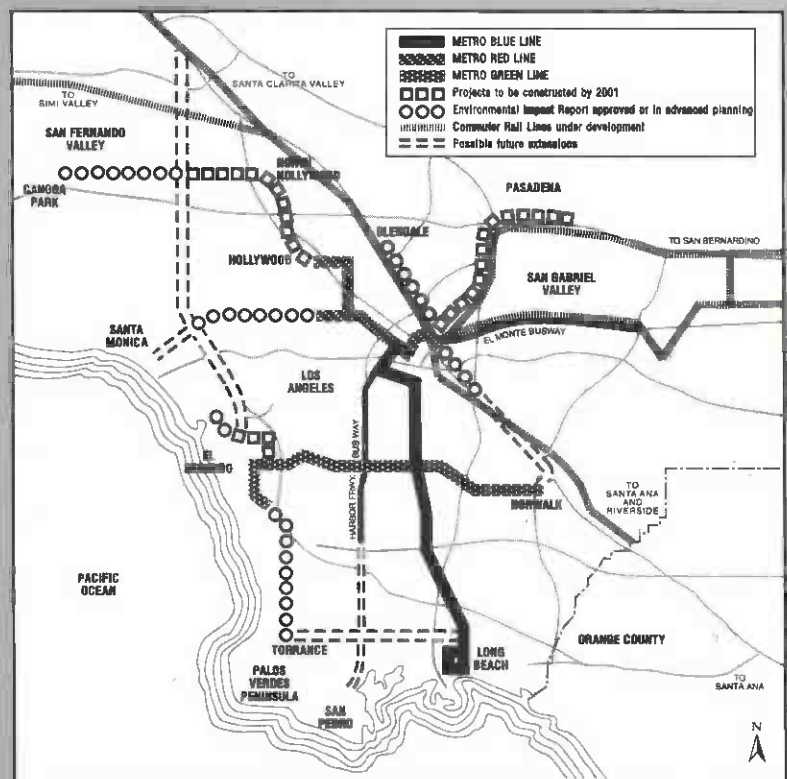


# RAIL CONSTRUCTION CORPORATION



## 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 BUDGET AND FORECAST

The rail design and construction program currently consists of four individual projects - the Metro Blue Line, the Metro Green Line, and the Metro Red Line, MOS-1 and MOS-2. The projects have a combined budget of \$4,277,000,000 and a combined current forecast of \$4,373,000,000, approximately 2% over budget. This forecast difference is from the Metro Red Line MOS-1. Measures continue to be taken to control and mitigate this forecasted cost.

About 100 construction change notices have been added this month for the Metro Red Line MOS-1. The total dollar value of executed change orders for the Metro Red Line MOS-1 increased by about \$600,000 to \$48.8 million. The backlog of unresolved changes increased by 42 over the previous month. Also, the percentage of outstanding change notices over 30 days old is now 32% of all outstanding changes, up from 26% last month. No change notices have been received to date for the Metro Red Line MOS-2 (no construction activity is underway) and only minor change activity has occurred on the Metro Green Line. Metro Blue Line change orders executed to date are about \$53.7 million as compared to \$49.3 million last month. The current backlog of 269 outstanding change notices is a dramatic drop from 371 last month. The Metro Blue Line changes over 30 days dropped to 235 (87% of total outstanding change notices) from 343 (92%). This is indicative of active resolution of outstanding change notices.

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.

### PROGRAM CASH FLOW

Through October 1990, total program expenditures for active projects is \$1,787,226,000. 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  
PROGRAM COST REPORT - TOTAL RAIL PROGRAM  
SUMMARY BY COST ELEMENT

STATUS DATE: 11/30/90

(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	2,490,310	2,631,979	284	1,246,468	61,517	1,192,486	8,806	960,091	17,393	959,563	2,671,280	39,301
PROFESSIONAL SERVICES	918,699	1,016,516	17,690	556,302	6,149	592,423	13,940	551,933	11,535	592,011	1,057,794	41,278
REAL ESTATE	245,664	298,470	258	182,169	1,254	189,483	1,254	183,657	905	179,790	302,529	4,059
UTILITY/AGENCY FORCE ACCOUNTS	105,724	101,708	0	61,653	994	69,718	1,057	61,549	(4,311)	60,910	101,401	(307)
SPECIAL PROGRAMS	5,523	11,853	0	508	0	608	0	276	0	196	11,853	0
PROJECT RESERVE	318,879	262,580	0	0	0	0	0	0	0	0	274,368	11,788
PROJECT REVENUE	(18,115)	(46,503)	0	0	(21)	(524)	(24)	(3,550)	(24)	(5,244)	(46,503)	0
GRAND TOTAL PROJECTS	4,066,684	4,276,603	18,232	2,047,100	69,893	2,044,194	25,033	1,753,956	25,498	1,787,226	4,372,722	96,119

