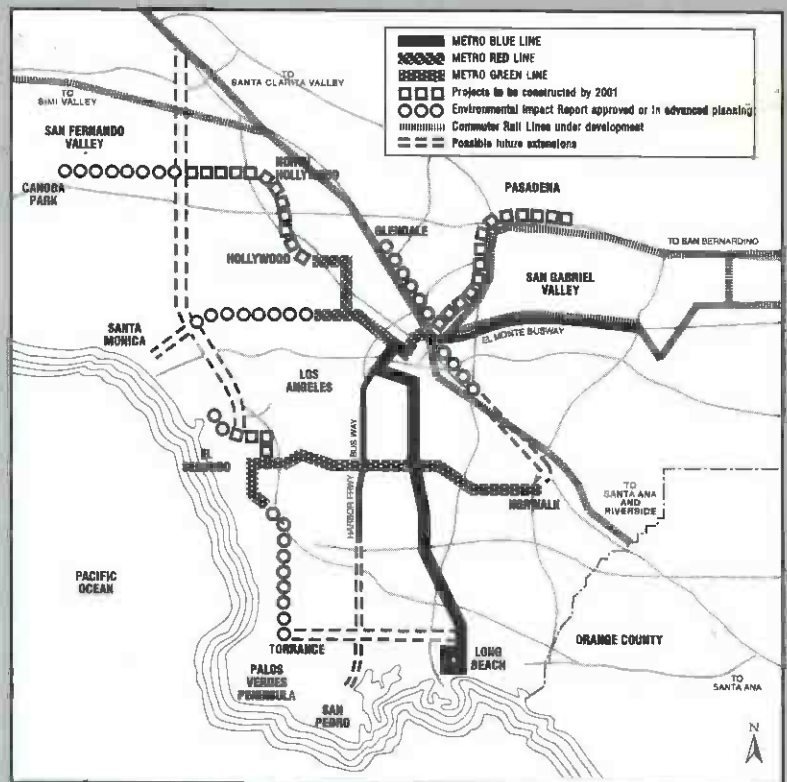


RAIL CONSTRUCTION CORPORATION



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 Metro Blue Line is now in the contract close out stage. The RCC projects have a combined budget of \$4,659,722,000 and a combined current forecast of \$4,659,722,000.

The number of outstanding change notices on Metro Red Line MOS-1 increased by 140 and the number of unresolved change notices increased by 105. The total dollar value of executed change orders for the Metro Red Line MOS-1 increased by about three hundred thousand dollars to \$52.2 million. There were 20 new change notices to the Metro Blue Line and the percent of unresolved change notices went down to 3% from 6% for the previous period. Minor change notice activity has occurred on the Metro Red Line MOS-2 and the Metro Green Line.

The program summary cost report (Figure 1) shows a more complete cost status of the program. This summary report includes the active design and construction projects.

Through February 1991, total program expenditures for active projects is \$1,939,878,000. This is an increase of approximately \$19 million for this 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.

ISSUES

The RCC is actively pursuing documentation and implementation of standard policies and procedures for management of Metro Rail construction. A Policies and Procedures group has been hired to support development of this process.

Vacant staff positions in the RCC organization are being actively recruited. The filling of vacancies in Engineering and Contract Administration positions 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
PROJECT COST REPORT - TOTAL RAIL PROGRAM
SUMMARY BY COST ELEMENT

STATUS DATE: 03/29/91

(IN THOUSANDS)

PROJECT: R01,R23,R80,R81 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	2,488,741	2,820,595	129,017	1,476,193	141,809	1,364,785	12,768	1,065,426	11,012	1,044,985	2,873,904	53,309
PROFESSIONAL SERVICES	913,373	1,116,430	28,329	562,501	27,148	697,037	12,525	605,037	17,331	634,337	1,116,808	378
REAL ESTATE	245,664	325,155	1,255	213,322	(171)	221,374	(210)	173,572	(154)	208,768	330,503	5,348
UTILITY/AGENCY FORCE ACCOUNTS	112,620	114,611	153	64,652	1,987	76,099	1,194	64,645	1,213	64,096	106,971	(7,640)
SPECIAL PROGRAMS	5,522	12,391	0	658	0	758	220	300	4	273	17,440	5,049
PROJECT RESERVE	318,879	317,043	0	0	0	0	0	0	0	0	265,908	(51,135)
PROJECT REVENUE	(18,115)	(46,503)	0	0	(46)	(5,748)	(1,829)	(5,773)	(1,841)	(12,581)	(51,812)	(5,309)
GRAND TOTAL PROJECT	4,066,684	4,659,722	158,754	2,317,326	170,727	2,354,305	24,668	1,903,207	27,565	1,939,878	4,659,722	0

Figure 1

Figure 2 - Rail Construction Plan

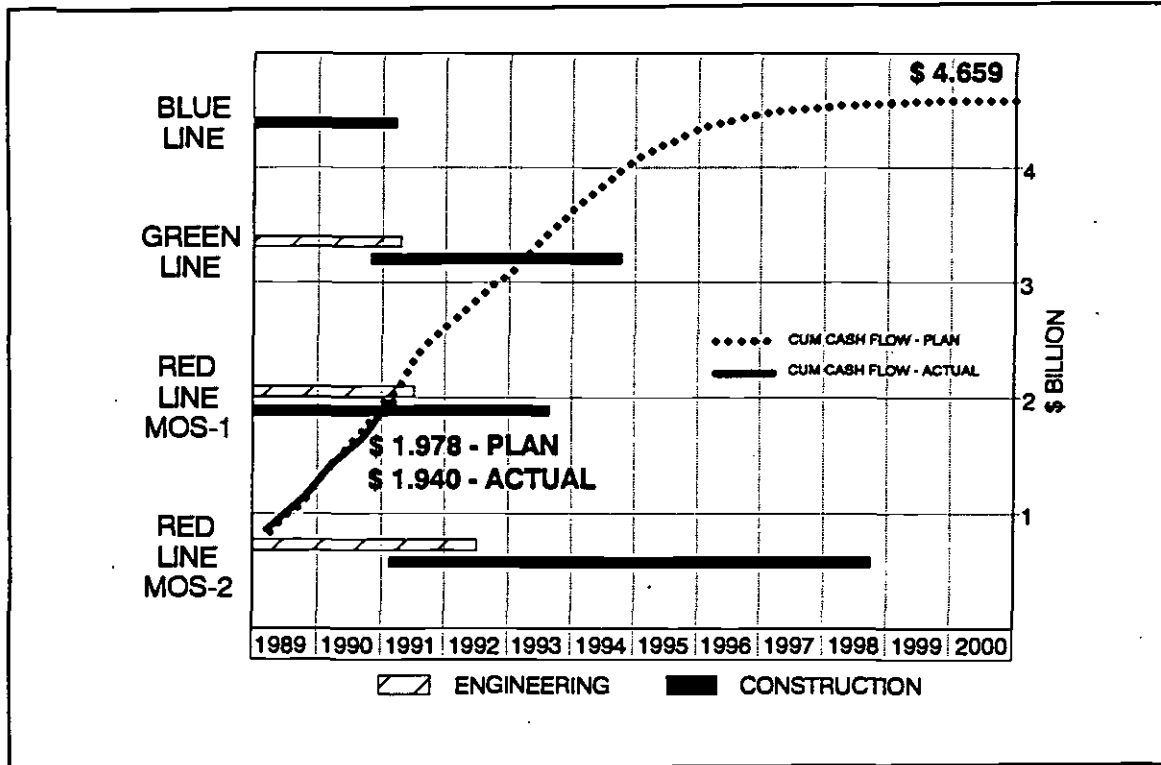


Figure 3 shows the funding sources for each project and for the total program. Data included in this figure is based on the current forecast total cost of each project.

Figure 3 - Rail Construction Funding Sources

BASED ON PROJECT COST FORECASTS (DOLLARS IN MILLIONS)										
	BLUE LINE		GREEN LN		RED LINE MOS-1		RED LINE MOS-2		TOTAL PROGRAM	
	\$	%	\$	%	\$	%	\$	%	\$	%
UMTA					696	48	667	46	1363	29
STATE					214	15	186	13	400	9
LOCAL (PROP A)	877	100	886	100	228	16	439	30	2430	52
BENEFIT ASSESSMENT					130	9	58	4	188	4
CITY OF LOS ANGELES					86	6	96	7	182	4
UNALLOCATED FCST					96	6	—		96	2
TOTAL	877*	100	886	100	1450**	100	1446	100	4659	100

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

PROGRAM SCHEDULE STATUS

The Metro Green Line is scheduled for Revenue Operations in October 1994. The project is now 105 days behind schedule (an additional 40 days behind from the last period) primarily because of slippage in the Vehicle Procurement (P1900) contract package. The delay is being caused by prospective bidders asking for a longer bid response time and by design evolution.

The Metro Red Line MOS-1 is scheduled to begin Revenue Operations in September 1993. The critical path for this project involves completion of all trackbed area work in stations and tunnels to allow trackwork access. This remains an achievable schedule.

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 impacts to these dates are presently seen.

REAL ESTATE

To date, one hundred ninety-three (193) real estate parcels have been identified as required for the Metro Red Line (MOS-1 and MOS-2) and the Metro Green Line. During the month, three parcels were made available for construction (1 for the Metro Green Line and 2 for the Metro Red Line MOS-2). There are 3 less parcels than last month as a result of a parcel deletion for the Metro Red Line MOS-2. Figure 4 summarizes the real estate status for each project.

Figure 4 - Real Estate Acquisition Status Summary

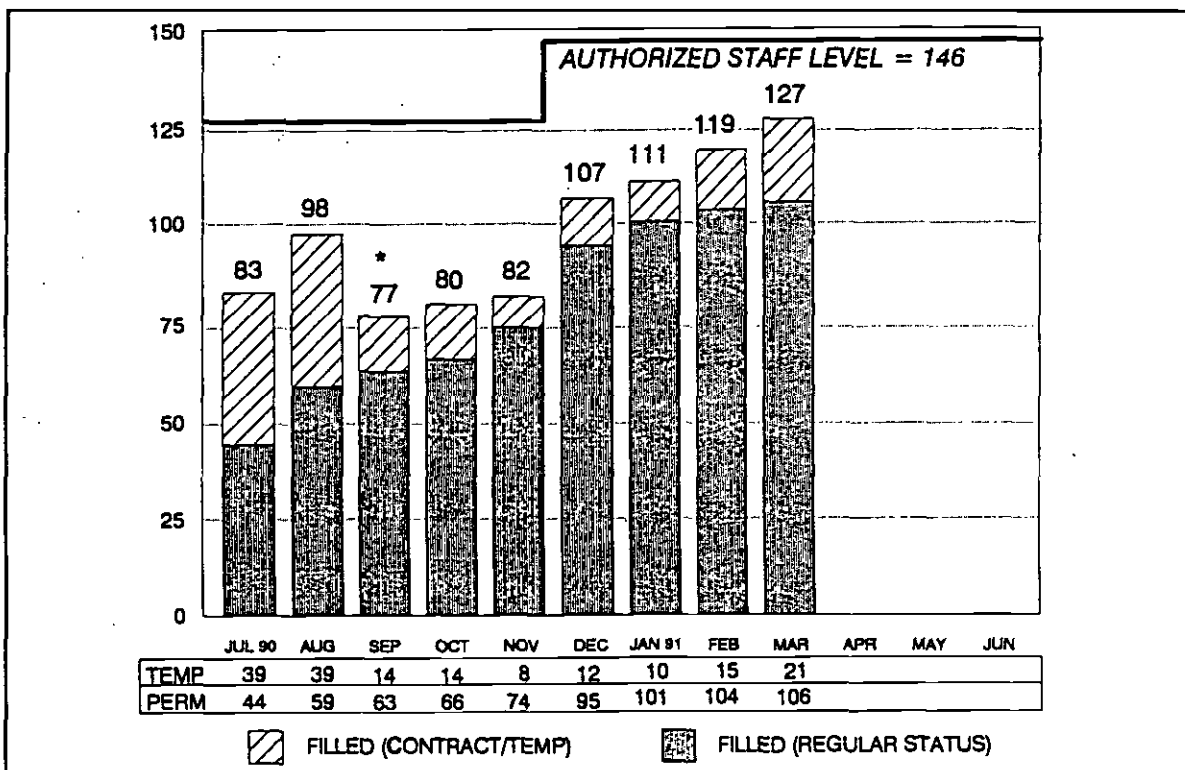
REAL ESTATE - STATUS SUMMARY							
TOTAL							
PROJECT	NO. OF PARCELS	NUMBER CERT'D	JUST COMP APPROVED	OFFERS MADE	CONDEM- NATION	PARCELS AVAIL	PARCELS NOT AVAIL
GREEN	35	35	23	23	3	21	14
MOS-1	94	94	94	94	22	94	0
MOS-2	64	40	24	24	4	6	58
TOTAL	193	169	141	141	29	121	72
PREVIOUS MONTH	196	157	116	117	27	118	78

RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Authorized staff level for the RCC is one hundred forty-six (146). Presently, one hundred six (106) positions are filled with regular full time staff and fifteen (15) 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. Based on the current cost forecast data for each project, the project administration cost totals 24%, the same as last month. 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% of total program costs which meets the established corporate goal. Figure 6 illustrates the forecast figures for each project and for total program.

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
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	GOAL
CONSTRUCTION	657,487	75%	604,709	68%	744,276	51%	974,403	67%	2,980,875	64%	
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%	81,773	6%	445,341	10%	
CONSTRUCTION MGMT.	91,642	10%	50,165	6%	138,325	10%	110,089	8%	390,221	8%	
STAFF	17,655	2%	26,189	3%	107,939	7%	56,166	4%	207,949	4%	4%
OTHER	14,222	2%	7,543	1%	20,744	1%	48,228	3%	90,737	2%	
SUBTOTAL	193,106	22%	162,367	18%	482,519	33%	296,256	20%	1,134,248	24%	20%
PROJECT RESERVE	963	0%	82,934	9%	83,404	6%	98,607	7%	265,908	6%	
PROJECT REVENUE	(29,877)	-3%	(16,626)	-2%	0	0%	(5,309)	-0%	(51,812)	-1%	
GRAND TOTAL	877,271	100%	886,000	100%	1,450,019	100%	1,446,432	100%	4,659,722	100%	

Figure 6

CONSTRUCTION SAFETY

Figure 7 shows the combined Construction Safety report for the Metro Blue Line and the Metro Red Line (MOS-1).

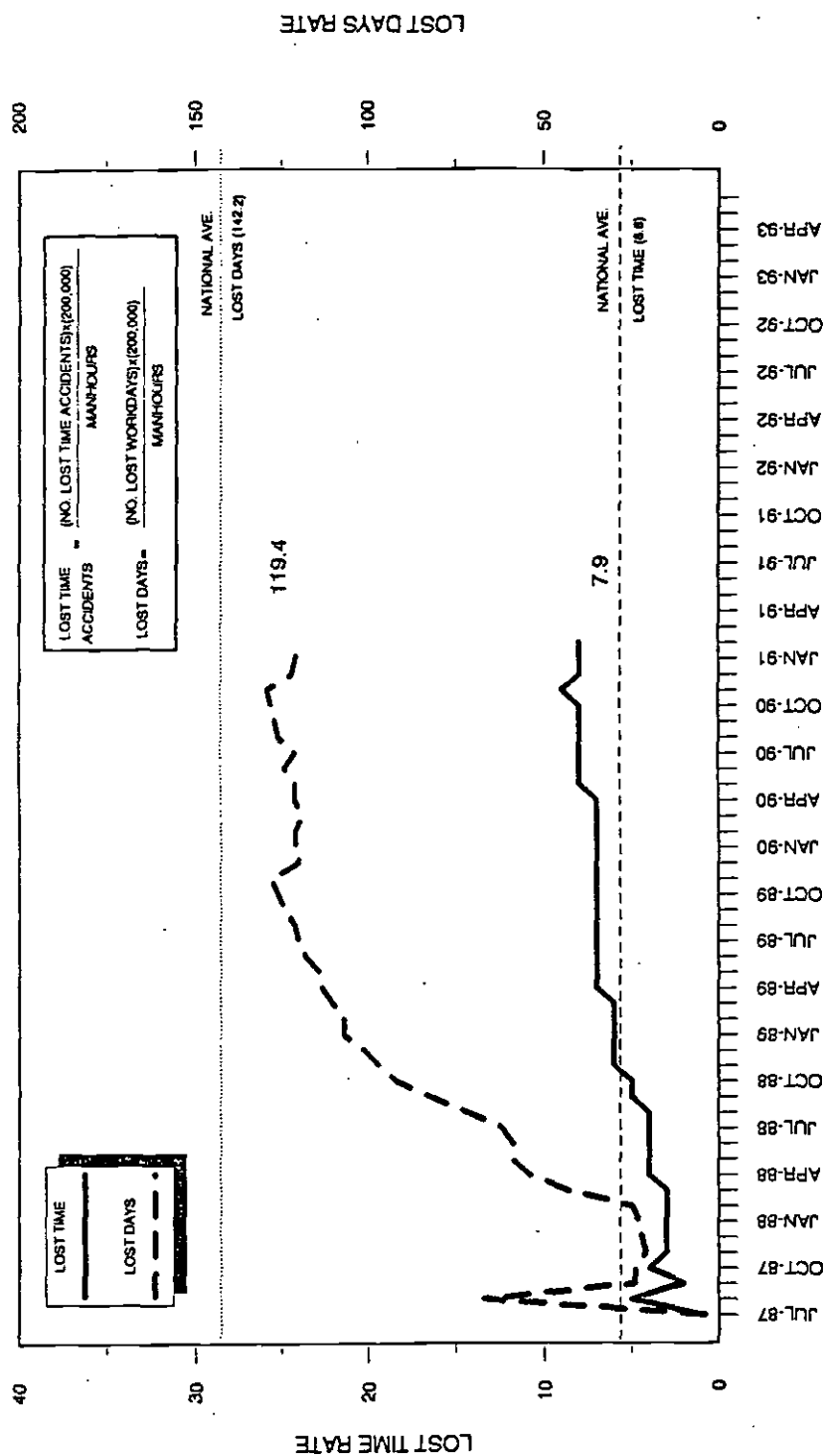


Figure 7

Total manhours as of February 1991: 12,949,230

CONSOLIDATED PROJECTS
SAFETY LOST TIME/LOST DAYS
CUMULATIVE INCIDENCE RATES

INVOICE PROCESSING

The invoice processing graph has been changed from a weekly moving average of all invoices to a monthly average of just procurement/construction contract invoices. This graph will be revised and shown in the next monthly report.

In the month of March 1991 for Construction/Procurement contracts:

Total Number of Invoices Paid **33**

Value of Invoices Paid **\$13,158,589**

Average Days to Pay **13.1**

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.

The status on Outstanding Invoices shown below.

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	9	3,995,046	2	19,717	82	12,183,298	54	6,862,049
FEB 1991	13	5,220,555	0	0	110	17,347,217	60	8,224,141
MAR 1991	8	4,831,793	1	33,214	97	15,591,590	77	7,005,498

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

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 \$771,422,842 (88.5% of the budget) have been incurred to date and \$821,965,610 (94% of the budget) has been committed during the same time period.

SCHEDULE STATUS

Construction progress WAS measured at 99.0% compared to the planned progress of 99.0%

AREAS OF CONCERN

ONGOING

January 1991

TVM Reliability

- Concern: The Ticket Vending Machines are experiencing breakdowns in excess of desired goals.
- Action: To improve TVM reliability and performance through closer supervision.
- Status: Vender has instituted a monitoring program to insure that the reliability improvement program is kept on schedule.

RAIL CONSTRUCTION CORPORATION
PROJECT COST REPORT - METRO BLUE LINE
SUMMARY BY COST ELEMENT

STATUS DATE: 03/29/91

(IN THOUSANDS)

PROJECT: R01 METRO BLUE LINE	(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	497,194	608,859	1,278	572,981	1,624	544,942	6,189	519,217	4,705	516,348	610,109	1,250
PROFESSIONAL SERVICES	121,494	186,778	0	164,821	1,516	179,755	1,516	179,753	1,487	177,324	186,778	0
REAL ESTATE	39,847	55,592	0	49,463	38	48,731	38	47,966	38	47,876	55,592	0
UTILITY/AGENCY FORCE ACCOUNTS	50,177	47,378	0	44,434	899	58,208	1,081	55,124	1,081	54,399	47,378	0
SPECIAL PROGRAMS	0	6,328	0	0	0	0	0	0	0	0	6,328	0
PROJECT RESERVE	64,129	2,213	0	0	0	0	0	0	0	0	963	(1,250)
PROJECT REVENUE	(1,489)	(29,877)	0	0	0	444	(1,783)	(5,362)	(1,783)	(5,362)	(29,877)	0
GRAND TOTAL PROJECT	771,352	877,271	1,278	831,699	4,077	832,080	7,041	796,698	5,528	790,585	877,271	0

RAIL CONSTRUCTION CORPORATION
PROJECT COST REPORT - METRO BLUE LINE
(LIGHT RAIL PORTION)
SUMMARY BY COST ELEMENT
(IN THOUSANDS)

STATUS DATE: 03/29/91

METRO BLUE LINE

MARCH 1991

PROJECT: R01 METRO BLUE LINE	(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	497,194	578,894	1,278	569,757	1,624	541,612	5,988	516,020	4,504	513,151	580,144	1,250
PROFESSIONAL SERVICES	121,494	183,458	0	164,821	1,516	179,726	1,516	179,724	1,516	177,324	183,458	0
REAL ESTATE	39,847	52,065	0	49,463	38	48,731	38	47,966	38	47,876	52,065	0
UTILITY/AGENCY FORCE ACCOUNTS	50,177	47,378	0	44,434	899	58,208	1,081	55,124	1,081	54,399	47,378	0
SPECIAL PROGRAMS	0	2,728	0	0	0	0	0	0	0	0	2,728	0
PROJECT RESERVE	64,129	1,713	0	0	0	0	0	0	0	0	463	(1,250)
PROJECT REVENUE	(1,489)	(19,287)	0	0	0	444	(3)	(3,236)	(3)	(3,236)	(19,287)	0
GRAND TOTAL PROJECT	771,352	846,949	1,278	828,475	4,077	828,721	8,620	795,598	7,136	789,514	846,949	0

RAIL CONSTRUCTION CORPORATION
PROJECT COST REPORT - METRO BLUE LINE
(MC5 PORTION)
SUMMARY BY COST ELEMENT
(IN THOUSANDS)

