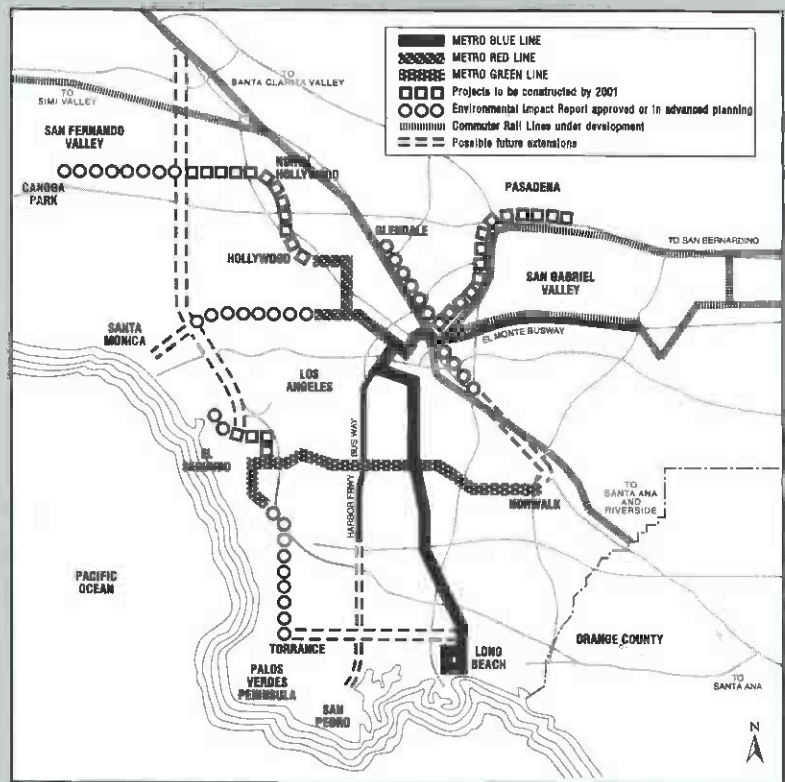


# RAIL CONSTRUCTION CORPORATION



## Executive Report Rail Program Status



**Rail  
Construction  
Corporation**

A Subsidiary of  
the Los Angeles County  
Transportation Commission

# RAIL PROGRAM SUMMARY STATUS

## RAIL PROGRAM STATUS SUMMARY

### PROGRAM COST STATUS

The rail design and construction program consists of four individual projects - the Metro Blue Line, the Metro Green Line, and the Metro Red Line, MOS-1 and MOS-2. The program has a combined budget of \$4,659.7 million and a combined current forecast of \$4,659.7 million.

The total number of change notices on the Metro Red Line MOS-1 increased by 181 this month. The percentage of unresolved change notices increased to 25.8% from 24% last month. The total dollar value of executed change orders for the Metro Red Line MOS-1 increased by about \$6.4 million to \$63.3 million.

The total number of change notices for the Metro Red Line MOS-2 and the Metro Green Line are less than 30 for each project.

Of the total forecasted program cost, approximately 56% has been committed and 43% has been expended. The program summary cost report (Figure 1) shows a more complete cost status of the program.

The total program expenditures are \$2,019.3 million. This is an increase of approximately \$45.2 million from last month. Figure 2 illustrates the major project objectives and attendant cash requirements through completion of the approved projects. This rail construction plan is based on the total cost forecast for each project.

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

STATUS DATE: 05/31/91

(IN THOUSANDS)

TOTAL RAIL PROGRAM	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	BUDGET		AUTHORIZED FOR EXPENDITURE		COMMITMENTS		INCURRED COST		EXPENDITURES		FORECAST	
DESCRIPTION	ORIGINAL	CURRENT	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	CURRENT	(11-2) VARIANCE
CONSTRUCTION	2,605,949	2,819,861	49,041	1,643,746	86,090	1,549,069	18,090	1,121,958	29,368	1,091,905	2,917,219	97,358
PROFESSIONAL SERVICES	967,500	1,116,430	143,052	713,721	33,909	752,897	6,015	657,680	14,432	657,445	1,132,177	15,747
REAL ESTATE	260,484	325,155	206	214,478	5,784	230,187	103	211,013	103	210,921	330,503	5,348
UTILITY/AGENCY FORCE ACCOUNTS	116,069	114,611	1	64,654	455	77,220	697	66,089	701	65,709	98,864	(15,747)
SPECIAL PROGRAMS	6,063	14,537	0	670	879	1,649	41	414	21	314	19,586	5,049
PROJECT RESERVE	343,734	315,631	0	0	0	0	0	0	0	0	218,941	(96,690)
PROJECT REVENUE	(18,115)	(46,503)	0	0	93	(673)	(39)	(6,205)	893	(6,967)	(57,568)	(11,065)
GRAND TOTAL PROJECT	4,281,684	4,659,722	192,300	2,637,268	127,211	2,610,350	24,907	2,050,949	45,517	2,019,327	4,659,722	0

Figure 1

Figure 2 - Rail Construction Plan

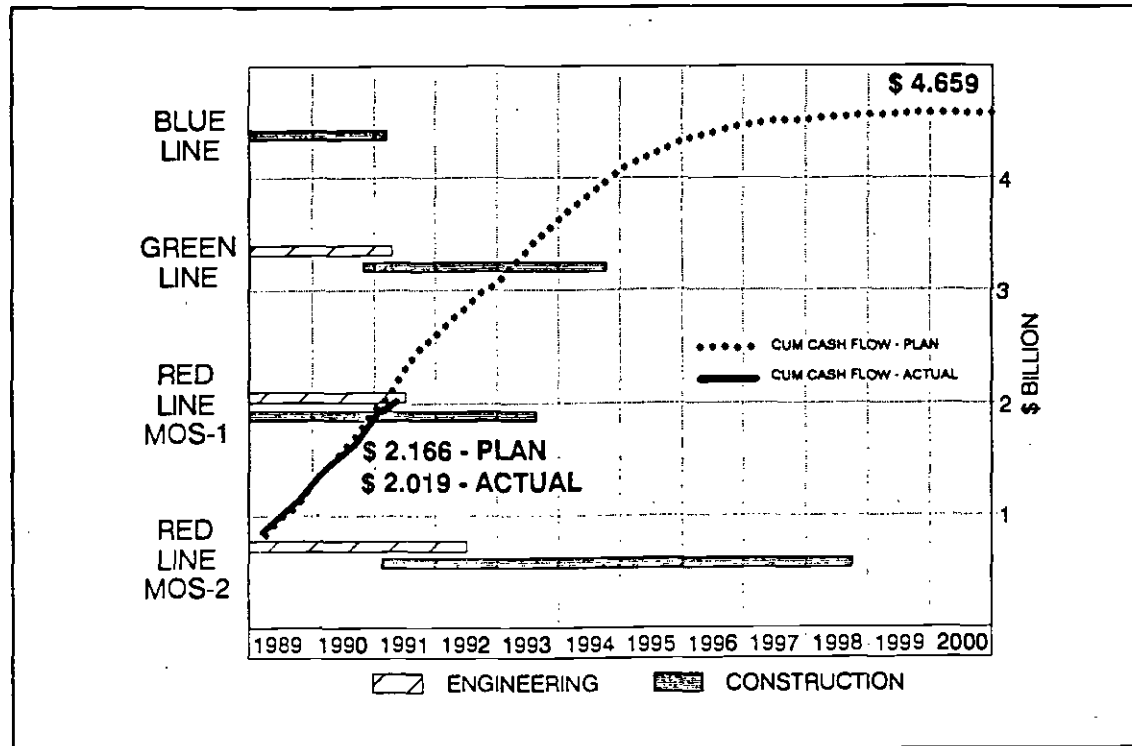


Figure 3 shows the funding sources for each project and for the total program. Data included in this figure is based on the current forecast total cost of each project.

Figure 3 - Rail Construction Funding Sources

	METRO BLUE LINE*		METRO GREEN LINE		METRO RED MOS 1**		METRO RED MOS 2		TOTAL PROGRAM	
	\$	%	\$	%	\$	%	\$	%	\$	%
UMTA					695.9	48	667.0	46	1362.9	29
STATE					213.1	15	186.0	13	399.1	9
LOCAL (PROP A)	877.0	100	742.5	84	176.6	12	439.4	30	2235.5	48
PROP 108			107.5	12					107.5	2
TCI			36.0	4					36.0	1
BENEFIT ASSESS					130.3	9	96.0	7	226.3	5
CITY OF L.A.					34.0	2	58.0	4	92.0	2
FORECAST					200.1	14			200.1	4
<b>TOTAL</b>	<b>877.0</b>	<b>100</b>	<b>886.0</b>	<b>100</b>	<b>1450.0</b>	<b>100</b>	<b>1446.4</b>	<b>100</b>	<b>4659.4</b>	<b>100</b>

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

**PROGRAM SCHEDULE STATUS**

The Metro Blue Line is in the close-out phase.

The current forecast for the Metro Green Line Revenue Operations is March 1995. The project is 118 working days behind the target ROD of October 1994, primarily because of slippage in the contract bid and design of the Vehicle Procurement (P1900) package.

The Metro Red Line MOS-1 is scheduled to begin Revenue Operations in September 1993. This project continues on schedule. The major concern on the critical path is now the "Fire and Emergency" and SCADA portion of Contract A640, Communications.

The Wilshire Segment of the Metro Red Line MOS-2 is scheduled to begin Revenue Operations in July 1996, with the Vermont/Hollywood Segment scheduled for opening in September 1998. No adverse impacts to these dates are presently seen.

**REAL ESTATE**

To date, one hundred seven (107) real estate parcels have been identified as required for the Metro Red Line MOS-2 and the Metro Green Line. Figure 4 summarizes the real estate status for each project.

Figure 4 - Real Estate Acquisition Status Summary

PROJECT	NO. OF PARCELS	NUMBER CERTIFIED		JUST COMP APPROVED		OFFERS MADE		CONDEM NATION	PARCELS AVAILABLE		PARCELS NOT AVAIL
		PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL		PLAN	ACTUAL	
GREEN	39	39	39	39	25	38	26	1	39	23	15
MOS-2	68	50	58	31	27	31	27	15	7	8	60
TOTAL	107	89	97	70	52	69	53	16	46	31	75
PREVIOUS MONTH	106	88	90	66	50	65	49	8	42	27	79

## ISSUES

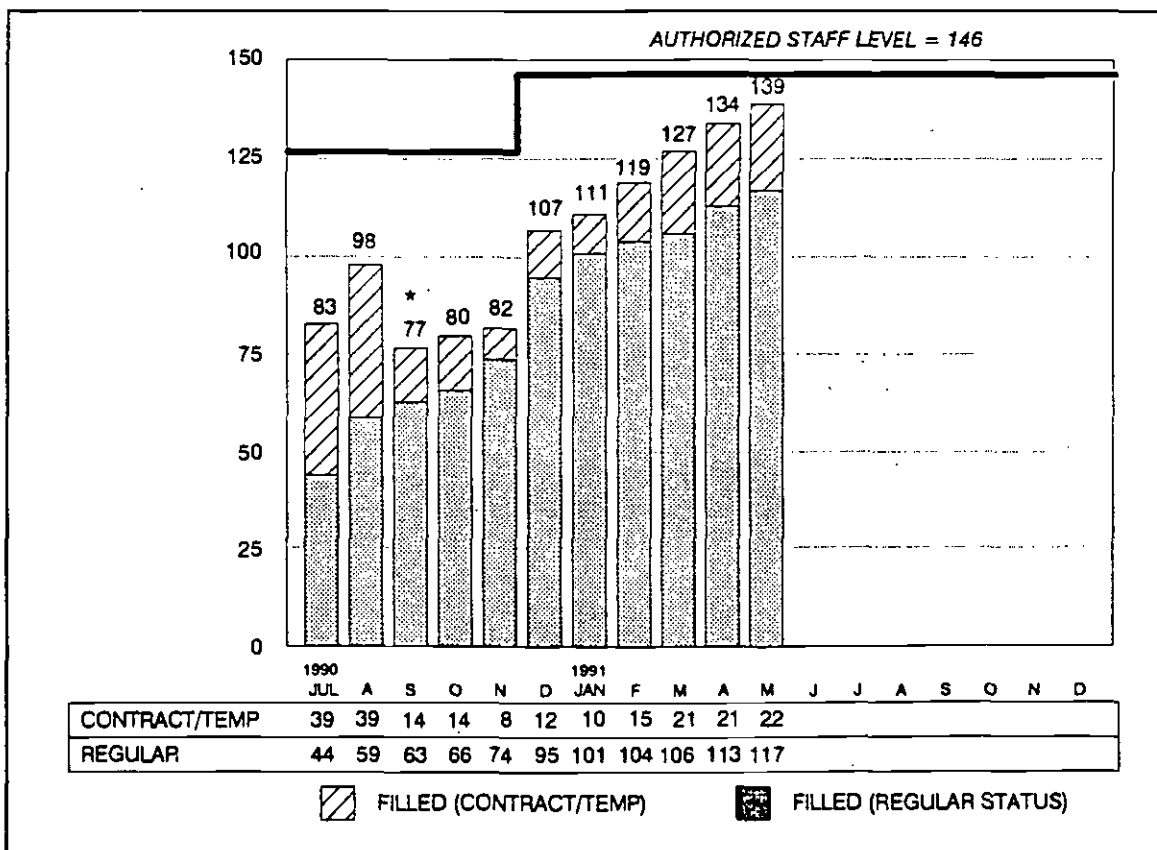
Vacant staff positions in the RCC organization are being actively recruited. Filling vacancies in Engineering and Contract Administration remain a key goal. A primary concern is that the quality of applicants for these positions has not met RCC/LACTC standards.

## RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Authorized staff level for the RCC is 146 positions. Presently, 117 positions are filled with regular full time staff and 22 positions are filled with contract or temporary employees. Active recruitment continues for the remaining positions. Staff levels beginning July 1, 1990 are illustrated in Figure 5.

Figure 5 - RCC Staff Levels

\* The contract/temporary number was revised from 39 in August to 14 in September to exclude SCRTD staff supporting the transition process.



## 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%. Based on the current cost forecast data for each project, the project administration cost totals 24.7% as compared to 24.6% last month. All projects contributed to this slight increase. The percentage includes all costs previously expended by the SCRTD when the Metro Red Line MOS-1 project was under SCRTD management.

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

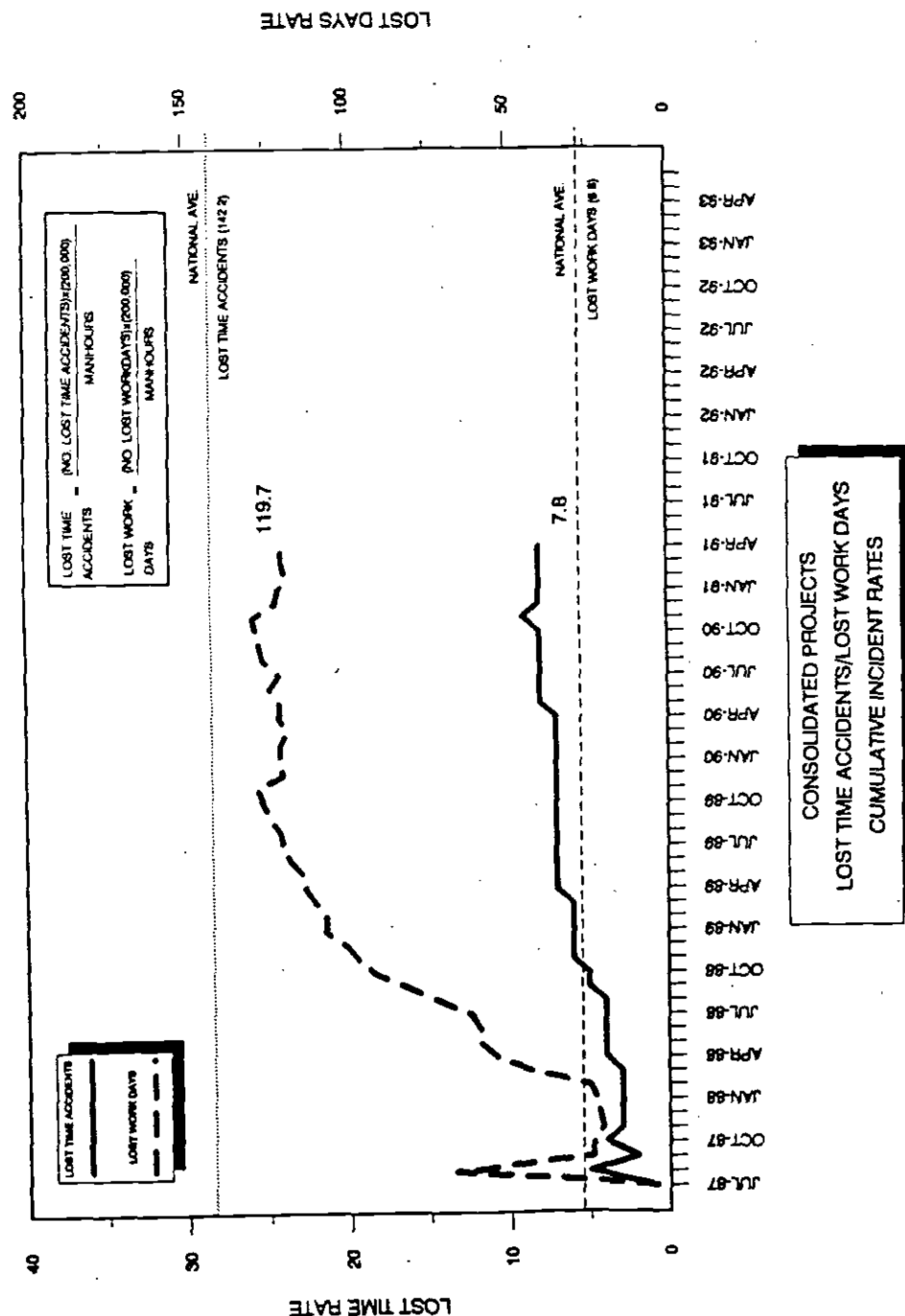
Figure 6 - Cost Performance Relative to Corporate Goals

(IN THOUSANDS)

	METRO BLUE LINE		METRO GREEN LINE		METRO RED LINE MOS-1		METRO RED LINE MOS-2		PROJECT TOTALS		CORPORATE GOAL
	DOLLARS	%	DOLLARS	%	DOLLARS	%	DOLLARS	%	DOLLARS	%	
CONSTRUCTION	657,487	75%	622,664	70%	754,189	52%	981,743	68%	3,016,083	65%	
REAL ESTATE	55,592	6%	52,616	6%	139,820	10%	82,475	6%	330,503	7%	
PROFESSIONAL SERVICES:											
ENGINEERING/DESIGN	69,587	8%	78,470	9%	215,511	15%	82,443	6%	446,011	10%	
CONSTRUCTION MGMT.	91,642	10%	50,165	6%	135,056	9%	131,058	9%	407,921	9%	4%
STAFF	17,655	2%	26,189	3%	114,358	8%	56,166	4%	214,368	5%	
OTHER	14,222	2%	9,689	1%	20,744	1%	38,807	3%	83,462	2%	
SUBTOTAL	193,106	22%	164,513	19%	485,669	33%	308,474	21%	1,151,762	25%	20%
CONTINGENCY	963	0%	62,833	7%	70,341	5%	84,807	6%	218,944	5%	
PROJECT REVENUE	(29,877)	-3%	(16,626)	-2%	0	0%	(11,065)	-1%	(57,568)	-1%	
GRAND TOTAL	877,271	100%	886,000	100%	1,450,019	100%	1,446,434	100%	4,659,724	100%	

## CONSTRUCTION SAFETY

Figure 7 shows the combined Construction Safety report for the Metro Blue Line, the Metro Green Line and the Metro Red Line MOS-1 and MOS-2 projects. The frequency index of accidents (Lost Time) exceeds the national average but the severity index of the accidents (Lost Days) continues to be below the national average.



**Total manhours as of April 1991: 13,311,255**

### Figure 7

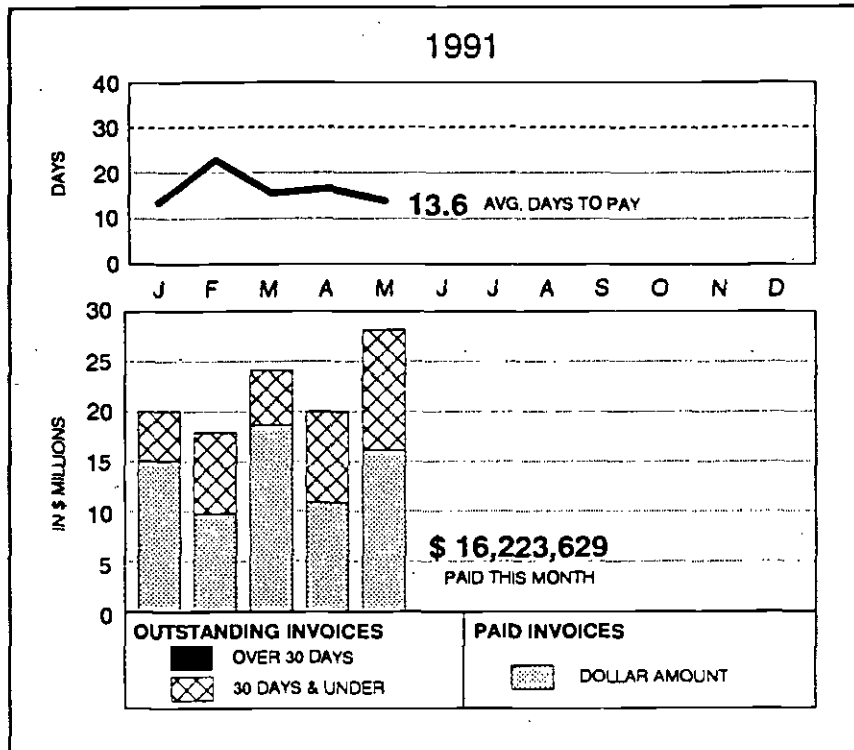
## INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 13.6 days.

- 42 invoices were paid this month for a total value of \$16,223,629.

- There was one outstanding Construction or Procurement invoice over 30 days old for \$4,937.

## 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
JAN 1991	16	4,958,187	2	19,717	74	11,669,670	55	6,864,826
FEB 1991	20	8,153,544	0	0	103	14,414,229	60	8,224,140
MAR 1991	15	5,485,581	1	33,214	86	12,634,672	77	6,998,877
APR 1991	22	9,142,595	0	0	67	11,848,262	76	8,959,658
MAY 1991	15	12,079,406	1	4,937	46	4,954,639	12	1,260,546

## COMMUTER RAIL

## SUMMARY

The RCC System Engineering (Vehicles) group is providing commercial and technical management to the Commuter Rail program for rolling stock. This includes procurement management, administration, engineering, inspection, testing, and warranty services. There are two contracts in place for rolling stock: bi-level passenger vehicles and locomotives. These contracts are in the initial design phase. One additional contract is in process for technical support services and assistance during the 2 year procurement and vehicle commissioning process.

The Revenue Operation Date is set for the fourth quarter 1992.

## CONTRACT DESCRIPTION

## BI-LEVEL PASSENGER VEHICLES

Contractor: UTDC Corporation, Canada  
Contract NTP: January 23, 1991  
Contract Value: \$ 51,542,500 (Base Buy)  
\$ 51,016,000 (Option Buy, if exercised before 7-23-91)  
Quantity: 40 vehicles - base (25 trailers/15 cabs)  
40 vehicles - option (28 trailers/12 cabs)  
Delivery: Car #1 (Base) - January 1992  
Car #40 (Base) - June 1992  
Option cars - To be Determined

## LOCOMOTIVES, DIESEL-ELECTRIC

Contractor: Electro-Motive Division - GM, Canada  
Contract NTP: January 23, 1991  
Contract Value: \$ 34,305,922 (Base Buy)  
\$ 20,950,000 (Option Buy, if exercised before 5-23-91)  
Quantity: 17 Locomotives - base  
10 Locomotives - option  
Delivery: Locomotive #1 (Base) - June 1992  
Locomotive #17 (Base) - September 1992  
Option locomotives - To be Determined

## TECHNICAL SUPPORT SERVICES

Contractor: LTK Engineering Services  
Contract NTP: April 12, 1991  
Contract Value: \$ 1,147,269

## COMMUTER RAIL (CONT'D)

## AREAS OF CONCERN

ONGOING

April 1991

Compliance with Disabilities Act (ADA) Accessibility Guidelines

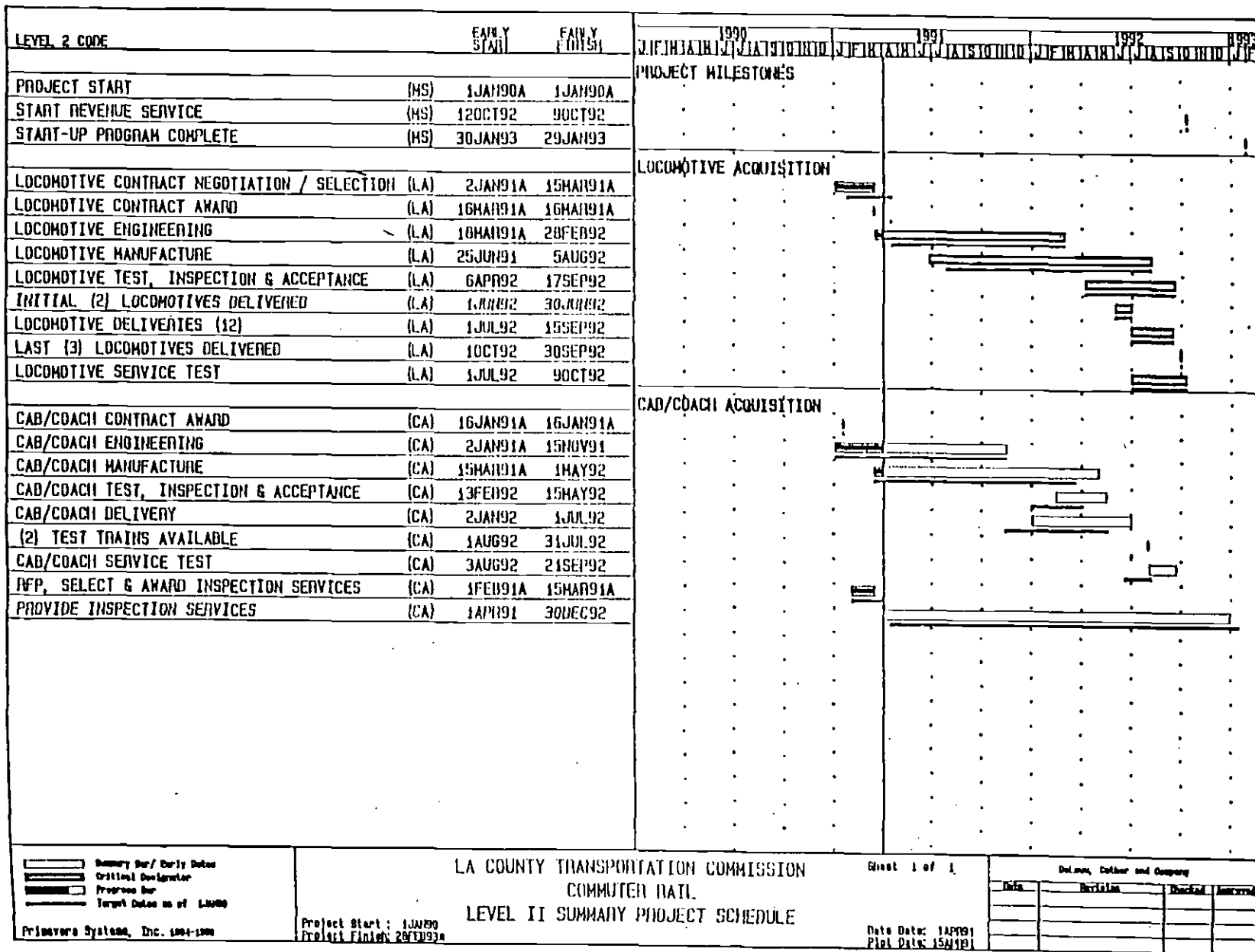
Concern: The initial design of the passenger vehicles do not include features which meet the latest ADA requirements.

