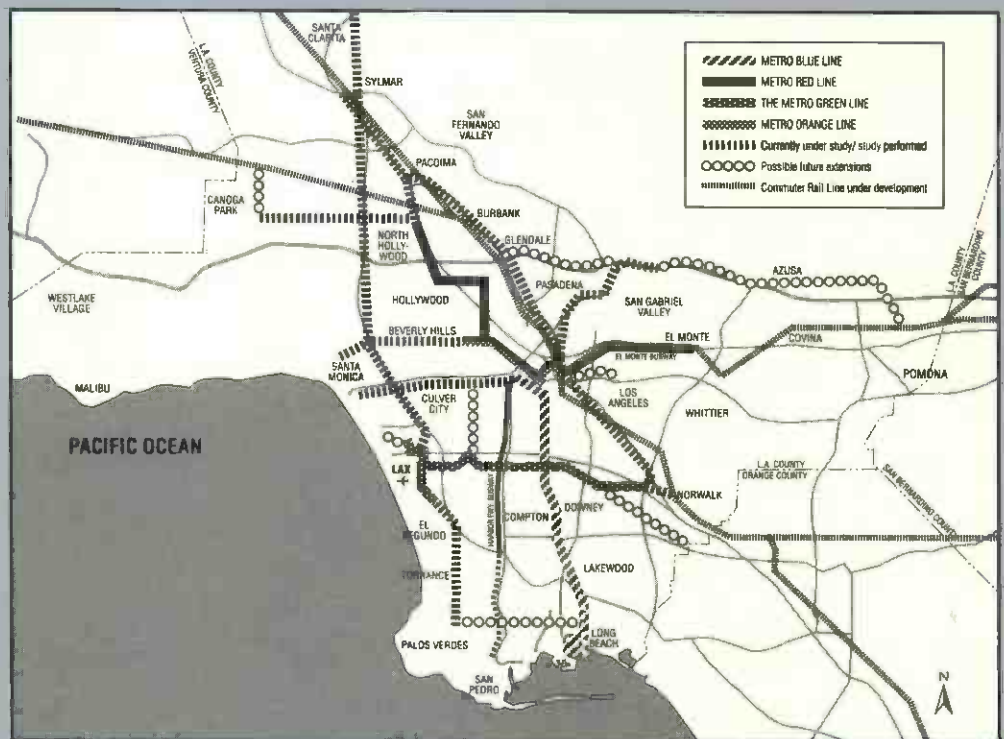


# RAIL CONSTRUCTION CORPORATION



## Executive Report Rail Program Status



**Rail  
Construction  
Corporation**

A Subsidiary of  
the Los Angeles County  
Transportation Commission

# RAIL PROGRAM STATUS SUMMARY

## RAIL PROGRAM STATUS SUMMARY

### Metro Red Line Segment 1

**Cost Status** (\$000)  
 Original Budget 1,249,900  
 Expended to Date 1,218,050  
 Current Budget 1,450,019

**Project Progress**  
**Design:**  
     Plan 100%  
     Actual 98%  
**Construction:**  
     Plan 94%  
     Actual 93%

**Schedule Status**  
 Revenue Operations Date:  
 Original April 1992  
 Forecast June 1993

### Metro Red Line Segment 2

**Cost Status** (\$000)  
 Original Budget 1,446,432  
 Expended to Date 167,604  
 Current Budget 1,446,432

**Project Progress**  
**Design:**  
     Plan 79%  
     Actual 74%  
**Construction:**  
     Plan 7%  
     Actual 7%

**Schedule Status**  
 ROD: Wilshire Vermont/Hlywd  
 Original Jul '96 Sep '98  
 Forecast Jul '96 Sep '98

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

**Cost Status** (\$000)  
 Original Budget 671,000  
 Expended to Date 162,997  
 Current Budget 716,000

**Project Progress**  
**Design:**  
     Plan 100%  
     Actual 99%  
**Construction:**  
     Plan 20%  
     Actual 17%

**Schedule Status**  
 Revenue Operations Date:  
 Original October 1994  
 Forecast May 1995

### Metrolink (includes 4 start-up lines, shared facilities, and LAUPT)

**Cost Status** (\$000)  
 Original Budget 473,262  
 Expended to Date 83,512  
 Current Budget 473,262

**Project Progress**  
**Design:**  
     Plan 100%  
     Actual 100%  
**Construction:**  
     Plan 16%  
     Actual 16%

**Schedule Status**  
 Revenue Operations Date for 3 lines:  
 Original October 1992  
 Forecast October 1992  
 Forecast(Union Pac) October 1993 \*\*

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

STATUS DATE: 01/31/92

(IN THOUSANDS)

RAIL PROGRAM STATUS SUMMARY

JANUARY 1992

PROJECT: TOTAL RAIL PROGRAM

DESCRIPTION	BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST	VARIANCE (9-2)
	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)	(9)	(10)
CONSTRUCTION	2,556,544	2,829,275	36,698	1,803,851	67,379	1,343,686	54,079	1,306,072	2,929,604	100,329
PROFESSIONAL SERVICES	916,961	1,055,114	6,960	930,807	12,316	764,815	11,149	747,606	1,159,106	103,992
REAL ESTATE	247,495	301,211	1,071	243,156	452	234,159	452	234,075	320,792	19,581
UTILITY/AGENCY FORCE ACCOUNTS	105,421	88,422	71	81,398	192	65,297	198	64,919	93,616	5,194
SPECIAL PROGRAMS	7,668	14,110	11,210	13,507	48	857	50	779	25,150	11,040
CONTINGENCY	322,710	245,265	0	0	0	0	0	0	75,272	(169,993)
PROJECT REVENUE	(18,115)	(43,675)	0	(8,205)	(1)	(6,315)	(2)	(7,545)	(43,975)	(300)
PROJECT GRAND TOTAL	4,138,684	4,489,722	56,010	3,064,514	80,386	2,402,499	65,926	2,345,906	4,559,565	69,843

Figure 1 - Rail Construction Plan

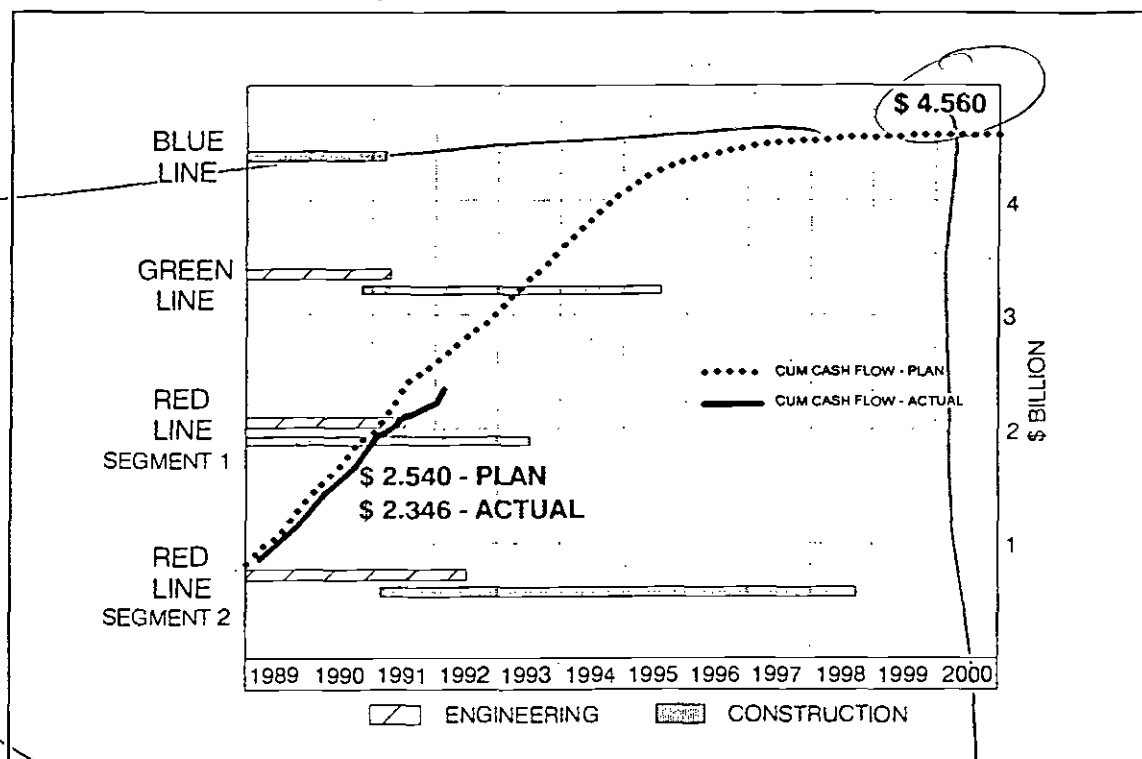


Figure 2 shows the funding sources for each project and for the total program. Data included in this figure is based on the current forecast total cost of each project.

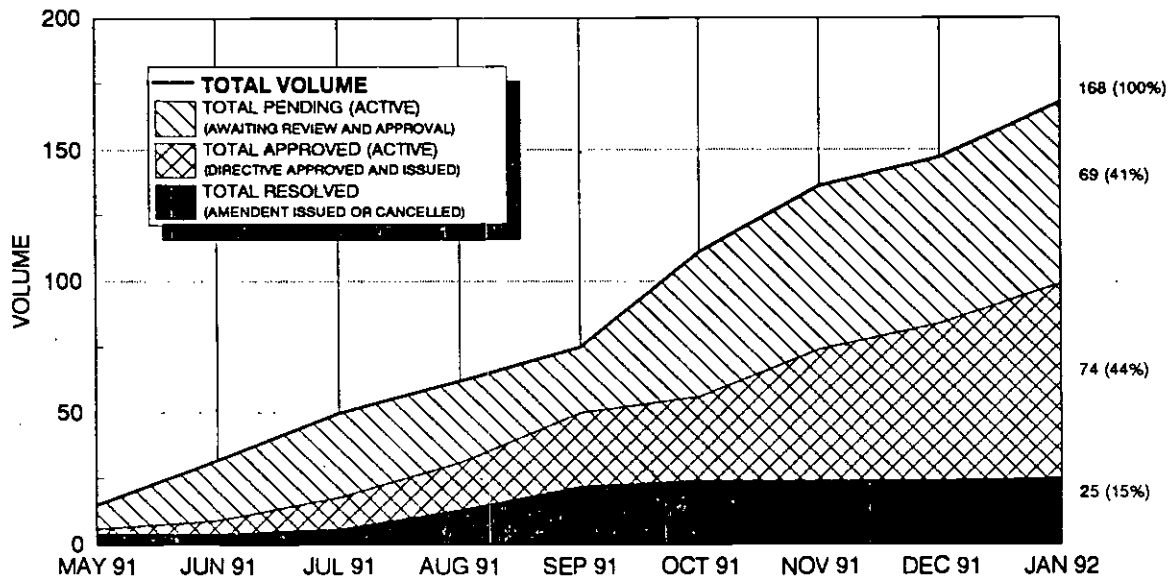
Figure 2 - Rail Construction Funding Sources

(IN MILLIONS)

	METRO BLUE LINE*		METRO GREEN LINE***		METRO RED SEGMENT 1**		METRO RED SEGMENT 2		TOTAL PROGRAM	
	\$	%	\$	%	\$	%	\$	%	\$	%
FTA-SEC 3					605.3	42	667.0	46	1272.3	27
FTA-SEC 9					90.6	6			90.6	2
STATE			107.5	12	213.1	15	186.0	13	506.6	11
LOCAL (PROP A)	877.0	100	778.5	88	176.6	12	439.4	30	2271.5	49
CITY OF L.A.					34.0	2	96.0	7	130.0	3
BENEFIT ASSESS					130.3	9	58.0	4	188.3	4
FORECAST					200.1	14			200.1	4
TOTAL	877.0	100	886.0	100	1450.0	100	1446.4	100	4659.4	100

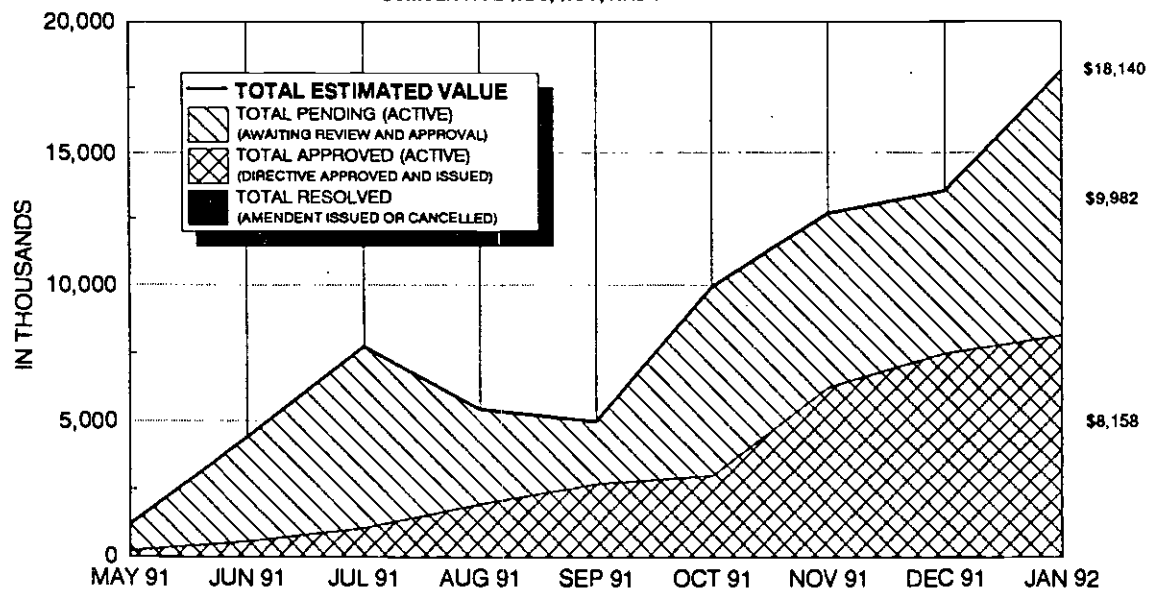
\* CONSISTS OF LIGHT RAIL LINE (\$847) AND MC-5 WORK (\$30).  
 \*\* LRT PORTION INCLUDED IN BLUE LINE FORECAST.  
 \*\*\* CONSISTS OF FUNDS ALLOCATED FOR NORTH COAST SEGMENT.

**CONSULTANT CONTRACT CHANGE SUMMARY  
CONSULTANT CHANGE REQUEST RESOLUTION  
CUMULATIVE R23, R80, AND R81**



AGE OF UNRESOLVED CONSULTANT CHANGES					
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	17	15	24	87	143
PERCENT	12%	10%	17%	61%	100%

**CONSULTANT CONTRACT CHANGE SUMMARY  
CONSULTANT CHANGE REQUEST VALUES  
CUMULATIVE R23, R80, AND R81**



## EXECUTIVE SUMMARY

**CONSULTANT CONTRACT CHANGE STATUS SUMMARY  
PENDING CHANGES/AMENDMENTS  
AS OF 01/31/92**

( \$ = THOUSANDS)

CONSULTANT CONTRACTS	TRANSCAL: E2301/MC005		MRTC: 2997/E0002		PD: 3369		OKA: MC008		OTHER		PROJECT TOTAL		LAST MONTH		VARIANCE	
	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$
R01: BLUE LINE	9	1,438									9	1,438	9	1,438	0	0
R05: PASADENA LINE									1	7	1	7	0	0	1	7
R23: GREEN LINE	48	3,365					14	1,043	2	111	64	4,519	55	4,338	9	181
R80: RED LINE S1			2	141	42	6,540					44	6,681	40	6,093	4	588
R81: RED LINE S2			15	3,718	19	3,222			1	200	35	7,140	28	3,132	7	4,008
R82: RED LINE S3			5	2,048							5	2,048	5	2,048	0	0
CONTRACT TOTAL	57	4,803	22	5,907	61	9,762	14	1,043	4	318	158	21,833	COMMENTS:			
LAST MONTH	52	4,853	18	4,426	55	6,847	11	892	1	31	137	17,049				
VARIANCE	5	(50)	4	1,481	6	2,915	3	151	3	287	21	4,784				

NOTE: DOLLAR VALUES SHOWN INCLUDE CONSULTANTS ROUGH-ORDER-OF-MAGNITUDE ESTIMATES AND DO NOT NECESSARILY REFLECT RCC'S FORECAST OF FINAL CHANGE COSTS.

## REAL ESTATE

Figure 3 summarizes the real estate status for Metro Green Line and Metro Red Line Segment 2.

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
Green Line	40	39	1	0	0
Red Line Seg 2	72	28	39	5	99

## RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Figure 4 shows that 143 positions are filled with regular full time staff and 21 positions are filled with contract or temporary employees.

Figure 4 - RCC Staff Levels

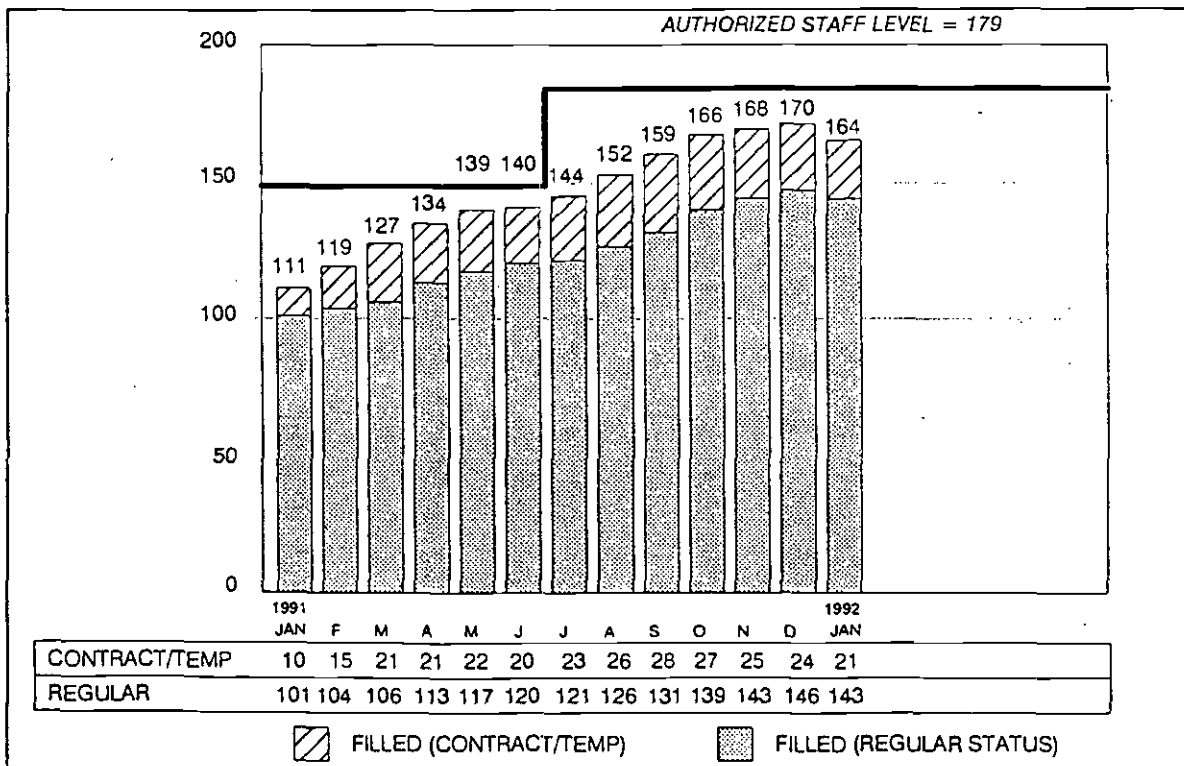
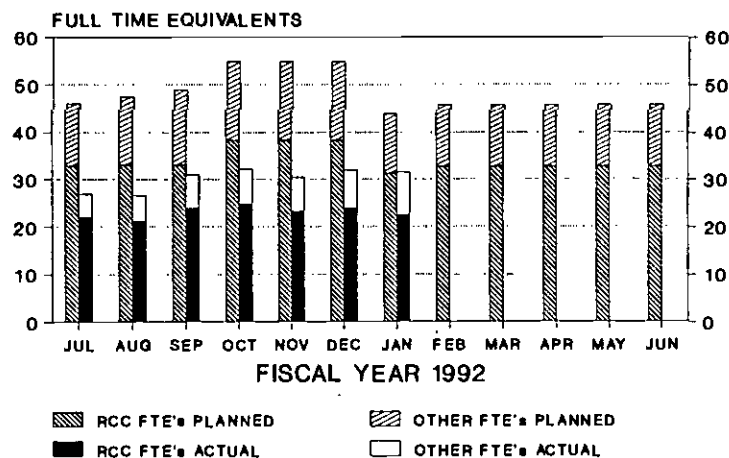


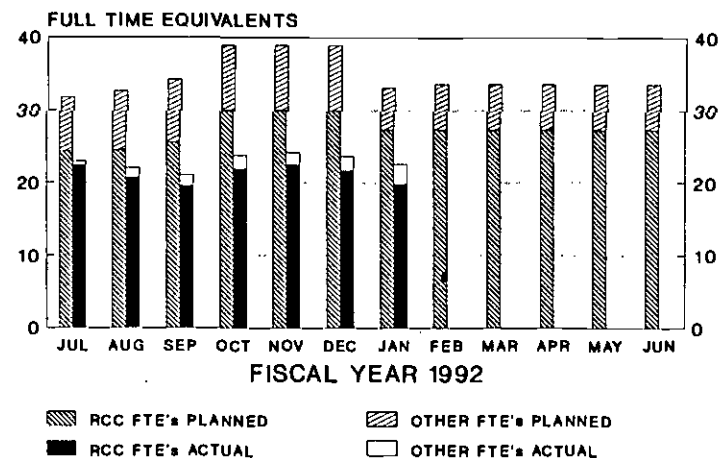
Figure 5 (on the following page) shows the LACTC/RCC staff full time equivalents and wage rate for the rail projects.

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



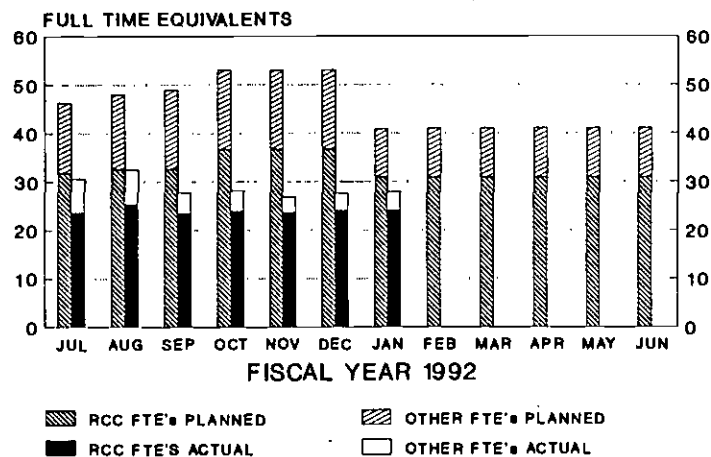
FY'92 Amended Budget Implemented JAN'92

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



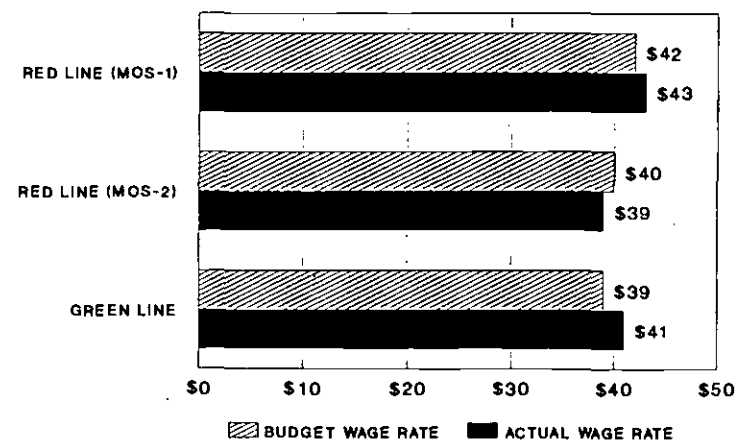
FY'92 Amended Budget Implemented JAN'92

### STAFFING PLAN VS. ACTUAL GREEN LINE



FY'92 Amended Budget Implemented JAN'92

### LABOR WAGE RATE\* RED LINE (SEGMENT 1 & 2), GREEN LINE



\*Salaries and Fringe Benefits Only

JANUARY 92

Figure 5



**RAIL CONSTRUCTION CORPORATION**  
**EXECUTIVE SUMMARY LABOR DISTRIBUTION REPORT**  
 For Period: January 1992  
 (All Figures in FTE Person Months)

Page: 1  
 Date: 2/14/92  
 Time: 9:18 am

DIVISION	R01 Blue Line		R05 Pasadena		R23 Green Line		R80 Red Seg 1		R81 Red Seg 2		R82 Red Seg 3		Sub Total		R60/70 Comm Rail		Rxx Other Proj		R92 System Wide		000 Overhead		Sub Total		Grand Total		ANNUAL BUDGET	
	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD		
Strategic Group	BUDGET	0.0	0.0	0.0	0.0	6.5	45.5	2.0	14.2	2.0	14.1	0.0	0.0	10.6	73.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.6	73.9	126.6
	ACTUAL	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	0.0										0.0	0.0		
Area Teams	BUDGET	1.7	11.4	.3	1.3	1.9	12.2	1.9	12.6	.9	6.3	.3	1.3	7.0	45.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.0	45.1	79.8
	ACTUAL	.7	4.4	0.0	.0	2.2	17.7	.9	2.5	1.4	4.5	0.0	.2	5.2	29.3										5.2	29.3		
FAST	BUDGET	0.0	0.0	1.2	8.4	.1	.7	0.0	0.0	.4	2.8	.4	2.8	2.1	14.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.1	14.7	25.2
	ACTUAL	.1	.6	.5	4.5	.0	.5	0.0	.3	1.1	4.8	.7	4.7	2.4	15.4										2.4	15.4		
Commuter Rail	BUDGET	2.2	14.1	.5	2.5	7.9	53.2	5.1	33.4	13.2	86.2	.3	1.5	29.1	190.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	29.1	190.8	336.0
	ACTUAL	.8	2.4	.3	1.7	1.6	14.6	1.8	9.2	6.5	39.2	0.0	.7	11.1	67.9										11.1	67.9		
Rail Construction Corporation	BUDGET	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	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0	0.0
	ACTUAL	0.0	0.0	0.0	0.0	0.0	.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3										0.0	0.0	.3	
COMMISSION TOTAL	BUDGET	1.7	11.0	13.8	80.3	36.7	243.8	30.0	194.2	38.4	252.3	2.7	17.0	123.1	798.5	6.0	38.7	1.5	7.8	0.0	0.0	43.8	277.5	31.2	323.9	174.3	1122.4	1993.9
	ACTUAL	2.0	21.3	3.1	13.8	24.0	167.8	19.8	148.4	22.5	162.0	3.2	7.8	74.6	521.0	3.7	24.1	3.9	75.9	0.0	0.0	99.9	247.5	67.5	347.6	142.2	868.6	
ANNUAL BUDGET	BUDGET	5.6	36.4	15.8	92.5	53.1	355.3	39.0	254.4	54.8	361.7	3.6	22.6	171.8	1122.9	6.0	38.7	1.5	7.8	0.0	0.0	43.8	277.5	31.2	323.9	223.0	1446.8	
	ACTUAL	3.7	28.7	3.9	20.1	27.9	201.0	22.5	160.3	31.5	210.5	3.9	13.3	93.4	633.9	3.7	24.1	3.9	75.9	0.0	0.0	99.9	247.5	67.5	347.6	160.9	981.5	
ANNUAL BUDGET		64.2		171.2		620.6		449.2		635.9		40.6				68.4		15.3		0.0		496.2						2561.5

## 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 25.9% which is the same figure as last month. 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 4.3% of total program costs, the same figure as last month, 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

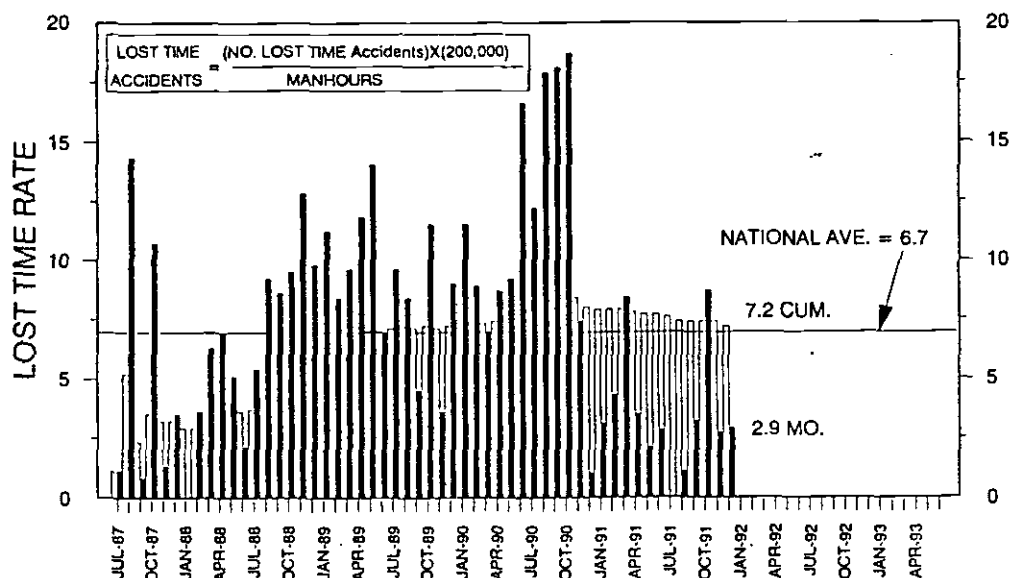
(IN THOUSANDS)

	METRO BLUE LINE		METRO GREEN LINE		METRO RED LINE SEGMENT 1		METRO RED LINE SEGMENT 2		TOTAL PROGRAM		CORPORATE GOAL
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	
CONSTRUCTION	657,487	74.95%	571,631	72.74%	813,943	56.13%	980,159	67.76%	3,023,220	66.31%	
REAL ESTATE	55,592	6.34%	29,232	3.72%	139,679	9.63%	96,289	6.66%	320,792	7.04%	
PROFESSIONAL SERVICES:											
ENGINEERING/DES	69,587	7.93%	75,425	9.60%	220,154	15.18%	126,816	8.77%	491,982	10.79%	
CONSTR MGMT.	91,642	10.45%	72,889	9.28%	138,243	9.53%	131,394	9.08%	434,168	9.52%	
STAFF	17,655	2.01%	21,360	2.72%	101,279	6.98%	57,541	3.98%	197,835	4.34%	4%
OTHER	14,222	1.62%	14,921	1.90%	988	0.07%	30,110	2.08%	60,241	1.32%	
SUBTOTAL	193,106	22.01%	184,595	23.49%	460,664	31.77%	345,861	23.91%	1,184,226	25.97%	20%
CONTINGENCY	963	0.11%	14,183	1.80%	35,733	2.46%	24,423	1.69%	75,302	1.65%	
PROJECT REVENUE	(29,877)	-3.41%	(13,798)	-1.76%	0	0.00%	(300)	-0.02%	(43,975)	-0.96%	
GRAND TOTAL	877,271	100.00%	785,843	100.00%	1,450,019	100.00%	1,446,432	100.00%	4,559,565	100.00%	

## CONSTRUCTION SAFETY

Figure 7 shows the combined Construction Safety report for the Metro Blue Line, the Metro Green Line and the Metro Red Line, Segment 1 and Segment 2 projects. The frequency index (Lost Time) and the severity index (Lost Days) of accidents for December were still below the national average.