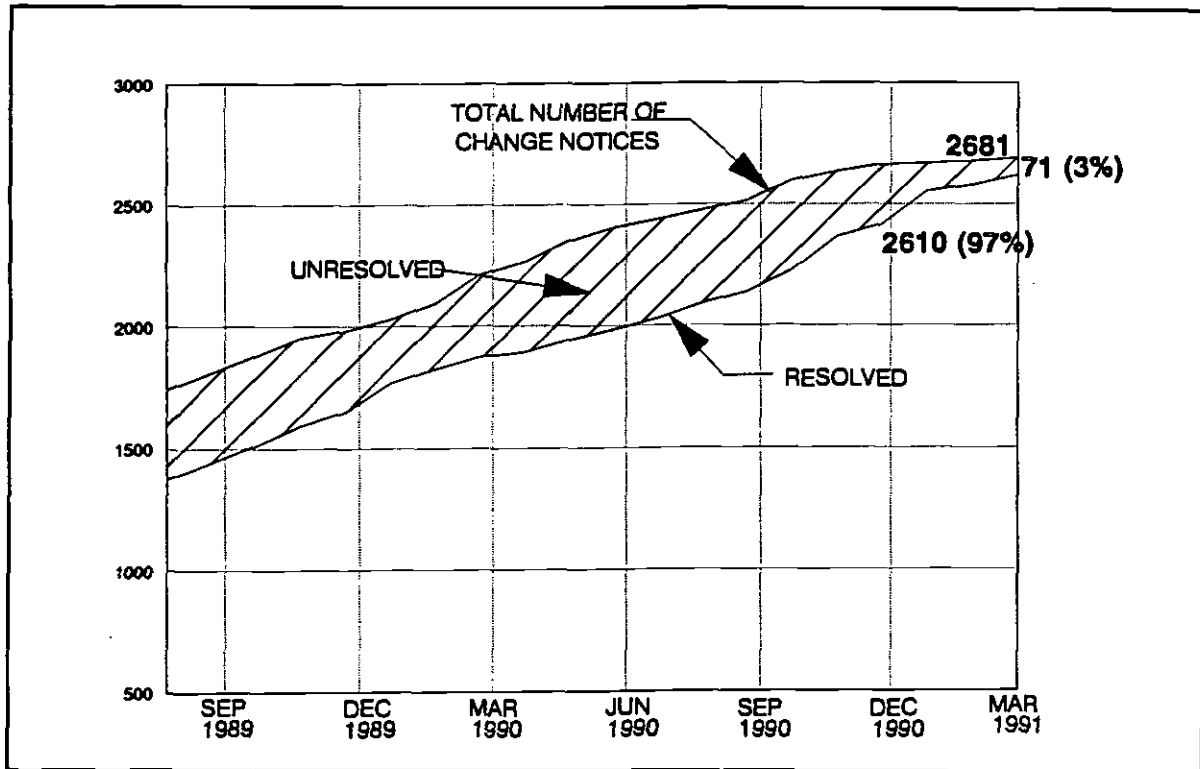
STATUS DATE: 03/29/91

METRO BLUE LINE

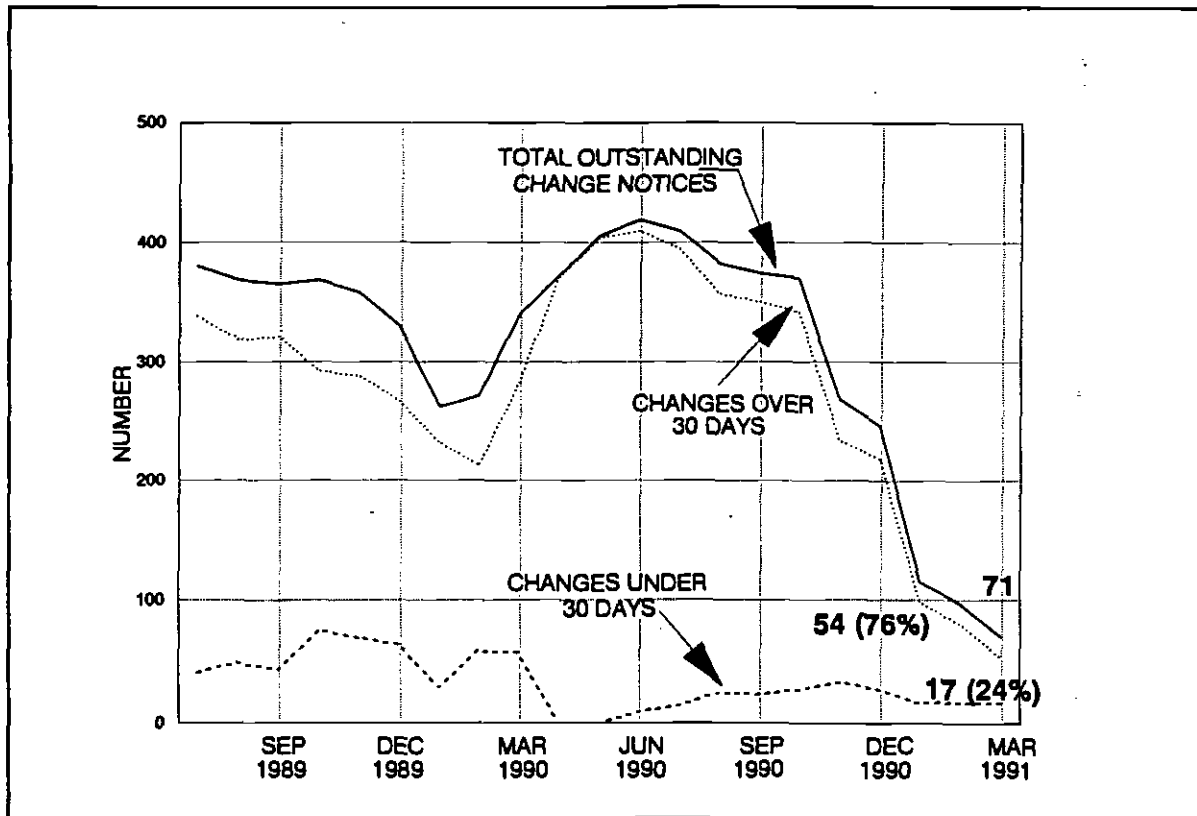
MARCH 1991

PROJECT: RH1 MC5 RR RELOC.	(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	0	29,965	0	3,224	0	3,330	201	3,197	201	3,197	29,965	0
PROFESSIONAL SERVICES	0	3,320	0	0	0	29	0	29	(29)	0	3,320	0
REAL ESTATE	0	3,527	0	0	0	0	0	0	0	0	3,527	0
UTILITY/AGENCY FORCE ACCOUNTS	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL PROGRAMS	0	3,600	0	0	0	0	0	0	0	0	3,600	0
PROJECT RESERVE	0	500	0	0	0	0	0	0	0	0	500	0
PROJECT REVENUE	0	(10,590)	0	0	0	0	(1,780)	(2,126)	(1,780)	(2,126)	(10,590)	0
GRAND TOTAL PROJECT	0	30,322	0	3,224	0	3,359	(1,579)	1,100	(1,608)	1,071	30,322	0

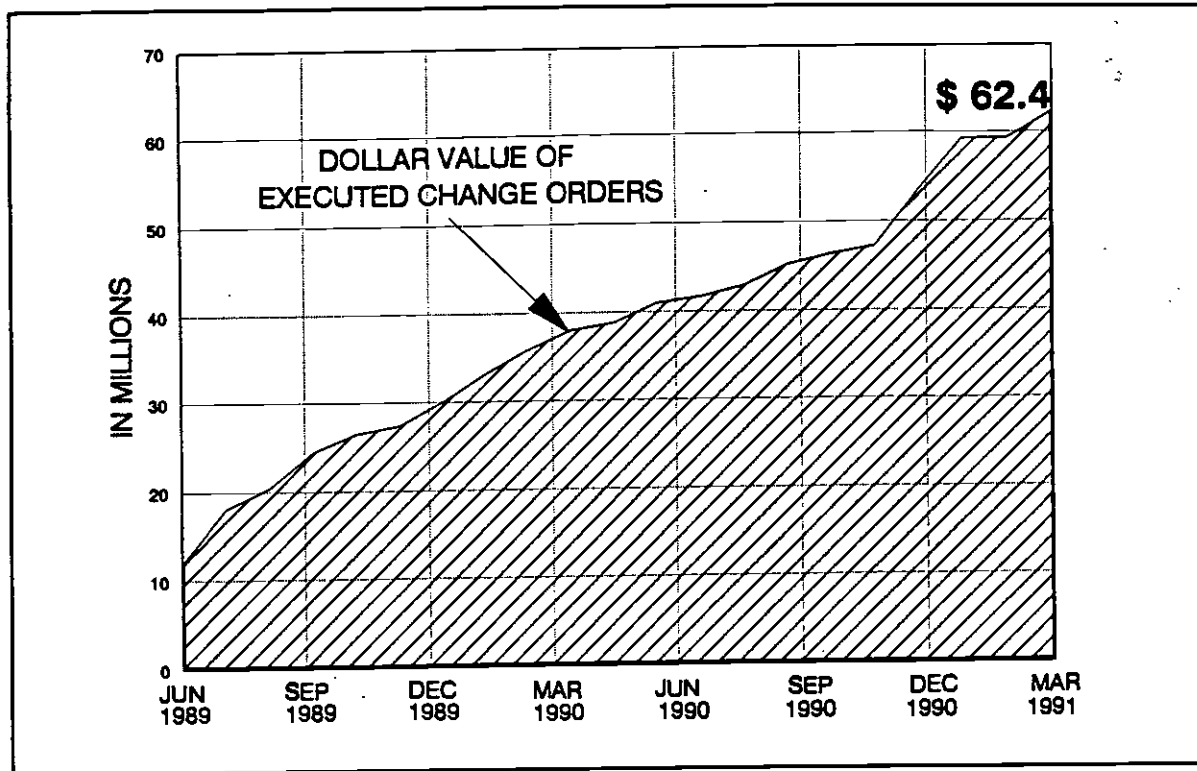
Change Notice Resolution



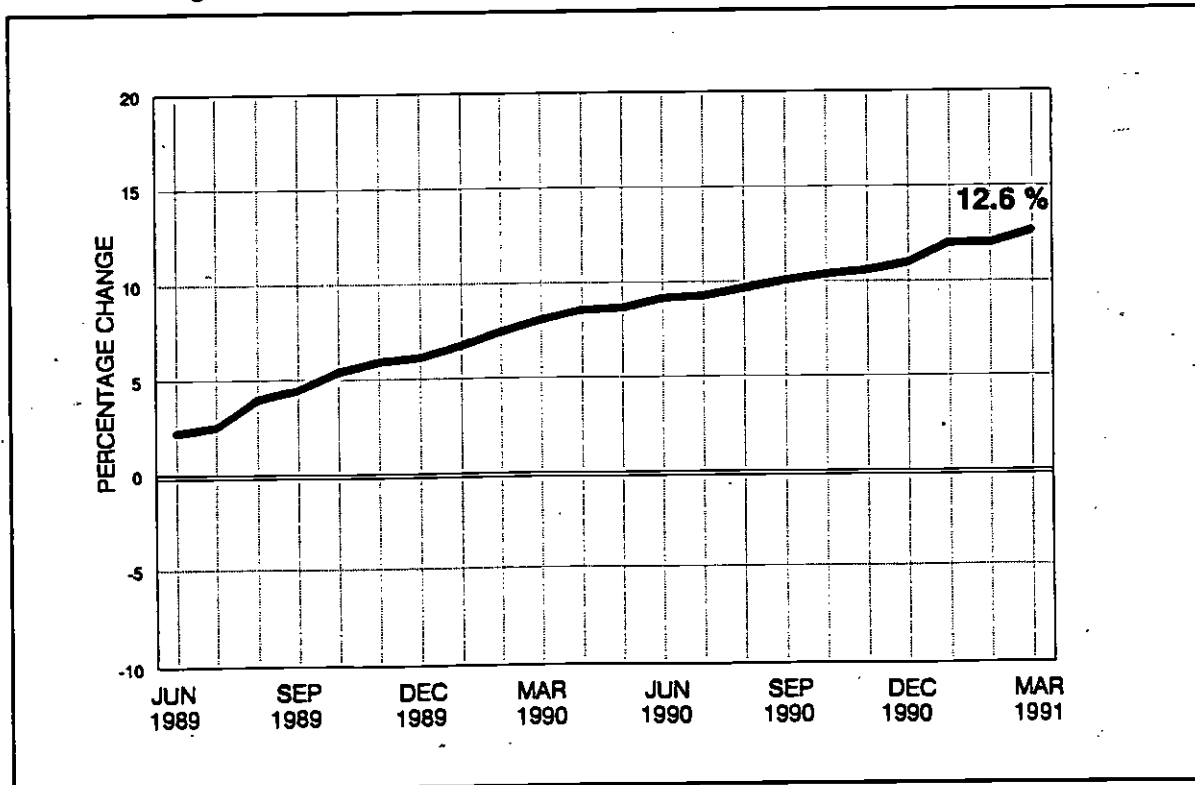
Change Activity Progress



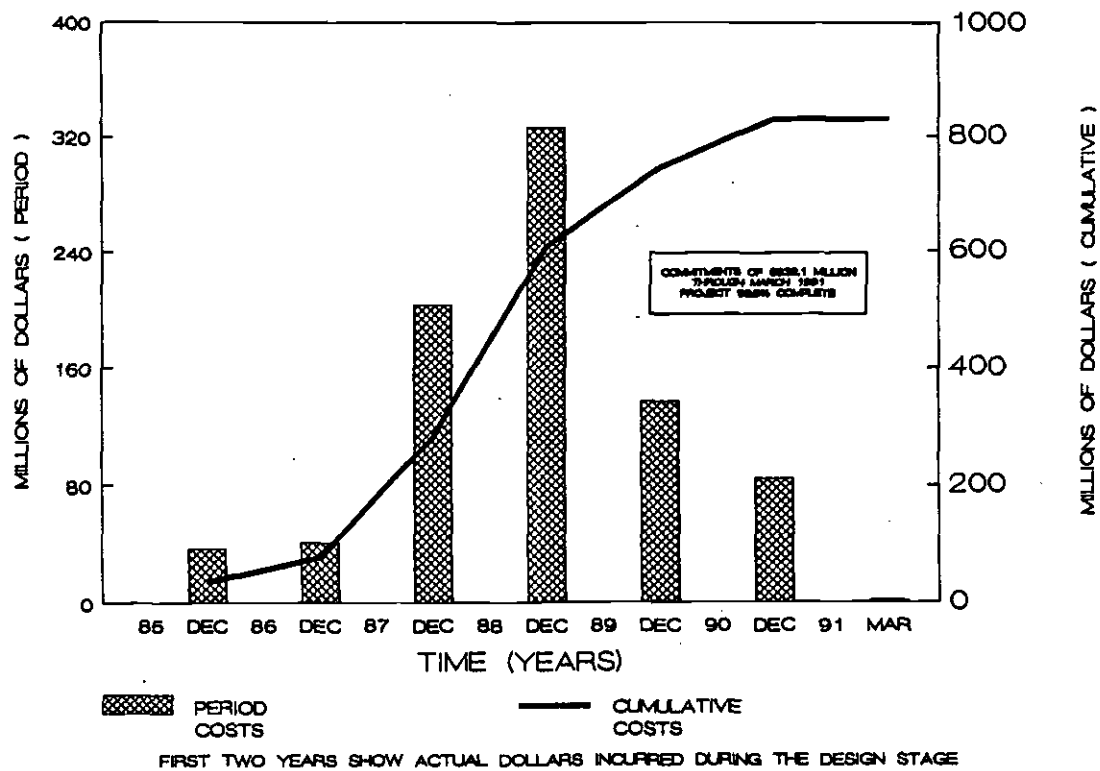
Total Value of Executed Change Orders



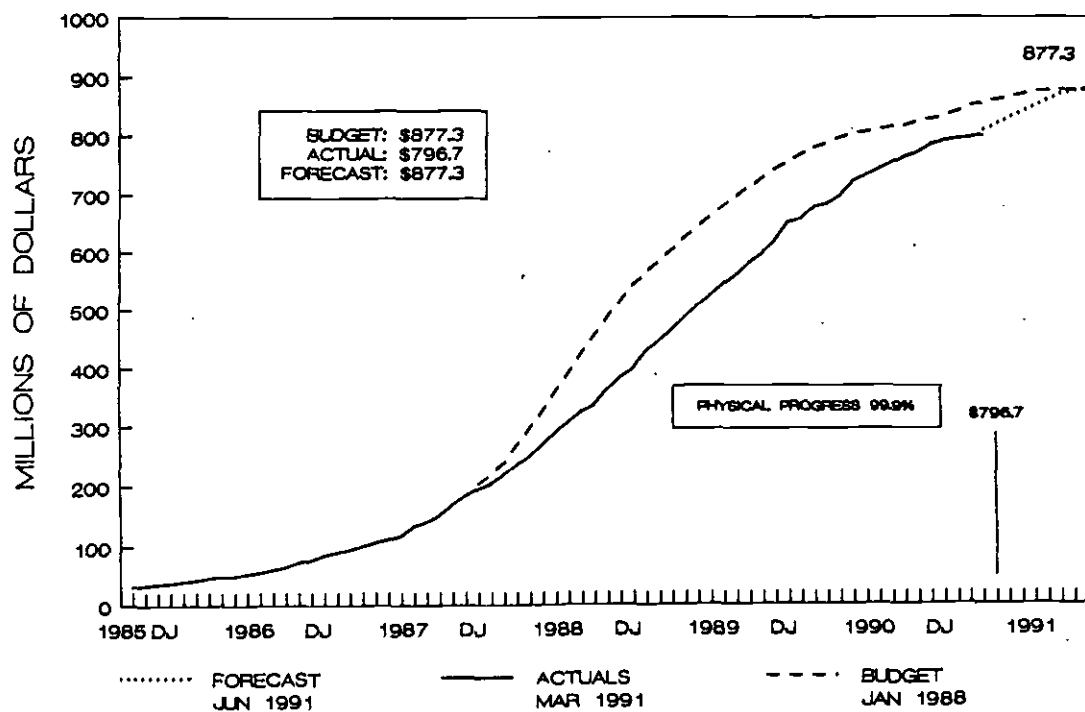
Change Order Dollars as a Percentage of Original Contract Award



METRO BLUE LINE COMMITTED COSTS



METRO BLUE LINE CASH FLOW PROJECTION



LEGEND

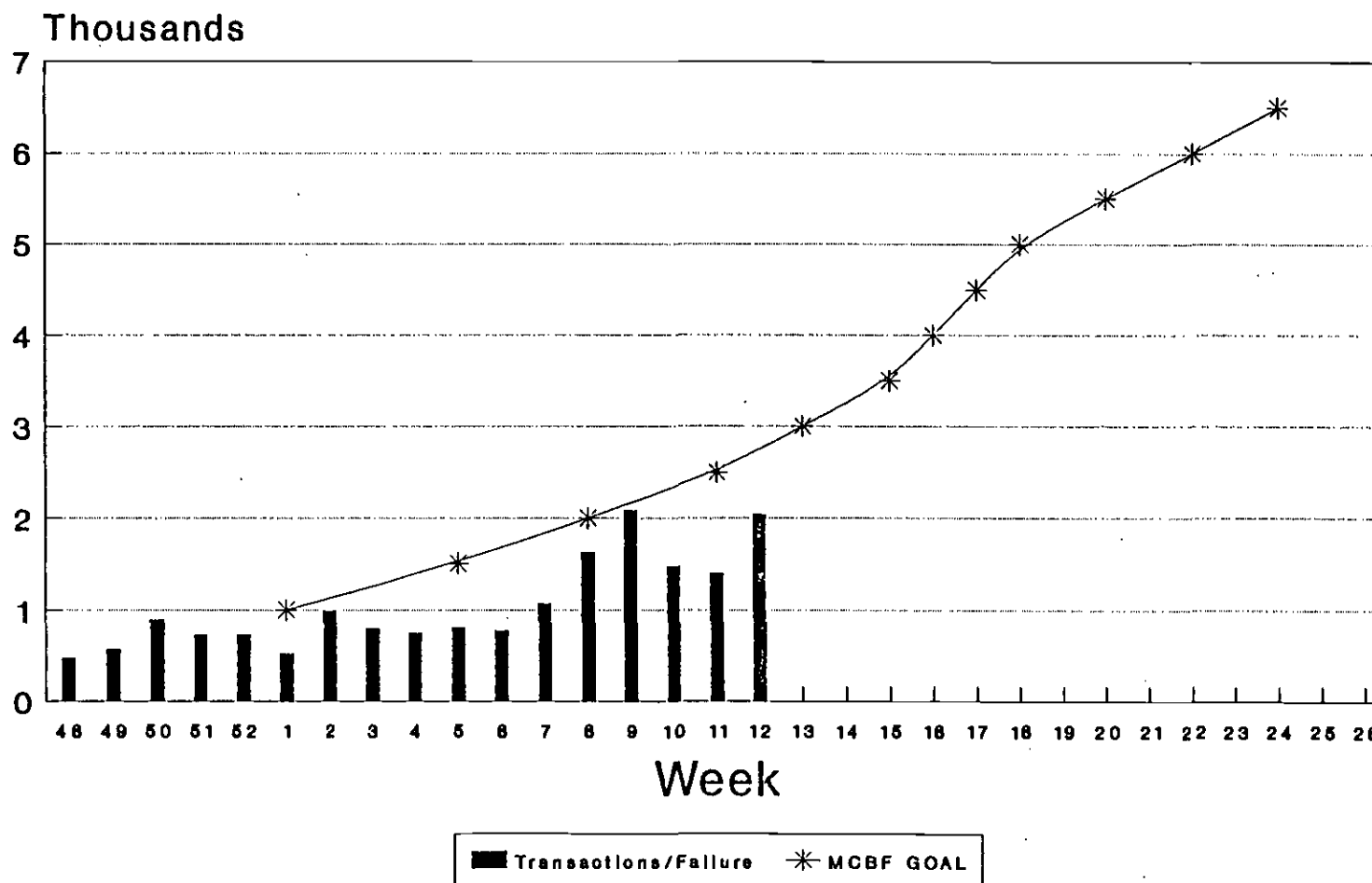
O	Open. Action still required.
	Completed or Not Applicable

CONTRACT CLOSE OUT STATUS
METRO BLUE LINE

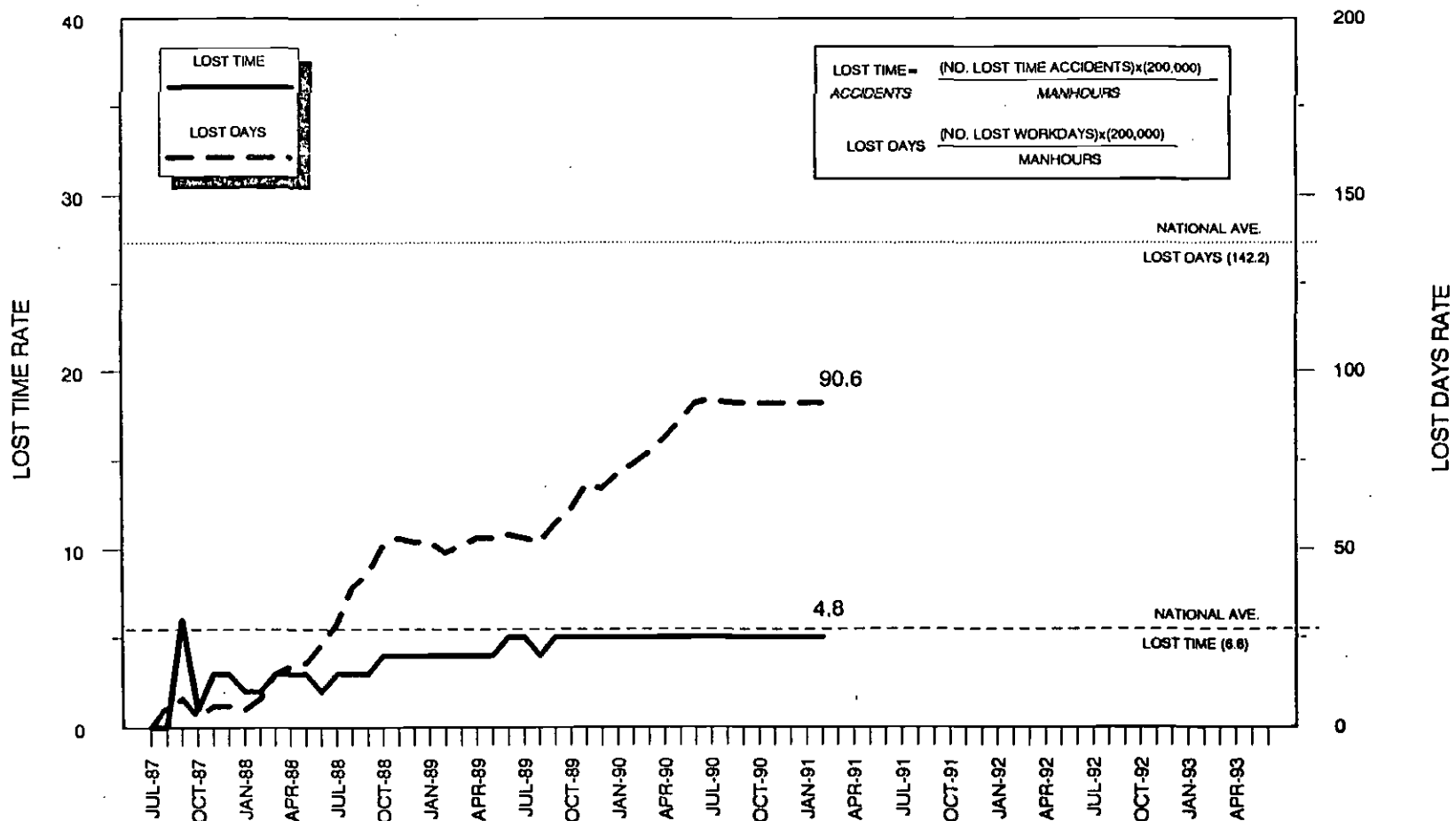
CONTRACT NUMBER	DESCRIPTION	CLOSE OUT STATUS					COMMENTS	PROJECTED CLOSE-OUT DATE
		CLAIMS/CHANGE ORDERS	FINAL PROG. PAYMENT	FINAL RELEASE	FINAL ACCEPT. CERTIF.	EQUIP. FINAL DELIV.		
C265	Station Super & Corridor						Package delivered to LACTC on 2-20-91	06-Mar-91
C275	Mid Corridor Landscaping	O					Package delivered to RCC on 3-18-91	25-Mar-91
C3270	Long Beach Loop						Package to RCC on 3-22-91	25-Mar-91
H860	Graphics & Signs	O	O	O	O		Package delivered to LACTC on 3-11-91	25-Mar-91
C420	MC5 Rosecrans Utility Reloc.						Pending resolution of insurance back charges	08-Apr-91
C117	Flower Street Subway	O	O	O	O		LACTC to approve CO #35	22-Apr-91
C140	LACBD Approach	O	O	O	O		LACTC to decide on CO #134 & #156	22-Apr-91
C335	LB Station Super Structure	O	O	O	O			22-Apr-91
C415	Firestone Bridge	O	O	O	O		DKJV to issue final report on CO #28	22-Apr-91
H836	Safety & Security Comm Sys	O	O	O	O			22-Apr-91
P822	Concrete Ties	O	O	O	O		Pandrol to test further the Insulating pads	22-Apr-91
P830	Special Trackwork		O	O	O	O	Spares delivery & receipt by RTD	22-Apr-91
H811	TPSS	O	O	O	O			06-May-91
H812	OCS	O	O	O	O			06-May-91
H825	Signalling & Train Control	O	O	O	O			06-May-91
H831	SCADA	O	O	O	O		Contract to be transferred to OKA (Green)	06-May-91
H832	Cable Transmission (CTS)	O	O	O	O		Contract to be transferred to OKA (Green)	06-May-91
P851	Hi-Rail Trucks	O	O	O	O		Back charges under dispute	06-May-91
H840	Fare Collection		O	O	O	O	Contract to be transferred to OKA (Green)	20-May-91
C4710	Misc. Construction	O	O	O	O	O	Work in progress	10-Jun-91
P852	Re-Railing Truck, Car Mover	O	O	O	O	O	Added work from P851	22-Jul-91
C355	Long Beach Landscaping	O	O	O	O		Work in progress	Sep-91

Weekly TVM Reliability Report

Maintenance-CDCS Data



Week Numbers Correspond to Calendar



**BLUELINE PROJECT
 SAFETY LOST TIME/LOST DAYS
 CUMULATIVE INCIDENCE RATES**

Total manhours as of February 1991: 4,755,427

INVOICE PROCESSING

The invoice processing graph has been changed from a weekly moving average of all invoices to a monthly average of just procurement/construction contract invoices. This graph will be revised and shown in the next monthly report.