Action: The vendor (UTDC) will review and assess impacts on design, cost and schedule. UTDC's review results are due by the end of May 1991.

Status: The review is continuing.

## SCHEDULE OF PAYMENTS

YEAR / QTR	UTDC		EMD-GM		TOTAL PROJECT		VARIANCE (PLAN-ACTUAL)
	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	
FY91 / 1	11,597,062	11,597,062	13,722,369	13,722,369	25,319,431	25,319,431	0
FY91 / 2	0	0	0	0	0	0	0
FY91 / 3	6,958,238	0	8,576,480	0	15,534,718	0	
FY91 / 4	4,092,075	0	0	0	4,092,075	0	
TOTAL FY91	22,647,375	11,597,062	22,298,849	13,722,369	44,946,224	25,319,431	0
FY92 / 1	10,384,358	0	8,576,481	0	18,960,839	0	
FY92 / 2	10,003,205	0	0	0	10,003,205	0	
FY92 / 3	8,456,020	0	1,816,196	0	10,272,216	0	
FY92 / 4	0	0	1,614,396	0	1,614,396	0	
TOTAL FY92	28,843,583	0	12,007,073	0	40,850,656	0	
FY94 / 4 RETENTION	51,542	0	0	0	51,542	0	
TOTAL PROJECT	51,542,500	11,597,062	34,305,922	13,722,369	85,848,422	25,319,431	0



## EXECUTIVE SUMMARY

### COST STATUS

The current Project Budget and Project Forecast is \$877,271,000. This figure includes the MC-5 contracts valued at \$30,322,000.

Costs totalling \$818,785,377 (93% of the budget) have been incurred to date and \$846,680,216 (97% of the budget) have been committed through the same time period.

The Light Rail portion (excluding MC-5) has incurred \$817,354,613 (97% of the budget) and committed \$843,098,747 (99.5% of the budget) to date.

### SCHEDULE STATUS

Construction progress (excluding MC-5) was measured at 100% compared to the planned progress of 100%

### AREAS OF CONCERN

#### Traffic Predictor

Concern: The predictors are not yet functional as planned due to software development problem.

Action: RCC is working with consultant on the development and testing of the software.

Status: The software program is still under development.

#### Metro Blue & Red Line Cost Sharing

Concern: The Cost of work performed for the Metro Blue Line under the Metro Red Line is exceeding the current forecast.

Action: RCC Program Managers are examining the cost sharing percentages, and TRANSCAL is developing the cost impact of the Red Line on the Blue Line.

Status: Examination of the percentages and cost impact evaluation is underway.

#### **DBE & WBE PARTICIPATION**

As of March 1991, 19.29% DBE and 8.85% WBE (28.14% total) participation levels were achieved, which continues to surpass the established goal of 23%.

#### **KEY ACTIVITIES - MAY**

- Maintained cost data base and prepared status report.
- Completed close-out of Contracts C117, H812, P322, P330, and H825.
- Coordinated transfer of Contract C4710.

#### **KEY ACTIVITIES - PLANNED FOR JUNE**

- Maintain cost data base and prepare status report.
- Coordinate transfer of cost data base to RCC.
- Coordinate close-out of Contracts C415, C140, H811 and P851.
- Coordinate transfer of Contracts H831 and H832 to OKA.
- Coordinate transfer of Contract H840 to Booz Allen & Hamilton.
- Coordinate transfer of Contract C355R to RCC.

LOS ANGELES COUNTY TRANSPORTATION COMMISSION  
SCHEDULE OF COST RECOVERABLE CONTRACT FACILITIES  
AS OF MAY 31, 1991

AGENCY	MCA NUMBER	AGREE, DATE	FACILITY	COSTS RECOVERABLE				UNPAID BALANCE	UNBILLED BALANCE	REMARKS
				TOTAL	BILLED	PAID	UNPAID BALANCE			
CalTrans	F210		Firestone Bridge.	456,000.00	456,000.00	0.00	456,000.00	\$0.00		Billed 10/89 90-1001. Backup still in review.
City of Compton **	F202	19-Dec-88	MC-5 Alternative	10,156,808.00	1,780,113.44	1,780,113.44	0.00	\$8,376,694.56		
			MC-5 Admin. Cost	345,874.00	345,874.00	345,874.00	0.00	0.00		
			SPTC/Watson Land	24,116.76	24,116.76	0.00	24,116.76	0.00		Invoice 91-0201
			SPTC/Right-of-way Acquisition	106,984.00	106,984.00	0.00	106,984.00	0.00		Invoice 91-0102 Payment on the way per Takahashi.
LA-CRA	F106	12-Oct-87	Century Blvd. grade crossing.	544,052.00	544,052.00	544,052.00	0.00	\$0.00		Balance received 11/3/89.
City of Los Angeles	F104	19-Dec-88	Street Lighting, Washington Blvd.	\$259,000.00	\$259,000.00	\$259,000.00	0.00	\$0.00		Paid
			Betterments and Backcharges	578,573.00	0.00	0.00	0.00	\$578,573.00		
City of Long Beach	C335		LB Station Superstructures	415,000.00	0.00	0.00	0.00	\$415,000.00		
LADWP			Flower Street Improvements	2,000,000.00	0.00	0.00	0.00	\$2,000,000.00		Beginning to negotiate for full C117.
LADWP	C140		Faulty Joints	17,500.00	0.00	0.00	0.00	\$17,500.00		
Los Angeles County	F208		Florence-Graham station imps.	0.00	0.00	0.00	0.00	\$0.00		Not recoverable per JMG
Owens-Corning		18-Mar-88	Mealy Street Spur	80,000.00	0.00	0.00	0.00	\$80,000.00		Will be billed at completion.
Simmons Cable TV			Install duct bank at 10th St. & LB	6,084.00	6,084.00	6,084.00	0.00	\$0.00		Bill 01-02-90, paid 01/19/90
SCRTD	F815	08-Jul-86	Central Control Facility	1,580,000.00	1,580,000.00	1,580,000.00	0.00	\$0.00		Prepaid by SCRTD.
SCRTD	F815		Construction, 7th & Flower station Refund of Insurance premiums.	655,969.56	655,969.56	655,969.56	0.00	\$0.00		Paid 3/91 by MTIA
Southern California Edison			Install duct bank at PCH	16,000.00	16,000.00	0.00	16,000.00	\$0.00		Billed at completion per RJM.
SPTC	F208		Firestone Bridge.	830,000.00	830,000.00	783,078.00	46,922.00	\$0.00		Partial payment 1/11/90. Balance in review by SPTC Legal Dept., re: CM expense allowability.

Prepared by: CONTRACT ACCOUNTING EXT. 6788

Date: 14-Jun-91

Page: 2

LOS ANGELES COUNTY TRANSPORTATION COMMISSION  
SCHEDULE OF COST RECOVERABLE CONTRACT FACILITIES  
AS OF MAY 31, 1991

AGENCY	MCA NUMBER	AGREE. DATE	FACILITY	COSTS RECOVERABLE				UNBILLED BALANCE	REMARKS
				TOTAL	BILLED	PAID	UNPAID BALANCE		
United Logistics		22-Oct-88	K-Line Spur	325,000.00	325,000.00	325,000.00	0.00	\$0.00	Paid in full, 4/17/89.
TIA (Argonaut Insurance)			Refund, W/C Insurance premiums	2,052,000.00	2,153,207.00	2,153,207.00	0.00	(\$101,207.00)	Paid 12/13/89. Refund larger than estimated.
Various			Refund, Gen. Liab. Ins. premiums	490,000.00	247,417.00	247,417.00	0.00	\$242,583.00	Receivable after insurance company rate audit.
TOTAL LB-LA RECOVERABLE				\$20,938,961.32	\$9,329,817.76	\$8,679,795.00	\$650,022.76	\$11,609,143.56	
City of Glendale		19-Aug-88	Glendale Route Refinement Stud	75,000.00	57,180.52	57,180.52	0.00	17,819.48	
City of Lawndale		15-Sep-88	Coastal Corridor Study	16,800.00	16,800.00	16,800.00	0.00	0.00	Paid 4-5-90.
City of Pasadena		01-Jan-88	Pasadena Route Refinement Stud	\$150,000.00	\$104,786.50	\$104,786.50	0.00	\$45,213.50	Billed by Susan Rosales, as Bechtel bills LACTC.
City/Redondo Beach		21-Jun-88	Coastal Corridor Study	7,000.00	7,000.00	7,000.00	0.00	0.00	Received 8/10/89
City of Torrance		30-Aug-88	Coastal Corridor Study	46,200.00	46,200.00	46,200.00	0.00	0.00	Received 8/9/89
Caltrans	64K576	26-Mar-90	LAUPT Access Study	200,000.00	149,302.47	147,809.44	1,493.03	50,697.53	Commuter Rail Bill 91-0303
TOTAL COSTS RECOVERABLE				\$21,233,961.32	\$9,561,784.78	\$8,911,762.02	\$650,022.76	\$11,672,176.54	
** City of Compton			West Alameda Underpass	702,660.00	330,433.45	325,222.70	5,210.75	372,226.55	\$5210.75 of unpaid represents Admin costs due RCC.
Courtesy Billings/Wildan Associates (Billed to County of Los Angeles)			Mealy Street - Environment Assm	87,699.00	85,086.89	83,776.77	1,310.12	2,612.11	\$1310.12 of unpaid represents Admin costs due RCC. Per County of LA, costs not allowable now.

## 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.		
C4710	Misc. Construction						Delivered	
H812	OCS						Delivered	
P822	Concrete Ties						Delivered	
C355R	Long Beach Landscaping	O	O	O	O		Work in progress/to be transferred to SCRTD	14-Jun-91
C140	LACBD Approach	O	O	O	O		RCC team working on claim negotiation	24-Jun-91
H811	TPSS	O	O	O	O		(Orig. closeout: 06-May)	24-Jun-91
H831	SCADA	O	O	O	O		Contract to be transferred to OKA (Green)	24-Jun-91
H832	Cable Transmission (CTS)	O	O	O	O		Contract to be transferred to OKA (Green)	24-Jun-91
H840	Fare Collection		O	O	O	O	Contract to be transferred to BAH (Green)	24-Jun-91
P851	Hi-Rail Trucks						Back charges under dispute (Orig.: 06-May)	24-Jun-91
P852	Re-Railing Truck, Car Mover							24-Jun-91

## **EXECUTIVE SUMMARY**

### **COST STATUS**

The total project budget for the Metro Green Line is \$886 million. Current cashflow information reflects a total project expenditure of \$79 million, representing approximately 9% of total dollars available. To date, the project commitments are \$228 million, approximately 26% of the total budget.

### **SCHEDULE STATUS**

The May 1991 update of the master schedule indicates that the Green Line is 118 working days behind the target revenue operations date (ROD) of October 1994. The current predicted ROD for the Green Line is March 22, 1995.

The critical path runs through Contract P1900 (High Performance Transit Vehicles) and H1100 (Automatic Train Control). The secondary critical path runs through the El Segundo Segment Contracts C0101 (Foundations and Utilities); C0100 (I-105 to Compton Boulevard); C0610 (Trackwork Installation); and H1400 (Overhead Contact System).

### **PROFESSIONAL SERVICES**

#### *O'Brien-Kreitzberg*

OKA held the second Resident Engineer Training class. Field as well as RCC personnel were in attendance. This training emphasized policies and procedures required for use on the project. In addition, the contract's terms and conditions were discussed and emphasized.

A working session was held with all resident and office engineers reviewing the monthly progress payment procedure. OKA Construction Management staff has also implemented weekly inspection training covering a wide range of topics. During the month of June, OKA is scheduled to provide two safety training meetings for OKA, Parsons-Dillingham (P-D), the Metro Red Line construction manager and RCC personnel. Thereafter, safety training will be held on a monthly basis, alternating between OKA and P-D offices.

***LTK Engineering Services***

LTK is commencing preparation for vehicle procurement negotiations. Other items needing resolution are the airport/HPTV interface problems and the new concerns resulting from the passage of the Americans with Disabilities Act in Congress (see further information in the Professional Services section of this report).

***TRANSCAL II***

TRANSCAL II continues to make progress towards finalizing the baseline design work and is supporting the construction effort by providing design services during construction. TRANSCAL is in full production of the North Coast design and is performing an ongoing liaison with the representatives from the Department of Airports, FAA and LAX in order to resolve potential impacts to the design and construction schedule for the North Coast segment.

**REAL ESTATE**

Real Estate Right of Entry continues to keep pace with construction. However, access to Southern California Edison and TRW properties has become critical.

**CONSTRUCTION/PROCUREMENT****Facilities**

Status of the four civil construction contracts in the El Segundo segment follows:

Contract C0100: I-105 to Compton Boulevard

In the Pre-Award stage as of May 30, 1991. Notice to Proceed is scheduled for July 1, 1991.

Contract C0101: I-105 to Compton, Foundations and Utilities

In the construction phase.

Contract C0110: I-105 to Compton, Segmental Bridges

In the contractor's mobilization stage.

Contract C0400: Hawthorne Yard and Shop, Buildings and Site Finish

In the bid phase. Bid scheduled for July 2, 1991.

TRANSCAL II submitted Contract C1001 (Utilities and Foundations, Imperial to Lot "C") 100% design review for comments on May 6, 1991. The comments returned by OKA on May 16, 1991 included the need for geotechnical data and establishment of construction easement and traffic control plans compatible with DOA operations. OKA's recommendation is to resolve these issues before advertisement of C1001.

### **Systems**

The H0832 Metro Blue Line Cable Transmission System and the H0831 Metro Blue Line SCADA contracts have had their original contract options exercised, extending their scope of work to include the Metro Green Line Project. The scope of these contracts is currently under revision through the change order process.

## **AREAS OF CONCERN**

### **ONGOING**

#### **Third Party Issues**

**Concern:** The relocation of oil lines belonging to Chevron (south of Rosecrans Avenue) could impact construction of the I-105 to Compton contracts C0100 and C0101 (Foundations and Utilities), and has already affected C0110 (Segmental Bridges).

**Action:** The Chevron oil lines should have been relocated by the end of June 1991 to avoid delays in the C0110 construction schedule. As it is now apparent that completion in June will not take place, the C0110 contractor was asked to reschedule the operation based on Chevron finishing their work by September, 1991, thereby giving the C0110 contractor access to the area from that date.

**Status:** The RCC and Chevron management met to discuss expediting the relocation of the oil lines. Following the RCC's April authorization, Chevron has arranged with a contractor to perform this work. A preconstruction meeting with the chosen contractor was held on May 6, 1991, but work has not started due to lack of sufficient construction easement on the TRW property (Parcels AS 521, AS 527). Present impact on the C0110 schedule, Rosecrans Bridge, is projected to be three to four months.

**Caltrans Rail Access Dates**

- Concern:** The start of Century Freeway construction has slipped from the original plan. Caltrans' forecast for rail access dates has been changed with no suggested methods of acceleration by Caltrans to compensate for the effect on the Light Rail Transit (LRT) master schedule.
- Action:** After the full scope of LRT design changes has been assessed by all interested parties, OKA and Caltrans must solidify access dates so that the systems installation schedule can be finalized. Once this is done, the schedule language for the systems contracts can be updated to reflect the projected dates.
- Status:** The OKA task force continues to discuss the projected rail access and light rail construction issues with Caltrans. Recent meetings have been held with Caltrans design, project control and field personnel to identify accurate access dates.

**Hazardous Waste*****Kramer Property***

- Concern:** It is not yet determined what total effect the treatment and handling of Kramer property hazardous waste material will have on the Kramer Bridge construction or on SCE utility relocations. A delay to the C0110 contractor may occur.
- Action:** The method of construction and the handling of the hazardous waste material located on the Kramer property should be approved by the Department of Health Services (DHS) before construction on the Kramer property can begin. The RCC has applied for the required permit through the DHS, but the DHS has requested further sampling and testing of soil from the two Kramer Bridge bent locations.
- Status:** Tetra Tech will be doing the sampling; at present, they are negotiating an agreement for work on the Southern Pacific Railroad's property, a prerequisite to sampling in the field. Each new requirement from DHS has a 30-day turn-around, and it is predicted that it will take 60-90 days to obtain the necessary permit.

*Hawthorne Yard and Shop*

**Concern:** The identification, quantification, abatement and/or clean-up of asbestos, PCB's and hydrocarbon contaminated soils at the site needs addressing and resolution.

**Action:** OKA and its environmental consultant (GEOFON, Inc.) continue to perform tests at the site and prepare findings for presentation to the Department of Health Services (DHS) to obtain approval of the remediation plan.

**Status:** The Preliminary Endangerment Assessment is being prepared for presentation to the DHS. Two meetings have been held to determine the needs of the DHS regarding characterization of the contaminants.

It is the goal of OKA and GEOFON to limit the extent of clean-up to minimize cost to RCC and impact on the C0400 construction schedule.

Addendum No. 4 to the C0400 bid package is being finalized. Five specification sections in Division 17 will be added to address the hazardous waste discovered to date.

**Segmental Bridges**

**Concern:** The Contractor has submitted an early completion schedule which suggests completion two months earlier than the time allowed in the bid documents. In addition, Third Party issues at Rosecrans Avenue as well as the Kramer property have construction almost at a standstill. There is potential for a delay claim related to easement unavailability, and for a cost claim related to hazardous materials at the Kramer site. At the date of this report, Notices of Intent to claim had not been received.

**Action:** OKA is preparing a detailed reply to the Contractor's schedule which identifies the two months in question as float only -- the schedule will not be shortened by two months. Acceptance of the Contractor's plan without condition will not be allowed.

OKA is meeting with Chevron on a weekly basis in an attempt to expedite the relocation of underground lines required to free the Rosecrans Avenue location for construction of the bridge.

OKA is closely monitoring RCC's interaction with DHS to obtain the approval required to begin work at the Kramer property.

**Status:** It appears that relocation of the Chevron lines will not be completed until September 1991, which will delay construction of the segmental bridge at that location for three months.

A letter from DHS to RCC dated May 20, 1991 asks for additional information on the Kramer site. Obtaining the information, presenting same to DHS, and obtaining approval to begin construction is anticipated to take 60 to 90 calendar days.

The Contractor's request to begin construction at the Kramer location as an effort to mitigate the Rosecrans Avenue delay may not be accepted because of the DHS impact.

#### **Vehicle Delivery Schedule**

**Concern:** When the baseline Project Master schedule was established in December 1989, the delivery date for the first Light Rail Vehicle (LRV) was December 1992. Delivery has since been delayed until September 1993, a schedule slippage of approximately nine months. The delay is due to design evolution and extension of bid response time requested by prospective bidders. Although workarounds in the schedule have been incorporated to absorb four months of the slippage, the remaining time has pushed the critical path to reflect a forecast project completion date of March 22, 1995, 118 days behind schedule.

Under the current scenario, if the October 1994 ROD is to be maintained, the current vehicle delivery schedule would allow approximately two months for overall systems testing and integration. This may not be sufficient time to fully test and commission a driverless, automatic train control system. The baseline schedule allowed seven months for the overall systems testing and integration portion of the project. Seven months is the anticipated minimum amount of time required to complete these tasks.

**Action:** The vehicle delivery schedule must be determined and the impact of this schedule on the overall Project Master Schedule must be analyzed.

**Status:** Proposals have been under review by LTK and the RCC. Negotiations will

indicate contract pricing and the final vehicle delivery schedule.

NEW

**North Coast Extension**

**Concern:** OCS structures intrude, as designed, into the LAX 50:1 glide slope with possible impact of EMI/RFI on the ILS system.

A resolution impasse could result in substantial redesign of the North Coast segment and adversely affect ROD.

**Action:** The RCC is currently addressing resolution of this problem.

**Status:** A consultant has been retained to study the EMI/RFI impacts. Additionally, TRANSCAL is currently studying the issue of glide slope intrusion.

**KEY ACTIVITIES** May**Contract C0100: I-105 to Compton Boulevard**

Review of the protest was completed and the contract has been recommended for award to Steven P. Rados Company.

**Contract C0400: Hawthorne Yard and Shop, Buildings and Site Finish**

New bid and award cycle was established for this contract. RCC issued direction on the hazardous waste abatement.

**Contract P1800: Special Trackwork Procurement**

Proposals were evaluated for this contract and the RCC recommended that the award go to the second lowest responsive proposer.

**KEY ACTIVITIES** Planned for June**Contract C0400: Hawthorne Yard and Shop, Buildings and Site Finish**

An addendum will be issued to incorporate the hazardous waste clean-up into the scope of this contract. Pre-bid meeting is scheduled for June 19, 1991.

**Contract C0100: I-105 to Compton Boulevard**

Preaward Meeting will be on June 12, 1991 and the Preconstruction Meeting will be June 26, 1991. Contract will be awarded during June with Notice to Proceed date of July 1, 1991.

**Contract C0101: I-105 to Compton, Foundations and Utilities**

Potholing and installation of foundations on Hughes property will begin.

**Contract C0110: I-105 to Compton, Segmental Bridges**

Chevron oil lines relocation scheduled for May 1991 will now start in June.

**Contract C1001: Utilities and Foundations, Imperial to Lot "C"**

Will be advertised for bid on June 26, 1991.

**Contract H0900: Safety and Security Communications System**

Will be advertised for bid on June 6.

**FUND SOURCE STATUS  
(IN THOUSANDS OF DOLLARS)**

STATUS: 05/31/91

SOURCE	TOTAL ANTICIPATED FUNDS	TOTAL FUNDS RECEIVED	OBLIGATIONS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
PROP 108	107,500	0	1,109	1%	1,109	1%	0	0%
TCI	36,000	0	0	0%	0	0%	0	0%
PROP A	742,500	78,649	226,927	31%	77,540	10%	79,649	11%
TOTAL	886,000	78,649	228,036	26%	78,649	9%	79,649	9%

O'BRIEN-KREITZBERG  
 CNE  
 Project: 825  
 Period: 4/27/91 to 5/31/91

RAIL CONSTRUCTION CORPORATION  
 METRO GREEN LINE  
 Project Cost by Element

Page: 1  
 Report Date: 05/12/91  
 Status Date: 05/31/91

[ \$ x 000's ]

Description	----- Budget -----		--- Authorized --- -- for Expenditure --		--- Commitments ---		-- Incurred Cost --		--- Expenditures ---		Current	
	Original [1]	Current [2]	Period [3]	To Date [4]	Period [5]	To Date [6]	Period [7]	To Date [8]	Period [9]	To Date [10]	Forecast [11]	Variance [11-2]
7 Construction	321,394	387,379	0	31,306	46,309	117,334	1,509	24,309	431	18,378	606,354	18,835
8 Professional Services	139,098	139,196	16,899	41,288	2,293	85,549	4,212	56,439	4,401	50,425	139,296	100
8 Real Estate	49,916	49,916	0	10,739	0	21,007	34	9,321	34	9,319	52,416	2,700
F Utility/Agency Force Accounts	16,310	16,310	0	7,091	87	4,354	26	437	28	377	16,310	0
D Special Programs	3,071	3,217	0	0	808	908	20	100	0	0	3,217	0
C Contingency	85,637	84,468	0	0	0	0	0	0	0	0	62,833	(21,635)
4 Project Reversals	(16,626)	(16,626)	0	0	(16)	(1,117)	(16)	(430)	(16)	(430)	(16,626)	0
Project Grand Total :	514,008	686,008	16,899	138,895	89,482	228,856	5,783	90,626	4,877	78,649	805,000	0

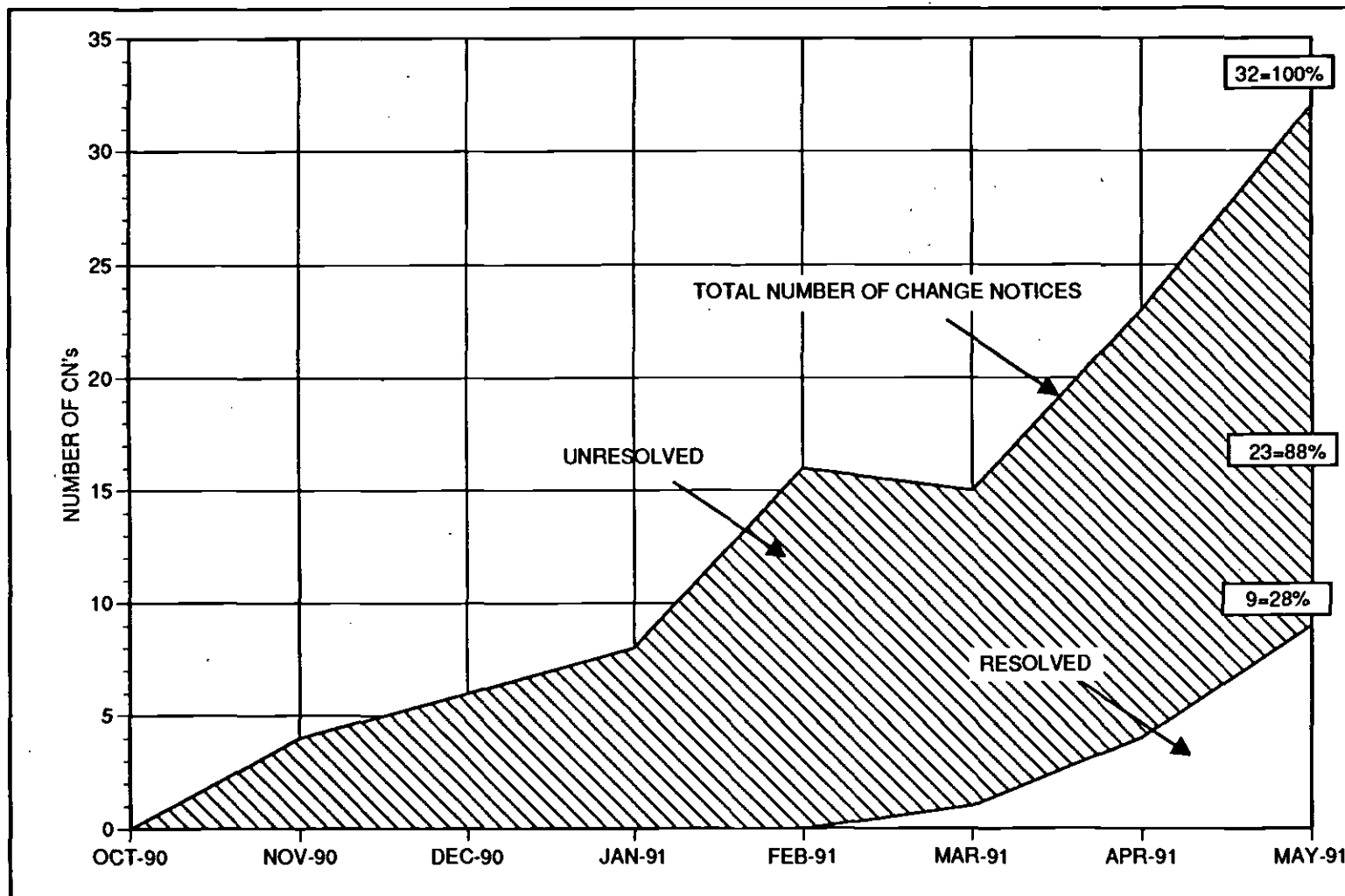
NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

