Extension

**Concern:** The C0421 site work scope is expanding to include a parking structure with related revisions to the bus facility. The section design consultant scope, Contract Unit C0411, and the design and construction schedule will be affected.

**Action:** EMC is studying design options with associated "rough order of magnitude" construction costs for review by the MTA.

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

**Status:** Section Design Consultant negotiations and the EMC design continue based on Contract C0421 preliminary engineering efforts and the C0411 in-progress design.

All efforts in this regard are funded locally, outside the parameters of Segment 3. Unique cost accounts have been established to collect all related costs.

**C0401, Olympic/Crenshaw Station - Mid City Extension**

**Concern:** Utility interfaces along Country Club Drive are imposing potentially costly construction impacts to station and adjoining line section. Depth of station is being dictated by concentrated utility services along Country Club Drive forcing tunnel alignment into less favorable geology.

**Action:** Review alternative designs and construction methodologies.

**Status:** EMC is undertaking a Value Engineering effort to address concerns and seek viable alternatives.

**ONGOING****Appointment of Section Designers - North Hollywood Extension**

**Concern:** A delay in the approval of section designers contracts for North Hollywood Extension, and consequent delay in issuance of Notice to Proceed, resulted in a revision of the camera ready submittal dates. This will impact the contracting cycle and the EMC staffing plan.

**Action:** Expedite approval and contracting process. Compress the schedules within reasonable constraints allowing float to recover schedule contingencies.

**Status:** Section Designer approval is scheduled for approval before the MTA board on September 15, 1993.



**AREAS OF CONCERN (CON'T)****Delay in Obtaining Environmental Permits - Mid City Extension**

**Concern:** Delay in acquiring the necessary Environmental Permits for Contract C0411 may result in slippage of the contract milestones.

**Action:** Expedite permitting process to avoid negative float.

**Status:** RCC Environmental staff and subconsultants are currently looking at ways to compress the process.

**Delay in Real Estate Acquisition - North Hollywood and Mid City Extensions**

**Concern:** There are nine parcels on the critical path for North Hollywood affecting Contract C0351, North Hollywood Station. There are six critical parcels that affect Contract C0428, Pico/San Vicente Demolition and Contract C0411, Line Section: Pico/San Vicente to Wilshire/Western. These parcels are behind the target acquisition schedule required to support the contract.

**Action:** Maintain acquisition schedule to avoid negative float.

**Status:** Remaining acquisition actions are under review for possible schedule compression. All mitigation measures are being evaluated.

## FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

### NEW

#### July 1993, Project Management Plan (PMP)

Concern: The Segment 3 PMP has not been completed.

Action: RCC should complete the Segment 3 PMP and release it.

Status: RCC has completed the Segment 3 PMP and it has been submitted for approval.

ONGOING NONE

RESOLVED NONE

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

**AUGUST 93**

STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
FTA-SECTION 3	\$681,037	\$19,850	\$114,817	17%		0%	\$0	0%
FED SURFACE TRANSIT PROG	\$25,000	\$20,019	\$20,019	80%	\$18,302	73%	\$18,200	73%
SB 1995 TRUST FUND	\$53,000	\$53,000	\$15,116	29%	\$15,116	29%		0%
STATE ARTICLE XIX	\$20,000			0%		0%		0%
STATE PROP 108	\$95,000			0%		0%		0%
STATE TCI	\$75,000			0%		0%		0%
PROP C	\$344,685	\$20,740	\$1,242	0%	\$1,242	0%	\$16,358	5%
BENEFIT ASSESS. DISTRICT	\$17,100			0%		0%		0%
<b>TOTAL</b>	<b>\$1,310,822</b>	<b>\$113,609</b>	<b>\$151,194</b>	<b>12%</b>	<b>\$34,660</b>	<b>3%</b>	<b>\$34,558</b>	<b>3%</b>

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JULY 1993.

METRO RAIL RED LINE SEGMENT 3

AUGUST 1993

RAIL CONSTRUCTION CORPORATION  
METRO RAIL RED LINE MID CITY PROJECT  
(IN THOUSANDS OF DOLLARS)

AUGUST 93

## STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
FTA-SECTION 3	\$242,563	\$19,850	\$45,151	19%		0%		0%
FED SURFACE TRANSIT PROG	\$55,400	\$1,307	\$1,307	2%	\$1,307	2%	\$1,307	2%
STATE ARTICLE 116	\$72,300			0%		0%		0%
FLEXIBLE CONGESTION RELIEF	\$26,000			0%		0%		0%
PROP C	\$94,400			0%		0%		0%
TOTAL	\$490,663	\$21,157	\$46,458	9%	\$1,307	0%	\$1,307	0%

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JULY 1993.