### CONSOLIDATED PROJECTS SUMMARY OF LOST TIME ACCIDENTS (FREQUENCY)



### CONSOLIDATED PROJECTS SUMMARY OF LOST WORK DAYS (SEVERITY)

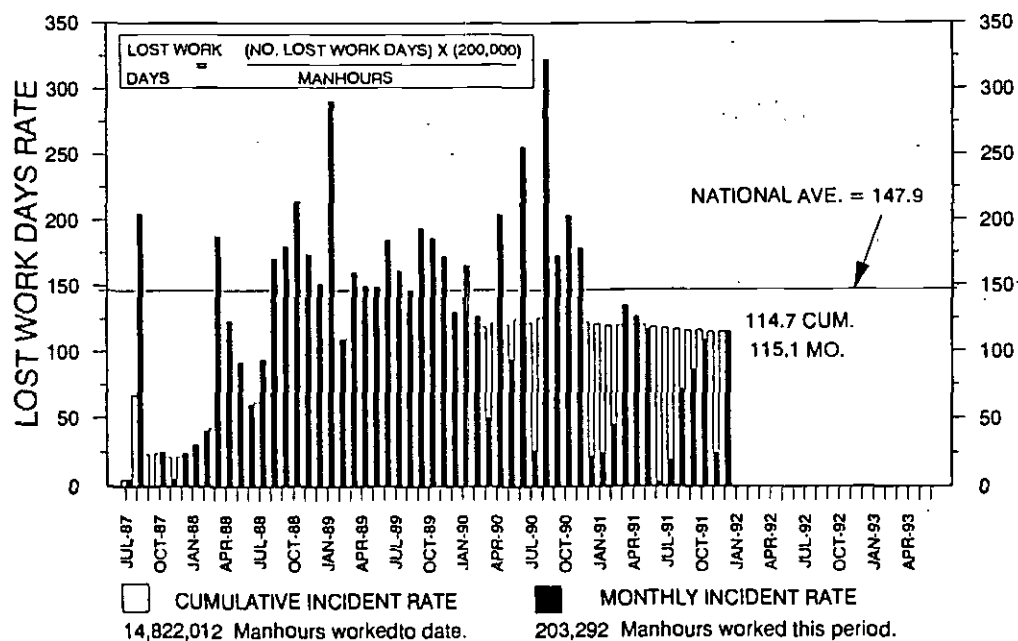
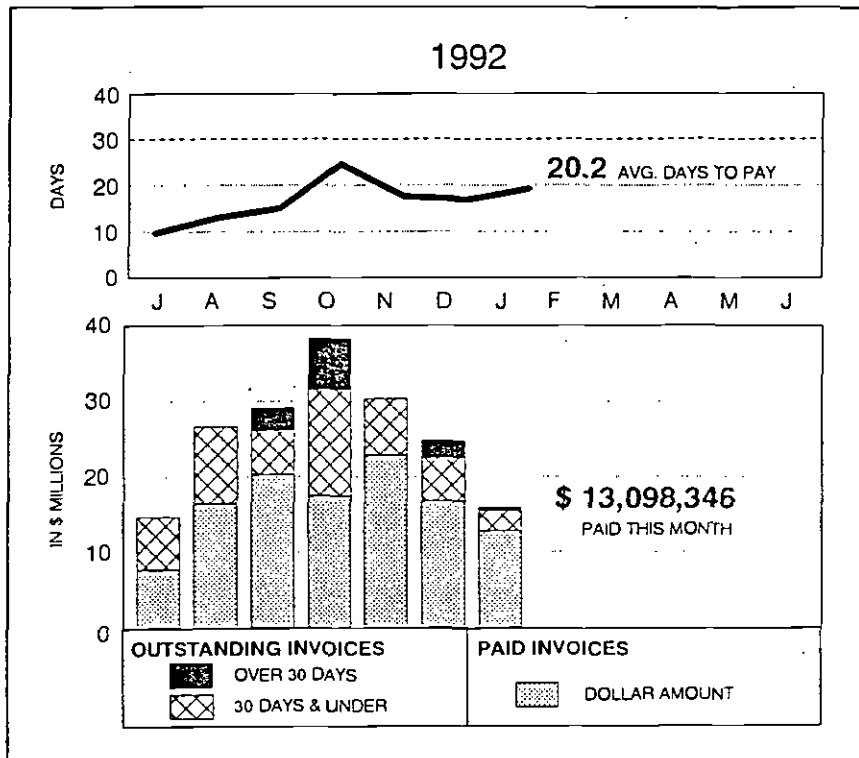


Figure 7

## INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 20.2 days.
- 28 invoices were paid this month for a total value of \$ 13,098,346.
- There were 3 outstanding Construction or Procurement invoices under 30 days old for \$ 2,739,635.
- There was 1 outstanding Construction or Procurement invoice over 30 days old for \$ 466,820.

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
OCT 1991	17	14,328,654	30	6,818,530	44	7,513,568	17	876,002
NOV 1991	16	7,640,255	2	27,063	49	7,791,884	22	1,218,880
DEC 1991	13	5,834,032	1	2,240,824	67	3,882,141	31	2,172,469
JAN 1992	3	2,739,635	1	466,820	44	4,660,958	30	1,314,546

**METROLINK - COMMUTER RAIL****JANUARY 1992  
VEHICLE PROGRESS REPORT  
PASSENGER COACHES (UTDC)****PROGRESS THIS PERIOD:**

- Car number 11 of the base (15) cab cars is in "splice"; subsections for an additional eight (8) cars (base 40) are in production floor assembly fixtures.
- Total quantity of passenger vehicles remains at 70: 24 cab cars plus 46 trailer cars.
- Total contract dollar value decrease (resulting from the reduction of Canadian Custom Duties and Processing Fees) has been received and is being reviewed.

**UPCOMING MILESTONES/ISSUES FOR NEXT THREE MONTHS:**

- Issuance of Change Order for spare parts for option cars.
- Pricing for pending Change Orders resulting from modifications required for ADA compliance has been revised and is under review.
- Production rate to maintain level of 2 vehicles every 3 weeks until mid-February '92 when a rate of 1 vehicle a week will be achieved.
- Arrival of first car anticipated beginning of April, 1992.

**CRITICAL NEEDS:**

- None

**METROLINK - COMMUTER RAIL**

**JANUARY 1992  
VEHICLE PROGRESS REPORT  
LOCOMOTIVES (GM)**

**PROGRESS THIS PERIOD:**

- Nearing completion of finalizing the engineering details for the modification to base locomotives for SCRRA operations to insure start of production fabrication.
- Total quantity of locomotives remains at seventeen (17) - Base Order.
- Reduction of NOx emissions still in work.

**UPCOMING MILESTONES/ISSUES FOR NEXT THREE MONTHS:**

- Processing and cleanup of Change Orders and Change Notices.
- Decision on optioning additional locomotives above base order.
- Continuing discussions with engine manufacturer on NOx reductions.
- Arrival of first locomotive anticipated in June 1992.

**CRITICAL NEEDS:**

- None

RAIL CONSTRUCTION CORPORATION											
COMMUTER RAIL											
CONTRACTING SCHEDULE						UPDATE: 27-Jan-92		PAGE: 7 of 8			
CONT NO	CONTRACT DESCRIPTION	CAMERA READY	ADVERTISE DATE	PRE-BID MEETING	SUBMISSION DATE	REPORT COMPLETE	UPA APPROVAL	COMMISSION APPROVAL		NOTICE TO PROCEED	RESPONSIBLE <small>Engng/Contracts/Prog/Cont</small>
T5020	COMMUTER RAIL OPERATION SERVICE		07-Jun-91	18-Jun-91	06-Jul-91	06-Sep-91	21-Nov-91	N/A		15-Jan-92	Solow/Sechler
C6090	MIDWAY TRACK & SIGNALS	Apr-92	Apr-92	T.B.D.	T.B.D.	T.B.D.	Dec-92	N/A		Jul-92	
C6150	EAST LINE POMONA AND COVINA STATIONS	28-Jan-92	04-Feb-92	17-Feb-92	02-Mar-92	06-Mar-92	13-Mar-92	N/A		02-Apr-92	Crary/Sechler
H2030	SIGNAGE FABRICATE INSTALL	OCT '91	OCT '91	T.B.D.	T.B.D.	T.B.D.	Jul-92	N/A		DEC '91	
H2050	C.T.C. DISPATCH CENTER DESIGN & BUILD	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.	N/A		T.B.D.	Rinard/
	SPTC FORCE ACCOUNT (SIGNALS)	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.	N/A		T.B.D.	Rinard/Sechler
H2060	COMMUNICATION SYSTEM CONSTRUCTION L.A. RIVER TO SAN BERNARDINO	21-Oct-91	02-Dec-91	11-Dec-91	31-Dec-91	03-Jan-92	10-Jan-92	N/A		22-Jan-92	Mahler/Rinard
TBD	BROADWAY CONNECTOR	FEB '92	MAR '92	MAR '92	APR '92	MAY '92	MAY '92	N/A		MAY '92	
TBD	CONDUITS	MAR '92	APR '92	MAY '92	JUN '92	JUN '92	JUN '92	N/A		JUN '92	
TBD	TAYLOR UNDERPASS	FEB '92	MAR '92	APR '92	MAY '92	MAY '92	JUN '92	N/A		JUN '92	
TBD	SEISMIC RETROFIT	JAN '92	FEB '92	FEB '92	MAR '92	APR '92	APR '92	N/A		APR '92	
*** LIMITED NOTICE-TO-PROCEED		ACTUAL DATE =				CHANGES SINCE THE LAST UPDATE= "BOLD ITALICS"					
A:COMMRAIL.JAN											

January changes shaded

## LACTC COST RECOVERY STATUS REPORT

as of 1/31/92

## CLAIMS IN PROCESS

Agency	Contract	Description	Claim Amount	Agreed Amount	Invoiced	Paid	Unpaid Balance	Unbilled Balance	Status	Action Items
<b>BLUE LINE</b>										
Compton	F202	MC-5 Alternative (See Note 1)	10,158,808	5,842,373	5,925,210	5,427,163	488,047	0	See Page 2	LACTC \$ exposure/45 day ltr
HJO	C140	C140 Counterclaim	5,171,204	1,000,000	1,000,000	1,000,000	0	0	HJO Claim	Balance to E&D - TBD
	C117	Third Party Backcharges	35,674	Included in line above					Reduction (8/91)	
Long Beach	C336	LB Station Superstructures - Indirect	211,733						On hold per JMG	Follow with Long Beach
	Various	Long Beach Prop A Projects	193,673						On hold per JMG	Develop addl documentation
LA-BSL	C117/C140	Betterments & Backcharges	788,848						In Neg - Most issues resolved	Will discuss shortly
LA-CRA	C510	105th Street Pedestrian Crossing	378,000	378,000					Agreed	Waiting on real estate
	C510	105th Street Land Issues	250,000						CRA appraisal scheduled 3/92	RE to write up zoning review
LA-DPW	C117	Flower St. Improvements	2,148,803						Meeting soon	Revise attorney letter
	C140	8" Sewer Relocation	500,000						In Negotiation	Waiting for DPW analysis
	C140	Roof Drains	160,000						In Preparation	
LA County	F208	Florence-Graham Park-N-Ride	400,000						Developing cash out strategy	Monitoring TIA action
	F208	Graham Avenue Widening	TBD							
So Cal Edison	C326	Install Duct Bank at PCH	19,114	19,114	19,114		19,114	0	Collection Imminent	Track Invoice progress
SCRTD	H812	Maintenance Parts	70,000	70,000	70,000		70,000	0	RTD wants to include in start-up W/O	Will be negotiated in start-up W/O closeout
	Work Orders	Blue Line Work Order Closeouts #1*	13,428,331	8,660,505		8,660,505			RTD responded on schedule	Close remainder. Review for backcharges and betterments
		Blue Line Work Order Closeouts #2	3,798,340						Balance of RTD work orders are in closeout process	
SPTC	C415/F208	Firestone Bridge	830,000	830,000	830,000	783,078	46,922	0	Collection Imminent	Track Invoice progress
	C510	105th Street Ped Crossing	17,700						Agmt at SPTC	Awaiting SP response on 105th
	C510	SPTC Share - Caldwell Ave. Ped Xing	32,550	32,550	32,550		32,550	0	Collection Imminent	Track Invoice progress
CNA Insurance	Various	Errors & Omissions	13,368,055						In Process	
<b>BLUE LINE TOTALS</b>			<b>51,940,833</b>	<b>18,830,542</b>	<b>7,876,874</b>	<b>15,870,748</b>	<b>668,633</b>	<b>0</b>		
<b>RED LINE</b>										
LA-BSL	A185	7th Street Streetscape	300,000						Addl bttrments to be discussed	Analyze amount of claim
SCRTD	A185	Duplicate Indirect Costs	4,400,000	Credit due Red Line from RTD					In proc - Acknowl by RTD	
<b>RED LINE TOTALS</b>			<b>4,700,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		

\* Release of LACTC obligations rather than cash recovery. Funds to be restored to Blue Line project budget.

11-Feb-92

RAIL PROGRAM STATUS SUMMARY

JANUARY 1992

# LACTC COST RECOVERY STATUS REPORT

as of 1/31/92

January changes shaded

Agency	Contract	Description	Claim Amount	Agreed Amount	Invoiced	Paid	Unpaid Balance	Unbilled Balance	Status	Action Items
<b>OTHER LINES</b>										
TIA (Argonaut Insurance)		Refund, W/C Ins premiums	2,052,000	2,052,000	2,153,207	2,153,207	0	(101,207)	Refund larger than estimated	
Various		Refund, Gen Liab Ins premiums	490,000	490,000	247,417	247,417	0	242,583	A/R after Ins Co rate audit	
Glendale		Route Refinement Study	75,000	75,000	57,181	57,181	0	17,819		
Lawndale		Costal Corridor Study	18,800	18,800	18,800	18,800	0	0		
Pasadena		Route Refinement Study	150,000	150,000	104,788	104,788	0	45,214	Billed as Bechtel bills LACTC	
Redondo Beach		Costal Corridor Study	7,000	7,000	7,000	7,000	0	0		
Torrance		Costal Corridor Study	48,200	48,200	48,200	48,200	0	0		
CalTrans	84K578	LAUPT Access Study	200,000	200,000	149,302	147,809	1,493	50,698		
<b>OTHER LINE TOTALS</b>			<b>3,037,000</b>	<b>3,037,000</b>	<b>2,781,893</b>	<b>2,780,400</b>	<b>1,493</b>	<b>255,107</b>		
<b>TOTAL CLAIMS IN PROCESS</b>			<b>59,877,833</b>	<b>19,887,642</b>	<b>10,858,787</b>	<b>18,851,148</b>	<b>888,128</b>	<b>255,107</b>		
<b>TOTAL CLAIMS RECOVERED (See Page 3)</b>			<b>4,968,232</b>	<b>4,735,581</b>	<b>4,735,581</b>	<b>4,735,581</b>	<b>0</b>	<b>0</b>		
<b>GRAND TOTALS</b>			<b>64,846,065</b>	<b>24,623,123</b>	<b>15,594,348</b>	<b>23,586,727</b>	<b>888,128</b>	<b>255,107</b>		

## NOTES

### NOTE 1 - MC-5

COURTESY BILLINGS FOR WILLDAN ASSOCIATES involving MC-5 projects billed to LA County, through LACTC, on behalf of Compton

	Authorized	Willdan Charges	Invoiced	Paid	Unpaid Balance	Available	Status	Action Items
West Alameda Underpass	702,680	567,178	567,178	567,178	0	135,484	In progress	
Administration Charges			10,050	0	10,050		Negotiation with Cmptn started	Set mtg with Hanson
Mealy St - Environmental Assessment	87,699	84,284	84,284	84,284	0	3,415	Completed	
Administration Charges			1,320	0	1,320		Negotiation with Cmptn started	Set mtg with Hanson
<b>SUBTOTALS</b>	<b>790,359</b>	<b>651,460</b>	<b>662,830</b>	<b>651,460</b>	<b>11,370</b>			

FUNDING FOR COMPTON for its MC-5 share

Grant	Original Amount	Drawdowns	Invoiced	Paid	Unpaid Balance		
FWHA (C421)	5,983,498	2,995,590	2,995,590	2,995,590	0		
LA County (C420 & other MC-5)	5,500,000	2,195,323	2,266,790	1,780,113	486,677		
Chevron Oil Relocation			415,210		415,210		LA Co reviewing oblig to pay
C420 Design Support & Const Mgt			100,000		100,000		Preparing claim
<b>SUBTOTALS</b>	<b>11,483,498</b>	<b>5,190,913</b>	<b>5,262,380</b>	<b>4,775,703</b>	<b>486,677</b>		Waiting for LA Co response Assemble backup documents

MC-5 TOTALS (figures transferred to Page 1)

5,842,373 5,825,210 5,427,183 498,047

OTHER MC-5 ISSUES

Owens Corning / Mealy Street Spur 80,000 Contingent on MC-5 complete Bill on completion

11-Feb-92

RAIL PROGRAM STATUS SUMMARY

JANUARY 1992

# LACTC COST RECOVERY STATUS REPORT

as of 1/31/92

January changes shaded

## CLAIMS RECOVERED

Agency	Contract	Description	Claim Amount	Agreed Amount	Invoiced	Paid	Unpaid Balance	Unbilled Balance	Status	Action Items
<b>BLUE LINE</b>										
CalTrans	C415	Firestone Bridge	458,000	458,000	458,000	458,000	0	0	Cash Collected (7/91)	
	C415	Firestone Bridge - Indirect	232,851	0	0	0	0	0	Payment capped at \$458,000	
Compton	F202	MC-5 Administration Cost	345,874	345,874	345,874	345,874	0	0	Cash Collected	
	C510	SPTC/Watson Land	24,117	24,117	24,117	24,117	0	0	Cash Collected (7/91)	
	C510	SPTC/Right-of-Way Acquisition	106,984	106,984	106,984	106,984	0	0	Cash Collected (7/91)	
LongBeach	C335	LB Station Superstructures	415,000	415,000	415,000	415,000	0	0	Cash Collected (9/91)	
LA-BSL	C140	Supplemental Agreement	259,000	259,000	259,000	259,000	0	0	Cash Collected (3/91)	
LA-CRA	C510	Century Blvd, Grade Crossing	544,052	544,052	544,052	544,052	0	0	Cash Collected	
LA-DWP-W	C140	HJO Repairs - Faulty DWP Joints	17,500	17,500	17,500	17,500	0	0	Cash Collected (8/91)	
Simmone Cable TV		Install Duct Bank - 10th St. & LB	8,084	8,084	8,084	8,084	0	0	Cash Collected	
SCRTD	F815	Central Control Facility	1,580,000	1,580,000	1,580,000	1,580,000	0	0	Cash Collected	
	F815	7th & Flower Sta. Rel of Ins Prem	655,970	655,970	655,970	655,970	0	0	Cash Collected	
United Logistics		K-Line Spur	325,000	325,000	325,000	325,000	0	0	Cash Collected	
<b>BLUE LINE TOTALS</b>			<b>4,868,232</b>	<b>4,735,581</b>	<b>4,735,581</b>	<b>4,735,581</b>	<b>0</b>	<b>0</b>		

10-Feb-92

RAIL PROGRAM STATUS SUMMARY

JANUARY 1992

## LEGEND

O	Open. Action still required.
	Completed or Not Applicable

CONTRACT CLOSE OUT STATUS  
METRO BLUE LINE

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.		
H840	Fare Collection						Board Approval Competed;GFI Submittals Du	Mar. 92
P851	Hi-Rail Trucks						Awaiting Delivery of Truck	Mar. 92
C355R	Long Beach Landscaping	O					Transferred to RCC	May 92

## METRO PASADENA PROJECT JANUARY 1992 STATUS REPORT

### EXECUTIVE SUMMARY

The Pasadena Team completed negotiations with the Engineering Management Consultant (EMC) for conducting Preliminary Engineering of the project from Union Station Platform #1 to the Los Angeles River. Twenty nine discreet tasks were identified and budgeted as unique activities. Performance will be measured monthly based on the extent of each tasks level of completion.

Working closely with the Area teams, the Pasadena project staff continues to make progress finalizing Yard and Shops locations, defining interface requirements with the Glendale Line, and closing station location and Grade Separation issues with the City of Pasadena. Liaison with the Commuter Rail team has been maintained in an effort to effectively coordinate our respective alignments.

The City of Pasadena requested that a plan check review of a proposed Civic Center West development be undertaken by the RCC. A portion of the development would be constructed over the Santa Fe Right of Way, utilizing a box structure configuration for the Pasadena alignment. With considerable support from the EMC, the RCC presented a list of concerns and provisions which must be included as part of the box structure design in order to accommodate the LRT project.

### AREAS OF CONCERN

#### ONGOING

Concern:	Location of the Yard and Shops in the Taylor Yard Site is operationally disadvantageous and could have an impact on the project budget.
Action:	The Cornfield Site is under investigation by the Project/Area team.
Status:	The EMC continues to refine the yard layout at the Cornfield Site. A preliminary cost comparison between the Taylor Yard and Cornfield Site was presented to Ed McSpedon on 1/31. A PMIC

agenda item will be presented in March to obtain approval to commence EIR studies on four alternative locations (Taylor, Cornfield, Burbank/Glendale, and a non-revenue connector to the Long Beach Maintenance Facility).

- Concern:** The Civic Center West Development, a portion of which will be constructed over the Santa Fe Right of Way is projected to begin construction by the third quarter of 1992. Approval by the City of funding one-half of the cost of performing grade separation preliminary engineering indicates their preference for this option over an at grade alignment over Colorado Boulevard. This differs markedly from the developers plans which are based on an at grade alignment. If grade separation became the eventual method of construction, Janss Development would have to dramatically change their design.
- Action:** The Pasadena team has reviewed the developers plan check drawings and provided comments regarding the LRT operational and safety requirements which must be satisfied.
- Status:** The developer (Janss Corporation) will prepare a response to RCC concerns. Follow up meetings will be scheduled throughout the month of February and beyond until a final consensus design scheme is reached.

## KEY ACTIVITIES - JANUARY

- Negotiations for Preliminary Engineering were completed with the EMC on 1/16/92.
- The Preliminary alignment drawing from LAUPT to the Maintenance yard was completed by the EMC and submitted on 1/16/92.
- RCC approved the consultant selection process to be used by the EMC 1/24/92.
- OCIP Proposals were received from eight firms. Evaluation of each of the proposals is underway.
- The baseline schedule for Preliminary Engineering was presented to the RCC on 1/31/92.
- The EMC began preparation of the System Operating Plan and Design Concepts Report scheduled for completion in February 1992.

**KEY ACTIVITIES - PLANNED FOR FEBRUARY**

- Submission of the draft System Operating Plan scheduled for 2/18/92.
- EMC to submit the draft Design Concepts Report to the RCC on 2/18/92.
- The RCC Real Estate Department will present a video presentation of the list of candidate parcels as shown in the EIR drawings on 2/11/92.
- Systemwide Errors and Omissions insurance proposals are scheduled to be received on 2/28/92.
- Continue the review of the Civic Center West drawings to ensure all LRT interface requirements are met.
- Submit RCC position on the Master Cooperative Agreement with the City of Pasadena to the City on 2/18/92.



## EXECUTIVE SUMMARY

### COST STATUS (in \$ millions)

•	Current Budget	716
•	Current Forecast	786
•	Project Expenditure	163
•	Project Commitments	343

### SCHEDULE STATUS

- |   |                                 |           |
|---|---------------------------------|-----------|
| • | Current Revenue Operations Date | May, 1995 |
|---|---------------------------------|-----------|
- 
- |   |                 |          |      |
|---|-----------------|----------|------|
| • | Design Progress | - Plan   | 100% |
|   |                 | - Actual | 99%  |
- 
- |   |                       |          |     |
|---|-----------------------|----------|-----|
| • | Construction Progress | - Plan   | 20% |
|   |                       | - Actual | 17% |
- 
- The Metro Green Line Master Schedule was revised during January, 1992 to incorporate the recently approved Revenue Operation Date of May, 1995.
  - Notice to Proceed for Contract H1100 (Automatic Train Control) was issued on January 13, 1992 to Union Switch & Signal and subsequently a temporary stop work order was issued.
  - Notice to Proceed for Contract P1900 (High Performance Transit Vehicles) was issued on January 13, 1992 to Sumitomo and the contract was terminated for convenience on January 16.

**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	40	39	1	0	0
Last Month	40	39	1	0	0

**AREAS OF CONCERN****ONGOING****Vehicle Delivery/Integrated Testing Conflict**

**Concern:** With the January 16, 1992 termination of Contract P1900 (High Performance Transit Vehicles) and the temporary suspension of Contract H1100 (Automatic Train Control), the control line testing scheduled to start in January, 1994, will have to be performed using substitute vehicles. Furthermore, the first two Metro Green Line vehicles will not be available for systems integrated testing. Consequently, a workaround has to be developed to use alternate vehicles for much of the control line and integrated testing.

**Action:** The H1100 (Automatic Train Control) contractor will be directed to initiate testing using alternate vehicles. Integrated test plans will address the workaround.

**Status:** Addendum 5 to Contract H1100 (Automatic Train Control) documents has provided the option of using alternate vehicles should the need arise. In order to use the alternate method for testing, the ATC contractor will have to submit plans incorporating this for review and approval.

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

**Concern:** Bids were opened on January 9, 1992. The current contract duration is 300 calendar days with no mention of early access for the LRT portion. This will deny site access to the trackwork contractor on November 2, 1992, the date given in the Contract C0600 documents. The delayed trackwork installation will impact the follow-on systems contracts and will potentially cause delay damage costs.

**Action:** The LRT special provisions for establishing a November 2, 1992 rail access date were not included in the bid documents. OKA will review the possibility of adding the provisions by change order or accelerating the guideway construction from the crossover at the west end of the Norwalk station to the west end of the project.

**Status:** OKA is awaiting award of the contract and review of potential extra costs.

**SCE Power Lines/Contract C0100 (Aerial Guideways) Conflict**

**Concern:** SCE has begun work related to raising their electrical transmission lines by installing new and taller towers at the Kramer property area. One guideway foundation (Bent 97) could not be constructed by the Contract C0101 (Foundations and Utilities) contractor due to the existing power line height conflicts, and has been removed from that contract's scope of work and added to Contract C0100. As the SCE line/tower raising work is scheduled to take approximately six months with completion presently set for May, 1992, a conflict exists with the Contract C0100 contractor's scheduled activities at this area.

**Action:** This matter is being discussed and reviewed at each monthly SCE/RCC/OKA coordination meeting.

**Status:** OKA and the RCC are monitoring SCE closely in an attempt to coordinate a window for Contract C0100's construction to take place during SCE's scheduled activities.

**Caltrans Permits**

- Concern:** Caltrans encroachment "double" permits (one by the RCC and one by the contractor) are required for each project working on Caltrans right-of-way. The first requirement is for Contract C0600 (Century Trackwork Installation). The permit is being held up due to Caltrans concerns over the stray current issue. A provisional permit for survey work and ballast installation (except at the bridges) has been issued for Contract C0600.
- Action:** The RCC negotiated with Caltrans and recommended execution of a Contract C0600 option and/or change order. The RCC will apply for all other permits.
- Status:** Contract C0600 action awaits the results of the RCC's negotiations with Caltrans. A list of other contracts requiring permits was compiled and given to the RCC by OKA.

**Rosecrans Bridge Falsework**

- Concern:** The Rosecrans falsework submittal has been approved. However, the two central span falsework portions adjacent to Bents 119 and 120 which may be situated above Chevron gas lines will be in violation of a California state law that prohibits any construction or obstruction adjacent to any hazardous liquid pipeline easement.
- Action:** The RCC has reviewed the two options presented by OKA in January and has directed OKA and TRANSCAL to implement the option in which the cast-on-falsework of the main span will be reduced and instead two segmental cantilever sections will be added.
- Status:** Redesign of the effected sections of the bridge is underway by TRANSCAL and is expected to be available in early February, 1992.

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

**Concern:** It has been noted 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 outstanding 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:** In Project CT044-1, the outstanding items were given to Caltrans as part of the punchlist requiring completion prior to LRT turnover. The Caltrans Resident Engineers on Projects CT037, CT046 and CT047 have been informed of the deficiencies.

**Status:** Per Caltrans, corrective actions will be taken before final acceptance of the projects. This course of action will be monitored against Contracts H1200, H1400 and C0600 (Century Trackwork Installation) schedule requirements.

**Impact of Vehicle Dimensional Data Delay on Contract C0400 (Hawthorne Yard and Shop)**

**Concern:** Contract C0400 is preparing submittals for the vehicle pit excavation located in the Hawthorne Shop. Work related to these pits is scheduled for the early stages of shop construction (April and May, 1992).

**Action:** RCC/TRANSCAL is to forward to the C0400 contractor all the preliminary vehicle data necessary to excavate and construct the vehicle pits as soon as the information becomes available.

**Status:** Evaluation of the vehicle data is currently underway at the RCC.

**KEY ACTIVITIES -- January**

- Contract H0901 (Platform Intrusion Detection System) was advertised for bids and bid opening was put on hold.
- Caltrans opened bids for Project CT043-2 (I-105 to Studebaker).
- Contract C0101 (Foundations and Utilities) reached completion milestone.

**KEY ACTIVITIES -- Planned for February**

- Contract C0501 (Systems Facilities Sites) will be advertised for bids.

O'BRIEN-KREITZBERG  
RCC  
Project: R23

RAIL CONSTRUCTION CORPORATION  
METRO GREEN LINE - NORWALK/EL SEGUNDO  
Project Cost by Element

Page: 1  
Report Date: 02/13/92  
Status Date: 01/31/92

[ \$ x 000's ]

Description		----- Budget -----		--- Commitments ---		-- Incurred Cost --		--- Expenditures ---		Current	Variance
		Original (1)	Current (2)	Period (3)	To Date (4)	Period (5)	To Date (6)	Period (7)	To Date (8)	Forecast (9)	
T	Construction	470,192	562,614	456	208,320	3,795	64,528	4,977	58,692	561,131	(1,483)
S	Professional Services	108,562	108,562	574	101,678	4,310	88,221	2,747	81,335	179,835	71,273
R	Real Estate	36,927	29,232	67	23,565	144	22,645	144	22,651	29,232	0
F	Utility/Agency Force Accounts	7,656	10,500	71	6,149	102	644	108	786	10,500	0
D	Special Programs	4,676	4,790	11,210	12,212	8	170	11	93	4,790	0
C	Contingency	59,613	14,100	0	0	0	0	0	0	14,153	53
A	Project Revenue	(16,626)	(13,798)	0	(8,649)	0	(559)	0	(559)	(13,798)	0
Project Grand Total :		671,000	716,000	12,378	343,275	8,359	175,649	7,986	162,997	785,843	69,843

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

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

18-Feb-92  
08:08 AM

JANUARY 92

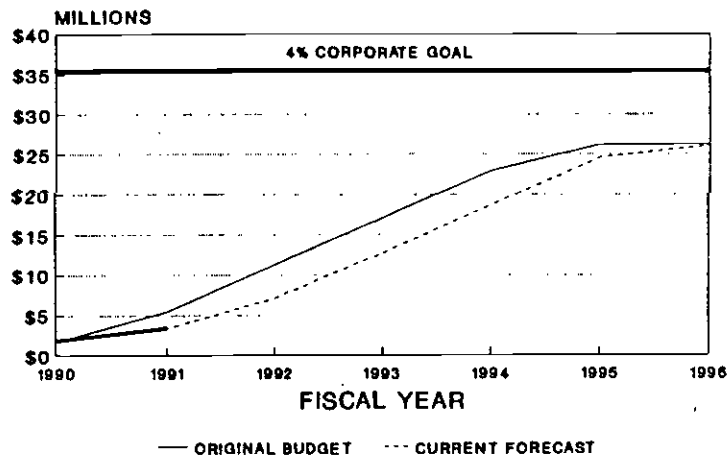
STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
LACTC	\$778,500	\$110,908	\$267,884	34%	\$162,997	21%	\$162,997	21%
STATE	\$107,500 (1)	\$0	\$0	0%	\$0	0%	\$0	0%
TOTAL	\$886,000	\$110,908	\$267,884	30%	\$162,997	18%	\$162,997	18%

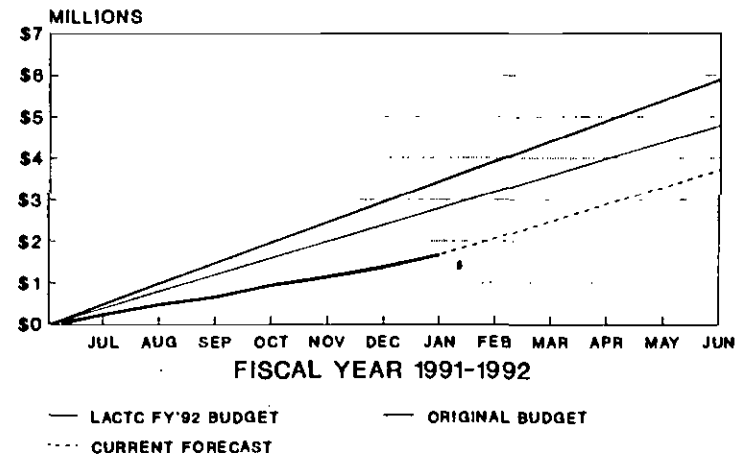
NOTES:

(1) On hold. No requests for funding from the State have been processed.

## AGENCY COSTS GREEN LINE



## FISCAL 1992 AGENCY COSTS GREEN LINE



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

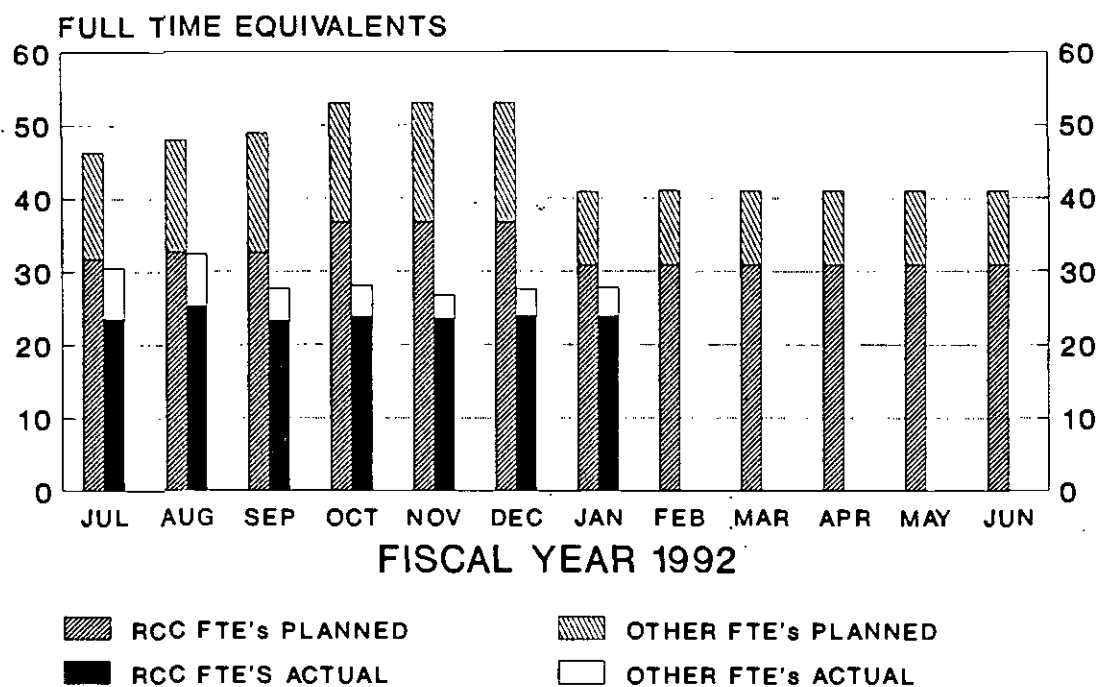
TOTAL PROJECT BUDGET	\$886,000
ORIGINAL BUDGET	\$26,189
BUDGET % OF TOTAL PROJECT	3.0%
CURRENT FORECAST	\$26,084
FORECAST % OF TOTAL PROJECT	2.9%
4% CORPORATE GOAL	\$35,440

## FISCAL YEAR 1992 AGENCY COSTS GREEN LINE (\$000)

LACTC FY'92 BUDGET	\$4,781
ORIGINAL BUDGET	\$5,833
CURRENT FORECAST	\$3,712
ACTUAL \$ TO DATE	\$1,660

Revised forecast as of December 1991.