In the month of March 1991 the statistics for Construction/Procurement contracts were:

Total Number of Invoices Paid	10
Value of Invoices Paid	\$1,107,475
Average Days to Pay	12.7

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	6	1,036,077	2	19,717	43	2,661,644	33	5,057,491
FEB 1991	1	174,248	0	0	57	3,286,622	35	5,065,440
MAR 1991	2	178,229	1	33,214	32	3,797,456	54	5,586,470

EXECUTIVE SUMMARY

The total project budget is now \$886 million. The cashflow information reflects a total project expenditure of \$69.2 million, representing approximately 8% of the current total dollars. To date the project commitments are \$152.2 million, approximately 17% of the total budget.

The design portion of the base Metro Green Line project is approximately 96% complete. Design of the North Coast Extension Segment has begun, and is scheduled to be complete by March, 1992.

The March 1991 update of the Master Schedule indicates that the project is 105 working days behind the target Revenue Operations Date (ROD) of October 1994. The current forecast ROD for the project is March 1995. The Critical Path runs through Contract P1900, Vehicle Procurement. The secondary Critical Path runs through El Segundo segment contracts as follows: C0101, Utility Relocation and Foundations; C0100, Elevated Guideway and Stations; C0610, Trackwork Installation; H1400, Overhead Contact System; H1100, Automatic Train Control; Overall Systems Testing & Integration; and Pre-Revenue Operations.

Of the four civil construction contracts in the El Segundo segment, only Contract C0101, Utility Relocation & Foundations, has started construction. The RCC awarded Contract C0110, Segmental Bridges, to Kiewit Pacific with the NTP scheduled for April 1, 1991. The bid opening for Contract C0100 is scheduled for April 9, 1991 with an anticipated NTP of May 15, 1991. The bid opening for Contract C0400, Hawthorne Yard & Shop, scheduled for April 3, 1991, has been postponed to a future date pending development of an abatement plan for contaminants in and around the existing building. The bid opening for Contract H1100, Automatic Train Control, is scheduled for May 15, 1991. Real Estate actions are keeping pace with construction needs. Third party utilities relocations are not keeping pace. The most significant impacts are relocations of Chevron and Four Corners oil lines. SCE utility and property interface in the Marine Station area is also critical.

Meetings were held regarding the North Coast Extension with the Department of Airports (DOA) to discuss their concerns over electromagnetic interference, glide slope intrusion and visual encroachment of guideways. All areas were satisfactorily resolved with the exception of the electromagnetic interference. This issue was under assessment by EMI specialists at the end of March, 1991.

AREAS OF CONCERN

ONGOING

Third Party Issues

Concern: The relocation of oil lines belonging to Chevron (south of Rosecrans Avenue) could impact construction of Contracts C0101, C0100 and C0110.

Action: The Chevron oil lines must be relocated by the end of June in order to avoid conflicting with the current construction schedule.

Status: Meetings have been held with Chevron management in order to expedite the completion of the oil lines relocation. Chevron is to study their schedule, analyze the RCC's recommended actions to expedite the relocation and to respond to the RCC with an action plan in early April, 1991.

Caltrans Rail Access Dates

Concern: The start of Century Freeway construction continues to slip without any change in rail access dates by Caltrans to accommodate the slippage.

Action: It is necessary to solidify the Caltrans access dates so that the systems installation schedule can be finalized. Once this has been accomplished, 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. Regular meetings are held with Caltrans design, project control and field personnel in an attempt to identify accurate access dates. Due to a lack of progress in the finalization of access dates, meetings with upper level Caltrans management will be arranged during the first week in April. At these meetings actions that need to be taken to guarantee access dates will be discussed. After the dates have been agreed upon by Caltrans and the Metro Green Line staff, an analysis will take place to determine the effect on the overall project schedule.

Kramer Property Hazardous Waste

Concern: It is not yet determined what impact the treatment of Kramer property hazardous waste material will have on SCE utility relocations or on the Kramer Bridge construction.

Action: The method of construction and the handling of the hazardous waste material located on the Kramer property must be approved by the Department of Health Services (DHS) before construction on the Kramer property can commence. It is anticipated that construction on the Kramer property will start during June 1991.

Status: A meeting was held on March 12, 1991, with the DHS to discuss the proposed methodology for the segmental bridge construction and to respond to any DHS concerns. It was agreed that a modified Preliminary Endangerment Analysis (PEA) would be performed to resolve this issue.

Vehicle Delivery Schedule

Concern: When the baseline Project Master Schedule was established in December 1989, a 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 5, 1995, 105 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: Meetings between RCC staff, LTK, Transcal II, Fluor Daniel and OKA were held to pursue any workarounds that would increase the amount of time available for overall testing and systems integration and allow the project ROD of October 1994 to be maintained. The result of these meetings was that an overall Project Master Schedule evaluation would be carried out. This evaluation is scheduled to be complete in April 1991.

Transcal II Design Packages

Concern: Transcal II has developed an in-house Caltrans design package priority list. Transcal's intent was to create a sense of urgency for the production of the design supporting Caltrans construction projects. The most recent publication is a schedule of design delivery dates extending into late March. A number of final submittals require revisions and are currently behind schedule which may impact the construction needs of Caltrans projects.

Action: Caltrans light rail design by Transcal II must be expedited to accurately incorporate all design changes in a time frame that will support current construction and change order negotiations.

Status: All but one of the Caltrans design packages are camera ready. These packages are being reviewed and it is anticipated that all of the design packages will have been issued to Caltrans for incorporation into the appropriate Caltrans contracts by the end of May 1991.

NEW

Hawthorne Yard & Shop Contaminated Material

Concern: Hazardous waste materials have been detected in the existing building that is to be demolished on the Hawthorne Yard & Shop construction site. The extent of the hazardous waste and the disposition of this material could delay the start of construction of Contract C0400.

Action: A study of the extent and quantity of asbestos, PCBs and hydrocarbons is currently underway by an environmental hygienist hired by the RCC. The Contract C0400 bid date will be postponed to allow inclusion of appropriate language into the contract bid documents.

RESOLVED

Real Estate

Status: The RCC Real Estate department is up to date on acquisition of parcels required for construction and the right-of-entry schedule will accommodate the current construction schedule.

FUND SOURCE STATUS
(IN THOUSANDS OF DOLLARS)

STATUS: 03/29/91

SOURCE	TOTAL ANTICIPATED FUNDS	TOTAL FUNDS RECEIVED	OBLIGATIONS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
PROP 108	107,500	0	0	0%	0	0%	0	0%
TCI	36,000	0	0	0%	0	0%	0	0%
PROP A	742,500	69,244	152,247	21%	69,244	9%	69,244	9%
TOTAL	886,000	69,244	152,247	17%	69,244	8%	69,244	8%

O'BRIEN-KREITZBERG
CBE
Project: R23
Period: 3/02/90 to 3/29/91

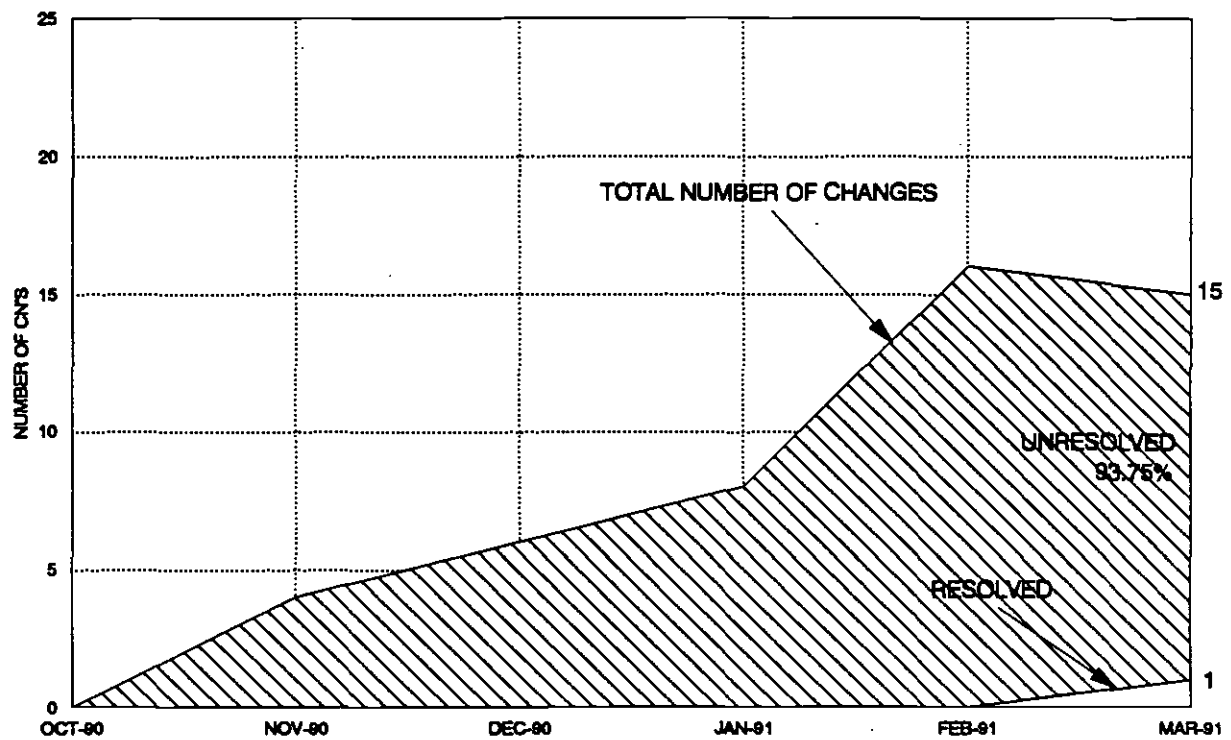
RAIL CONSTRUCTION CORPORATION
METRO GREEN LINE
Project Cost by Element

Page: 1
Report Date: 04/11/91
Status Date: 03/29/91

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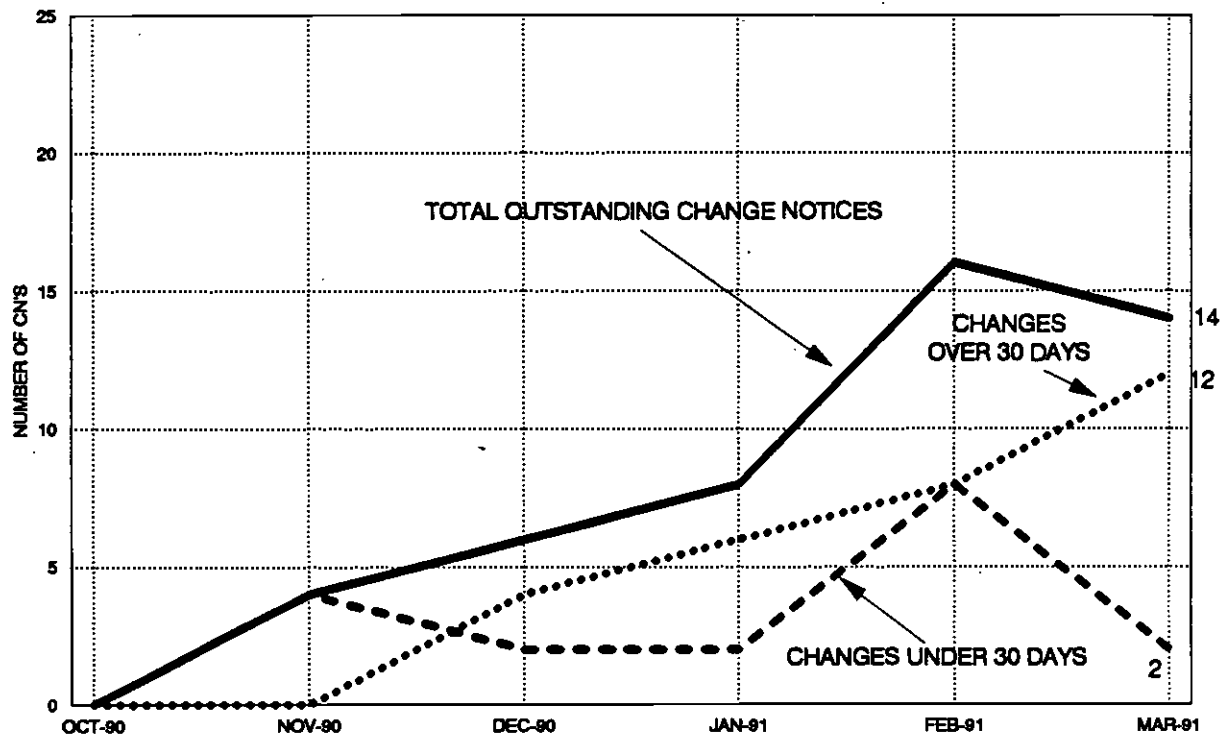
Description	----- Budget -----		----- Authorized -----		----- Commitments -----		----- Incurred Cost -----		----- Expenditures -----		Current	
	Original	Current	Period	To Date	Period	To Date	Period	To Date	Period	To Date	Forecast	Variance
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(11-2)
T Construction	404,267	588,253	0	26,451	15,290	46,944	598	21,422	652	16,765	588,399	146
S Professional Services	110,295	159,196	0	32,695	1,327	81,653	2,859	49,633	1,706	43,071	159,296	100
R Real Estate	35,096	49,916	0	10,759	0	20,807	0	9,287	(1)	9,285	52,616	2,700
F Utility/Agency Force Accounts	7,656	16,310	0	7,091	61	3,821	25	398	25	534	16,310	0
D Special Programs	2,530	3,071	0	0	0	100	0	80	0	0	3,071	0
C Project Reserve	55,782	85,880	0	0	0	0	0	0	0	0	82,934	(2,946)
A Project Revenue	(16,626)	(16,626)	0	0	(46)	(1,078)	(46)	(411)	(58)	(411)	(16,626)	0
Project Grand Total :	599,000	886,000	0	76,995	16,633	152,247	3,437	80,409	2,325	69,244	886,000	0

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

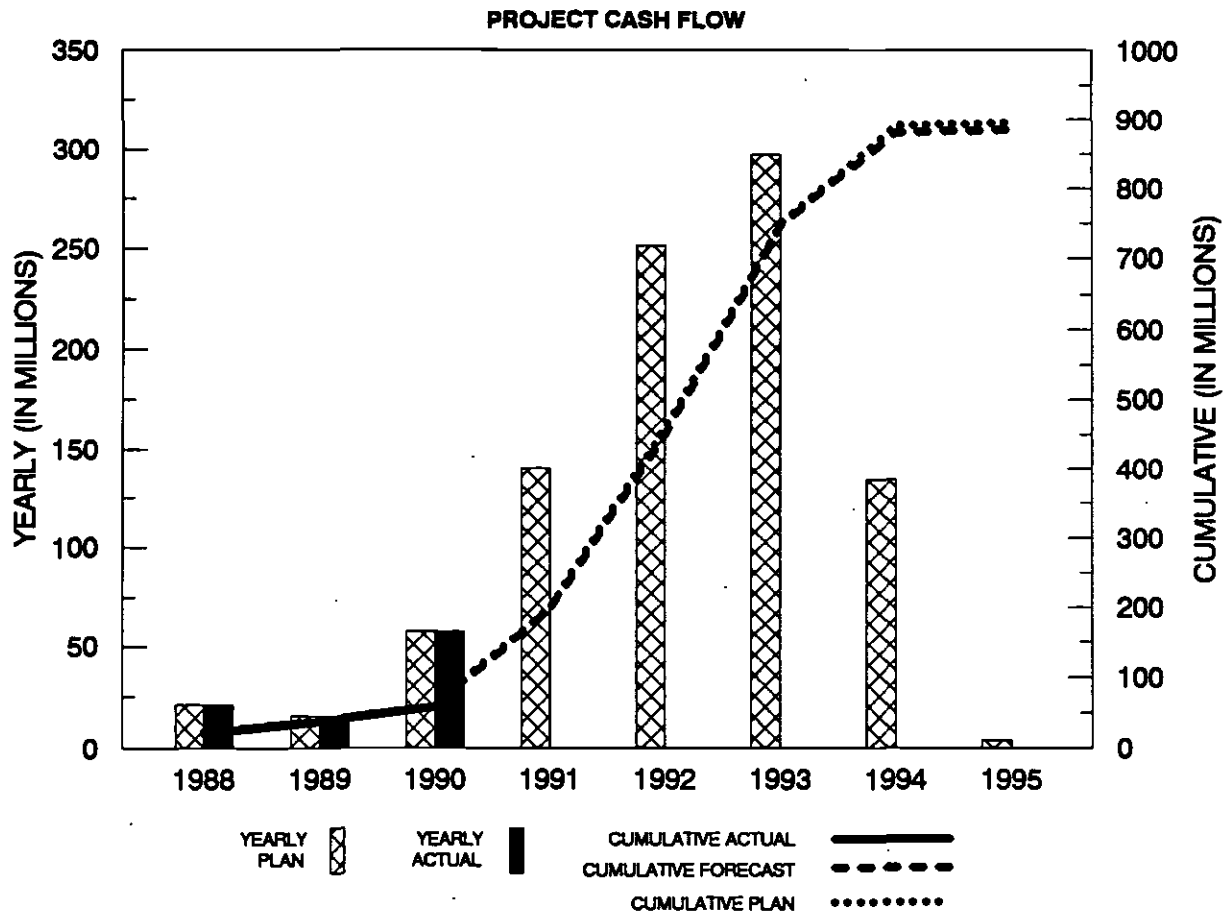
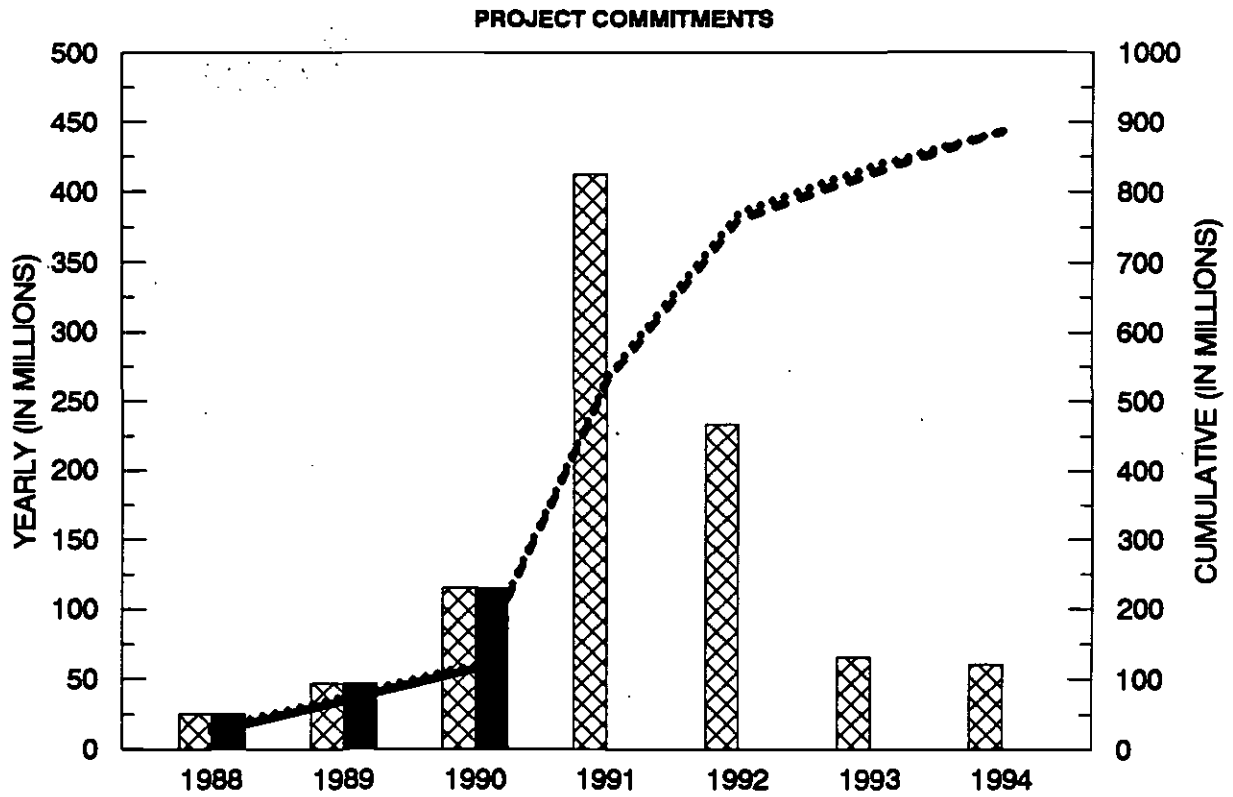


THE 15 ACTIVE CHANGE NOTICES ARE ALL FROM CONTRACT C0101. OF THESE, TWO ARE INCLUDED IN A CHANGE ORDER, AND ARE AWAITING APPROVAL

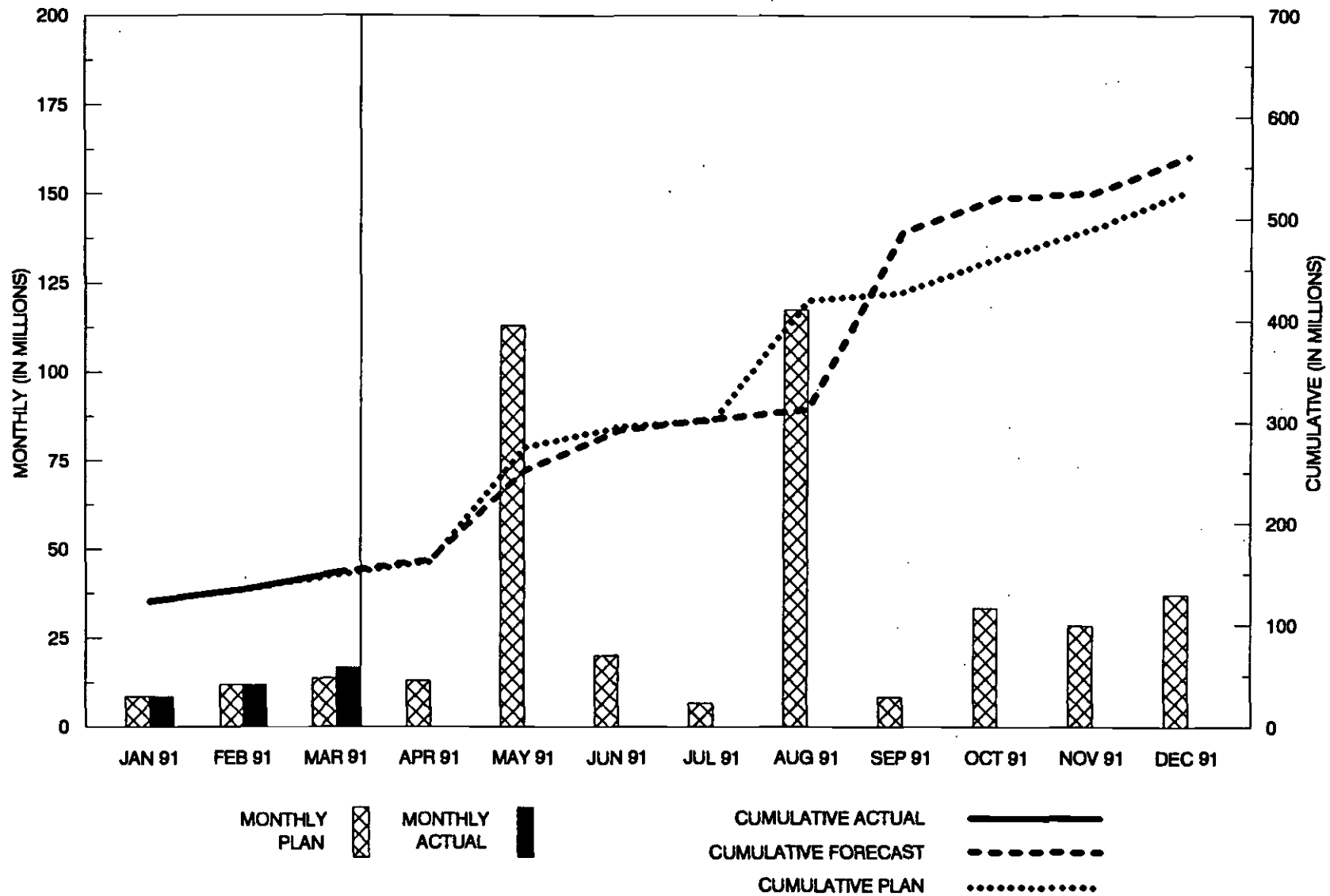
CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE ACTIVITY PROGRESS