**RAIL CONSTRUCTION CORPORATION  
PROJECT COST REPORT  
COST BY ELEMENT**

Project: 882 METRO RED LINE - SEGMENT 3 - N. HOLLYWOOD

Period: Jul 30, 1993 to Aug 27, 1993  
Run Date: Sep 21, 1993  
Units: \$ in Thousands (Truncated)

ELEMENT / DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		INCURRED		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	
T CONSTRUCTION	890,729	0	890,729	1,234	63,206	59	6,434	59	6,434	298	834,639	-56,089
S PROFESSIONAL SERVICES	254,747	0	254,747	45,695	74,275	1,831	14,592	1,831	14,592	0	254,747	0
R REAL ESTATE	84,534	0	84,534	3,331	13,606	13,325	13,606	13,325	13,606	6,520	91,054	6,520
F UTILITY/AGENCY FORCE ACCOUNTS	13,237	0	13,237	0	105	1	27	1	27	0	13,237	0
C PROJECT RESERVE	67,575	0	67,575	0	0	0	0	0	0	-6,819	117,143	49,568
GRAND TOTAL	1,310,822	0	1,310,822	50,261	151,194	15,217	34,660	15,217	34,660	0	1,310,822	0

**RAIL CONSTRUCTION CORPORATION  
PROJECT COST REPORT  
COST BY ELEMENT**

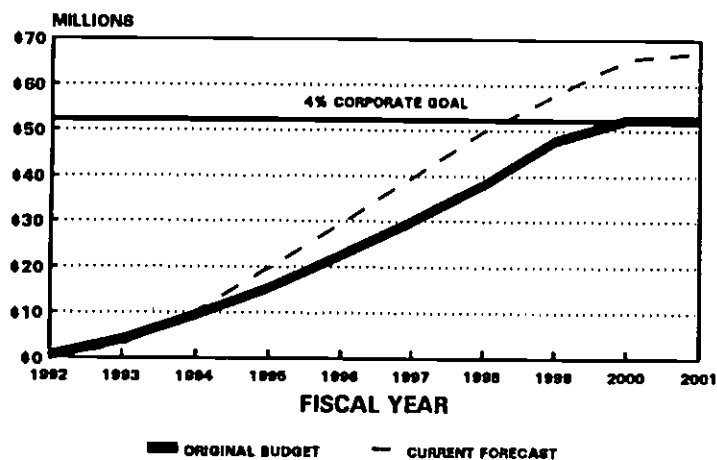
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Project: R83 METRO RED LINE - SEGMENT 3 - MID CITY EXTENSION

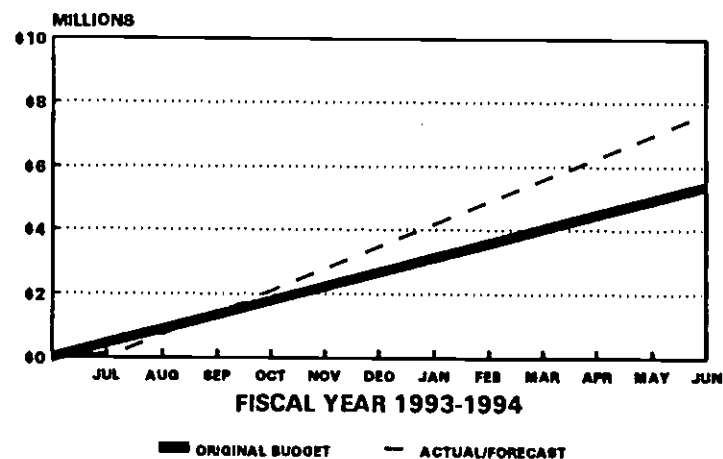
Period: Jul 30, 1993 to Aug 27, 1993  
Run Date: Sep 20, 1993  
Units: \$ In Thousands (Truncated)

ELEMENT / DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		INCURRED		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		Period	To Date	Period	To Date	Period	To Date	Period	To Date	Period	To Date	
T CONSTRUCTION	334,139	0	334,139	860	9,756	0	25	0	25	5,929	338,730	4,591
S PROFESSIONAL SERVICES	98,133	0	98,133	24,459	36,693	0	1,282	0	1,282	0	99,471	1,338
R REAL ESTATE	53,303	0	53,303	8	8	0	0	0	0	-5,929	47,374	-5,929
F UTILITY/AGENCY FORCE ACCOUNTS	5,088	0	5,088	0	0	0	0	0	0	0	5,088	0
C PROJECT RESERVE	0	0	0	0	0	0	0	0	0	0	0	0
<b>GRAND TOTAL</b>	<b>490,663</b>	<b>0</b>	<b>490,663</b>	<b>25,328</b>	<b>46,458</b>	<b>0</b>	<b>1,307</b>	<b>0</b>	<b>1,307</b>	<b>0</b>	<b>490,663</b>	<b>0</b>