**PROJECT: R23  
CONSULTANT CONTRACT CHANGE STATUS SUMMARY  
PENDING CHANGES/AMENDMENTS  
AS OF 05/31/91**

(0 = THOUSANDS)

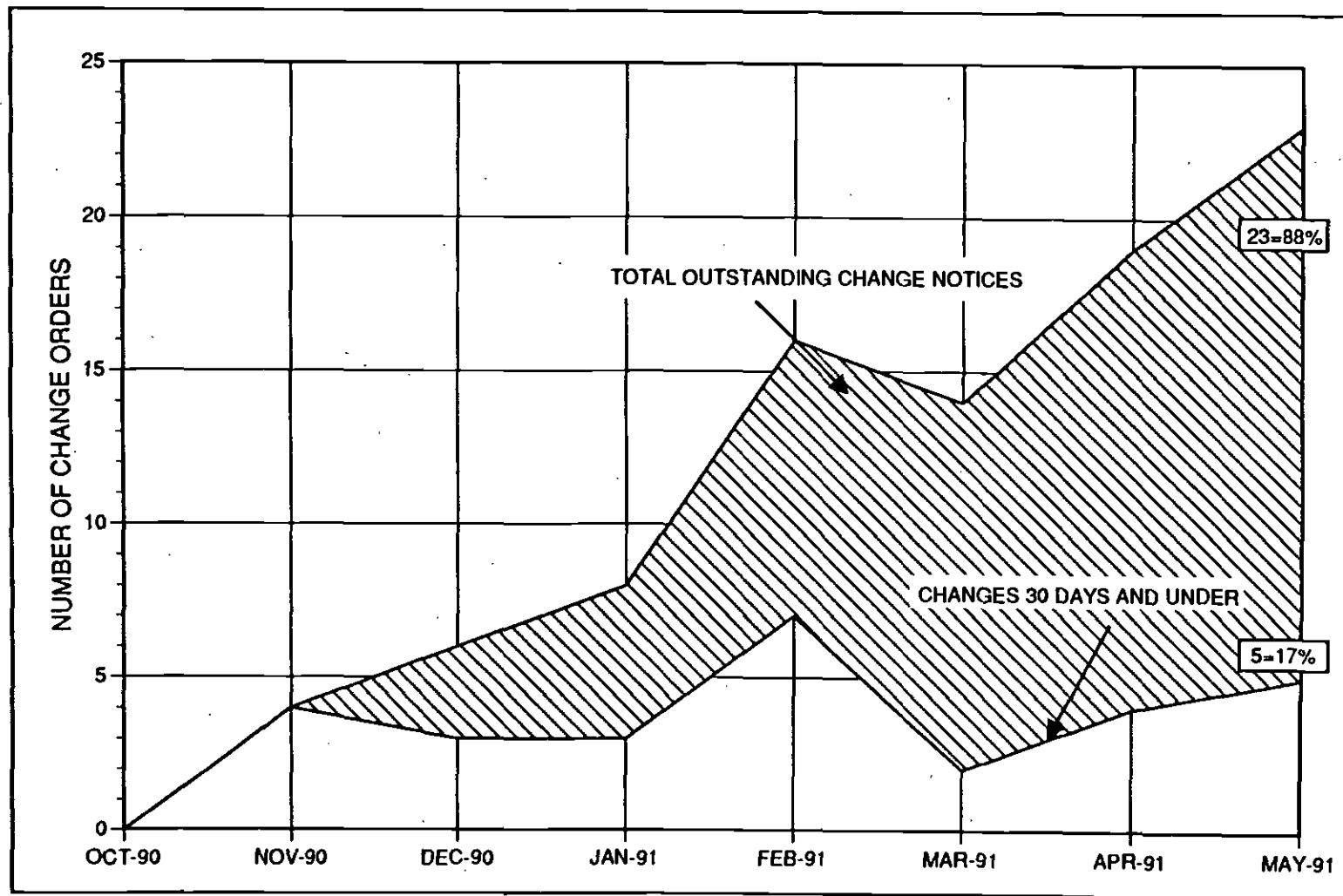
CONSULTANT CONTRACTS	TRANSCAL: E2301/MC005		MRTC: 2997		PD: 3369		OKA:		OTHER		PROJECT TOTAL		LAST MONTH		VARIANCE	
	#	0	#	0	#	0	#	0	#	0	#	0	#	0	#	0
ASSIGNED/NOT SUBMITTED											0	0	0	0	0	0
SUBMITTED/IN PROCESS	2	107									2	107	0	0	2	107
APPROVED/ISSUED									1	31	1	31	0	0	1	31
NEGOTIATED											0	0			0	0
COMPLETED (AMENDMENT ISSUED)											0	0			0	0
CONTRACT TOTAL	2	107	0	0	0	0	0	0	1	31	3	138	COMMENTS:			
LAST MONTH	0	0	0	0	0	0	0	0	0	0	0	0				
VARIANCE	2	107	0	0	0	0	0	0	1	31	3	138				

# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Notice Resolution

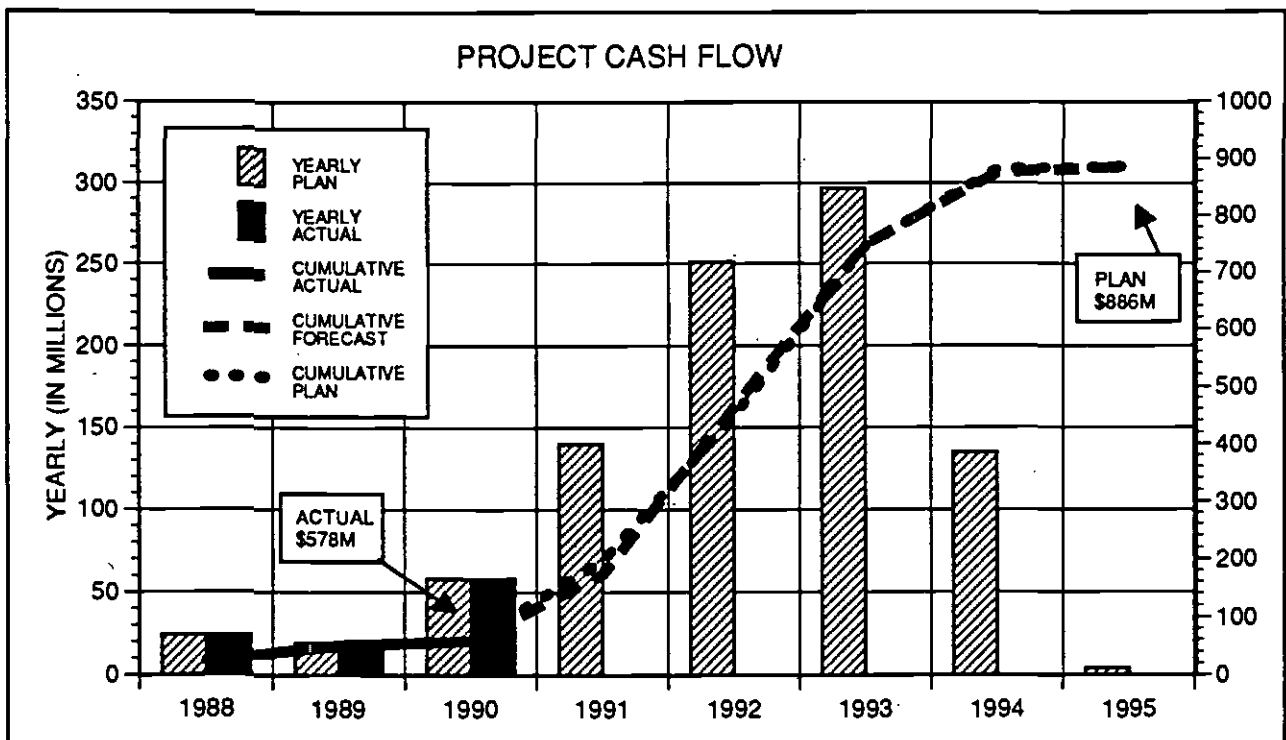
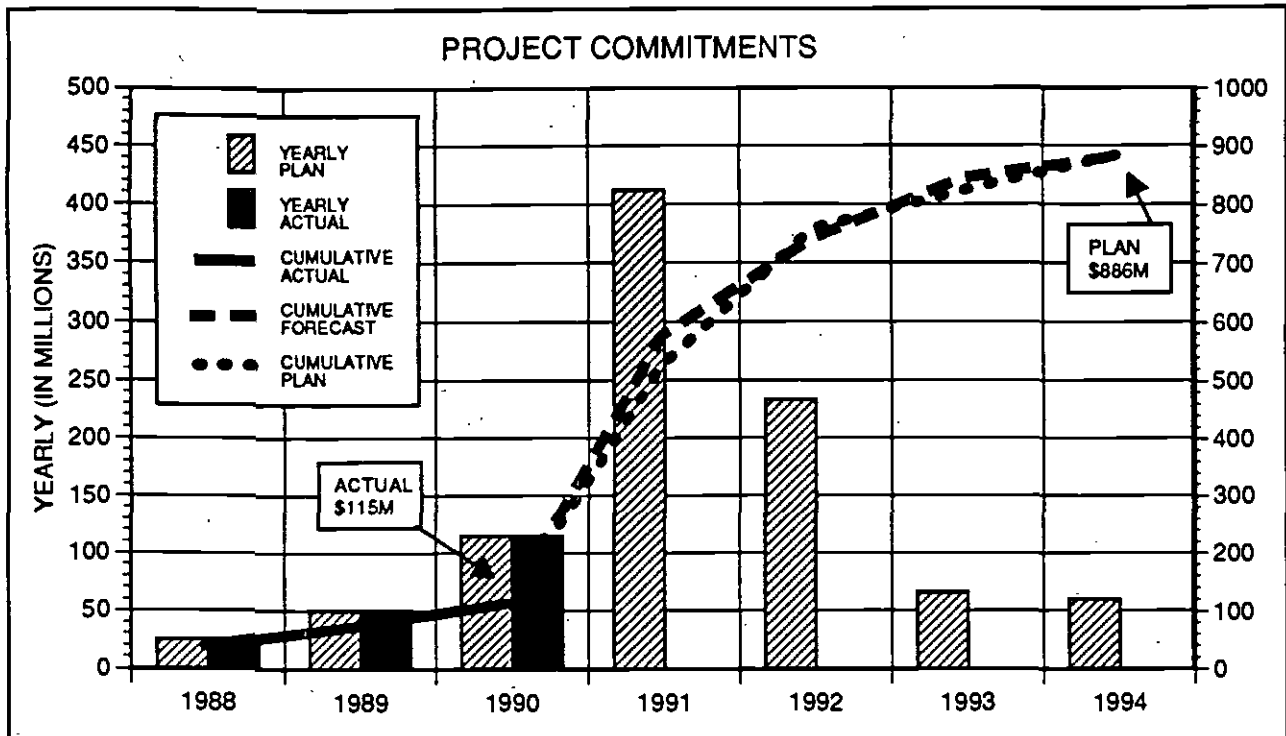


FROM THE TWENTY (20) ACTIVE CHANGE NOTICES, SIXTEEN (16) ARE FROM CONTRACT C0101, ONE (1) FROM CONTRACT C0110, AND THREE (3) FROM H0832

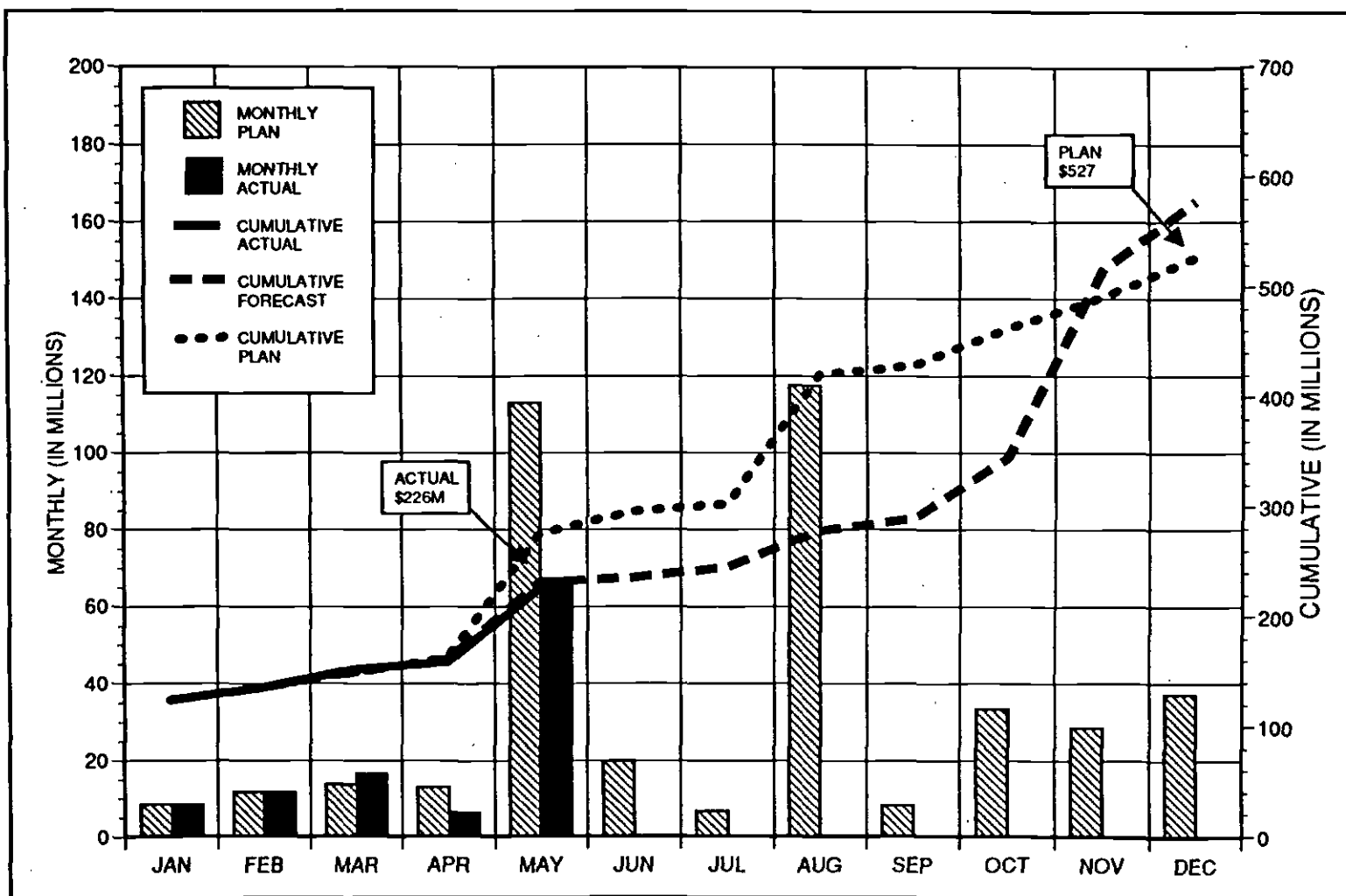
# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Activity Progress



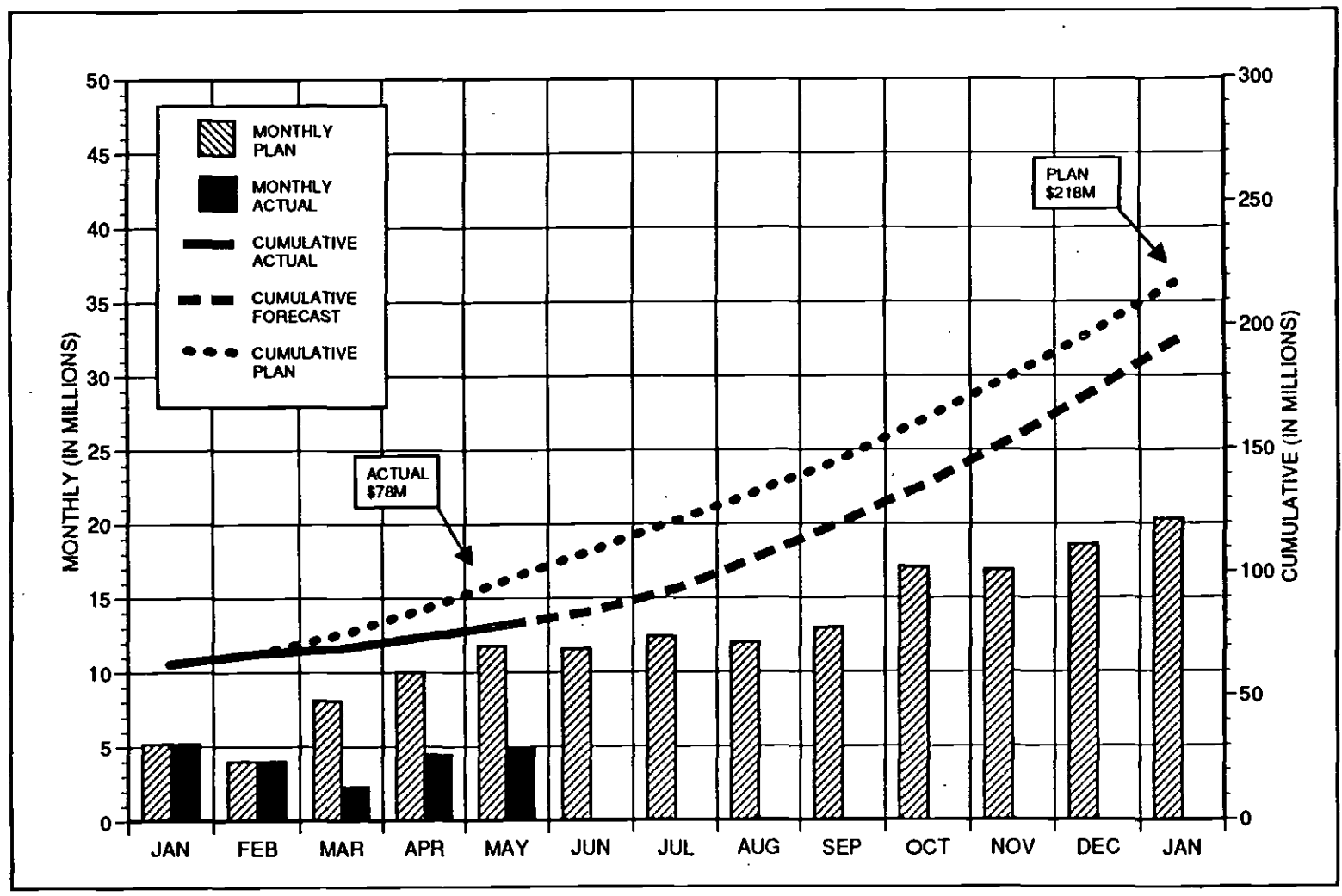
3 Change Notices - Awaiting data from Transcal; 4 Change Notices - Converted to Change Orders (awaiting packages from OKA field office; 6 Change Notices - Waiting for hazardous language from RCC; 1 Change Notice - Waiting for schedule information; 2 Change Notices - Awaiting LACTC Board approval; 3 Cost Plus Change Notices - Work Incomplete.