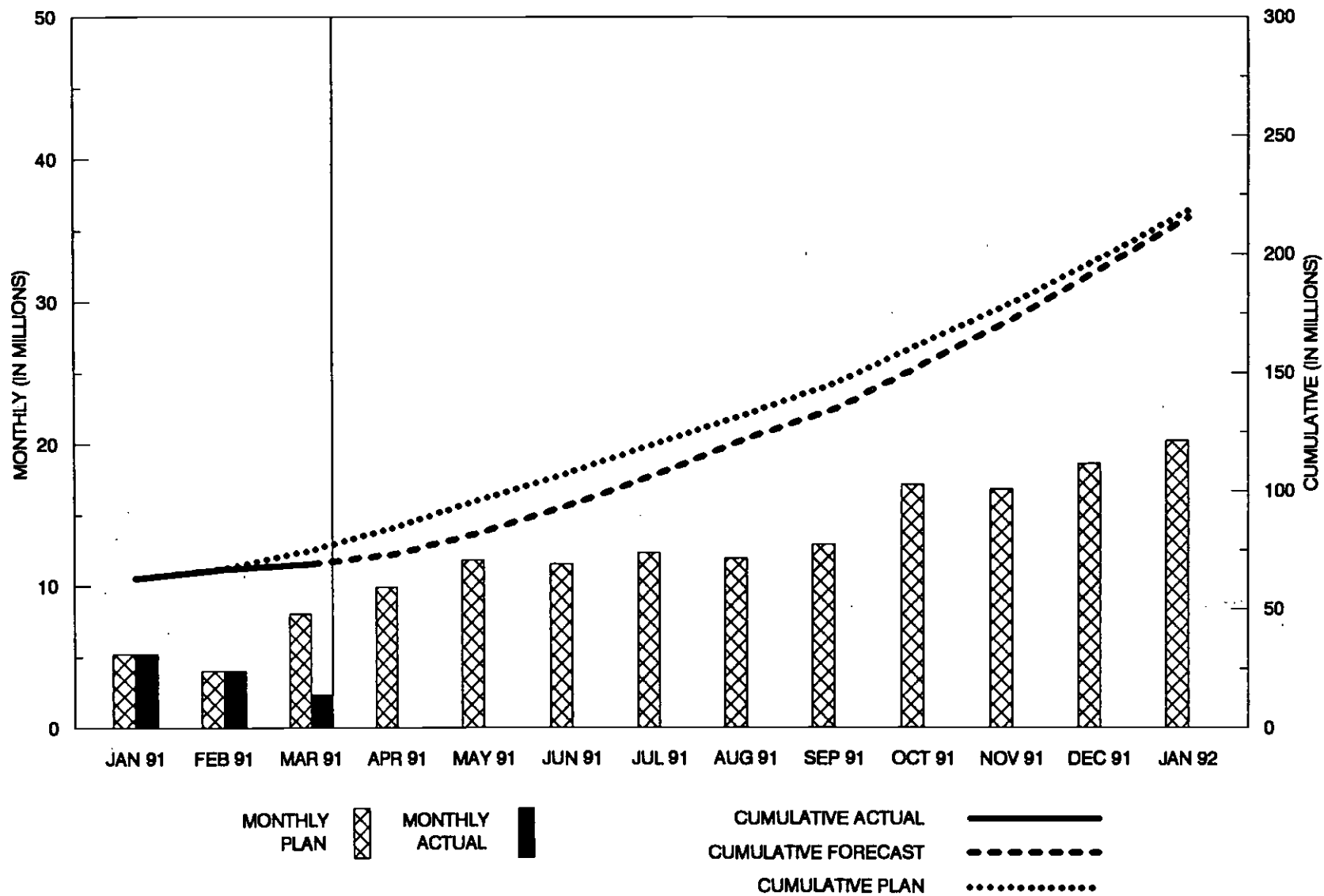
THE 14 OUTSTANDING CHANGE NOTICES ARE ALL FROM CONTRACT C0101. OF THESE, TWO ARE INCLUDED IN A CHANGE ORDER, AND ARE AWAITING APPROVAL.



PROJECT COMMITMENT

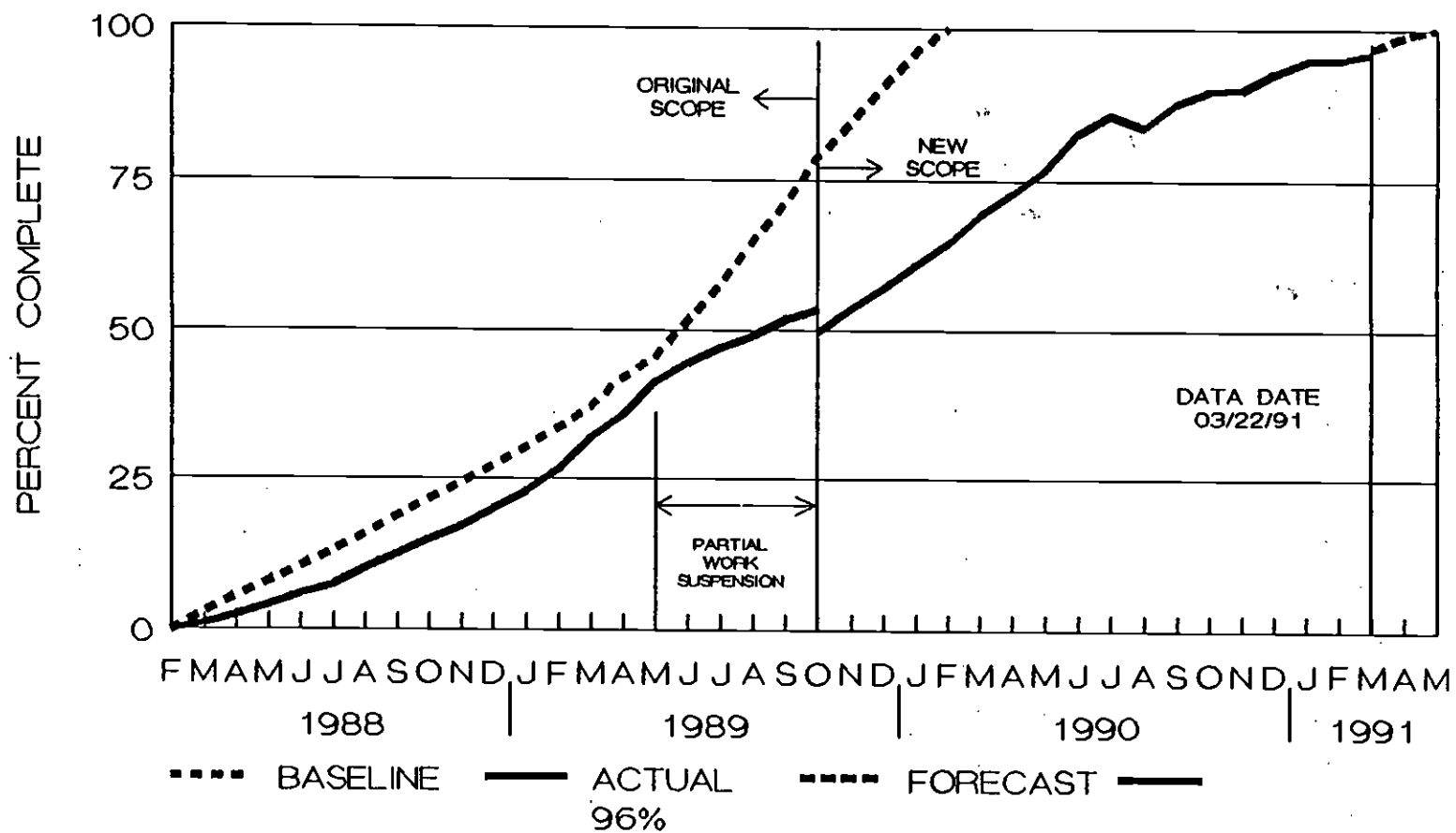


PROJECT CASH FLOW



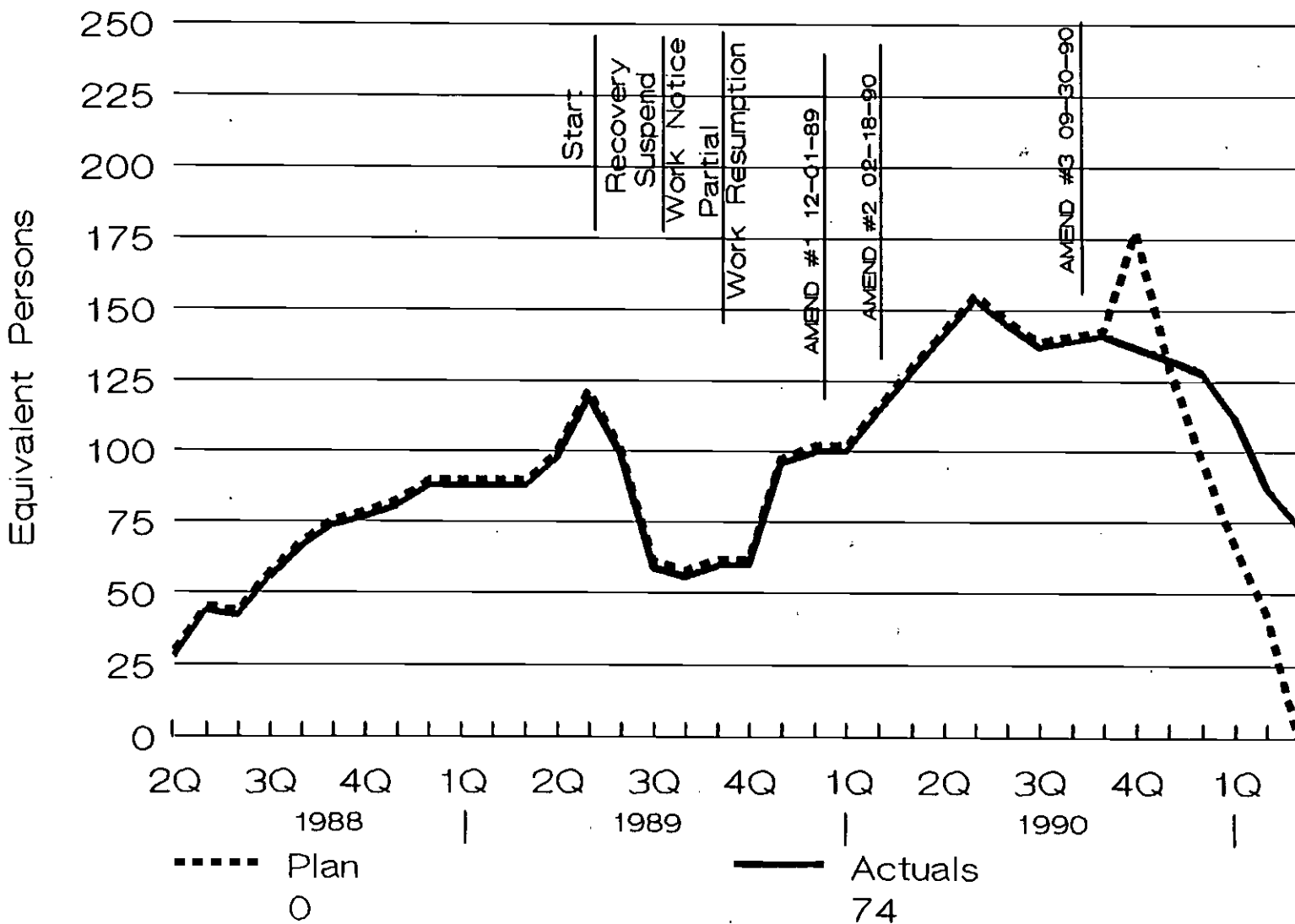
TRANSCAL II DESIGN ENGINEERING

*Progress Curve



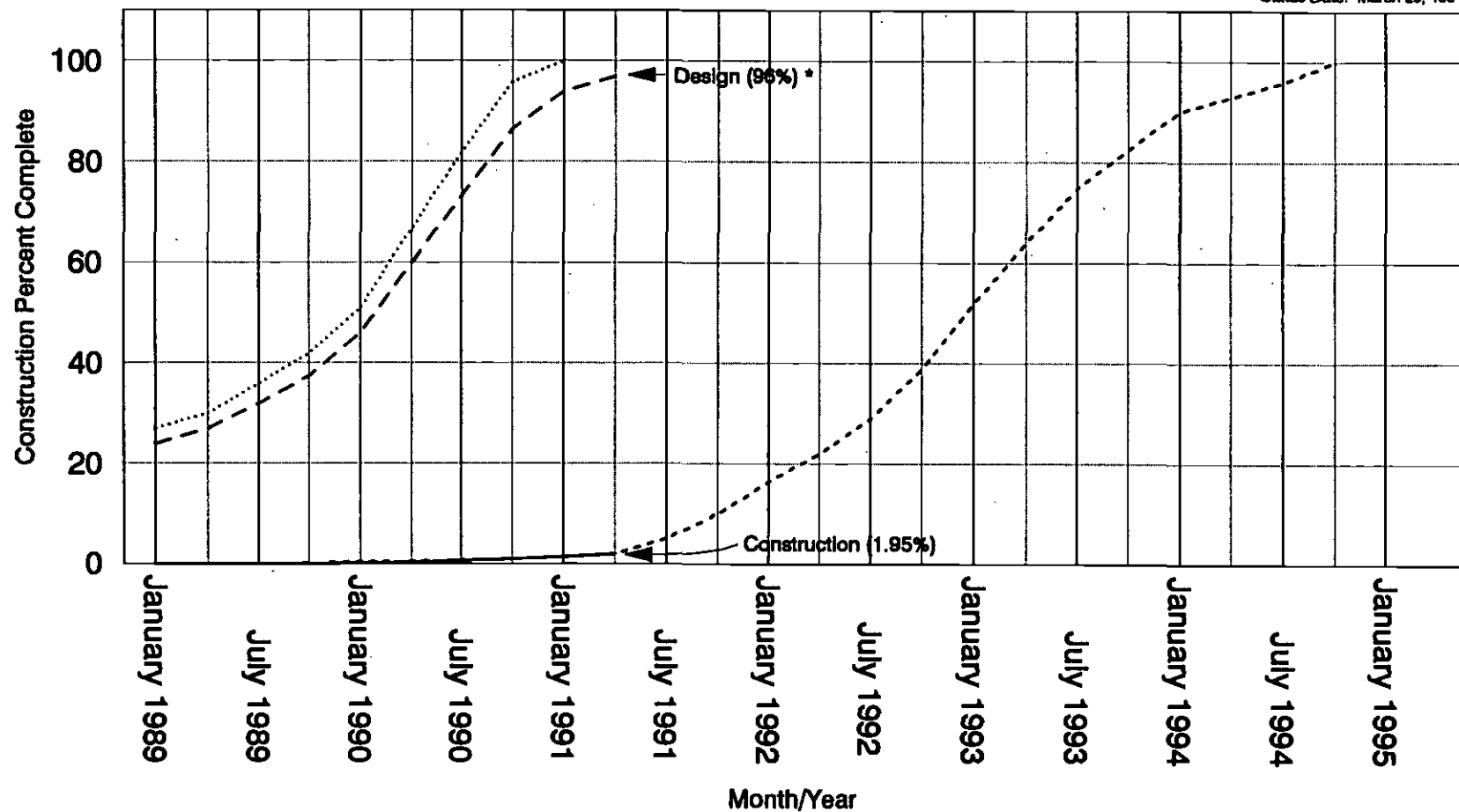
*Excludes Administrative Level of Effort Activities

METRO GREEN LINE PROJECT STAFFING PLAN - TOTAL CONTRACT E2301



RAIL CONSTRUCTION CORPORATION METRO GREEN LINE EXECUTIVE SUMMARY SCHEDULE

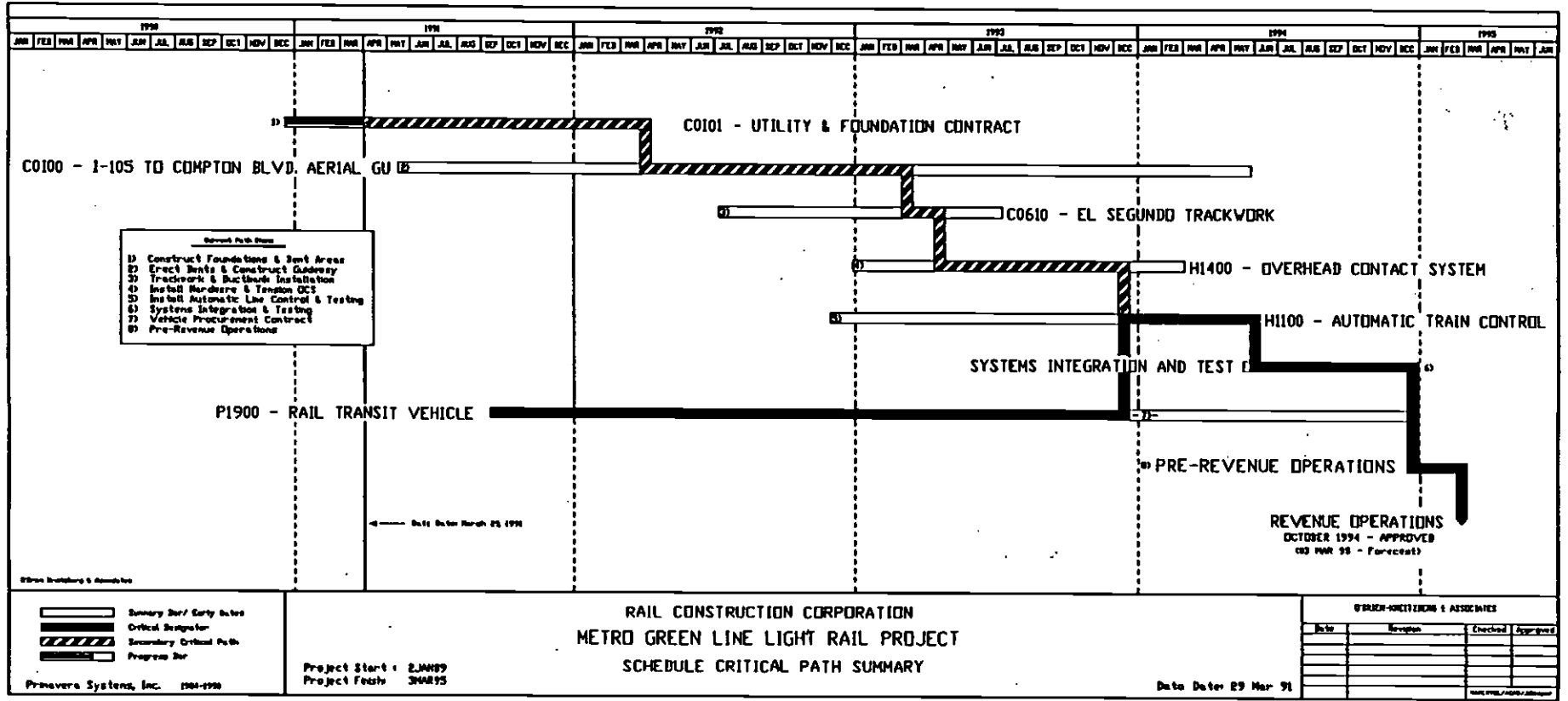
Status Date: March 29, 1991



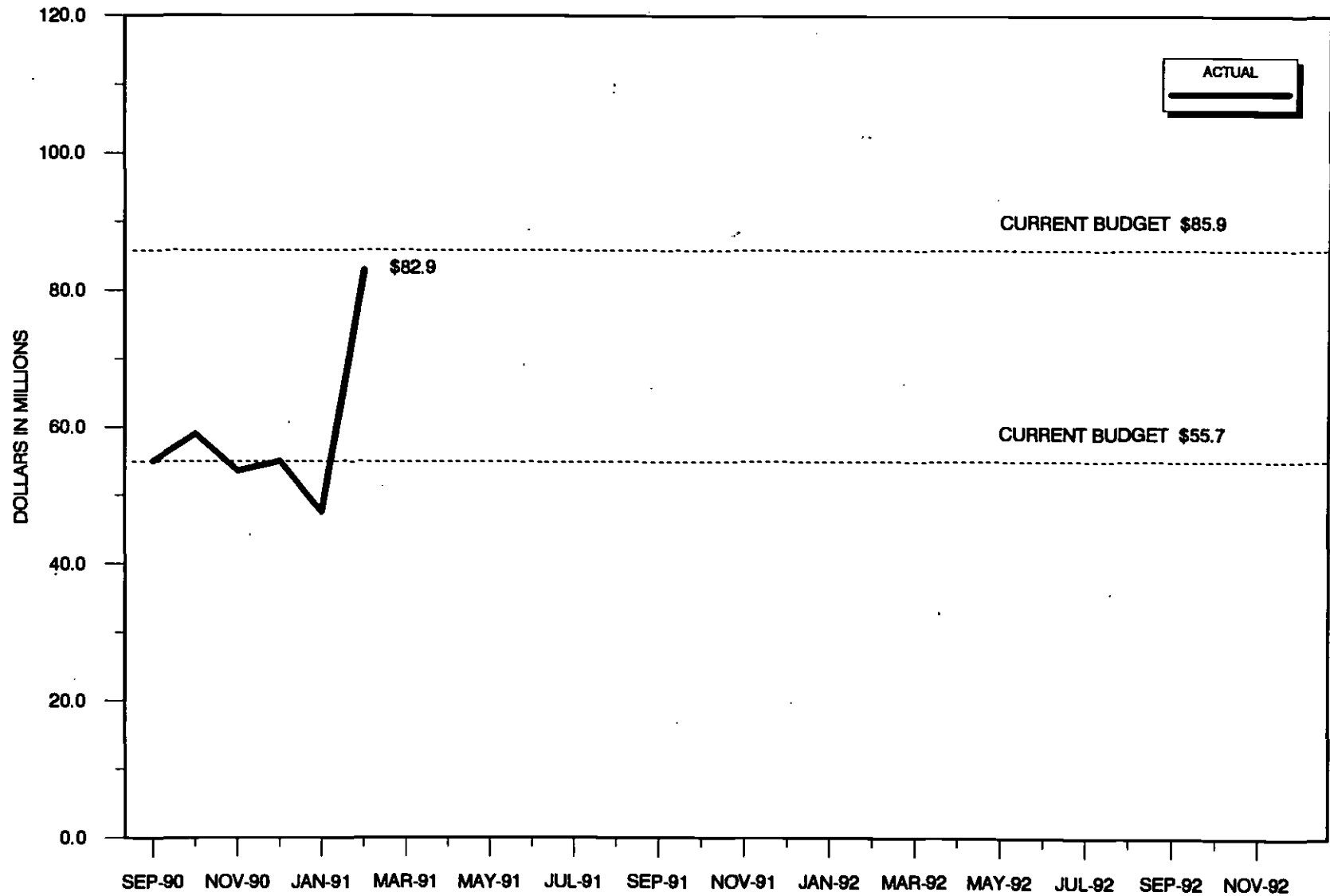
Construction Baseline Construction Actual Design Baseline Design Actual

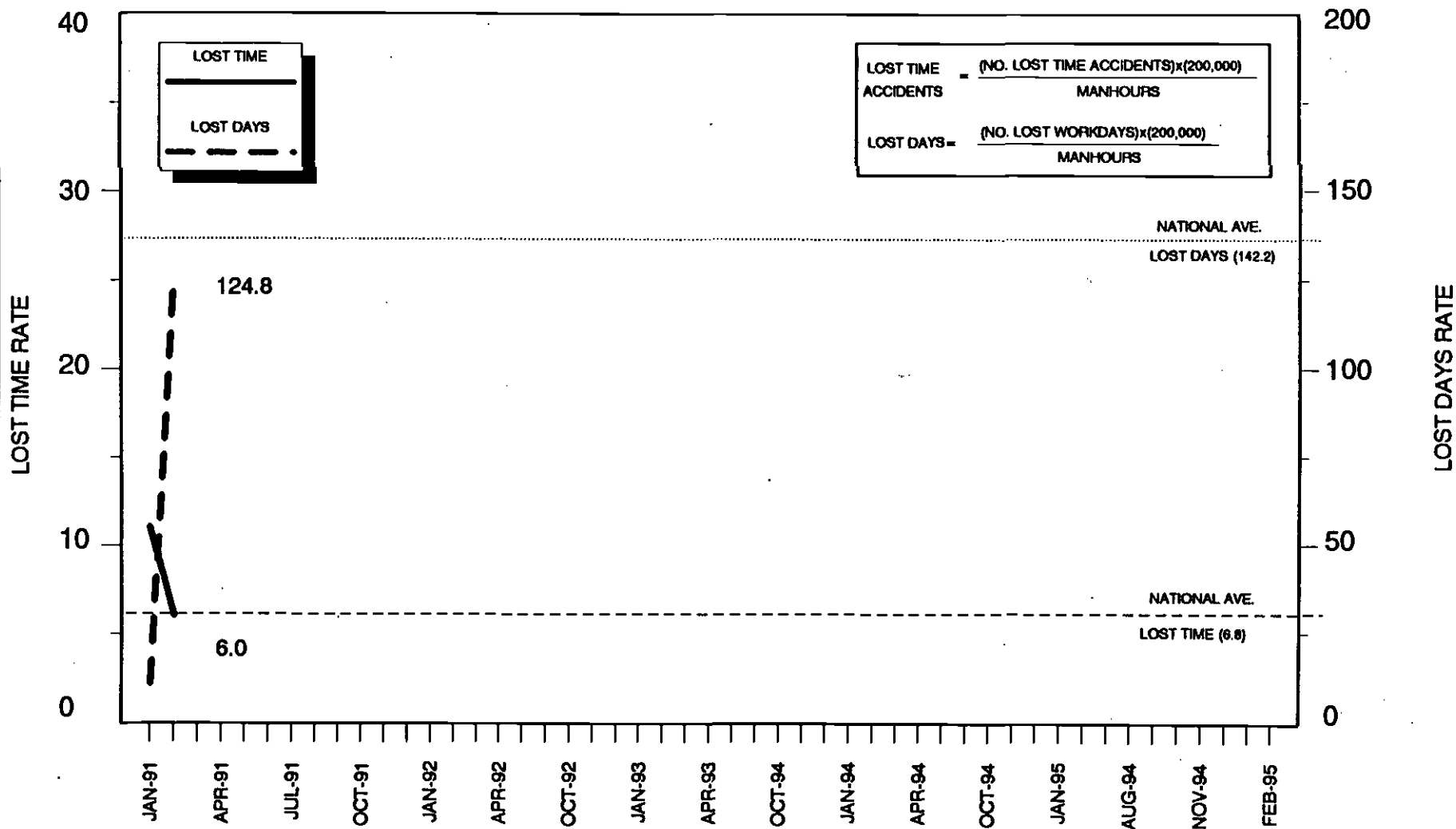
.....