### AGENCY COSTS RED LINE NORTH HOLLYWOOD



### FISCAL YEAR 1994 AGENCY COSTS RED LINE NORTH HOLLYWOOD



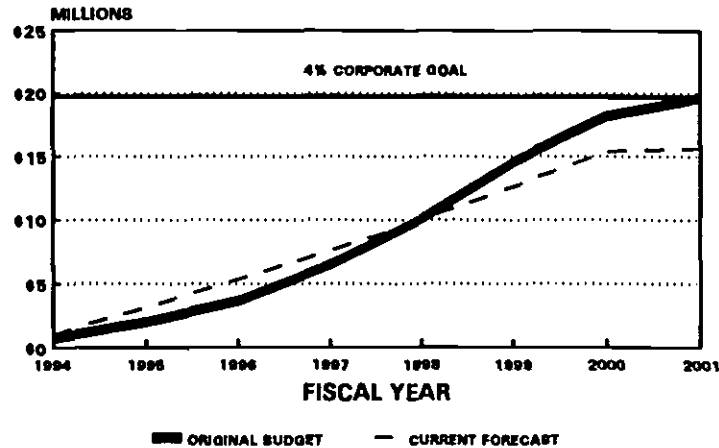
### PROJECT AGENCY COSTS RED LINE NORTH HOLLYWOOD (\$000)

TOTAL PROJECT BUDGET	\$1,310,825
ORIGINAL BUDGET	\$52,472
BUDGET % OF TOTAL PROJECT	4.0%
CURRENT FORECAST	\$67,088
FORECAST % OF TOTAL PROJECT	5.1%

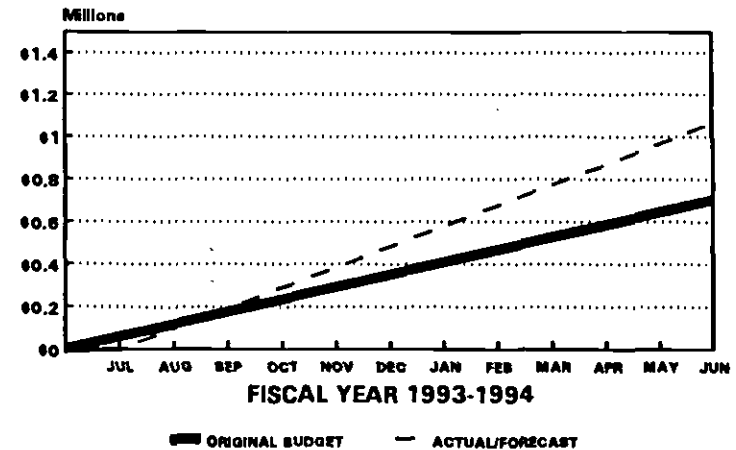
### FISCAL YEAR 1994 AGENCY COSTS RED LINE NORTH HOLLYWOOD (\$000)

ORIGINAL BUDGET	\$5,380
CURRENT FORECAST	\$7,660
ACTUAL TO DATE	\$ 19

### AGENCY COSTS RED LINE MID CITY



### FISCAL YEAR 1994 AGENCY COSTS RED LINE MID CITY



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

TOTAL PROJECT BUDGET	\$ 490,663
ORIGINAL BUDGET	\$ 19,627
BUDGET % OF TOTAL PROJECT	4.0%
CURRENT FORECAST	\$ 15,629
FORECAST % OF TOTAL PROJECT	3.2%

