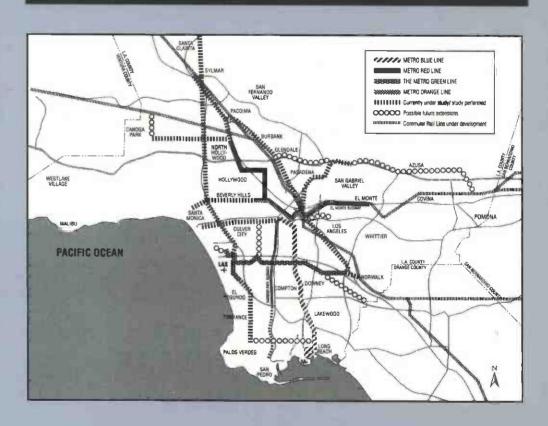
# RAIL CONSTRUCTION CORPORATION



Executive Report Rail Program Status





### RAIL PROGRAM STATUS SUMMARY

#### **RAIL PROGRAM STATUS SUMMARY**

			<del></del>
Metro Red Line Se	ament 1		
Cost Status	(\$000)	Project Progress	
Original Budget	1,249,900	Design:	
Expended to Date		Plan	100%
Current Budget	1,450,019	Actual	100%
Schedule Status	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Construction:	10070
Revenue Operation	s Date:	Plan	99%
	April 1992	Actual	99%
_	January 1993	7.000	00,0
Metro Red Line Se	ament 2		
Cost Status	(\$000)	Project Progress	
Original Budget	1,446,432	Design:	
Expended to Date	387,439 *	Plan	92%
	1,446,432	• • • • • • • • • • • • • • • • • • • •	
Current Budget Schedule Status	1,440,432	Actual	90%
ROD: Wilshi	e Vermont/Hlywd	Construction: Plan	25%
Original Jul '96		Plan Actual	25% 19%
Forecast Jul '96	•	Actual	13%
Metro Green Line	Budget and forecast	excludes North Coast S	Segment)
Cost Status	(\$000)	Project Progress	-
Original Budget	671,000	Design:	
Expended to Date	311,651 *	Plan	100%
Current Budget	722,402	Actual	99%
Schedule Status	•	Construction:	
Revenue Operation	s Date:	Plan	60%
	October 1994	Actual	48%
<del>-</del>	November 1994		- •
Matralials /includes	A start un lines als		<u> </u>
		red facilities, and LAUP	1)
Cost Status	(\$000)	Project Progress	
Original Budget	473,262	Design:	4000
Expended to Date	349,079 *	Plan	100%
Current Budget	473,262	Actual	100%
Schedule Status	D D	Construction:	
Revenue Operations		Plan	98%
Original	October 1992	Actual	97%
Forecast	October 1992		
Metro Pasadena Li	ne		
Cost Status	(\$000)	Project Progress	
Original Budget	841,000	Design:	
Expended to Date	13,835 *	Plan	30%
Current Budget	841,000	Actual	30%
Schedule Status	- · · <b>,</b>	Construction:	
Revenue Operations	s Date:	Plan	0%
Original	November 1997	Actual	0%
Forecast	November 1997	* Expended data thro	
i Diecast	140Velliper 1997	Expended data tint	Augii i 60. 1333

STATUS DATE.

03/31/93

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

(IN THOUSANDS)

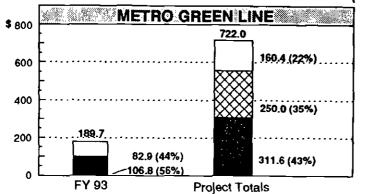
PROJECT: TOTAL RAIL PROGRAM

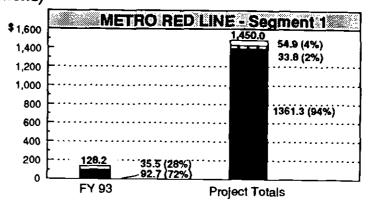
ELEMENT	BUI	OGET	соммі	TMENTS	INCURR	RED COST	EXPEN	DITURES	CURRENT FORECAST	VARIANCE (9-2)
DESCRIPTION	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)	(9)	(10)
T CONSTRUCTION	2,556,544	2,872,234	2,152	2,185,315	36,291	1,712,645	27,266	1,651,537	2,863,300	(8,934)
S PROFESSIONAL SERVICE	916,962	1,073,664	5,207	1,065,051	9,261	881,063	11,990	875,432	1,180,705	107,041
R REAL ESTATE	247,495	301,211	3,250	274,237	3,813	264,424	5,054	264,334	315,264	14,053
F UTILITY/AGENCY FORCE ACCOUNTS	105,421	88,791	234	88,363	855	72,275	855	71,755	90,641	1,850
D SPECIAL PROGRAMS	7,667	13,790	57	2,369	1	1,073	1	1,073	19,806	6,016
C CONTINGENCY	322,710	190,109	0	0	0	0	0	0	73,701	(116,409)
A PROJECT REVENUE	(18,115)	(43,675)	0	(819)	0	(6,408)	0	(6,408)	(36,695)	6,980
PROJECT GRAND TOTAL	4,138,684	4,496,124	10,900	3,614,516	50,221	2,925,072	45,166	2,857,723	4,506,722	10,597

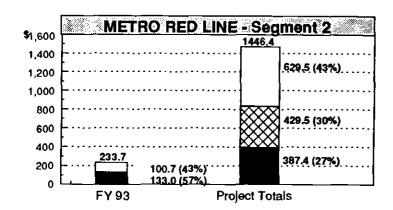
NEW REQUIREMENTS	BU	OGET	СОММІ	TMENTS	INCURR	RED COST	EXPEN	OITURES	CURRENT	VARIANCE (9-2)
DESCRIPTION	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)	(9)	(10)
T CONSTRUCTION	0	3,562	0	0	0	0	0	0	60,078	56,516
S PROFESSIONAL SERVICE	0	0	336	4,465	3,467	4,325	2,168	2,168	8,226	8,226
R REAL ESTATE	0	0	0	0	0	0	0	0	0	0
F UTILITY/AGENCY FORCE ACCOUNTS	0	0	0	O	0	0	0	0	0	0
D SPECIAL PROGRAMS	0	0	0	0	o	0	o	0	0	o
C CONTINGENCY	О	0	0	0	0	0	0	0	0	0
A PROJECT REVENUE	0	0	. о	0	0	0	o	0	0	0
NEW REQ. SUBTOTAL	0	3,562	336	4,465	3,467	4,325	2,168	2,168	68,304	64,742
PROJECT GRAND TOTAL	4,138,684	4,499,686	11,236	3,618,981	53,688	2,929,397	47,334	2,859,891	4,575,026	75,339

This report includes total project costs for the Metro Blue Line of \$877. It does not include project costs for any Metrolink start-up lines.

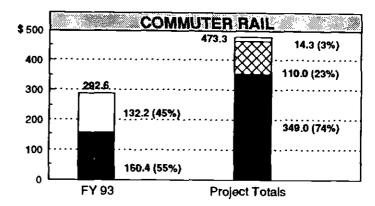
#### BUDGET STATUS - March 26, 1993 (in \$ Millions)

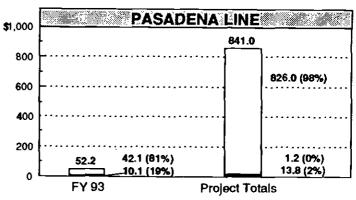






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Actual Spent Encumbered Remaining Budget

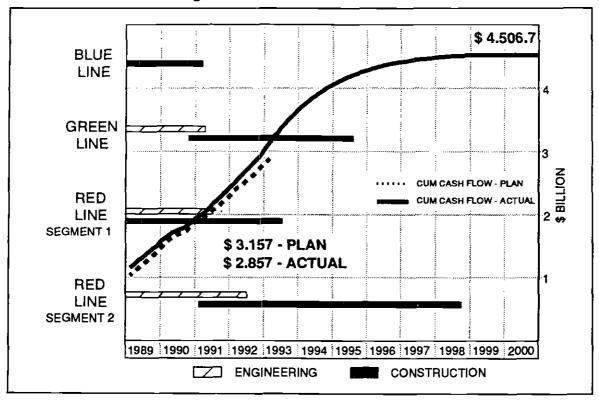


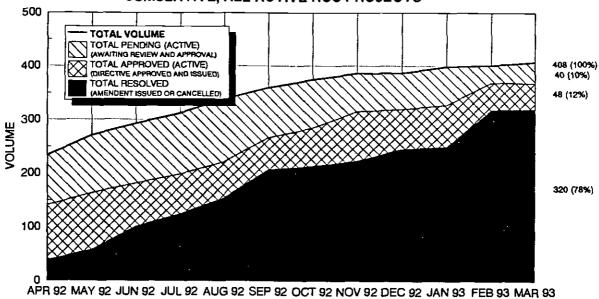
Figure 1 - Rail Construction Plan

Figure 2 - Rail Construction Funding Sources

				(IN MILL	(SNO)					
			METRO	GREEN	METRO	RED	METRO	- 1	TOTA	_
	LIN		LIN		SEGME	_	SEGME		PROG	
FTA-SECTION 3	-	96	\$	%	\$ 605.3	<u>%</u> 42	\$ 667.0	% 44	\$ 1272.3	<u>%</u> 3
FTA-SEC 3 DEFERRED LOCAL SHARE									Ì	
FTA-SECTION 9					90.6	6		i	90.6	:
STATE	ļ				210.3	15	186.0	12	396.3	!
PROPOSITION A	877.2	100	205.1	28	179.5	12	439.4	29	1701.2	3
TRANSIT ENHANCEMENT (PROP A)	ĺ						63.2	4		
PROPOSITION C			517.0	71				.	517.0	1
IMPERIAL HWY GRADE SEP (PROP C)			4.5	1.					4.5	
AMERICAN DISABILITY ACT (PROP C)			6.4	1			5	o	11.4	
CITY OF LOS ANGELES					34.0	2	96.0	6	130.0	
BENEFIT ASSESSMENT					130.3	9	58.0	4	188.3	
COST OVERRUN ACCOUNT					200.1	14				
BENEFIT ASSESSMENT SHORTFALL								' <u>]</u>	Ì	
FORECAST						0			0.0	
TOTAL	877.2	100	733.0	100	1450.1	100	1514.6	100	4311.6	10

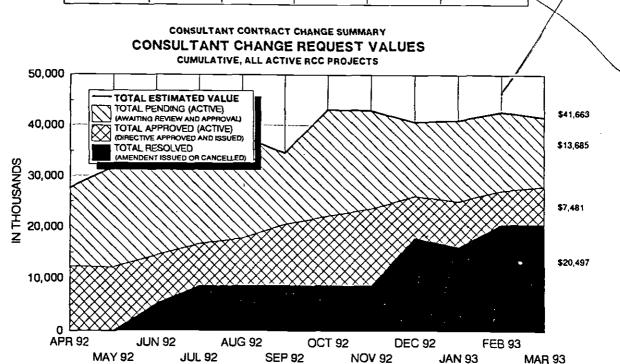
<sup>\*\*</sup> LRT PORTION INCLUDED IN BLUE LINE FORECAST.

## CONSULTANT CONTRACT CHANGE SUMMARY CONSULTANT CHANGE REQUEST RESOLUTION CUMULATIVE, ALL ACTIVE RCC PROJECTS



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	6	5	9	68	88						
PERCENT	7%	6%	10%	77%	100%						

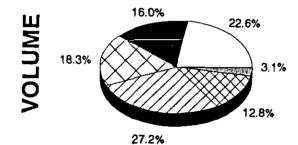


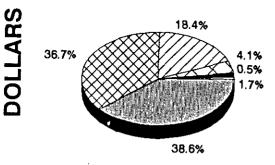
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# METRO PROGRAM CHANGES BY COST LEVEL AND BASIS CONSULTANT CONTRACT CHANGES

#### **COST LEVEL**

Total: \$41.6 Million



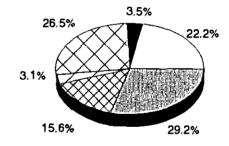


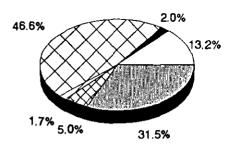
### Legend

Cost Range		<u>Basis</u>
\$ 0-10K		OTHER AGENCIES
10-25K		SCHEDULE REVISION
25-50K	$\boxtimes$	CONTRACT CHANGES
5 <b>0</b> -200K		CLAIMS/DISRUPTIONS
200K-1 MIL	$\boxtimes$	SPECIAL STUDIES
ABOVE 1 MIL		STAFFING/EQUIPMENT

#### **BASIS**

Total: 257





DATA AS OF 03/26/93 REQUESTED CHANGES SINCE 05/01/91 ONLY

#### **REAL ESTATE**

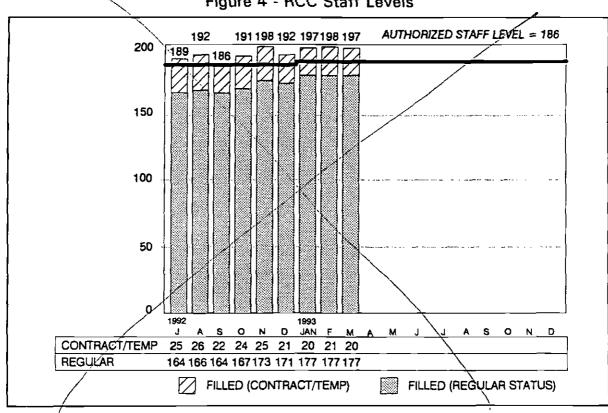
Figure 3 - Real Estate Acquisition Status Summary

	Number of Parcels		Parcels Not Available (on Schedule)
Green Line	39	39	0
Red Line Seg 2	85	60	21

			_	
Parcels Not	Ava	lab	le	
(Behind Scl	nedu	e)	_	
Number	Avg	Di	ys I	§ehind
0	[	/	0 /	1
4			42	1
				/

#### RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Figure 4 - RCC Staff Levels



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#### RAIL CONSTRUCTION CORPORATION

EXECUTIVE SUMMARY LABOR DISTRIBUTION REPORT
For Period: February 1993
(All Figures in FTE Person Months)

ge:	1
ate:	3/30/93
ime:	A-31 am

		Blue		Pasa	05 dena	Green	Line	Red Red		Red Se	g 2	Red S		Sub Total	R6	x/7x n Rail	Rxx Other Proj	R92 System W	de	000 Overhead	Sub Total	Grand Total	
DIVISION		PER	YTO	PER	YTD	PER	YTO	PER	YID	PER Y	10	PER	YID	PER YTD	PER	YTO	PER YID	PER YTO	7	PER YTO	PER Y70	PER YTD	BUDGET
Area Teams	BLIDGET ACTUAL	0.0	0.0	0.0	0.0 4.7	0.0	0.0	0.0	0.0 .8	0.0 .5	0.0.	0.0 1.1	0.0	0.0 0.0 3.9 19.9		/A	N/A	N/A		N/A	N/A	0.0 0.0 3.9 19.9	0.0
ATO Finance	BUDGET	0.0	0.0 1.1	0.0	0.0 1.1	0.0 .5	0.0 2.2	0.0 1.9	0.0 6.7	0.0 1.3	0.0 5.3	0.0	0.0 .8	0.0 0.0 4.2 17.1	٧	/A	N/A	N/A		H/A	N/A	0.0 0.0 4.2 17.1	0.0
ATO Administration	BLDGET ACTUAL	0.0	0.0 16.1	0.0 1.8	0.0 12.3	0.0 4.0	0.0 25.1	0.0 20.5	0.0 53.6		0.0 60.8	0.0 3.7	0.0 15.9	89.0 0.0 4121 184.1		/A	N/A	N/A		N/A	N/A	0.0 0.0 41.1 184.1	0.0
Commuter Rail	BLIDGET ACTUAL	0.0	0.0	0.0 0.0	0.0 .1	0.0	0.0 0.0	0.0	0.0	0.0 0.0	0.0	0.0	0.0	0.0 0.0 0.0 .2	1	/A	N/A	N/A		N/A	N/A	0.0 0.0 0.0 .2	0.
RCC	BRUDGET ACTUAL	0.0	0.0	14.6 11.7	110.4 49.3		242.8 122.7	4.4 18.2	40.1 113.6	34.8 24 35.2 2	45.4 21.1	22.0 13.2	154.7 50.0	106.8 773.4 100.5 561.6	3.0 7.2	12.0 43.4	5.3 63.4 12.1 70.7	44.4 305 43.0 215		16.0 128.0 17.4 139.1	71.7 508.6 79.7 469.0	178,5 1302,0 180,1 1030,6	2022.
COMMISSION TO	DTAL BLOGET ACTUAL	0.0 2.7	Except in	14.6 15.6	\$**X^***&		242.8 150.8	4.0		34,8 2 45.7 2		22.0 18.2	154.7 76.7	106.8 793.4 149.6 762.8	7.2	12.0 43.4	8.3 63.4 (2.1 70.7)		8	16.0 128.0 17.4 139.1	71.7 508.6 79.7 469.0	178.5 1302.0 229.3 1251.8	
ANNUAL BUDGE	T		0.0		168.6		367.2		57.5	34	84.6		245.8			24.0	96.6	485	.8	192.0	ļ -		2022.