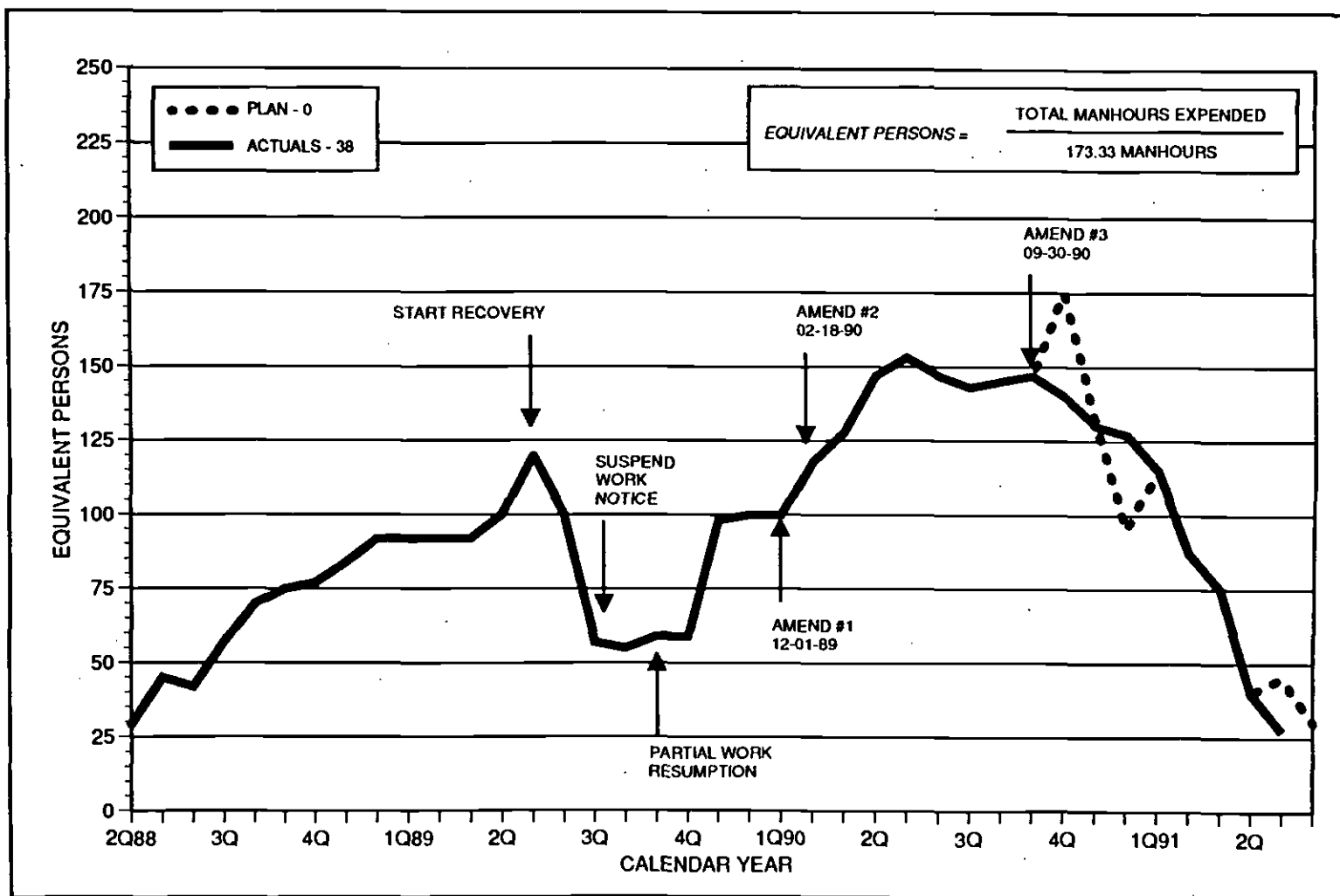


## PROJECT COMMITMENTS

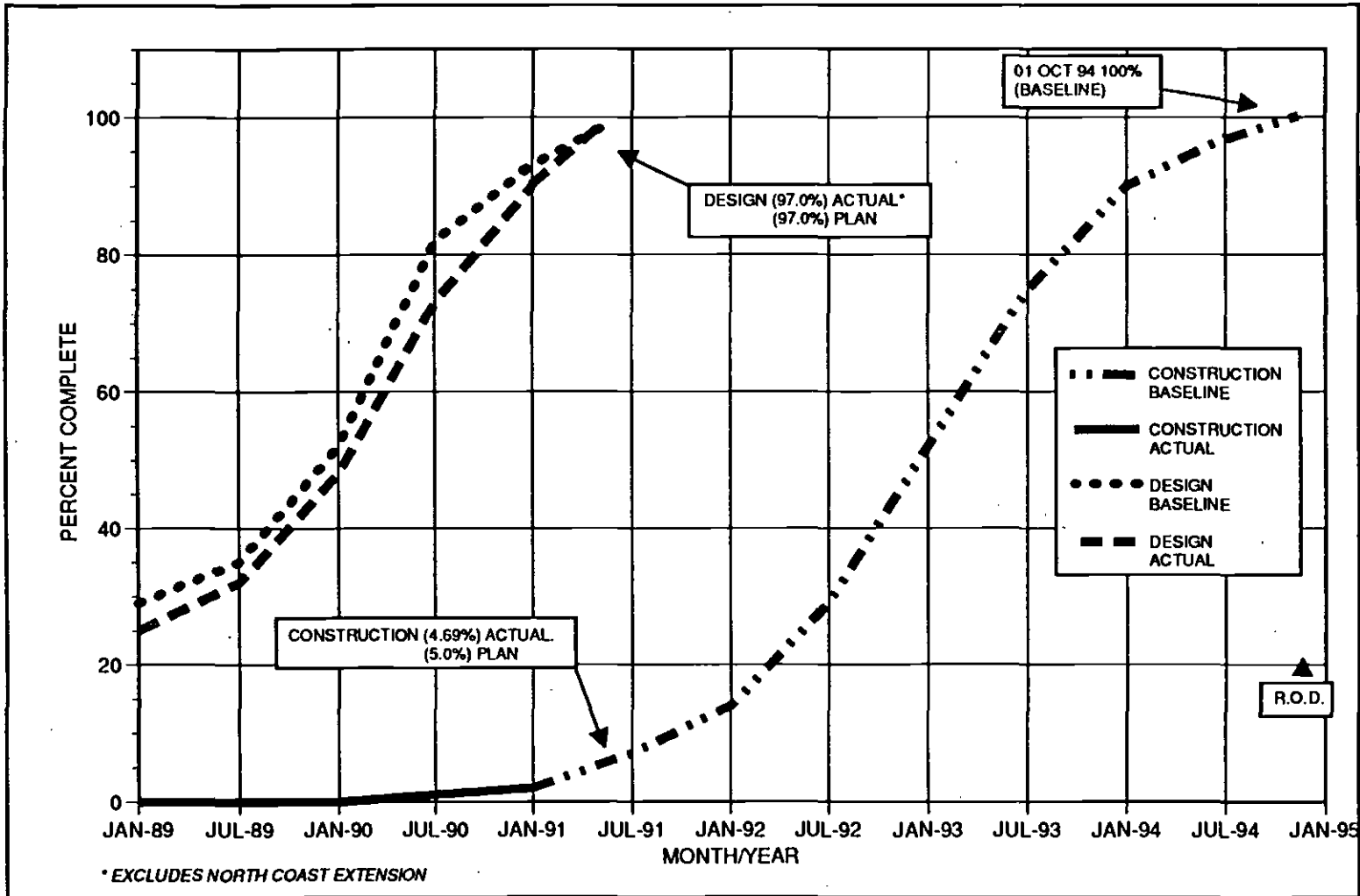


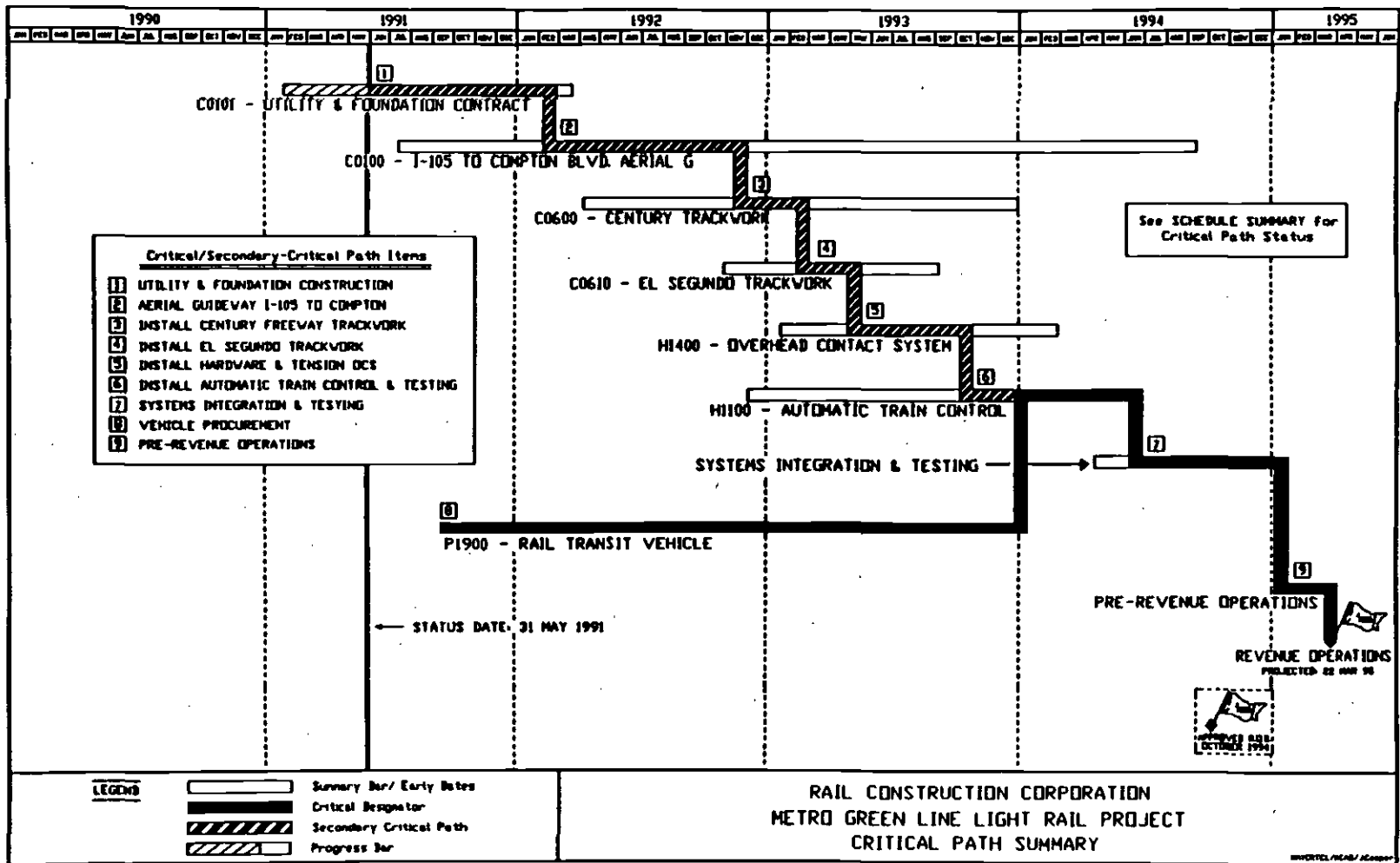
# PROJECT CASH FLOW



NORWALK-EL SEGUNDO DESIGN SERVICES  
STAFFING PLAN

# EXECUTIVE SUMMARY SCHEDULE





## REAL ESTATE - STATUS SUMMARY

CCU	NO. OF PARCELS	NUMBER CERTIFIED		JUST COMP APPROVED		OFFERS MADE		AGREEMENT SIGNED		CONDEM- NATION	PARCELS AVAIL **		PARCELS NOT AVAIL	CONSTRUCT NTP DATE
		PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL		PLAN	ACTUAL		
C0100	10	10	10	10	3	9	3	9	2	1	10	2	8	06/05/91
C0101	18*	18	18	18	18	18	18	18	17	0	18	17*	1	11/26/90
C0110	6	6	6	6	2	6	2	6	2	0	6	2	4	04/01/91
C0400	5	5	5	5	2	5	3	5	3	0	5	3	2	07/18/91
TOTAL	39	39	39	39	25	38	26	38	24	1	39	23	15	

### NOTE:

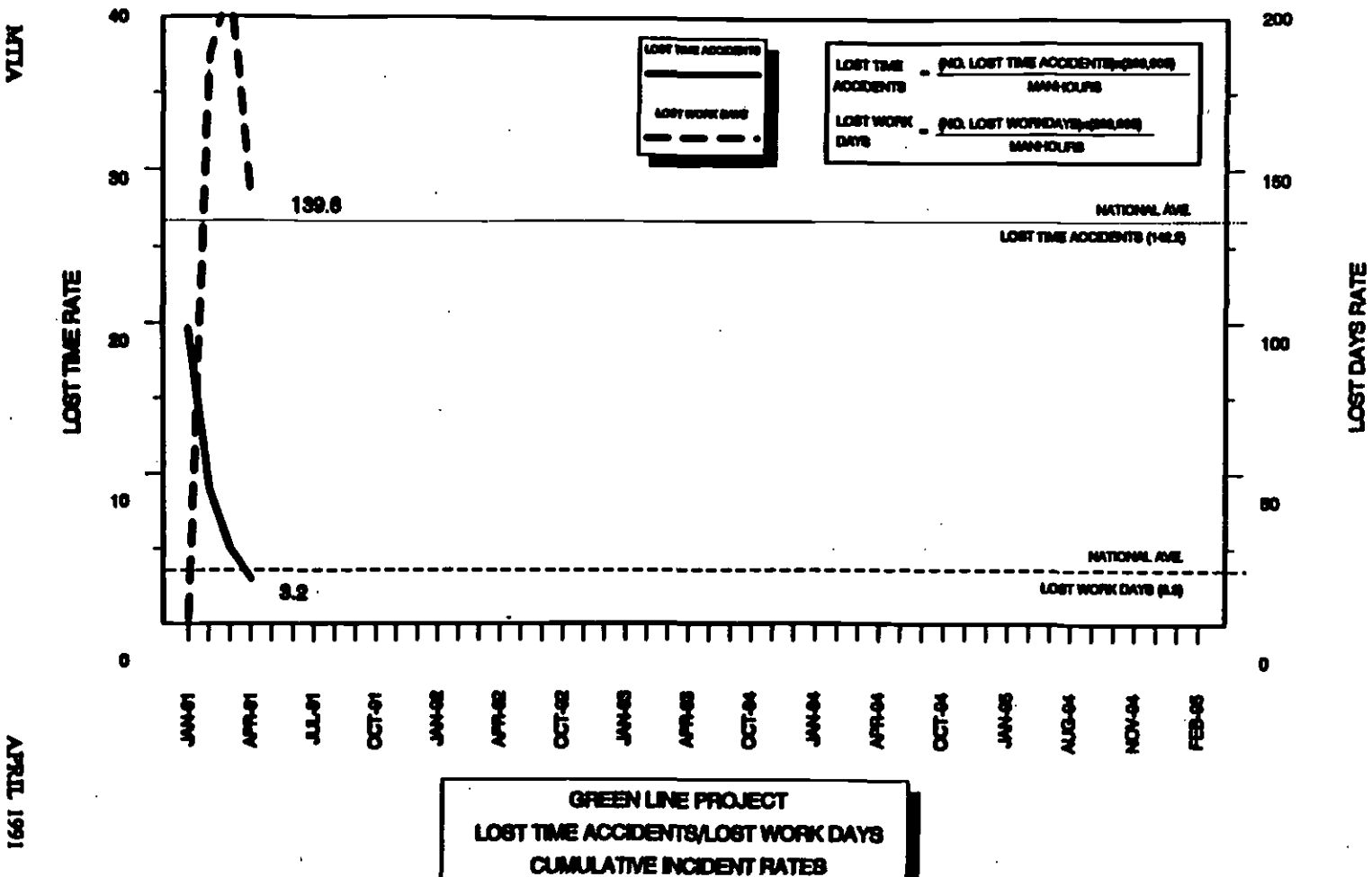
\* Number Includes Exhibits A and B, Railroad Agreements.

\*\* Includes Right-Of-Entry to parcels.

C0100 - Cert # 540, 541 and 542 added.

C0101/C0110 - Right-Of-Entry to TRW property has been granted for construction staging and storage only and is therefore being classified as not available.

C0400 - NTP date shown is the current proposed date.



Total manhours as of April 1991: 67,561

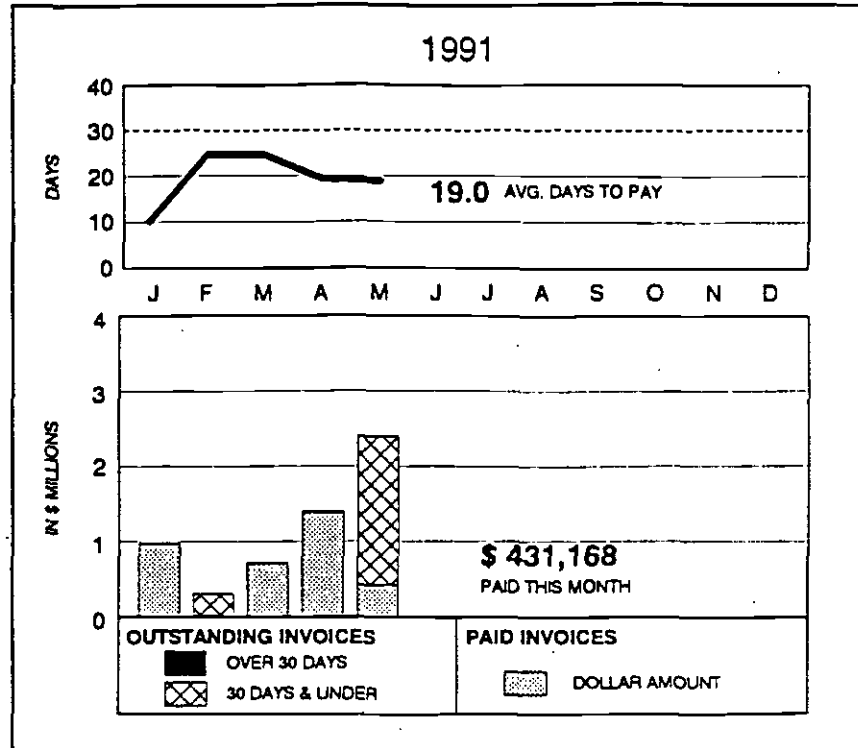
## INVOICE PROCESSING

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

- 4 invoices were paid for a total value of \$431,168.

- 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
JAN 1991	1	8,737	0	0	9	2,811,699	2	8,152
FEB 1991	1	296,928	0	0	11	1,586,103	2	8,152
MAR 1991	1	10,126	0	0	7	2,638,217	2	8,152
APR 1991	1	11,840	0	0	14	2,731,169	1	2,778
MAY 1991	4	1,971,943	0	0	17	3,318,597	3	5,006

## EXECUTIVE SUMMARY

### COST STATUS

The original Baseline Budget for the Project is \$1,250 million. The Current Approved Budget (based on the December 1990 forecast) is \$1,450 million. The May forecast is also \$1,450 million.

The Project commitments to date are \$1,166 million, or 80% of the total forecast. The cash flow plan reflects a total Project expenditure to date of \$1,049 million, or 72% of the total forecast. Incurred costs to the Project are \$1,057 million, or 73% of the total forecast.

### SCHEDULE STATUS

The overall duration of MOS-1 as indicated in the current Project schedule remains unchanged at 84 months to reflect a revenue operation date (ROD) of September 1993. Value of work in place as of May 31, 1991, is 80% actual versus 82% planned.

### PROFESSIONAL SERVICES

Primary work efforts in May were directed at mitigating impacts to the Project schedule, design misalignment at interfaces for all Stage II contracts, and integrating a full range of testing activities into the Project schedule.

### REAL ESTATE

All of the real estate required for MOS-1 construction is available under ownership by the Rapid Transit District or under a right-of-entry. Currently, 14 parcels are in the acquisition process.

### CONSTRUCTION/PROCUREMENT

During May, corrective work to floating slabs was completed, and the physical close-out of contracts continued. Rework continued on the walkway in the Contract A146, Line Section 5th/Hill to 7th/Flower, tunnel.

## AREAS OF CONCERN

### ONGOING

#### **August 1990      Contract A650, Vehicles (Booz Allen Hamilton)**

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

**Action:** The Rail Construction Corporation (RCC) has developed a plan which would alter 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. Other measures are also being considered by the RCC.

**Status:** The current forecast is an August 1991 shipment of one paired set of vehicles to the TTC and delivery of one paired set of vehicles to Los Angeles in January 1992. Static testing is scheduled for completion mid-June and the vehicles will be shipped to Colorado in August as per the mitigation plan.

#### **February 1991      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:** Completion of MRTC's review was required before further action could be taken.

**Status:** This activity remains on the critical path. All equipment critical to the schedule has been issued for procurement. Design will be locked in place June 14, 1991.

**AREAS OF CONCERN (CON'T)**NEW**May 1991****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.

**Status:** The Contract A640 design will be locked in place by June 14, 1991, allowing work to proceed with no further changes. A meeting will be held June 11, 1991, with all parties to develop a plan and commitment to recover lost time.

RESOLVED**April 1991****Contract A187, Wilshire/Alvarado, Stage II**

**Concern:** The final design details are needed for CN-249, plenum enclosures and metal ceiling. This is causing a delay to the contract completion milestone date and a potential cost increase to the contract.

**Action:** MRTC will provide resolution of design issue.

**Status:** A design solution has been agreed upon. Negotiations with the contractor will conclude by June 3, 1991, and the contractor directed to proceed with the work. Overall impacts will be reviewed in June.

## AREAS OF CONCERN (CON'T)

### RESOLVED (CON'T)

**March 1991**

**Contract A620, Automatic Train Control  
Contract A650, Passenger Vehicles**

**Concern:** Parsons-Dillingham is unable to complete the procurement and installation of signalling equipment in the stations. Booz Allen Hamilton must finalize the design and engineering details with BREDA as quickly as possible to avoid an impact to the Project schedule.

**Action:** The RCC is working with Booz Allen Hamilton to expedite turnover of the required engineering details.

**Status:** The technical solution and costs have been agreed upon. Contract A620 has begun installation of the cable. Equipment installation is planned for a later date.

## UMTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

### ONGOING

**November 1990**    **Project Procedures**

**Concern:** RCC is falling behind in developing its procedures.

**Action:** Update, develop, and publish project procedures.

## UMTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEM FOR RCC ACTION (CON'T)

### ONGOING (CON'T)

Status: Project procedures are in the final review and sign-off process. Final drafts have been provided to Hill International for information purposes. No comments from Hill were received as of the end of May. High-priority procedures are forecast to be completed by mid-June 1991 (rescheduled from the end of April 1991).

### NEW

#### April 1991      Schedule Analysis

Concern: An expanded narrative to the Level III schedule is required to express project schedule analysis and recommended actions.

Action: Provide additional narrative including analysis and action recommendations to the Level III schedule.

Status: Narrative analysis and action recommendations have been added to the May 1991 schedule report. It is expected that this action will be closed following Hill review of the May report.

### RESOLVED

No UMTA PMOC actions were resolved this period.

**KEY ACTIVITIES - MAY**

- Assessed and resolved the electrical and HVAC design misalignment at interfaces for all Stage II contracts. A design misalignment at the Stage II interfaces has the potential to impact the Project schedule and cause cost increases. The Construction Manager has been working to mitigate such impact by resolving design misalignment issues with the MRTC.
- Completed corrective work to the floating slabs at Contract A175, Wilshire/Alvarado Station.
- Completed turnover of DWP and ATC rooms to Systems contractors as required.
- Continued Contract A146 tunnel rework.
- Established team to develop and implement System integration test.
- Developed a comprehensive punchlist of all Facility contract interfaces relating to Contract A710, Escalator/Elevator schedule.
- Applied approved grouting materials throughout the system.

**KEY ACTIVITIES - PLANNED FOR JUNE**

- Continue physical close-out of Contracts A130, Yard Leads and Transfer Zone; A135, Union Station, Stage I; A145, 5th/Hill Station, Stage I; A165, 7th/Flower Station, Stage I; A175, Wilshire/Alvarado Station, Stage I. This activity must be undertaken to ensure completion of the work, and to avoid delay in contract close-outs.
- Continue resolution of design misalignment at electrical/HVAC interfaces for all Stage II contracts.
- Continue conduit verification on a station by station basis.
- Continue turnover of DWP and ATC rooms to Systems contractors as required.

STATUS DATE : MAY 31, 1991  
 STATUS PERIOD : APRIL 27, 1991 TO MAY 31, 1991

RAIL CONSTRUCTION CORPORATION  
 PROJECT COST REPORT  
 Cost by Element  
 (\$000)

PROJECT : METRO RAIL RED LINE MOS-1

ELEMENT / DESCRIPTION	BUDGET		AUTHORIZED FOR EXPENDITURE		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST (11)	VARIANCE (11-2) (12)
	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)	PERIOD (9)	TO DATE (10)		
T CONSTRUCTION	694,181	730,483	0	740,676	5,001	650,491	8,888	550,622	20,773	535,894	739,934	9,451
S PROFESSIONAL SERVICES	397,758	481,308	0	303,332	188	385,020	(1,790)	379,451	8,438	387,679	484,681	3,375
R REAL ESTATE	90,894	139,820	(204)	116,565	(204)	116,565	(204)	116,565	(204)	116,565	139,820	0
F UTILITY/AGENCY FORCE ACCOUNTS	12,914	14,255	1	13,116	1	13,116	32	9,653	32	9,653	14,255	0
D SPECIAL PROGRAMS	948	948	0	520	0	520	15	255	15	255	988	40
C CONTINGENCY	53,225	83,207	0	0	0	0	0	0	0	0	70,341	(12,866)
A PROJECT REVENUE	0	0	0	0	0	0	0	0	932	(762)	0	0
PROJECT GRAND TOTAL	1,249,900	1,450,019	(203)	1,174,209	4,986	1,165,712	6,741	1,056,548	27,988	1,049,264	1,450,019	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

**FUND SOURCE STATUS**  
(IN THOUSANDS OF DOLLARS)

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
UMTA-Section 3	\$605,300	\$605,300	\$575,617	95%	\$507,064	84%	\$492,395	81%
UMTA-Section 9	\$ 90,584	\$ 90,584	\$ 89,567	99%	\$ 86,566	96%	\$ 86,312	95%
State	\$213,077	\$214,015	\$160,658	75%	\$166,168	78%	\$200,444	94%
LACTC	\$176,640	\$175,701	\$171,913	97%	\$141,890	80%	\$140,977	80%
City of Los Angeles	\$ 34,000	\$ 34,000	\$ 32,978	97%	\$ 25,655	75%	\$ 25,434	75%
Benefit Assess.	\$130,300	\$ 19,082	\$138,300	100%	\$ 94,262	72%	\$ 0	0%
* Cost Overrun Account	\$200,119	\$ 19,565	\$ 0		\$ 0		\$ 0	0%
** Benefit Assess. Shortfall	\$ 0	\$ 0	\$ 0		\$ 0		\$ 48,869	38%
<b>TOTAL</b>	<b>\$1,450,019</b>	<b>\$1,158,247</b>	<b>\$1,161,033</b>	<b>80%</b>	<b>\$1,021,605</b>	<b>70%</b>	<b>\$994,432</b>	<b>69%</b>
<b>NOTES:</b> * The Cost Overrun Account includes CAPRA funds as well as LACTC and City of Los Angeles contributions to cover cost overruns. ** The current Benefit Assessment District revenue shortfall is being funded by SCRTD and LACTC.								

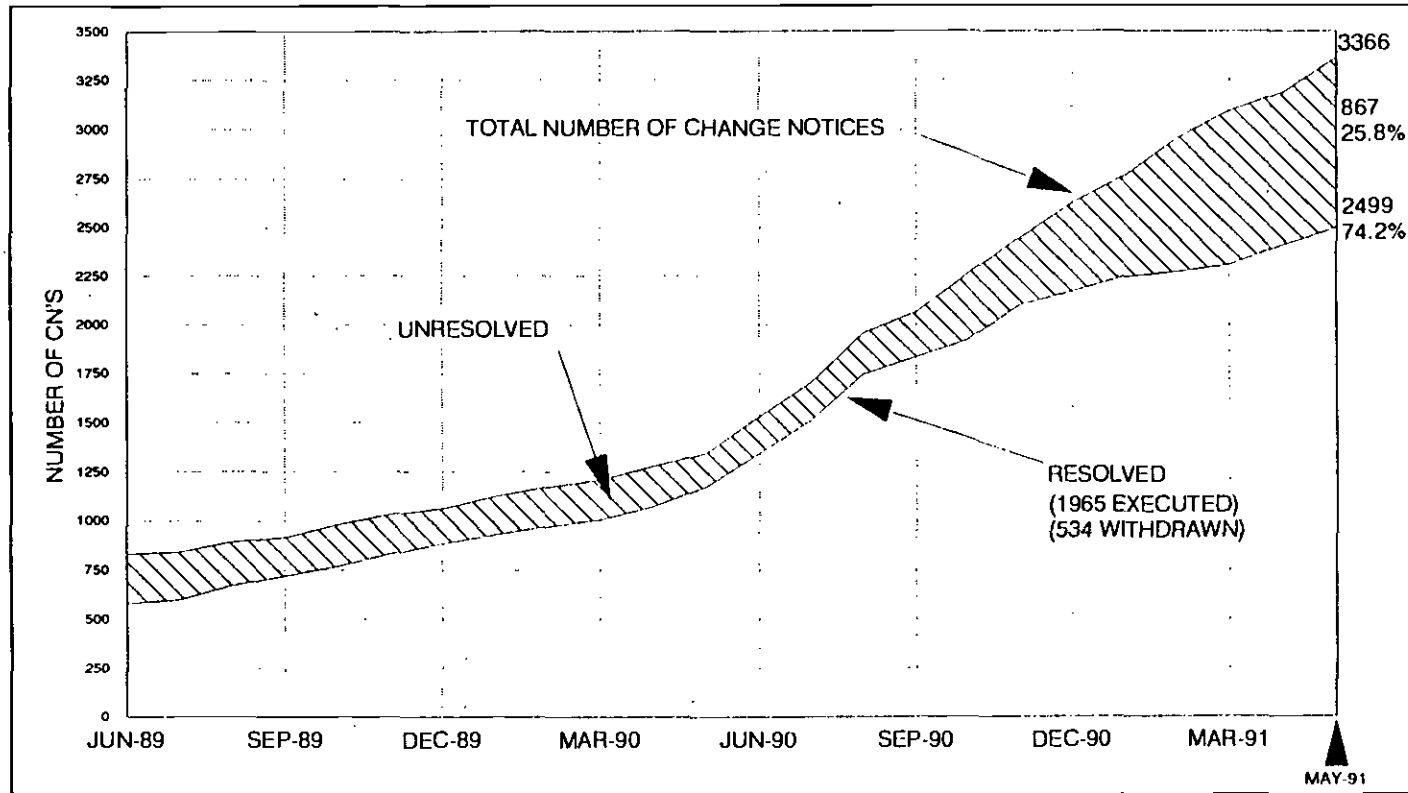
PROJECT: R80  
CONSULTANT CONTRACT CHANGE STATUS SUMMARY  
PENDING CHANGES/AMENDMENTS  
AS OF 05/31/91

( \$ = THOUSANDS)

CONSULTANT CONTRACTS	TRANSCAL: E2301/MC005		MRTC: 2997		PD: 3369		OKA:		OTHER		PROJECT TOTAL		LAST MONTH		VARIANCE	
	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$
ASSIGNED/NOT SUBMITTED					6	781					6	781	0	0	6	781
SUBMITTED/IN PROCESS											0	0	0	0	0	0
APPROVED/ISSUED											0	0	0	0	0	0
NEGOTIATED											0	0			0	0
COMPLETED (AMENDMENT ISSUED/NOT REQUIRED)			3	0							3	0			3	0
CONTRACT TOTAL	0	0	3	0	6	781	0	0	0	0	9	781	COMMENTS:			
LAST MONTH	0	0	0	0	0	0	0	0	0	0	0	0				
VARIANCE	0	0	3	0	6	781	0	0	0	0	9	781				

# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

## Change Notice Resolution

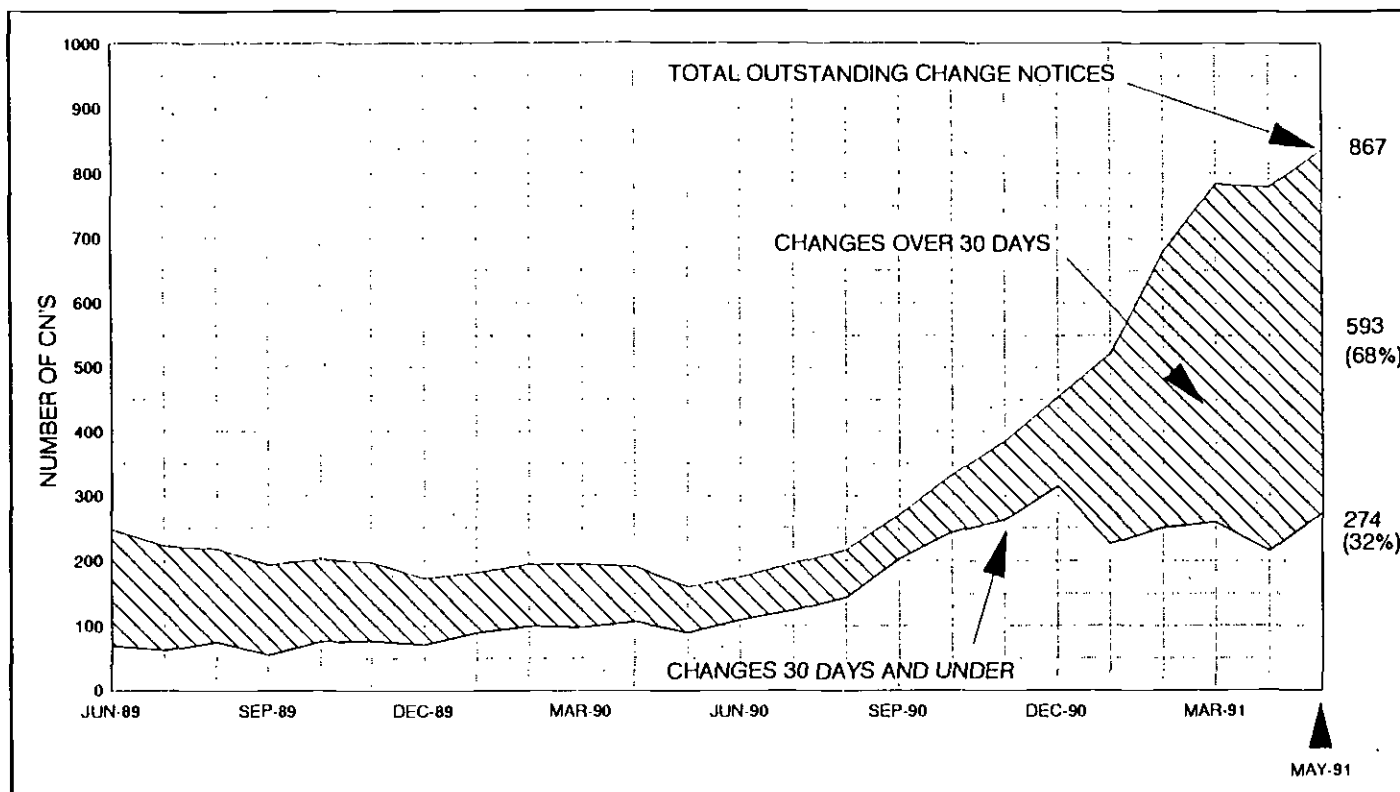


PRIOR TO JANUARY 1991, WITHDRAWN CHANGE NOTICES WERE NOT INCLUDED IN THIS CHART.