Figure 1

Figure 2 - Rail Construction Plan

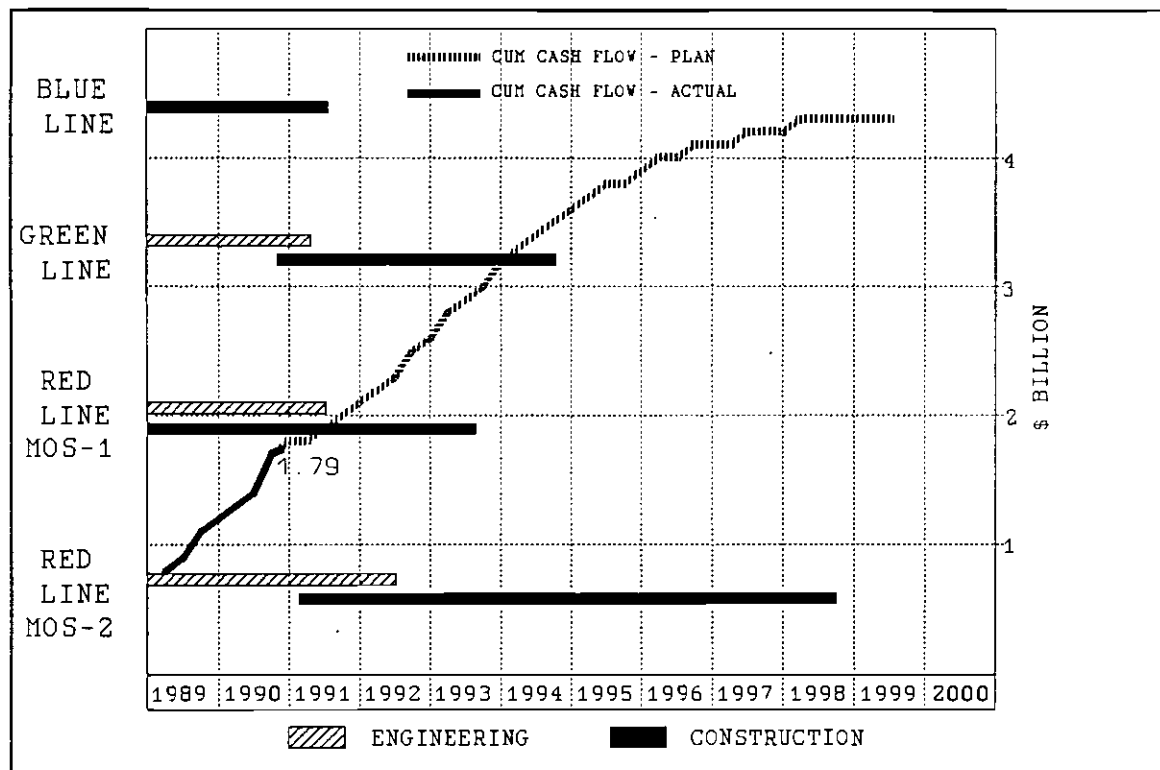


Figure 3 shows the funding sources for each project and for the total program. Data included in this figure is based on the current forecast total cost of each project.

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	31
STATE					214	15	185	13	399	9
LOCAL (PROP A)	877	100	599	100	228	16	440	30	2144	49
BENEFIT ASSESSMENT					130	9	58	4	188	5
CITY OF LOS ANGELES					86	6	96	7	182	4
UNALLOCATED FCST					96	6	—		96	2
TOTAL	877	100	599	100	1450	100	1446	100	4373	100

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

## PROGRAM SCHEDULE

The scheduled Revenue Operations Date for the remaining portion of the Metro Blue Line (Seventh and Flower station to Pico Station) was advanced to February 14, 1991, four months ahead of schedule.

The Metro Green Line is scheduled for Revenue Operations in October 1994. The project is 58 days behind schedule. Workaround plans are being made to resolve the schedule delays.

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 on target for Revenue Operations in July 1996, with the Vermont Segment scheduled for opening in September 1998. No impacts to these dates are presently seen.

Figure 4 is a listing of key events for all projects scheduled over the next twelve (12) months and is intended as a planning guide only.

1 YEAR OUTLOOK

PROJECT STATUS / KEY EVENTS  
TOTAL PROGRAM

DATA DATE: 30 NOV 90

	NOV 90		DEC	JAN 91	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
	PLAN	ACTL											
60% Design Submittl	2	2	1	1			2	2		1		3	1
85% Design Submittl	2	1	2	1		1		1	1	2	1	1	1
100% Design Submittl		2	2	6	1	1				1	2	2	2
<b>TOTAL</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>8</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>4</b>
CR Camera Ready	1	1	3	7	5			1	1			2	
AD Advertise	2	2	3	2	5	1	2				1	2	
BD Bid Due	1	1	1	1	2		2		1				1
AW Award	1	3	3	3	1	2	3	3	3	3	2	1	
RE Real Estate			2	1			1	2				1	
NTP Notice to Proc.		2	2	4	1	2	3	2	5	3	2	1	1
MFG Manufacturing						2	2						
VS Vehicle Ship													
FD Delivery Finish													
VT Vehicle Test												2	2
VA Vehicle Arrival													
LIQ Liquid. Milest.	2	3	2	2	4	2	10	5	2	4	3	3	4
INT Interfc. Milest.													
CC Contract Complt.					2	2	2	3	2	1	2		2

NOTE: 1.) REPORT REFLECTS ONLY CONTRACT PACKAGES FOR MAJOR SYSTEMS.