* Includes North Coast Extension



PROJECT RESERVE STATUS





**GREENLINE PROJECT
SAFETY LOST TIME/LOST DAYS
CUMULATIVE INCIDENCE RATES**

Total manhours as of February 1991: 33,642

INVOICE PROCESSING

The invoice processing graph has been changed from a weekly moving average of all invoices to a monthly average of just procurement/construction contract invoices. This graph will be revised and shown in the next monthly report.

In the month of March 1991 the statistics for Construction/Procurement contracts were:

Total Number of Invoices Paid	1
Value of Invoices Paid	\$703,387
Average Days to Pay	21

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	0	0	0	0	11	2,823,214	1	5,375
FEB 1991	0	0	0	0	12	1,883,030	2	8,152
MAR 1991	0	0	0	0	11	3,381,449	2	8,152

EXECUTIVE SUMMARY

COST STATUS

The original Baseline Budget for the Project is \$1.25 billion. The Current Approved Budget (based on the December 1990 forecast) is \$1.45 billion. The March forecast is also \$1.45 billion.

Actual Project commitments to date increased by 1% over February to \$1.154 million, or 80% of the March forecast. To date, Project expenditures remain at 60% of the March forecast with an increase of \$9.770 million over February.

SCHEDULE STATUS

The Project Schedule currently shows a positive float trend of 70 workdays for Stage I, Stage II, and Systems Installation.

The overall duration of MOS-1 as indicated in the current Project schedule (March 1991) remains unchanged at 84 months to reflect a revenue operations date (ROD) of September 1993. Value of work in place as of April 1, 1991, is 77% actual, a 1% increase over February; versus 78% planned.

PROFESSIONAL SERVICES

Primary work efforts in March were directed at schedule improvement, Yard remediation work, rail installation in the AR tunnel, third rail joint testing in the Yard, improved turnover/close out procedures, and conduit checks in preparation for systems contractors.

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

Continued rail installation in the AR tunnel, and started rail installation in the AL tunnel. Continued to facilitate the turnover of Facilities contracts to Systems contractors.

AREAS OF CONCERN

ONGOING

AUGUST 1990

1. Contract A650, Vehicles (Booz Allen Hamilton)

Concern: A potential 5 1/2 month late delivery to the Transportation Test Center (TTC) in Pueblo Colorado, of the one paired set of vehicles required for testing could impact the system testing and the Project critical path.

Action: The Rail Construction Corporation (RCC) has developed a plan which would alter vehicle testing sequence at the (TTC) to release the first pair of vehicles directly to Los Angeles by the dates required to support systems testing. The RCC also is considering alternate measures.

FEBRUARY 1991

2. 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. The schedule for the relocation requires re-engineering and equipment orders to begin in April.

Delay is impacting the Contract A640 schedule and the overall MOS-1 Project schedule could be affected.

Action: Completion of MRTC's review is required before further action can be taken.

NEW

MARCH 1991

3. 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

AREAS OF CONCERN (CON'T)

BREDA as quickly as possible in order 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.

RESOLVED**DECEMBER 1990****4. Contract A146, Line Section 5th/Hill Station to 7th/Flower Station**

Concern: Certain portions of the tunnel alignment are in conflict with the dynamic envelope. The walkway modifications must be completed so as not to impact the follow-on contractor, Contract A620, Automatic Train Control.

Action: Parsons-Dillingham determined two modifications were required for resolution of this issue: Modification of the walkway, and modification of the tunnel liner. The required modifications were approved by the Fire/Life/Safety Committee, and MRTC.

A work-around plan was developed in March to carry out repairs to the walkway by April 15, 1991, so as to avoid an impact to the Project schedule. Repairs to the tunnel liner, which will not impact the Project schedule, will be completed off-shift at a later date.

JANUARY 1991**5. Contract A610, Trackwork Installation, Yard Storage Area
Contract A612, Contact Rail**

Concern: Weld breaks in 3 areas indicated a potential quality problem with the rail and rail welds in the Yard.

Action: During February, the rail welds and rail were tested to determine their quality and to implement corrective actions, where required.

AREAS OF CONCERN (CON'T)

Ultrasonic testing of 100 welds was conducted in March by the consultant, Dr. Steele. It was determined that both the rail manufacturing and welding procedures were satisfactory, and repair work commenced on the 3 weld breaks.

JANUARY 1991

6. **Cost Management**

Concern: Based on current forecast information, contract Authorizations For Expenditure (AFE) amounts need to be increased.

Action: In February, RCC Board approval was obtained.

The LACTC approved the increased AFE amounts in March.

FEBRUARY 1991

7. **Contract A136, Union Station, Stage II**

Concern: A longer than expected delay to construction of Union Station's west entrance occurred as a result of the discovery of archaeological items. The items were discovered during excavation operations for the west entrance.

The internal milestone of Contract A710 Escalators/Elevators, for installation of escalators and elevators in the west entrance area was impacted.

Action: In February, the A136 contractor furnished personnel and equipment to expedite the archaeological investigation.

The archaeological investigation was completed in March, and installation of the excavation support system in the west entrance continued. A potential impact to the Contract A136 schedule is currently being evaluated. The internal milestone for installation of escalators and elevators in the west entrance area will be re-scheduled for August 1991 with no impact to that contractor.

There is no impact to the ROD of the project schedule.

AREAS OF CONCERN (CON'T)

FEBRUARY 1991

8. Contract A141, Line Section,
Union Station to 5th/Hill and Civic Center Station

Concern: The Contract A141 field office site lease expired March 1, 1991. To avoid a substantial rent increase, the site was to be vacated and restored to its original condition prior to the lease expiration date.

Action: In February, Parsons-Dillingham Project staff vacated the site and relocated to the Subway Terminal Building on Hill Street.

As of March 29, 1991, the contractor is continuing to lease a small section of the site at his own expense under an agreement between the County of Los Angeles and Tutor-Saliba. Restoration work to the site is substantially complete.

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

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

ONGOING

OCTOBER 1990

1. Contract Closeout Procedures

Concern: The lack of approved closeout procedures limits the (RCC/Parsons-Dillingham's) ability to close contracts.

Action: Develop/update contract closeout procedures applicable to Red Line contracts.

UMTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT (CON'T)

Status: Draft procedures were submitted by Parsons-Dillingham in March 1991. Will be reviewed, revised, and incorporated into the LACTC/RCC policies and procedures manual.

NOVEMBER 1990

2. Project Procedures

Concern: RCC is falling behind in developing its procedures.

Action: Update, develop, and publish project procedures.

Status: The LACTC has hired a Policies and Procedures Manager responsible for the timely completion and issuance of project procedures. The contract with the consultant, Decision Management Associates (DMA), responsible for preparing the policies and procedures has been extended through June 1991. First drafts of the revised procedures are currently under review.

NEW

(New items since December 1990. Future reports list new and resolved items on a monthly, rather than quarterly, basis).

JANUARY 1991

3. Project Management Plan/Letter of Understanding

Concern: Failure to reach a timely agreement (on the role of the SCRTD) may impact the development/implementation of the Rail Activation Plan.

Action: Complete negotiations and execute the Letter-of-Understanding between the LACTC and the SCRTD. Incorporate the executed Letter-of-Understanding into the MOS-1 Project Management Plan.

UMTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT (CON'T)

Status: Negotiations between the LACTC and SCRTD are in process. Pending the formal agreement, RCC and SCRTD staff are working together to develop the Rail Activation plan.

RESOLVED

(No items reported as resolved since December 1990).

KEY ACTIVITIES - MARCH

- Completed ATC room preparation at Contract A136, Union Station, Stage II.
- Completed plan and schedule and commenced with Yard remediation work.
- Completed third rail joint testing in the Yard.
- Completed turnover/close-out procedures.
- Initiated full scope corrosion control/cathodic protection testing.
- Started rail installation in the AL tunnel.
- Developed the RTD training and maintenance interfaces so that they could be incorporated into the Project schedule.

KEY ACTIVITIES - PLANNED FOR APRIL

- Continue to assess and resolve the electrical and HVAC design misalignment at interfaces for all Stage II contracts.
- Continue corrective work to the floating slabs at Contract A175, Wilshire/Alvarado Station.
- Complete turnover of the AR tunnel from Contract A610/A115, Trackwork Installation, to Contract A620, Automatic Train Control.
- Integrate a full range of testing activities into the Project schedule.
- Coordinate 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.
- Turnover DWP and ATC rooms to Systems contractors as required.

STATUS DATE : MARCH 29, 1991
 STATUS PERIOD : MARCH 2, 1991 TO MARCH 29, 1991

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

PROJECT : METRO RAIL RED LINE SEGMENT-1

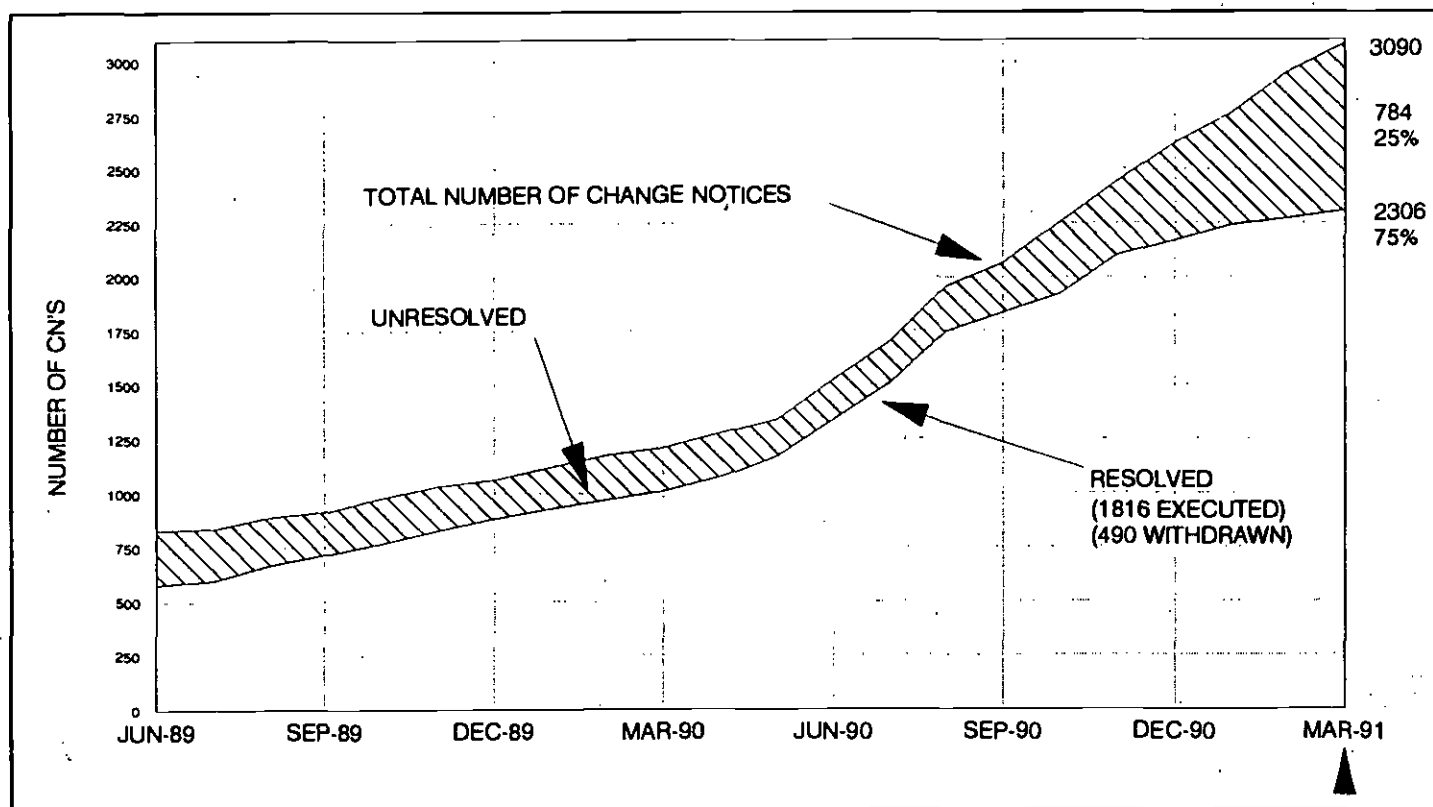
ELEMENT / DESCRIPTION	BUDGET		AUTHORIZED FOR EXPENDITURE		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST (11)	VARIANCE (11-2) (12)
	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)	PERIOD (9)	TO DATE (10)		
T CONSTRUCTION	694,280	730,483	48,310	740,678	(5,710)	839,285	5,981	524,787	1,777	505,679	730,021	(462)
S PROFESSIONAL SERVICES	392,434	481,308	10,698	303,332	8,899	385,500	8,150	375,851	8,150	375,851	481,531	225
R REAL ESTATE	90,894	139,820	(248)	118,319	(248)	118,319	(248)	118,319	(248)	118,319	139,820	0
F UTILITY/AGENCY FORCE ACCOUNTS	18,119	14,255	153	13,115	153	13,115	87	9,123	87	9,123	14,255	0
D SPECIAL PROGRAMS	948	948	0	508	0	508	220	220	4	220	948	40
C PROJECT RESERVE	53,225	83,207	0	0	0	0	0	0	0	0	83,404	197
A PROJECT REVENUE	0	0	0	0	0	0	0	0	0	*(1,694)	0	0
PROJECT GRAND TOTAL	1,249,900	1,450,019	58,911	1,173,950	3,094	1,154,727	14,190	1,026,100	9,770	1,005,298	1,450,019	0

* REPRESENTS LEASE REVENUES RECEIVED BY RCC AT EARLY STAGES OF REAL ESTATE ACQUISITION.

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

Change Notice Resolution

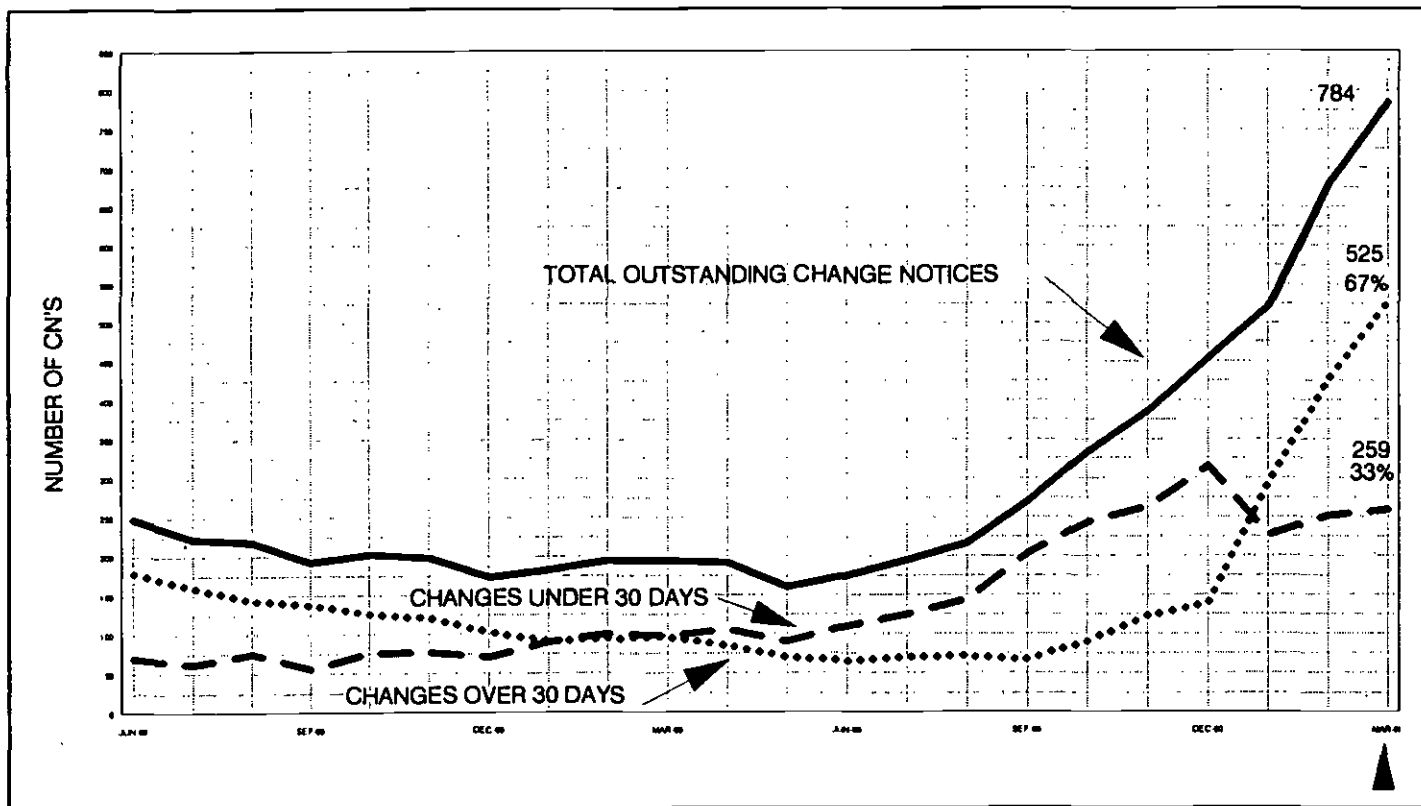


PRIOR TO JANUARY 1991, WITHDRAWN CHANGE NOTICES WERE NOT INCLUDED IN THIS CHART.

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

CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

Change Activity Progress

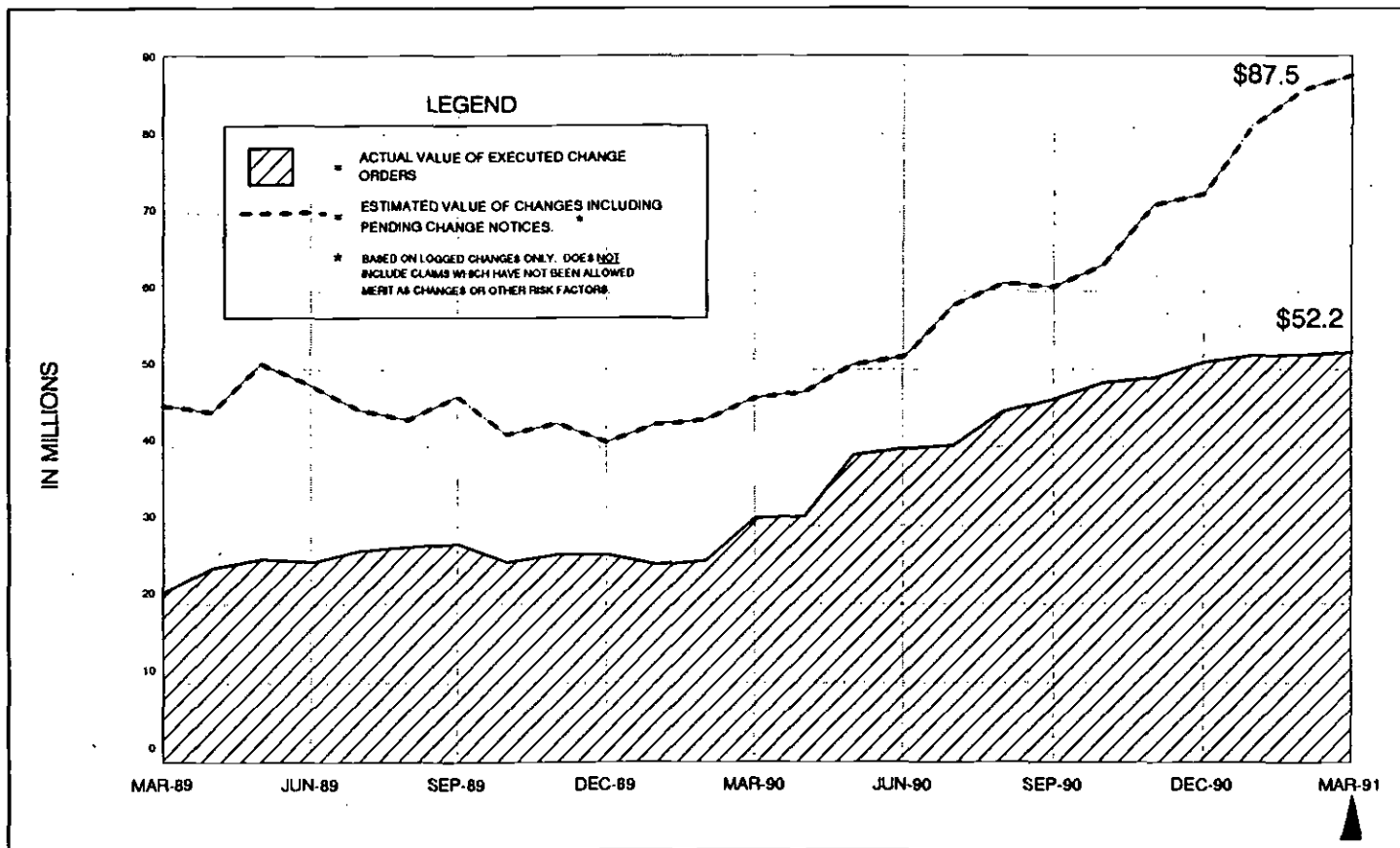


CONTRACT CHANGE NOTICES HAVE INCREASED THIS PERIOD DUE TO CLAIMS RESOLUTION AND ENTITLEMENT GIVEN TO THE CONTRACTORS.

CHANGES OVER 30 DAYS CONTINUE TO INCREASE DUE TO THE BACKLOG OF PROPOSALS REQUIRED FROM THE CONTRACTORS. CURRENTLY 66% OF CHANGES REQUIRE ACTION BY THE CONTRACTORS.