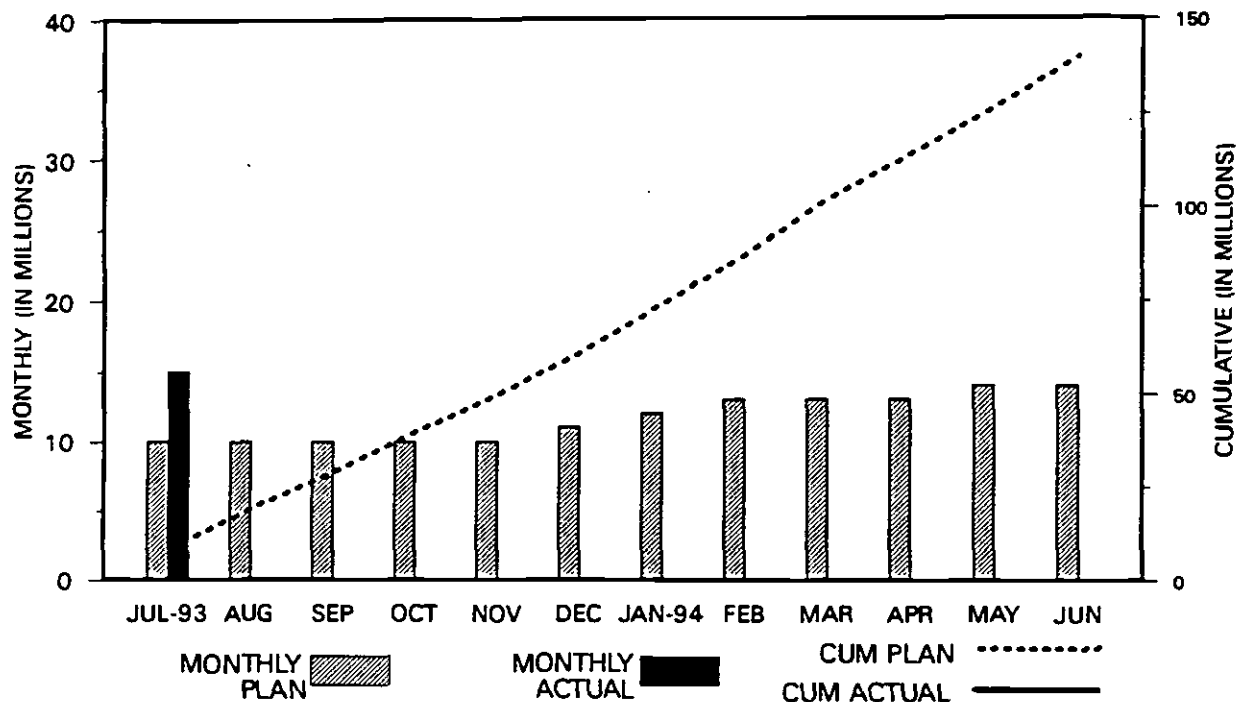
### FISCAL YEAR 1994 AGENCY COSTS RED LINE MID CITY (\$000)