## STAFFING PLAN VS. ACTUAL GREEN LINE

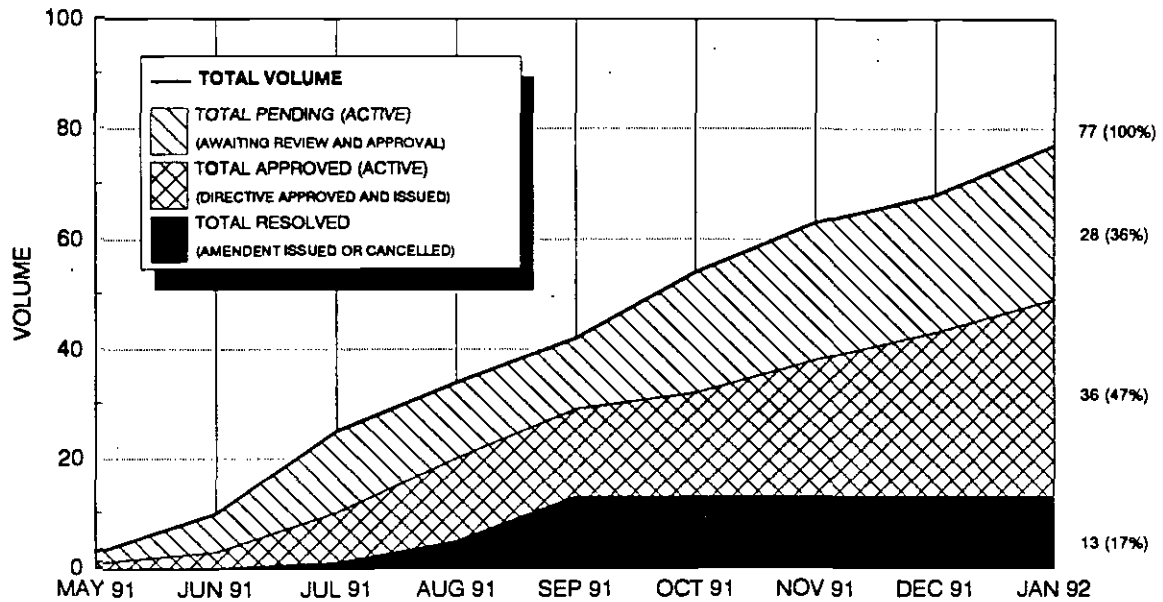


FY'92 Amended Budget implemented JAN'92

## GREEN LINE STAFFING PLAN FISCAL YEAR 1992

BUDGET WAGE RATE (\$/HOUR)	\$39
ACTUAL WAGE RATE (\$/HOUR)	\$41
RCC FTE's PLANNED	31
RCC FTE's ACTUAL	24
OTHER FTE's PLANNED	10
OTHER FTE's ACTUAL	4
TOTAL FTE's PLANNED	41
TOTAL FTE's ACTUAL	28

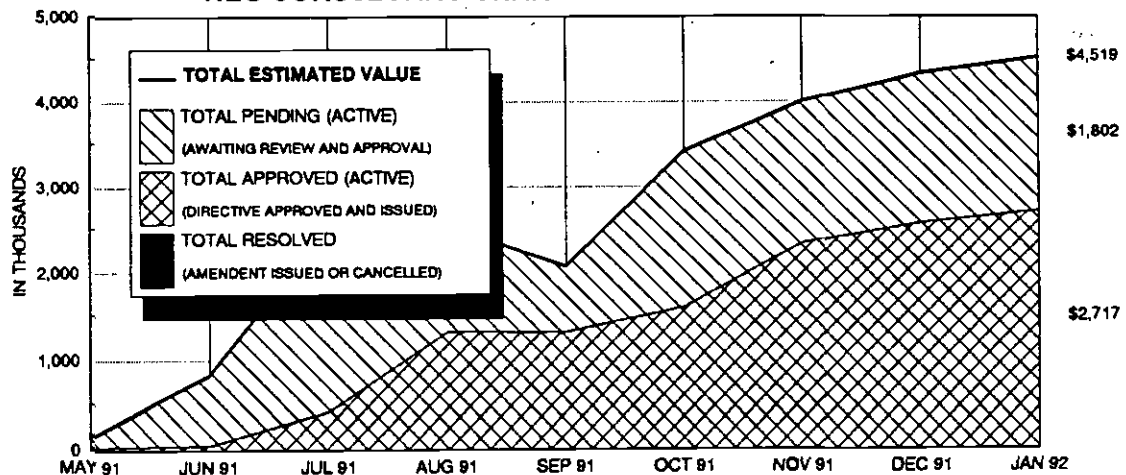
**CONSULTANT CONTRACT CHANGE SUMMARY  
R23 CONSULTANT CHANGE REQUEST RESOLUTION**



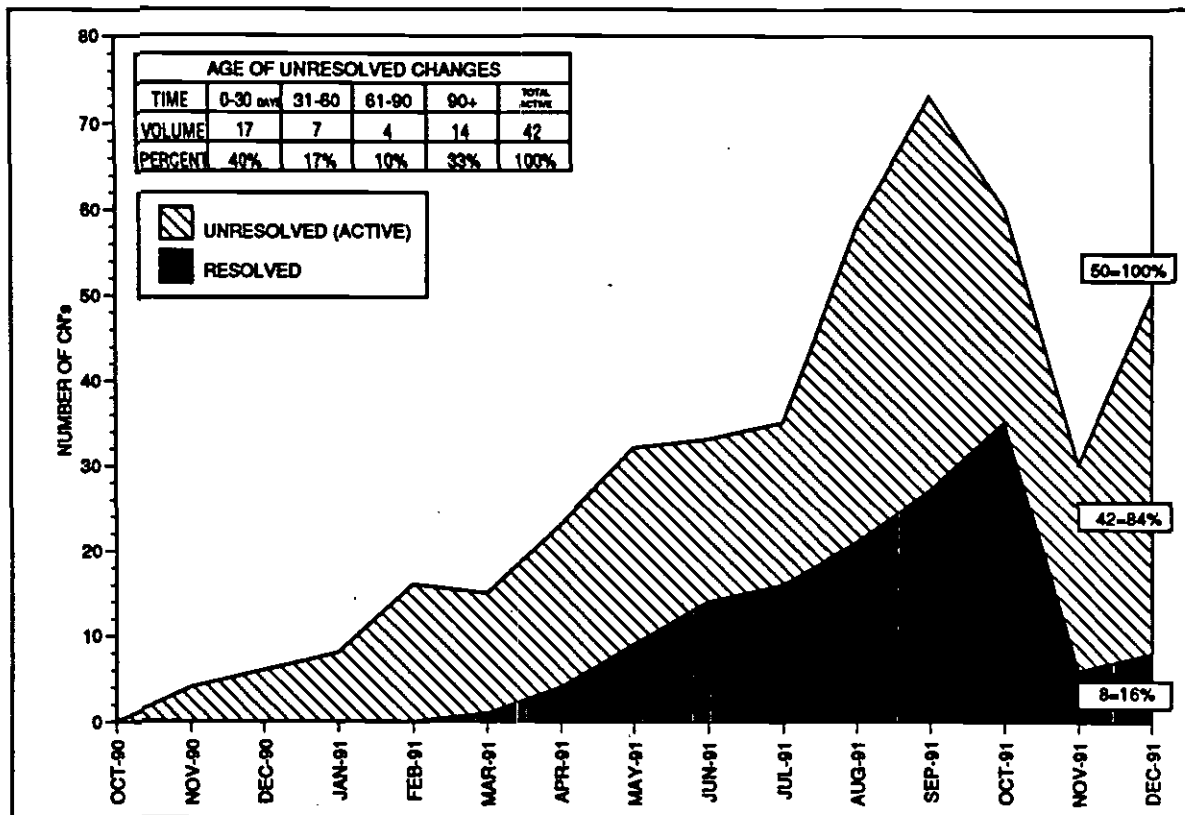
**AGE OF UNRESOLVED CONSULTANT CHANGES**

TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	7	7	9	41	64
PERCENT	11%	11%	14%	64%	100%

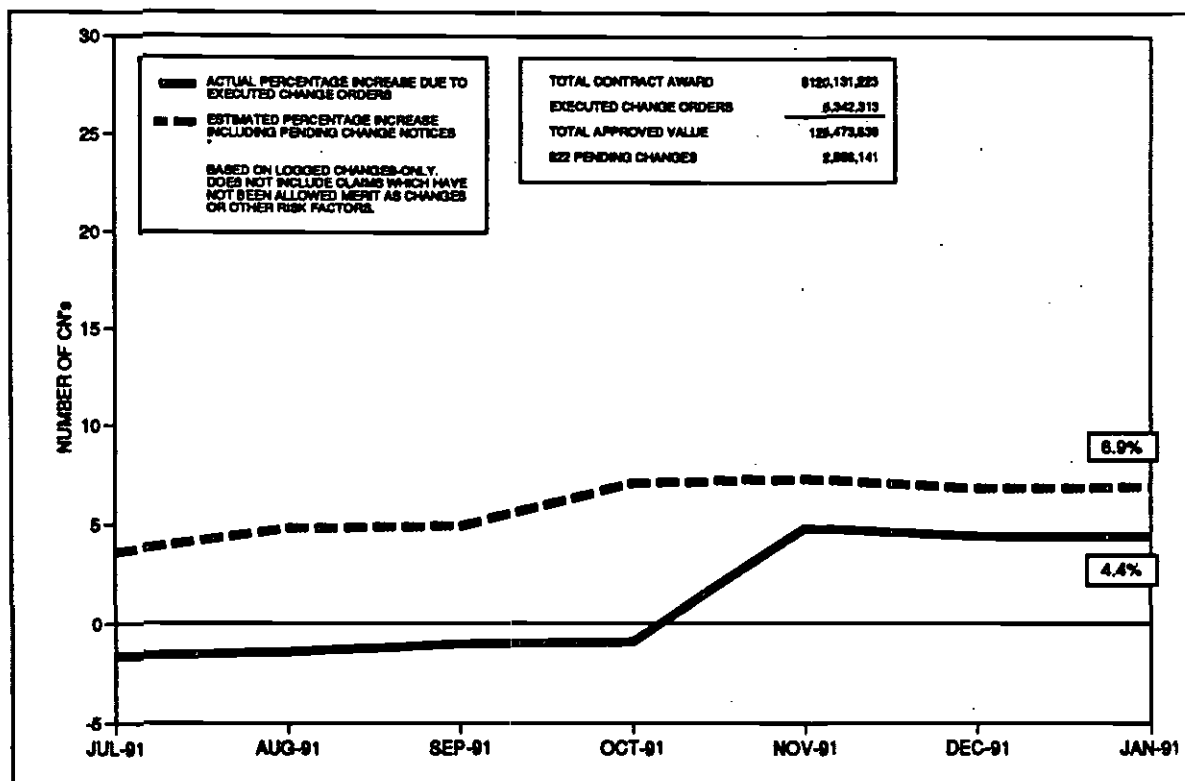
**CONSULTANT CONTRACT CHANGE SUMMARY  
R23 CONSULTANT CHANGE REQUEST VALUES**



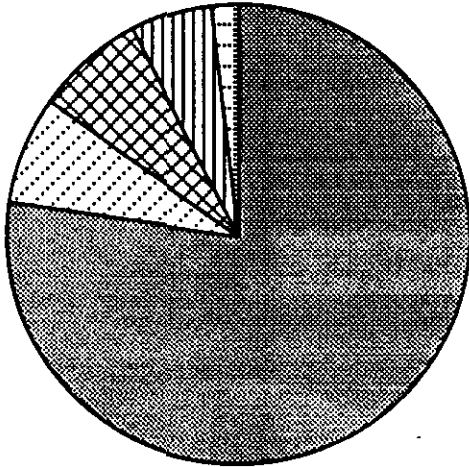
# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Notice Resolution



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








### CONSTRUCTION/PROCUREMENT Change Volume and Cost By Cost Level








CHANGE BASIS VOLUME  
TOTAL AS OF 12/27/91 = 53

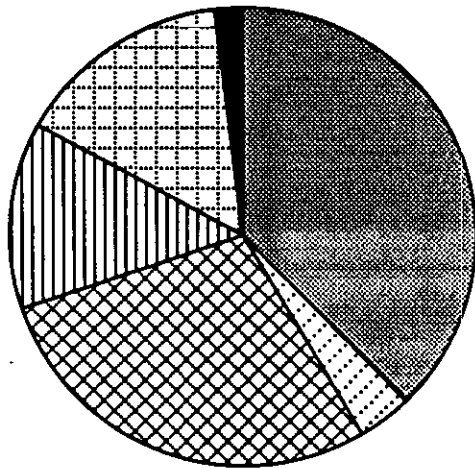
#### CHANGE VOLUME ABSOLUTE VALUES

41	75.93%		<25,000
4	7.41%		<50,000
4	7.41%		<200,000
3	5.56%		>200,000
1	1.85%		>1,000,000

#### CHANGE COST ABSOLUTE VALUES

\$311,075.49		<25,000
\$77,229.98		<50,000
\$414,863.00		<200,000
(\$1,250,375.00)		>200,000
\$5,788,000.00		>1,000,000

# **CONSTRUCTION/PROCUREMENT** **Change Volume and Cost By Change Basis Type**



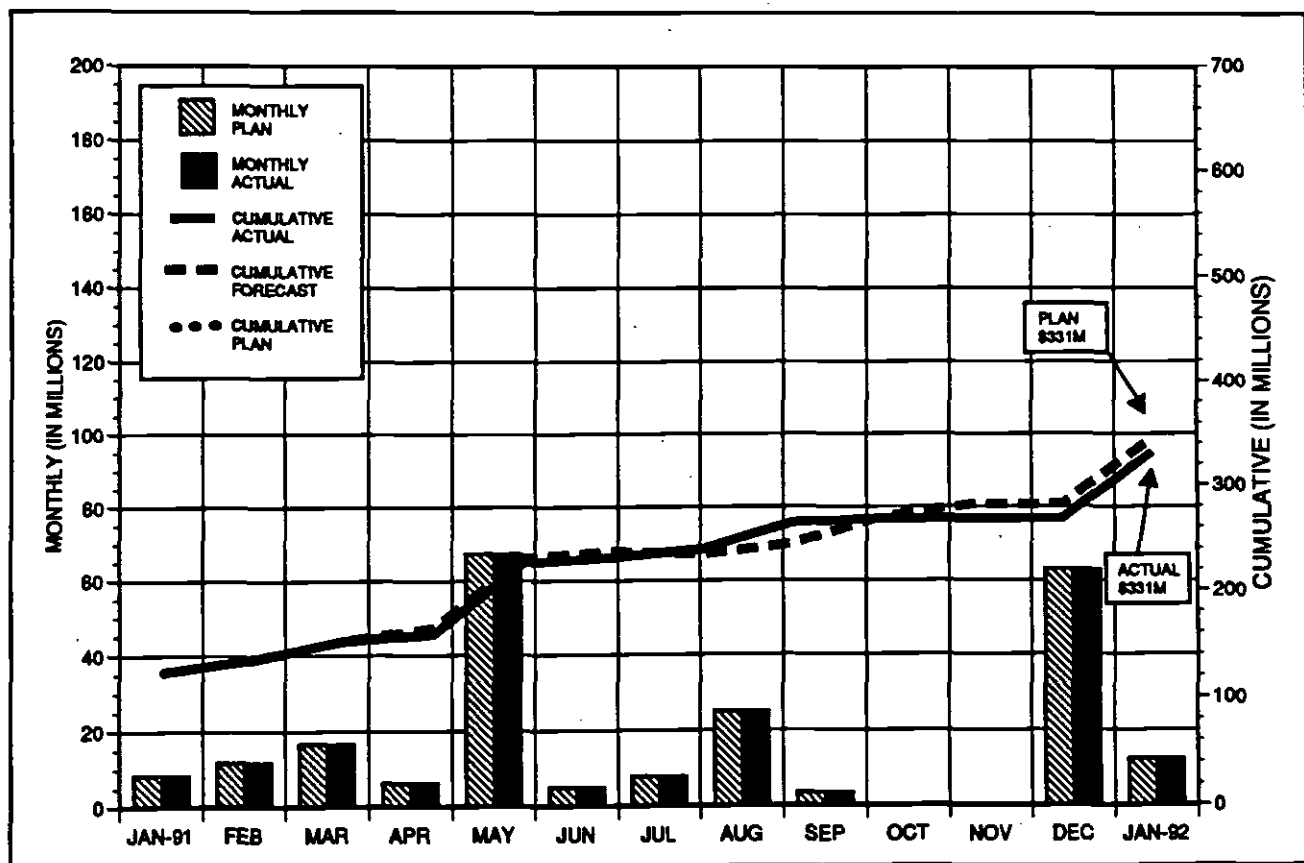
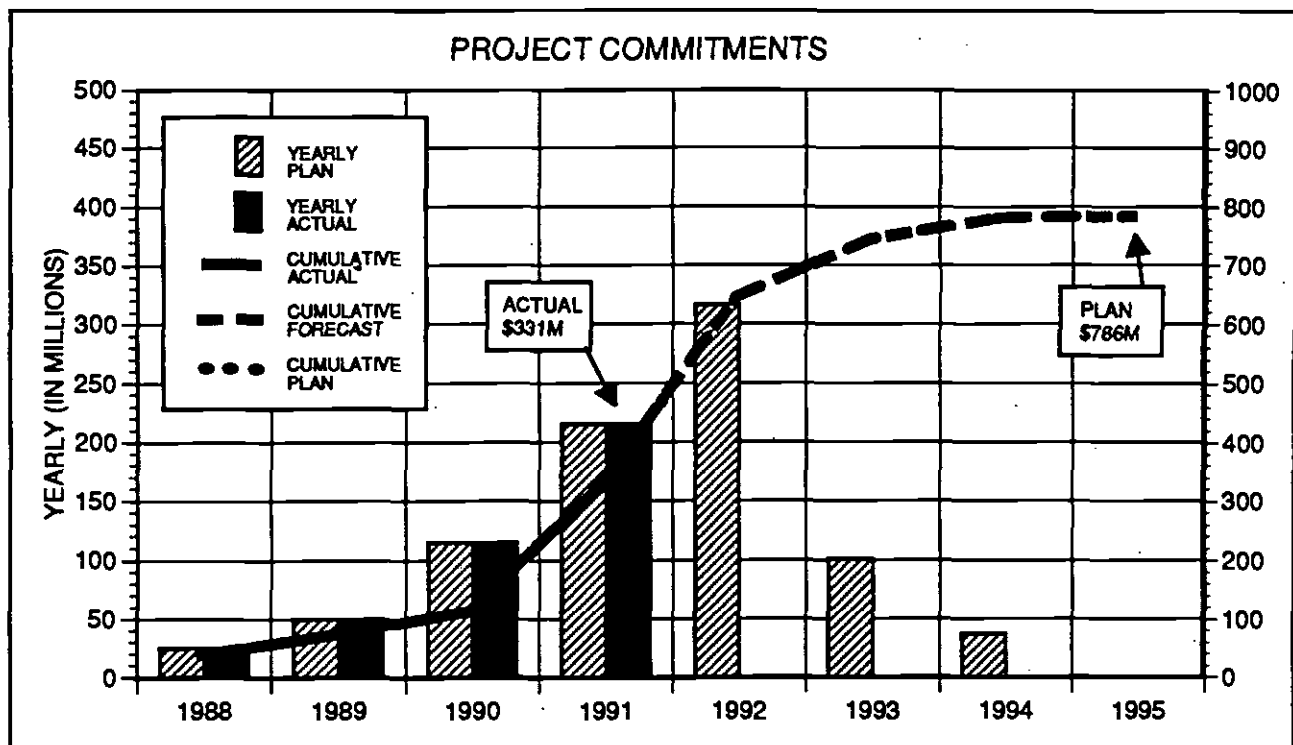
CHANGE BASIS VOLUME  
 TOTAL AS OF 12/27/91 = 53

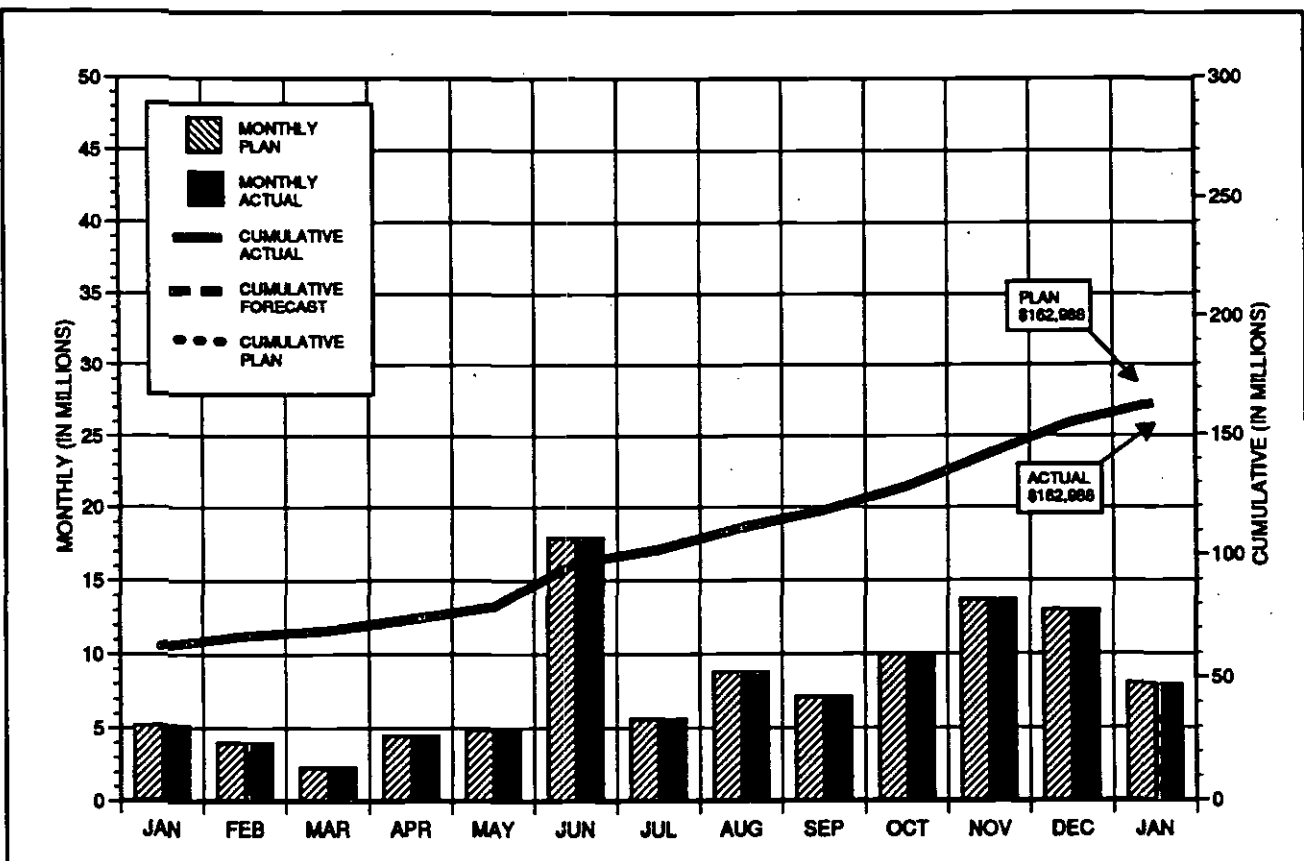
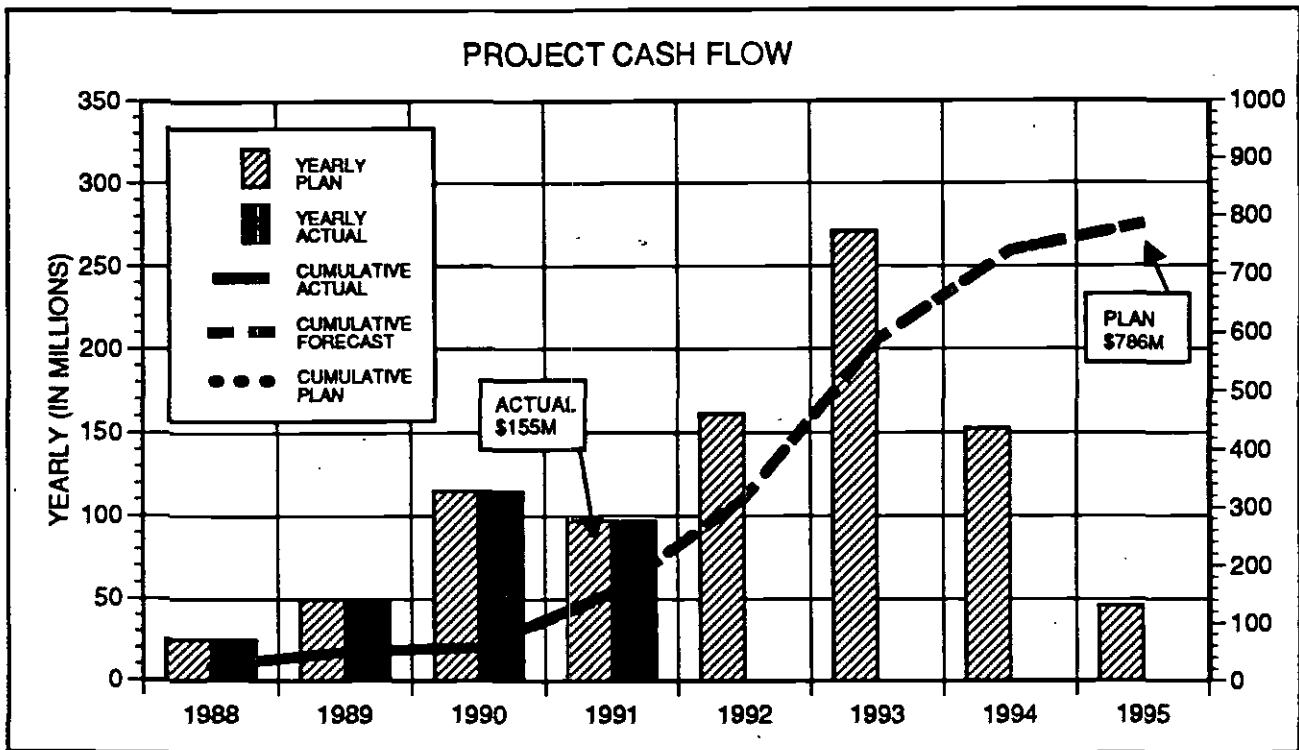
## **CHANGE BASIS VOLUME ABSOLUTE VALUES**

20	33.3%		Work Scope Changes
2	4.17%		Schedule Changes
15	29.17%		Differing Conditions
7	12.5%		Administrative Changes
8	16.67%		Design Changes
1	2.08%		Other

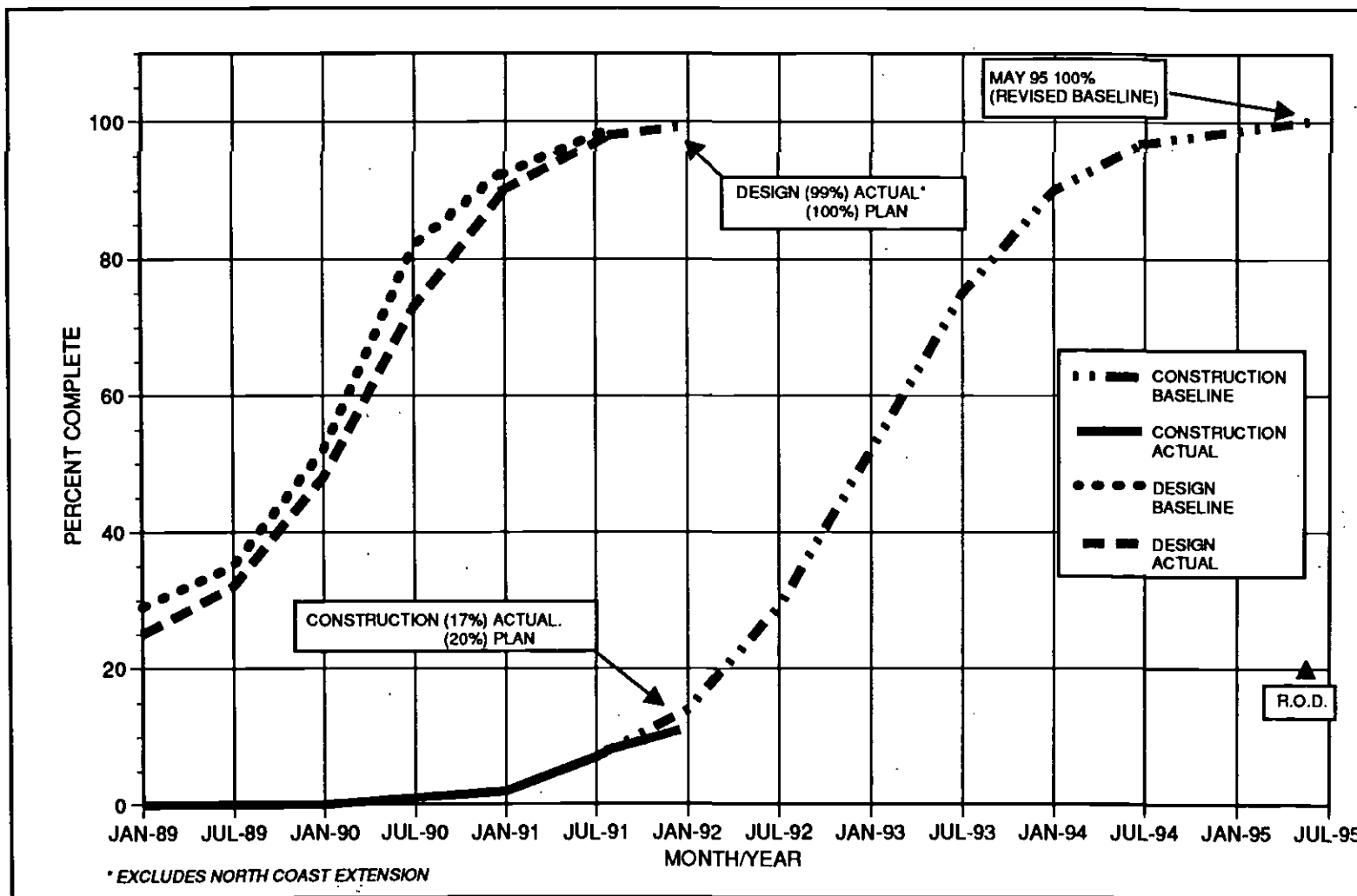
## **CHANGE BASIS COST ABSOLUTE VALUES**