THE INCREASE TO "UNRESOLVED CHANGES" IS PRIMARILY DUE TO THE CONTINUED INCREASE IN CHANGE ACTIVITY IN STAGE II FINISH CONTRACTS, AND CLOSE-OUT COST-PLUS CHANGE NOTICES DUE TO THE ACCELERATION OF THE A167 LRT STATION.

## CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

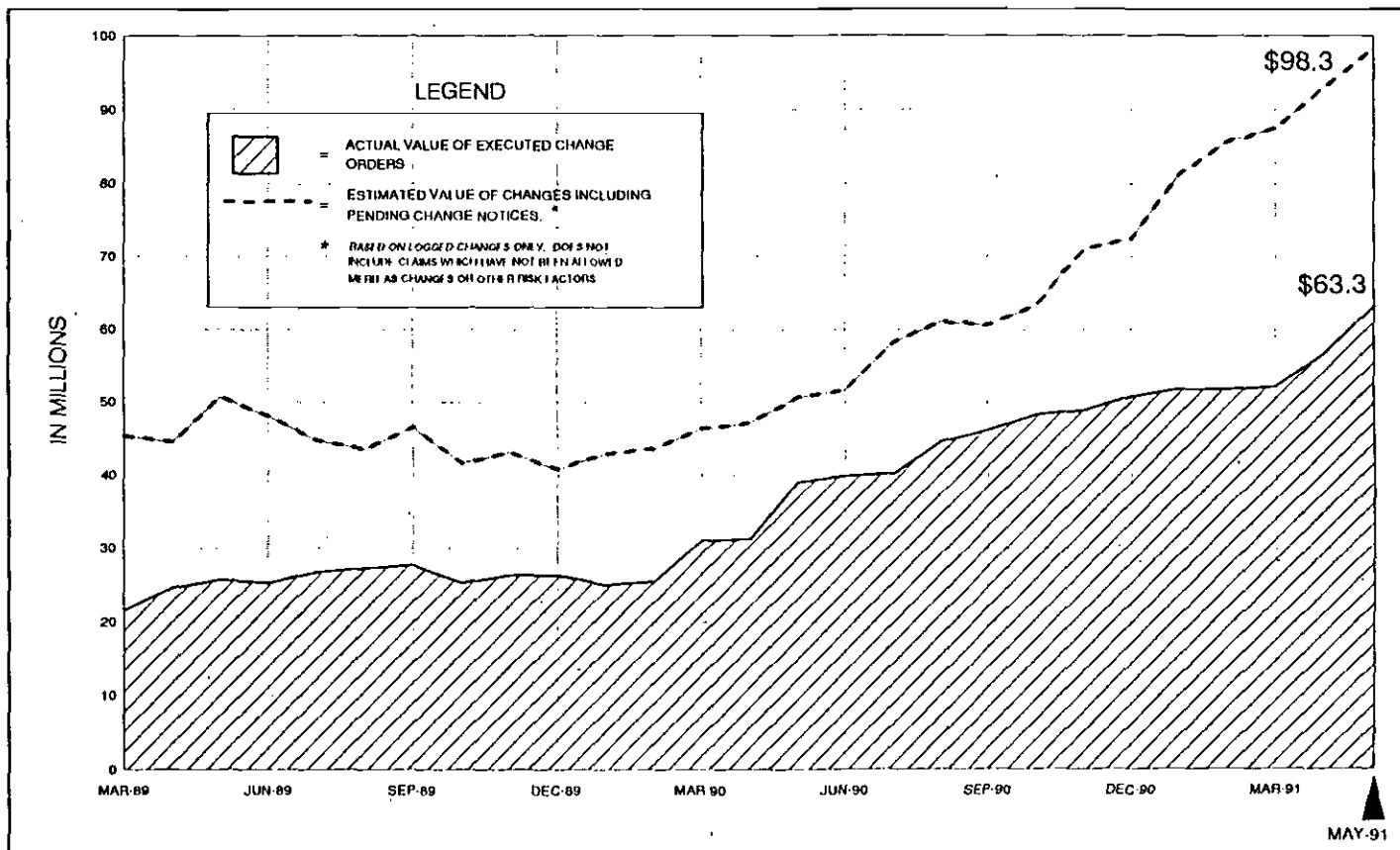
### Change Activity Progress



CHANGES OVER 30 DAYS CONTINUE TO INCREASE DUE TO THE BACKLOG OF PROPOSALS REQUIRED FROM THE CONTRACTORS. CURRENTLY 63% OF CHANGES REQUIRE ACTION BY THE CONTRACTORS.

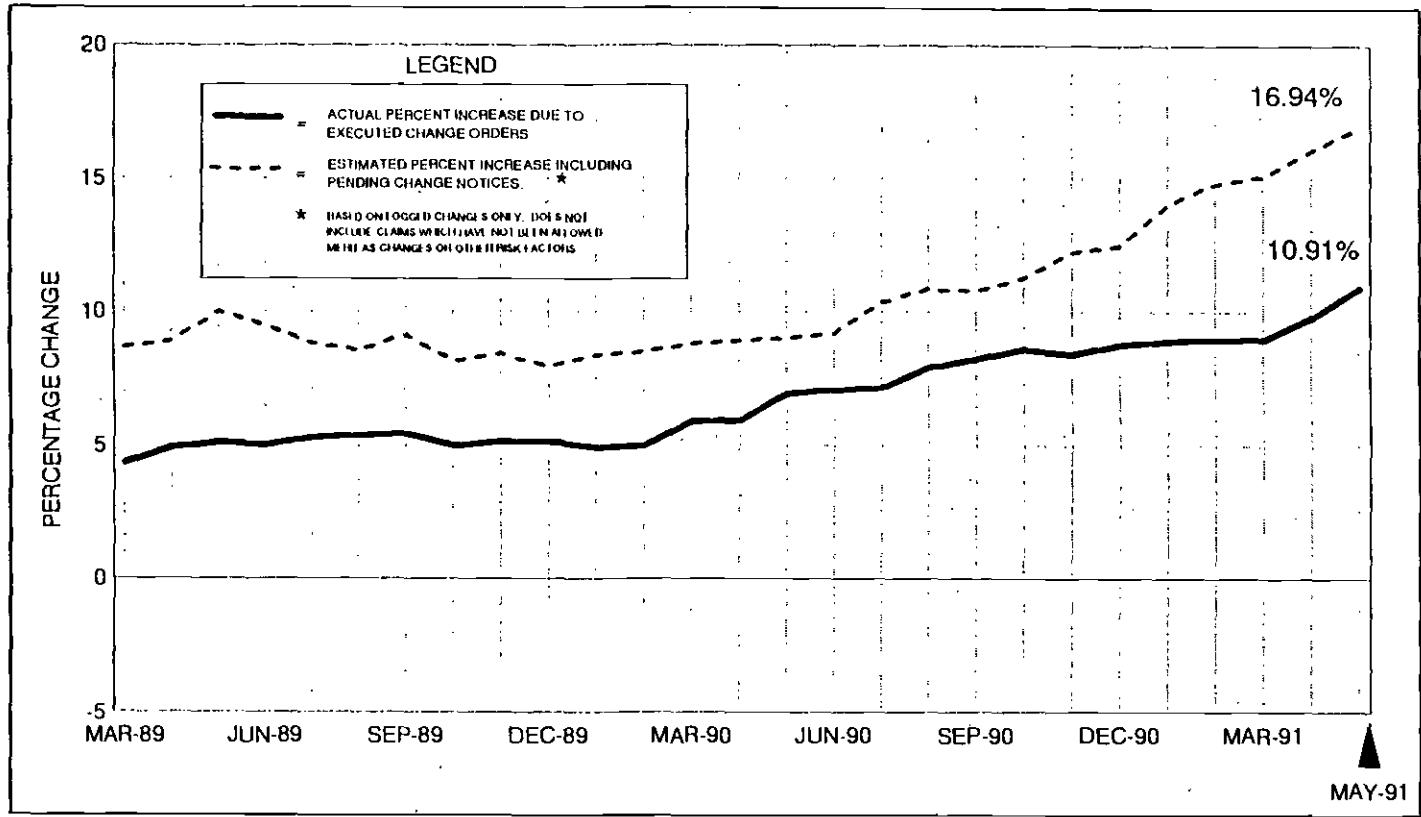
# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

## Change Order Value



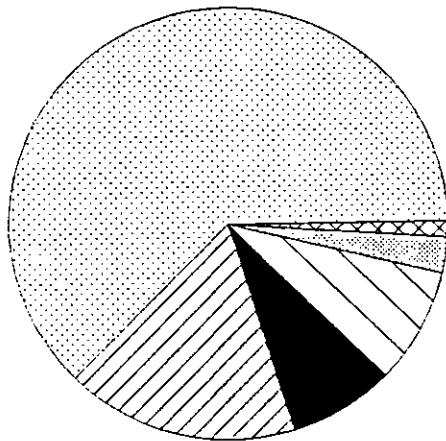
THE INCREASED VARIANCE BETWEEN CHANGE ORDERS EXECUTED AND ESTIMATED VALUE IS DUE TO THE INCREASED NUMBER OF STAGE II CHANGE NOTICES AND CLOSE-OUT ISSUES, SPECIFICALLY THE LINE ITEM UNIT COST CLOSE-OUT.

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









THE INCREASE IN ESTIMATED VALUE VS. ACTUAL VALUE IS DUE TO STAGE I CONTRACT CLOSE-OUT.

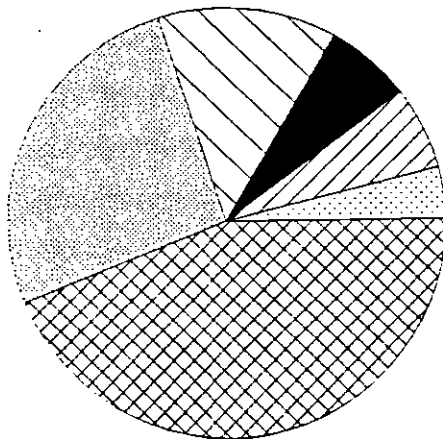
CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY COST LEVEL  
BASED ON EXECUTED CHANGES AS OF 5/31/91









CHANGE VOLUME  
TOTAL VOLUME: 1619 CO'S (1965 CN'S)

## ABSOLUTE VALUES

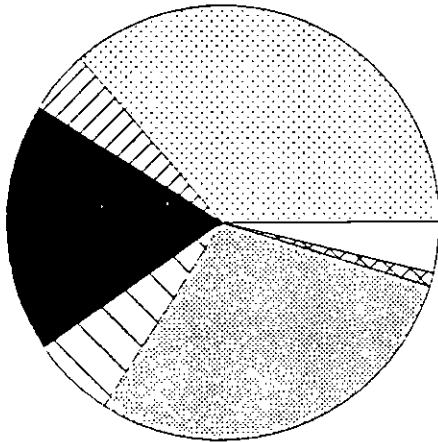
1011	62.4%		< \$10,000
278	17.2%		< \$25,000
124	7.7%		< \$50,000
143	8.8%		< \$200,000
43	2.7%		> \$200,000
20	1.2%		> \$1,000,000



CHANGE COST  
TOTAL COST: \$63,339,509

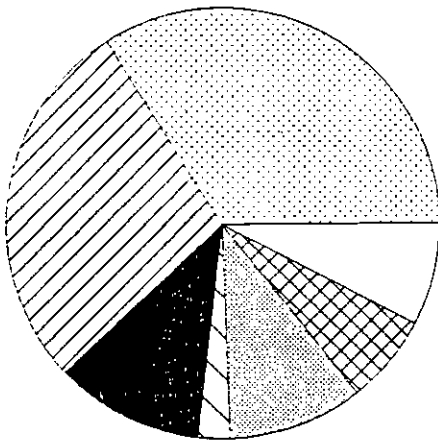
\$2,472,147	3.9%		< \$10,000
\$3,996,241	6.3%		< \$25,000
\$4,025,262	6.4%		< \$50,000
\$8,339,911	13.2%		< \$200,000
\$16,634,595	26.2%		> \$200,000
\$27,871,353	44.0%		> \$1,000,000

**CONSTRUCTION/PROCUREMENT CONTRACT CHANGES  
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE  
BASED ON EXECUTED CHANGES AS OF 05/31/91**



CHANGE BASIS VOLUME  
TOTAL VOL: 1965 CN'S (1619 CO'S)

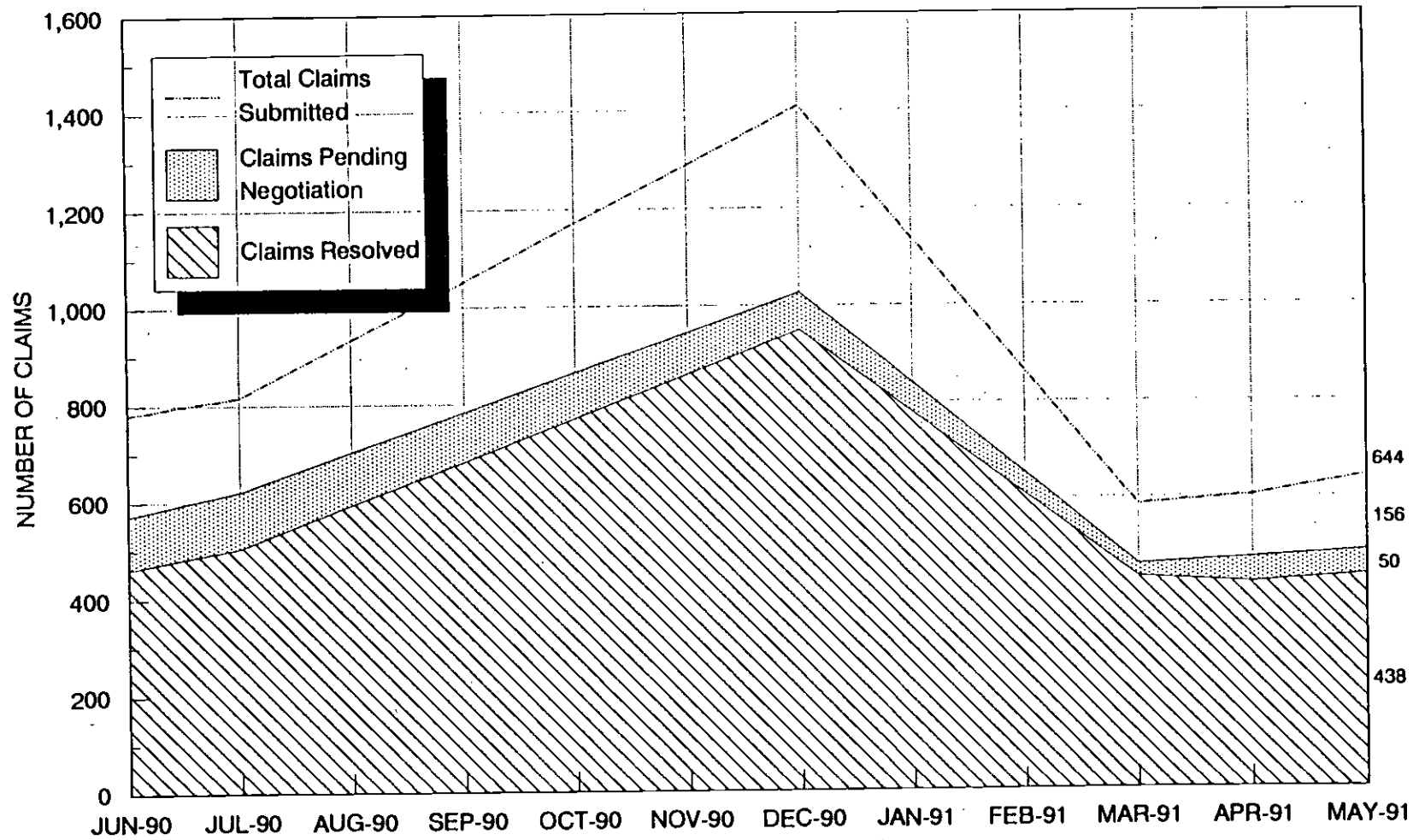
722	36.7%		WORK SCOPE CHANGES
92	4.7%		SCHEDULE CHANGES
367	18.7%		DIFFERING CONDITIONS
122	6.2%		ADMINISTRATIVE
579	29.5%		DESIGN CHANGES
3	0.2%		MANAGEMENT ISSUES
80	4.0%		UNASSIGNED



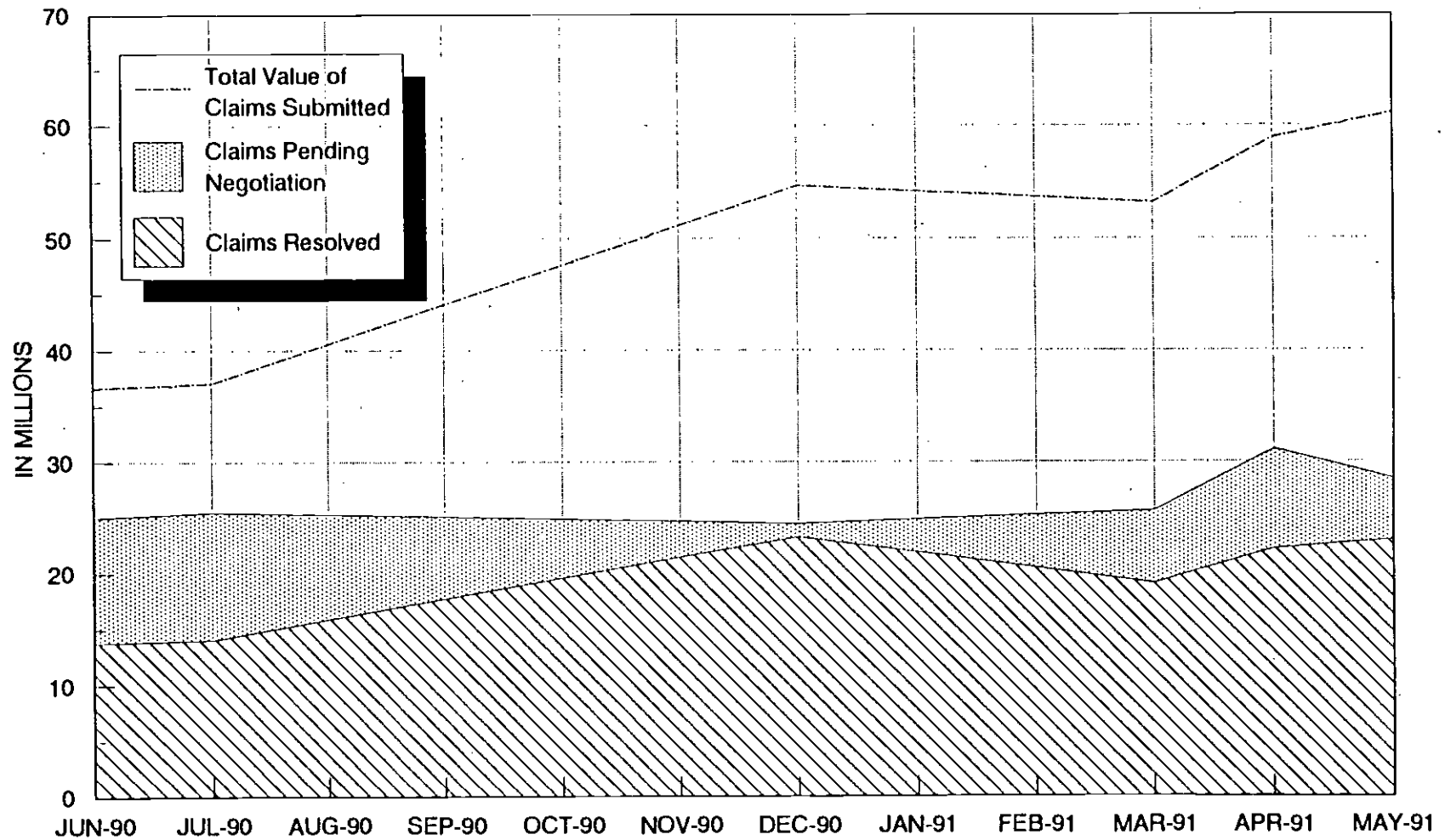
CHANGE BASIS COST  
TOTAL COST: \$63,339,509

\$21,408,735	33.8%		WORK SCOPE CHANGES
\$17,788,679	28.1%		SCHEDULE CHANGES
\$7,095,367	11.2%		DIFFERING CONDITIONS
\$1,515,831	2.4%		ADMINISTRATIVE
\$6,360,990	10.0%		DESIGN CHANGES
\$4,232,538	6.7%		MANAGEMENT ISSUES
\$4,937,369	7.8%		UNASSIGNED

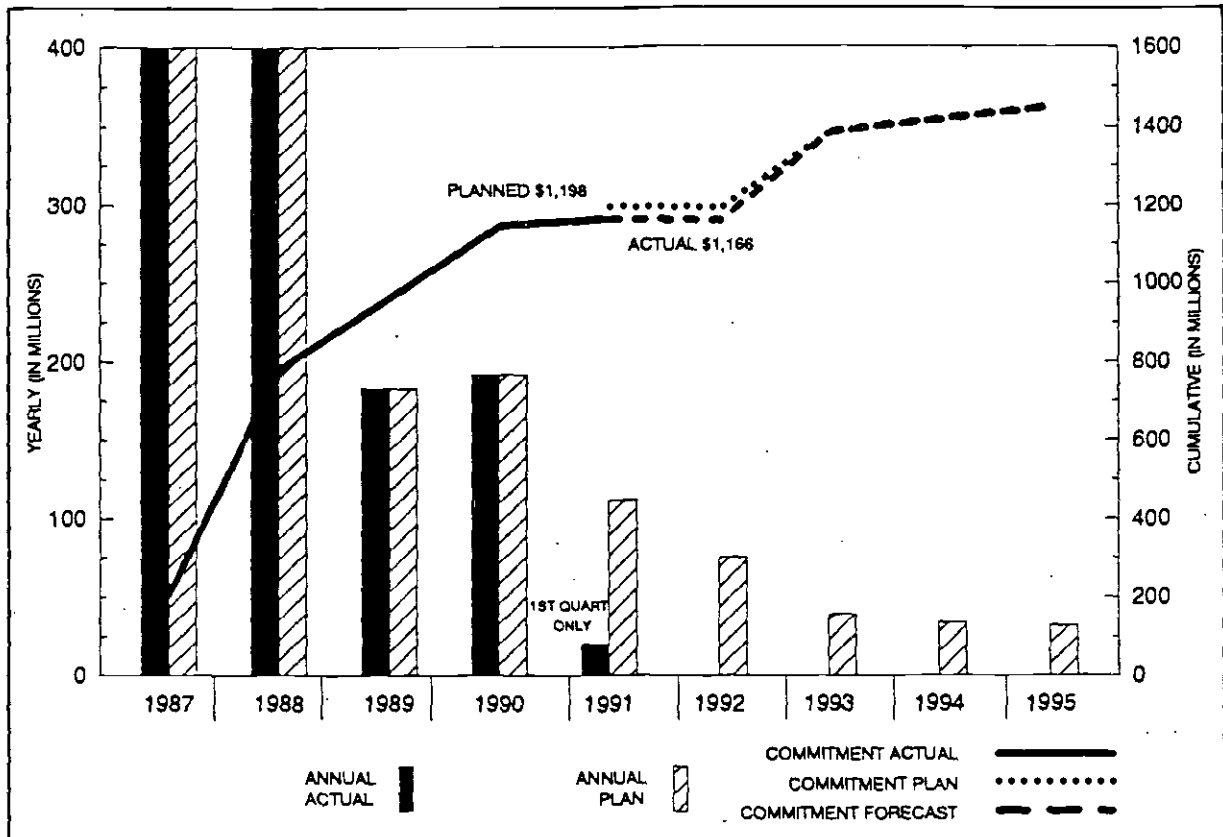
# CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS Filed Claims - COUNT



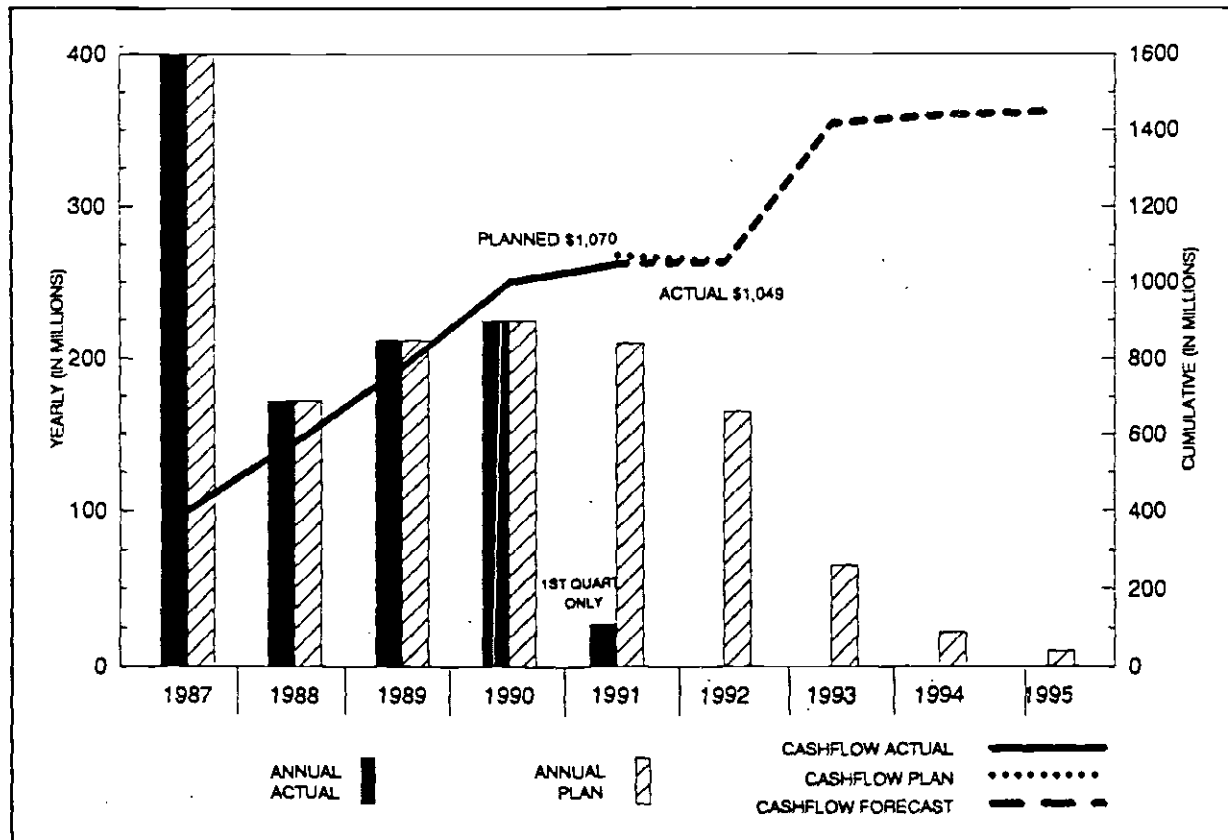
# CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS Filed Claims - COST