ORIGINAL BUDGET	\$ 706
CURRENT FORECAST	\$1,065
ACTUAL TO DATE	\$ 0

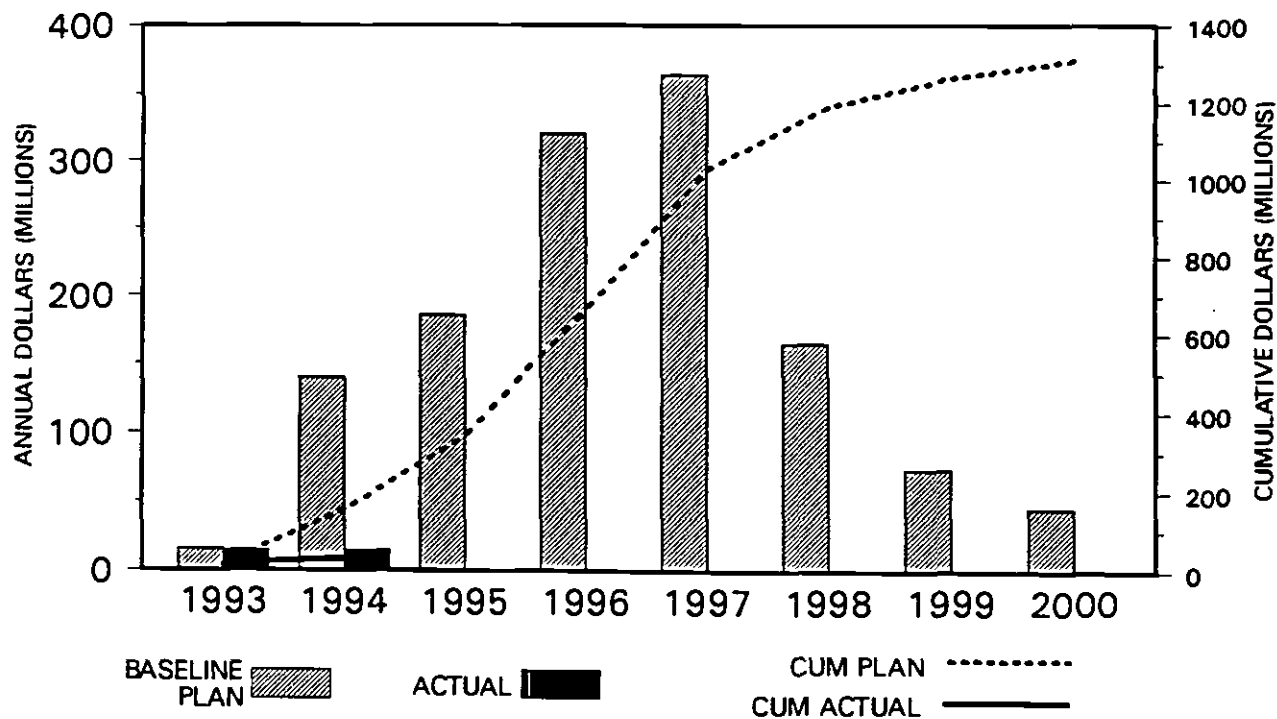


# NORTH HOLLYWOOD

PROJECT CASH FLOW - ANNUAL  
FISCAL YEAR - 1994



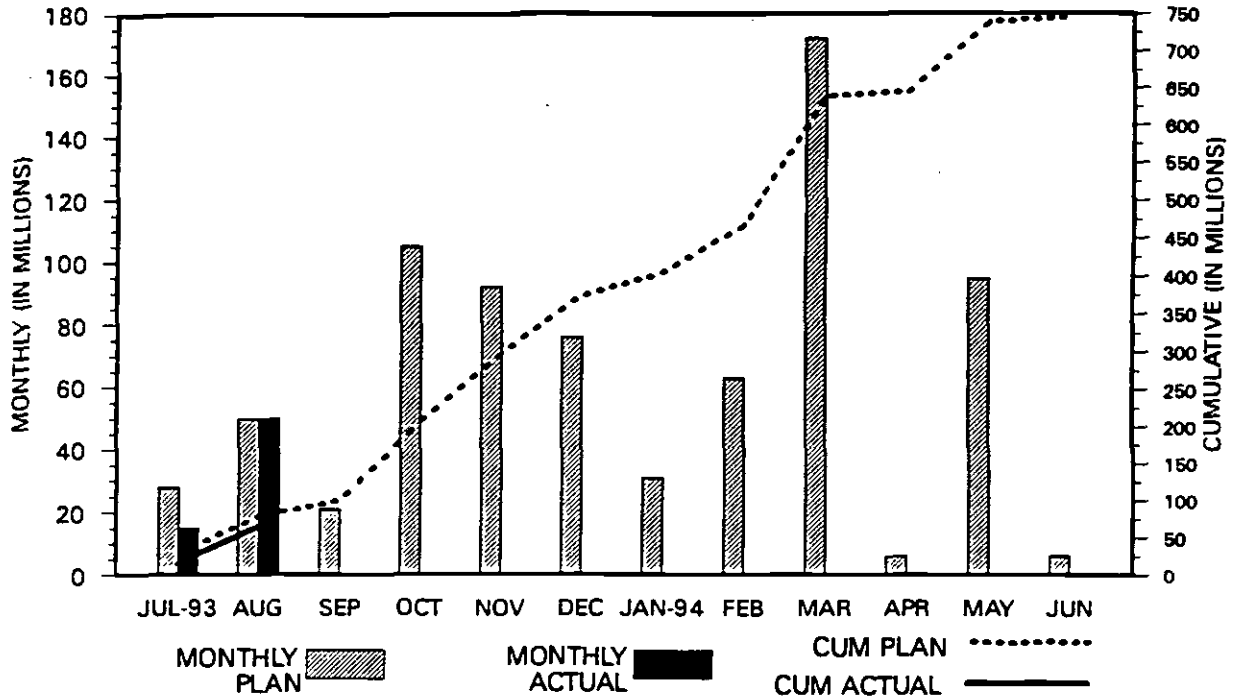
## PROJECT CASH FLOW - PROJECT FISCAL YEAR