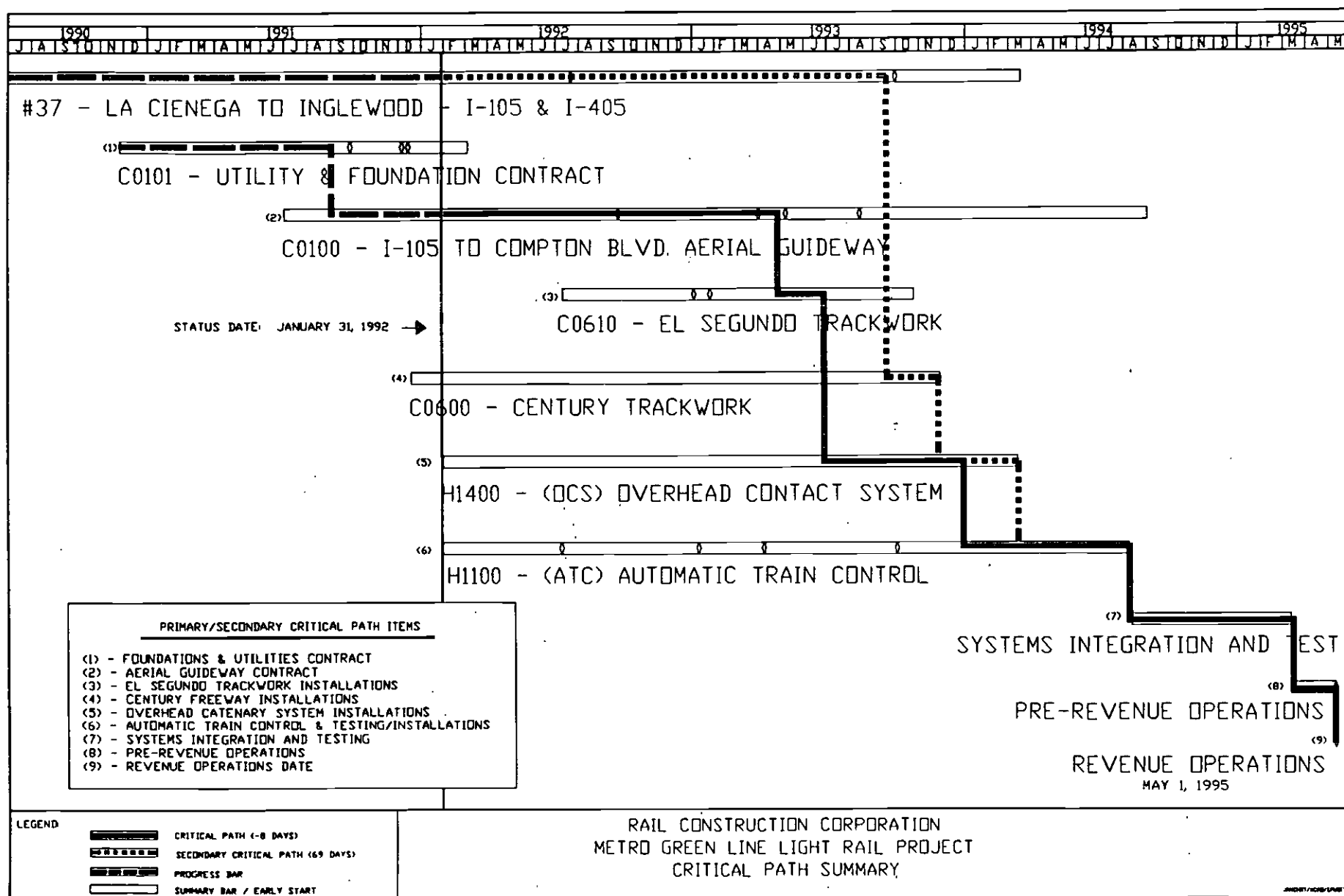
(\$90,114.41)		Work Scope Changes
\$10,685.00		Schedule Changes
\$6,176,065.34		Differing Conditions
(\$267,371.71)		Administrative Changes
(\$647,768.75)		Design Changes
\$159,298.00		Other



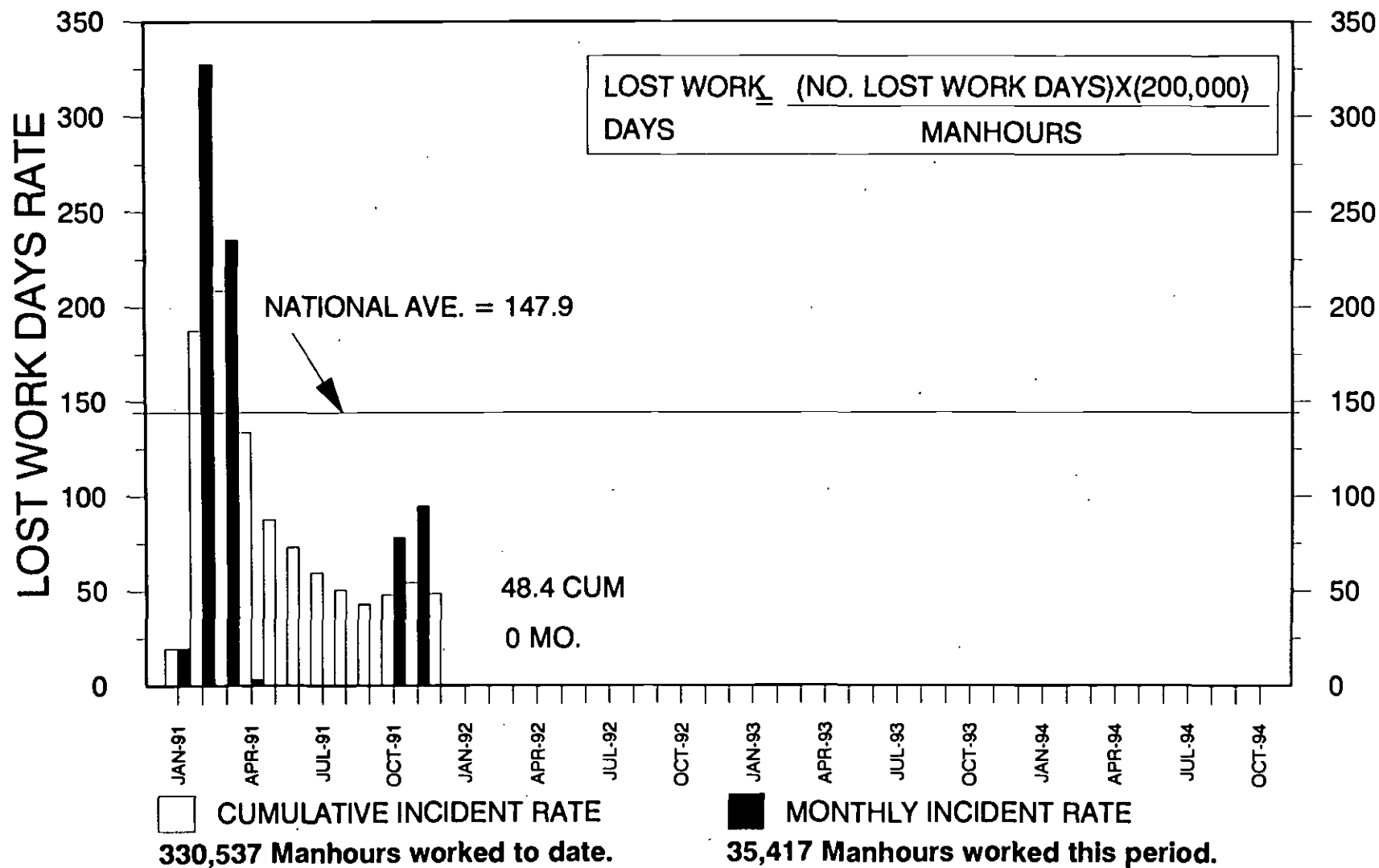


# PROGRESS SUMMARY

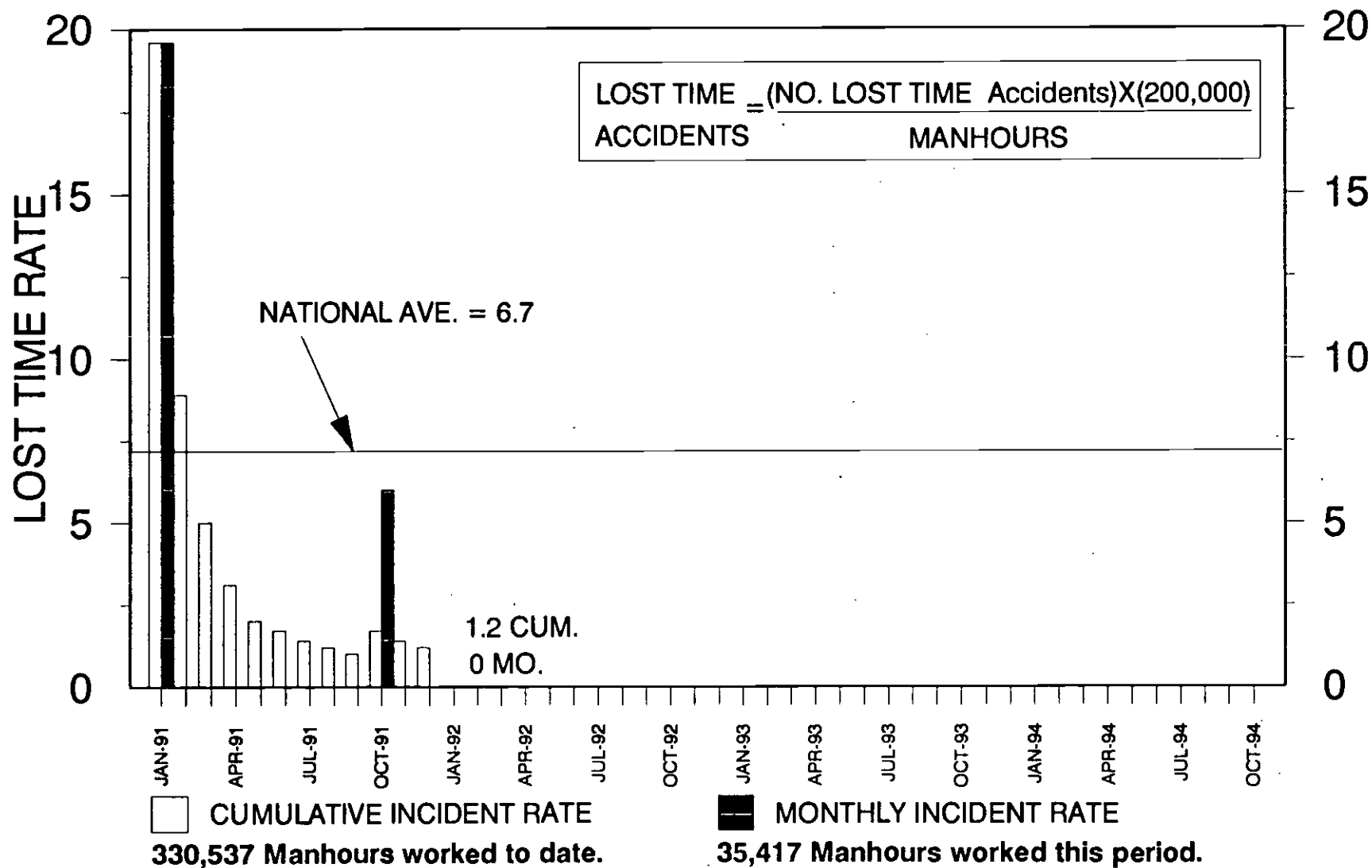




## METRO GREEN LINE PROJECT SUMMARY OF LOST WORK DAYS (SEVERITY)



## METRO GREEN LINE PROJECT SUMMARY OF LOST TIME ACCIDENTS (FREQUENCY)



## INVOICE PROCESSING

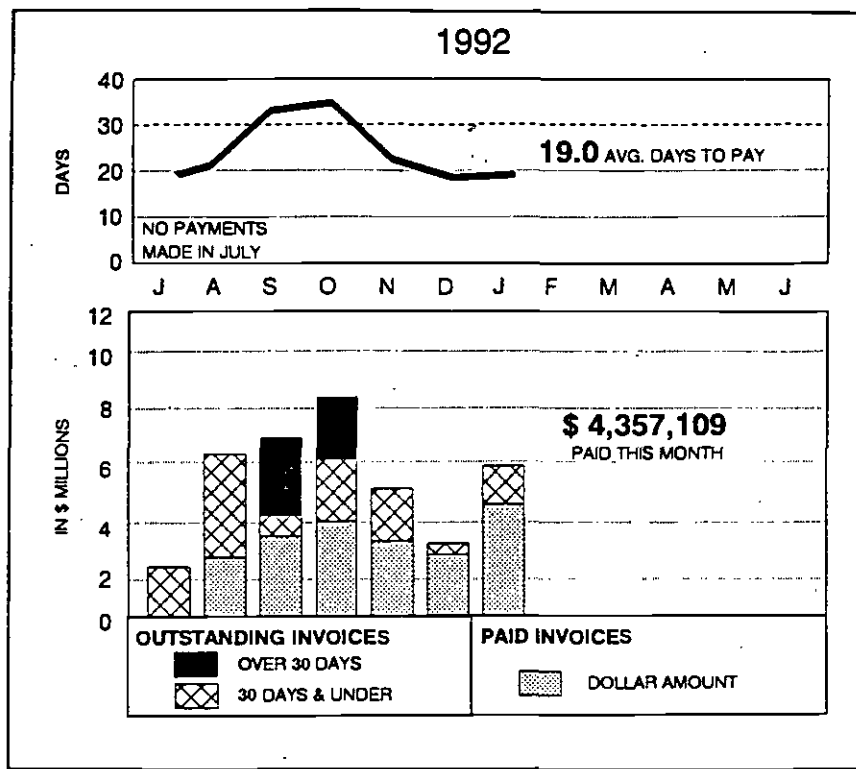
- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 19.0 days.

- 9 invoices were paid for a total value of \$ 4,357,109.

- There was 1 outstanding Construction or Procurement invoice under 30 days old for \$ 1,499,133.

- 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
OCT 1991	2	2,334,769	10	2,271,025	12	3,566,036	3	8,800
NOV 1991	5	1,953,086	0	0	15	4,892,586	6	105,454
DEC 1991	1	413,186	0	0	13	406,258	8	107,071
JAN 1992	1	1,499,133	0	0	13	2,147,064	8	58,882

## EXECUTIVE SUMMARY

### COST STATUS

in \$ million

- Current Budget 1,450
- Current Forecast 1,450
- The January Construction Forecast increased primarily due to anticipated costs associated with the Contract A145 final claim negotiations, resolution of several smaller claims issues, Stage II electrical work and Contract A167 offsite corrective work. The January Professional Services Forecast increased due to additional High-Point Schaer claims support.

### SCHEDULE STATUS

- Current Revenue Operations Date June 1993
- Construction Progress
  - Plan 94%
  - Actual 93%
- The A640 contract schedule incorporating F&EM system reconfiguration (CN 224) shows an expected finish date of November 30, 1992. The ROD of June 1993 is still supported and 38 days of total float remain in the Project schedule.

### SAFETY STATUS

- The Safety Training Program implemented for third rail activation has trained over 1700 Project personnel from the RCC, Parsons-Dillingham, CAL-OSHA, MRTC, High-Point Schaer and the contractors. Auditing of established procedures and compliance to these procedures continued in addition to monitoring contractor safety activities for all contractor work shifts.

## EXECUTIVE SUMMARY (CON'T)

### 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-of-entry. Currently, seven parcels are in the final acquisition process.

### RAIL ACTIVATION

The Rail Activation Group continued coordination and management activities related to systems integration, testing and commissioning activities for the Project.

#### Activities

During the reporting period, the activities of the Rail Activation Group included the following:

- Continued review of training schedule and availability of associated materials.
- Prepared plan to incorporate training not originally defined in Facilities and Yard/Shops contracts for submission to RCC.
- Continued support of Breda vehicle testing at TTC Pueblo, Colorado.
- Conducted "live" Metro-Dade Transit vehicle test runs in AR tunnel from Main Yard to Wilshire/Alvarado Station, 16 and 20 January.
- Conducted "live" Metro-Dade Transit vehicle test runs in AL tunnel from Main Yard to Wilshire/Alvarado Station January 29, 1992.

Future activities will focus on:

- Delivery and in-Yard testing of Breda vehicle.
- Evaluation of contracts not requiring training for submission to the RCC.
- Refining recruitment and training plan to ensure support of Project requirements.
- "Live" Metro-Dade Transit vehicle testing in tunnels.

## AREAS OF CONCERN

### ONGOING

#### **Contract A650, Vehicles (Booz Allen Hamilton)**

**Concern:** The delivery of vehicles in time for systems testing is a concern for maintaining the Project schedule.

**Action:** The Rail Construction Corporation (RCC) has developed a plan which would alter the vehicle testing sequence at the Transportation Test Center (TTC) in Pueblo, Colorado, to release the first pair of vehicles directly to Los Angeles by the dates required to support systems testing.

The RCC has also developed a plan for modification and use of four vehicles from the Metro-Dade Transit System (Miami) in order to support the integrated testing program.

**Status:** The Metro-Dade Transit vehicles arrived as scheduled in November 1991 to support integrated testing. A married pair of vehicles has been used to test shoe/contact rail interfaces, and tunnel clearance in both the AR and AL tunnels.

Planning for initiation of endurance testing at the Transportation Test Center (TTC) in Pueblo, Colorado, is proceeding. Subsequent deliveries to Los Angeles are expected in early February. Deliveries to Los Angeles of production vehicles directly from Italy are under review.

#### **Contract A640, Communications**

**Concern:** Completion of the design review of the technical proposal submitted by the A640 contractor, Bechtel, for the Rail Control Center relocation to the Central Control Maintenance Facility (A640-CO-025) is behind schedule.

**Action:** A "Fast Track" team has been organized to pursue completion of the relocation.

**Status:** This activity is no longer on the critical path. The Fast Track team has been successful in keeping the relocation progressing. The required equipment for the Control Center has been ordered. Installation activities related to the Rail Control Center relocation are progressing.

## AREAS OF CONCERN (CON'T)

Negotiations to finalize Change Order A640-CO-025 are ongoing and will be completed by the end of February.

### **Contract A640, Communications**

**Concern:** Procurement of the fire and emergency panels equipment has been delayed due to the submittals review and acceptance process. This delay could potentially impact the Project schedule.

**Action:** Parsons-Dillingham has taken the following mitigating actions:

- Worked with MRTC/RCC to expedite design submittals
- Directed contractor to procure critical items; scheduled remaining procurements
- Met with contractor to target issues and obtain commitment to maintain schedule
- Worked with the contractor to make up the time lost
- Established a Quick Response Team Task Force to review design changes and incorporate them immediately
- Developed a mitigation plan which includes resequencing of work

**Status:** A manloaded schedule is being used to track and manage the critical path items. Design requirements for Fire and Emergency Management throughout the system have been established, pricing and design data (CN 224) was issued in late November.

The complete impact of CN 224 is now being evaluated. As a result, a formal Change Notice has been defined and issued to Bechtel. There still exists a high level of confidence that all contractual milestones will be met.

Analyses were conducted of Bechtel's proposed schedules which show impacts of CN 224 to the A640 contract schedule. A recommendation was made of an acceptable mitigated schedule to be incorporated into the Project schedule. Negotiations are ongoing and expected to be completed in February.

## AREAS OF CONCERN (CON'T)

### Contract A640, Communications

- Concern:** Installation of additional radiax cable throughout the tunnels to support LAPD radio frequencies. Costs of this undertaking could directly impact contingency funds.
- Action:** Review of alternate design concepts are under study to provide data allowing for the determination of cost and schedule impacts to Contract A640.
- Status:** The police radio system requirements are currently under review by the Contractor and the Resident Engineer for Contract A640, and are expected to be completed by mid-February 1992. Tests will be conducted in February to determine if additional radiax cabling can be avoided through system reconfiguration.

### Contingency Drawdown Rate

- Concern:** The rate of contingency drawdown is causing concern as projections based on the current rate indicate a possible depletion of the contingency fund prior to Project completion.
- Action:** Continue to identify and mitigate forecast increases, where possible. Also, Change Orders and Change Notices in the change control data base have been prioritized, and a process developed to manage backchargeable items to their final resolution.
- Parsons-Dillingham completed a comprehensive analysis of the Estimate at Completion for all Segment I contracts.
- Status:** Staff has been dedicated to analyze individual Change Notices and Change Orders for cost recovery potential. The Construction Manager has completed an extensive review and identified potential construction contract backcharges. Refinement of this backcharge data base is continuing. The contingency drawdown trend over the past 2 months has improved. However, this issue still warrants concern and continues to be closely monitored.

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

### **Increase In Change Notice Backlog**

- Concern:** An increase in Change Notice backlog as a result of electrical/mechanical interface issues.
- Action :** The construction manager has increased the estimating staff to mitigate the Change Notice backlog increase on all facilities and systems contracts.
- Status:** Efforts have been prioritized to identify and decrease the Change Notice backlog. Meetings have been held with the Resident Engineers and Contract Administrators to identify and schedule possible completion dates for outstanding CN's/CO's. A system to monitor the quantity of new CN's initiated weekly has been developed. Mitigation efforts include redirection of available Contract Administration personnel to both systems and facilities contracts, and a Change Order package checklist has been developed to ensure accuracy and completeness.

### **RESOLVED**

#### **Contract A147, Civic Center Station, Stage II and Contract A157, Pershing Square Station, Stage II**

- Concern:** The fire dampers located in the cross passages are inconsistent with the fire rating of the surrounding walls.
- Action:** Analyze damper fire rating requirements in accordance with specifications.
- Status:** A corrective design has been determined and a procurement and construction schedule for completion of work is being developed. Corrected design work will be carried out by the contractor.

## FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

ONGOING      NONE

### NEW

#### December 1991      Resolution of CPCNs to COs

Concern:      Number and dollar values of CPCNs is continuing to rise.

Action:      Recommended that the administration staff be increased.

Status:      Discussions with Hill International have indicated that the number of new CPCNs has dropped significantly. Further, it would not be acceptable to increase the staffing at this point in the contract. It was agreed that the situation would be watched for the next month to see if the trend has actually changed.

RESOLVED      NONE

**KEY ACTIVITIES - JANUARY**

- Conducted low-speed shoe/contact mechanical rail interface and tunnel clearance tests using the Metro-Dade Transit vehicles in both the AR and AL tunnels.
- Completed testing of fiber optics cable in the AR and AL tunnels between Union Station and Wilshire/Alvarado Station, Contract A620.
- Completed installation of main line machine switch (installation prototype) at Union Station, Contract A620.
- Completed systemwide installation and testing of emergency trip stations (ETS) and emergency telephones at blue light stations, Contract A640.
- Completed tests of radio channels 1 and 2 to support rail activation, Contract A640.
- Completed testing of emergency fans at Pershing Square and Civic Center Stations.

**KEY ACTIVITIES - PLANNED FOR FEBRUARY**

- Continue close-out of the following contracts: A130, Yard Leads and Transfer Zone; A135, Union Station, Stage I; A141, Line Section, Union Station to Pershing Square and Civic Center Station, Stage I; A165, 7th/Flower Station, Stage I; A175, Wilshire/Alvarado, Stage I.
- Continue "live" testing with Metro-Dade Transit vehicles.
- Continue to resolve electrical/mechanical interfaces for all Stage II contracts as they surface.
- Complete Integrated Contract Completion Schedule.
- Complete signal and wayside installation, proceed with train control systems tests.
- Implement Change Notice reduction program.
- Support of Breda vehicle arrival and testing.

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

STATUS PERIOD: DECEMBER 28, 1991 TO JANUARY 31, 1992  
 STATUS DATE : JANUARY 31, 1992  
 UNITS : DOLLARS IN THOUSANDS

PROJECT : R00 METRO RAIL RED LINE SEGMENT 1

ELEMENT	DESCRIPTION	ORIGINAL BUDGET (1)	CURRENT BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST		VARIANCE (11-3)
			PERIOD (2)	TO DATE (3)	PERIOD (4)	TO DATE (5)	PERIOD (6)	TO DATE (7)	PERIOD (8)	TO DATE (9)	PERIOD (10)	TO DATE (11)	
T	CONSTRUCTION	896,158	0	751,872	36,052	742,858	48,873	878,832	38,845	867,409	4,411	801,825	48,853
S	PROFESSIONAL SERVICES	387,755	0	461,830	174	437,413	3,531	418,462	3,531	418,462	118	459,578	(2,254)
R	REAL ESTATE	80,884	0	139,820	18	124,545	18	124,545	18	124,545	0	139,579	(141)
F	UTILITY RELOCATIONS	18,820	0	12,140	0	12,018	88	8,325	88	8,325	0	12,018	(122)
D	SPECIAL PROGRAMS	948	0	848	0	848	40	538	40	538	0	888	40
C	PROJECT CONTINGENCY	53,225	0	83,208	0	0	0	0	0	0	4,528	35,733	(47,478)
A	PROJECT REVENUE	0	0	0	0	0	0	0	(1)	(1,238)	0	0	0
PROJECT GRAND TOTAL		1,246,800	0	1,450,818	36,242	1,317,623	52,552	1,228,803	43,423	1,210,050	0	1,450,019	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

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

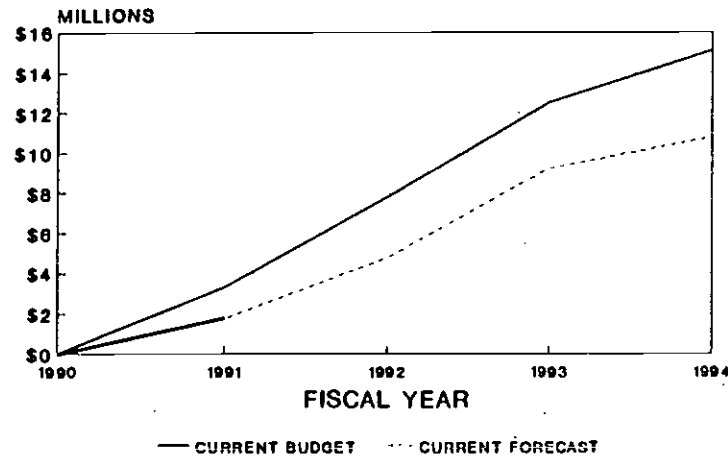
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DECEMBER 91

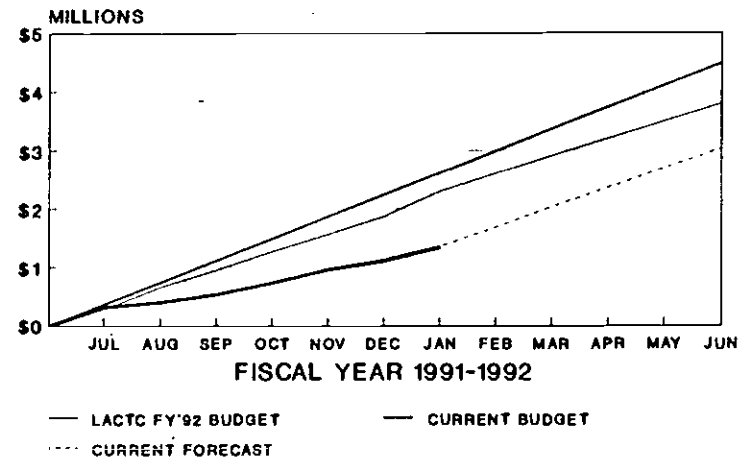
STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
FTA-SECTION 3	\$605,300	\$605,300	\$598,191	99%	\$568,667	94%	\$563,441	93%
FTA-SECTION 9	\$90,584	\$90,584	\$87,018	96%	\$86,373	95%	\$78,957	87%
STATE	\$213,076	\$214,016	\$198,737	93%	\$181,857	85%	\$210,034	99%
LACTC	\$176,640	\$175,701	\$175,701	99%	\$159,595	90%	\$158,554	90%
CITY OF L.A.	\$34,000	\$34,000	\$30,382	89%	\$29,239	86%	\$28,600	84%
BENEFIT ASSESS.	\$130,300	\$19,082	\$114,950	88%	\$114,950	88%	\$19,082	15%
(1) COST OVERRUN ACCOUNT	\$200,119	\$34,818	\$79,084	40%	\$29,665	15%	\$24,843	12%
(2) BENEFIT ASSESS. SHORTFALL	\$0	\$0	\$0		\$0		\$95,867	
TOTAL	\$1,450,019	\$1,173,501	\$1,284,063	89%	\$1,170,346	81%	\$1,179,378	81%
NOTES:								
(1) The Cost Overrun Account includes CAPRA funds as well as LACTC and City of Los Angeles contributions to cover cost overruns								
(2) The current Benefit Assessment District revenue shortfall is being funded by SCRDT and LACTC								

### AGENCY COSTS RED LINE SEGMENT 1



### FISCAL YEAR 1992 AGENCY COSTS RED LINE SEGMENT 1



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

TOTAL PROJECT BUDGET	\$1,450,019
CURRENT BUDGET *	\$15,091
CURRENT FORECAST *	\$10,818

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

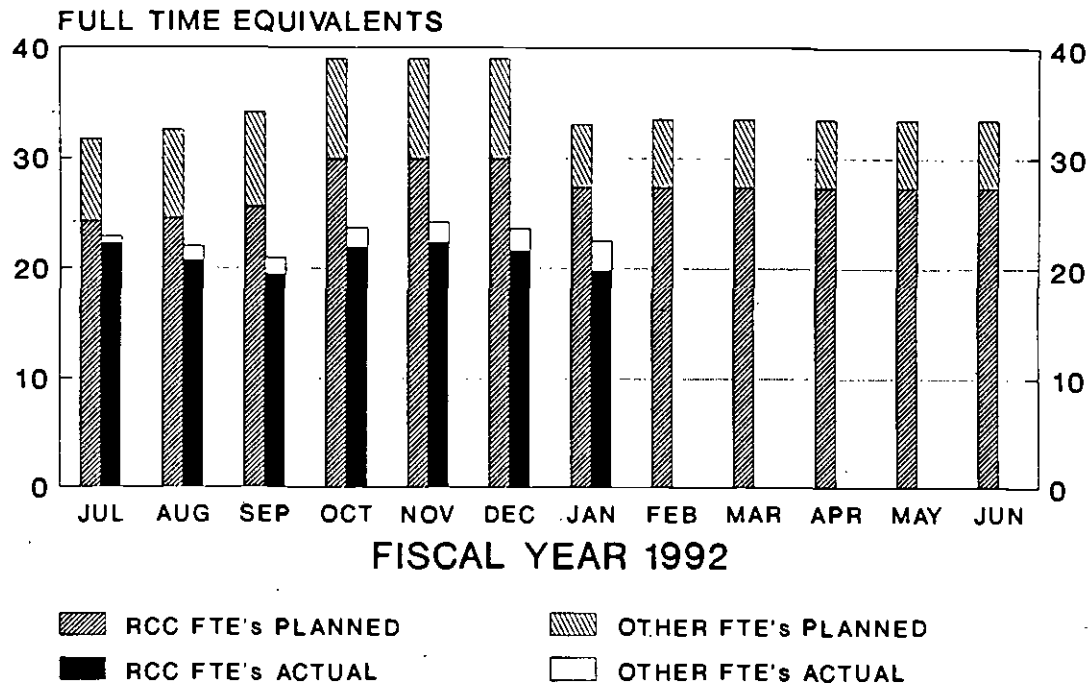
### FISCAL YEAR 1992 AGENCY COSTS RED LINE SEGMENT 1 (\$000)

LACTC FY'92 BUDGET	\$3,792
CURRENT BUDGET	\$4,477
CURRENT FORECAST	\$3,027
ACTUAL \$ TO DATE	\$1,352

Current forecast as of December 1991.