MGMT/ENLION + ADMIN\_COST

#### CORPORATE COST TARGETS RELATIVE TO CONSTRUCTION

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.

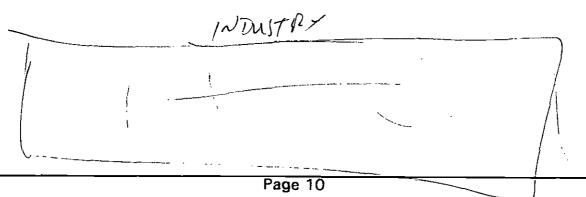
The RCC corporate goal for project administration costs is 20%. The current cost forecast data for project administration costs totals 26.4% which exceeds the corporate goal by 6.4%. The percentage includes all costs previously expended by the SCRTD when the Metro Red Line Segment 1 project was under SCRTD management.

Staff costs are projected at 4.6% of total program costs, which exceeds the 4.0% corporate goal. Figure 6 illustrates the forecast figures for each project and for total program.

Figure 6 - Cost Performance Relative to Corporate Goals

METRO BLUE LINE | METRO GREEN LINE METRO RED LINE METRO RED LINE CORPORATE TOTAL SEGMENT 1 SEGMENT 2 PROGRAM GOAL DOLLARS PERCENT DOLLARS PERCENT DOLLARS PERCENT DOLLARS PERCENT CONSTRUCTION 657,487 74,95% 502,891 68.61% 811,501 55.96% 1,042,557 65.89% 68.83% 3.014.436 REAL ESTATE 55,592 6.34% 28,522 3.89% 140,000 9.66% 91,149 6.02% 315,263 6.89% PROFESSIONAL SERVICES: ENGINEERING/DES 69,587( 7.93% 73,166 9.98%() 218,218 15.05% - 9.40% 11.00% 142,426 503,397 CONSTR MGMT. 91,642 10,45% 66,985 -- 9.14% 147,724 8.73% 10.19% 132,203 438,554 9.59% STAFF 17,655 2.01% 27,607 - 3.77% 96,273 4.63% 6.64% 70,237 - 4.64% 211,772 4% OTHER 14,222 1.62% 17,509 2.39% 867 0.06% 22,453 - 1.48% 55,051 1.20% SUBTOTAL 22.01% 25.28% 193,106 185,267 463,082 31.94% 367,319 24.25% 1,208,774 26.42% 20% CONTINGENCY 963 0.11% 22,838 3.12% 35,436 2.44% 14,011 0.92% 73,248 1.60% PROJECT REVENUE (29.877)-3.41% (6,518)-0.89% 0.00% -0.02% (300)(36,695)-0.80% 877,271 100.00% GRAND TOTAL 733,000 100.00% 1,450,019 100.00% 1,514,736 100,00% 4,575,026 100,00%

(IN THOUSANDS)



### RCC PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

NEW - No new items.

ONGOING - February 1993

Concern: The Metro Green Line change order backlog has increased to 141 since

last report. The largest backlog growth area has been in the over 90 day late category. This category has grown from 36 to 72 outstanding.

Action: The RCC and CM should develop an incentive program to encourage the

contractors to expedite change notice pricing and negotiations.

Status: The Metro Green Line Project Manager has directed the CM to develop

a plan to reduce the change order backlog.

Concern: The RCC Board has not approved the schedule for the Metro Green Line

segmental opening.

Action: Review proposed Metro Green Line segmental opening schedule with

RCC Board for approval.

Status: Schedule review and analysis has been completed. A presentation to a

Board subcommittee is scheduled for April 22, 1993.

Concern: Access dates for RCC contractors on Metro Green Line may not be met.

Action: The CM should perform cost/benefit analyses on various acceleration

strategies in order to achieve forecasted access dates.

Status: The CM will present a plan to MGL project management on April 21,

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: Engineering progress on the Metro Pasadena Line is a continuing

concern.

Action: Design progress information has been requested by FDI in order to

conduct an analysis.

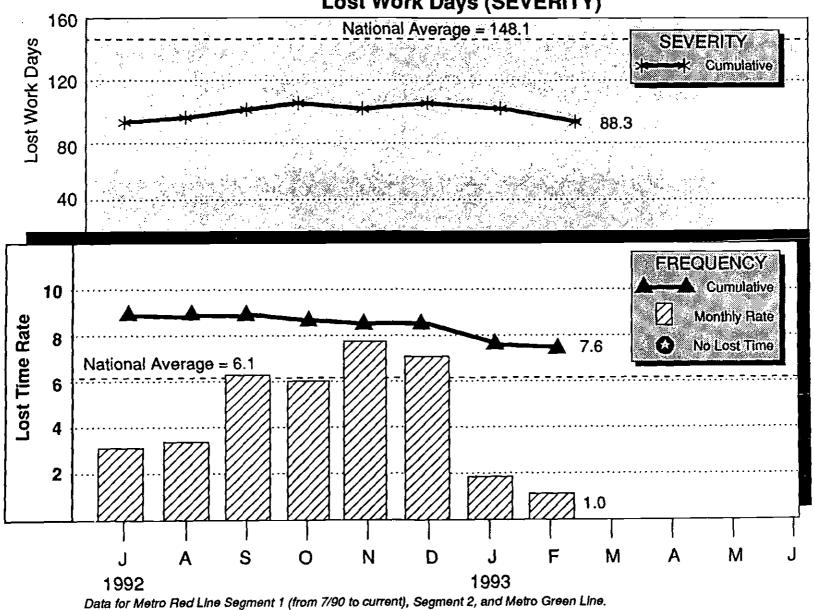
Status: FDI is discussing management plan and strategy to meed final design

schedule with project staff and the EMC.

RESOLVED - No new items.

TOTAL PROGRAM





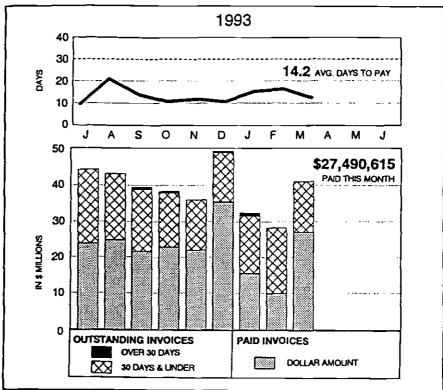
Page

#### METRO BLUE LINE GRADE CROSSING INCIDENT STATUS **Line Section Cumulative Accident Rate Per Month Total Accidents** 7th/Metro Station Los Angeles 56 Accidents Avg. Accidents Street Running -Per Month Majority of accidents were caused by illegal Slow Speeds. left turns into the path of the train. 1 Accident this month. 34 Accidents Cab Signal -Avg. Accidents Majority of accidents Per Month Speeds Between were caused by barrier 25 and 55 MPH. arm violations. Major Injuries and most fatalities occurred here. No Accidents this month. 72 Accidents Long Beach Avg. Accidents Majority of accidents Street Running Per Month were caused by illegal Slow Speeds. left turns into the path of the train. Long Beach Transit Mall No Accidents this month. Avg. Accidents Per Month **Blue Line** 162 Total Accidents Summary 1 Accident this month. 1990 1991 1992

#### **INVOICE PROCESSING**

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 14.2 days.
- 50 invoices were paid this month for a total value of \$ 27,490,615.
- There were 13 outstanding Construction or Procurement invoices under 30 days old for \$ 14,078,736.
- There were 2 outstanding Construction or Procurement invoices over 30 days old for \$ 17,167.

#### 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**

<u> </u>	Con	struction/Procu	rement invo	ices	Other Invoices							
	30 Days	and Under	Over 3	0 Days	30 Days	and Under	Over 30 Days					
!	Number of	Dollar	Number of	Dollar	Number of	Dollar	Number of	Dollar				
Month	Invoices	Value	Invoices	Value	Invoices	Value	Invoices	Value				
OCT 1992	45	15,026,900	1	574,379	77	8,750,757	25	4,268,765				
NOV 1992	32	14,103,060	0	0	52	5,408,308	17	2,974,820				
DEC 1992	45	13,720,653	2	389,360	86	8,061,468	11	2,975,227				
JAN 1993	40	16,195,600	4	823,507	75	6,153,892	21	3,070,015				
FEB 1993	22	18,452,405	1	500	61	9,654,506	20	731,924				
MAR 1993	13	14,078,736	2	17,167	43	6,943,622	12	547,720				

#### **EXECUTIVE SUMMARY**

The EMC reported an 8% gain in production during the month of March, 1993 and continues to achieve schedule according to their completion plan for Preliminary Engineering (PE).

Public Affairs and the Art-for-rail Program have begun conducting 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.

Since the official adoption of the Metro Pasadena Project on January 27, 1993 by the LACTC Board, EMC has continued PE on the thirty-plus baseline tasks as well as the Midway Yard layout and the below-grade segment at Marmion/Figueroa. As of monthend March, PE was 92% complete; the forecasted completion remains at mid-May, 1993. Close-out of PE is being addressed, identifying those activities which can now be deferred to Final Design Engineering.

#### 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. Preliminary Engineering (PE) must now proceed to define the

scope of work for Final Design of the Yard & Shops.

Action:

EMC/RCC to define scope of work for Final Design and resolve outstanding issues related to secondary access for the LA Fire Department (LAFD) and the provision for an Elysian Park bike

path.

Status:

The section designer is now on board with a limited NTP. Continue close communications with the designer, and RCC/RTD Operations & Maintenance staff to identify/define Yard & Shops layout. Discussions continue with LAFD, DWP, and Parks & Recreation to refine requirements for additional access road to the Midway Yard and to study proposals for a bike plan connecting

Elysian Park to the LA River bike path.

#### 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. Impacts on access to the Ratkovich development require evaluation. 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. Discussions continue on related issues.

Status:

Monthly meetings continue, with workshops as needed to negotiate outstanding issues. LACMTA leadership in resolving these issues is on-going with the project providing technical support as required.

#### Real Estate

Concern:

The Real Estate effort by LACMTA and EMC continues to lag behind schedule in development of a comprehensive Real Estate matrix. Full and partial takes still need to be identified, as well as those for alternate TPSS sites.

Action:

The Pasadena Project team will facilitate 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 that are contained in the Right-of-Way acquisition Control Matrix are underway. This should be complete by the end of March.

#### 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 for start of upcoming final design.

Action: RCC is interfacing with the City of Los Angeles, Fire/Life Safety,

and the CPUC on acceptable train operation details through the

Marmion Way segment.

Status: Continue working with the involved agencies and communities.

Alternative solutions are being proposed. Potential schedule delay exists if additional full and/or partial property acquisitions are

required for acceptable emergency vehicle access.

#### **Glendale Wye Connection**

Concern: Identification of the Glendale Wye connection and non-revenue

connector and their possible impacts on the Pasadena line at Avenue 19 are being evaluated. Additional costs and potential bridge modifications at Avenue 19 and San Fernando Road are

expected.

Action: RCC/EMC to define impacts and associated costs.

Status: Work is in progress. Preliminary impacts have been identified;

direction on how to proceed has been requested of LACMTA.

#### **KEY ACTIVITIES - MARCH**

 RCC continued to hold discussions with SCRRA, RTD and LAFD to review Midway Yard conceptual design and access. Consensus should be reached as to final Yard configuration by the end of March, 1993.

- Continued to finalize PE, along with the items which were added to the baseline budget: Marmion/Figueroa Grade Separation; Park-and-Ride Lot @ Marmion/Figueroa; Southwest Museum; and Colorado Grade Separation.
- Received responses to RFQ's from section designers for the four line segments of the alignment.
- Received and reviewed modified Sierra Madre Villa station feasibility report and cost estimate from EMC.
- Revised Project Schedule to reflect approved budget, consolidation of ROD dates and additional scope of work.

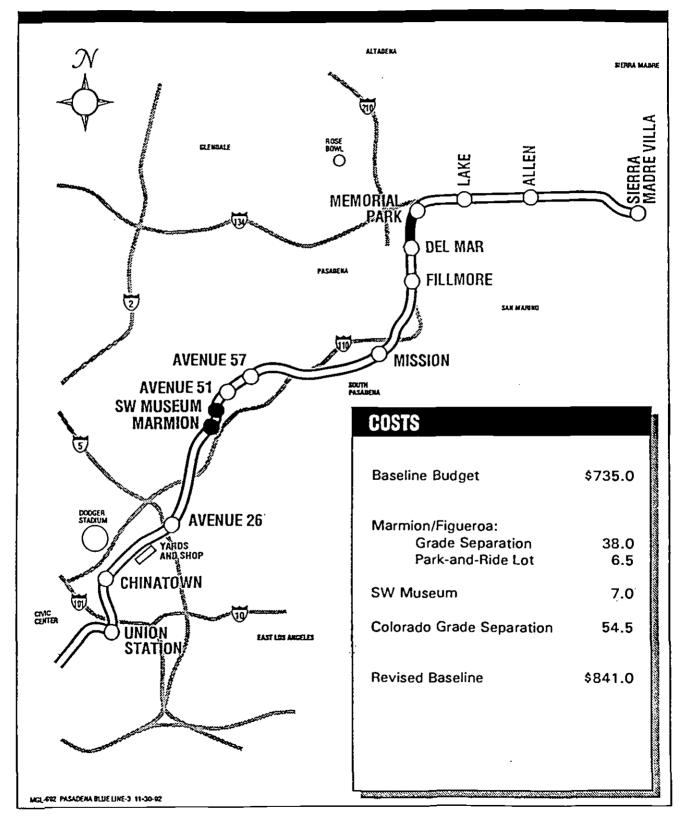
- Updated Cash Flow requirements based on the revised Project Schedule; review final product with Capital Planning.
- Kicked-off TOP Program at Franklin High School on March 17, 1993.
- The San Gabriel Area Team submitted applications for available grant monies for the renovation of the Arroyo Seco Bridge and for Urban Greenways.
   LACMTA is ranking all grant applications to determine their importance. A decision on these two applications is due by the end of April.

#### **KEY ACTIVITIES - PLANNED FOR APRIL**

- Continue Community meetings for the Station Artist selection process.
- Issue by April 23, 1993 the revised Contract Unit Description documentation reflecting the approved project scope adopted January 27, 1993.
- Award service contracts for Waste Handling and Environmental Engineering.
- Real Estate re-prioritization of full-takes and Site Office/Laydown requirements to support acceleration of certification process; activity to be completed by the end of April, 1993.
- Finalize special permitting process with the cities of Los Angeles and Pasadena.
- Finalize MCA with the City of South Pasadena.
- Award Final Design contracts for the following: the line segment from Del Mar to Walnut Street; Midway Yard & Shop; architectural contracts for the six (6) station packages.
- Determine short-list for Construction Manager contract MC-013; hold interviews during the last week of April.