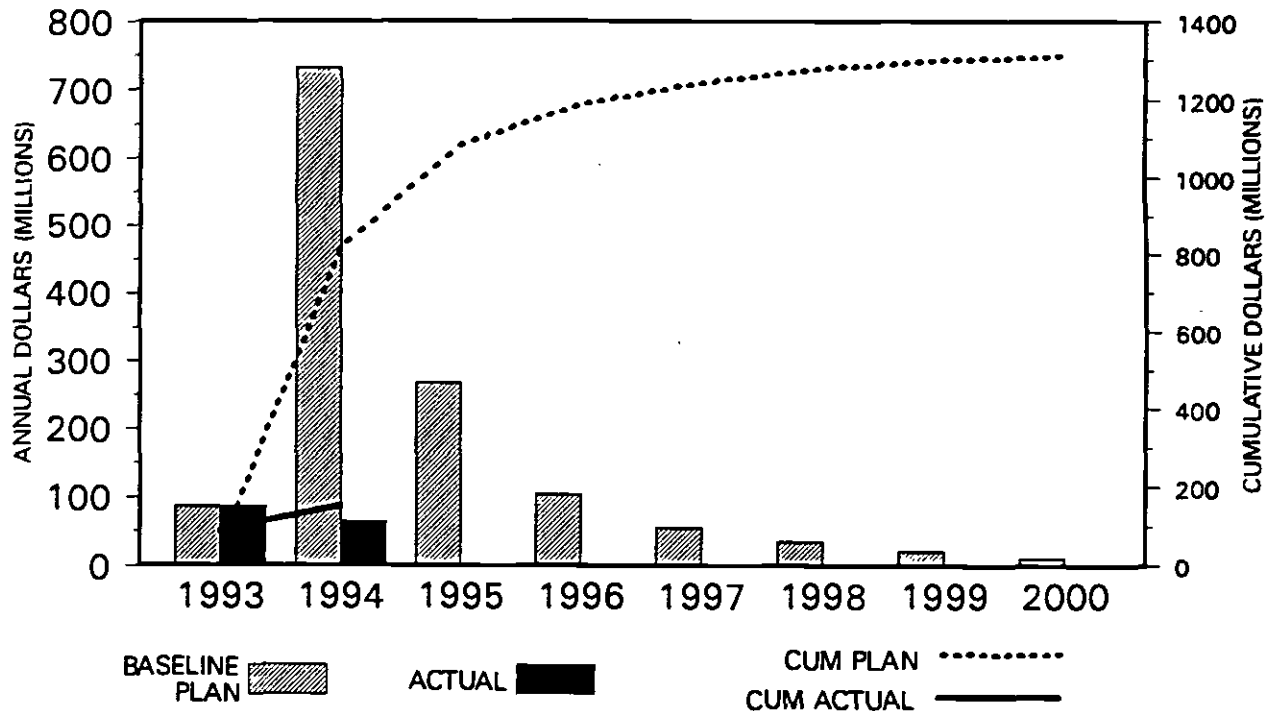
NOTE: THESE CHARTS ARE BASED ON ACTUAL EXPENDITURES CURRENT THROUGH JULY 1993

# NORTH HOLLYWOOD

PROJECT COMMITMENT - ANNUAL  
FISCAL YEAR - 1994



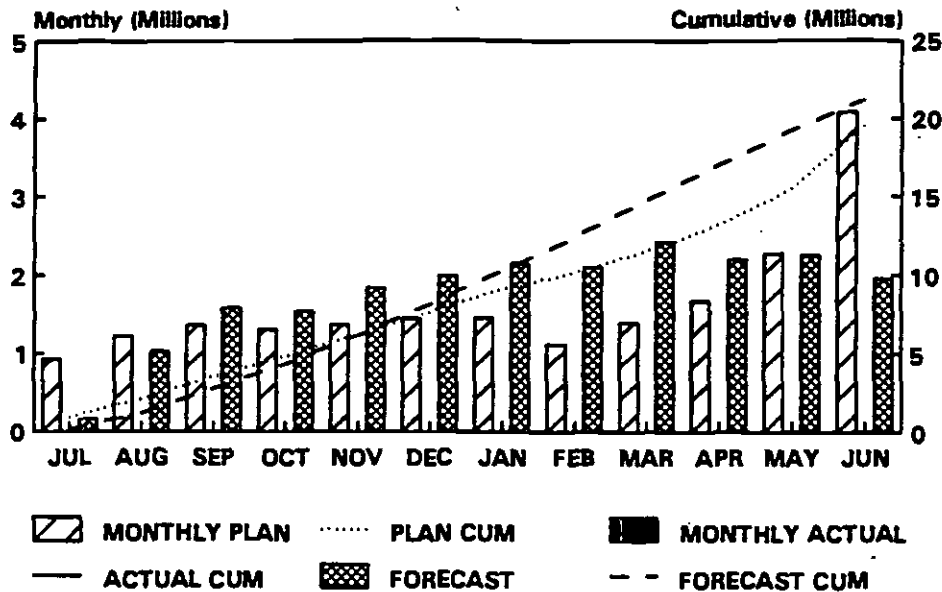
## PROJECT COMMITMENT - PROJECT FISCAL YEAR