## STAFFING PLAN VS. ACTUAL

### RED LINE SEGMENT 1



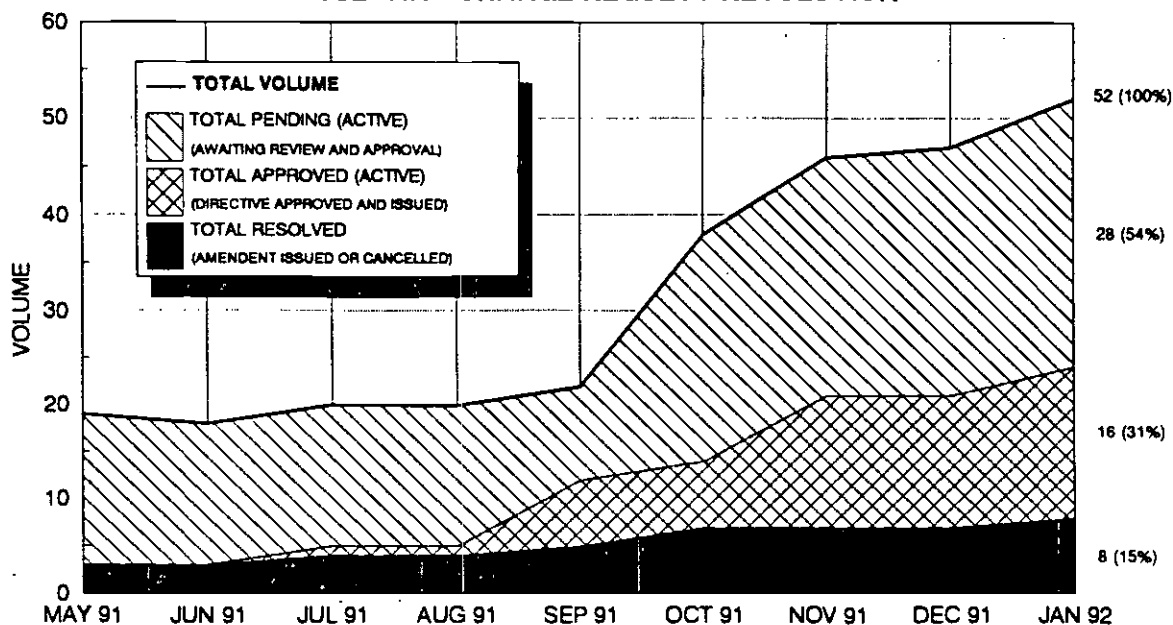
FY'92 Amended Budget implemented JAN'92

## RED LINE (SEGMENT 1) STAFFING PLAN

### FISCAL YEAR 1992

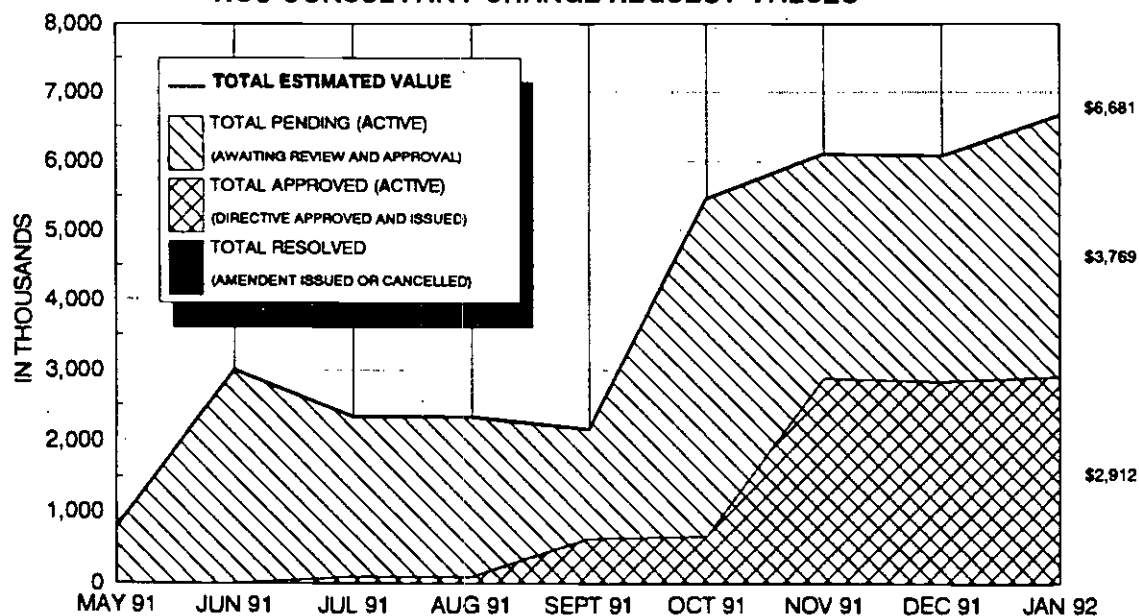
BUDGET WAGE RATE (\$/HOUR)	\$42
ACTUAL WAGE RATE (\$/HOUR)	\$43
RCC FTE's PLANNED	27
RCC FTE's ACTUAL	20
OTHER FTE's PLANNED	6
OTHER FTE's ACTUAL	3
TOTAL FTE's PLANNED	23
TOTAL FTE's ACTUAL	24

**CONSULTANT CONTRACT CHANGE SUMMARY  
R80 CONSULTANT CHANGE REQUEST RESOLUTION**

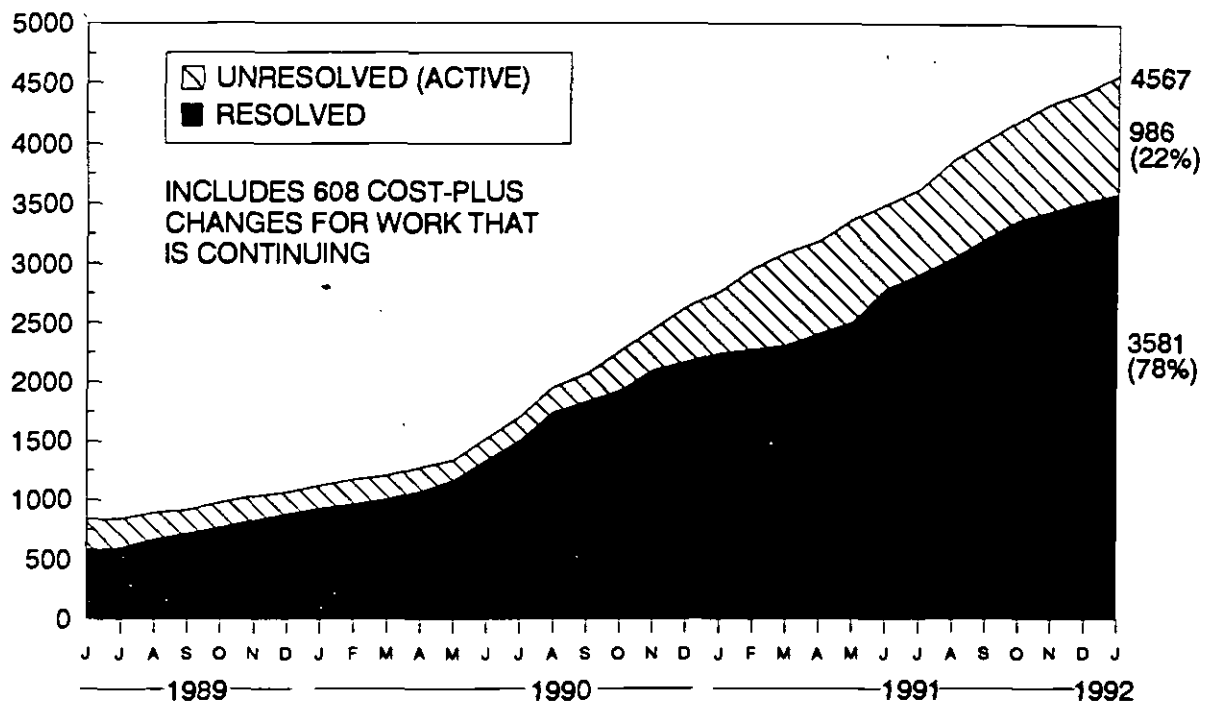


AGE OF UNRESOLVED CONSULTANT CHANGES					
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	5	1	7	31	44
PERCENT	11%	2%	16%	71%	100%

**CONSULTANT CONTRACT CHANGE SUMMARY  
R80 CONSULTANT CHANGE REQUEST VALUES**



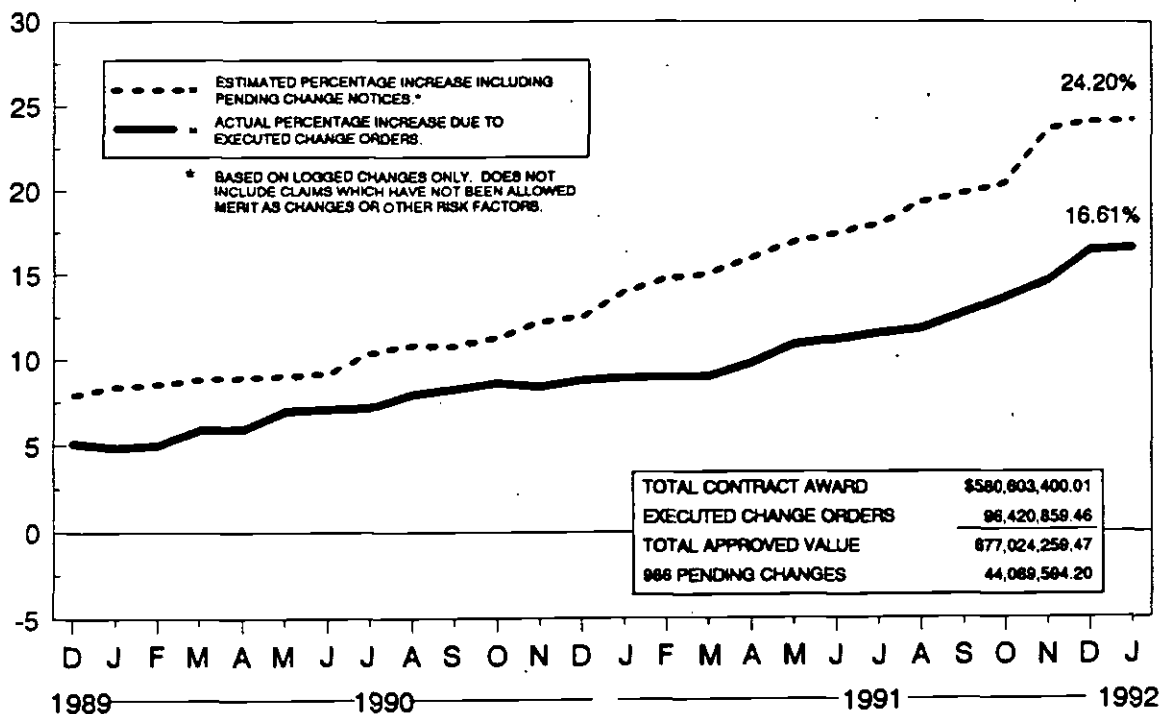
### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE NOTICE RESOLUTION



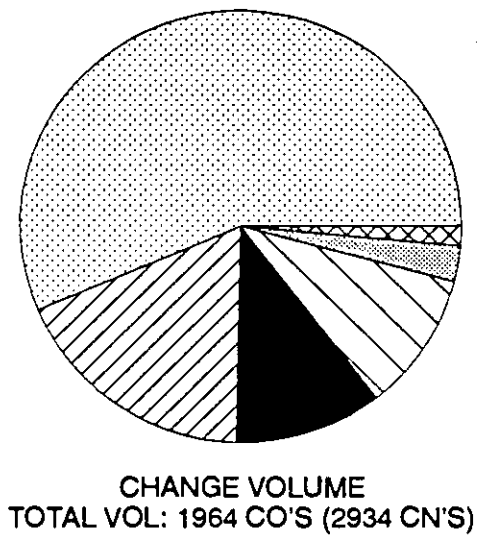
### AGE OF UNRESOLVED CHANGES







TIME	0-30 DAYS	31-60	61-90	OVER 90	TOTAL ACTIVE
VOLUME	114	113	99	660	986
PERCENT	12%	11%	10%	67%	100%

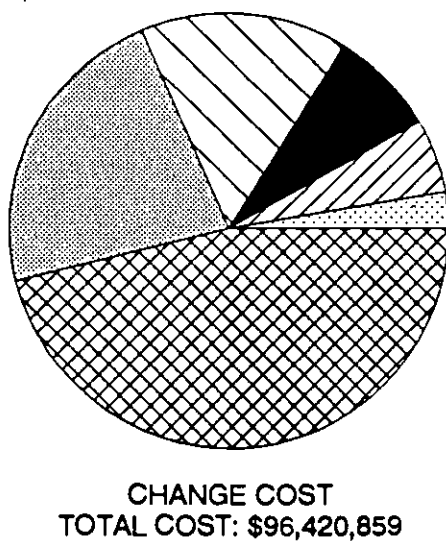
### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE DOLLARS AS A PERCENTAGE OF ORIGINAL CONTRACT AWARD









**CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY COST LEVEL  
BASED ON EXECUTED CHANGES AS OF 01/31/92**

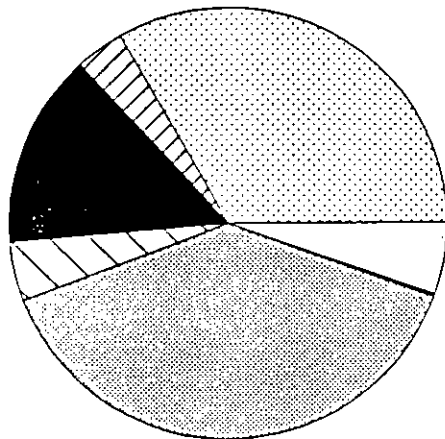


ABSOLUTE VALUES		
1107	56.4%	 < \$10,000
356	18.1%	 < \$25,000
216	11.0%	 < \$50,000
203	10.3%	 < \$200,000
53	2.7%	 > \$200,000
29	1.5%	 > \$1,000,000



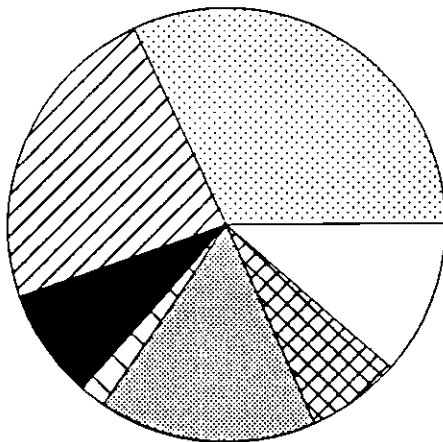
\$2,737,500	2.8%	 < \$10,000
\$5,277,277	5.5%	 < \$25,000
\$7,600,287	7.9%	 < \$50,000
\$14,627,438	15.2%	 < \$200,000
\$21,730,174	22.5%	 > \$200,000
\$44,448,183	46.1%	 > \$1,000,000

**CONSTRUCTION/PROCUREMENT CONTRACT CHANGES  
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE  
BASED ON EXECUTED CHANGES AS OF 01/31/92**



CHANGE BASIS VOLUME  
TOTAL VOL: 2934 CN'S (1964 CO'S)

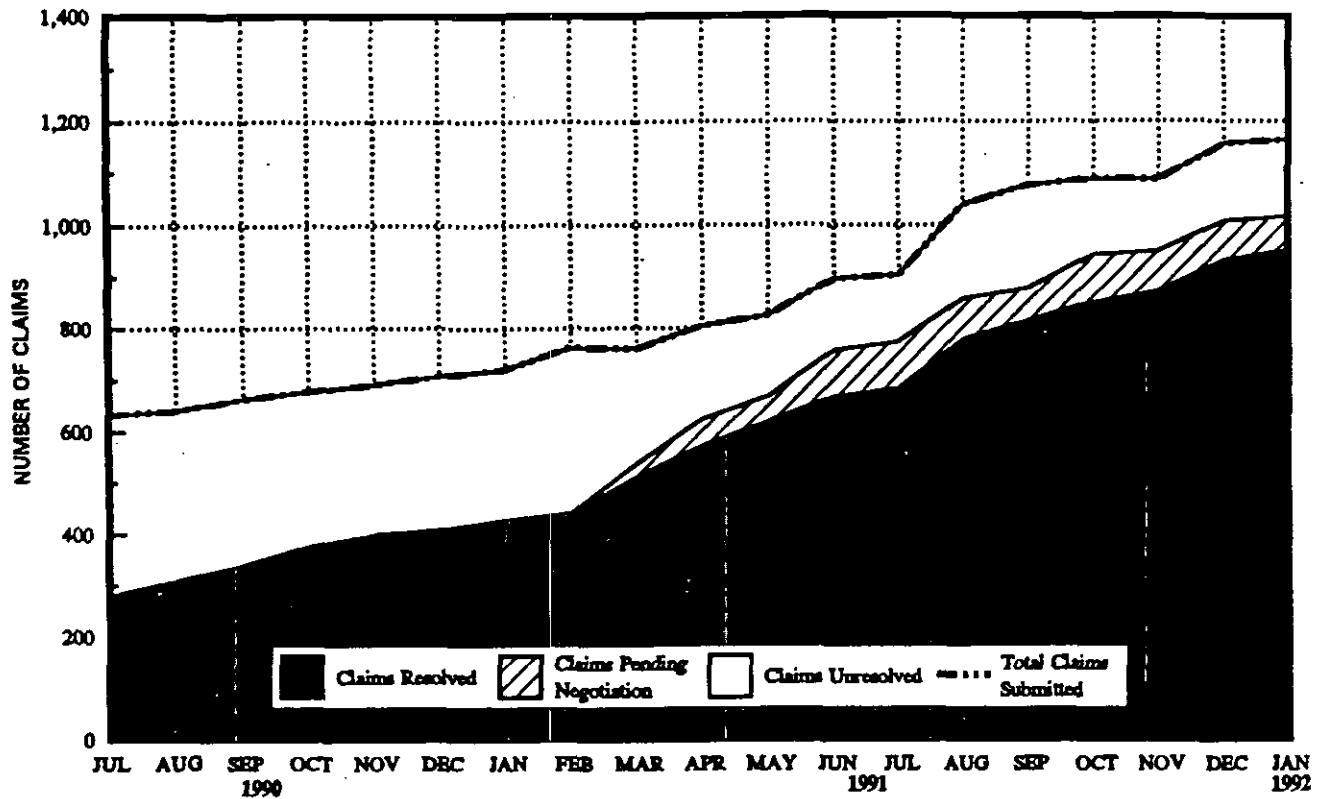
973	33.2%		WORK SCOPE CHANGES
107	3.6%		SCHEDULE CHANGES
425	14.5%		DIFFERING CONDITIONS
132	4.5%		ADMINISTRATIVE
1133	38.6%		DESIGN CHANGES
7	0.2%		MANAGEMENT ISSUES
157	5.4%		UNASSIGNED



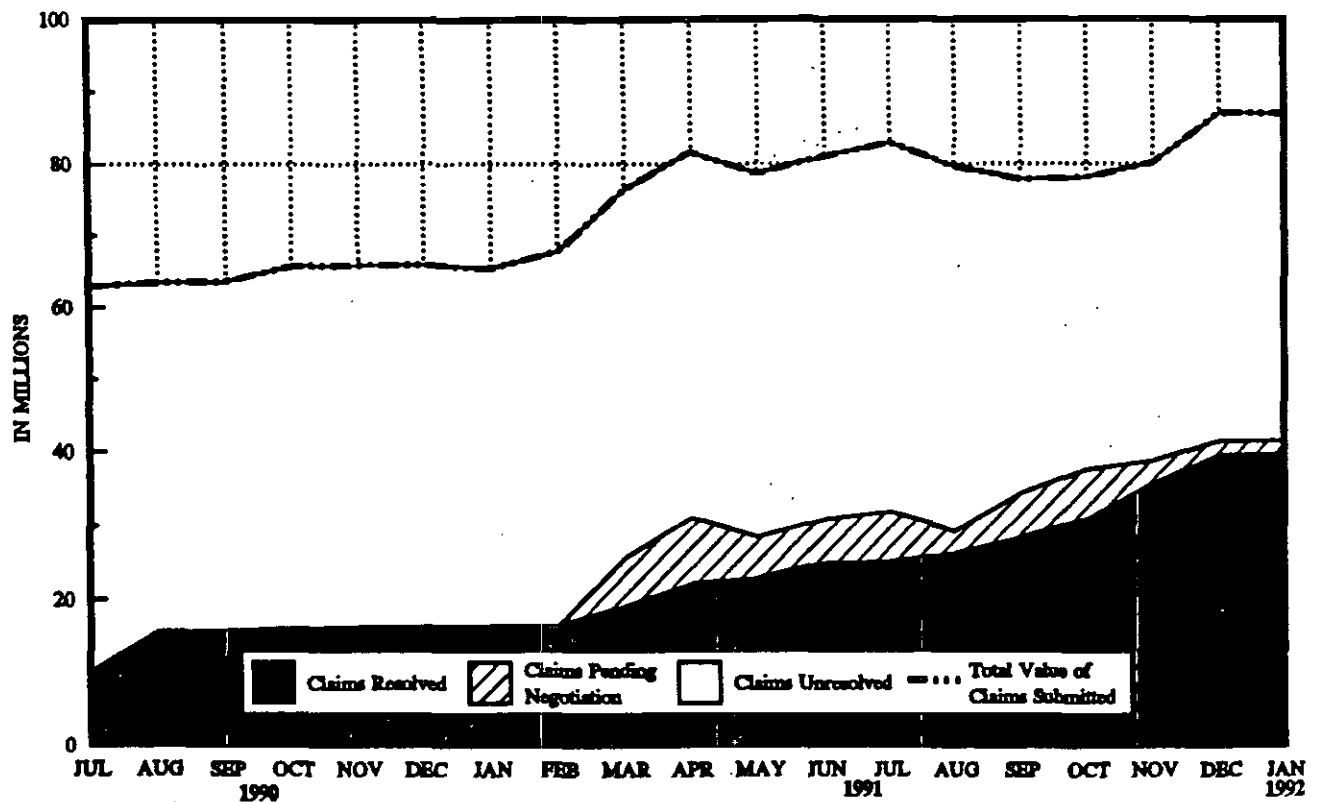
CHANGE BASIS COST  
TOTAL COST: \$96,420,859

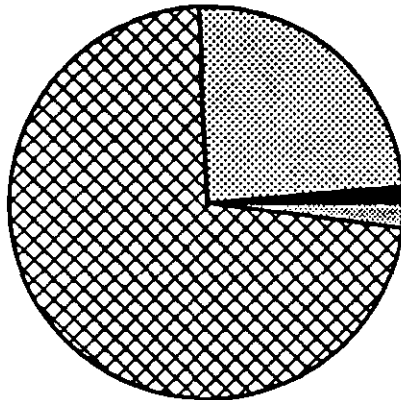
\$30,738,529	31.9%		WORK SCOPE CHANGES
\$22,504,338	23.3%		SCHEDULE CHANGES
\$8,026,288	8.3%		DIFFERING CONDITIONS
\$1,830,209	1.9%		ADMINISTRATIVE
\$15,535,158	16.1%		DESIGN CHANGES
\$6,621,651	6.9%		MANAGEMENT ISSUES
\$11,164,686	11.6%		UNASSIGNED

CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Total All Filed Claims - COUNT








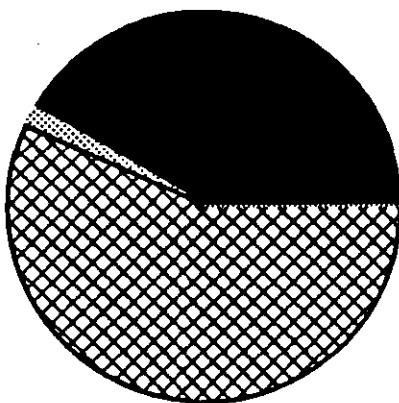
CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Total All Filed Claims - COST








**CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS****Unresolved Claims Distribution Chart****Total All Filed Claims as of 01/31/92**

**COUNT**  
**TOTAL = 148**

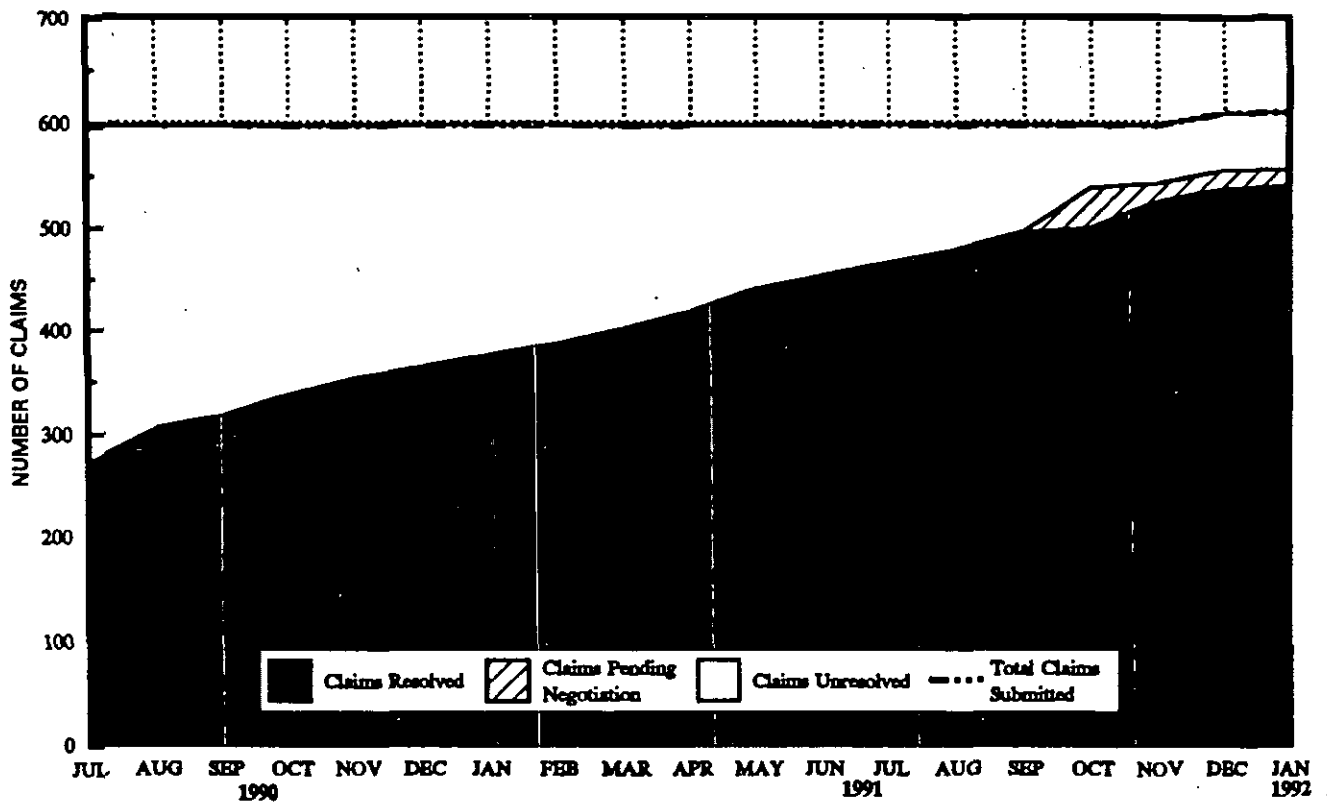
2	1.4%		Litigation
0	0.0%		Closed
36	24.3%		Rejected
107	72.3%		Pending Merit
3	2.0%		In Dispute



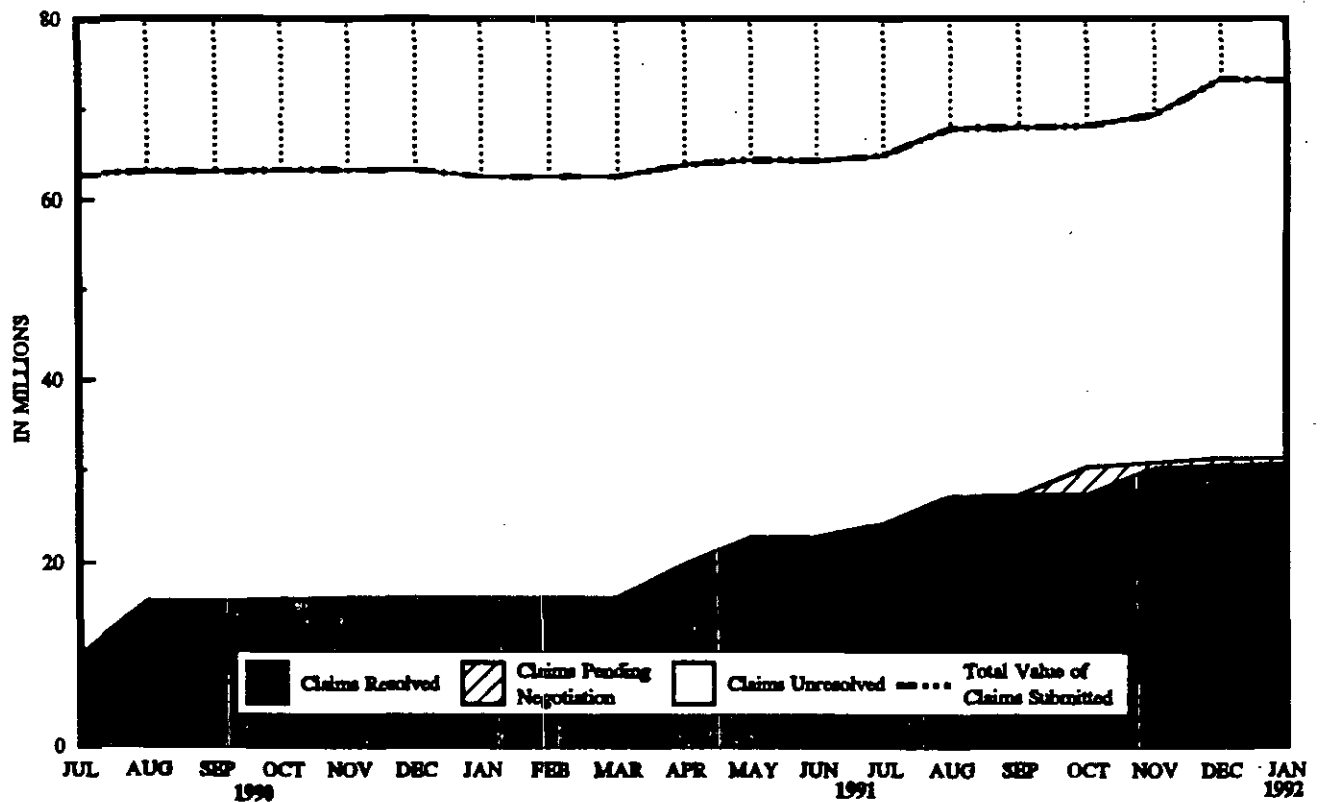
**COST**  
**TOTAL = \$45,526,677**

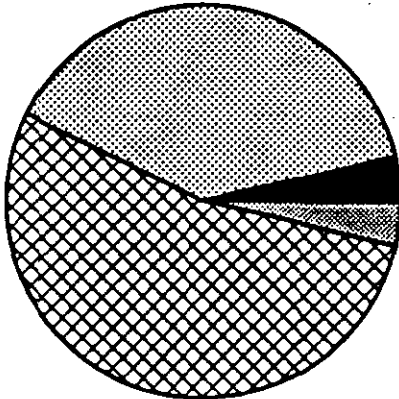
\$18,857,362	41.4%		Litigation
\$0	0.0%		Closed
\$794,672	1.7%		Rejected
\$25,850,731	56.8%		Pending Merit
\$23,913	0.1%		In Dispute

CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Claims Filed Prior to 07/01/90 - COUNT








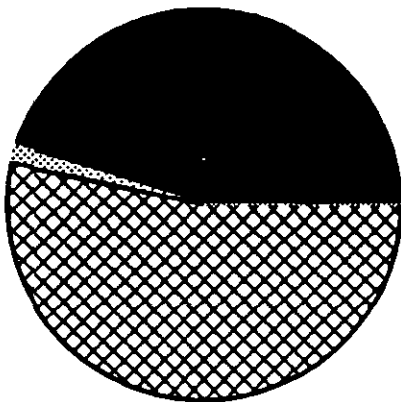
CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Claims Filed Prior to 07/01/90 - COST








**CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS****Unresolved Claims Distribution Chart**  
**Claims Filed Prior to 07/01/90 as of 01/31/92**

**COUNT**  
**TOTAL = 54**

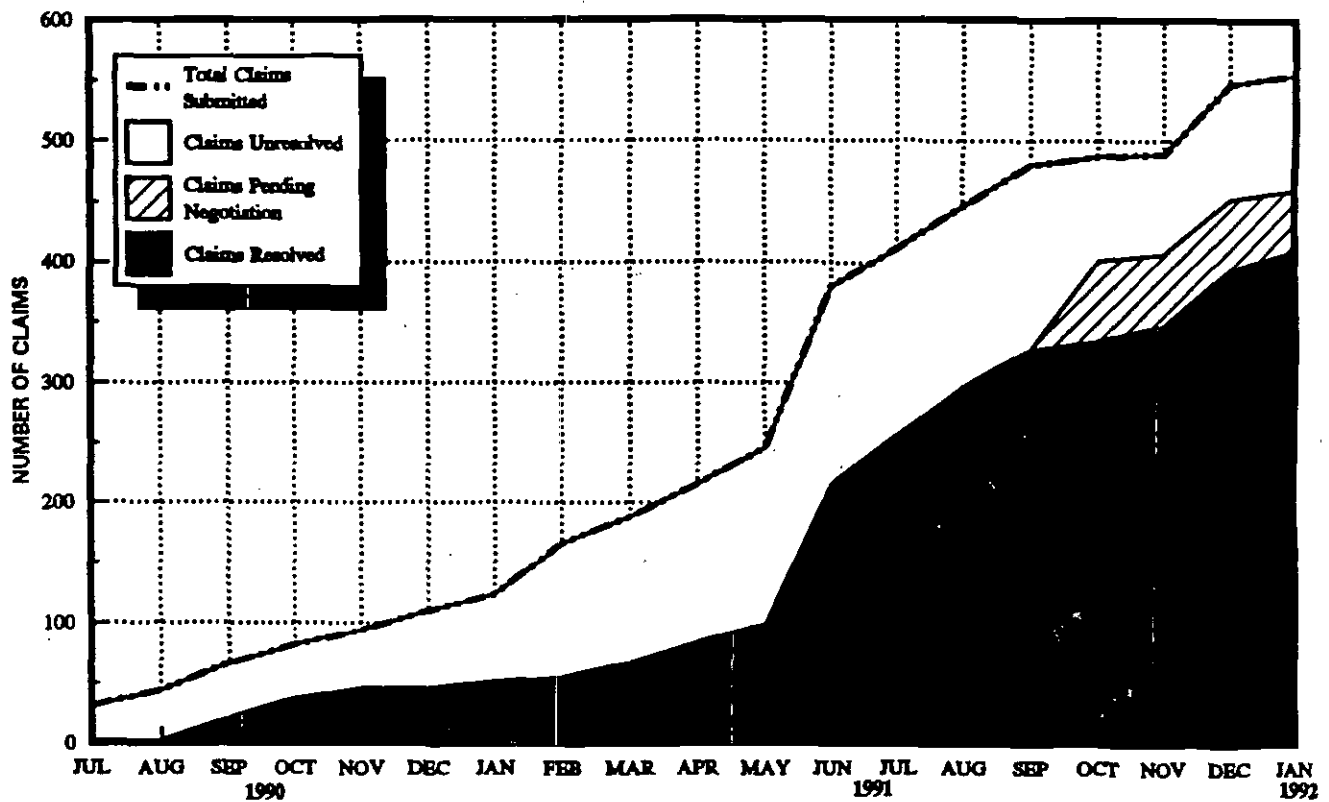
2	3.7%		Litigation
0	0.0%		Closed
21	38.9%		Rejected
29	53.7%		Pending Merit
2	3.7%		In Dispute