### METRO PASADENA PROJECT Union Station to Sierra Madre Villa



#### **EXECUTIVE SUMMARY**

#### COST STATUS (in millions)

• Current Budget \$722

• Current Forecast \$733

#### **SCHEDULE STATUS**

Current Approved Revenue Operations Date May, 1995
 Design Progress - Plan 100% - Actual 99%

Construction Progress - Plan 60%\*Actual 48%

#### **REAL ESTATE STATUS**

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

<sup>\*</sup> plan percentage reflects the current target schedule

#### **AREAS OF CONCERN**

#### **ONGOING**

Approval of the Contract H1100 (Automatic Train Control) Schedule to Support the Target May 1994 Segmental and the Target November 1994 Revenue Operations Date

Concern:

The Contract H1100 contractor, Union Switch & Signal, Inc. has shown a schedule of work that does not support either the segmental or the full line ROD. The contractor may not have the resources to meet the project schedule requirements for either revenue operations target

Action:

Change Notice 005 has been submitted to the contractor defining the scope of work and schedule requirements for both revenue operations dates. The contractor has been requested to prepare a cost and schedule proposal for the change as well as a baseline schedule. This proposal is still pending as of March 26, 1993.

Status:

The contractor was informed of the importance of meeting the project schedule. As soon as the cost and schedule proposal is received it will be evaluated for project requirements. The contractor was in Los Angeles to discuss schedule issues the first week of March, 1993.

#### Caltrans Project CT042 (Dunrobln to Studebaker)/Contract C0600 (Century Trackwork Installation) Access Date

Concern:

The LRT access date continues to slip. Original forecast turnover dates are no longer valid. Significant progress has been lost due to the rain and the accumulated water damage. Continual slippage is having a pronounced cost and schedule impact on the turnover of this contract to the LRT follow-on contracts.

Action:

The contractor's schedule was reviewed and recommendations were

forwarded to Caltrans in February, 1993.

Status:

The contractor has resumed construction activities as of February, 1993. Full

access will be gained by the end of April, 1993.

#### Contract C0100 (Aerial Guideways) Schedule Impacts to Contract C0610 (El Segundo Trackwork Installation) and the November 1994 Revenue Operations Date

Concern:

The Contract C0100 schedule may impact Contract C0610 access dates with potential impact to the target November 1994 revenue operations date. Final resolution of delay and impact issues such as delayed contract access due to Chevron interface and the El Segundo Station re-design for additional stairs need to be analyzed.

Action:

Negotiations are continuing with the contractor to resolve various change notices. Delay and impact issues are being analyzed in order to achieve access to the guideway as early as possible.

Status:

The Contract C0610 contractor received access to the yard throat March 8, 1993. Additional hours have been authorized for Frames 57 and 58. Other candidate areas are being considered for overtime work.

### 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. This delay will have a negative impact on the November, 1994 target revenue operations date by approximately two months. 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 and has directed the contractor to produce a schedule with a target completion date of late August, 1993.

Status:

Excavation of the site continues. Weekly status meetings are being conducted and any slip in the schedule will be recovered by the addition of extra resources or work hours. Caltrans has informed its contractor that contract construction is to be completed by 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 the segmental revenue operations date and Contract H1200 (Traction Power Supply System) interface dates by approximately one month.

Action:

Assistance has been extended to the contractor in expediting submittals and working to a schedule. The contractor has been asked to submit a reasonable schedule to recover the lost time with appropriate supervision at various sites.

Status:

The contractor has submitted a March, 1993 schedule that generally maintains the February, 1993 schedule update milestones incorporating extra concrete parapet forms and working hours. OKA will be monitoring the near-term schedule performance.

### 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 and minor

schedule impact to the target segmental revenue operations date.

Action: Workaround scenarios to expedite turnover to the Contract C0600

contractor have been developed.

Status: Turnover is anticipated at the contract completion date of September 1,

1993. The monitoring of the contractor's construction schedule has been increased, providing more accurate assessment of time extensions due to

change orders, owner and weather delays.

#### **Caltrans Permits**

Concern: Caltrans encroachment permits are required for each contract working

within Caltrans right-of-way.

Action: The full permits for Contracts C0600 (Century Trackwork Installation),

C0501 (Systems Facilities Sites), H0831 (SCADA), H0832 (Cable Transmission System), H0840 (LRT Fare Collection Equipment), H1100 (Automatic Train Control), H1200 (Traction Power Supply Systems), H1300 (Signage and Graphics) and H1400 (Overhead Contact System) have been issued. The RCC is pending receipt of the permit for Contracts C0095 (Wayside Intrusion Detection System) and C0901 (Platform Intrusion

Detection System).

Status: RCC will apply for additional and remaining contract permits as necessary.

Caltrans is currently reviewing the Contract C0095 Traffic Control Plan.

### Caltrans Project CT046 (Vermont to Main)/Contract C0600 (Century Trackwork Installation) Access Date Conflict

Concern: Site access for Century trackwork installation originally scheduled May 1,

1992 will be withheld until the contract milestone is satisfied and construction is completed. Complete access was forecast for September 15,

1992.

Action: All work-arounds are being explored. The Caltrans contractor is being

requested to control its schedule and the subcontractor's schedule. Partial access to allow the Contract C0600 contractor an opportunity to start work in small areas is being pursued. OKA has published a contractor's schedule for the remaining LRT work which is being used by OKA, Caltrans and the

contractor to measure progress and forecast turnover dates.

Status:

The facilities/structures contractor has not completed the project to satisfaction. Contract C0600 contractor access is still pending. The contractor's tentative turnover schedules have proved inadequate. The ballasted section has been damaged by the contractor during construction. Although the inspection staff has pursued correction prior to release, repair has been delayed since these structures are being used as the primary haul route of excavated material from Caltrans Projects CT033 to CT044.

Remedial Work: Caltrans Projects CT037 (La Cienega to Inglewood), CT044-1 (Santa Fe to Atlantic), CT046 (Vermont to Main) and CT047 (Atlantic to Garfield)

Concern:

Documentation indicates that there are bent anchor bolts, incorrect anchor bolt sizes, lack of anchor bolt protection, lack of proper grounding, conduits not mandrelled and lack of continuity straps in the above Caltrans projects. The remedial work, if not completed in a timely manner, could impact the follow-on systems Contracts H1200 (Traction Power Supply System) and H1400 (Overhead Contact System).

Action:

On Project CT044-1, the deficient items were given to Caltrans as part of the punch list requiring completion prior to LRT turnover. The Caltrans Resident Engineers on Projects CT037, CT046 and CT047 have been informed of the deficiencies.

Status:

Correction of bent anchor bolts has been completed on Project CT047. Caltrans electrical personnel have been informed of the deficient grounding of OCS anchors and are to make appropriate corrections. All corrections are to take place prior to final acceptance of the LRT facilities supplied by Caltrans. Design deficiencies will be addressed by other methods.

#### **KEY ACTIVITIES - MARCH 1993**

• Issued Notice to Proceed for Contract C0095 (Wayside Intrusion Detection System).

#### **KEY ACTIVITIES - PLANNED FOR APRIL 1993**

- Award Contract H1300 (Signage and Graphics).
- Open bids for Contract C0090 (Miscellaneous Construction).

#### RAIL CONSTRUCTION CORPORATION PROJECT COST REPORT COST BY BLEMENT

Project: R23 NETRO GREEN LINE

Period: Feb 26, 1993 to Mar 26, 1993

Run Date: Apr 7, 1993

Unite: \$ in Thousands (Truncated)

	ORIGINAL BUDGET	CURRE	NT BUDGET	COM	IITHENTS	INCL	RREO	EXPER	DITURES	CURRENT	FORECAST	FORECAST VARIANCE
ELEMENT / DESCRIPTION		Period	d To Dat	e Perio	To Date	Period	To Dete	Period	To Date	Period	To Oate	<u> </u>
T CONSTRUCTION	470,191	2,421	570,37	1 1,004	384,661	11,199	195,271	5,286	173,388	1,347	491,974	-78,397
S PROFESSIONAL SERVICES	108,562		109,62	6 1,141	143,413	2,392	112,667	2.392	112,667	-210	180,440	70,811
R REAL ESTATE	36,927					1	23, 124	1	23,124			-709
F UTILTY/AGENCY FORCE ACCOUNTS	7,656		83810,50	0 155	9,831	167	2,865	167	2,B65	0 200	10,500	130 to 10
D SPECIAL PROGRAMS	4,675				1,018		210		210		4,790	0
C PROJECT RESERVE	59,613	*2,421	11.67	в 💮 🐃 (				0	· · · · · · · · ·	2,137	23,290	S 11,612
A PROJECT REVENUE	-16,626	q			-1,263		-605	0	-605			7,280
GRAND TOTAL - R23 METRO GREEN LINE	671,000	0	722,40	2 2,330	561,677	13,731	333,534	7,819	311,651	-1,000	733,000	10,597

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

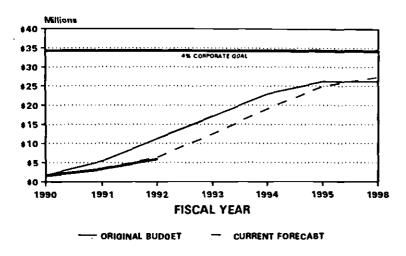
#### **FEBRUARY 93**

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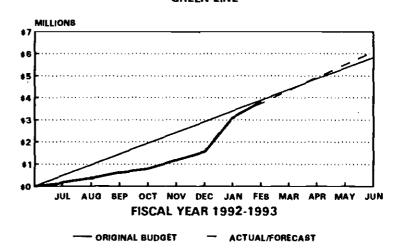
#### STATUS OF FUNDS BY SOURCE

	TOTAL	TOTAL	COMMITM	ents	EXPENDIT	URES	BILLED TO SO	URCE
SOURCE	FUNDS FUNDS ANTICIPATED AVAILABLE	AVAILABLE	\$	%		%	<b>\$</b>	%
PROP A	\$205,136	\$205,136	\$205,136	100%	\$205,136	100%	\$205,136	1009
PROP C	\$516,964	\$189,700	\$356,541	69%	\$106,515	21%	\$106,515	219
ISTEA/PROP C (IMPERIAL HWY GRADE SEPARAT	\$4,500 (ION)	\$1	\$0	0%	\$0	0%	\$0	09
PROP C (ADA)	\$6,400	<b>\$</b> 0	\$0	0%	\$0	0%	\$0	09
TOTAL	\$733,000	\$394,837	<b>\$</b> 561,677	77%	\$311,651	43%	\$311,651	439

#### AGENCY COST GREEN LINE



### FISCAL 1993 AGENCY COSTS GREEN LINE



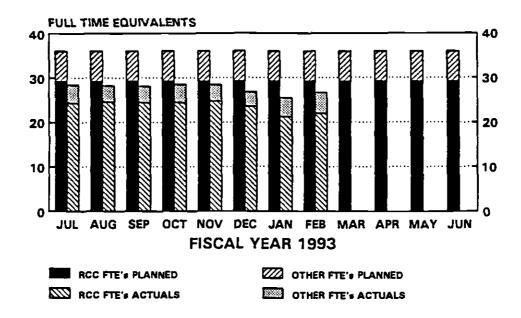
### PROJECT AGENCY COSTS GREEN LINE (\$000)

TOTAL PROJECT BUDGET	\$716,000
ORIGINAL BUDGET	\$ 26,189
BUDGET % OF TOTAL PROJECT	3.7%
CURRENT FORECAST	\$ 27,407
FORECAST % OF TOTAL PROJECT	3.B%
4% CORPORATE GOAL	\$ 2B,640

### FISCAL YEAR 1993 AGENCY COSTS GREEN LINE (\$000)

ORIGINAL BUDGET	\$5,833
FORECAST	\$6,099
ACTUAL \$ TO DATE	\$3,737

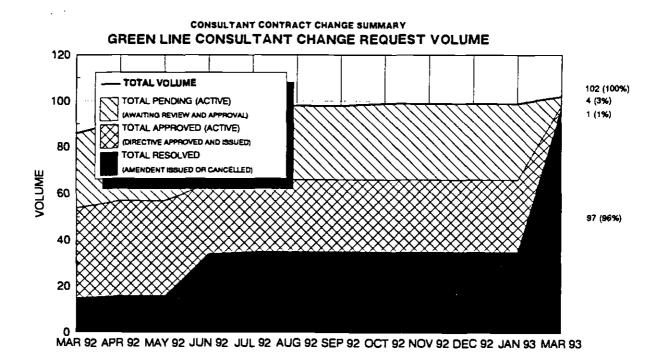
### STAFFING PLAN VS. ACTUAL GREEN LINE



**FY'93 BUDGET** 

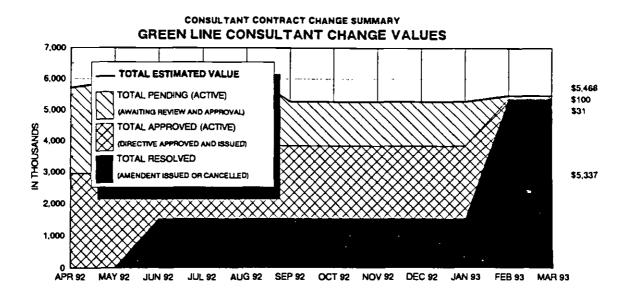
# GREEN LINE STAFFING PLAN FISCAL YEAR 1993

RCC FTE's PLANNED	29
RCC FTE's ACTUAL	22
OTHER FTE's PLANNED	7
OTHER FTE's ACTUAL	5
TOTAL FTE's PLANNED	36
TOTAL FTE's ACTUAL	27

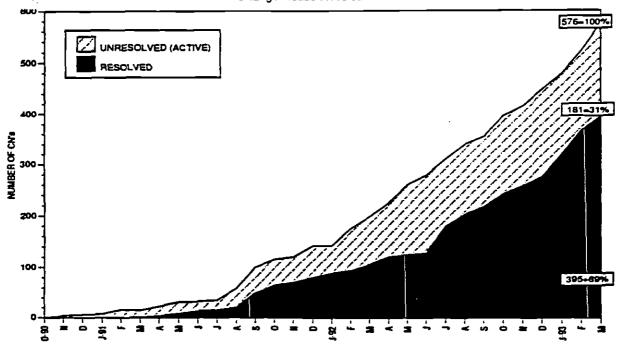


REQUESTED CHANGES SINCE 05/01/91 ONLY

AGE OF UNRESOLVED CONSULTANT CHANGES					
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	0	3	0	2	5
PERCENT	0	60%	0%	40%	100%

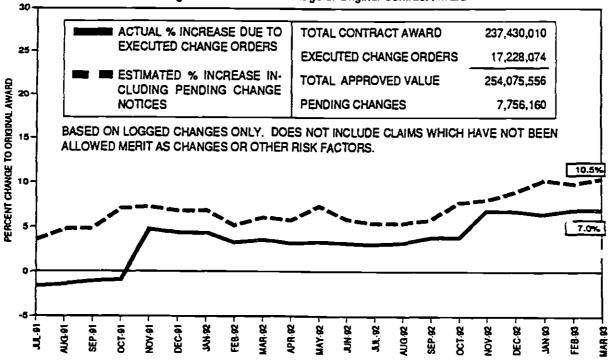


### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Notice Resolution

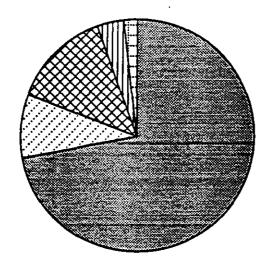


AGE OF UNRESOLVED CHANGES					
TIME	0-30 days	31-60	61-90	90+	TOTAL
VOLUME	51	23	14	67	155
PERCENT	33%	15%	9%	43%	100%

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



#### CONSTRUCTION/PROCUREMENT Change Volume and Cost By Cost Level Executed Changes as of 3/26/93



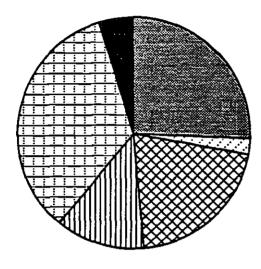
CHANGE VOLUME BY CHANGE VALUE TOTAL AS OF 3/26/93 = 272

#### CHANGE VOLUME ABSOLUTE VALUES

196	72.06%		<25,000
24	8.82%	88	<50,000
37	13.60%	$\boxtimes$	<200,000
10	3.68%		>200,000
5	1.84%		>1,000,000