# MID CITY EXTENSION

## PROJECT CASH FLOW - ANNUAL

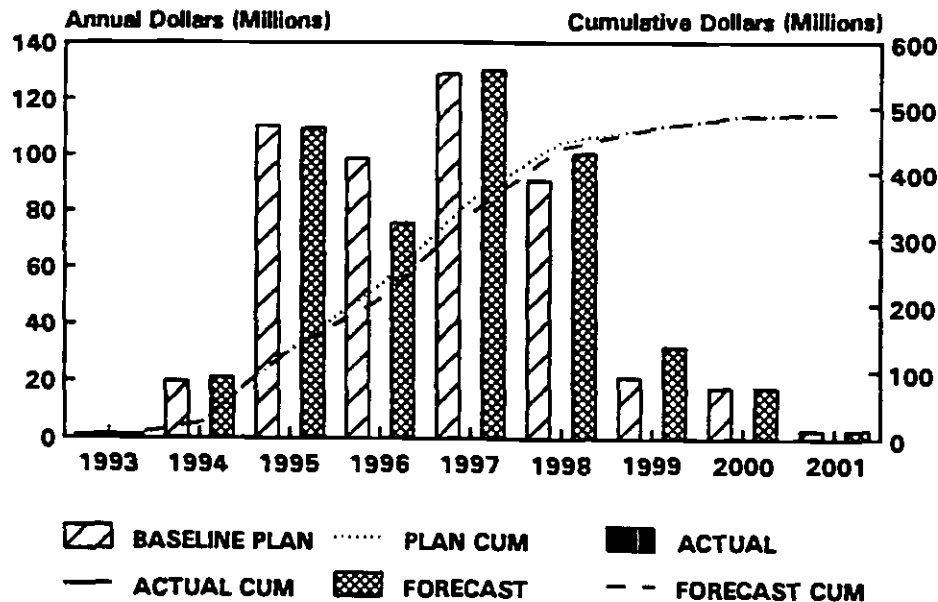
### FISCAL YEAR 1994



\* No actuals recorded for 7/93

## PROJECT CASH FLOW - PROJECT

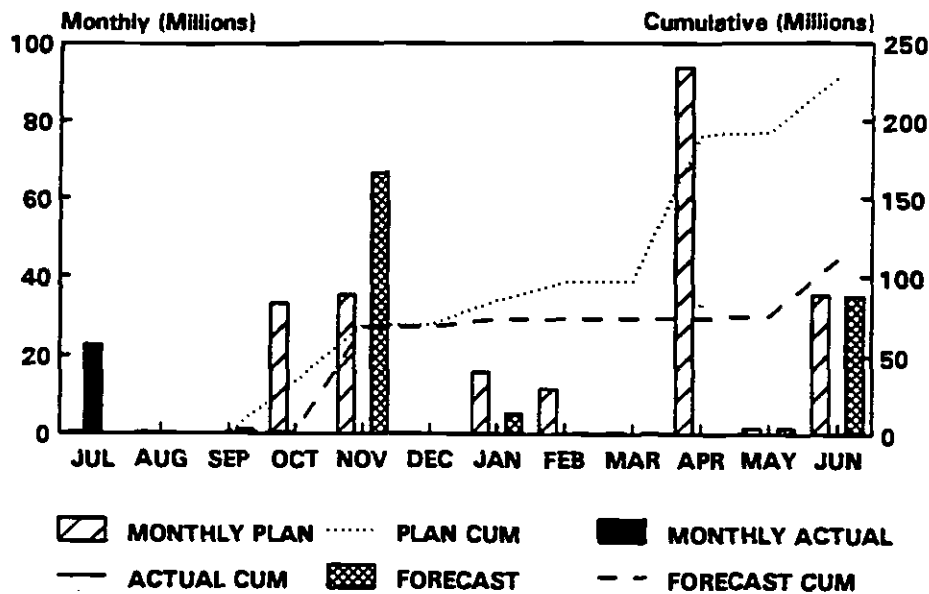
### FISCAL YEAR



# MID CITY EXTENSION

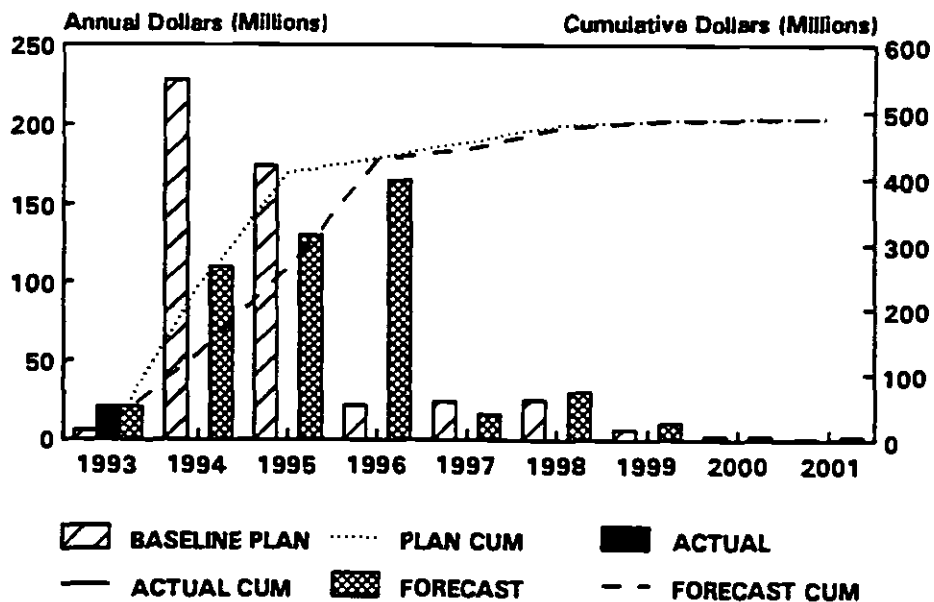