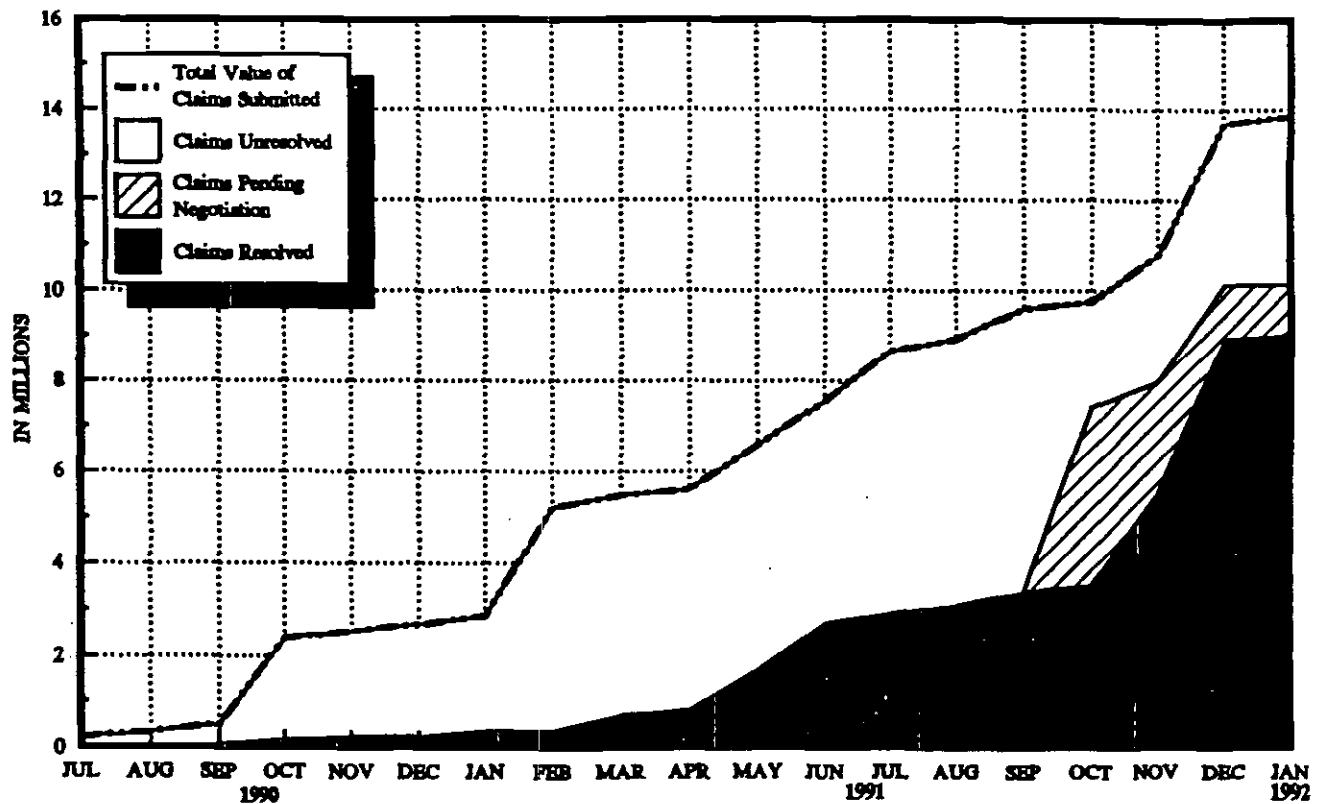
**COST**  
**TOTAL = \$41,819,076**

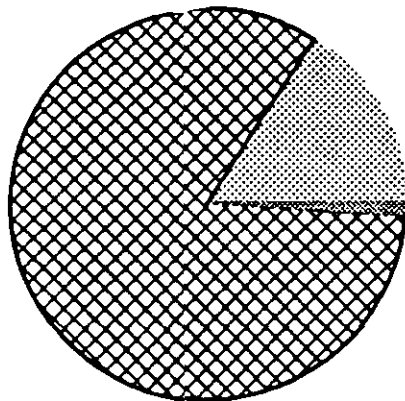
\$18,857,362	45.1%		Litigation
\$0	0.0%		Closed
\$607,853	1.4%		Rejected
\$22,329,948	53.4%		Pending Merit
\$23,913	0.1%		In Dispute

CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Claims Filed After 07/01/90 - COUNT



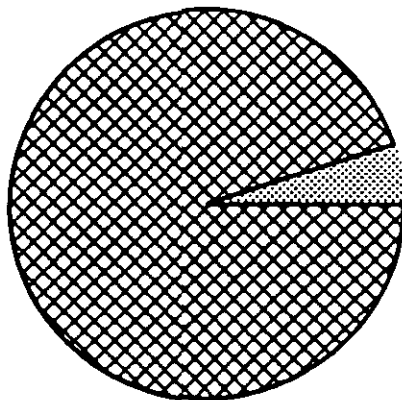
CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Claims Filed After 07/01/90 - COST



**CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS****Unresolved Claims Distribution Chart**  
**Claims Filed After 07/01/90 as of 01/31/92**

**COUNT**  
**TOTAL = 94**

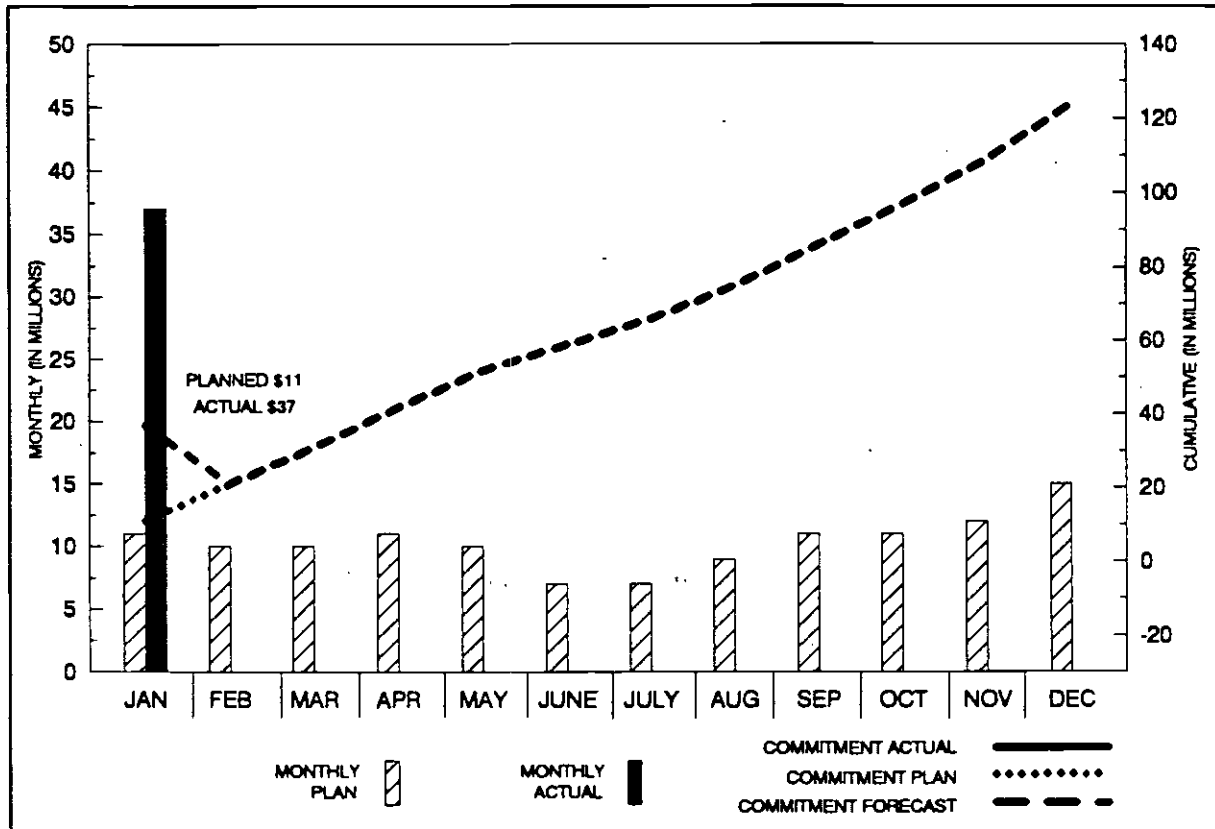
0	0.0%		Litigation
0	0.0%		Closed
15	16.0%		Rejected
78	83.0%		Pending Merit
1	1.0%		In Dispute



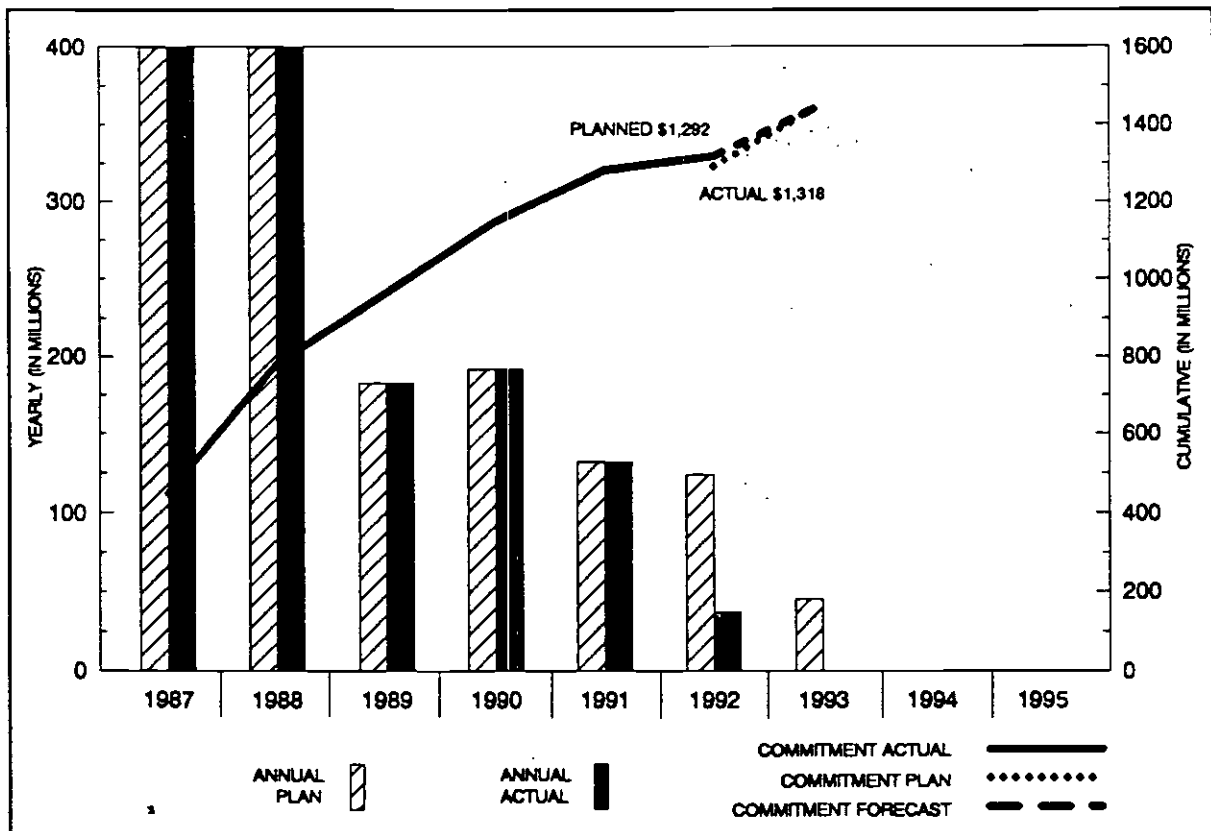
**COST**  
**TOTAL = \$3,707,601**

\$0	0.0%		Litigation
\$0	0.0%		Closed
\$186,818	5.0%		Rejected
\$3,520,783	95.0%		Pending Merit
\$0	0.0%		In Dispute

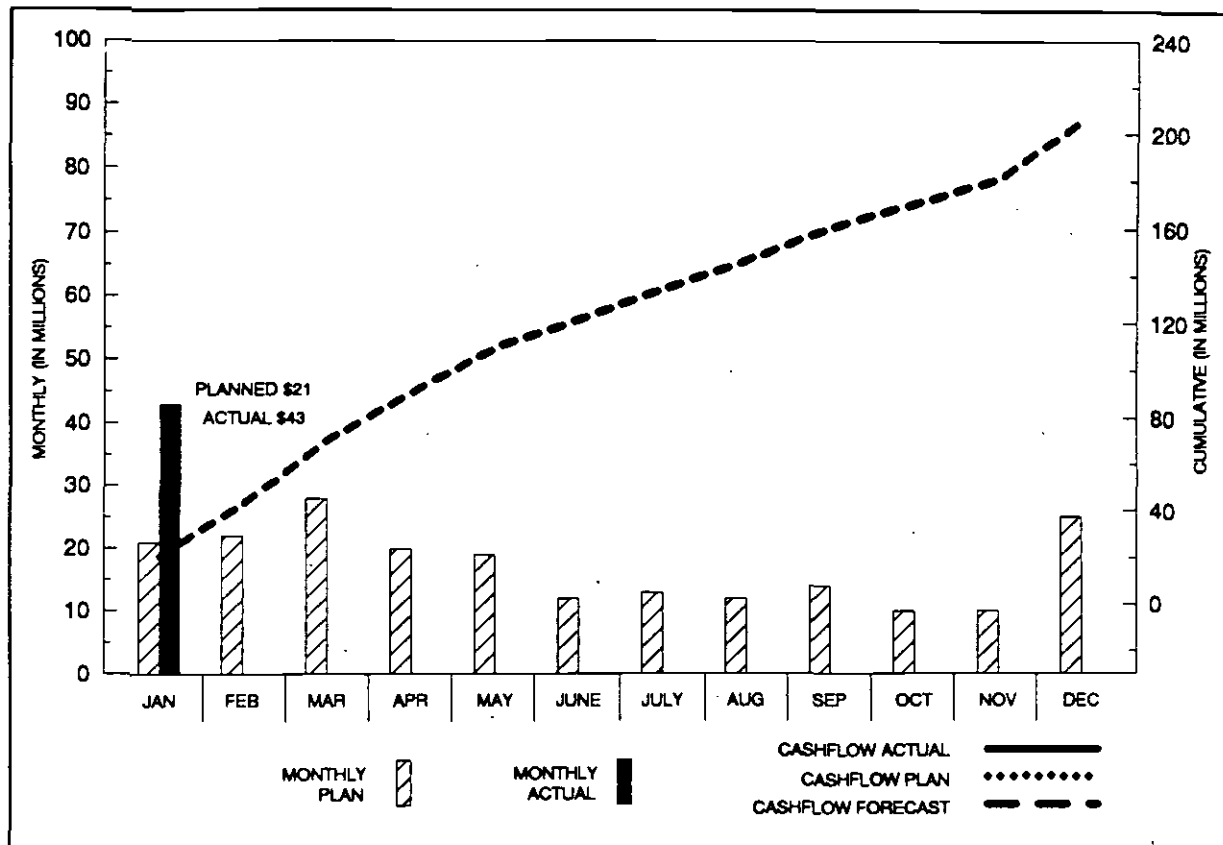
PROJECT COMMITMENTS – ANNUAL



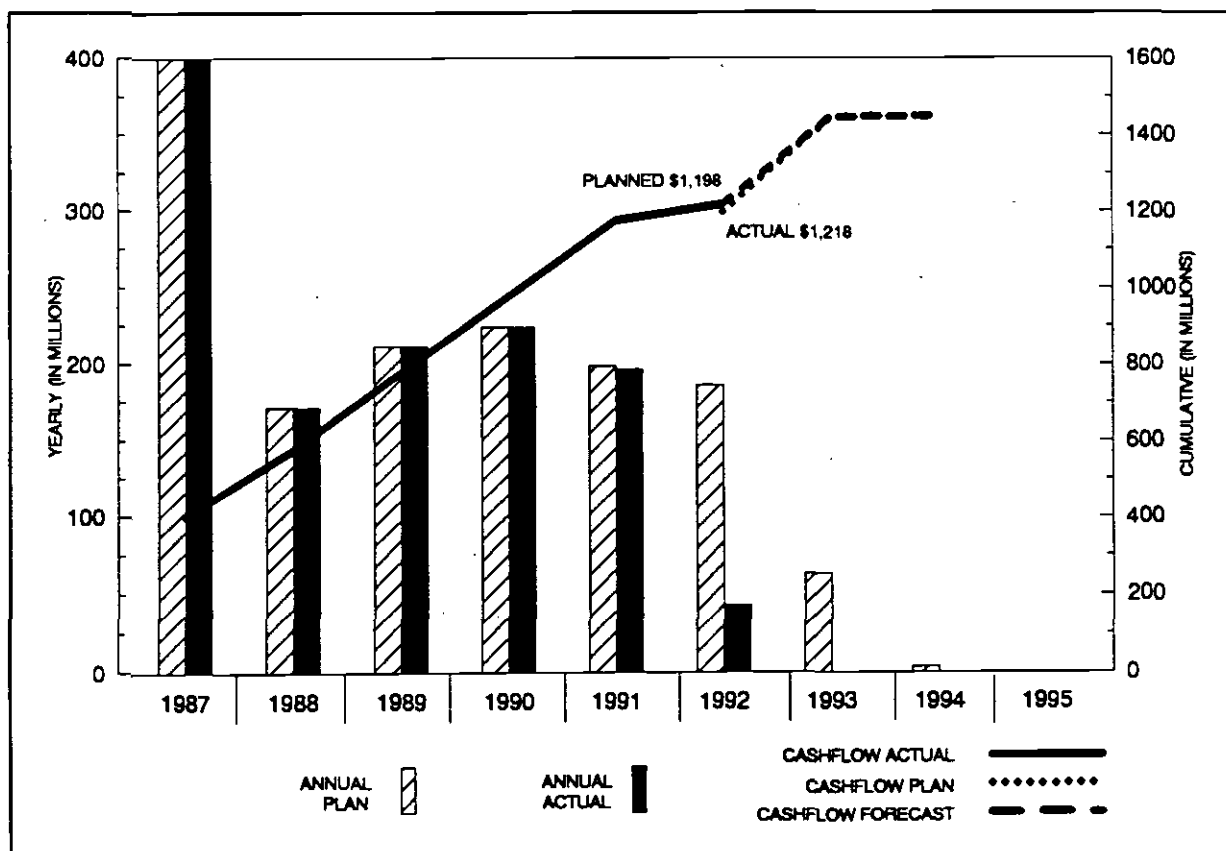
PROJECT COMMITMENTS – PROJECT



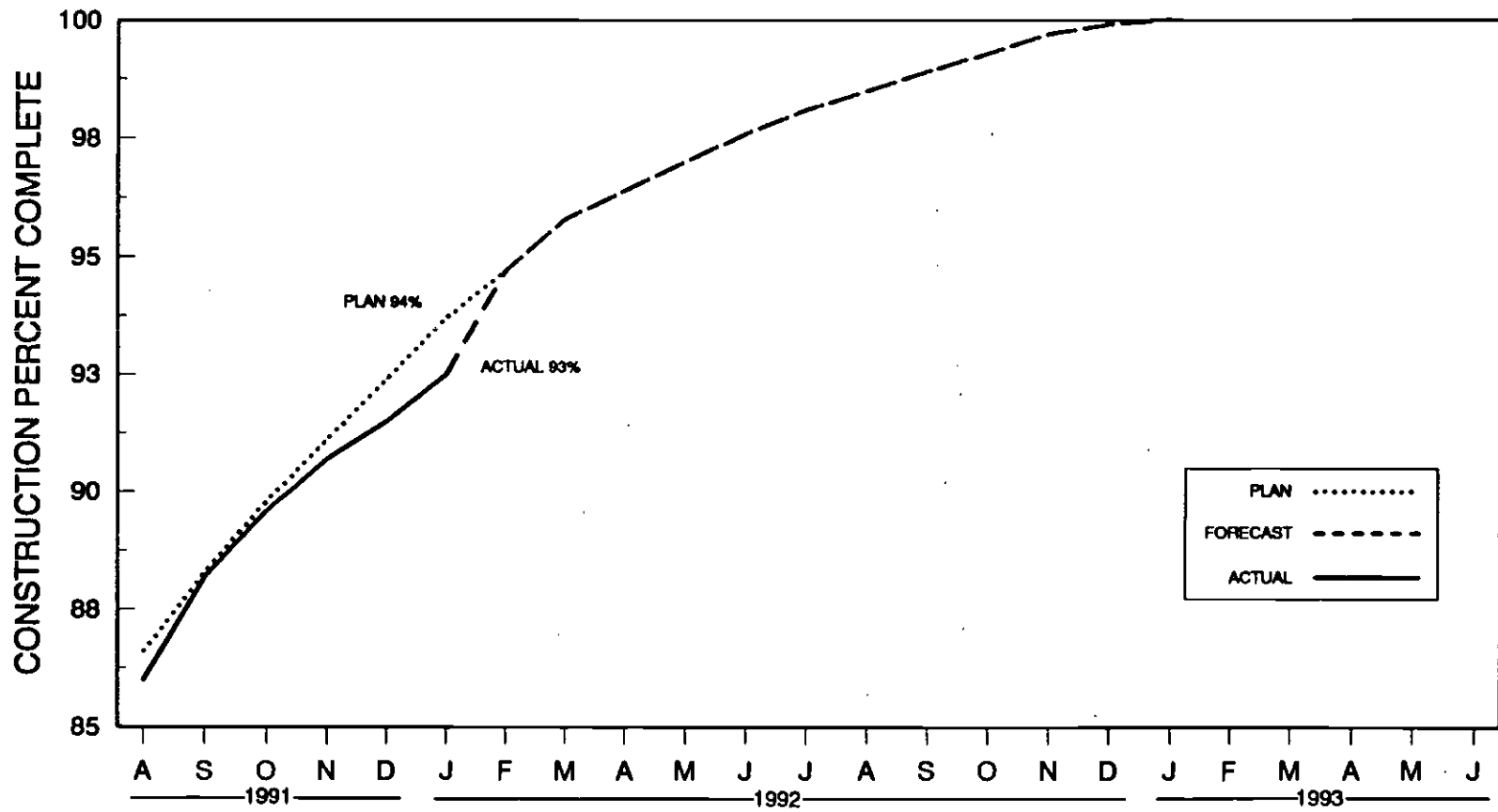
PROJECT CASH FLOW – ANNUAL

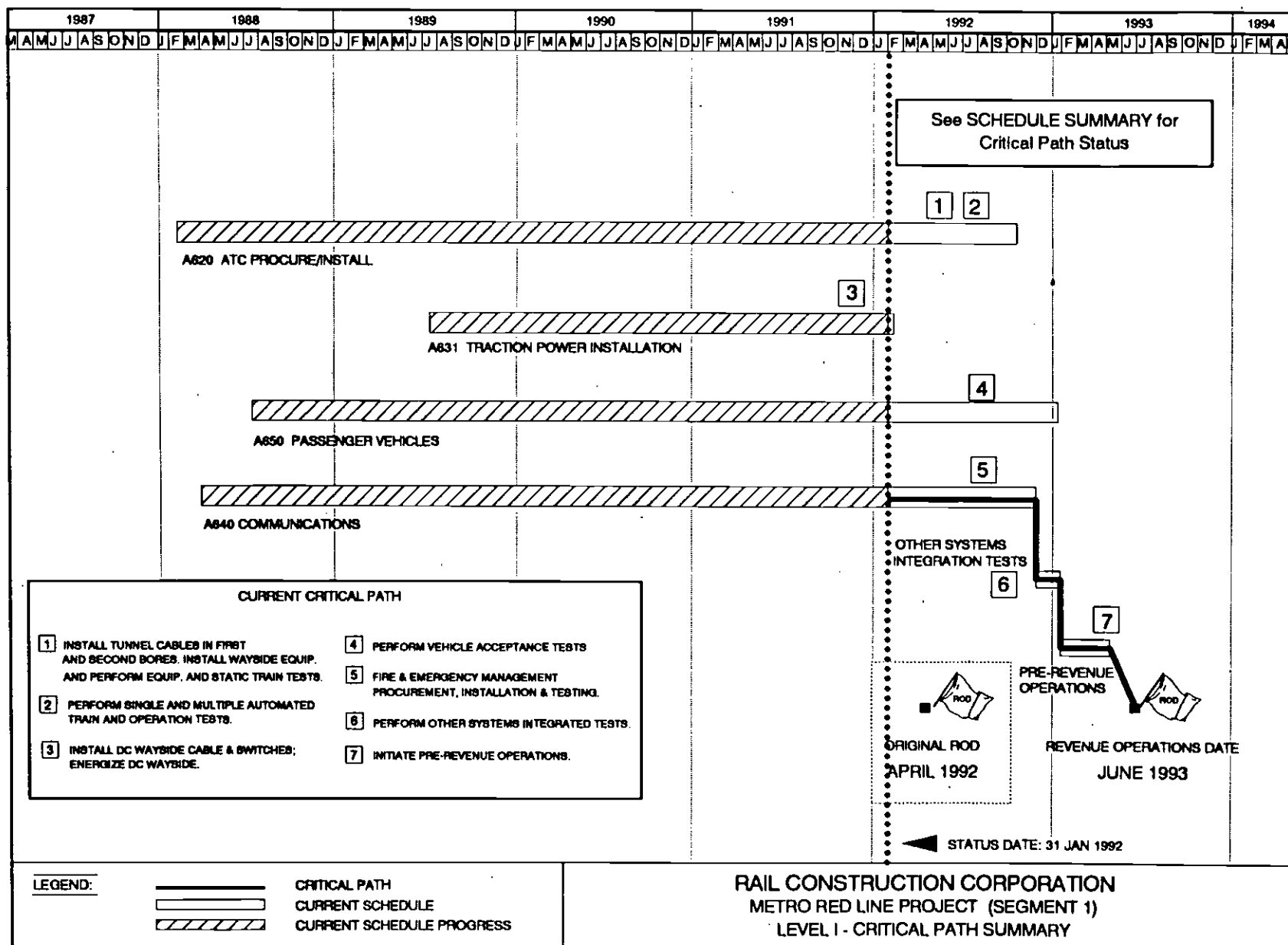


PROJECT CASH FLOW – PROJECT

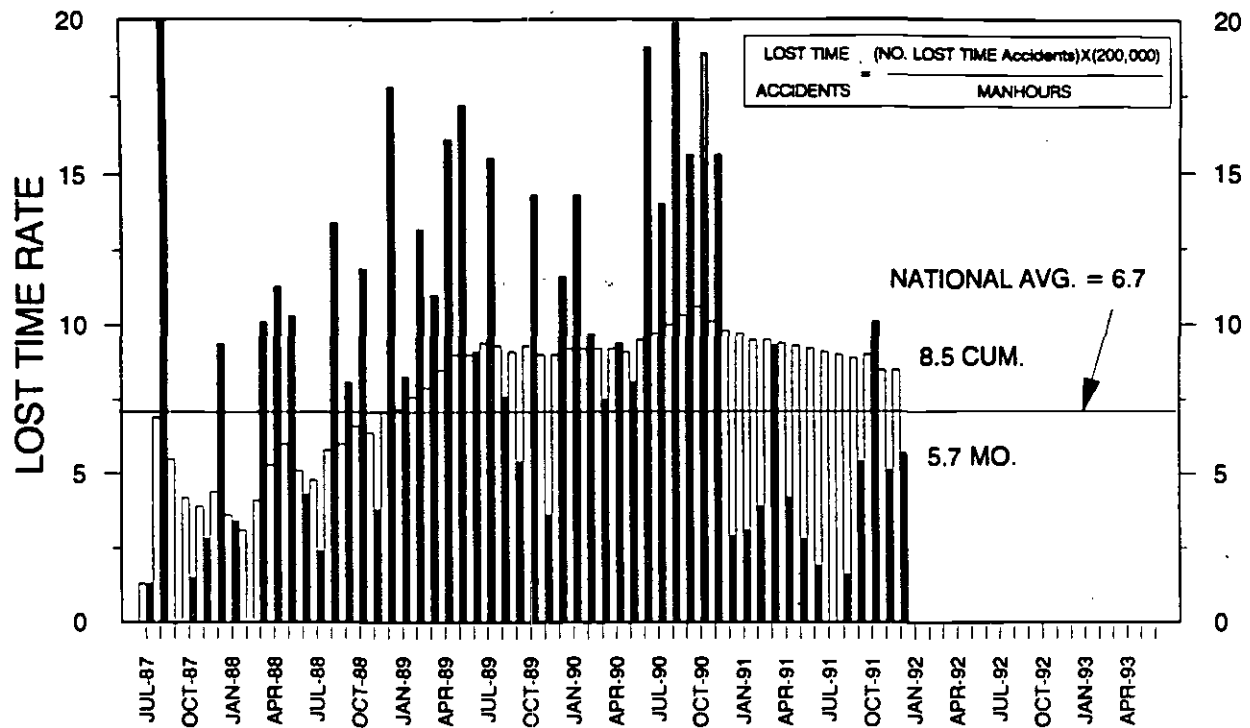


RAIL CONSTRUCTION CORPORATION  
METRO RED LINE SEGMENT 1  
PROGRESS SUMMARY

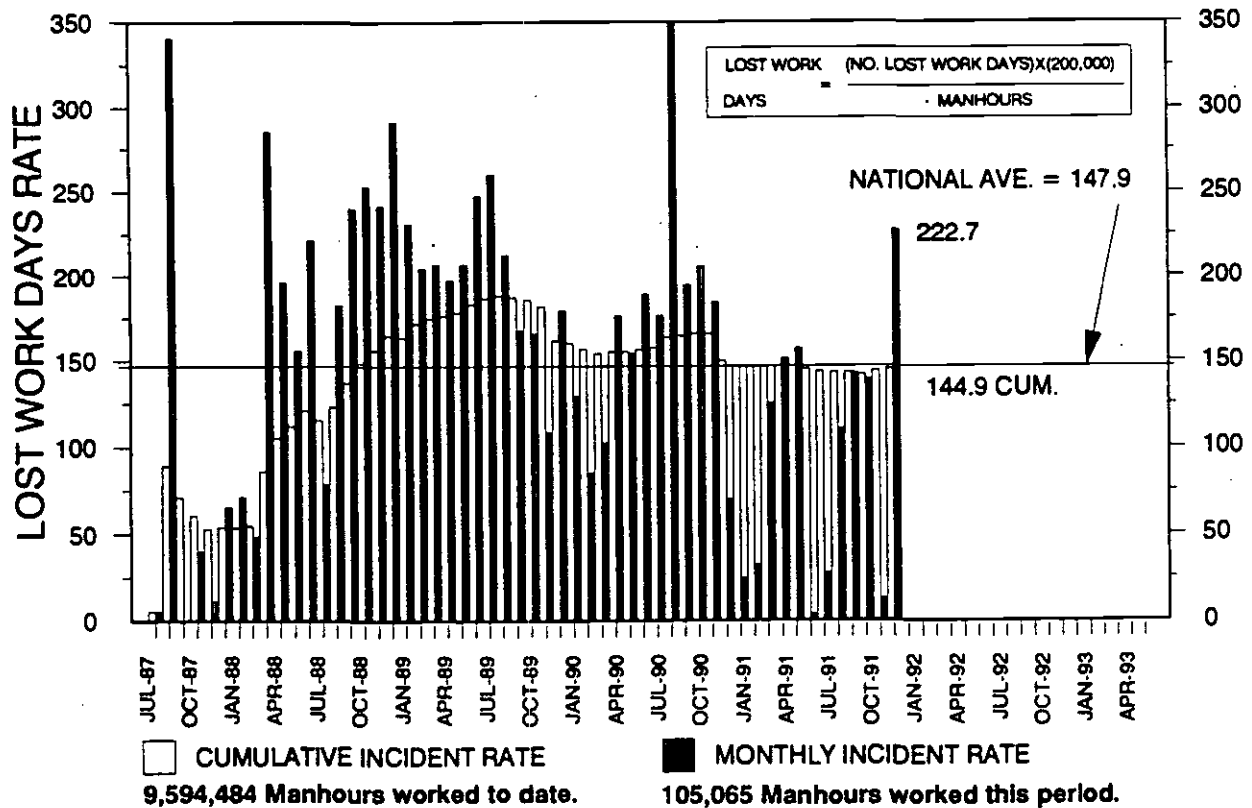




### METRO RED LINE (SEGMENT - 1) PROJECT SUMMARY OF LOST TIME ACCIDENTS (FREQUENCY)



### METRO RED LINE (SEGMENT - 1) PROJECT SUMMARY OF LOST WORK DAYS (SEVERITY)



## LEGEND

O	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.		
A135	Union Station - Stage 1	O					Minor dispute resolution	Apr 92
A175	Wilshire/Alvarado - Stage 1	O					Notice of completion to be filed in March 1992	Apr 92

## INVOICE PROCESSING

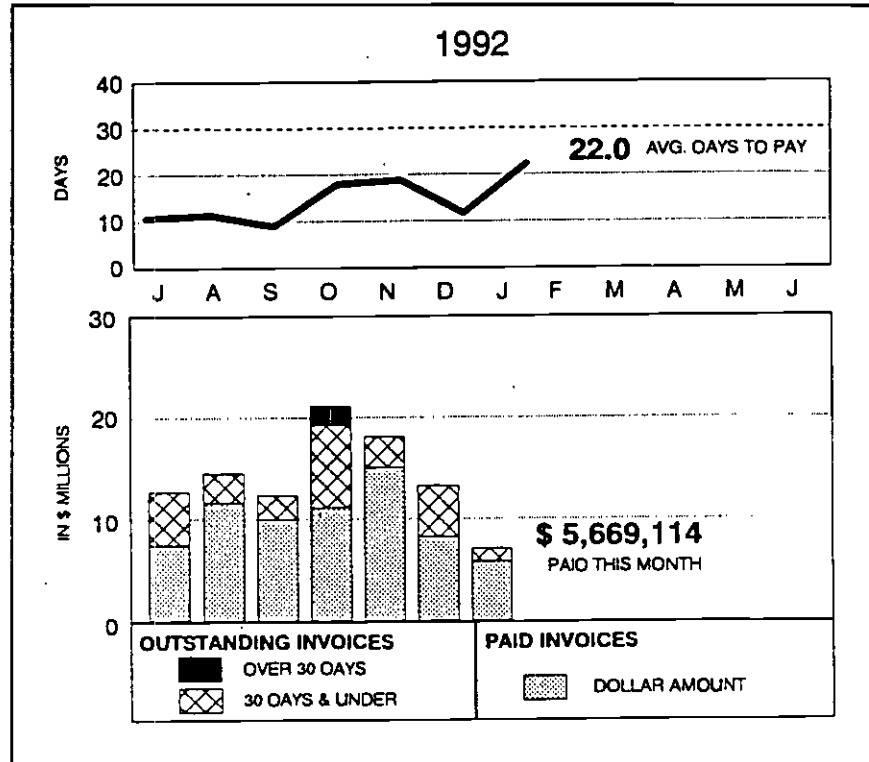
- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 22.0 days.