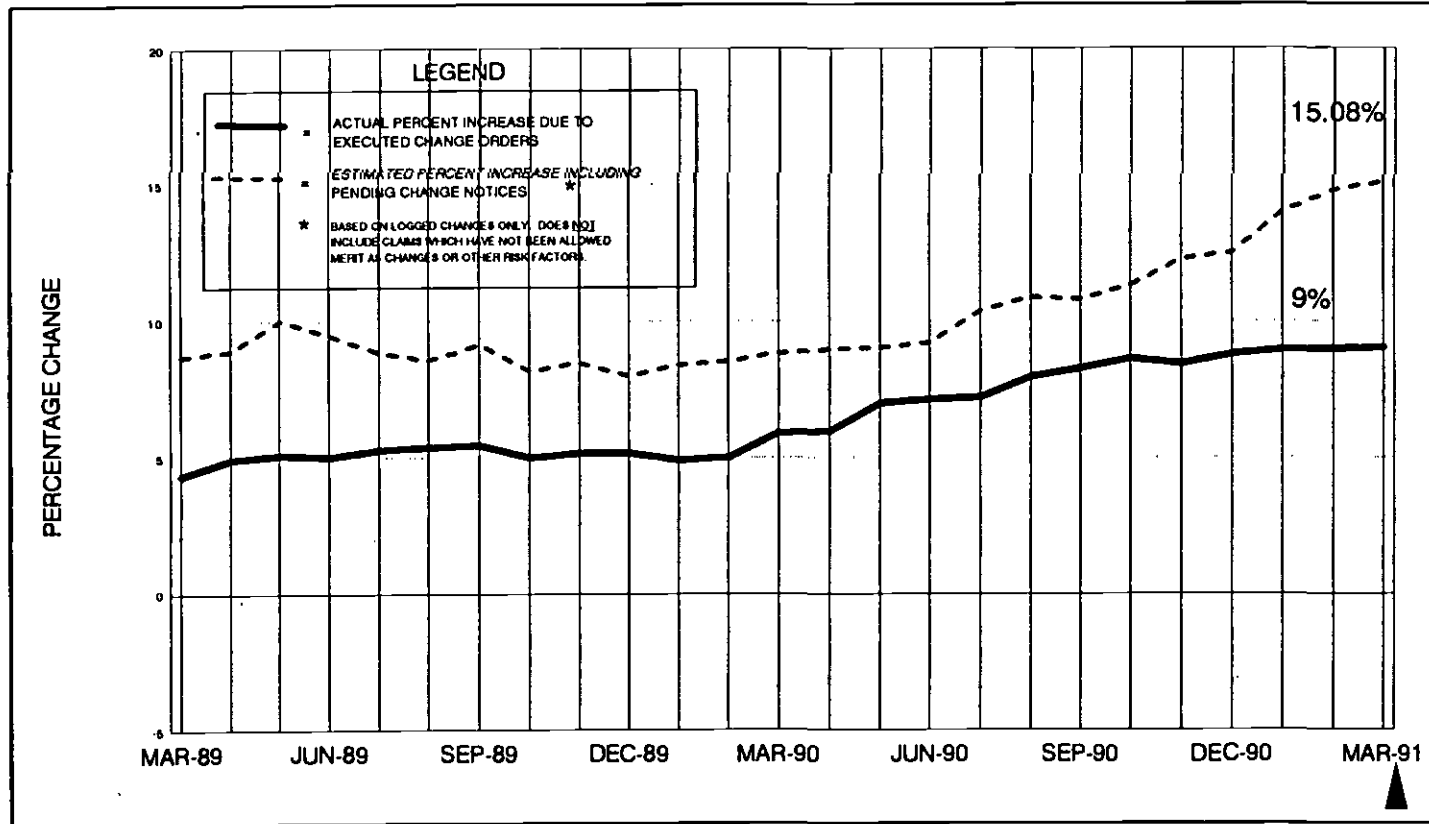
CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

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.

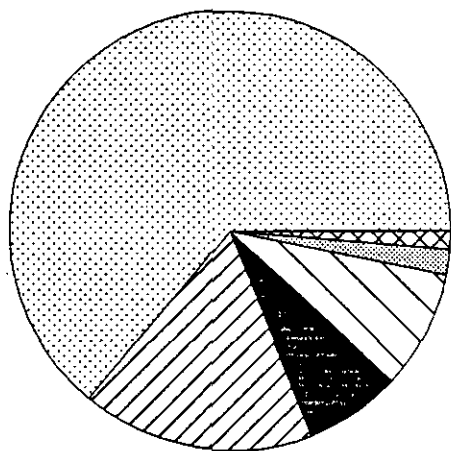
CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Dollars as a Percentage of Original Contract Award









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

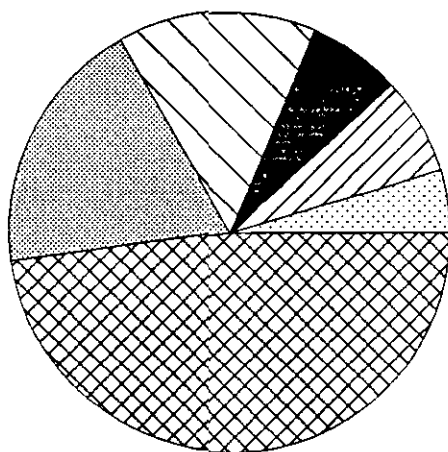
**CONSTRUCTION/PROCUREMENT
CHANGE VOLUME AND COST BY COST LEVEL
BASED ON EXECUTED CHANGES AS OF 3/29/91**

ABSOLUTE VALUES









CHANGE VOLUME
TOTAL VOLUME: 1557 CO'S (1816 CN'S)

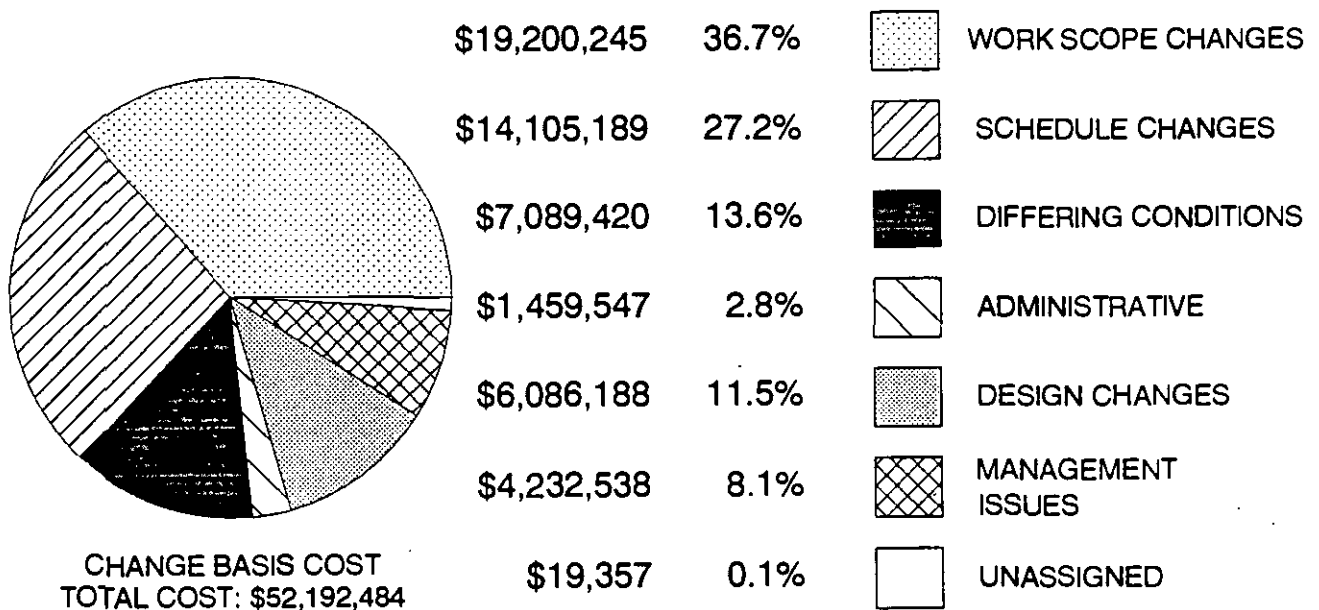
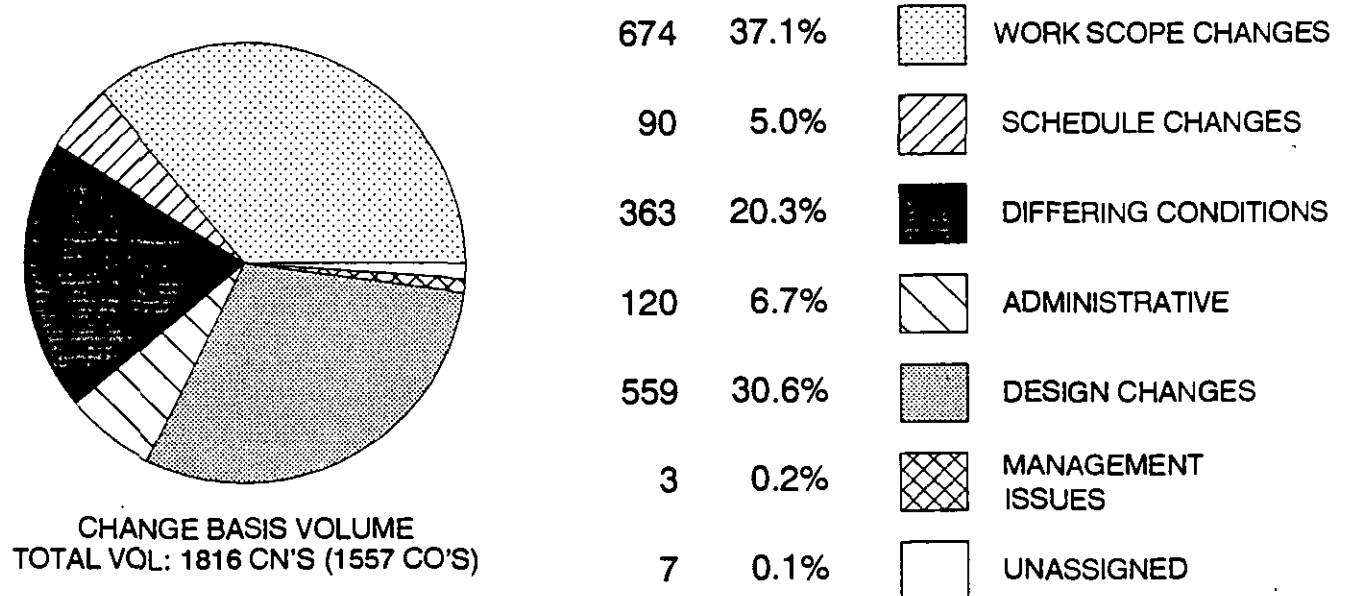
995	63.9%		< \$10,000
265	17.0%		< \$25,000
112	7.2%		< \$50,000
136	8.7%		< \$200,000
30	1.9%		> \$200,000
19	1.3%		> \$1,000,000



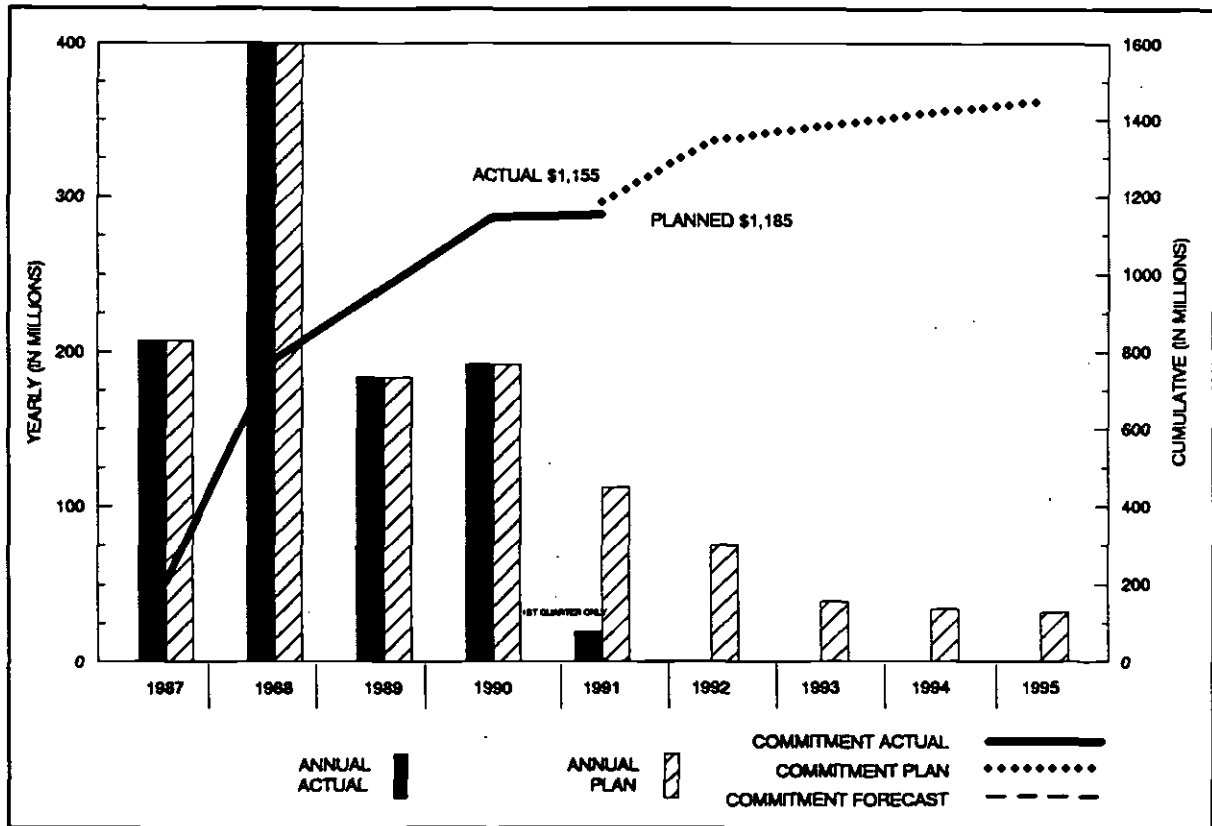
CHANGE COST
TOTAL COST: \$52,192,484

\$2,427,083	4.6%		< \$10,000
\$3,739,616	7.2%		< \$25,000
\$3,598,740	6.9%		< \$50,000
\$7,561,955	14.5%		< \$200,000
\$9,877,227	18.9%		> \$200,000
\$24,987,863	47.9%		> \$1,000,000

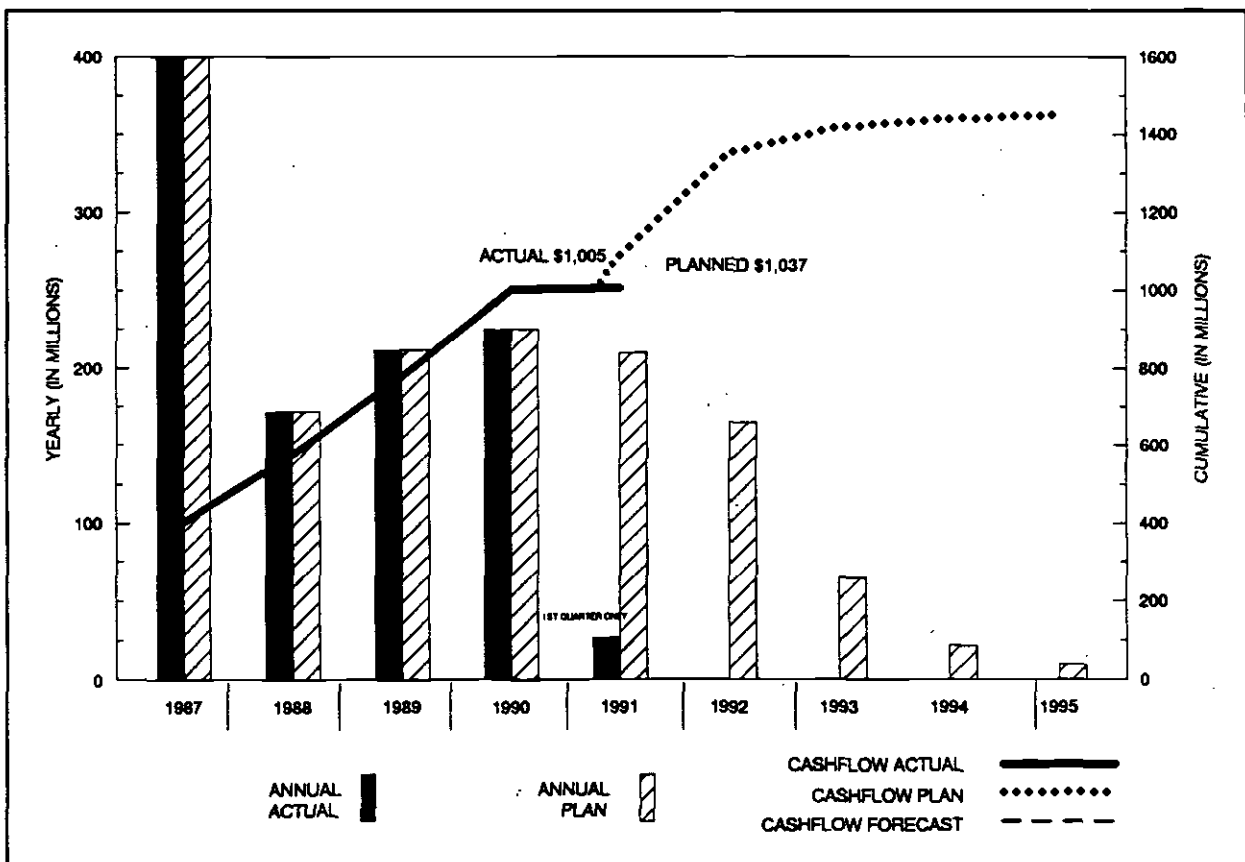
**CONSTRUCTION/PROCUREMENT CONTRACT CHANGES
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE
BASED ON EXECUTED CHANGES AS OF 03/29/91**