## PROJECT COMMITMENTS - ANNUAL

### FISCAL YEAR

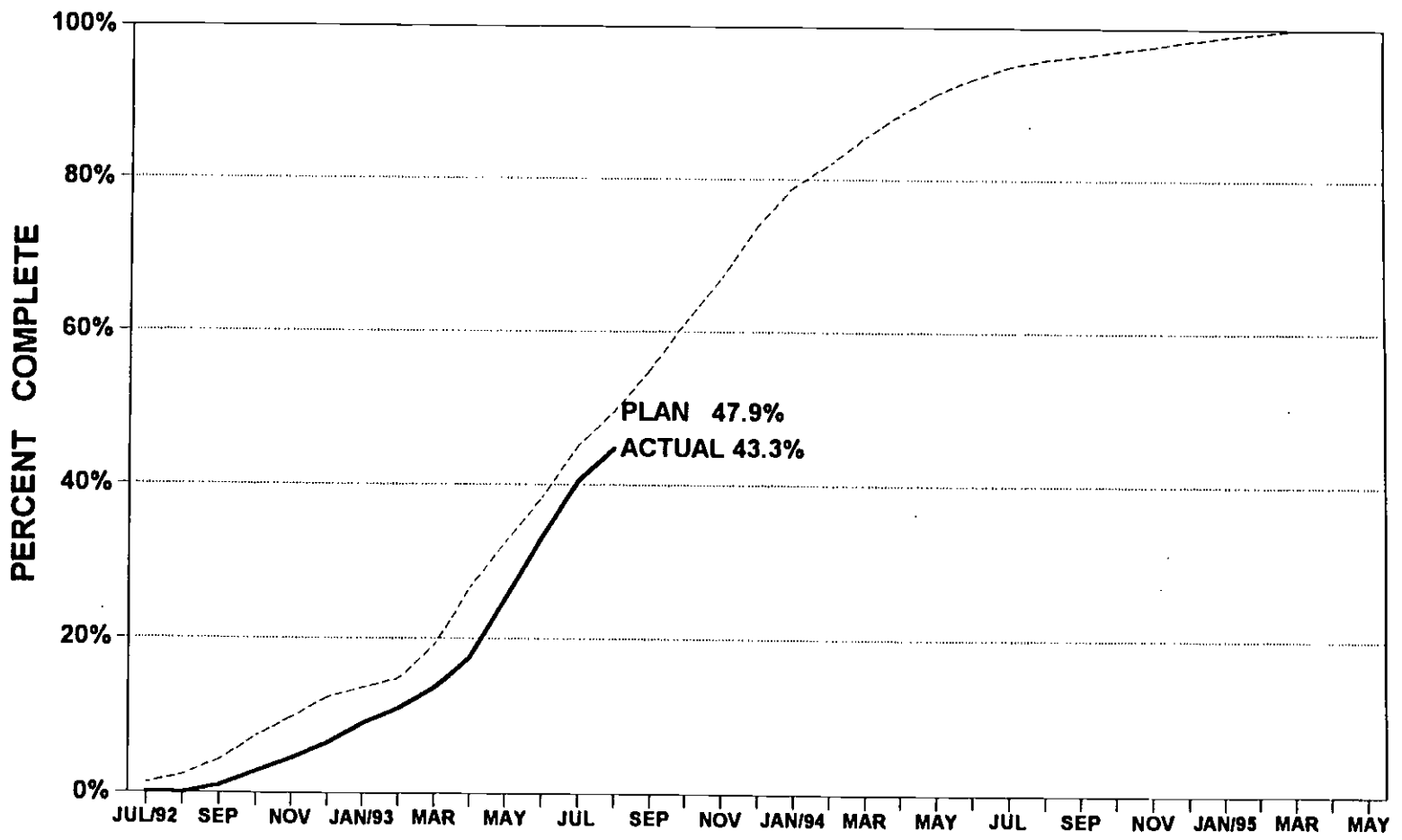


## PROJECT COMMITMENTS - PROJECT

### FISCAL YEAR



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



# METRO RED LINE SEGMENT 3 MID CITY EXT - FACILITIES DESIGN