- 11 invoices were paid for a total value of \$ 5,669,114.

- There were 2 outstanding Construction/ or Procurement invoices under 30 days old for \$ 1,240,502.

- 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
OCT 1991	13	7,927,716	10	1,895,120	19	3,487,114	3	798,966
NOV 1991	6	2,956,345	2	27,063	18	2,800,800	4	1,040,811
DEC 1991	10	4,952,526	0	0	23	2,850,368	9	1,991,918
JAN 1992	2	1,240,502	0	0	11	2,384,087	7	1,138,991

## EXECUTIVE SUMMARY

### COST STATUS

in \$ million

- Current Budget \$1,446.4
- Current Forecast \$1,446.4
- The defined costs forecast increased primarily due to the Contract B252, Vermont/Santa Monica Station and Crossover, Prefinal Design Estimate; and Real Estate Storage Space for Contaminated Soils. The increase is partially offset by decreases in Awarded Contracts Forecast Changes; Deletion of On-Site QA Inspection for HDPE; and Schedule Changes Impact on Cost Forecasts. The balance of the increase in direct costs was offset by a decrease in Contingency.

### SCHEDULE STATUS

- Current Revenue Operation Date
 

Wilshire Corridor	July	1996
Vermont/Hollywood Corridor	September	1998
- Design Progress
 

- Plan	79%
- Actual	74%

Planned design progress remains unchanged from last month. The design progress plan was reassessed to include effort for redesign of Contract B261 (new entrance and plaza) and Contract B241 (Great Space Concept, which adds an open bay at the end of the mezzanine level by eliminating the horizontal struts at the columns in that area).

- Construction Progress
 

- Plan	7%
- Actual	7%

- The Wilshire Corridor is currently showing Zero Float to the Revenue Operations Date. Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line, soldier piles for pocket structure are complete, installation of lagging/shotcrete is 57% complete, pocket track structural excavation is 67% complete, interior and most of the exterior walls at section 16-11 have been placed, and 892 feet of the AR tunnel has been excavated. Demolition of the Wilshire/Shatto Plaza Building is complete at Contract B211, Wilshire/Vermont Station, Stage I, and soldier pile

delivery continues. At Contract B221, Wilshire/Normandie Station and Line, soldier pile installation is 84% complete, cap beam and cap waler work continues on the south side of Wilshire, installation is 47% complete, and utility relocation continues. Soldier pile installation is 77% complete at Contract B231, Wilshire/Western Station, and cap beam and cap waler installation is in progress on the south side of Wilshire; utility relocation continues.

The critical path for the Wilshire Corridor is Contract B211, Wilshire/Vermont Station. Following completion of the Contract B211 trackway area, the critical path continues through Contract B610, Trackwork, Contract B620 Automatic Train Control, Integrated Testing and Pre-revenue Operations to the Revenue Operation Date of July 1996.

The critical path for the Vermont/Hollywood Corridor is Contract B251, Vermont/Hollywood Tunnel, which is currently showing 54 work days of negative float due to rescheduled Contract B251 Notice to Proceed. Upon completion of the tunnel excavation, the critical path continues through Contract B610, Trackwork, Contract B620, Automatic Train Control, Integrated Testing and Pre-Revenue Operations to the Revenue Operations Date of September 1998.

## 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	72	28	39	5	99
LAST MONTH	71	27	40	4	84

- There are 72 parcels of land required for the Segment 2 Project. The acquisition breakdown is as follows: 20 full takes, three partial takes, 41 subsurface easements, two surface easements, one temporary construction easement, two leases, and three parcels for the Vermont/Hollywood Tunnel. The number of parcels increased by one due to the need for the new entrance at Contract B261, Vermont/Sunset Station (Children's Hospital).
- To date, there have been 28 parcels acquired. 18 of these parcels were acquired through condemnation and the remaining 12 were negotiated acquisitions.

## AREAS OF CONCERN

### ONGOING

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

**Concern:** There are five parcels which may not be available by their scheduled need dates. This number has increased by one since last month. Of the five parcels, two are approved for condemnation and are expected to be available before the need date for construction. The other two parcels are delayed due to environmental approvals. The remaining parcel is expected to be available before the need date for construction.

**Action:** Maintain schedule to recover negative float.

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

#### **Wilshire Corridor Revenue Operation Date**

**Concern:** The four major Facility Contracts for the Wilshire Corridor have been awarded to the same contractor. The contractor has indicated intent to use one tunnel shield machine to excavate both tunnel sections. The schedules are tight with tunnel drive rates that were never attained during the Segment 1 construction experience.

**Action:** A contingency plan must be developed and agreed upon with the contractor to help assure that the milestone dates will be met if the anticipated drive rates are not attained.

**Status:** Discussions are ongoing, Parsons-Dillingham has submitted several contingency plans to the RCC for consideration and eventual discussion with the contractor.

A Change Notice has been issued to the contractor providing for the purchase of a roadheader attachment for the tunnel shield machine in the event of the contractor tunneling through harder ground than he may have anticipated.

The contractor's tunnel drive rate is averaging less than 60 linear feet per day. Although the rate is improving, the projected actual drive rate could impact milestone completion dates.

**Blast Relief Shafts Relocation**

- Concern:** In August, the City of Los Angeles required that the Under Platform Exhaust (UPE) and Blast Relief Shafts (BRS) penetrate the surface at locations away from the traveled (vehicle and pedestrian) way.
- Action:** Continue to work with the City Bureau of Engineers and Department of Transportation to find the most cost effective solution to the City's concerns.
- Status:** Contract B252 UPE and BRS terminations have been finalized in the sidewalks adjacent to Vermont. Contracts B241 and B261 shaft termination locations are still under discussion with the DOT and BOE. Along Hollywood Boulevard, Contracts B271, B281 and C301 will probably have terminations located in roadway medians.

**Noise Mitigation**

- Concern:** The noise level of construction work at Contract B221 caused complaints from the Wilshire Koreana Hotel. Without the implementation of noise mitigation measures, construction work could be held up, resulting in possible delays to the contract.
- Action:** Resolution of noise complaints and implementation of noise mitigation measures throughout the Segment 2 construction.
- Status:** Parsons-Dillingham/RCC have implemented noise mitigation measures at Contracts B211, B221 and B231. Steps undertaken include enforcement of noise regulations, site monitoring, review and upgrading of equipment as required, and installation of sound barriers/acoustical enclosures for night work. LADOT now requires noise mitigation plans to be submitted by utility subcontractors. Site specific noise mitigation measures have been identified and are being implemented at each Segment 2 contract work area.
- Site specific noise mitigation measures continue to be identified for Contracts B221 and B231 for impacts to both the north and south side of Wilshire Boulevard. Measures will be implemented in accordance with LADOT and RCC standards and will reflect tenant concerns.

**Mined Station Concept**

- Concern:** Cut and cover plans for the Vermont/Hollywood Corridor are currently showing zero or negative float to the Vermont/Hollywood Revenue Operations Date (ROD). Any Mined Station Concepts that exceed the current station construction time frames will be a direct impact to ROD.

- Action: The RCC has requested a comprehensive review of the Mined Station Concept by an outside consultant.
- Status: Consultant's Deloitte and Kellogg are presently finalizing their review of the Mined Station Concept, and will be presenting their recommendation in support of the concept to the RCC at the April 6, 1992, Board Meeting.

**NEW****Contract B251, Vermont/Hollywood Line**

- Concern: Delays to the adoption of the Environmental Negative Declaration for Contract B251, Vermont/Hollywood Tunnel, has delayed the scheduled Notice to Proceed date. Current delay impacts the Revenue Operations Date by two months.
- Action: The RCC and LACTC Boards need to adopt the Environmental Negative Declaration to allow the contract to be advertised.
- Status: RCC must finalize negotiations for environmental impact mitigation measures with concerned parties to enable the RCC and LACTC Boards to adopt the Environmental Negative Declaration.

**RESOLVED****Delay in Design Progress**

- Status: While design progress is still slightly behind schedule, the recovery plans are working and the design documents will be delivered as scheduled. Currently, there is no impact to the Project Schedule or ROD.

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**FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT  
ITEMS FOR RCC ACTION**

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

**ONGOING**

**April 1991**

**Project Procedures**

Concern: Certain project procedures have not being issued. Additionally, some of the procedures reviewed are not in accordance with the Project Management Plan (PMP).

Action: Complete and publish remaining policies and procedures and review the PMP for conflicts

Status: An updated procedure completion schedule, with approved and projected dates, was provided to Hill International. Additionally, the PMP has been reviewed for conflicts with the new procedures. The PMP revision is to be submitted at the next FTA quarterly meeting.

**NEW**

**NONE**

**RESOLVED**

**NONE**

**KEY ACTIVITIES - JANUARY**

- Continued pocket track excavation and structural concrete work in MacArthur Park area, Contract B201.
- Finished east side of Alvarado Street decking and started piling, pile capping, and street beam operations on the west side for Contract B201 pocket track excavation.
- Completed 892 linear feet of AR tunnel from the portal at MacArthur Park, Contract B201.
- Continued shaft #17 excavation at Wilshire and Commonwealth Streets, Contract B201.
- Completed demolition of the Wilshire/Shatto Plaza Building and backfilling of the area.
- Completed traffic detour and started pile installation for the turn-out structure at 6th/Vermont, Contract B221.
- Continued soldier pile installation and utility relocation on the south side of Wilshire at Normandie, Contract B221.
- Started street decking operations on Wilshire Boulevard between Western and Oxford Avenues, Contract B231.
- Completed Contract B251, Vermont/Hollywood combined tunnels specification and drawings review.
- Completed street decking time studies for Hollywood Avenue Station.
- Completed close-out of Contract B218, Building Demolition/Site Clearing for B221.
- Completed In-Progress Design Submittal for Contract B745, Air Handling Equipment.
- Continued potholing investigations for remainder of Segment 2 Stations.
- Evaluating the impact of the Americans with Disabilities Act on Metro Red Line Segment 2.

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KEY ACTIVITIES - PLANNED FOR FEBRUARY

- Complete street decking operation of Alvarado Street, Contract B201.
- Complete tunneling an additional 1200 linear feet of AR tunnel toward 6th/Vermont, Contract B201.
- Commence roof construction of concrete structure for pocket track crossover at MacArthur Park, Contract B201.
- Commence installation of soldier piles for the Wilshire/Vermont Station, Contract B211.
- Complete soldier pile installation at Wilshire/Normandie and prepare for start of decking operations, Contract B221.
- Complete decking installation between Oxford and Serrano Avenues for the Wilshire/Western Station, Contract B231.
- Complete Prefinal Design Submittal of Contract B271, Hollywood/Western Station.
- Continue working toward the revised Prefinal Design Submittal in March for Contracts B241, Vermont/Beverly Station, and B281, Hollywood/Vine Station.
- Complete Prefinal Design Submittal of Contract B630, Traction Power and Contract B710, Escalator/Elevator.

RAIL CONSTRUCTION CORPORATION  
PROJECT COST REPORT  
COST BY ELEMENT

Project: R81 METRO RED LINE MOS-2

Period: 26-Dec-91 to 31-Jan-92  
Run Date: 18-Feb-92  
Units: Dollars in Thousands

ELEMENT / DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		INCURRED COSTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
T Construction	693,000	0	905,830	190	299,805	14,811	70,100	9,257	57,430	3,284	956,439	50,609
S Professional Services	289,150	0	297,844	6,212	211,514	4,475	77,932	4,871	70,038	0	332,817	34,973
R Real Estate	79,527	0	78,567	988	48,315	292	39,003	292	39,003	3,000	96,289	19,722
F Utility/Agency Force Account	36,668	0	18,404	0	4,989	98	1,118	98	1,118	0	23,720	5,318
D Special Programs	2,044	0	2,044	0	347	0	148	0	148	0	13,044	11,000
C Contingency	145,743	0	145,743	0	0	0	0	0	0	(6,284)	24,423	(121,320)
A Project Revenue	0	0	0	0	0	(1)	(133)	(1)	(133)	0	(300)	(300)
Project Grand Total:	1,446,432	0	1,446,432	7,390	562,950	19,475	188,188	14,517	167,604	0	1,446,432	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS.

## STATUS OF FUNDS BY SOURCE

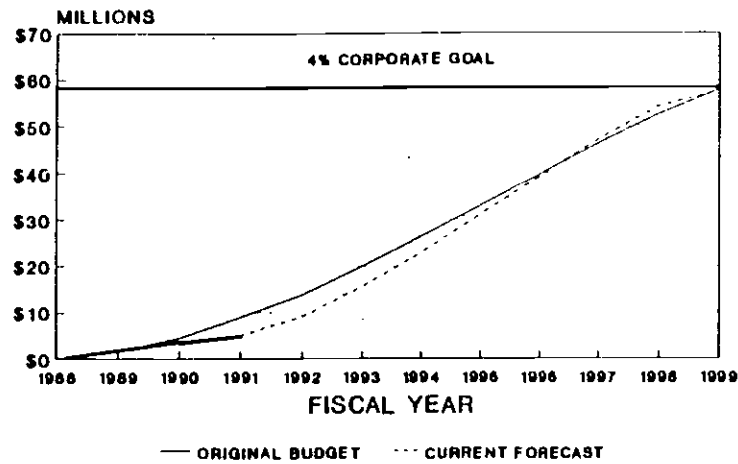
SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
UMTA-SECTION 3	\$867,000	\$478,916	\$233,616	35%	\$48,192	7%	\$34,242	5%
STATE	\$185,965	\$27,000 (1)	\$78,612	42%	\$28,972	16%	\$0	0%
LACTC	\$439,447	\$70,778	\$196,147	45%	\$85,450	18%	\$85,732	18%
CITY OF L.A.	\$98,000	\$40,000	\$43,498	45%	\$14,957	16%	\$20,000	21%
BENEFIT ASSESSMENT	\$58,000	\$0	\$9,033	16%	\$9,033	16%	\$0	0%
COST OVERRUN ACCOUNT (2)	\$0	\$5,208	\$0	0%	\$0	0%	\$0	0%
BENEFIT ASSESSMENT SHORTFALL (3)	\$0	\$0	\$0	0%	\$0	0%	\$9,033	
TOTAL	\$1,446,432	\$521,902	\$562,903	39%	\$167,604	12%	\$132,007	9%

(1) STATE FUND TRANSFER AGREEMENT HAS BEEN EXECUTED. BILLINGS TO COMMENCE IN FEBRUARY 1992.

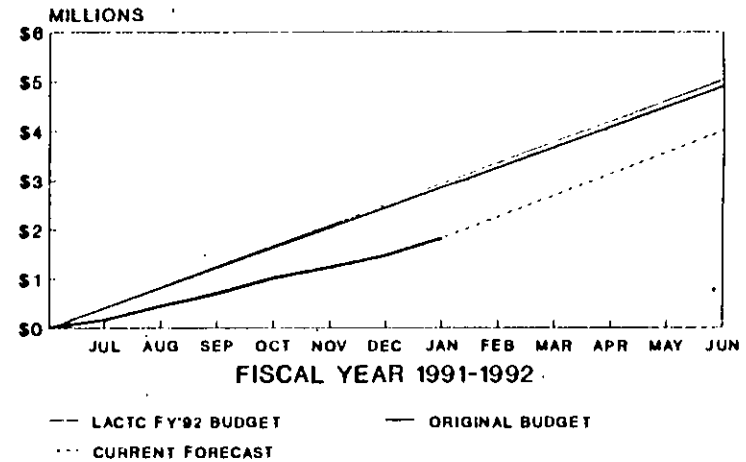
(2) THE COST OVERRUN ACCOUNT INCLUDES CAPRA FUNDS ONLY.

(3) THE CURRENT BENEFIT ASSESSMENT DISTRICT REVENUE SHORTFALL IS BEING FUNDED BY LACTC.

### AGENCY COSTS RED LINE SEGMENT 2



### FISCAL YEAR 1992 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	\$57,541
FORECAST % OF TOTAL PROJECT	3.9%

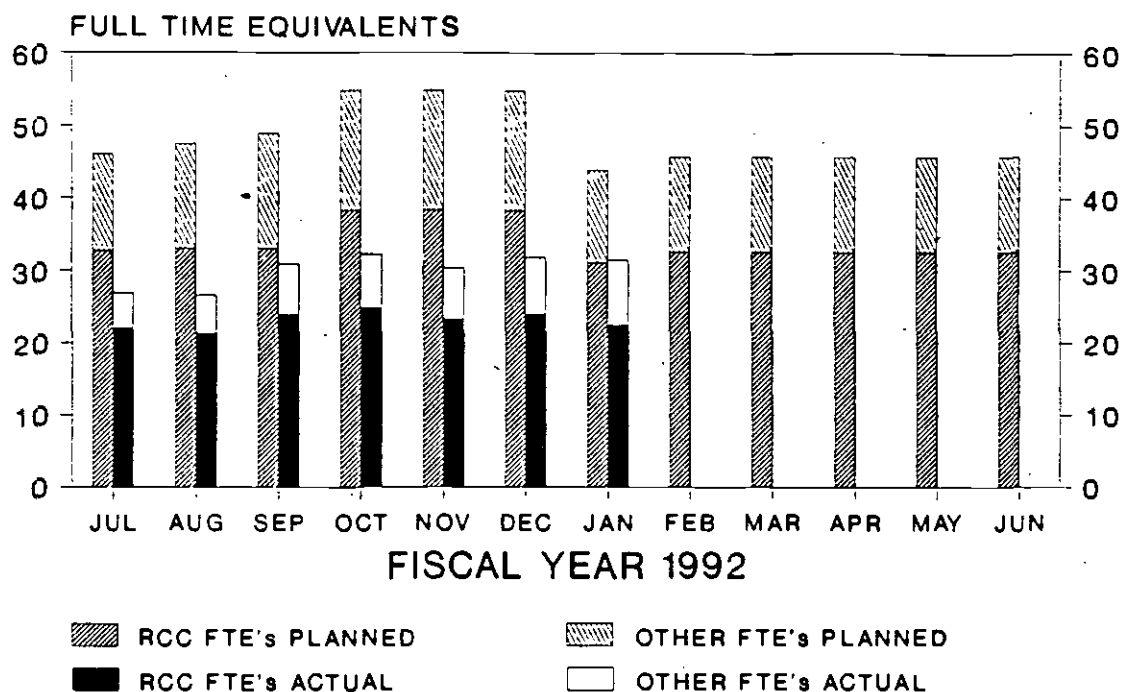
### FISCAL YEAR 1992 AGENCY COSTS RED LINE SEGMENT 2 (\$000)

LACTC FY'92 BUDGET	\$5,021
ORIGINAL BUDGET	\$4,894
CURRENT FORECAST	\$4,001
ACTUAL \$ TO DATE	\$1,821

Current forecast as of December 1991.

## STAFFING PLAN VS. ACTUAL

### RED LINE SEGMENT 2



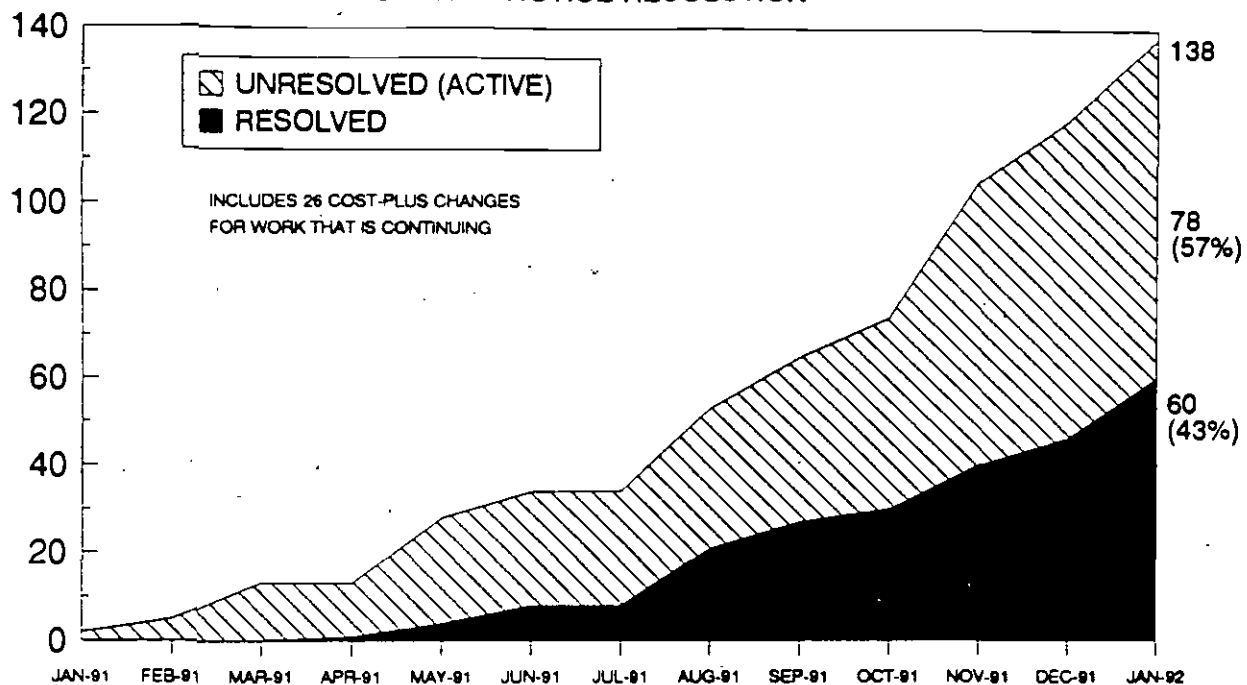
FY'92 Amended Budget implemented JAN'92

## RED LINE (SEGMENT 2) STAFFING PLAN

### FISCAL YEAR 1992

BUDGET WAGE RATE (\$/HOUR)	\$40
ACTUAL WAGE RATE (\$/HOUR)	\$39
RCC FTE's PLANNED	31
RCC FTE's ACTUAL	23
OTHER FTE's PLANNED	13
OTHER FTE's ACTUAL	9
TOTAL FTE's PLANNED	44
TOTAL FTE's ACTUAL	32

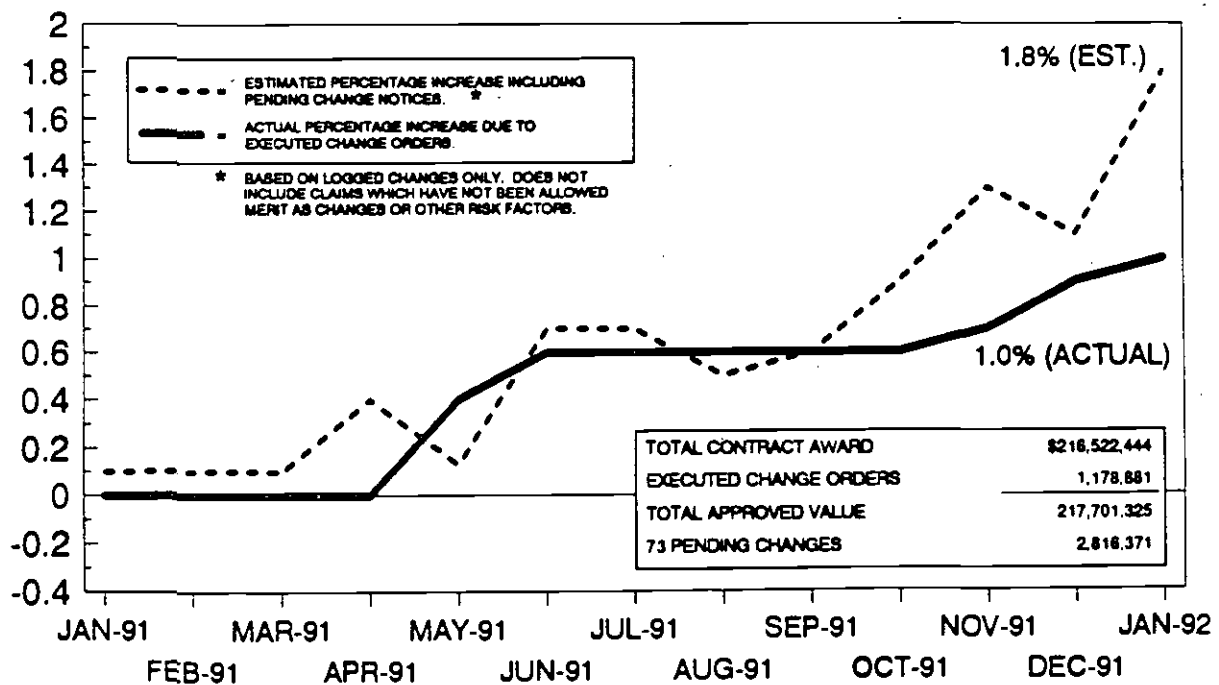
### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE NOTICE RESOLUTION



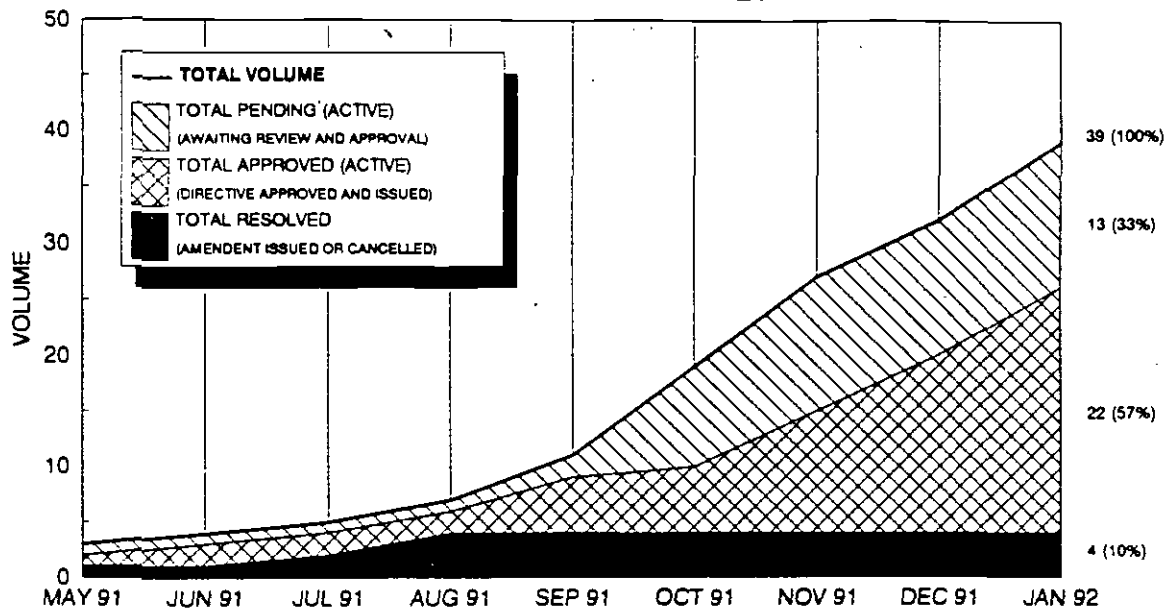
### AGE OF UNRESOLVED CHANGES

TIME	0-30 DAYS	31-60	61-90	OVER 90	TOTAL ACTIVE
VOLUME	37	8	9	24	78
PERCENT	47%	10%	12%	31%	100%

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



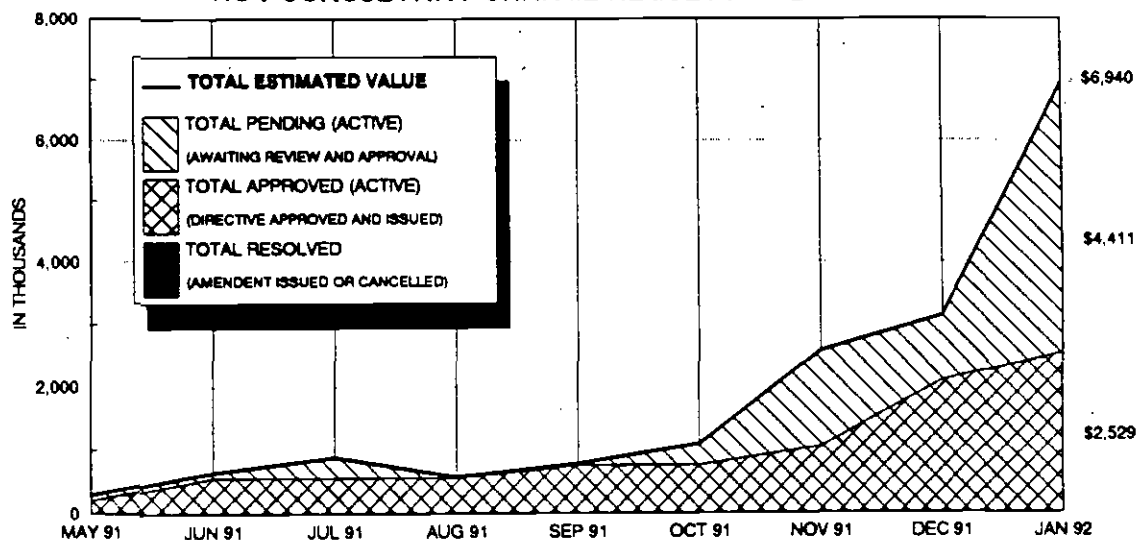
**CONSULTANT CONTRACT CHANGE SUMMARY  
R8 1 CONSULTANT CHANGE REQUEST RESOLUTION**



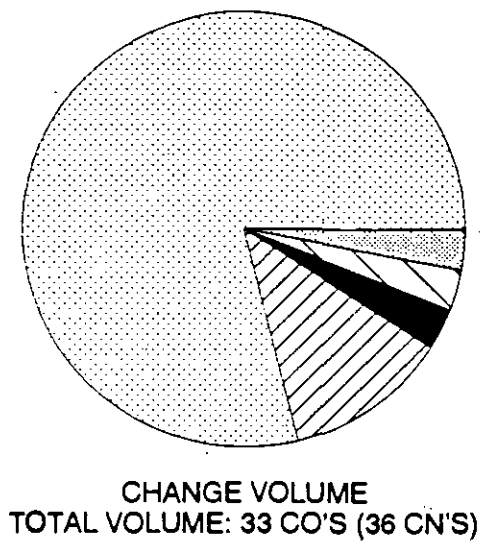
**AGE OF UNRESOLVED CONSULTANT CHANGES**







TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	5	7	8	15	35
PERCENT	14%	20%	23%	43%	100%

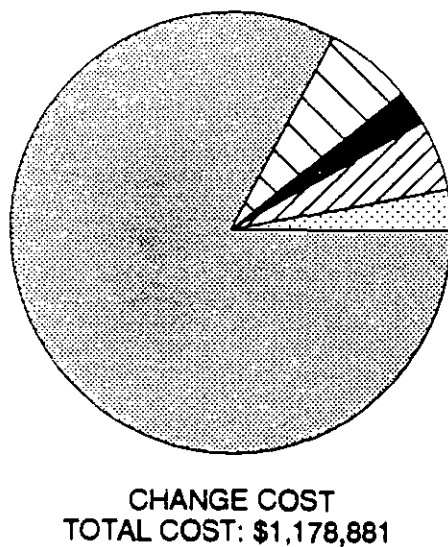
**CONSULTANT CONTRACT CHANGE SUMMARY  
R8 1 CONSULTANT CHANGE REQUEST VALUES**









**CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY COST LEVEL  
BASED ON EXECUTED CHANGES AS OF 01/31/92**

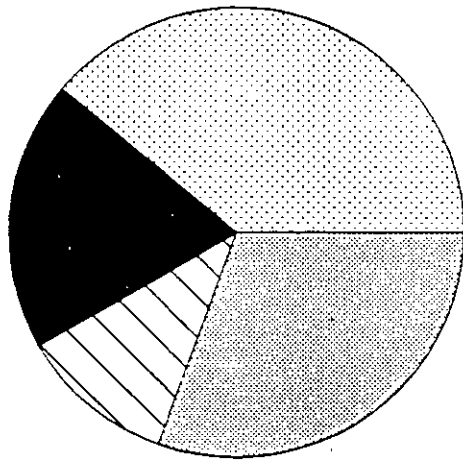
**ABSOLUTE VALUES**

26	78.9%		< \$10,000
4	12.1%		< \$25,000
1	3.0%		< \$50,000
1	3.0%		< \$200,000
1	3.0%		> \$200,000
0	0.0%		> \$1,000,000



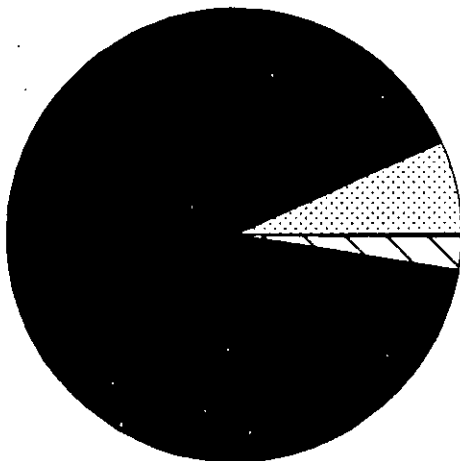
\$34,472	3.0%		< \$10,000
\$62,819	5.3%		< \$25,000
\$30,590	2.6%		< \$50,000
\$76,000	6.4%		< \$200,000
\$975,000	82.7%		> \$200,000
\$0	0.0%		> \$1,000,000

**CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE  
BASED ON EXECUTED CHANGES AS OF 01/31/92**



CHANGE BASIS VOLUME  
TOTAL VOL: 36 CN'S (33 CO'S)

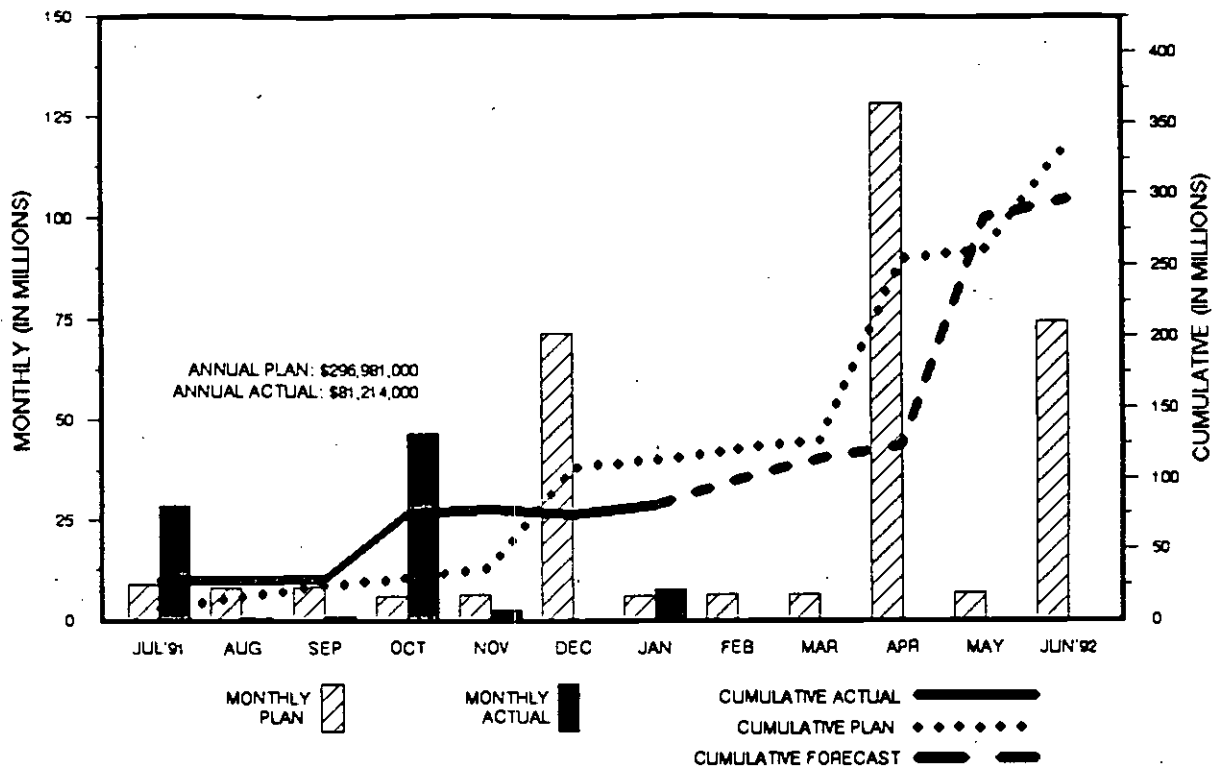
14	38.9%		WORK SCOPE CHANGES
0	0%		SCHEDULE CHANGES
7	19.4%		DIFFERING CONDITIONS
4	11.1%		ADMINISTRATIVE
11	30.6%		DESIGN CHANGES
0	0%		MANAGEMENT ISSUES/CLAIMS
0	0%		UNASSIGNED



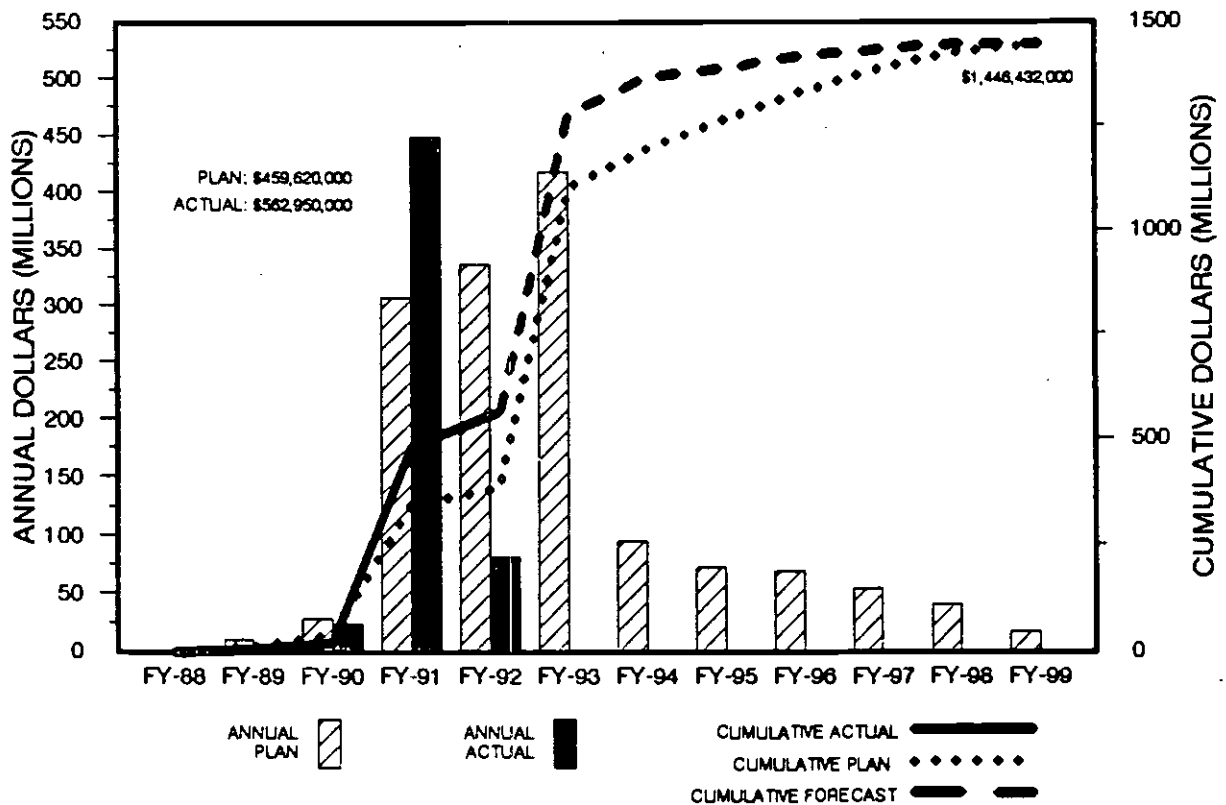
CHANGE BASIS COST  
TOTAL COST: \$1,178,881

\$78,436	6.7%		WORK SCOPE CHANGES
\$0	0%		SCHEDULE CHANGES
\$1,069,321	90.7%		DIFFERING CONDITIONS
\$28,590	2.4%		ADMINISTRATIVE
\$2,534	0.2%		DESIGN CHANGES
\$0	0%		MANAGEMENT ISSUES/CLAIMS
\$0	0%		UNASSIGNED

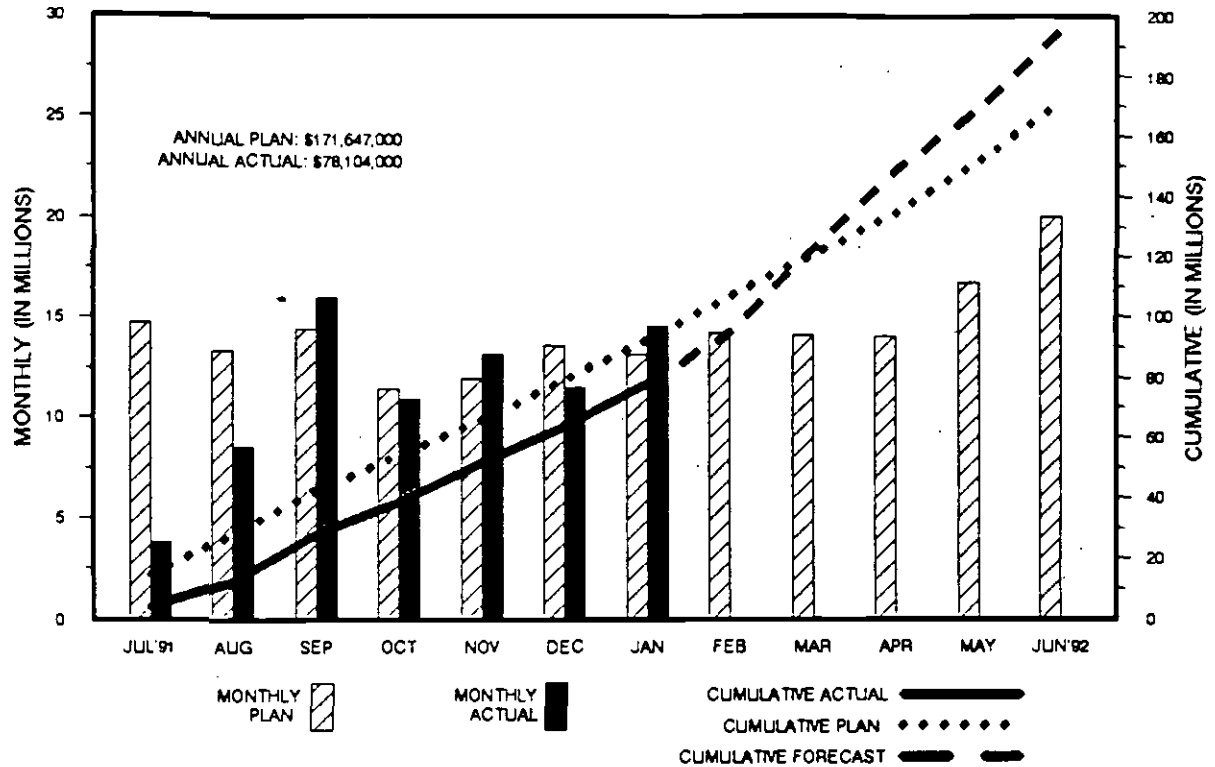
ANNUAL PROJECT COMMITMENTS (FY '92)



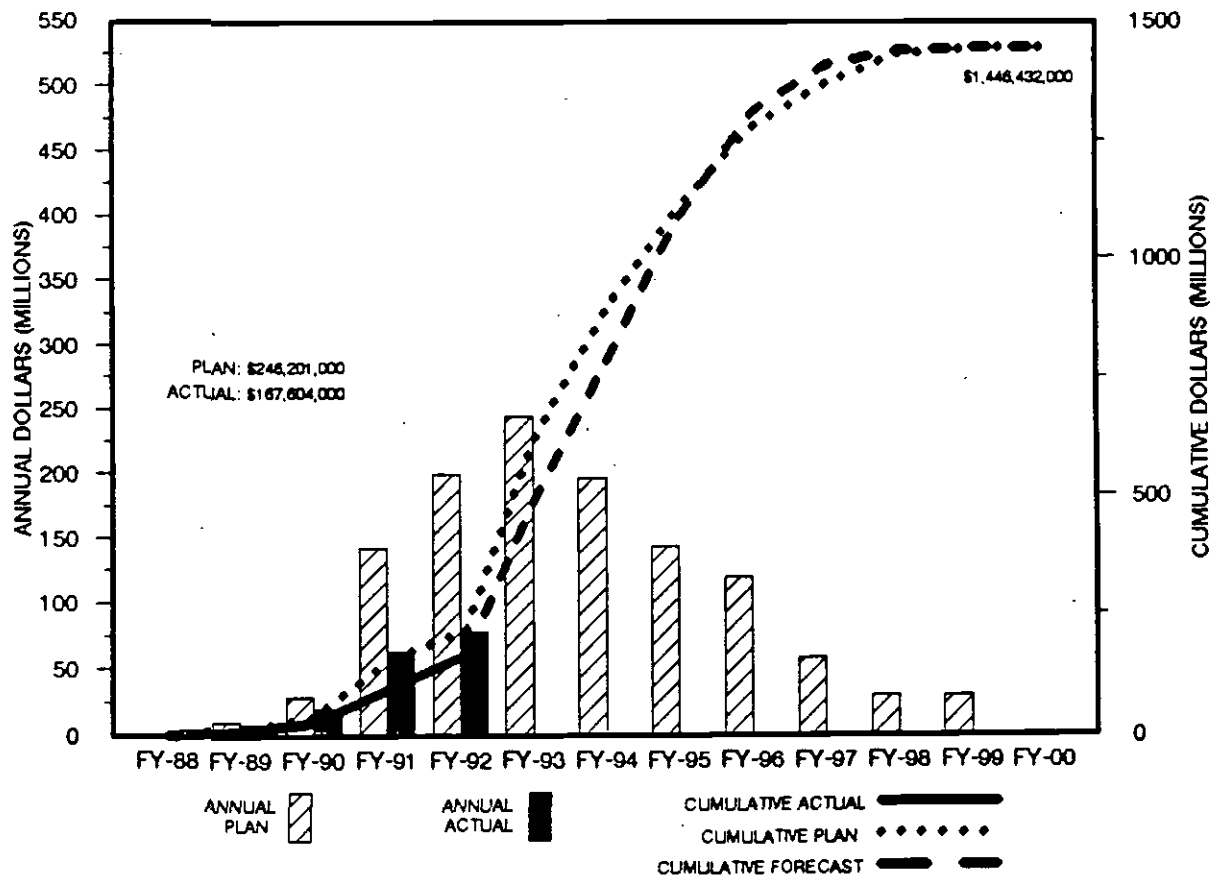
TOTAL PROJECT COMMITMENTS



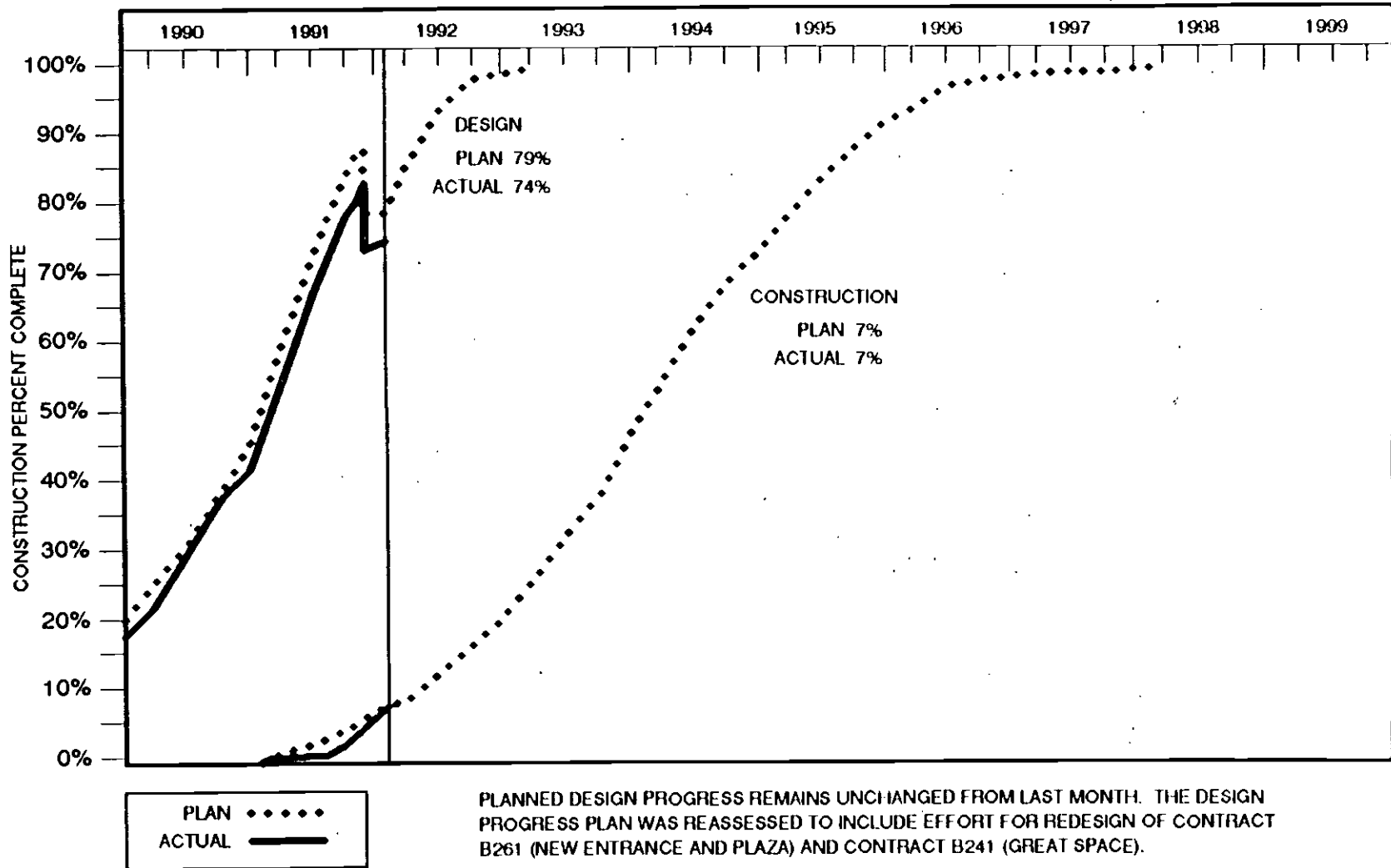
### ANNUAL PROJECT CASHFLOW (FY '92)



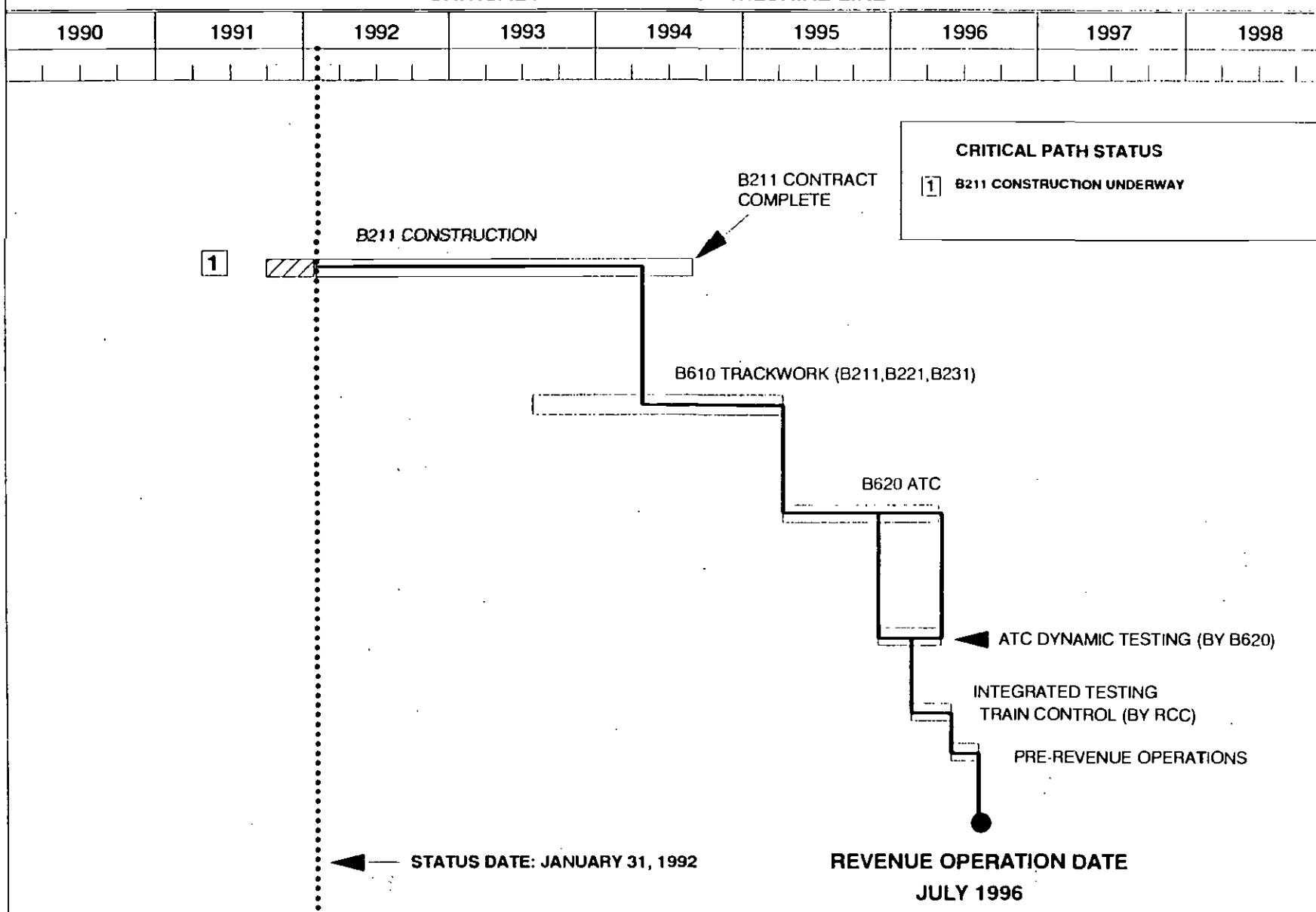
### TOTAL PROJECT CASHFLOW



RAIL CONSTRUCTION CORPORATION  
METRO RED LINE SEGMENT 2  
PROGRESS SUMMARY



# CRITICAL PATH SUMMARY - WILSHIRE LINE

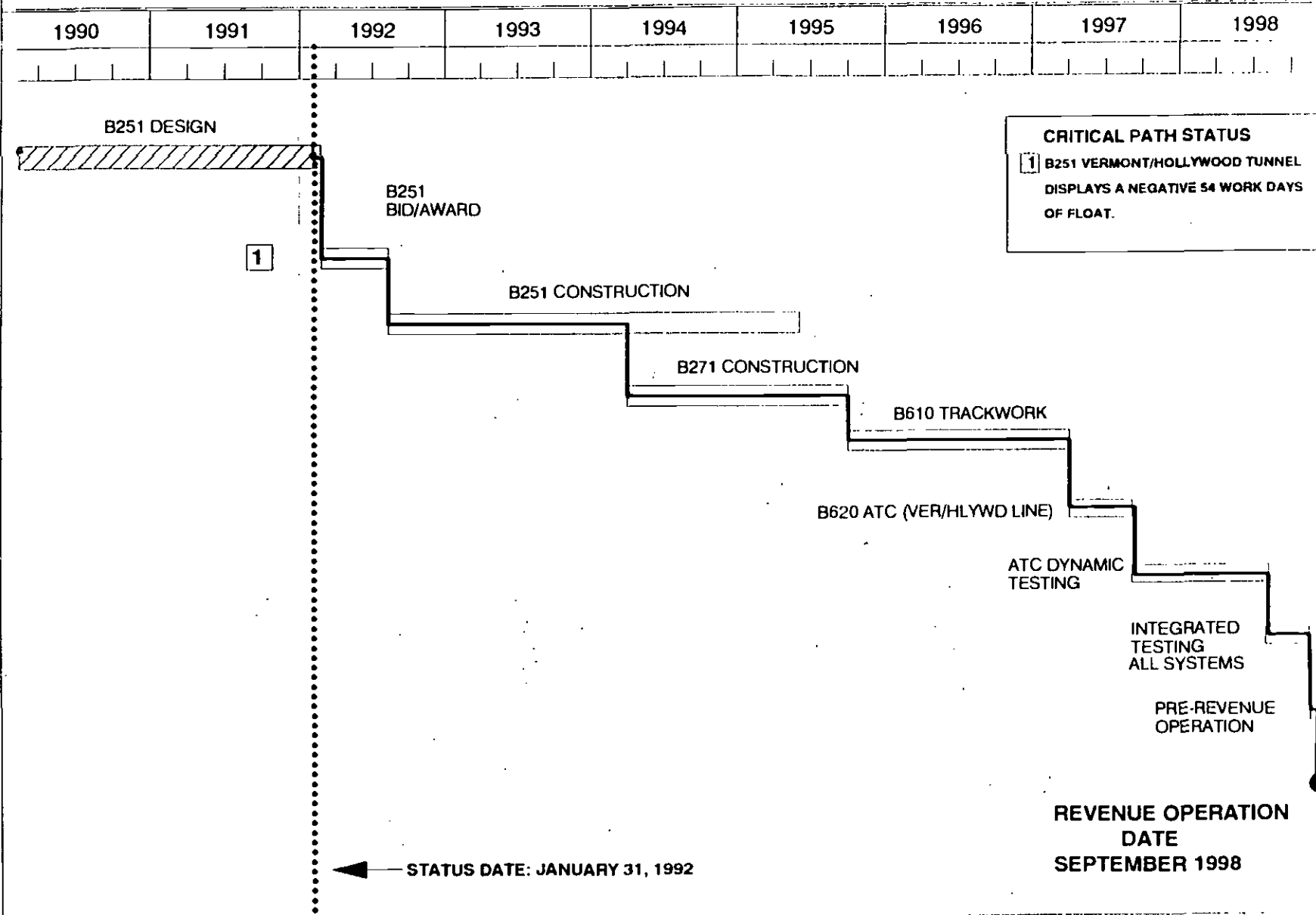


**LEGEND:**

- CRITICAL PATH
- - - CURRENT SCHEDULE
- ////// CURRENT SCHEDULE PROGRESS

**RAIL CONSTRUCTION CORPORATION  
 METRO RED LINE SEGMENT-2  
 CRITICAL PATH SUMMARY**

# CRITICAL PATH SUMMARY - VERMONT/HOLLYWOOD LINE

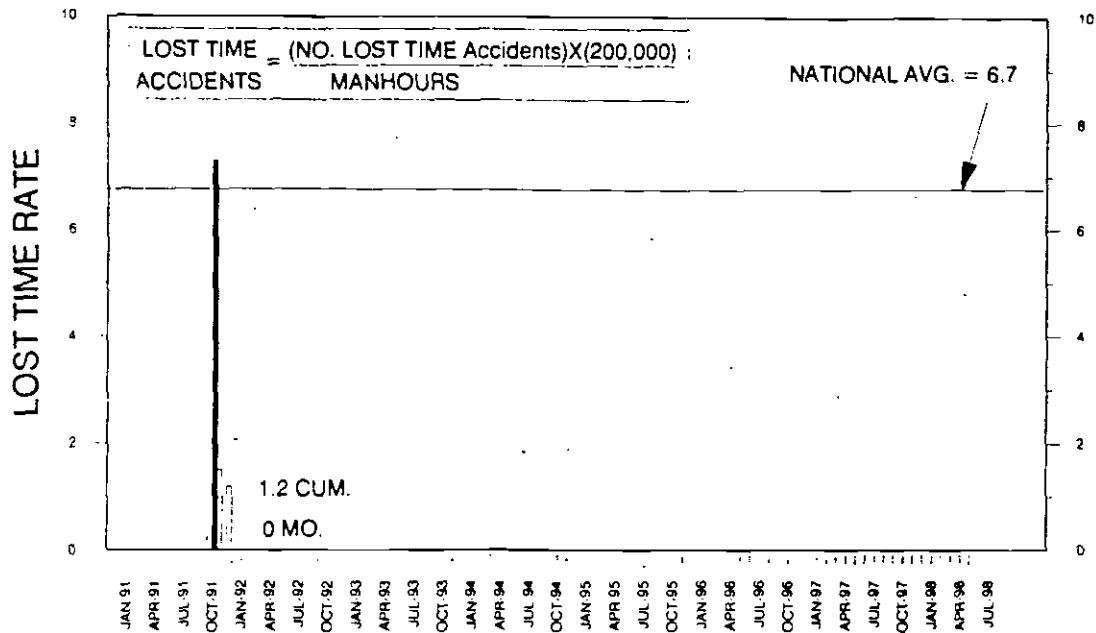


**LEGEND:**

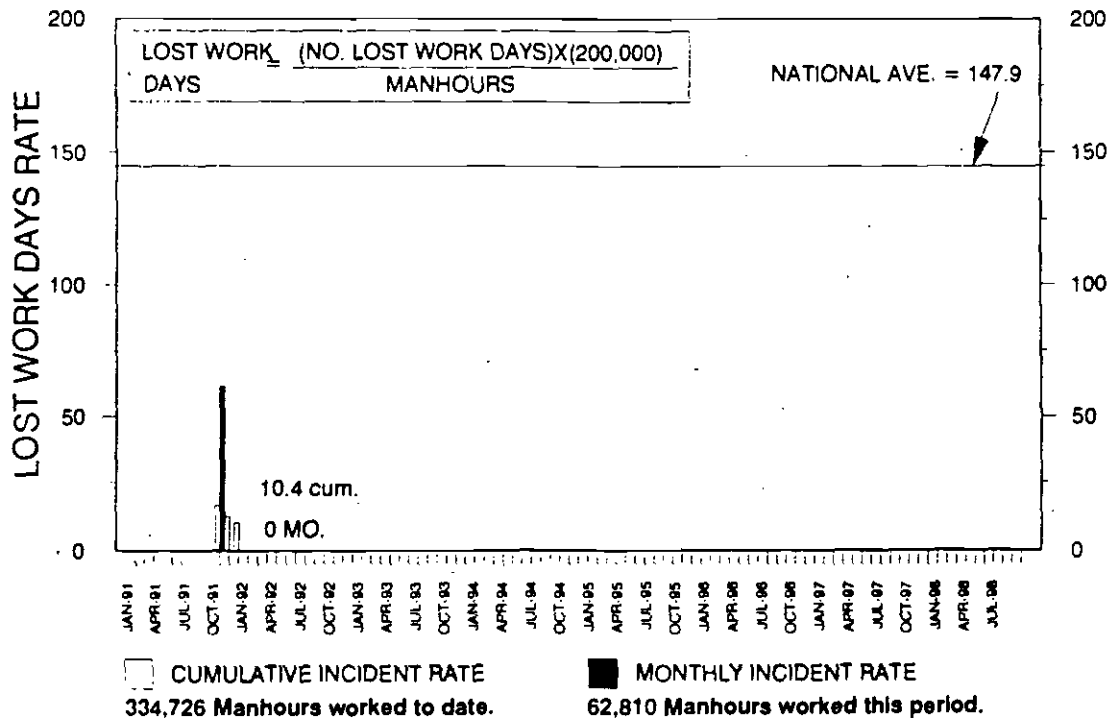
- CRITICAL PATH
- CURRENT SCHEDULE
- //// CURRENT SCHEDULE PROGRESS

**RAIL CONSTRUCTION CORPORATION  
 METRO RED LINE SEGMENT-2  
 CRITICAL PATH SUMMARY**

### METRO RED LINE (SEGMENT - 2) PROJECT SUMMARY OF LOST TIME ACCIDENTS (FREQUENCY)



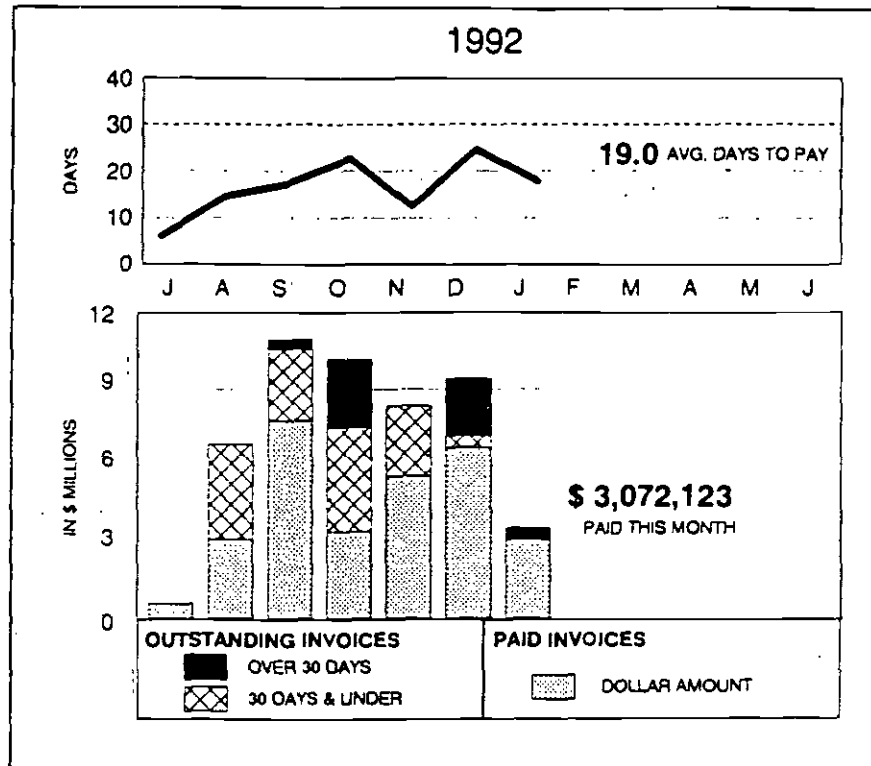
### METRO RED LINE (SEGMENT - 2) PROJECT SUMMARY OF LOST WORK DAYS (SEVERITY)



## INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 19.0 days.
- 8 invoices were paid for a total value of \$ 3,072,123.
- There were no outstanding Construction or Procurement invoices under 30 days old.
- There was 1 outstanding Construction or Procurement invoice over 30 days old for \$ 466,820.

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
OCT 1991	2	4,066,169	10	2,652,385	13	460,418	11	68,236
NOV 1991	5	2,730,824	0	0	17	96,407	12	72,615
DEC 1991	2	468,320	1	2,240,824	31	625,515	14	73,480
JAN 1992	0	0	1	466,820	20	129,807	15	116,673