#### CHANGE COST ABSOLUTE VALUES

# CONSTRUCTION/PROCUREMENT Change Volume and Cost By Change Basis Type Executed Changes as of 3/26/93



CHANGE BASIS VOLUME TOTAL 3/26/93=272

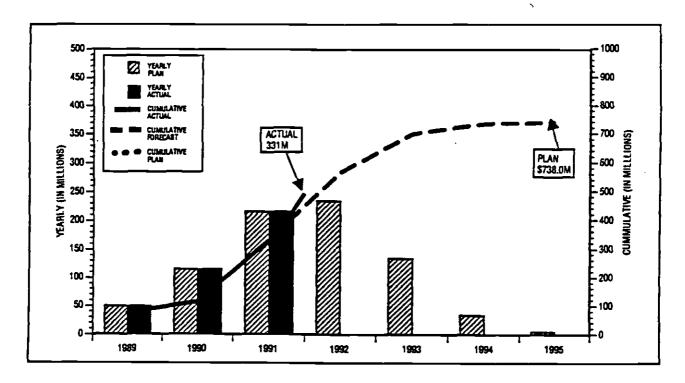
#### CHANGE BASIS VOLUME ABSOLUTE VALUES

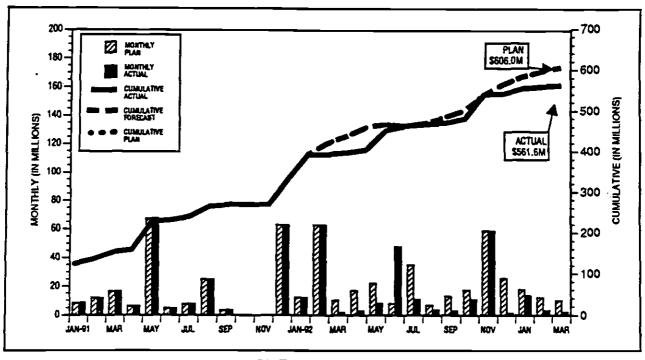
70	25.74%		Work Scope Changes
6	2.21%		Schedule Changes
56	20.59%	$\boxtimes$	Differing Conditions
34	12.50%		Administrative Changes
93	34.19%		Design Changes
13	4.78%		Other

#### CHANGE BASIS COST ABSOLUTE VALUES

\$1,086,489.55	Work Scope Changes
\$237,348.00	Schedule Changes
\$7,029,492.70	Differing Conditions
\$7,208,376.29	Administrative Changes
<\$114,326.61>	Design Changes
\$1,780,694.42	Other

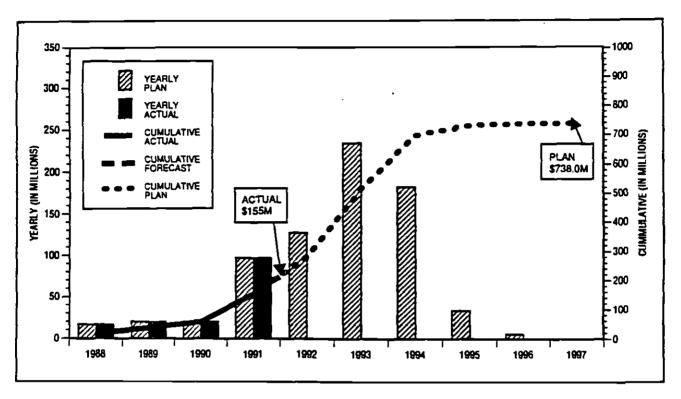
#### PROJECT COMMITMENTS

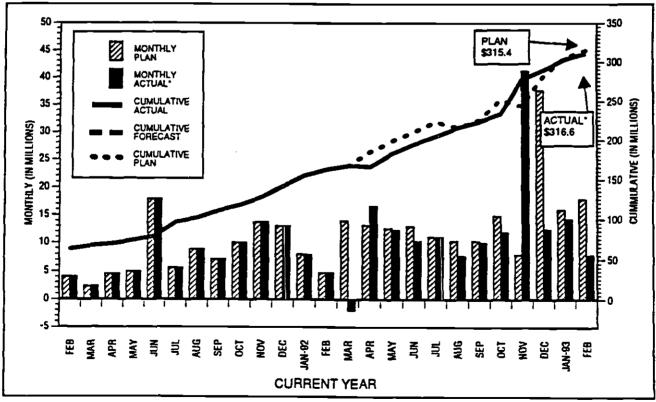




**CURRENT YEAR** 

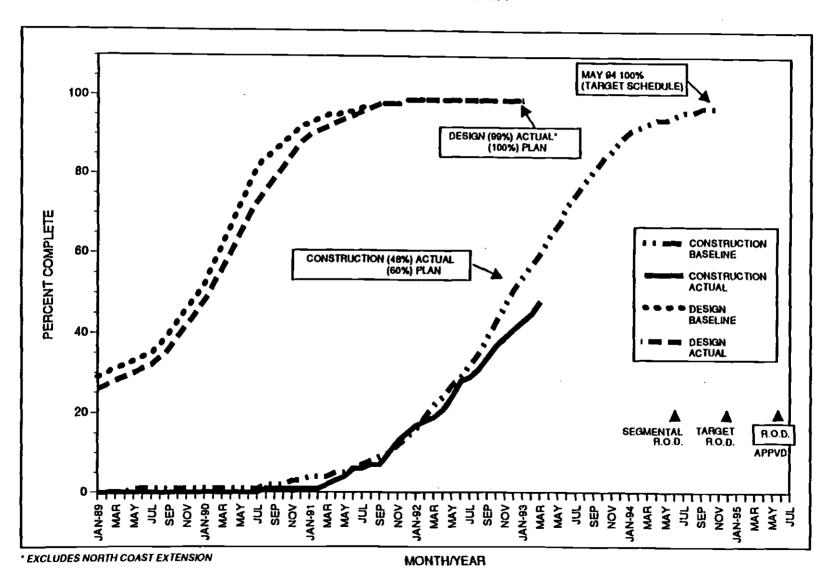
#### PROJECT CASH FLOW





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

#### **PROGRESS SUMMARY**

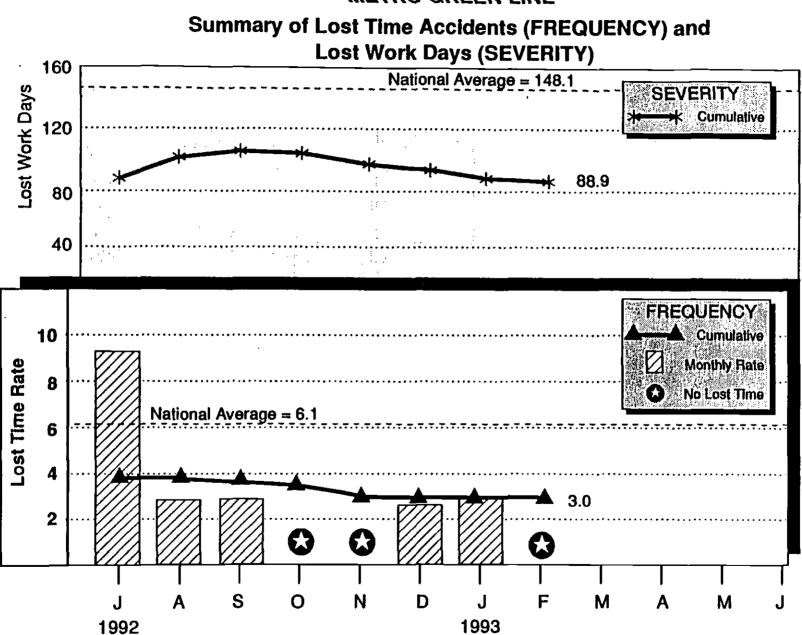


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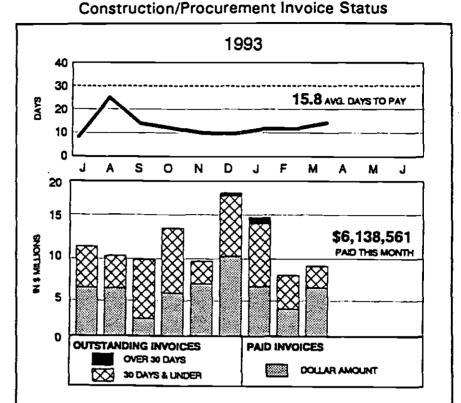
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#### **METRO GREEN LINE**



#### **INVOICE PROCESSING**

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 15.8 days.
- 20 invoices were paid for a total value of \$ 6.138.561.
- There were 5 outstanding Construction or Procurement invoices under 30 days old for \$ 2,748,401.
- There were no outstanding Construction or Procurement invoices over 30 days old.



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**

	Cons	struction/Procu	rement Invoic	es	Other Invoices					
•	30 Days and Under Number of Dollar		Over 30	Days	30 Days	and Under	Over 3	0 Days		
1			Number of	Dollar	Number of	Dollar	Number of	Dollar		
Month	invoices	Value	Invoices	Value	Invoices_	Value	Invoices	Value _		
OCT 1992	17	8,251,294	0	0	23	2,455,148	5	1,982,568		
NOV 1992	10	2,921,509	0.	0	. 13	1,495,399	4	1,980,273		
DEC 1992	21	7,623,013	_1	388,860	23	3,381,107	5	2,140,155		
JAN 1993	17	7,977,962	3	823,007	15	2,354,181	7	2,185,266		
FEB 1993	11	4,270,284	0	0	13	3,344,014	7	301,065		
MAR 1993	5	2,748,401	0	0	12	950,485	6	177,199		

#### **EXECUTIVE SUMMARY**

#### **GRANT TRANSFER**

 The Los Angeles County Metropolitan Transportation Authority (LACMTA) is now the Grantee of Record and possesses full drawdown capability. A grant close-out plan continues to be formulated.

#### **COST STATUS**

in \$ million

Current Budget 1,450

Current Forecast 1,450

The March forecast decreased primarily as a result of the close-out reconciliation of a variety of miscellaneous contracts and the reforecast of various claims issues. Additionally, the forecast decreased to reflect a net reduction due to the settlement of several pending claims for Contracts A130, A147/A157, and A187. Other decreases were for the elimination of several potential changes and revised change notice values for Contract A620, the settlement of changes for less than originally anticipated at Contract A136, and other smaller changes. An increase to the forecast was a result of additional Task Orders written for Contract A190.

Since no Segment 1 Cost Report was published for February, it should be noted that the March forecast reflects changes for February and March, compared to January. The Commitment, Incurred, and Expenditure information also covers the same two month period in this report.

#### **SCHEDULE STATUS**

Current Revenue Operations Date
 January 1993

Construction Progress - Plan
 99%

- Actual 99%

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

• The overall duration of the current Segment 1 Project Schedule is 76 months which reflects the actual Revenue Operation Date (ROD) of January 1993. The Project critical path is now through Contract A640 SCADA reliability demonstration and availability test to contract completion on May 25, 1993. Acceptance of passenger vehicles at the main shop, and systemwide certification remains the near critical path.

#### **REAL ESTATE**

 All of the real estate required for Segment 1 construction is available under ownership by the Rapid Transit District or under a right-ofentry. Condemnation proceedings have been completed except for the removal of underground storage tanks.

## FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

#### ONGOING

Concern:

#### May 1992, Spot Report #15

The spot report addresses four areas of concern that need LACMTA

attention.

Action: There are three remaining issues that have been taken over by the

RCC with the grant transfer.

Status: The merger should facilitate the resolution of these issues. The RCC

is continuing to address the remaining issues.

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

**NEW** 

NONE

#### RESOLVED

May 1992, Grant Close-out Plan

Concern:

LACMTA/Operations did not complete an accepted grant close-out

plan prior to the grant being transferee to the RCC.

Action:

LACMTA has reviewed the previously prepared draft close-out plan

with Hill.

Status:

RESOLVED: RCC will accept the previously drafted close-out plan

for Segment 1.

#### **KEY ACTIVITIES - FEBRUARY - MARCH**

- Continued resolution of warranty and punchlist work at Contracts A136,
   Union Station; A147, Civic Center Station; A157, Pershing Square Station;
   A167, 7th/Metro Station; and A187, Wilshire/Alvarado Station.
- System contractors continued to provide support to system integration and start-up team.
- Contract A640 to begin reliability and maintainability test.
- Continue with SCADA Reliability Demonstration and final system integration monitoring and tests.
- A640 completed radio system training.

#### **KEY ACTIVITIES - PLANNED FOR APRIL**

- Contract Close-out Team will continue close-out efforts for the following contracts: A130, Yard Leads and Transfer Zone (Litigation); A141, Line Section, Union Station to Pershing Square and Civic Center Station; A147, Civic Center Station; A157, Pershing Square Station; A165, 7th/Metro Station; A187, Wilshire/Alvarado Station; A190, Ancillary Construction and Maintenance OS-1; A620, Automatic Train Control; A710, Escalators/Elevators; A732, Wheel Truing Machine; A740, Ventilation Equipment; and A745, Air Handling Equipment; A760B, Edge Lighting.
- Continue support of Breda vehicle arrival, testing and acceptance.
- Continue systemwide certification.

#### **RAIL CONSTRUCTION CORPORATION**

PROJECT COST REPORT COST BY ELEMENT

STATUS PERIOD: JAN 30, 1993 TO MAR 26, 1993

STATUS DATE : MARCH 26, 1993

UNITS : OOLLARS IN THOUSANDS

PROJECT : R80 METRO RAIL REO LINE SEGMENT 1

		ORIGINAL	FFGA	CURREN	BUDGET	COMMI	TMENTS	INCURR	ED COST	EXPER	DITURES	CURRENT	FORECAST	VARIANCE
ELEMENT	DESCRIPTION	1		PERIOD	TO DATE	PERIOO	TO DATE	PERIDO	TO DATE	PER100	TO GATE	PERIOD	TO DATE	-{
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Ţ	CONSTRUCTION	696,158	751,972	0	751,972	923	791,884	10.128	774,989	12,639	769,220	. (2,861)	800,492	48,520
s	PROFESSIONAL SERVICES	397.755	461,930	0	461,930	4,044	461,979	5,313	452,771	5,313	452,771	0	462,215	285
R	REAL ESTATE	90,894	139,820	0	139,820	3,221	129,458	3,221	129,458	4,462	129.458		140.000	180
F	UTILITY RELOCATIONS	10,920	12,140	0	12,140	0	11,009	175	9,306	175	9,306	0	11.009	(1,131)
0	SPECIAL PROGRAMS	948	948	0	948	(8)	867	1	623	1	623	(4)	867	(81)
C	PROJECT CONTINGENCY	53,225	83,209	0	83.209	0	0	0	0	0	0	2.065	35,436	(47,773)
A	PROJECT REVENUE	0	0	0	۵	0	0	0	٥	0	0	0	0	0
														_
	PROJECT GRAND TOTAL	1.249,900	1.450.019	0	1.450.019	8,180	1,395,197	18,838	1,367,147	22.590	1,361,378	0	1,450,019	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

RAIL CONSTRUCTION CORPORATION METRO RAIL PROJECT SEGMENT 1 (IN THOUSAND OF DOLLARS)

#### STATUS OF FUNOS BY SOURCE

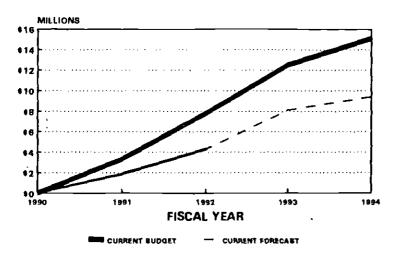
	TOTAL	* TOTAL	СОММІТІ	MENTS	EXPENDI	TURES	BILLEO TO SOURCE	
	FUNOS	FUNDS						
SOURCE	ANTICIPATEO	AVAILABLE	<u> </u>	%	\$	%	\$ %	
FTA-SECTION 3	\$605,300	<b>\$6</b> 05,300	\$605,300	100%	\$599,828	99%	\$589,145 97%	
FTA-SECTION 9	\$90,584	\$90,584	\$86,716	96%	\$86,716	96%	\$79,496 88%	
STATE	\$210,268	\$210,268	\$205,326	98%	\$198,425	94%	\$210,268 100%	
LACTO	\$179,448	\$179,448	\$179,448	100%	\$179,448	100%	\$179,185 100%	
CITY OF L.A.	\$34,000	\$34,000	\$34,000	100%	\$34,000	100%	\$34,000 100%	
BENEFIT ASSESS.	\$130,300	\$130,300	\$130,300	100%	\$130,300	100%	\$130,300 100%	
COST OVERRUN ACCOUNT	\$200,119	\$40,902	<u>\$154,106</u>	77%	\$132,661	66%	\$63,926 32%	
TOTAL	\$1,450,019	\$1,290,802	\$1,395,197	96%	\$1,361,378	94%	\$1,286,320 89%	

NOTES:

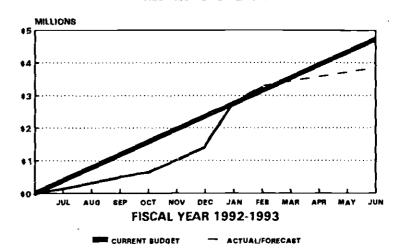
(1) The Cost Overrun Account includes CAPRA funds as well as LACTC and City of Los Angeles contributions to cover cost overruns

Fund available are computed on a cumulative basis.