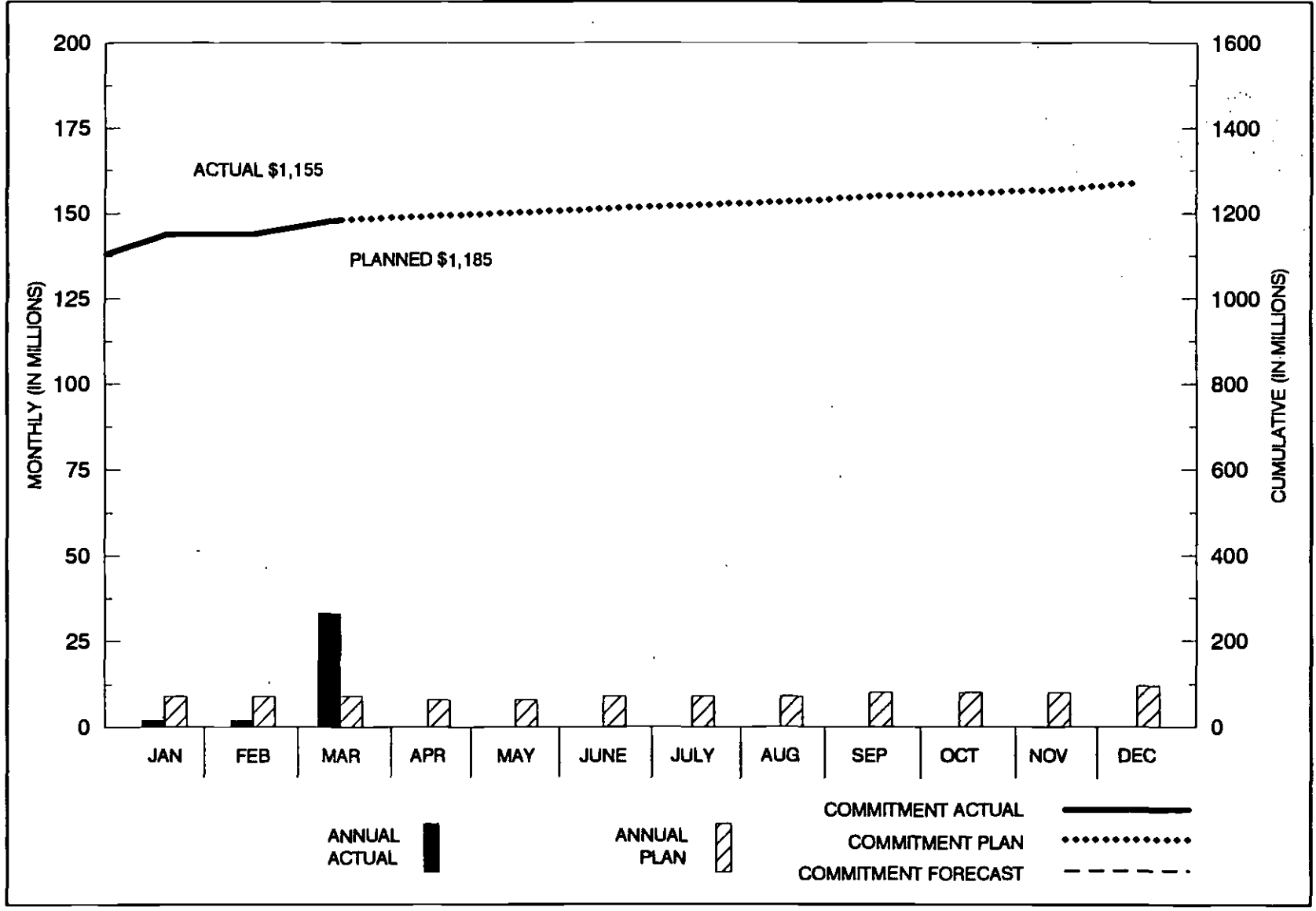
COMMITMENT PLAN



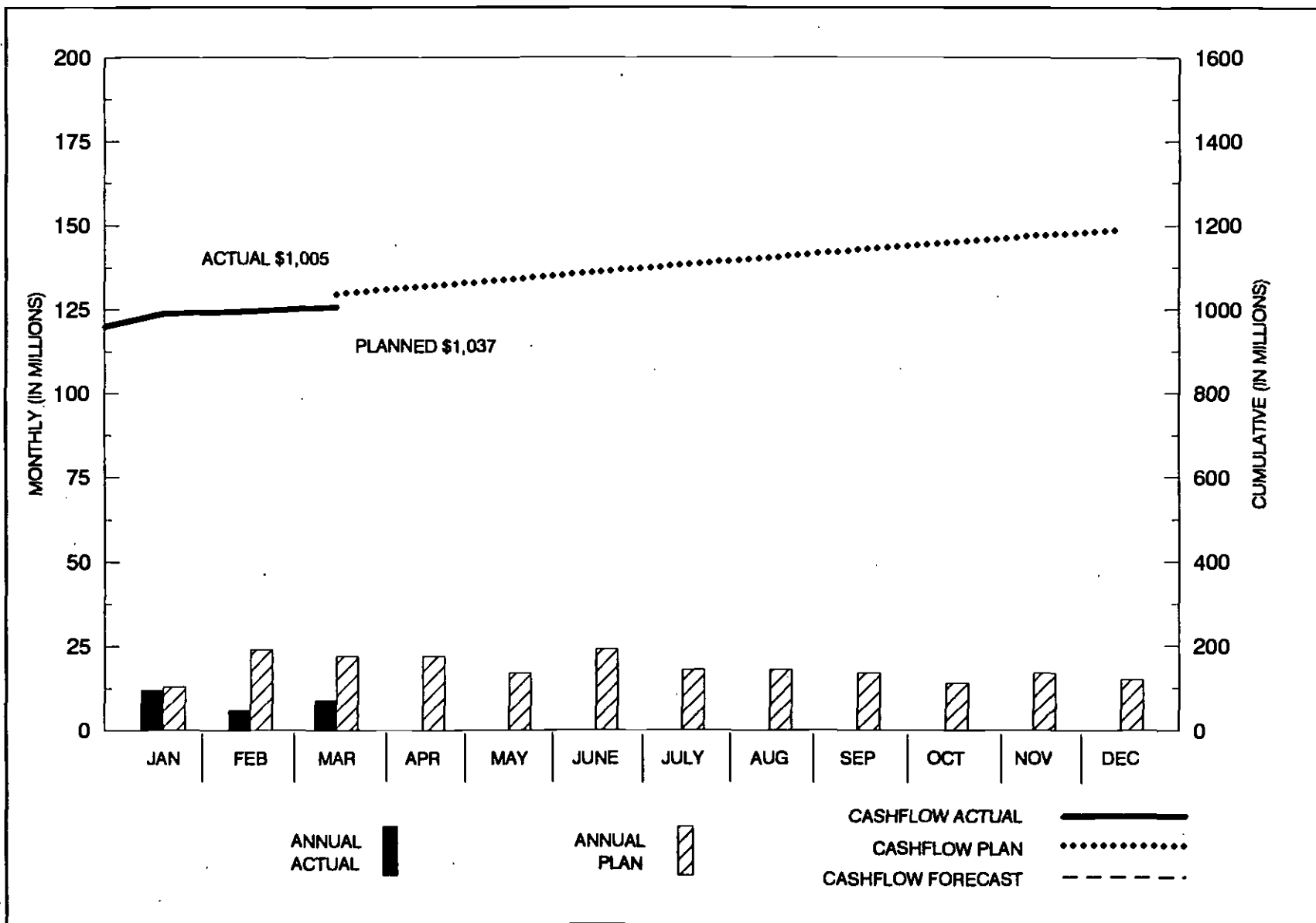
CASH FLOW



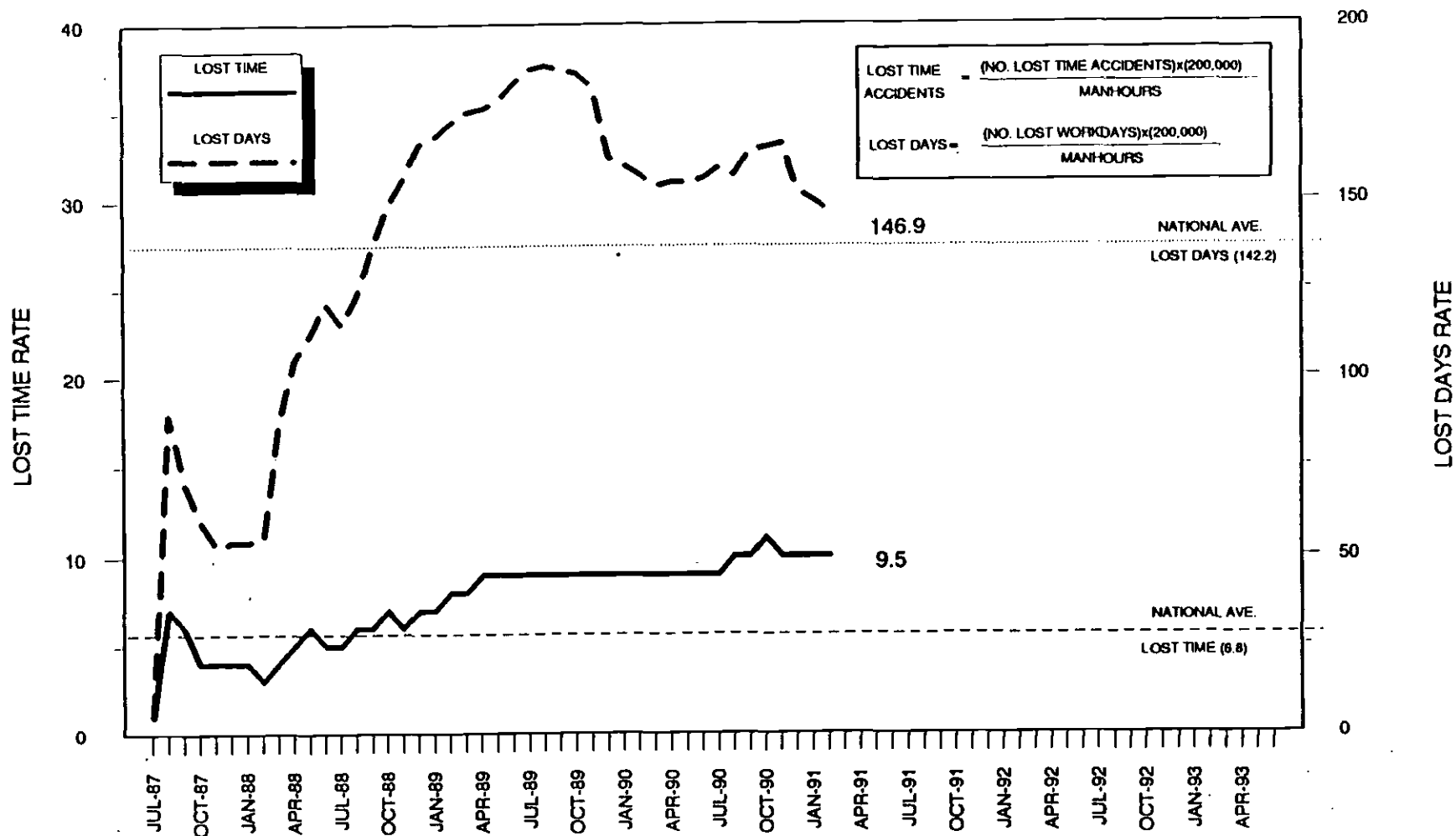
COMMITMENT PLAN



CASH FLOW







**REDLINE PROJECT (MOS-1)
SAFETY LOST TIME/LOST DAYS
CUMULATIVE INCIDENCE RATES**

Total manhours as of February 1991: 8,397,236

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-entry. Currently, 14 parcels are in the acquisition process.

INVOICE PROCESSING

The invoice processing graph has been changed from a weekly moving average of all invoices to a monthly average of just procurement/construction contract invoices. This graph will be revised and shown in the next monthly report.

In the month of March 1991 the statistics for Construction/Procurement contracts were:

Total Number of Invoices Paid	19
Value of Invoices Paid	\$10,933,325
Average Days to Pay	12.6

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	3	2,958,969	0	0	13	4,034,012	7	1,620,858
FEB 1991	10	4,757,906	0	0	23	7,952,309	5	2,588,899
MAR 1991	5	4,591,239	0	0	25	6,256,057	4	1,099,773

EXECUTIVE SUMMARY

COST STATUS

The Metro Red Line MOS-2 current budget \$1,446 million with a current forecast of \$1,446 million. The project commitments to date are \$215.3 million or 15% of the total forecast. The cashflow plan reflects a total project expenditure to date of \$74.8 million or 5% 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: refined construction estimates; Real Estate forecast update; fencing at MacArthur Park; Contract B211 and B215 repackaging; Contract B221 Utility DWP relocation; revised Construction Management Consultant forecast; addition of Testing and Pre-revenue Operation Contract; asbestos removal at Contract B218; revised Specialty and Project Management Consultant forecasts; and Tooling Requirements for Contract B650.

SCHEDULE STATUS

The Master Schedule update with status through March 29, 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 ROD 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 ROD in September 1998.

PROFESSIONAL SERVICES

The overall MOS-2 design is approximately 53% complete versus the planned 59% completion. All design packages are planned to be completed on schedule.

The Construction Management Consultants are primarily concerned with monitoring the progress at Contract B218, Building Demolition, making records of site conditions prior to start of construction at Contract B231, Wilshire/Western Station, and locating a field site office for the Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line.

REAL ESTATE

There are 64 parcels of land required for MOS-2 with status as follows: 15 full takes, 4 partial takes, 42 subsurface easements, and 3 temporary construction easements. These acquisitions will involve the relocation of approximately 114 commercial businesses. To date 6 MOS-2 parcels have been acquired, 24 offers to purchase are open, and 4 condemnations have been obtained from the Los Angeles Superior Court.

CONSTRUCTION/PROCUREMENT

Demolition and asbestos removal at Contract B218 is expected to be completed this month in time for construction NTP for Contract B221, Wilshire/Normandie Station and Line next month. MacArthur Park Lake draining is progressing and the Contract B201 construction site will be ready for the contractor when required. PDCD is making records of the site conditions prior to the start of construction of Contract B231, Wilshire/Western Station and will provide copies to the contractor. Six Change Orders have been received to date and will be reflected in next month's Cost Report Forecast.

To date no safety incidents have been reported. Reporting on safety-related issues is anticipated to begin in mid 1991.

AREAS OF CONCERN**ONGOING**

February 1991 **Cost Impact of B211 and B215 Alternate Design Package.**

Concern: Acquisition of property B2-117 now includes both parking lot and building. Cost to change design and construction over \$9 million.

Action: Approval of LACTC Executive Board required.

Status: Will go before the Board April 24, 1991.

NEW**March 1991 Delay in Real Estate Acquisitions**

Concern: Real Estate Schedule shows delays in property acquisition for required access dates for Contract B211 and B252.

Action: Develop alternative action plan for on-site requirements for lay-down areas to identify property acquisition priorities. Real Estate Department to resolve.

March 1991 Contract B211

Concern: Agreement not reached by end of month for acquisition of parcel B2115. Asbestos survey authorized by 3/18/91 for entry to building.

Action: Complete asbestos survey by 4/17/91. Include asbestos removal in B211 Contract, assist legal efforts in assuring access by 9/1/91 for parcels B2113, B2115 and B2118.

RESOLVED**(From
January 1991) Asbestos Removal at Contract B218**

Status: Extension of one month given to Contract. No impact on critical path.

**(From
February 1991) Contracts B211 and B215 Alternate Design Schedule Impact**

Status: Systems schedules rescheduled to eliminate negative float.

**(From
February 1991) Contract B211 Critical Path**

Status: Contract B211 remains critical for the Wilshire Line.

UMTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

ONGOING

- October 1990 "Top Down" Station Construction**
- Concern: Failure to study this option will waste opportunities for schedule and cost savings.
- Action: Prepare analysis and recommendations regarding the "top-down" station construction approach and other design alternatives.
- Status: A draft analysis was prepared and submitted by MRTC in March 1991. The draft has been reviewed by RCC and returned to MRTC to complete. MRTC will submit their final study and recommendations in mid-April, 1991.
- November 1990 Improve Interface Planning (Action transferred from MOS-1)**
- Concern: Planning should include the preparation of detailed interface plans identifying conditions under which contractors can access partly completed portions of the work.
- Action: Develop detailed contractor interface plans which address access issues and responsibility for ventilation, temporary power, security, etc., when multiple contractors are working in the same area. Reflect partial and full access requirements in the contract documents. Review and update interface plans as access dates approach.
- Status: RCC Engineering is developing guidelines for interface plan preparation and maintenance.

NEW

(No new items since December 1990. Future reports will list new and resolved items on a monthly, rather than quarterly, basis).

RESOLVED**June 1990 Project Management Plan (PMP)**

Concern: The (MOS-2) PMP requires modification to address issues raised at the June 28, 1990 quarterly meeting.

Status: RESOLVED. Revision 2 of the MOS-2 PMP (November 1990) was approved by UMTA on January 23, 1991.

July 1990 Lessons Learned

Concern: Experience gained in the resolution of design and construction problems is not being fully utilized.

Status: RESOLVED. A "Lessons Learned"/Quality Improvement" policy will be incorporated into the revised LACTC/RCC policies and procedures manual currently under revision. The RFI and Change Control processes have been revised to improve direct designer involvement and follow-through on changes and clarifications which affect future design work.

KEY ACTIVITIES - THIS MONTH

- Bids were opened March 28, 1991 for Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line. Recommendation for award will be submitted to the LACTC Board on April 10, 1991.
- Bids were reopened March 1, 1991 for Contract B221, Wilshire/Normandie Station and Line. Recommendation for award will be submitted to the LACTC Board on March 27, 1991.
- Demolition is underway at Contract B218, Demolition at B221 Construction Site, and is expected to be complete by the end of March.
- MacArthur Park Lake draining is progressing and the B201 construction site will be ready for the Contractor when needed.
- Continued preliminary design for Contract C301, Hollywood/Highland Station.
- Repackaged the contract documents to exclude construction of the entrance structure at Contract B211, Wilshire/Vermont Station.
- Continued final design of Section Designer's Contract Packages.

KEY ACTIVITIES - PLANNED FOR APRIL 1991

- Advertise Contract B211, Wilshire/Vermont Station, Stage I. The bid package has been modified to remove the station entrance work.
- Issue the pre-final design submittal for Contract B251, Wilshire/Vermont to Vermont/Santa Monica Line.
- Issue the in-progress design submittal for Contract B271, Vermont/Santa Monica to Hollywood/Vine Line.
- Complete preliminary engineering of Contract C301, Hollywood/Highland Station and Line.
- Architectural presentation for Contract B281, Hollywood/Vine Station is scheduled on April 5, 1991.
- Issue NTP for Contract B221. Site demolition completed.
- Issue NTP for Contract B201.

RAIL CONSTRUCTION CORPORATION
PROJECT COST REPORT
COST BY ELEMENT

Project: R81 METRO RED LINE MOS-2

Period: 23-Feb-91 to 29-Mar-91
Run Date: 09-Apr-91
Units: Dollars in Thousands

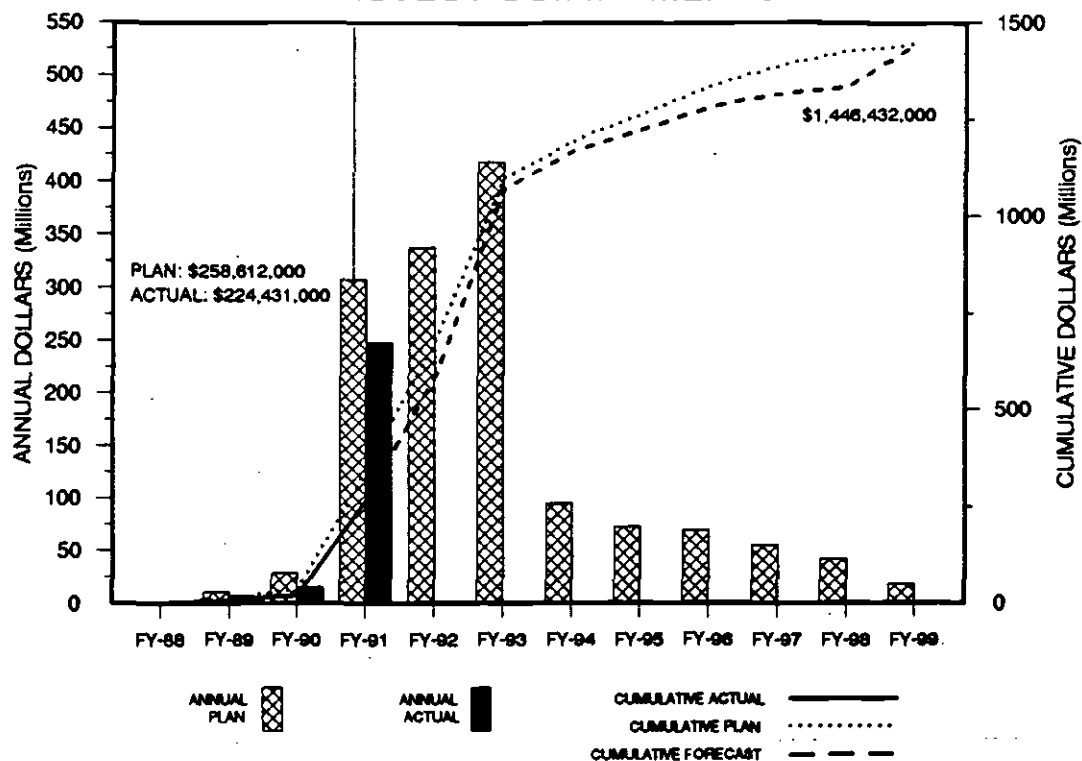
ELEMENT / DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		AUTHORIZED FOR EXPENDITURE		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
T Construction	893,000	0	893,000	79,429	136,085	130,605	133,614	3,878	6,193	14,838	945,375	52,375
S Professional Service	289,150	0	289,150	17,633	61,653	15,406	50,129	5,988	38,291	3,544	289,203	53
R Real Estate	79,827	0	79,827	1,503	36,781	39	35,517	57	35,288	10,137	82,475	2,648
F Utility Relocation	36,668	0	36,668	0	13	873	955	19	40	573	29,028	(7,640)
D Special Programs	2,044	0	2,044	0	150	0	150	0	53	0	7,053	5,009
C Project Reserve	145,743	0	145,743	0	0	0	0	0	0	(28,879)	98,607	(47,136)
A Project Revenue	0	0	0	0	0	0	(5,114)	0	(5,114)	(209)	(5,309)	(5,309)
Project Grand Total:	1,446,432	0	1,446,432	98,565	234,682	146,923	215,251	9,942	74,751	0	1,446,432	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS.

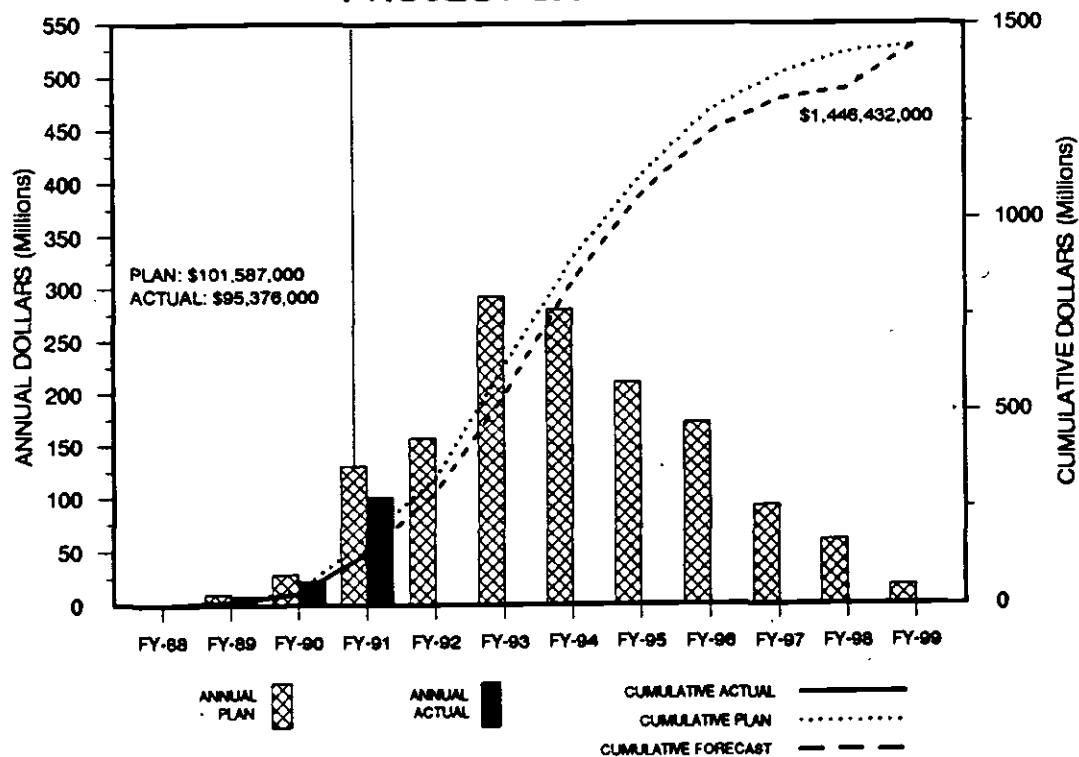
FUND SOURCE STATUS
(IN THOUSANDS OF DOLLARS)

SOURCE	TOTAL ANTICIPATED FUNDS	TOTAL FUNDS RECEIVED	OBLIGATIONS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
UMTA-SECTION 3	\$667,000,000	\$329,668,113	\$133,716,000	20%	\$5,093,000	1%	\$3,641,751	1%
STATE	\$186,000,000	\$0	\$0	0%	\$0	0%	\$0	0%
LACTC	\$439,432,667	\$0	\$81,532,000	19%	\$69,656,000	16%	\$57,552,437	13%
CITY OF L.A.	\$96,000,000	\$10,000,000	\$0	0%	\$0	0%	\$0	0%
BENEFIT ASSESS.	\$58,000,000	\$0	\$0	0%		0%	\$0	0%
TOTAL	\$1,446,432,667	\$339,668,113	\$215,251,000	15%	\$74,751,000	5%	\$61,194,188	4%