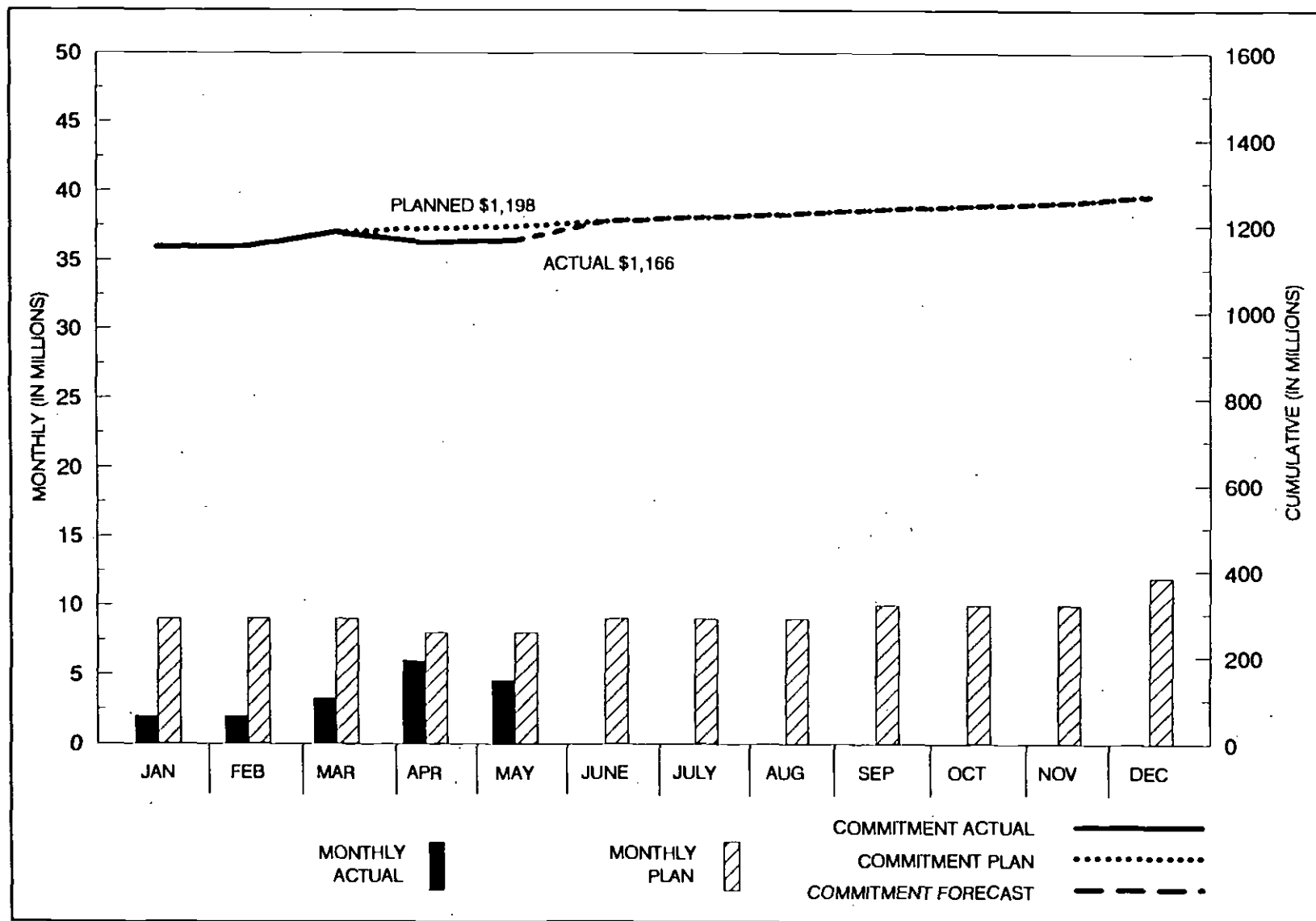
## PROJECT COMMITMENTS



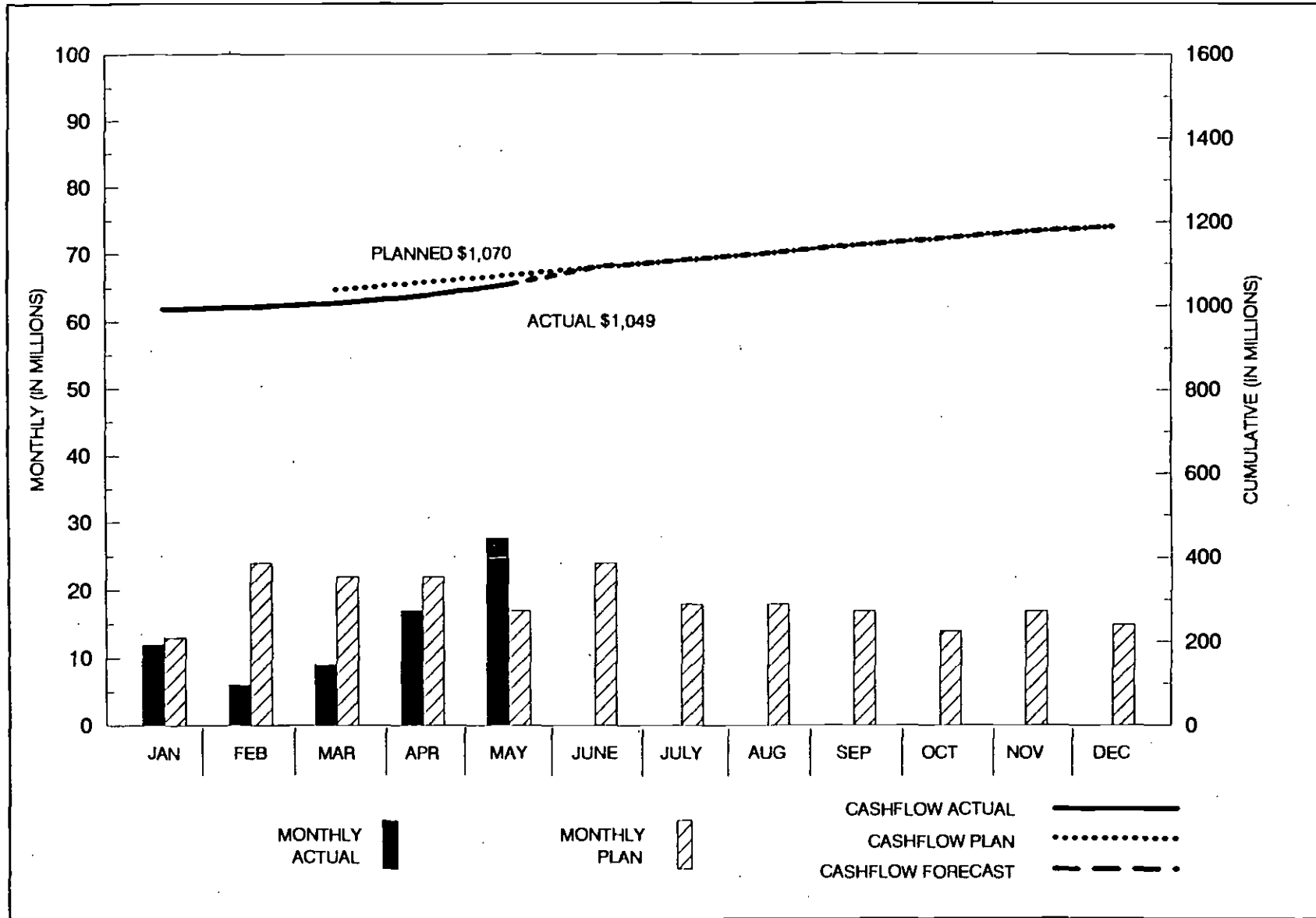
## PROJECT CASH FLOW

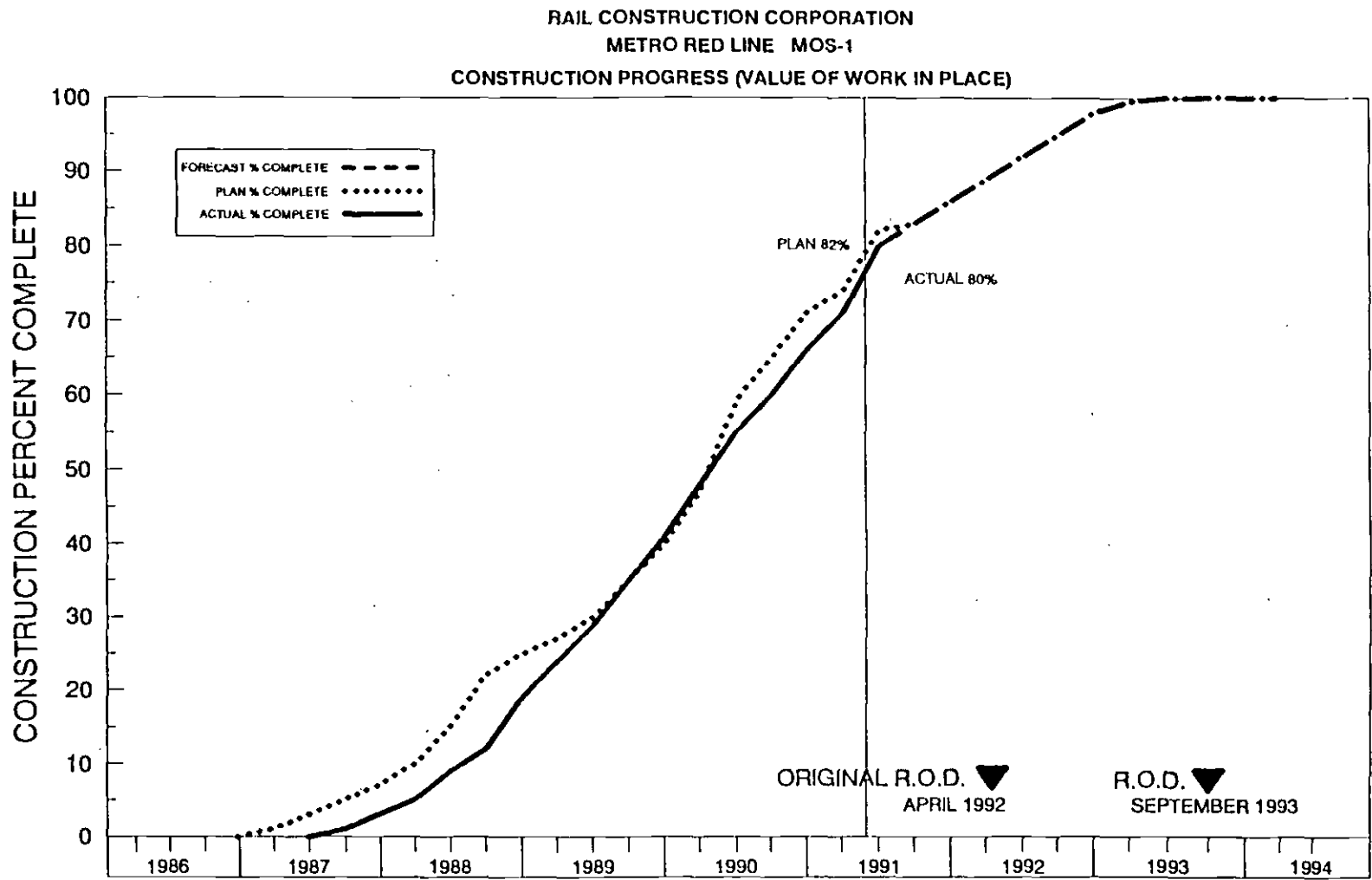


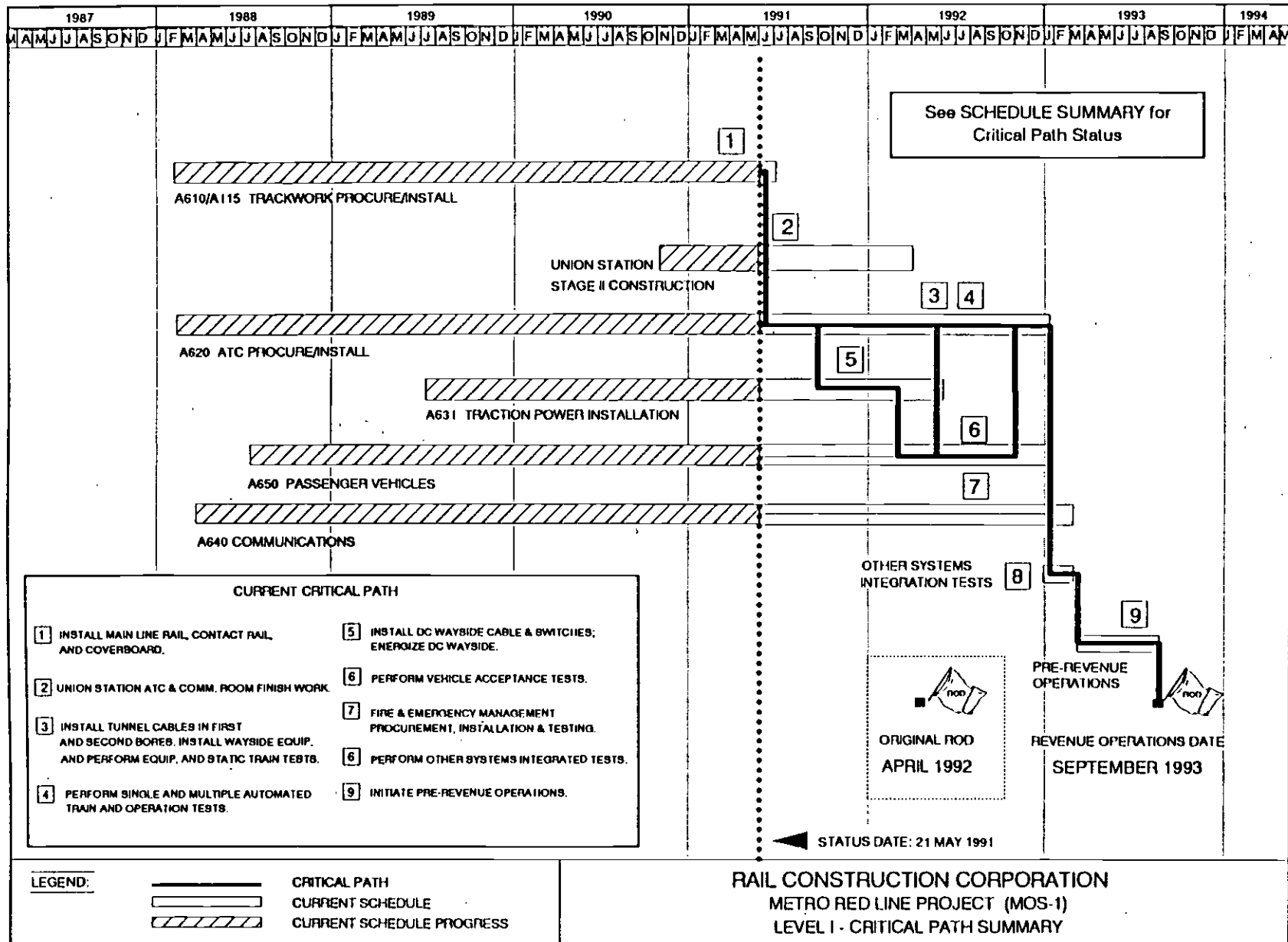
# PROJECT COMMITMENTS



## PROJECT CASH FLOW

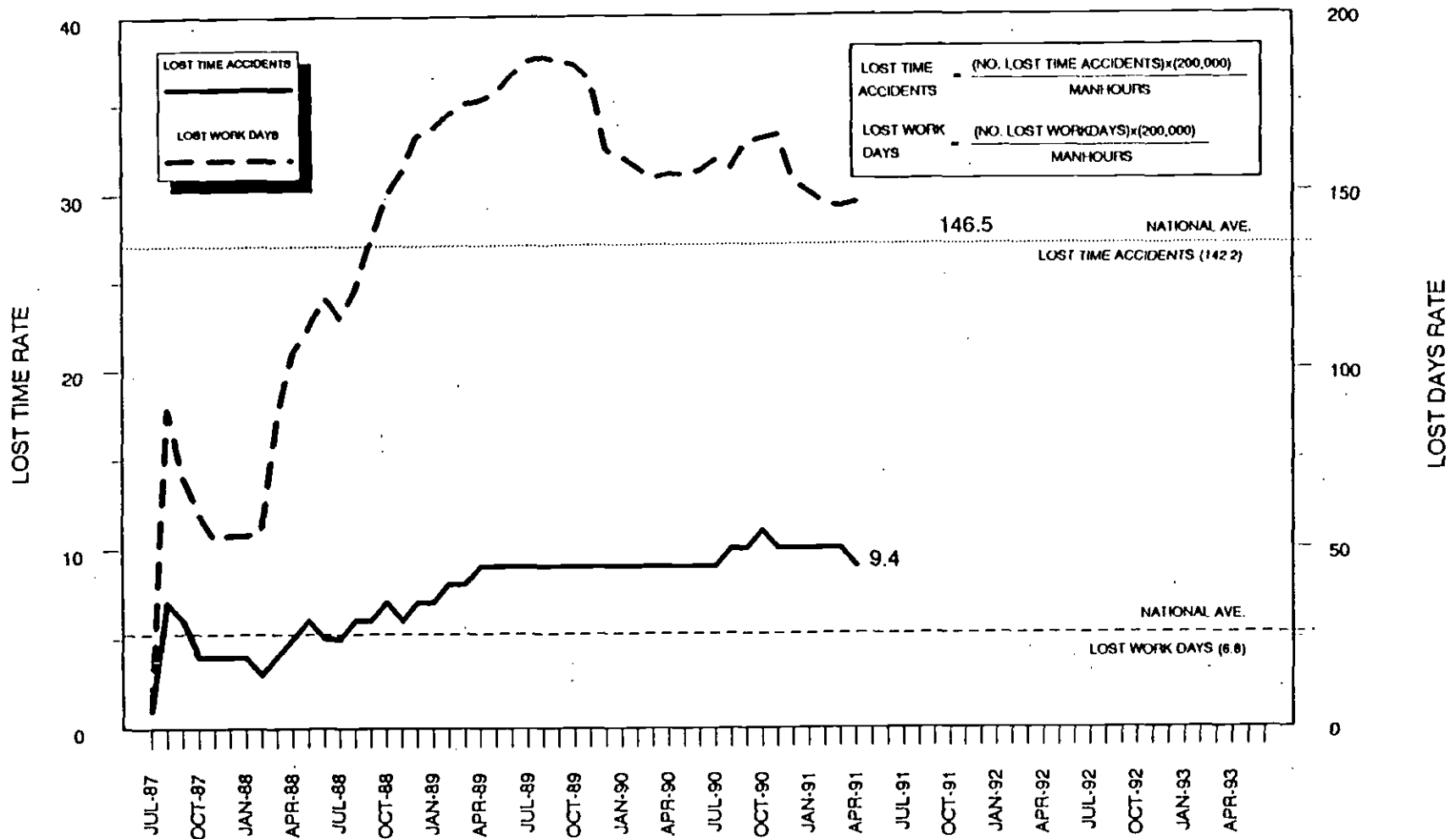






## MOS-1 REAL ESTATE - STATUS SUMMARY

All of the real estate required for MOS-1 construction is available under ownership by the Rapid Transit District or under a right-of-way. Currently, 14 parcels are in the acquisition process.



RED LINE PROJECT (MOS-1)  
LOST TIME ACCIDENTS/LOST WORK DAYS  
CUMULATIVE INCIDENT RATES

Total manhours as of April 1991: 8,711,108

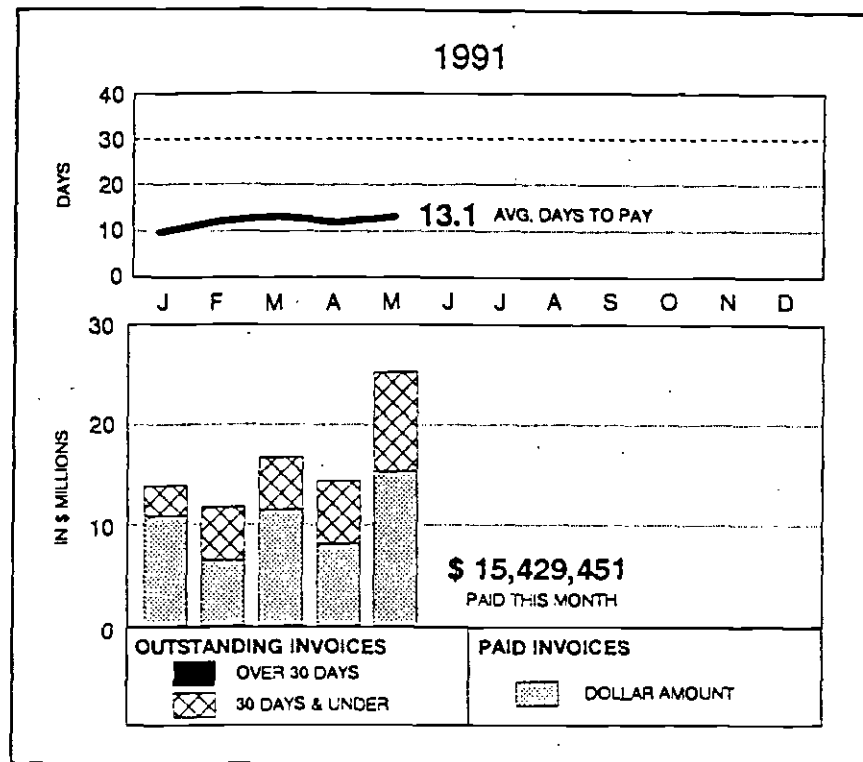
## INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 13.1 days.

- 36 invoices were processed for a total value of \$15,429,451.

- There was one outstanding Construction/Procurement invoice over 30 days old for \$4,937.

## 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
JAN 1991	4	3,039,993	0	0	12	3,952,988	7	1,620,858
FEB 1991	12	5,248,873	0	0	21	7,461,343	5	2,588,899
MAR 1991	9	5,221,659	0	0	21	5,625,638	4	1,099,773
APR 1991	9	6,319,949	0	0	21	7,217,508	9	2,374,298
MAY 1991	9	9,855,194	1	4,937	11	1,308,463	5	1,104,039

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## EXECUTIVE SUMMARY

### COST STATUS

The Metro Red Line MOS-2 current budget is \$1,446 million with a current forecast of \$1,446 million. The project commitments to date are \$369.9 million or 26% of the total forecast. The cashflow plan reflects a total project expenditure to date of \$85.0 million or 6% of the total forecast, which is primarily for Design Consultant and Real Estate Contracts.

The following items have been identified this month as potential cost increases, and trend notices have been issued or are in process: Contract B251, Wilshire/Vermont to Vermont/Santa Monica Line, 85% Estimate Refinement; Termination of Blast Relief Shafts (BRS) in streets; Addition of Contract B750, Hazardous Material Removal; and MOS-2 Start-up Budget Refinement.

### SCHEDULE STATUS

The Master Schedule update with status through May 31, 1991, shows that the project is currently on schedule.

The critical path for the Wilshire Line is through the Wilshire/Vermont Station and Line, Stage I, Contract B211, installation of systems, and the integrated testing with Revenue Operation Date in July 1996. The critical path for the Vermont/Hollywood Line is through the Hollywood/Western Station and Tunnels, Contract B271, installation of systems, and the integrated testing with Revenue Operation Date in September 1998.

### PROFESSIONAL SERVICES

The overall MOS-2 design is approximately 61% complete versus the planned 67% completion. All design packages are planned to be completed on schedule.

The Construction Management activities for the month of May included: review, approval and incorporation of schedule of values into pay estimates associated with Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line and Utilities; and Contract B221, Wilshire/Normandie Station and Line, including Utility Work.

**REAL ESTATE**

There are 68 parcels of land required for the MOS-2 Project. The acquisition breakdown for this land is as follows: 21 full takes, one partial take, 41 subsurface easements, two surface easements, one partial take, one temporary construction easement and two leases.

To date, there have been five parcels acquired for the MOS-2 Project; 25 offers to purchase have been made and 11 orders of possession have been obtained through the Los Angeles Superior Court.

**CONSTRUCTION/PROCUREMENT**

Demolition of the Thrifty Drug Store, Contract B231, began May 9, 1991. The contractor started installation of the test wells for dewatering.

Preparatory work began on tree and artifact removal at Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line. Installation of the support structure for Otis-Parsons art panels (artwork) continued.

To date no safety incidents have been reported with the April 1991 status of 14,538 construction hours to date.

**AREAS OF CONCERN****ONGOING****March 1991****Delay in Real Estate Acquisitions**

Concern: There are seven parcels currently projected not to be available by the scheduled need date.

Action: Maintain schedule to avoid negative float.

Status: Of the seven parcels shown to be behind schedule, five show a negative float of three days and the other two are in the process of being resolved.

April 1991

## Blanket Permits

Concern: Lack of blanket permits have forced contractors to obtain individual permits from the city to begin utility work. It is increasingly difficult to obtain individual utility permits to meet schedule need dates.

Action: RCC is expediting the blanket permit.

Status: PD will continue working with contractors to obtain individual permits pending availability of the Blanket Permit. We are continuing to adapt and accommodate the situation. Fortunately, delays in permits to date have not impacted the critical path for any contracts.

## UMTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

### ONGOING

**March 1991**

#### **Depth of Design Drawing Detail**

**Concern:** Need to perform an independent evaluation of the optimum level of detail to be incorporated into design to maximize construction cost and time savings.

**Action:** Assess results of revised procedures for handling contractor's Requests-for-Information (RFI's) and prepare a cost/benefit assessment comparing increased design efforts to increased field support efforts. Arrange for independent analysis by LACTC's Project Management Oversight consultant, Fluor-Daniels.

**Status:** Constructibility and Quality Control review requirements and RFI procedures have been strengthened. RCC Engineering is to provide an analysis of improved RFI handling based on MOS-1 comparative data by mid-June. RCC Construction to arrange for independent analysis by Fluor-Daniels.

### NEW

**April 1991**

#### **Project Procedures**

**Concern:** Project procedures are not being issued.

**Action:** Complete and publish policies and procedures manual.

**Status:** Final drafts of LACTC policies and procedures are in the sign-off cycle. Copies have been provided to Hill International for information. Publication is forecast for June 1991.

RESOLVED

October 1990      "Top Down" Station Construction

Status:      RESOLVED. Study of revised tunneling concepts and alternative construction approaches is underway.

November 1990    Improve Interface Planning (Action transferred from MOS-1)

Status:      RESOLVED. Improved interface detail has been incorporated into MOS-2 contract drawings and specifications.