## AGENCY COSTS RED LINE SEGMENT 1



## FISCAL YEAR 1993 AGENCY COSTS RED LINE SEGMENT 1



## PROJECT AGENCY COSTS RED LINE SEGMENT 1 (\$000)

\$9,436

TOTAL PROJECT BUDGET \$1,450,019

CURRENT BUOGET \$ \$15,091

\*Does not include \$80,864 in agency costs expended by SCRTD prior to June 30, 1990.

**CURRENT FORECAST \*** 

## FISCAL YEAR 1993 AGENCY COSTS RED LINE SEGMENT 1 (\$000)

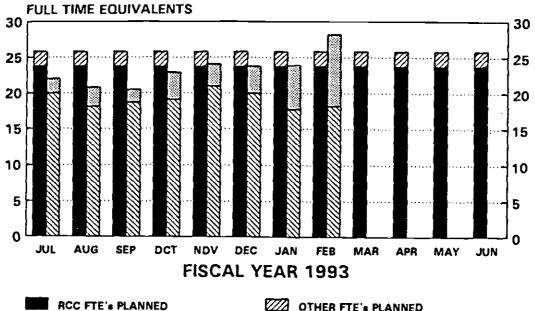
CURRENT BUDGET \$4,722

CURRENT FORECAST \$3,866

**ACTUAL TO DATE** 

\$3,295

#### STAFFING PLAN VS. ACTUAL **RED LINE SEGMENT 1**



RCC FTE's ACTUAL

OTHER FTE's PLANNED

OTHER FTE's ACTUAL

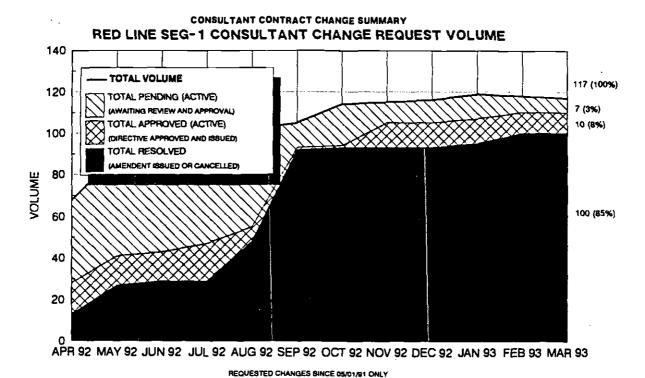
FY'93 Budget

#### **RED LINE (SEGMENT 1) STAFFING PLAN** FISCAL YEAR 1993

RCC FTE's PLANNED	24
RCC FTE's ACTUAL	18
OTHER FTE's PLANNED	2
OTHER FTE's ACTUAL	10
TOTAL FTE's PLANNED	26
TOTAL FTE's ACTUAL	28

PERCENT

0%



AGE OF UNRESOLVED CONSULTANT CHANGES

TIME 0-30 DAYS 30-80 DAYS 61-90 DAYS OVER 90 TOTAL ACTIVE

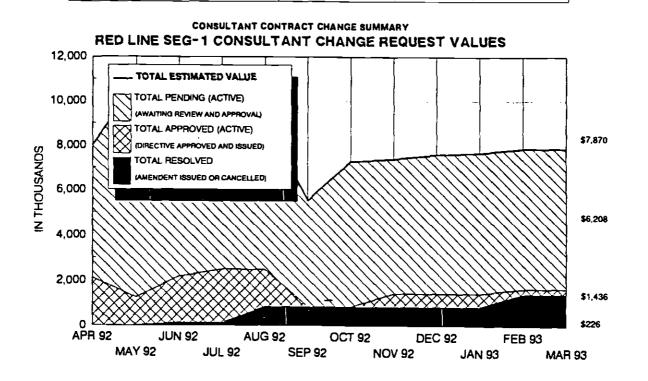
VOLUME 0 0 1 16 17

6%

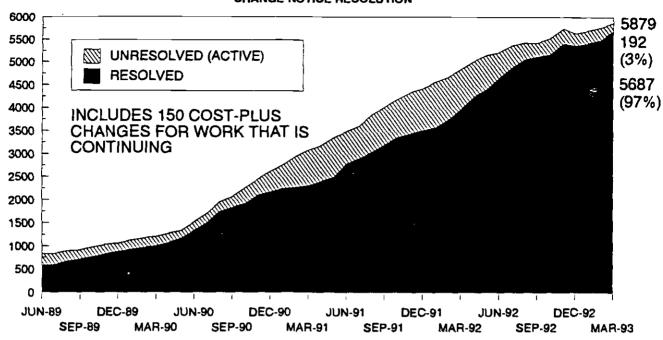
94%

100%

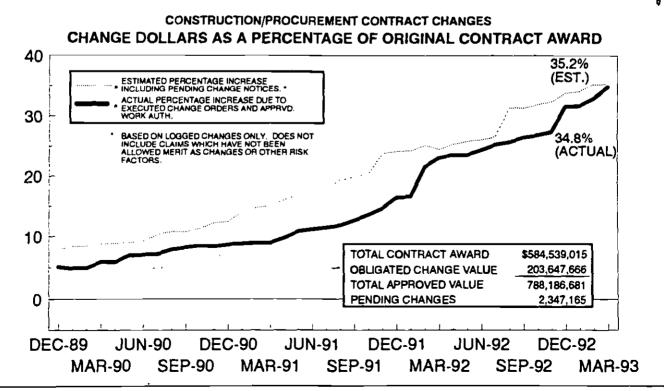
0%



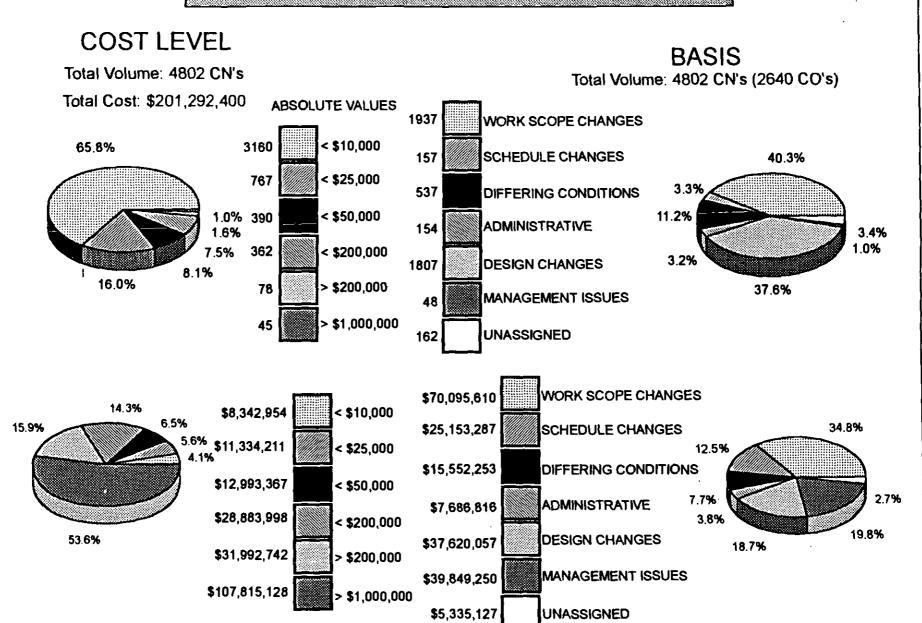
### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE NOTICE RESOLUTION

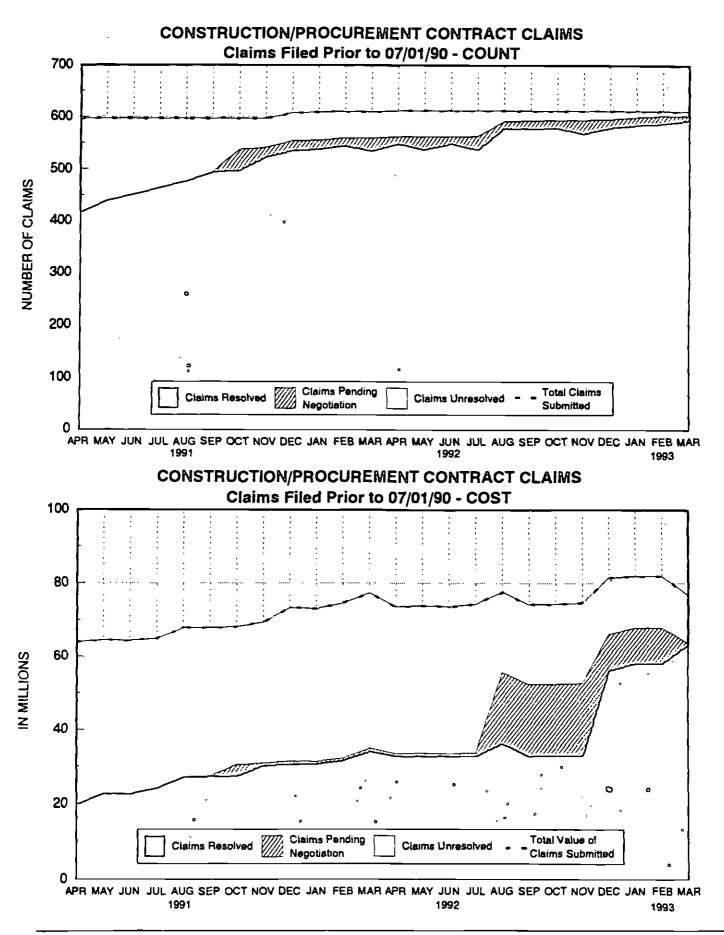


AGE OF UNRESOLVED CHANGES												
TIME 0-30 DAYS 31-60 61-90 OVER 90 TOTAL ACTIVE												
VOLUME	83	22	14	73	192							
PERCENT												

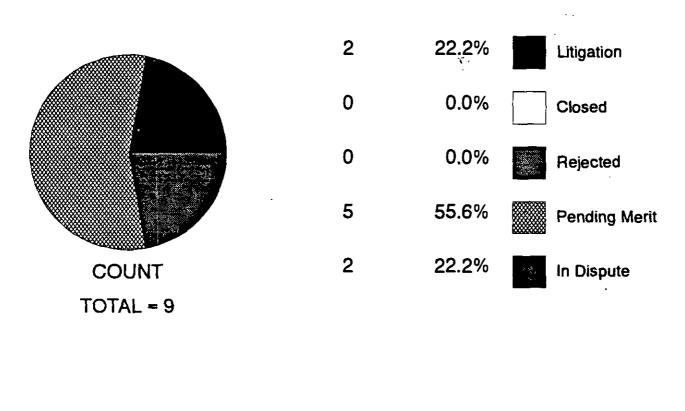


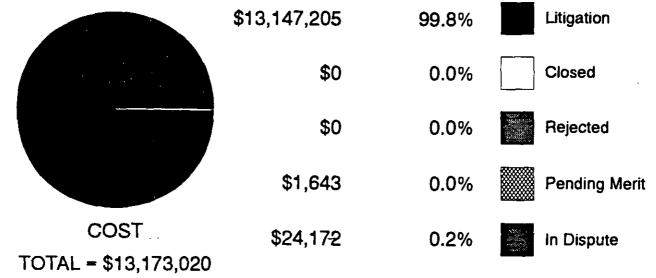
## CONSTRUCTION/PROCUREMENT CHANGE VOLUME BY COST LEVEL AND BASIS BASED ON EXECUTED CHANGES AS OF 03/26/93

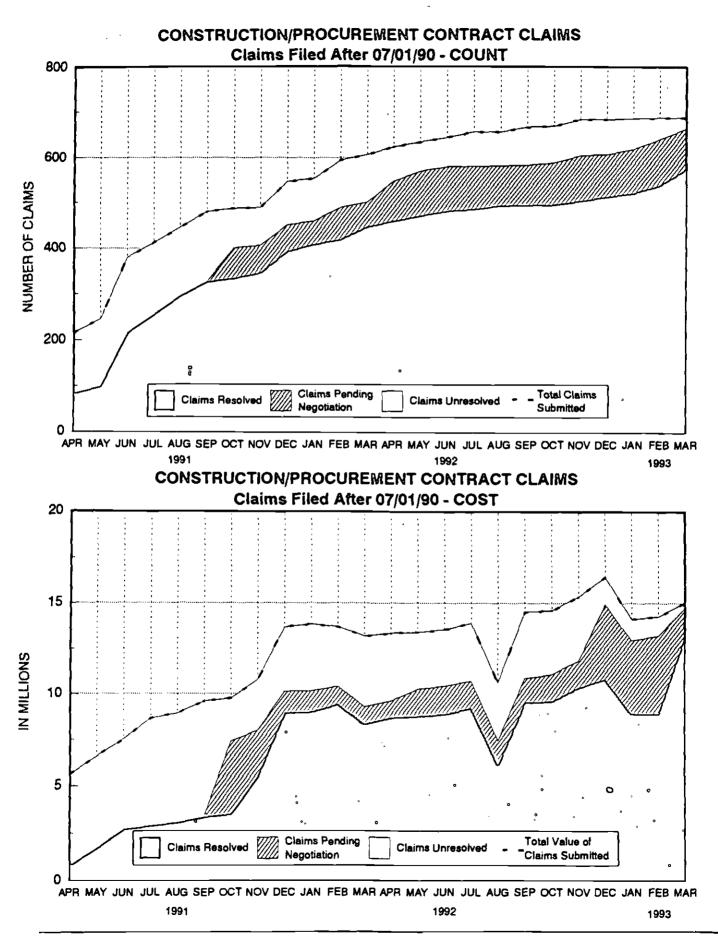




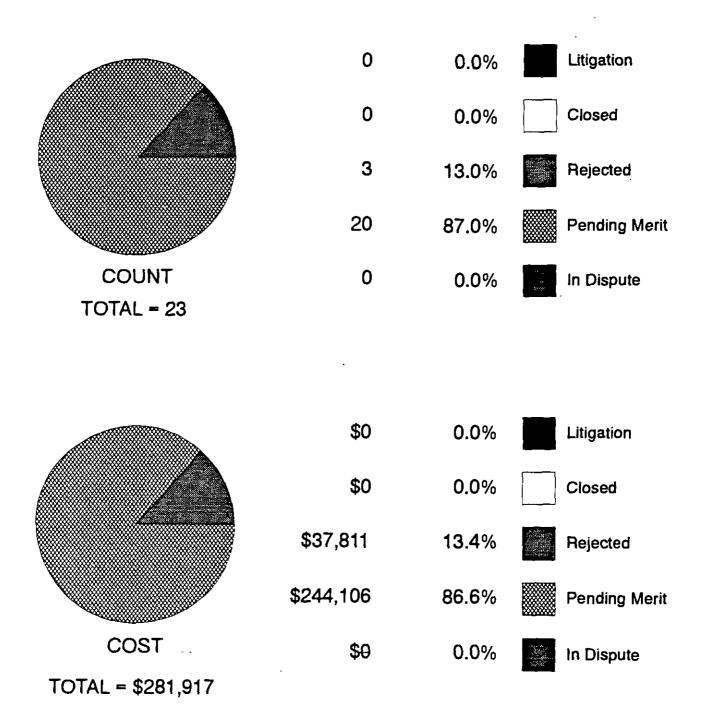
# CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS Unresolved Claims Distribution Chart Claims Filed Prior to 07/01/90 as of 03/26/93