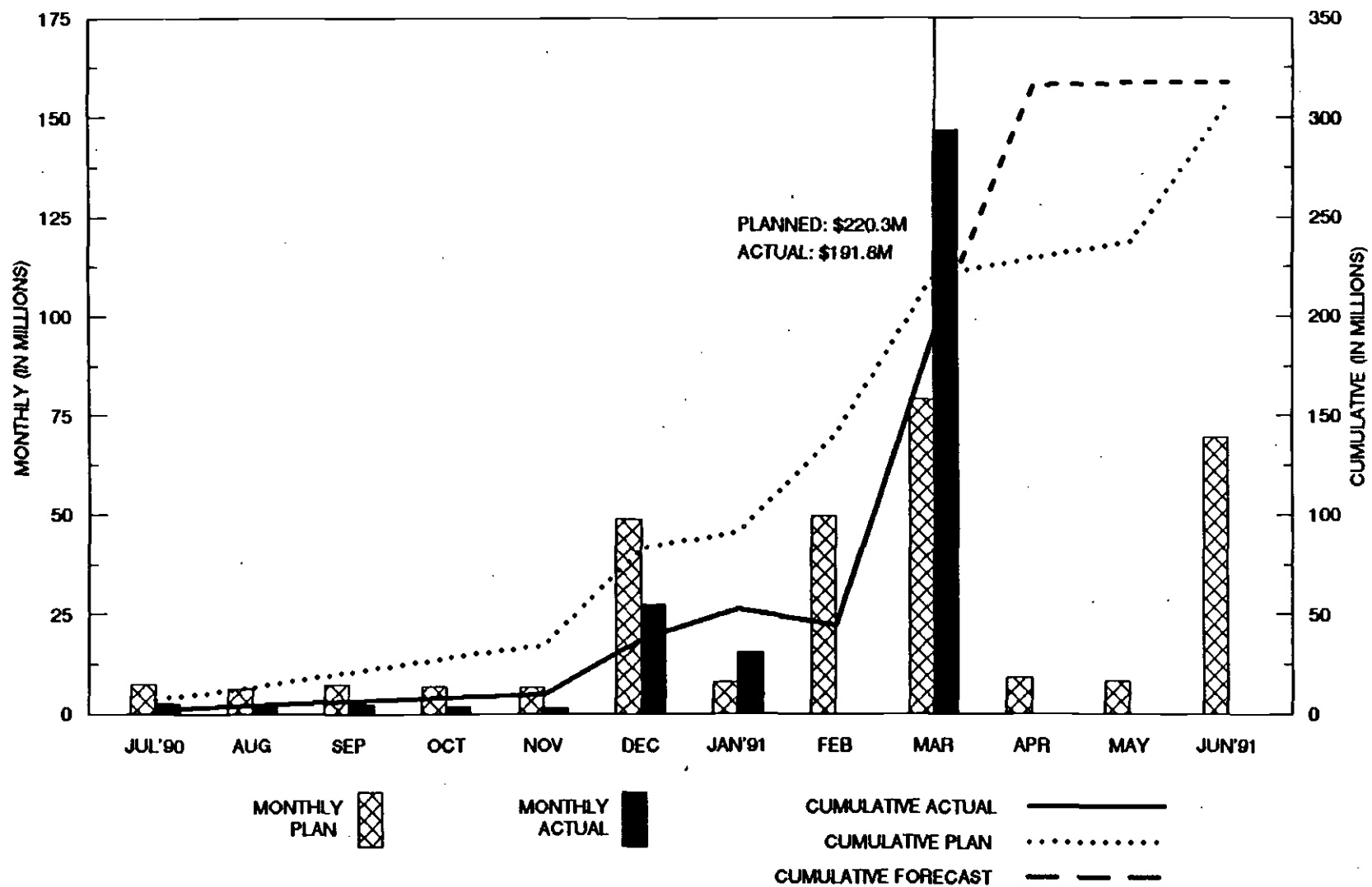
PROJECT COMMITMENTS



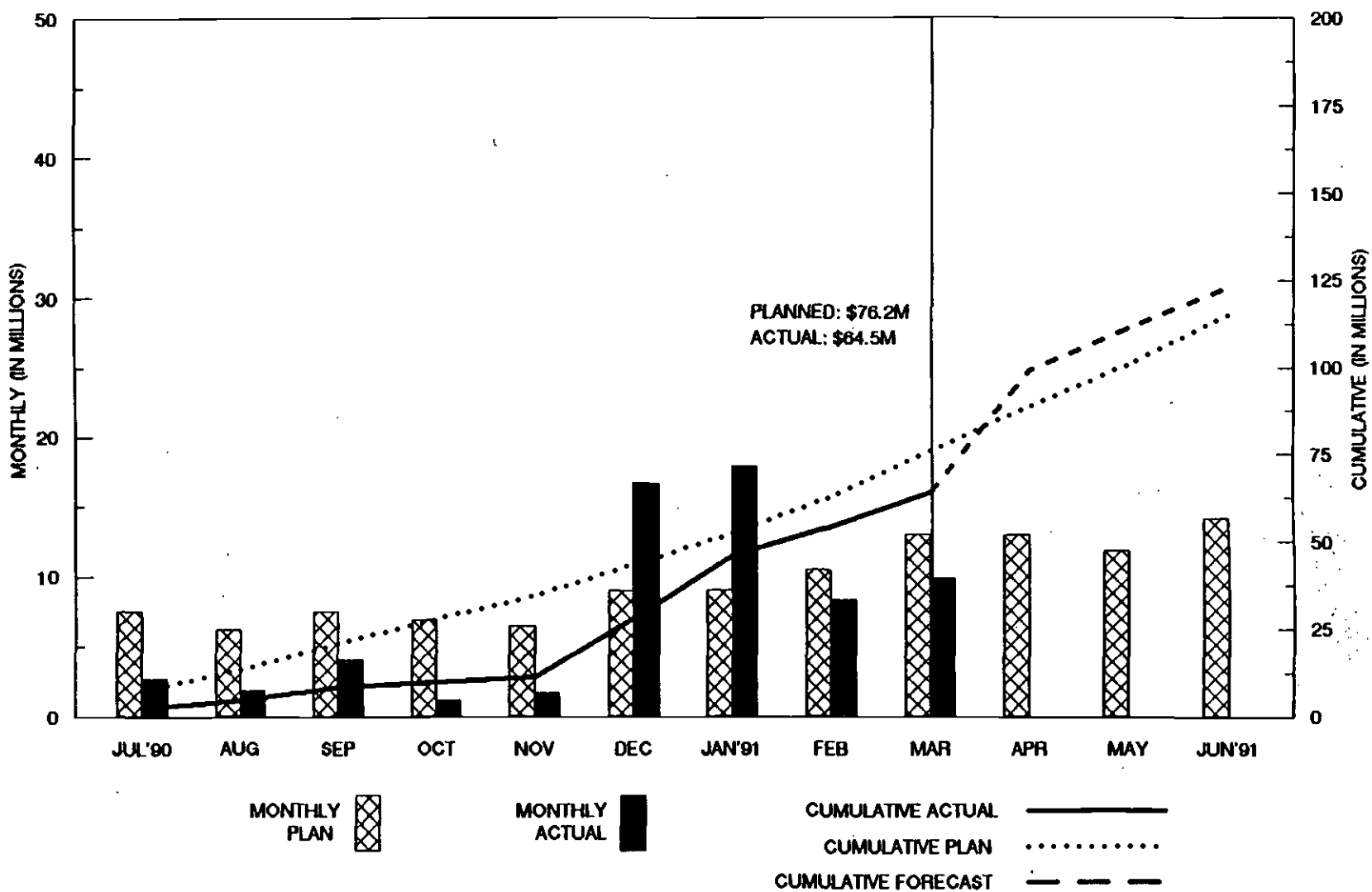
PROJECT CASHFLOW



PROJECT COMMITMENTS

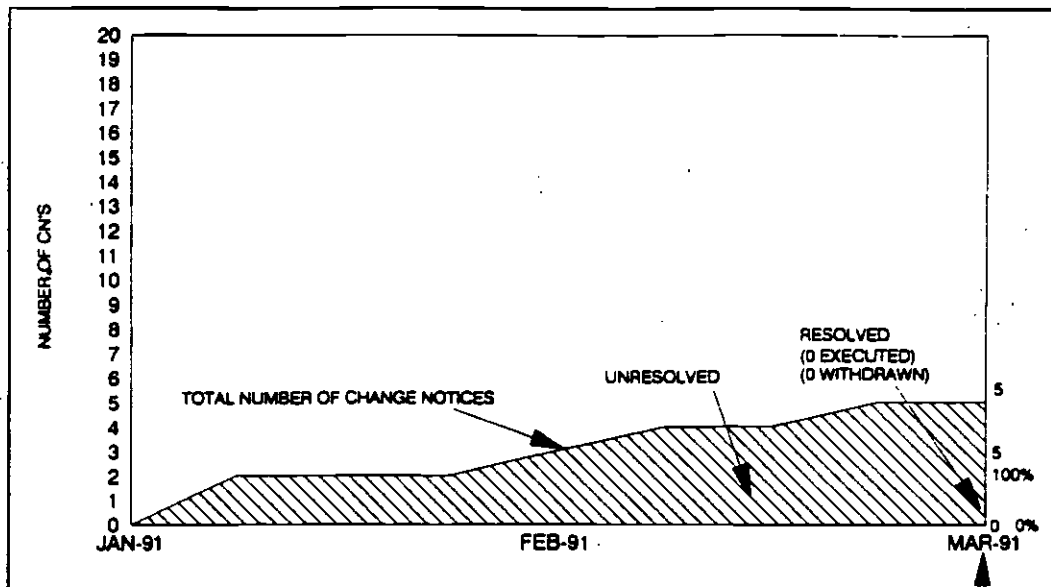


PROJECT CASHFLOW



CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

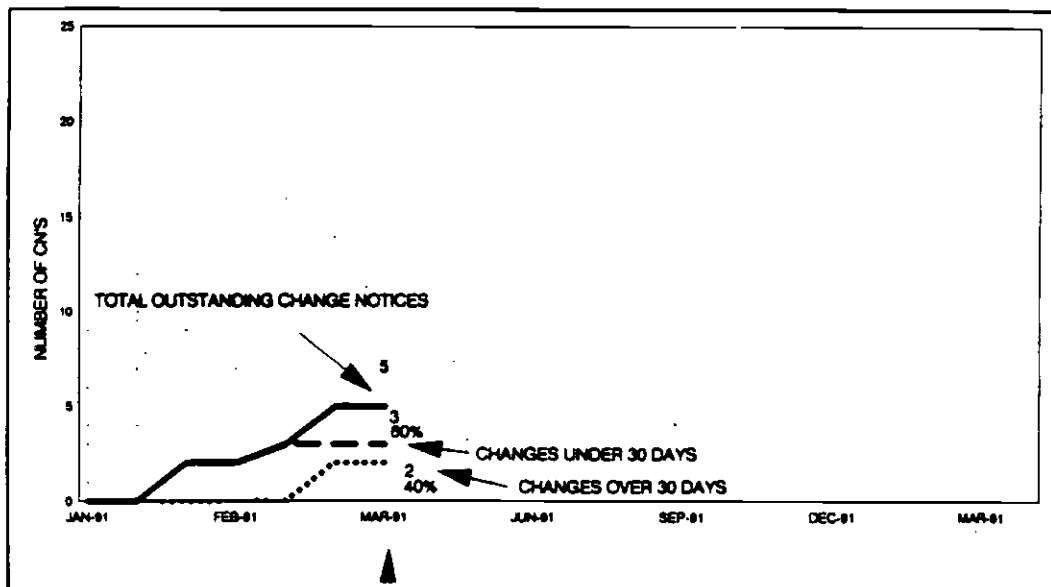
Change Notice Resolution



2 COST PLUS CHANGE NOTICES HAVE BEEN ISSUED, 3 CHANGE NOTICES ARE AWAITING CONTRACTOR'S COST PROPOSALS.

CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

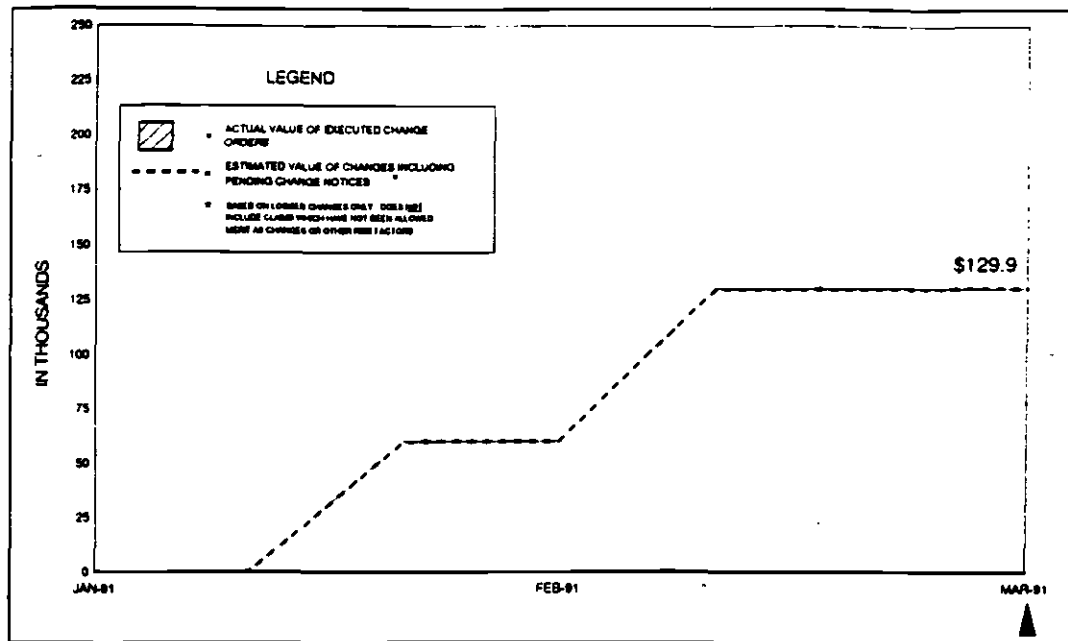
Change Activity Progress



2 COST PLUS CHANGE NOTICES HAVE BEEN ISSUED, 3 CHANGE NOTICES ARE AWAITING CONTRACTOR'S COST PROPOSALS.

CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

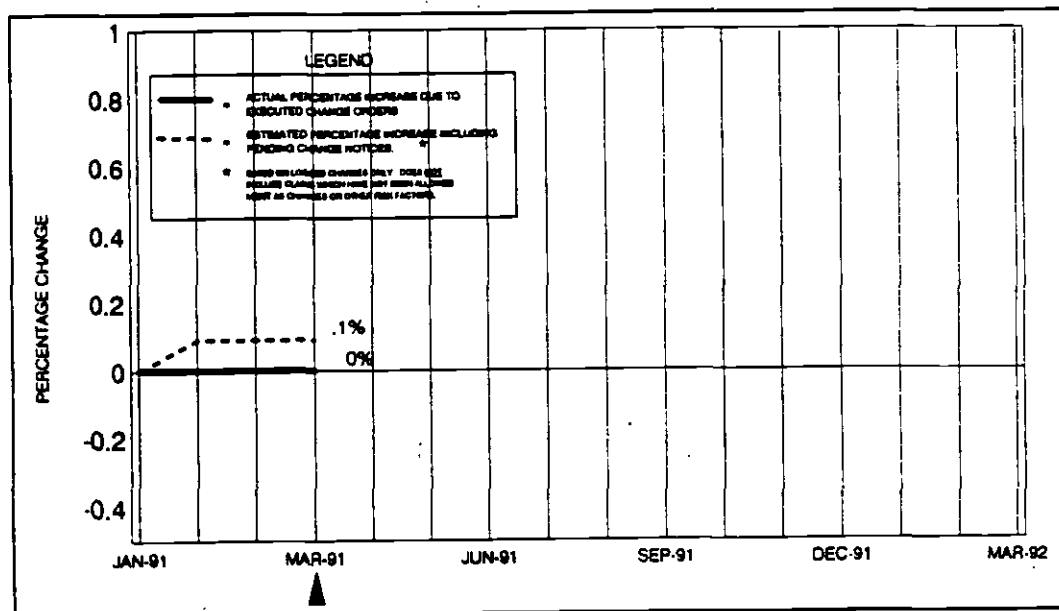
Change Order Value



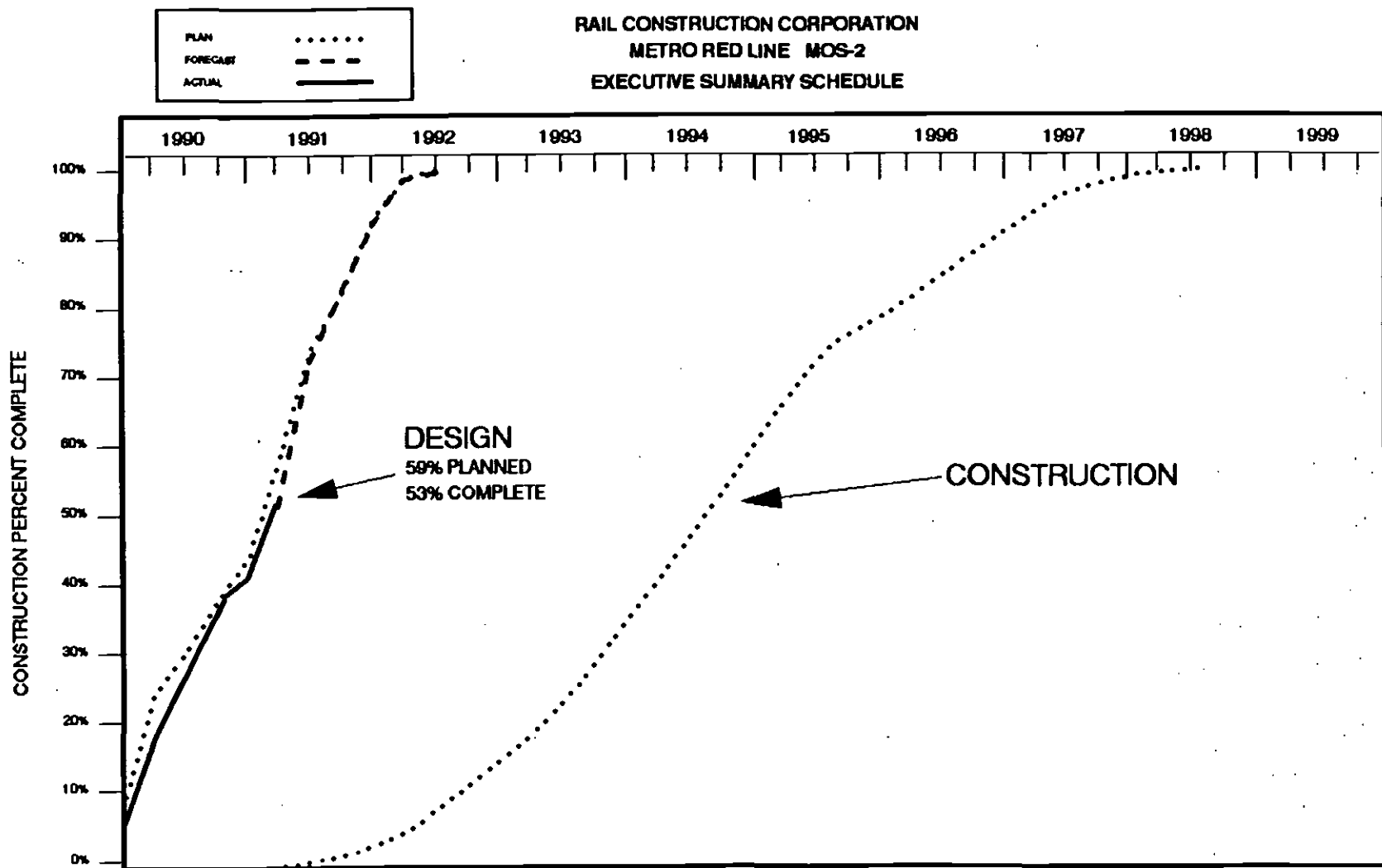
THERE ARE NO CHANGES EXECUTED AS OF 3/29/91. THE ESTIMATED VALUE OF PENDING CHANGES IS \$129,900.00.

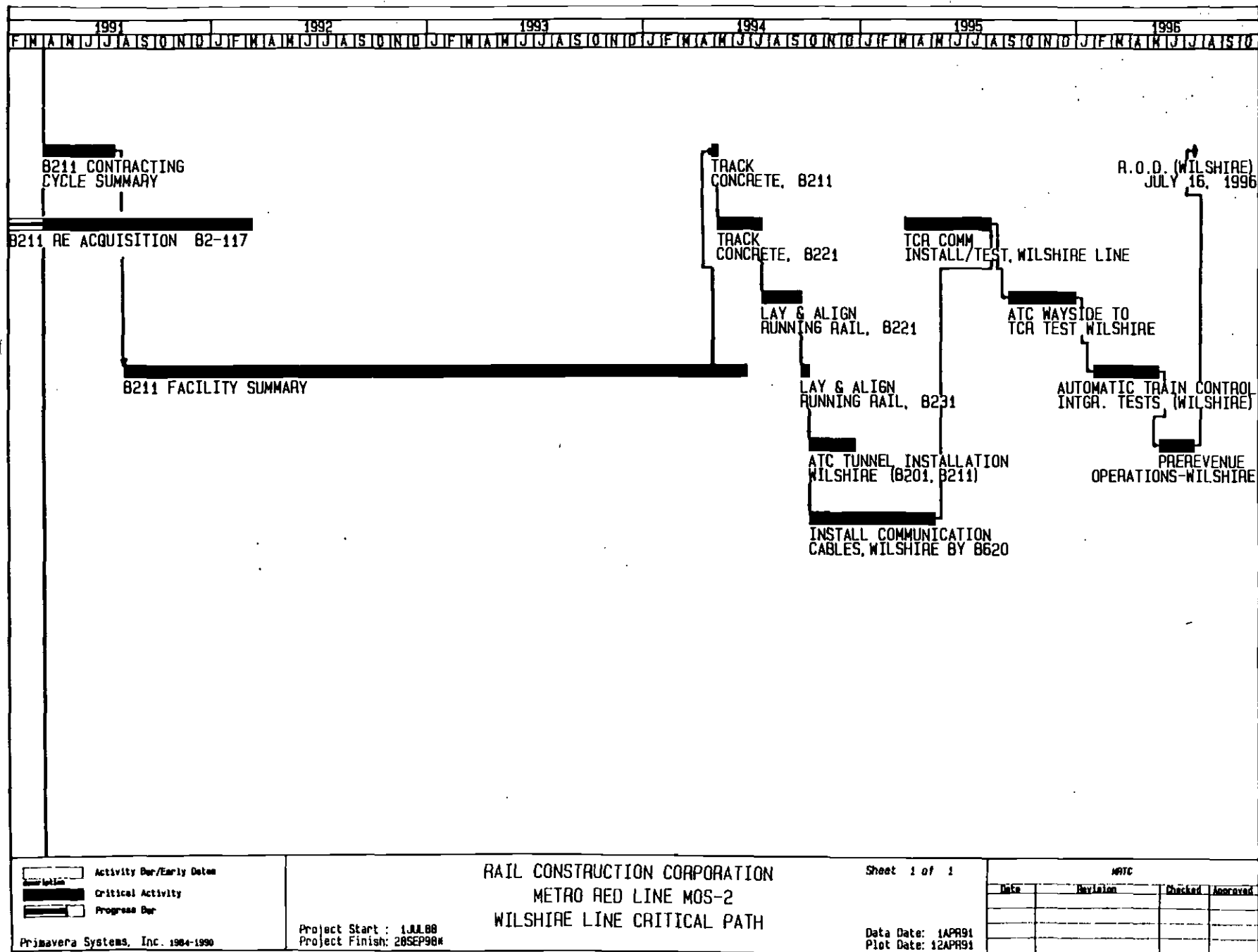
CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

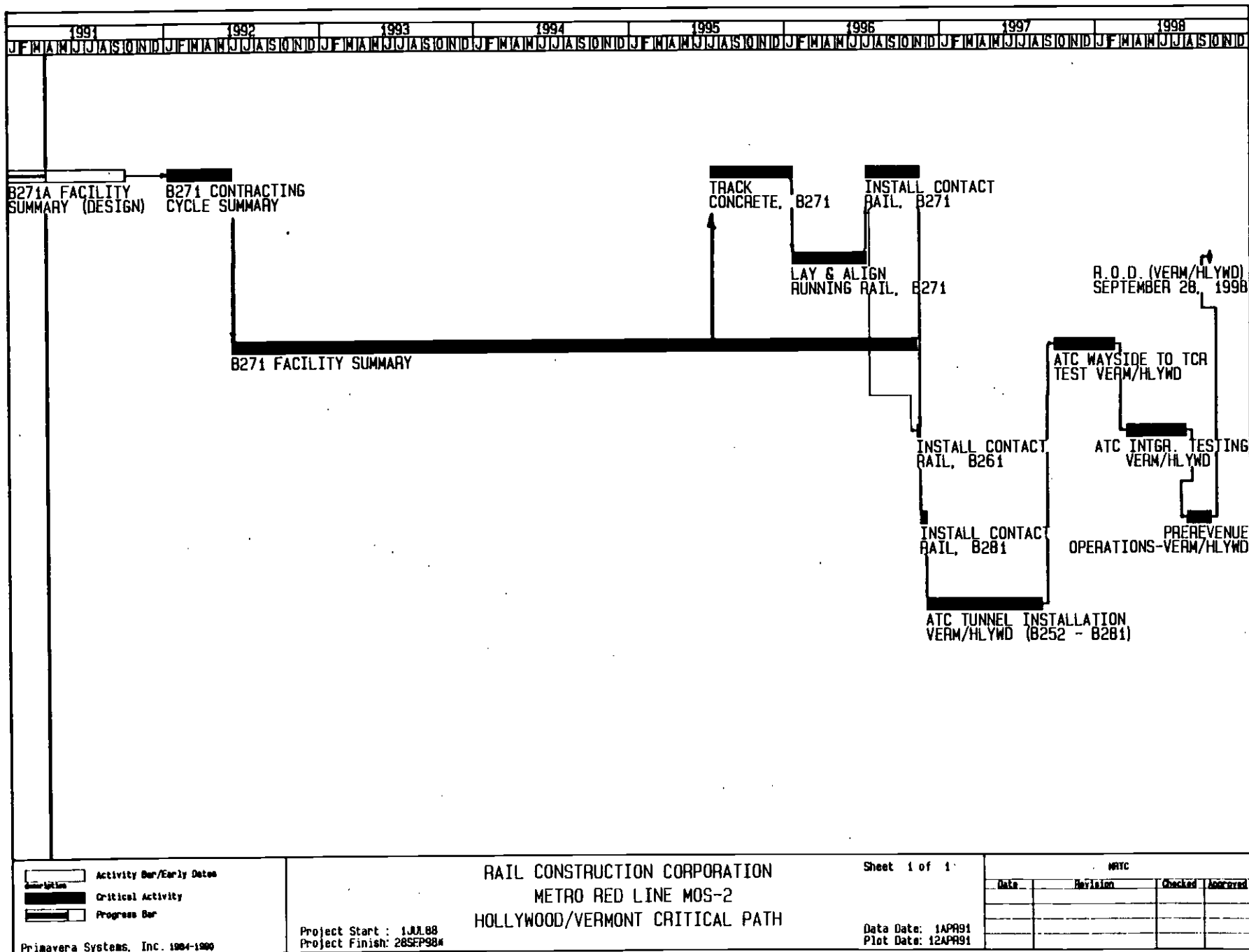
Change Dollars as a Percentage of Original Contract Award



THERE ARE NO CHANGES EXECUTED AS OF 3/29/91. THE ESTIMATED PERCENTAGE OF CHANGE DOLLARS AS A PERCENTAGE OF ORIGINAL CONTRACT AWARD IS .1%.







REAL ESTATE STATUS SUMMARY

CCU	NO. OF PARCELS	NUMBER CERTIFIED		JUST COMP APPROVED		OFFERS MADE		AGREEMENT SIGNED		CONDEM- NATION	PARCELS AVAILABLE		PARCELS NOT AVAILABLE	CONSTRUCT NTP DATE
		PLAN	ACT	PLAN	ACT	PLAN	ACT	PLAN	ACT		PLAN	ACT		
B201	5	5	5	5	4	5	4	5	1	1	2	1	4	04/24/91
B211	5	4	4	4	3	4	4	4	0	2	4	1	4	08/12/91
B216	1	1	1	1	1	1	1	1	0	1	1	1	0	01/10/91
B221	15	15	13	15	13	15	12	10	6	0	10	1	14	04/15/91
B231	3	3	3	3	2	3	2	3	2	0	2	1	2	02/11/91
B241	2	0	0	0	0	0	0	0	0	0	0	0	2	05/17/93
B251	19	5	13	0	0	0	0	0	0	0	0	0	19	02/04/92
B252	3	0	0	0	0	0	0	0	0	0	0	0	3	08/24/92
B261	3	0	0	0	0	0	0	0	0	0	0	0	3	04/21/93
B271	7	1	0	0	1	0	1	0	1	0	0	1	6	06/04/92
B281	1	1	1	0	0	0	0	0	0	0	0	0	1	11/25/92
TOTAL	64	35	40	28	24	28	24	23	10	4	19	6	58	

This month, three parcels, B2-159, B2-199 and B2-171 from Contract B251 were deleted. One parcel, B2-140, Contract B221, and one parcel B2-223, Contract B271, were acquired. Eight parcels, B2-159, 160, 161, 162, 166, 167, 168 and 170 for Contract B251, were certified.

The status of the 64 parcels required for Metro Red Line MOS-2 is as follows: 15 full takes, 4 partial takes, 42 subsurface easements, and 3 temporary construction easements. Approximately 44 relocations are associated with the full or partial takes.

INVOICE PROCESSING

The invoice processing graph has been changed from a weekly moving average of all invoices to a monthly average of just procurement/construction contract invoices. This graph will be revised and shown in the next monthly report.

In the month of March 1991 the statistics for Construction/Procurement contracts were:

Total Number of Invoices Paid	3
Value of Invoices Paid	\$414,402
Average Days to Pay	15

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	0	0	0	0	15	2,664,429	13	178,325
FEB 1991	2	288,402	0	0	18	4,225,255	18	561,649
MAR 1991	1	62,325	0	0	29	2,156,628	17	311,103