**KEY ACTIVITIES - MAY**

- Construction is underway at Contract B231, Wilshire/Western Station, with the Thrifty Building demolition in progress with forecast completion June 4, 1991. Demolition of remaining buildings on site to immediately follow. A groundbreaking ceremony is planned for June 13, 1991.
- Final draining of the lake is delayed at MacArthur Park, Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line. Because of turbidity, the water does not meet discharge requirements. CM to introduce coagulant into water to lower the turbidity. This will allow the balance of the water to be drained into the sewer system by the contractor.
- Contractor continues to mobilize at Contract B221, Wilshire/Normandie Station and Line. General site work and fence installation to begin in early June.
- Issued Addendum 2 for Contract B211, Wilshire/Vermont Station, to change the bid date from May 23, 1991 to June 6, 1991. Addendum 3 adding asbestos abatement work to the contract was issued May 23, 1991.
- Issued in-progress design submittal for Contract B241, Vermont/Beverly Station.
- Issued pre-final design submittal for Contract B251, Wilshire/Vermont to Vermont/Santa Monica Line.
- Issued in-progress design submittal for Contract B252, Vermont/Santa Monica Station.
- Completed the architectural presentation for Contract B261, Vermont/Sunset Station.
- Continued with real estate certifications and appraisals along the Vermont/Hollywood Line.

**KEY ACTIVITIES - PLANNED FOR JUNE**

- Issue Notice to Proceed for final design of Contract C301, Hollywood/Highland Station and Tunnels.
- Open bids for Contract B211, Wilshire/Vermont Station, Stage I.
- Continue final design of Contracts B241, B251, B252, B261, B271 and B281.

- Complete demolition of the Thrifty Building at Contract B231 on June 4, 1991.
- Continue contractor mobilization and submittals for Contracts B201 and B221.
- Continue real estate certifications and appraisals along the Vermont/Hollywood Line.

RAIL CONSTRUCTION CORPORATION  
PROJECT COST REPORT  
COST BY ELEMENT

Project: R81 METRO RED LINE MOS-2

Period: 27-Apr-91 to 31-May-91  
Run Date: 11-Jun-91  
Units: Dollars in Thousands

ELEMENT / DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		AUTHORIZED FOR EXPENDITURE		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
T Construction	893,000	0	893,000	49,041	278,284	10,061	223,498	407	7,135	6,691	960,822	67,822
S Professional Services	289,150	0	289,150	126,153	184,368	30,844	101,542	3,009	40,986	670	301,422	12,273
R Real Estate	79,827	0	79,827	410	37,691	5,880	43,776	44	36,732	0	82,475	2,648
P Utility/Agency Force Account	36,668	0	36,668	0	13	(236)	885	34	182	0	20,921	(15,747)
D Special Programs	2,044	0	2,044	0	150	71	221	6	59	0	7,053	5,009
C Contingency	145,743	0	145,743	0	0	0	0	0	0	(7,361)	84,804	(60,939)
A Project Revenue	0	0	0	0	0	109	0	(23)	(132)	0	(11,065)	(11,065)
Project Grand Total:	1,446,432	0	1,446,432	175,604	500,505	46,729	369,922	3,477	84,962	0	1,446,432	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS.

## FUND SOURCE STATUS

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
UMTA-SECTION 3	\$666,999,996	\$329,668,113	\$187,750,000	28%	\$7,983,331	1%	\$7,983,331	1%
STATE	\$185,984,500	\$27,000,000	\$43,478,000	23%	\$19,269,657	10%	\$0	0%
LACTC	\$439,447,171	\$39,066,584	\$102,698,000	23%	\$41,439,906	9%	\$41,439,906	9%
CITY OF L.A.	\$96,000,000	\$10,000,000	\$22,443,000	23%	\$9,055,449	9%	\$9,055,449	9%
BENEFIT ASSESS.	\$58,000,000	\$0 **	\$13,553,000	23%	\$7,213,657	12%	\$0	0%
TOTAL	\$1,446,431,667	\$405,734,697	\$369,922,000	26%	\$84,962,000	6%	\$58,478,686	4%

\* AWAITING EXECUTION OF STATE FUND TRANSFER AGREEMENT.

\*\* PENDING RESOLUTION OF LITIGATION. IN THE INTERIM, LACTC WILL PROVIDE THE BENEFIT ASSESSMENT SHARE.

PROJECT: R81  
 CONSULTANT CONTRACT CHANGE STATUS SUMMARY  
 PENDING CHANGES/AMENDMENTS  
 AS OF 05/31/91

( \$ = THOUSANDS)

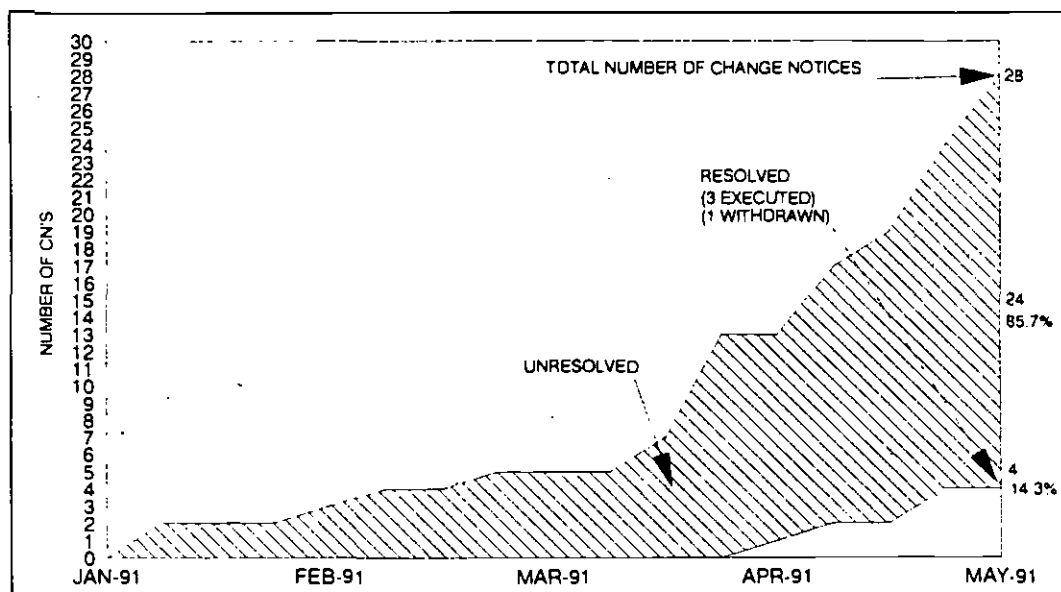
CONSULTANT CONTRACTS	TRANSCAL: E2301/MC005		MRTC: 2997		PD: 3369		OKA:		OTHER		PROJECT TOTAL		LAST MONTH		VARIANCE	
	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$
ASSIGNED/NOT SUBMITTED											0	0	0	0	0	0
SUBMITTED/IN PROCESS			1	98							1	98	0	0	1	98
APPROVED/ISSUED					1	193					1	193	0	0	1	193
NEGOTIATED											0	0			0	0
COMPLETED (AMENDMENT ISSUED/NOT REQUIRED)			1	0							1	0			1	0
CONTRACT TOTAL	0	0	2	98	1	193	0	0	0	0	3	291	COMMENTS:			
LAST MONTH	0	0	0	0	0	0	0	0	0	0	0	0				
VARIANCE	0	0	2	98	1	193	0	0	0	0	3	291				

CONSTRUCTION/PROCUREMENT CONTRACT CHANGES  
 CONTRACT VALUE SUMMARY  
 AS OF 05/31/91

CONTRACT	AWARD VALUE	# CO'S	\$ CO'S	CURRENT VALUE	(a) % INCREASE FROM AWARD	(b) % OF TOTAL PROJECT CHANGE \$'S	(c) # DAYS EXTENDED
B201-	\$44,577,273.00	0	\$0.00	\$44,577,273.00	0.00%	0.00%	0
B218-	\$64,000.00	2	\$80,194.00	\$144,194.00	125.30%	100.00%	37
B221-	\$79,812,793.00	0	\$0.00	\$79,812,793.00	0.00%	0.00%	0
B231-	\$53,645,201.00	0	\$0.00	\$53,645,201.00	0.00%	0.00%	0
B616-	\$2,946,400.00	0	\$0.00	\$2,946,400.00	0.00%	0.00%	0
TOTALS:	\$181,045,667.00	2	\$80,194.00	\$181,125,861.00	0.04%	100.00%	N/A

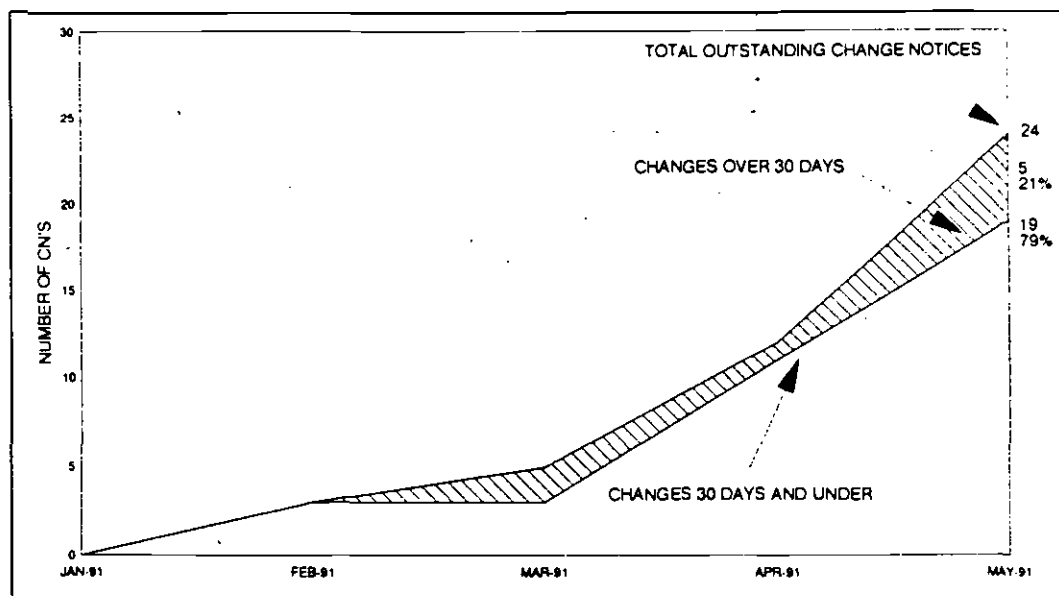
SOURCE: CHANGE CONTROL CENTER

### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Notice Resolution



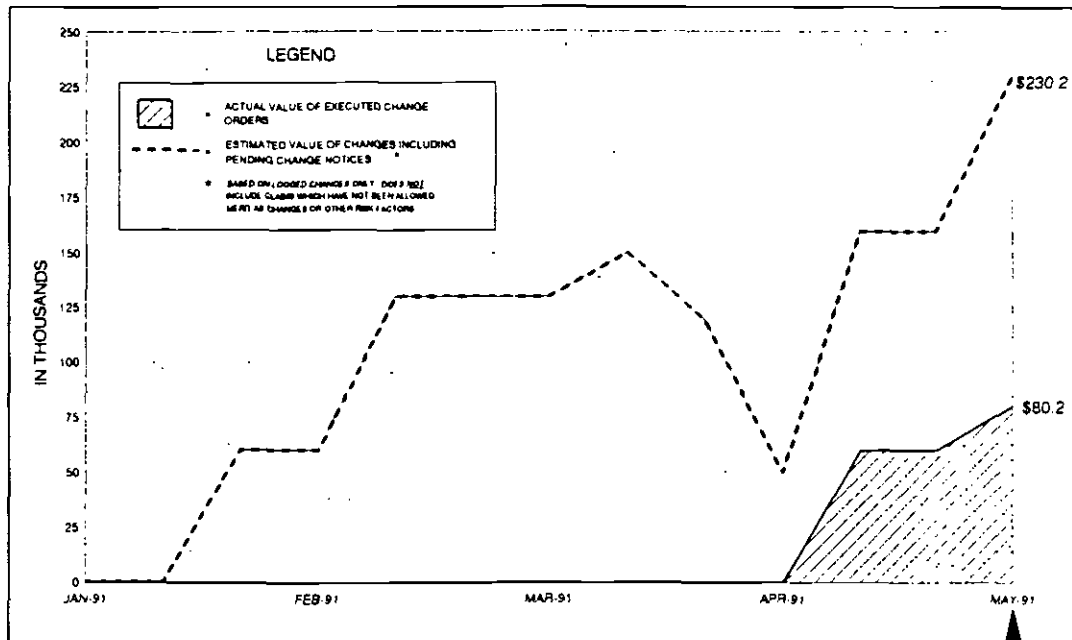
ADDITIONAL CHANGE NOTICES IN THE REPORTING PERIOD ARE DUE TO DESIGN CHANGES.

### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Activity Progress



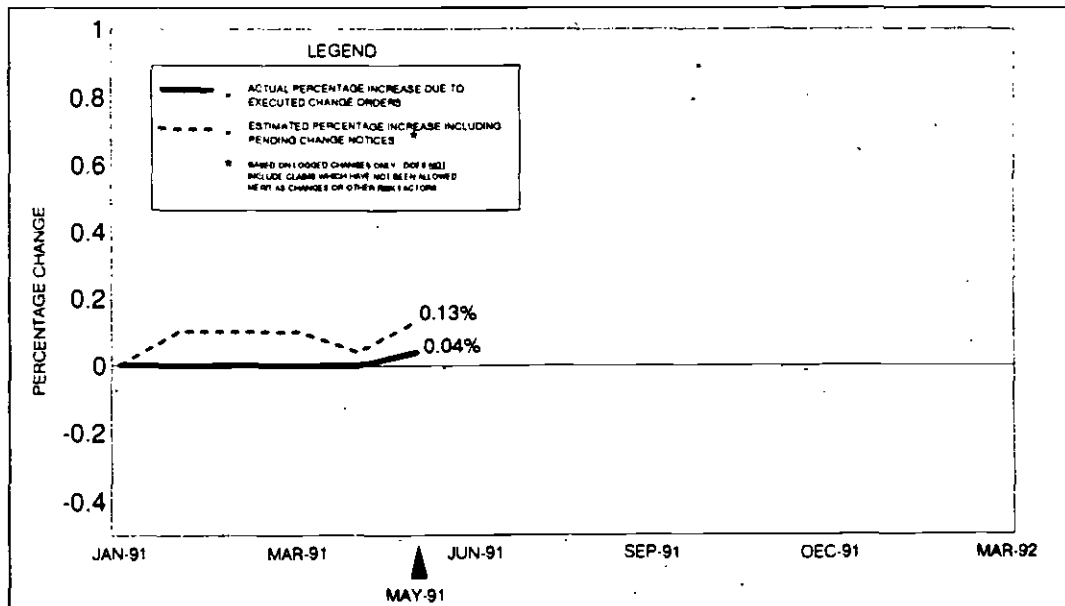
THE NUMBER OF CHANGE NOTICES OVER 30 DAYS HAS INCREASED DUE TO THE INCREASED NUMBER OF DRAWING AND SPECIFICATION REVISIONS.

### CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Order Value



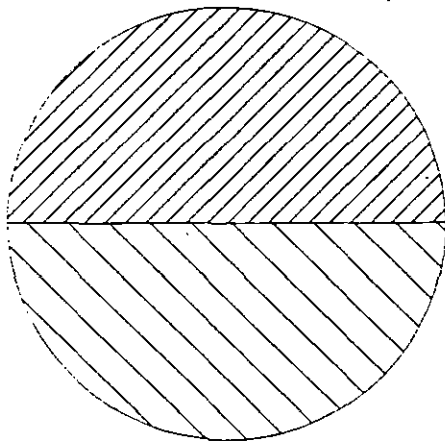
AN INCREASE IN THE ESTIMATED VALUE OF CHANGES INCLUDING PENDING CHANGE NOTICES IS DUE TO A FORECASTED COST INCREASE RESULTING FROM DESIGN CHANGES.

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









THE ESTIMATED PERCENTAGE OF CHANGE DOLLARS AS A PERCENTAGE OF THE ORIGINAL CONTRACT AWARD INCREASED DUE TO DESIGN CHANGES.

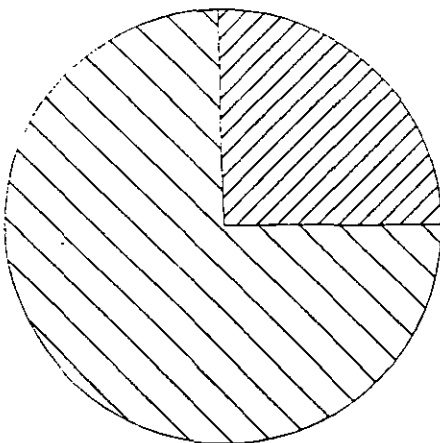
**CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY COST LEVEL  
BASED ON EXECUTED CHANGES AS OF 05/31/91**









**CHANGE VOLUME**  
TOTAL VOLUME: 2 CO'S (3 CN'S)

**ABSOLUTE VALUES**

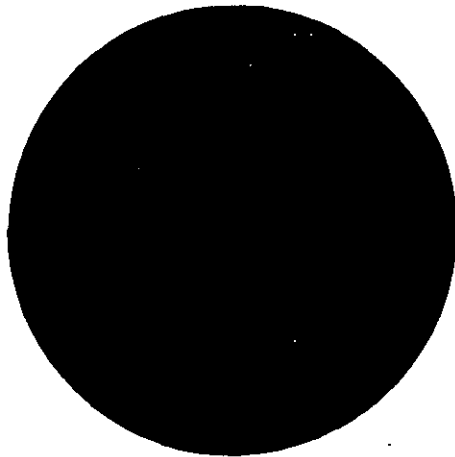
0	0.0%		< \$10,000
1	50.0%		< \$25,000
0	0.0%		< \$50,000
1	50.0%		< \$200,000
0	0.0%		> \$200,000
0	0.0%		> \$1,000,000



**CHANGE COST**  
TOTAL COST: \$80,194.00

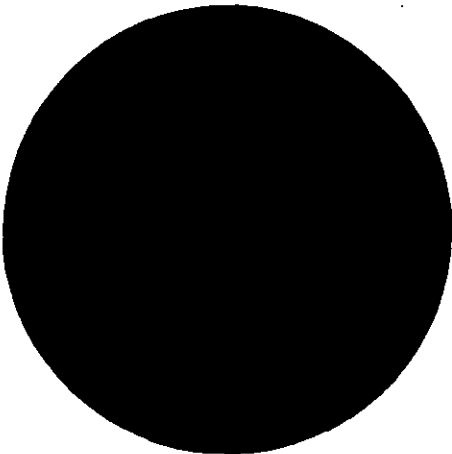
\$0.00	0.0%		< \$10,000
\$20,294.00	25.3%		< \$25,000
\$0.00	0.0%		< \$50,000
\$59,900.00	74.7%		< \$200,000
\$0.00	0.0%		> \$200,000
\$0.00	0.0%		> \$1,000,000

CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE  
BASED ON EXECUTED CHANGES AS OF 05/31/91



CHANGE BASIS VOLUME  
TOTAL VOL: 3 CN'S (2 CO'S)

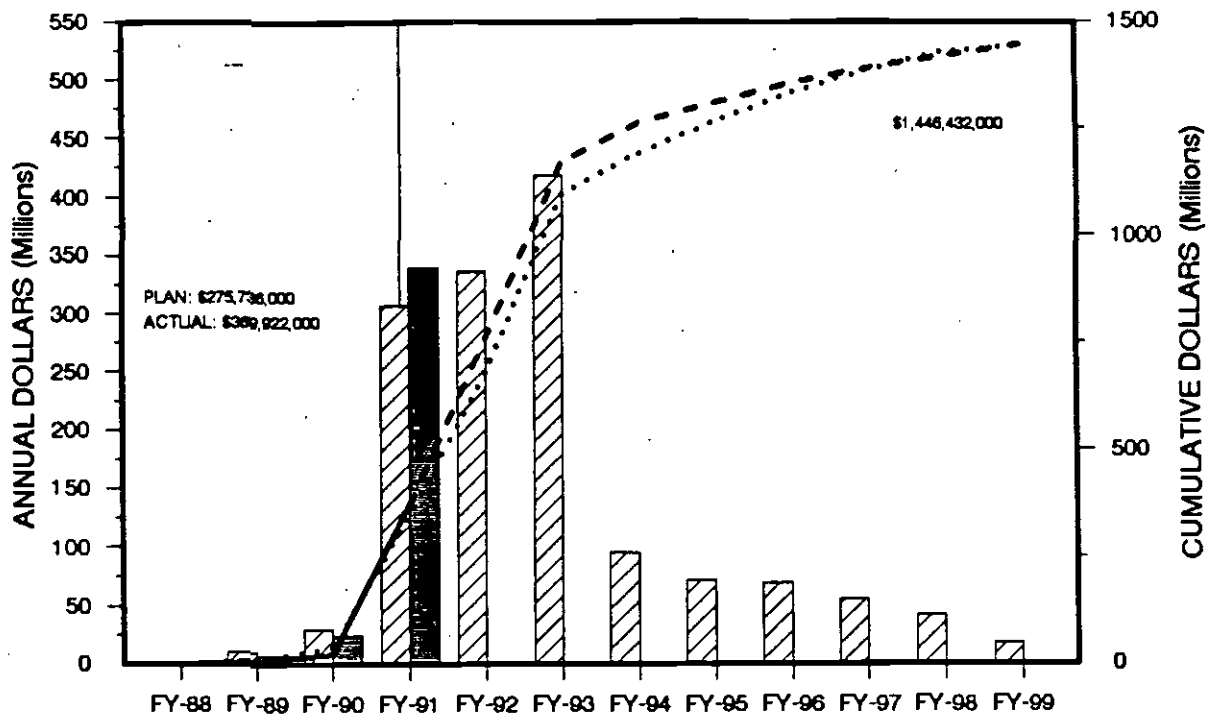
0	0%		WORK SCOPE CHANGES
0	0%		SCHEDULE CHANGES
3	100%		DIFFERING CONDITIONS
0	0%		ADMINISTRATIVE
0	0%		DESIGN CHANGES
0	0%		MANAGEMENT ISSUES/CLAIMS
0	0%		UNASSIGNED



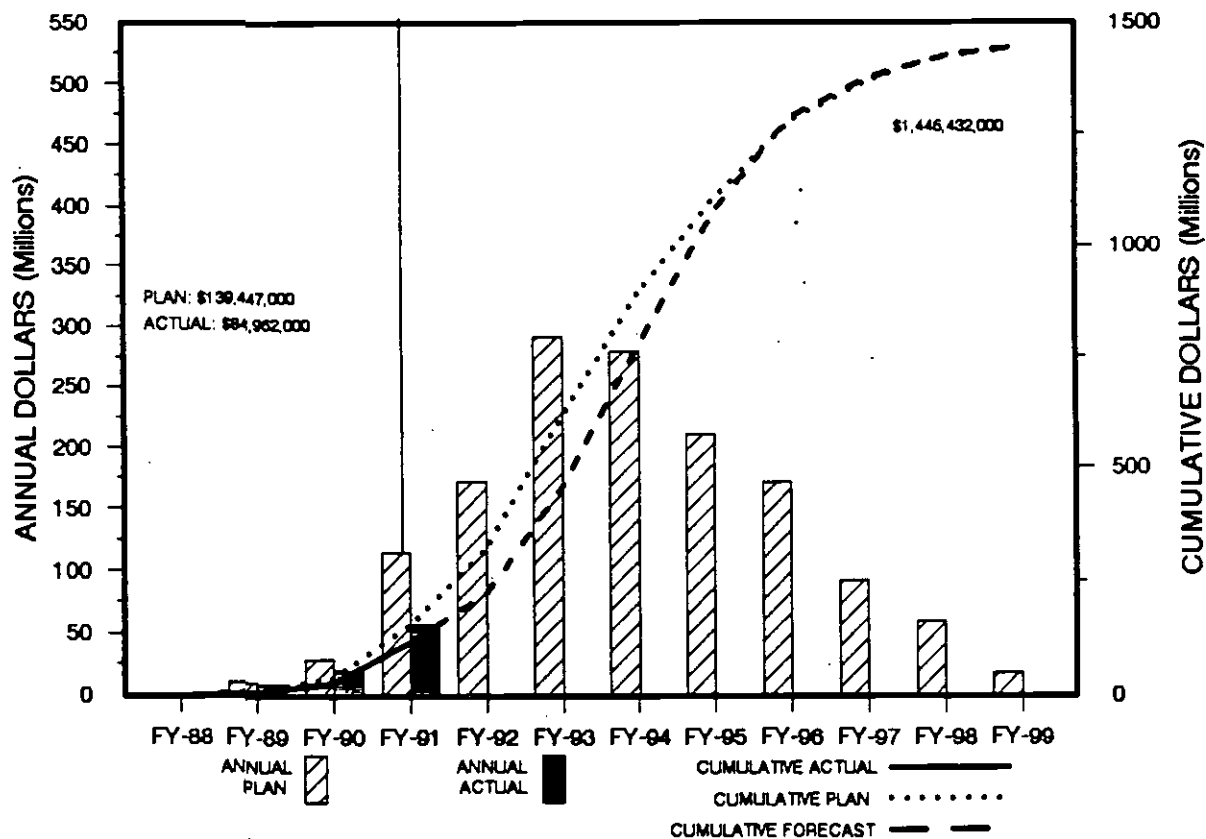
CHANGE BASIS COST  
TOTAL COST: \$80,194.00

\$0.00	0%		WORK SCOPE CHANGES
\$0.00	0%		SCHEDULE CHANGES
\$80,194.00	100%		DIFFERING CONDITIONS
\$0.00	0%		ADMINISTRATIVE
\$0.00	0%		DESIGN CHANGES
\$0.00	0%		MANAGEMENT ISSUES/CLAIMS
\$0.00	0%		UNASSIGNED