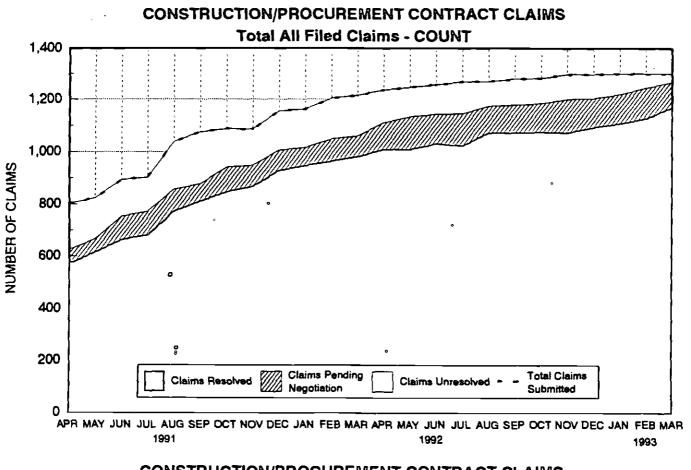


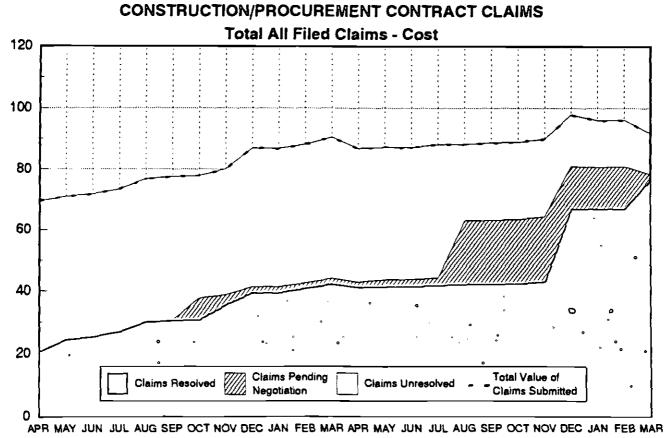


# CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS Unresolved Claims Distribution Chart Claims Filed After 07/01/90 as of 03/26/93



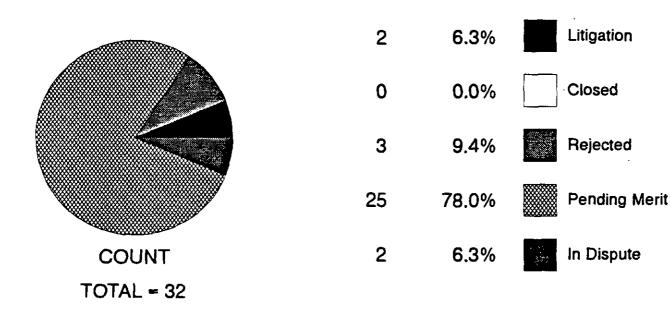
1991

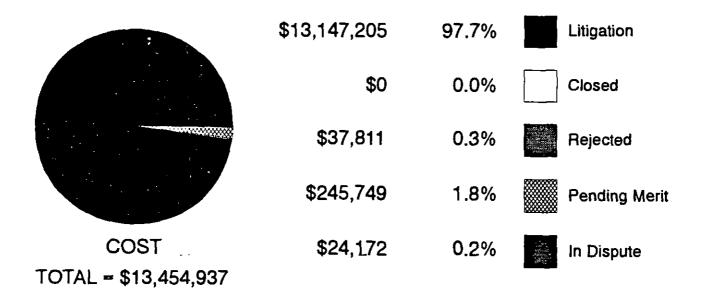




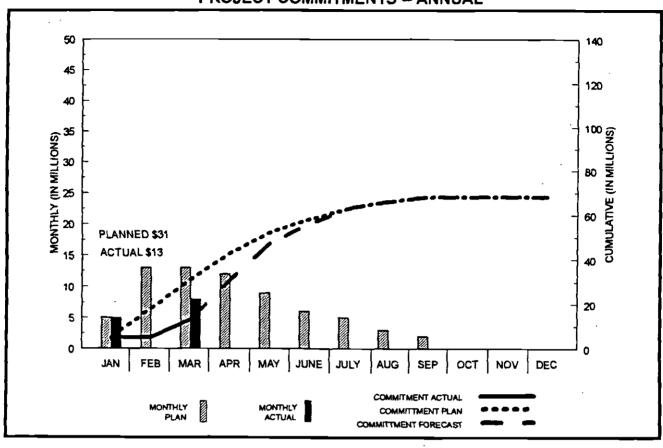
1992

# CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS Unresolved Claims Distribution Chart Total All Filed Claims as of 03/26/93

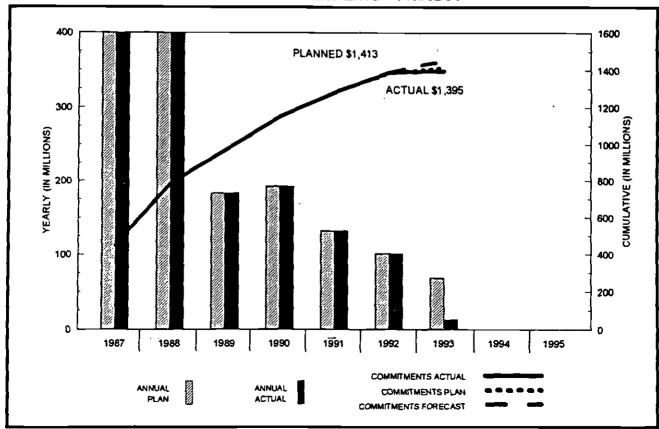


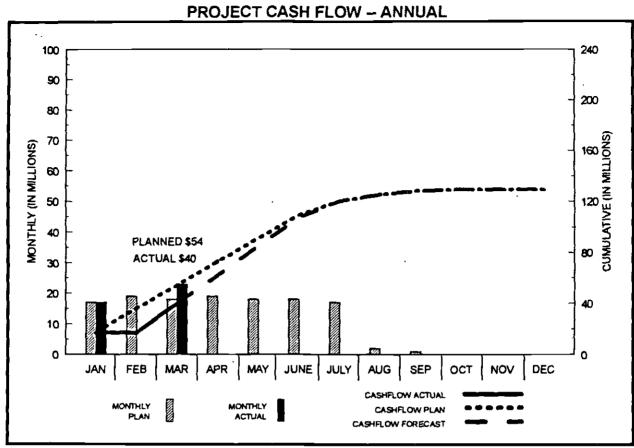


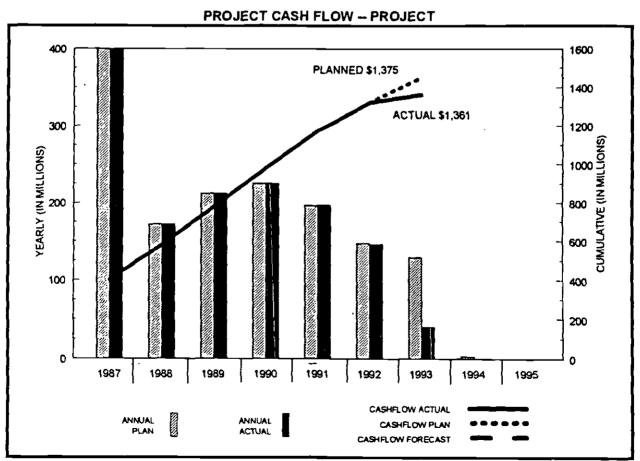
PROJECT COMMITMENTS - ANNUAL

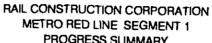


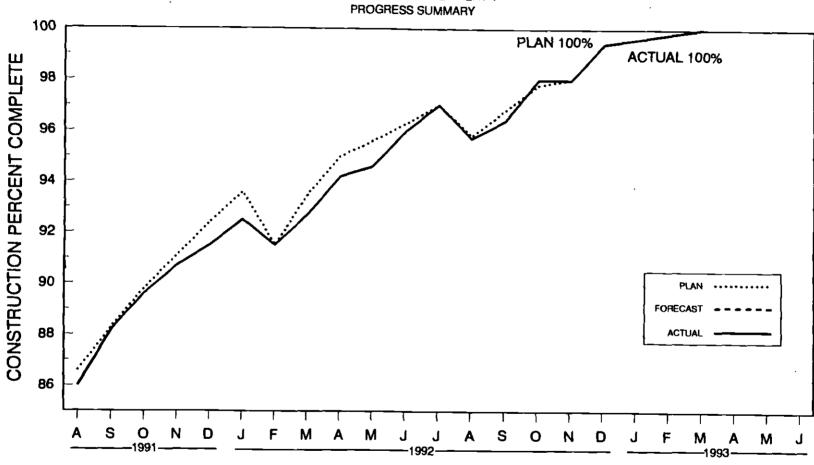
PROJECT COMMITMENTS - PROJECT



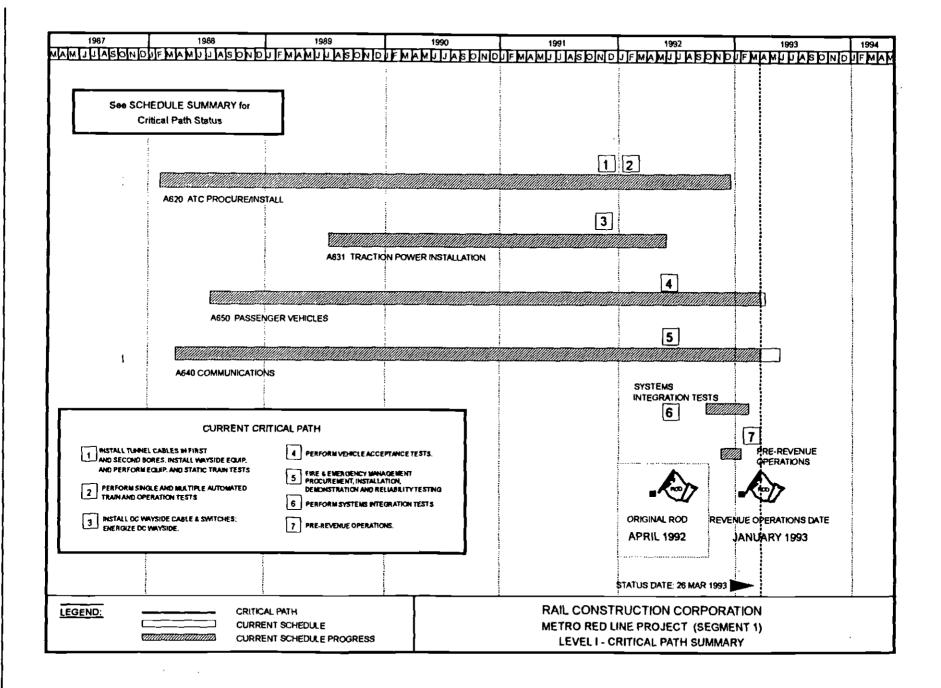








NOTE: BASELINE WAS ADJUSTED TO REFLECT CHANGES TO THE AUGUST 1992 COST FORECAST VALUES AND TO REFLECT AUGUST SCHEDULE ADJUSTMENTS.

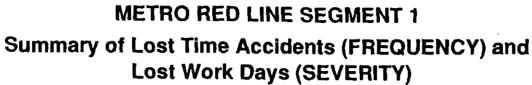


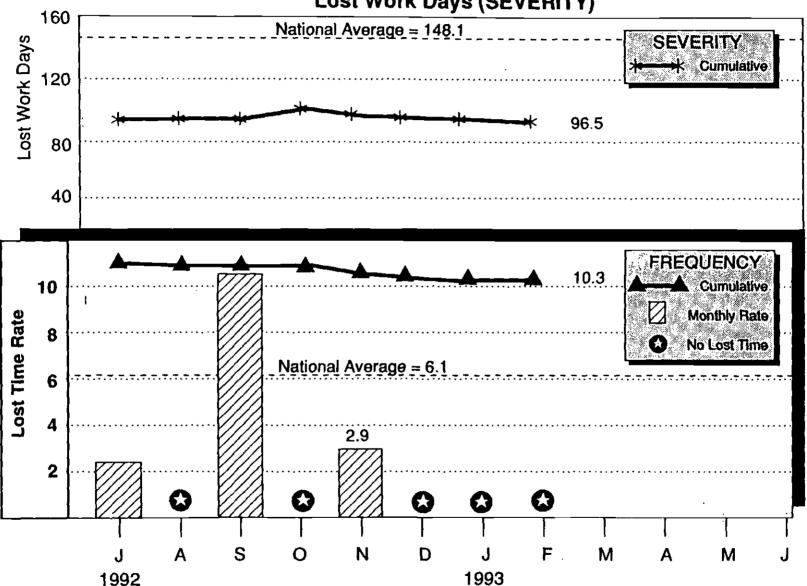
Page

20

## Page

# **MARCH 1993**





LEGEND

Open. Action still required.
Completed or Not Applicable

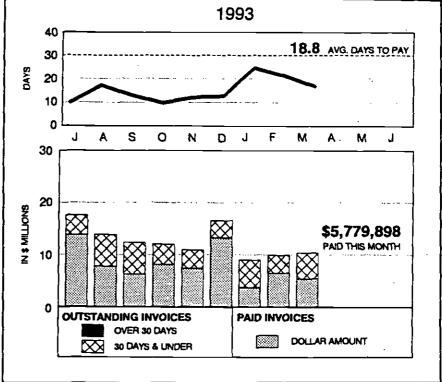
## CONTRACT CLOSE OUT STATUS METRO RED LINE SEGMENT 1

			CLOS	E OUT STA	ATUS	<del></del> -	}	
		CLAIMS/	FINAL.	<u> </u>	FINAL	EQUIP.		PROJECTED
CONTRACT		CHANGE	PROG.	FINAL	ACCEPT.	FINAL	}	CLOSE-OUT
NUMBER	DESCRIPTION	ORDERS	PAYMENT	RELEASE	CERTIF.	DELIV.	COMMENTS	DATE
A130	Yard Lead Transfer Zone	0	0	0	0	0	Final closeout pending claims litigation.	TBD
A136	Union Station Stage II						Closed.	Mar 93
A141	U/S - 5 & Hill Tunnels	0	0	0	0	0	Final closeout pending claims litigation.	TBD
A147/A157	Pershing Square/Civic Cntr		0	0	0		Finalizing closeout package.	Apr 93
A165	7th & Flower Station Stage		Ö	0	0	0	Final closeout pending claims litigation.	TBD
A185	Landscaping & Pylon Install						Closed.	Mar 93
A187	Wilshire/Alvar Stat. Stage II	0	0	0	0		Finalizing closeout package.	May 93
A190	Misc. Constr/Ancillary Serv.	0	0	0	0		Finalizing closeout package.	May 93
A610/115	Track Installation	0	0	0	0	0	Final closeout pending claims litigation.	TBD

#### INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 18.8 days.
- 13 invoices were paid for a total value of \$ 5,779,898.
- There were 6 outstanding Construction/ or Procurement invoices under 30 days old for \$ 5,254,666.
- There was 1 outstanding Construction or Procurement invoices over 30 days old for \$ 1,167.

## 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**

	Cons	struction/Procu	rement Invoic	es	Other Invoices						
ľ	30 Days and Under Number of Dollar		Over 30	Days	30 Days	and Under	Over 30 Days				
			Number of	Dollar	Number of	Dollar	Number of	Dollar			
Month	Invoices	Value	Invoices	Value	Invoices	Value	Invoices	Value			
OCT 1992	18	4,135,280	0	0	23	2,221,084	6	817,861			
NOV 1992	13	3,742,157	\ · O	0	14	1,895,560	3	801,000			
<b>DEC 1992</b>	13	3,479,636	<u> </u>	500	36	3,319,136	2	794,7 <u>00</u>			
JAN 1993	14	5,631,634	1	500	31	1,939,636	2	794,700			
FEB 1993	5	3,703,856	1 1	500	22	2,305,932	1	303,345			
MAR 1993	6	5,254,666	<u> </u>	1,167	13	2,434,802	1	303,345			

#### **EXECUTIVE SUMMARY**

#### **COST STATUS**

	•	in \$ million
•	Current Budget	\$1,446.4
•	Current Project Forecast	\$1,446.4
•	Current Forecast ((including new requirements)	\$1,514.7

The forecast exceeds the budget by \$68,304,000 because the Board approved estimated cost to incorporate The Americans with Disabilities Act of 1990 items for all eight stations, and to include enhanced entrances at four of the five Vermont/Hollywood Corridor stations.

The current forecast including new requirements increased a net of \$2,302,000 this month primarily due to revisions/updates to various estimates, changes in the awarded contracts, and changes to Professional Services, Real Estate and Utilities contracts.

#### SCHEDULE STATUS

Current Revenue Operation Date

	Wilshire Corridor		July	1996
	Vermont/Hollywood Corridor	•	September	1998
•	Design Progress	- Plan		92%
		- Actual		90%
•	Construction Progress	- Plan		25%
		- Actual		19%

The variance between planned and actual is due to later Notice-to-Proceed Dates for Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line, Contract B211, Wilshire/Vermont Station, Stage I, and Contract B251, Vermont/Hollywood Tunnel, Contract B252, Vermont/Santa Monica Station and Crossover, Contract B268, Vermont/Sunset Demolition, Contract B281, Hollywood/Vine Station, Contract B288, Hollywood/Vine Demolition, Contract B611, Running Rail Procurement, Contract B630, Traction Power Equipment Procurement, and Contract B710, Escalators and Elevators. Progress at Contract B251 is over two months behind schedule.

#### **REAL ESTATE**

	NÚMBER OF PARCELS	NUMBER OF PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)		OT AVAILABLE SCHEDULE)	
				NUMBER	AVG. DAYS BEHIND	
THIS MONTH	85	60	21	4	42	
LAST MONTH	83	58	21	6	53	

- There are now 85 parcels required for the Segment 2 Project. The acquisition breakdown for this land is as follows: 30 full takes, 44 subsurface easements, 3 temporary construction easements and 2 partial-takes. Six additional parcels have been added for temporary Right-of-Entry.
- To date, there have been 60 parcels acquired. Thirty-nine of these parcels were acquired through condemnation, and the remaining were negotiated acquisitions.

#### **PUBLIC AFFAIRS**

Major Wilshire Corridor activities revolved around the Los Angeles Marathon, including an information desk and public entertainment, and the appearance of the first advertisement in the "Understanding Metro Construction" series. The monthly Contract B251 mitigation meeting regarding the Los Feliz School was held, as well as an internal partnering meeting intended to assist construction personnel in the attainment of mitigation objectives. Staff review of the HCIP brochure was completed and the document is being printed. The brochure, which summarizes construction methods, schedules, and mitigation plans, will be released to the public in early April, 1993.

#### AREAS OF CONCERN

#### ONGOING

#### **Delay in Real Estate Acquisitions**

Concern:

There are four parcels currently being projected in the worst case

scenario not to be available by the scheduled "need dates."

Of the four parcels showing a negative float, two were late in being certified, one delayed in the appraisal process and one delayed as a

result of continued negotiations.

Action:

Maintaining schedule to avoid negative float.

Status:

There remains a high probability that almost all parcels will be

acquired by the need dates.

#### **RESOLVED**

#### Contract B251, Vermont/Hollywood Tunnels

Concern:

The sinking of the Barnsdall shaft was significantly behind schedule. Excavation and tieback installation scheduled production rates were met, however, the tensioning of the tiebacks were targeted as a

problem area.

Action:

Modifications to the contractor's procedures, overtime, and the use of

a different grout mix design were utilized in an attempt to improve the

construction cycle.

Status:

The contractor concluded the sinking of the Barnsdall shaft and the installation of tiebacks with longer anchorage zones. The contractor's modified procedures resulted in an improved production rate during

the excavation of the final four levels (E, F, G & H).

## FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

The following items reflect action requirements identified in the February 1993 Monthly Project Report submitted to FTA by their Project Management Oversight Consultant, Hill International.

ONGOING NONE

NEW NONE

RESOLVED NONE

#### **KEY ACTIVITIES - MARCH**

- Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line, installed the 36"
   RCP water line in Alvarado Street, continued arch concrete in the AL alignment, the installation of HDPE and pocket track concrete.
- Contract B211, Wilshire/Vermont Station, Stage I, concluded segment removal and concrete pours at the lower track level eastern interface wall, along with the north and south track lower level lift #1 exterior wall.
- Contract B221 Wilshire/Normandie Station and Line, completed invert concrete and track level exterior walls.
- Contract B231, Wilshire/Western Station and Crossover, completed Lift #1
  platform exterior walls and mezzanine level exterior wall concreting and
  continue roof and side structure concrete and HDPE installation.
- Contract B251, Vermont/Hollywood Tunnel, accomplished excavation of conveyor decline and West yard paving and dry houses.
- Conducted pre-bid meeting for Contract B213, Wilshire/Vermont Station Demolition.
- Contract B642, Public Address (procurement) and for Contract B642,
   Closed Circuit Television (procurement), issued In-Progress Design Submittals.
- Contract B646, Fire Management Equipment (procurement), Contract B647, Gas Monitoring Equipment (procurement), and for Contract B761, Illuminated Signs/Edgelight (design/supply), issued Pre Final Design Submittals for

#### **KEY ACTIVITIES - PLANNED FOR APRIL**

- Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line, conclude arch concrete in the AL alignment.
- Contract B211, Wilshire/Normandie Station and Line, continue invert and exterior wall concrete.
- Contract B221, Wilshire/Normandie Station, execute the installation of embeds, reinforcement and form work for the east track level interior walls.
- Contract B231, Wilshire/Western Station and Crossover, pursue roof concreting and installation of Bentonite HDPE.
- Contract B251, Vermont/Hollywood Tunnels, proceed with excavation of the starter tunnel procurement and fabrication of tunnel shields and rolling stock access shaft excavation and West yard development.
- Contract B644, Cable Transmission Equipment, Contract B641, Radio, and Contract B760, Signs and Graphics, issue Prefinal Design Submittals.
- Contract B631, Traction Power Installation, Contract B645, SCADA, Contract B761, Illuminated Signs & Edgelights, and Contract B646, Fire Management Equipment, issue Final Design Submittals.
- Contract B241, Vermont/Beverly Station, Contract B612, Contact Rail and Coverboards, Contract B612, Contact Rail and Coverboards, and Contract B761, Illuminated Signs and Edgelights, issue Camera Ready Packages.

# **MARCH 1993**

## RAIL CONSTRUCTION CORPORATION PROJECT COST REPORT COST BY ELEMENT

Project: METRO RED LINE SEGMENT 2

Period:

2/27/93 - 3/28/93

Run Date: Unite: 3/26/93 Dollers in Thousands

	ORIGINAL	CURRENT	BUDGET	СОММІТ	MENTS	INCURRED	BUDGET	EXPEND	ITURES*	CURRENT	FORECAST
ELEMENT/DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIDO	TO DATE	PERIOD	TO DATE	PERIDO	TO DATE	PERIDO	TO OATE
T CONSTRUCTION	893,000	0	841,032	225	455,743	14,964	210,268	9,341	186,388	1,192	960,72
S PROFESSIONAL SERVICES	289,160	o	315,327	22	279,467	1,668	136,426	4,286	132,223	(348)	361,27
R REAL ESTATE	79,827	o	78,687	29	72,032	619	63,876	619	63,876	3,220	81,14
F UTILITY/AGENCY FORCE ACT	36,668	o	18,773	49	9,261	613	4,894	613	4,894	(6,238)	21,75
D SPECIAL PROGRAMS	2.044	o	1,724	86	484	٥	240	0	240	o	7,82
C CONTINGENCY	146.743	o	93,009	o	٥	o	0	0	o	1,170	14,01
A PROJECT REVENUE	0	0	0	0	0	0	(182)		(182)	0	(300
PROJECT TOTAL	1,448,432		1,448,432	390	816,977	17,852	414,611	14,768	387,439	0	1,448,43
NEW REQUIREMENTS											
T CONSTRUCTION		o	3,682	0	0	0	o	0	0	2,302	60,07
S PROFESSIONAL SERVICES	0	o	0	336	4,466	3,407	4,325	2,168	2,168	o	8,22
R REAL ESTATE										li .	
F UTILITY/AGENCY FORCE ACT			:							ı	
O SPECIAL PROGRAMS	[								ľ		
C CONTINGENCY	[ ]		į				ţ				
A PROJECT REVENUE	<u>l</u>							<u> </u>			
PROJECT TOTAL	1,446,432		1,449,994	726	821,442	21,118	418,838	16,926	389,607	2,302	1,614,73

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

<sup>\*</sup>EXPENDITURES ARE FOR THE PERIDO OF 2/26/93 TO 3/26/93

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

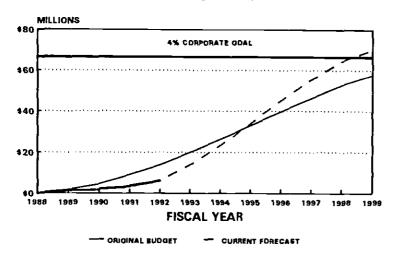
#### STATUS OF FUNDS BY SOURCE

	TOTAL FUNDS	TOTAL FUNDS	* COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
SOURCE	ANTICIPATED	AVAILABLE	\$	%	\$	%	\$	%
FTA-SECTION 3	\$667,000	\$548,028	\$356,579	53%	\$148,359	22%	\$148,359	22
FTA-SECTION 3 DEFERRED LOCAL SH	ARE (1)		\$38,705		\$19,925		\$19,925	
STATE	\$185,985	\$133,000	\$130,433	70%	\$130,433	70%	\$121,856	66
LACTC	\$439,447	\$76,377	\$229,611	52%	\$66,079	15%	\$66,079	15
CITY OF L.A.	\$96,000	\$21,400	\$53,125	55%	\$14,120	15%	\$20,000	2
BENEFIT ASSESS.	\$58,000	\$0	\$8,524	15%	\$8,524	15%	\$0	(
COST OVERRUN ACCOUNT (2)	\$0	\$12,793	\$0	0%	\$0	0%	\$0	(
BENEFIT ASSESS. SHORTFALL (3)	\$0	\$0		0%	\$0	0%	\$8,524	
TOTAL	\$1,446,432	\$791,598	\$816,977	56%	\$387,440	27%	\$384,743	2
PROP C: AMERICAN DISABILITY ACT	\$5,075	\$0	\$336	7%	\$336	7%	\$0	(
PROP A: TRANSIT ENHANCEMENTS	\$63,229	\$0	<b>\$</b> 4,129	7%	\$1,832	3%	\$0	
GRAND TOTAL	\$1,514,736	\$791,598	\$821,442	54%	\$389,608	26%	\$384,743	2

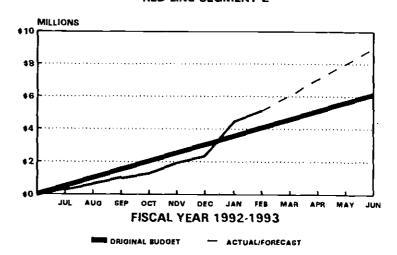
Commitments amounts are as of March 93.

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

## AGENCY COSTS RED LINE SEGMENT 2



## FISCAL YEAR 1993 AGENCY COSTS RED LINE SEGMENT 2

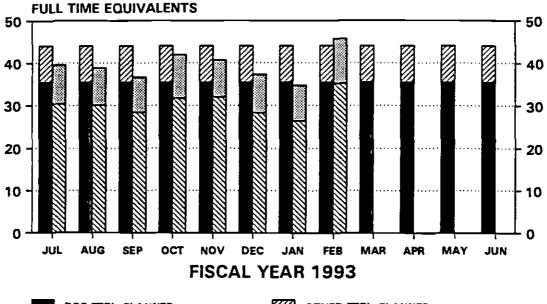


## PROJECT AGENCY COSTS RED LINE SEGMENT 2 (\$000)

## FISCAL YEAR 1993 AGENCY COSTS RED LINE SEGMENT 2 (\$000)

TOTAL PROJECT BUDGET	\$1,446,432	ORIGINAL BUDGET	\$6,131
ORIGINAL BUDGET	\$57,840		
BUDGET % OF TOTAL PROJECT	4.0%	CURRENT FORECAST	\$8,973
CURRENT FORECAST	\$70, <b>237</b>	ACTUAL TO DATE	\$5,102
FORECAST % OF TOTAL PROJECT	4.9%		

## STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 2



RCC FTE's PLANNED
RCC FTE's ACTUAL

OTHER FTE's PLANNED

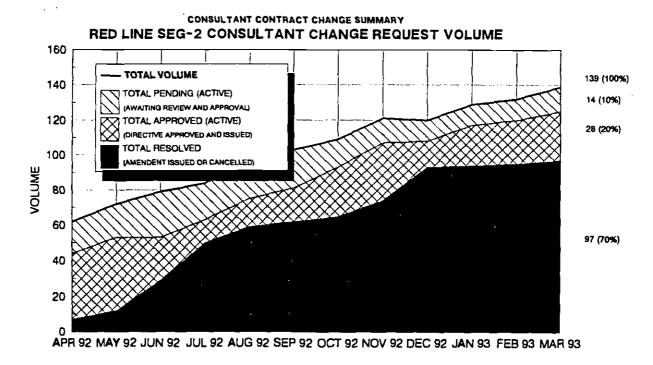
OTHER FTE's ACTUAL

FY'93 Budget

## RED LINE (SEGMENT 2) STAFFING PLAN FISCAL YEAR 1993

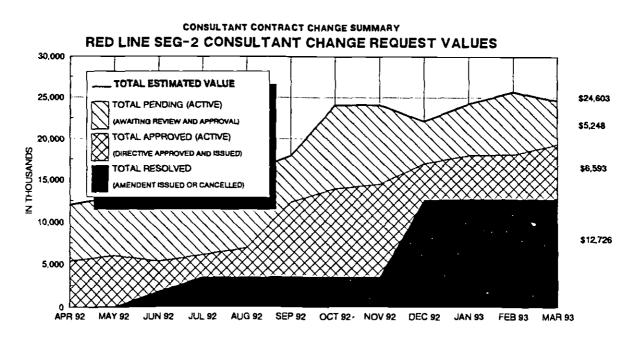
RCC FTE's PLANNED	35
RCC FTE's ACTUAL	35
OTHER FTE's PLANNED	9
OTHER FTE's ACTUAL	11
TOTAL FTE's PLANNED	44
TOTAL FTE's ACTUAL	46

<sup>\*</sup>Reflects February 1993 data.