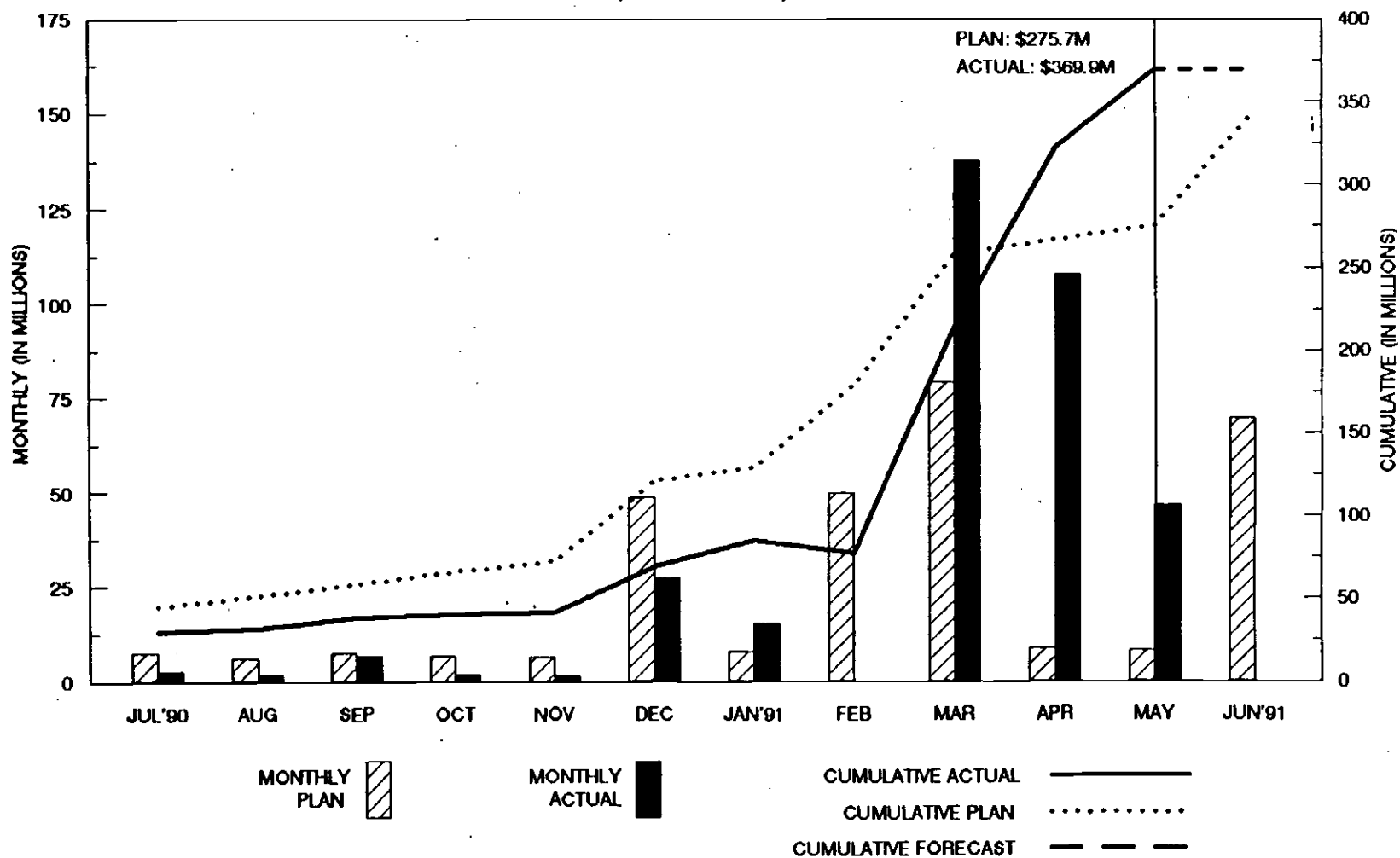
# PROJECT COMMITMENTS



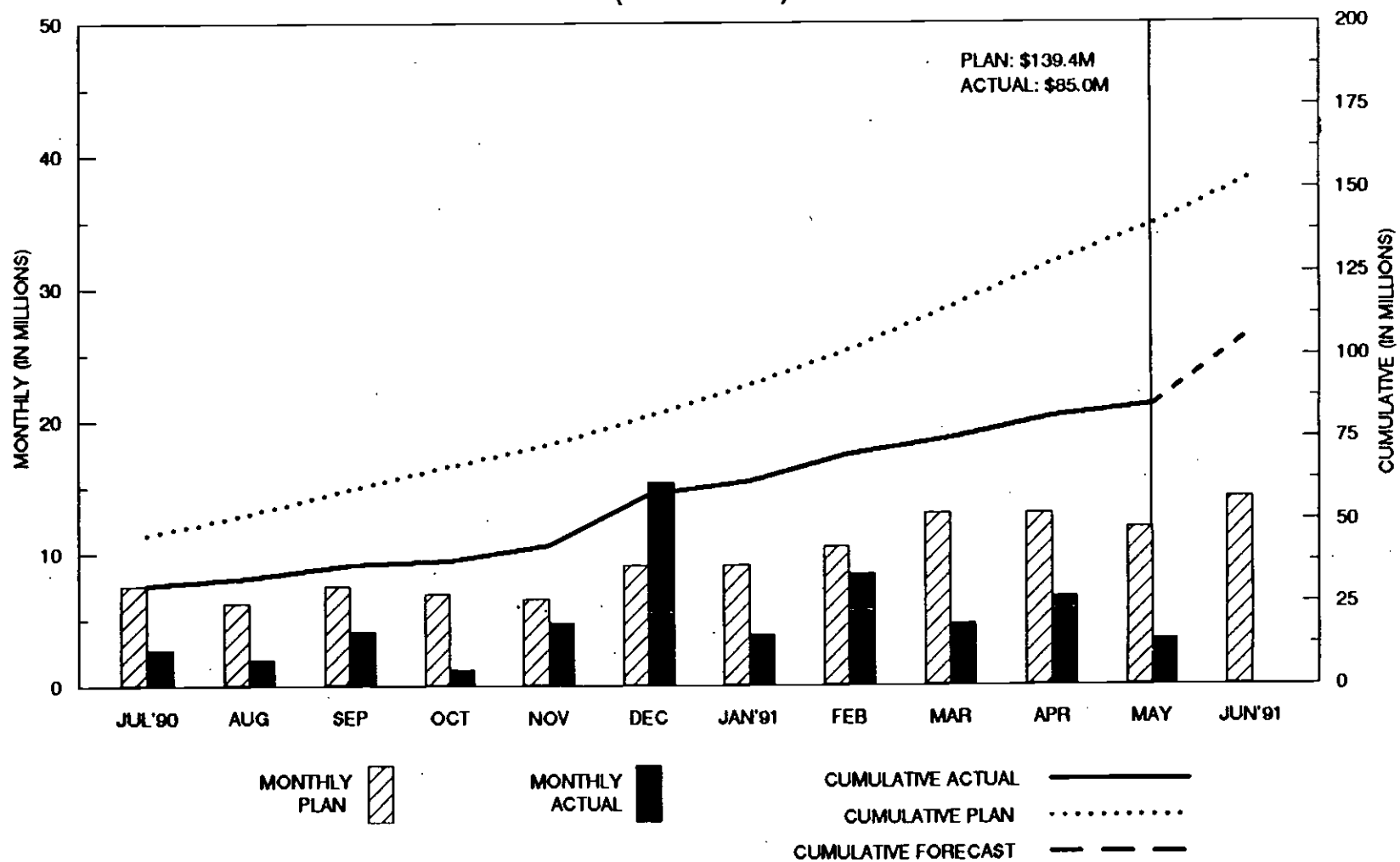
# PROJECT CASHFLOW



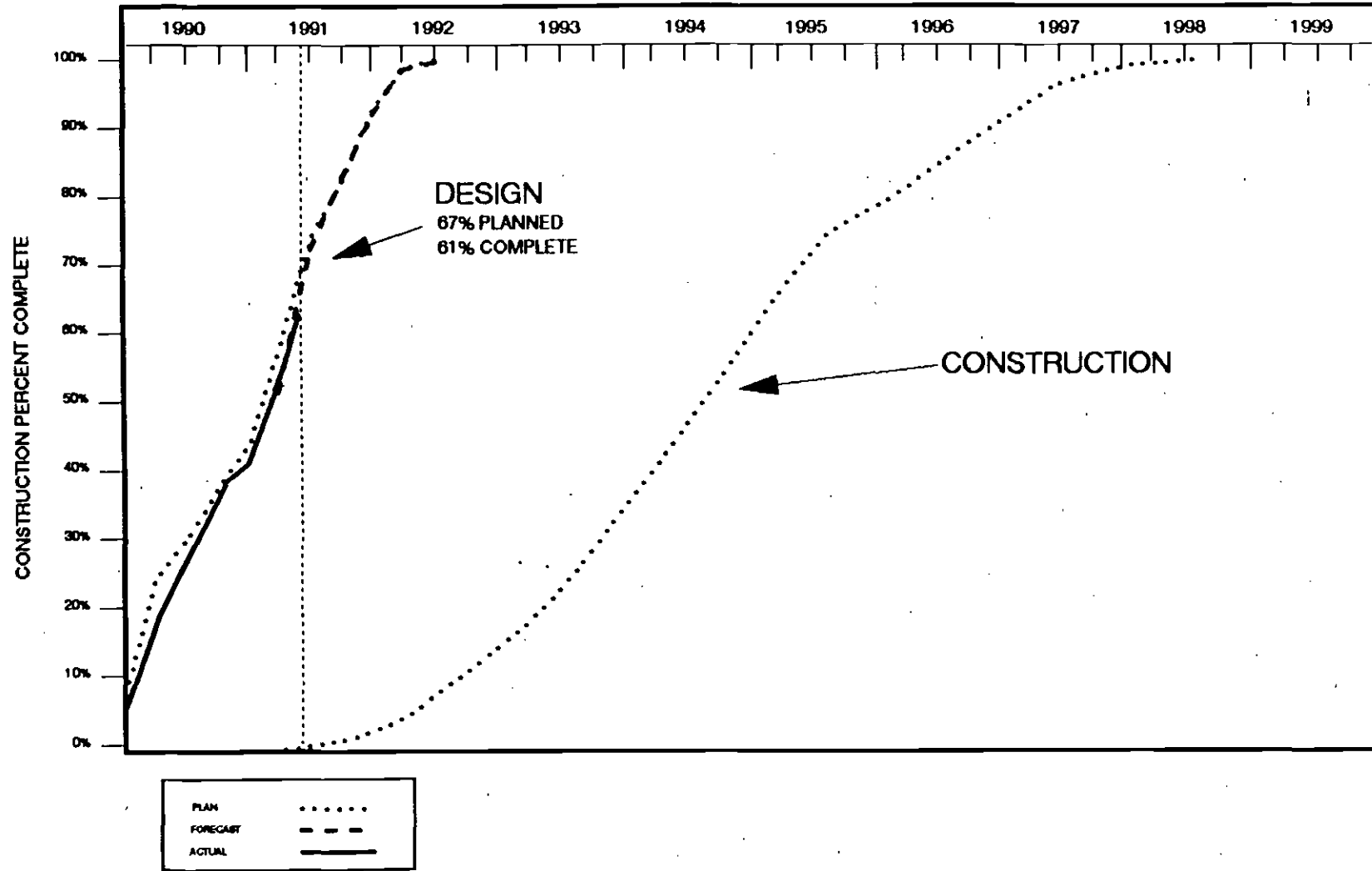
# PROJECT COMMITMENTS (FY'91 ONLY)

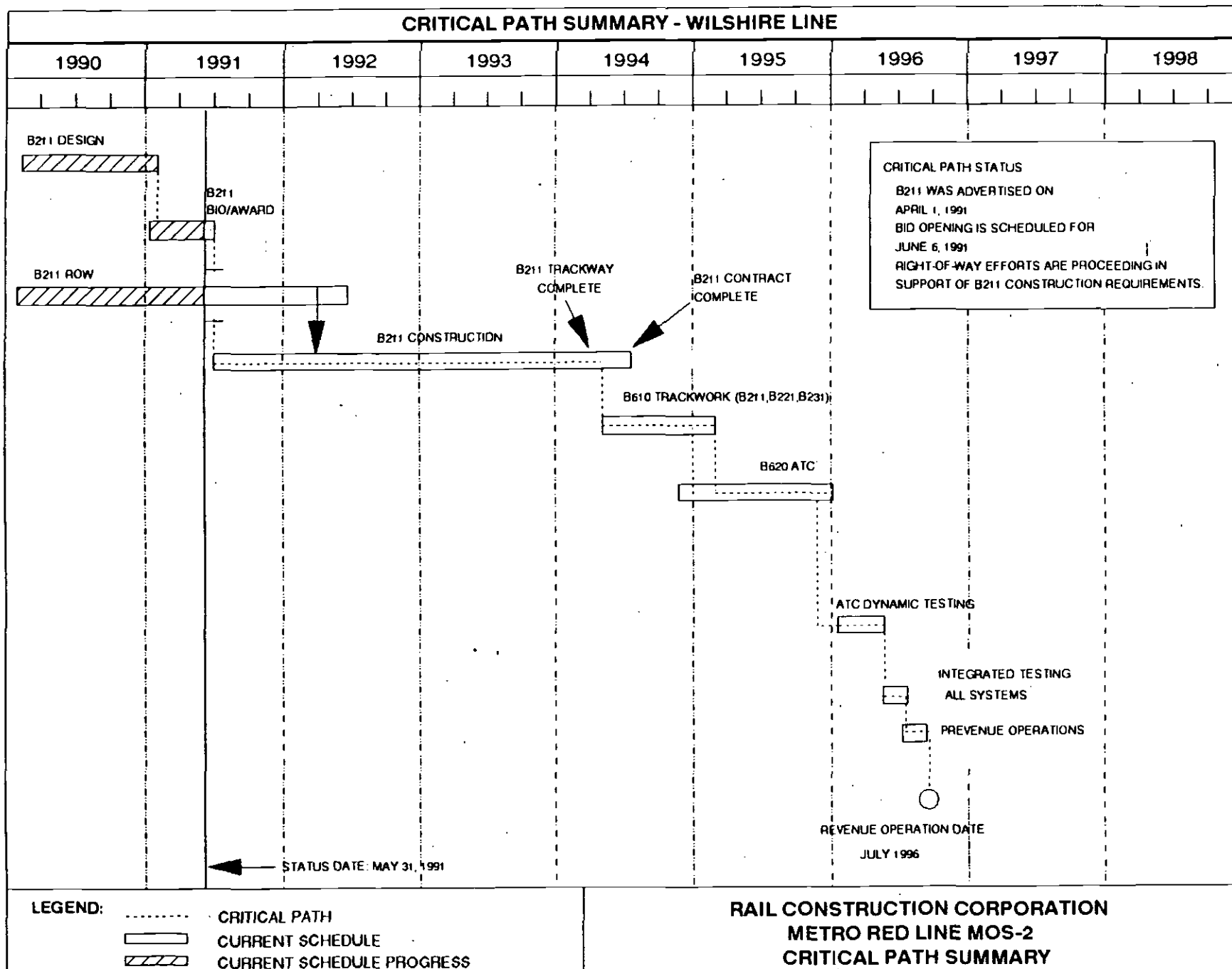


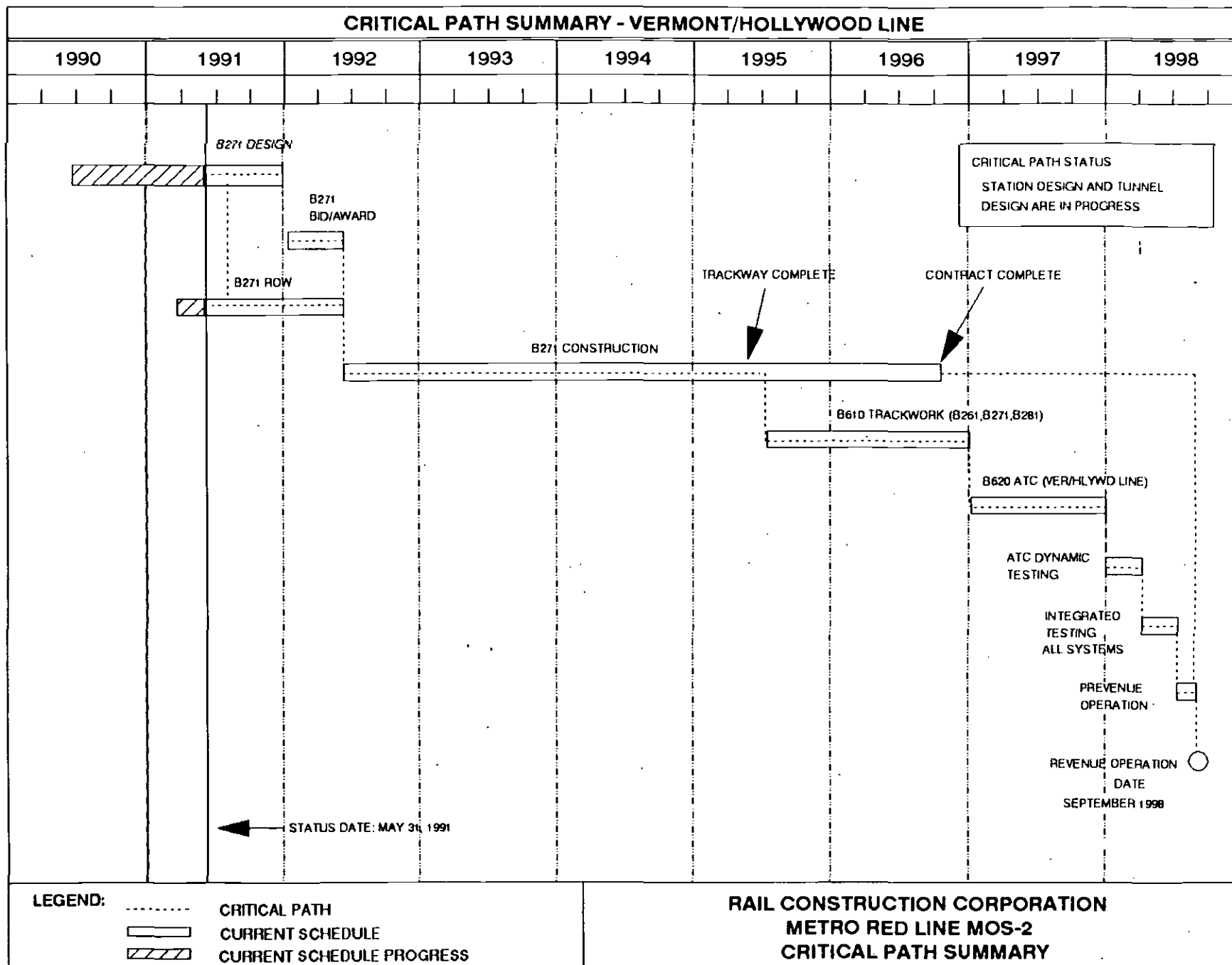
# PROJECT CASHFLOW (FY'91 ONLY)



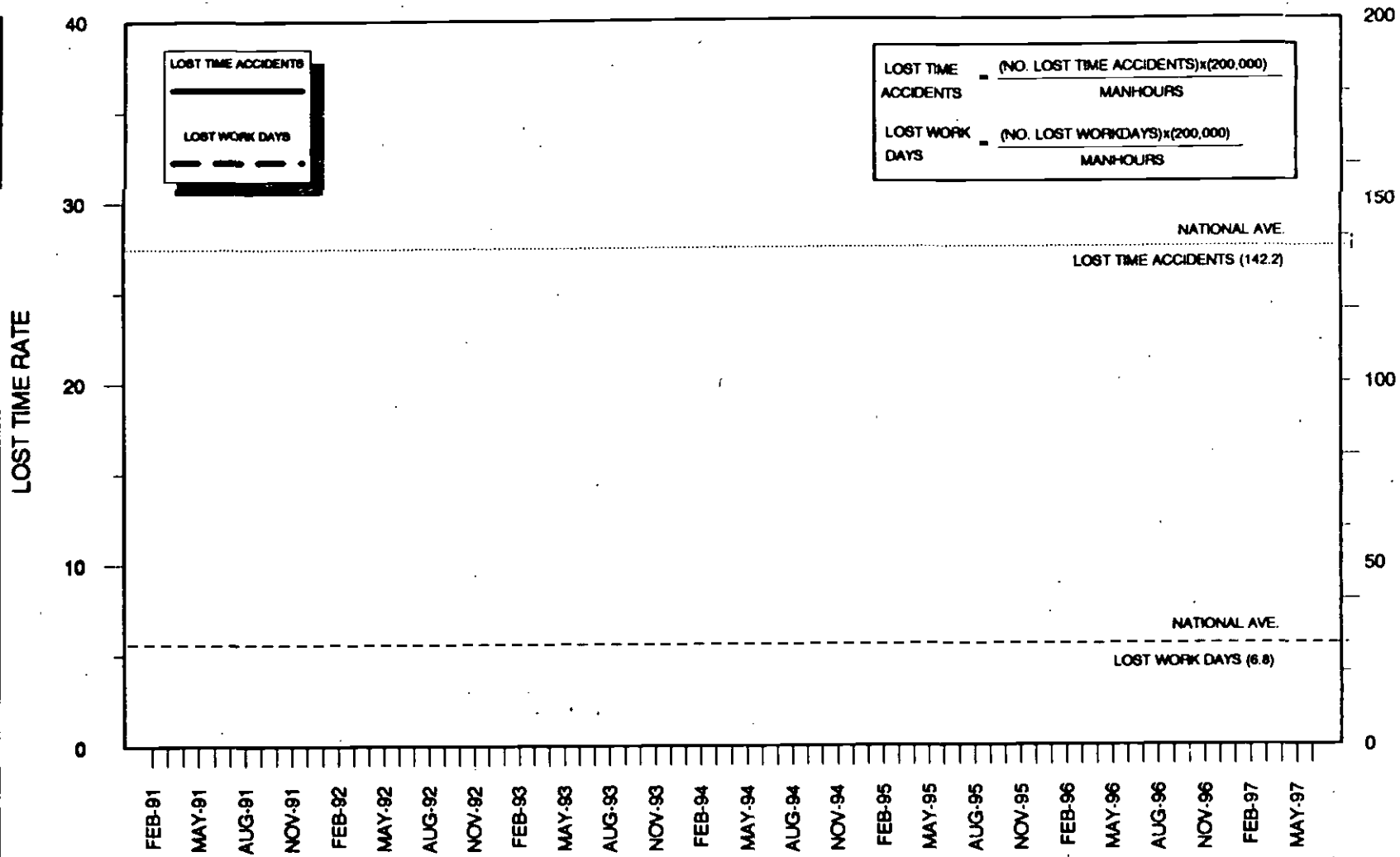
RAIL CONSTRUCTION CORPORATION  
METRO RED LINE MOS-2  
EXECUTIVE SUMMARY SCHEDULE







LOST DAYS RATE



RED LINE PROJECT (MOS-2)  
LOST TIME ACCIDENTS/LOST WORK DAYS  
CUMULATIVE INCIDENT RATES

Total manhours as of April 1991 14,538

## REAL ESTATE SUMMARY

CCU	NO. OF PARCELS	NUMBER CERTIFIED		JUST COMP APPROVED		OFFERS MADE		AGREEMENT SIGNED		CONDEMNATION		PARCELS AVAILABLE		NUMBER OF PARCELS PROJECTED NOT TO BE AVAILABLE BY NEED DATE
		PLAN	ACT	PLAN	ACT	PLAN	ACT	PLAN	ACT	PLAN	ACT	PLAN	ACT	
B201	5	5	5	5	5	5	5	5	2	3	3	1	1	0
B211	7	7	6	7	3	7	3	7	0	3	3	0	0	1
B218	1	1	1	1	1	1	1	1	0	1	1	1	1	0
B221	15	15	15	15	15	15	15	15	8	8	7	3	3	1
B231	3	3	3	3	2	3	2	3	1	1	1	2	2	0
B241	2	0	2	0	0	0	0	0	0	0	0	0	0	0
B251	19	19	18	0	0	0	0	0	0	0	0	0	0	0
B252	3	0	3	0	0	0	0	0	0	0	0	0	0	0
B261	3	0	3	0	0	0	0	0	0	0	0	0	0	0
B271	9	0	1	0	1	0	1	0	1	0	0	0	1	5
B281	1	0	1	0	0	0	0	0	0	0	0	0	0	0
TOTAL	68	50	58	31	27	31	27	31	12	16	15	7	8	7

**Contract B201:** All acquisitions are on schedule. There are no parcels projected "not" to be available by the contract need date.

**Contract B211:** There are seven parcels required in this Contract. One is owned by SCRTD and will be assigned to us without going through the regular steps as shown on the Matrix. Two parcels were newly designated as a result of the change in entrance location. A third parcel was changed from a partial take to a full take, also due to the change in entrance location. Three remaining parcels are proceeding on schedule.

**Contract B218:** The one parcel required for this contract was available by the date it was needed.

**Contract B221:** Basically, the acquisitions for this contract are on schedule. The one parcel planned for condemnation that was not condemned is owned by the City of Los Angeles, and the City has agreed to give us the Right-of-Entry upon the completion of their appraisal, which is expected to be prior to the need date. The one parcel shown as not available by the need date is owned by SCRTD and is in the process of being assigned to the Commission.

**Contract B231:** There is one parcel shown as behind schedule. This parcel is going to be leased rather than acquired in fee. The lease negotiations are moving ahead and the parcel should be available by the scheduled need date.

**Contract B241:** The two parcels required for this contract were certified early to ensure availability when needed.

**Contract B251:** One parcel shown as having certification planned but not certified is a section of the freeway owned by the State of California, which will be obtained by license or franchise, rather than the normal acquisition procedure.

**Contract B252:** The three parcels required for this contract were certified early to ensure availability when needed.

**Contract B262:** Same as Contract B252.

**Contract B271:** One parcel was acquired under an early acquisition program. Of the remaining six parcels, five are currently projected to be acquired three days later than the need date. Assuming that these parcels are certified on or before the scheduled certification dates, it is expected that the three days can be made up during the acquisition process.

**Contract B282:** Proceeding ahead of schedule.

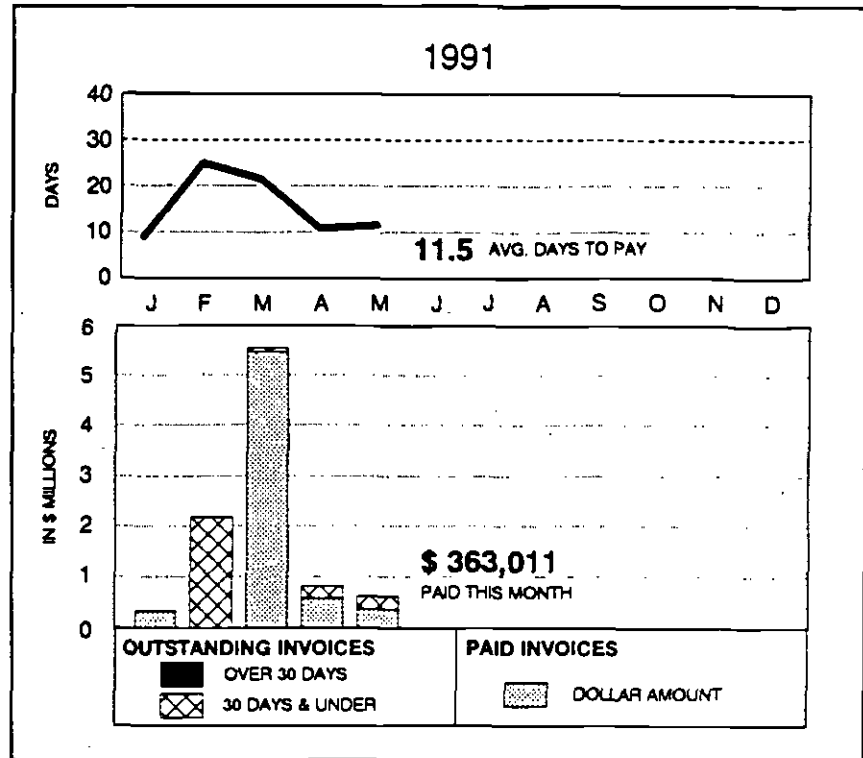
## INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 11.5 days.

- 2 invoices were paid for a total value of \$363,011.

- 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
JAN 1991	1	5,712	0	0	14	2,658,716	13	178,325
FEB 1991	4	2,174,042	0	0	16	2,339,615	18	561,649
MAR 1991	2	68,946	0	0	27	573,361	17	311,103
APR 1991	3	235,308	0	0	8	261,468	6	304,850
MAY 1991	2	252,270	0	0	18	327,579	4	151,501