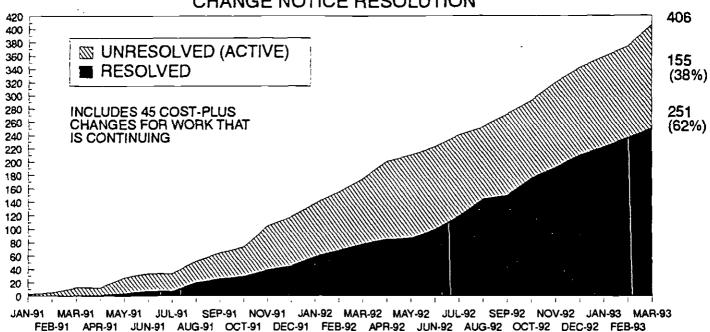


REQUESTED CHANGES SINCE 05/01/91 ONLY

AGE OF UNRESOLVED CONSULTANT CHANGES							
TIME 0-30 DAYS		30-60 DAYS	YS 61-90 DAYS OVE		TOTAL ACTIVE		
VOLUME	DLUME 6 2		5	29	42		
PERCENT 14%		5%	5% 12%		100%		

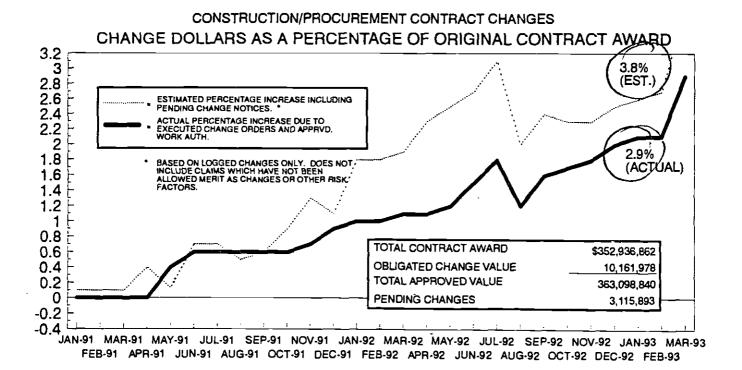


#### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE NOTICE RESOLUTION

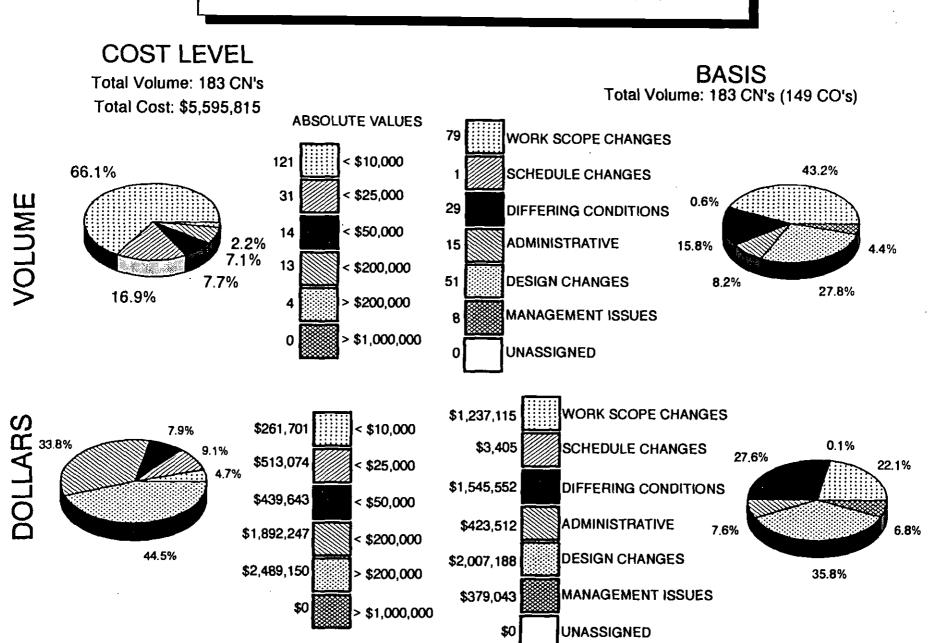


AGE OF UNRESOLVED CHANGES TIME 0-30 DAYS ( 31-60 61-90 OVER 90 TOTAL ACTIVE 21 **VOLUME** 155 56 10 68 **PERCENT** 

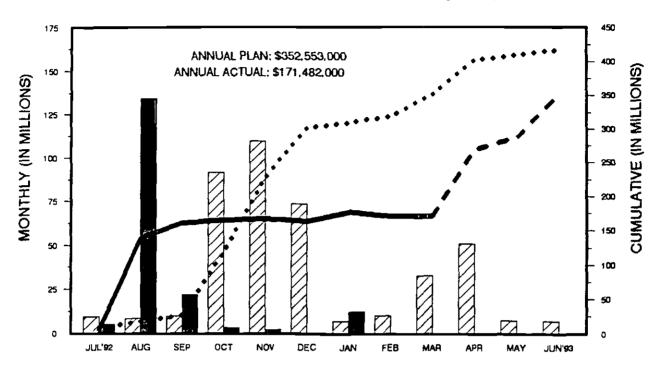
#### 14% 36% 6% 44% 100%



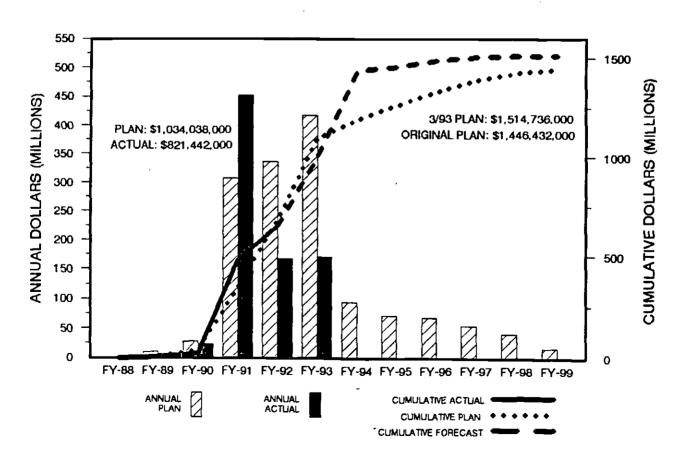
# CONSTRUCTION/PROCUREMENT CHANGE VOLUME BY COST LEVEL AND BASIS BASED ON EXECUTED CHANGES AS OF 03/26/93



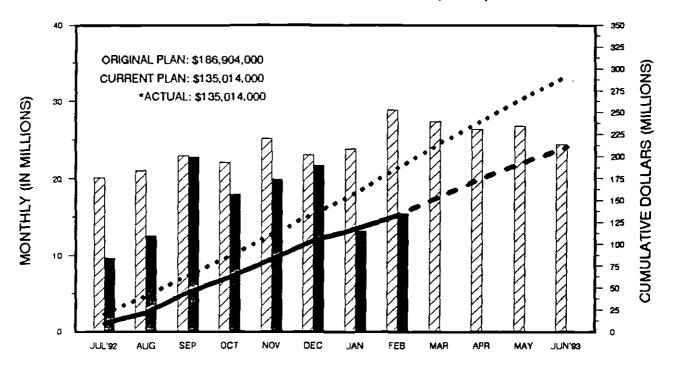
#### **ANNUAL PROJECT COMMITMENTS (FY '93)**



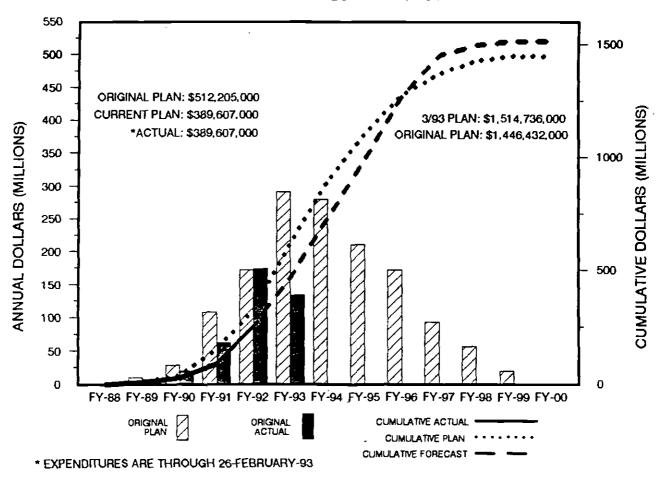
**TOTAL PROJECT COMMITMENTS** 

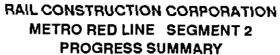


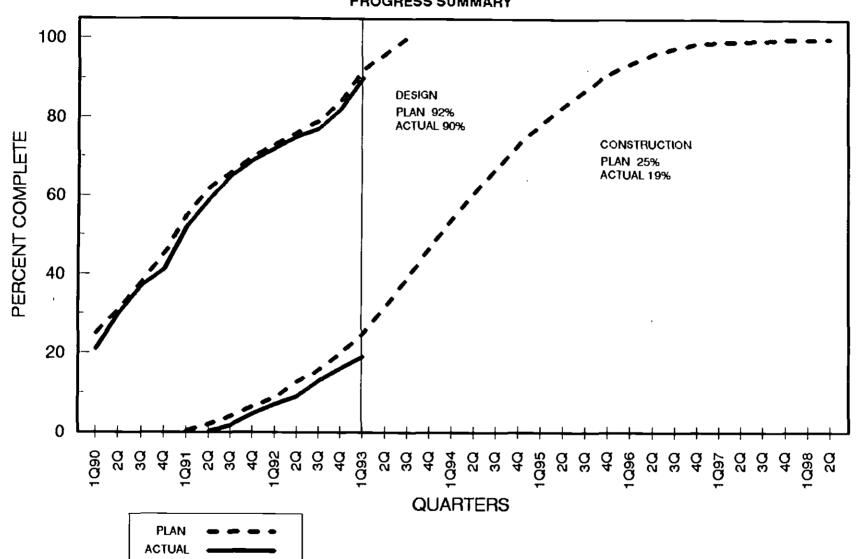
#### ANNUAL PROJECT CASHFLOW (FY '93)

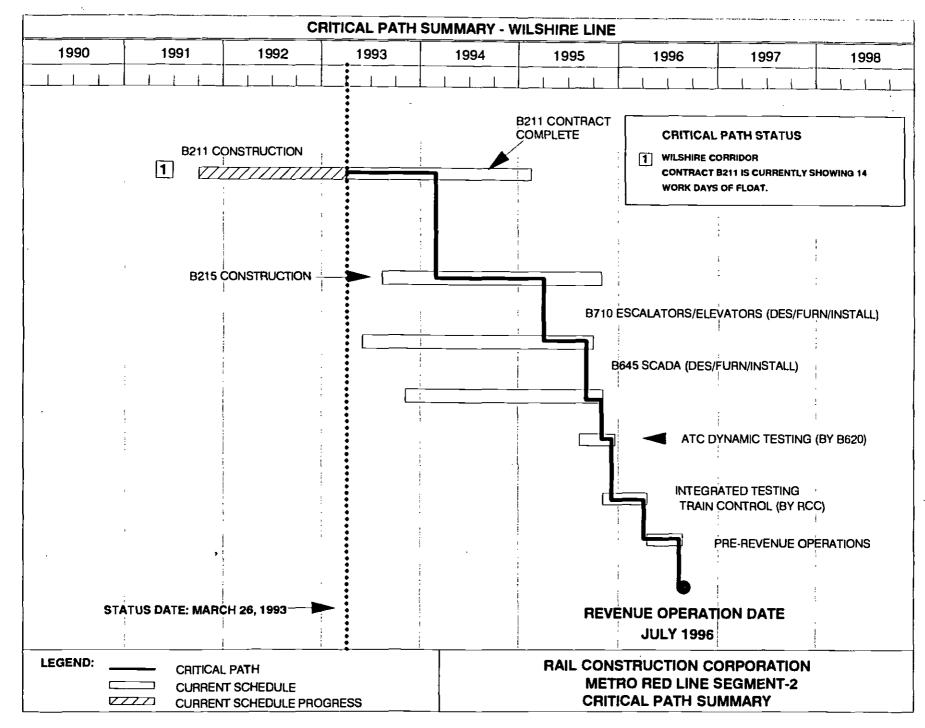


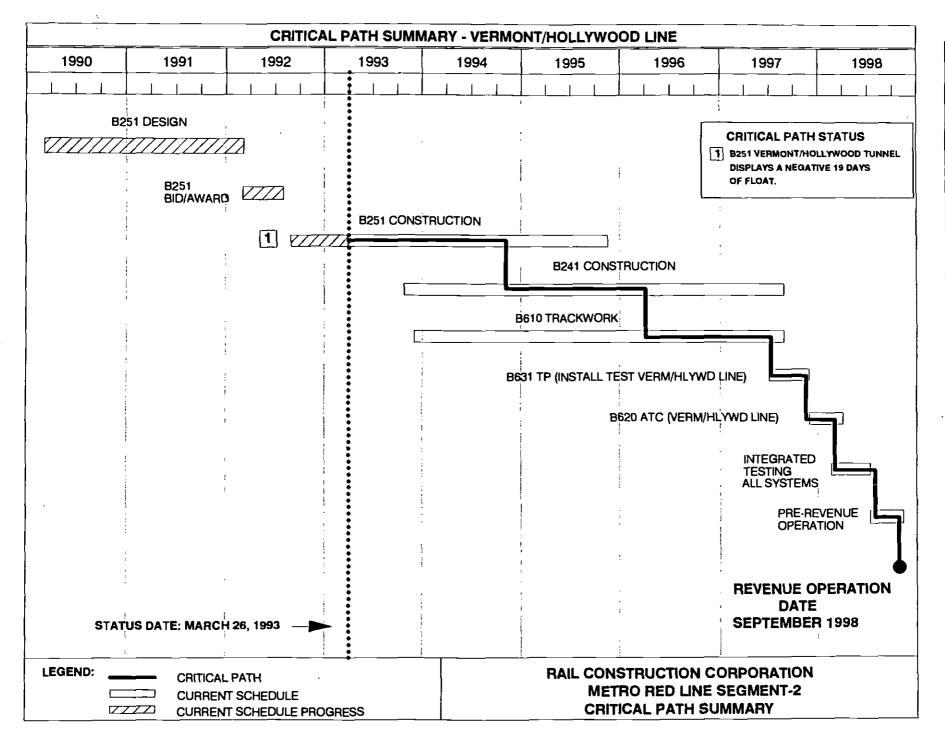
#### TOTAL PROJECT CASHFLOW





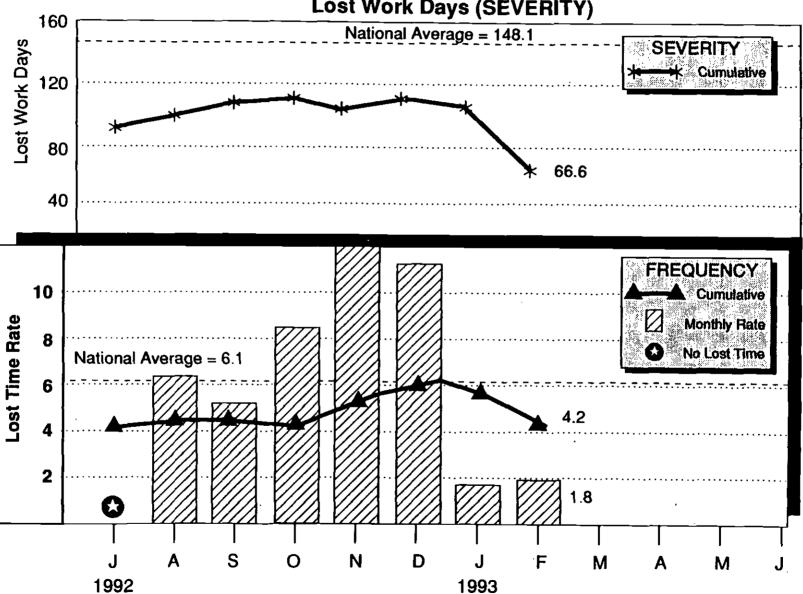






### METRO RED LINE SEGMENT 2

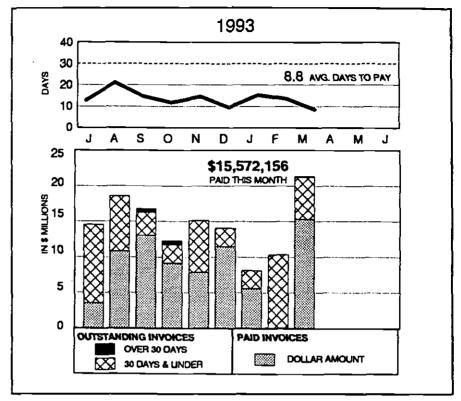
Summary of Lost Time Accidents (FREQUENCY) and Lost Work Days (SEVERITY)



#### **INVOICE PROCESSING**

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 8.8 days.
- 17 invoices were paid for a total value of \$15.572.156.
- There were 2 outstanding Construction or Procurement invoices under 30 days old for \$ 6,075,669.
- There was 1 outstanding Construction or Procurement invoice over 30 days old for \$16,000.

#### 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**

	Construction/Procurement Invoices					Other Invoices				
	30 Days and Under		Over 30 Days		30 Days and Under		Over 30 Days			
	Number of	Dollar	Number of	Dollar	Number of	Dollar	Number of	Dollar		
Month	Invoices	Value	Invoices	Value	_ Invoices_	Value	Invoices	Value		
OCT 1992	10	2,640,326	1	574,379	31	4,074,525	14	1,468,336		
NOV 1992	9	7,439,394	0	0	25	2,017,349	10	193,547		
DEC 1992	11	2,618,004	0	0	27	1,361,225	4	40,372		
JAN 1993	9	2,586,004	0	0	29	1,860,075	12	90,049		
FEB 1993	6	10,478,265	0	О (	26	4,004,560	12	127,514		
MAR 1993	2	6,075,669	1	16,000	18	3,558,335	5	67, <u>1</u> 76		