Figure 4

## REAL ESTATE ACQUISITIONS

To date, six hundred and sixteen (616) real estate parcels have been identified as required for the total program. Of this total, one hundred and forty-one (141) are not yet available for construction. The RCC is taking action to reduce or eliminate adverse impacts to the schedule because of any possible delays in real estate entry/acquisition. Figure 5 summarizes the real estate status for each project.

Figure 5 - Real Estate Acquisition Status Summary

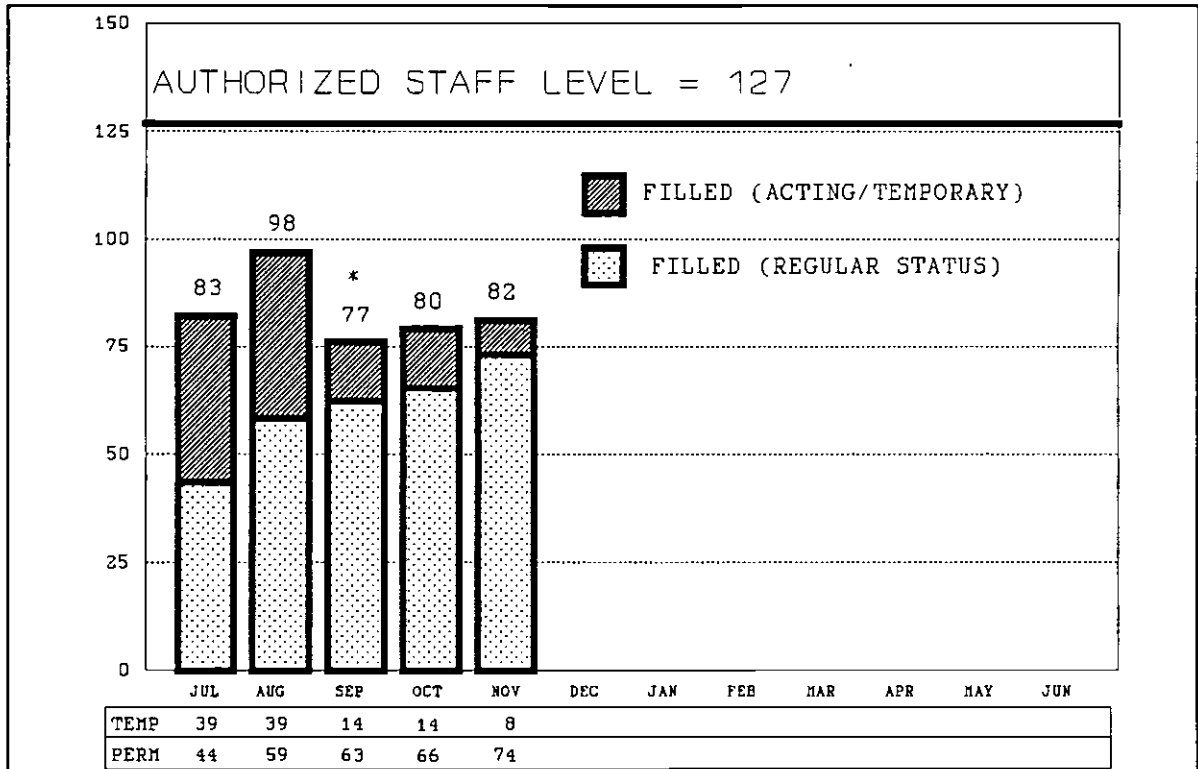
REAL ESTATE - STATUS SUMMARY TOTAL							
PROJECT	NO. OF PARCELS	NUMBER CERT'D	JUST COMP APPROVED	OFFERS MADE	CONDEM- NATION	PARCELS AVAIL	PARCELS NOT AVAIL
BLUE	423	229	157	259	23	370	53
GREEN	34	33	NA	NA	4	10	24
MOS-1	94	94	94	94	22	94	0
MOS-2	65	27	17	13	5	1	64
TOTAL	616	383	268	366	54	475	141
PREVIOUS MONTH	616	383	254	360	51	472	144

## RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Authorized staff level for the RCC is one hundred twenty-seven (127). There was an increase of eight permanent staff this month. Recruitment continues for the remaining positions. Staff levels are illustrated in Figure 6.

Figure 6 - RCC Staff Levels

\* The acting/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%. This exceeds the goal of 20% maximum but is an improvement from 25% for last month. The percentage includes all costs previously expended by the SCRTD when the project was under SCRTD management.

Staff costs are projected at 5% of total program costs. This exceeds the corporate goal of 4%. Improvements and efficiencies are still being pursued to optimize staff and administrative expenditures. Figure 7 illustrates the forecast figures for each project and for the total program.

COST PERFORMANCE RELATIVE TO CORPORATE GOALS  
IN THOUSANDS

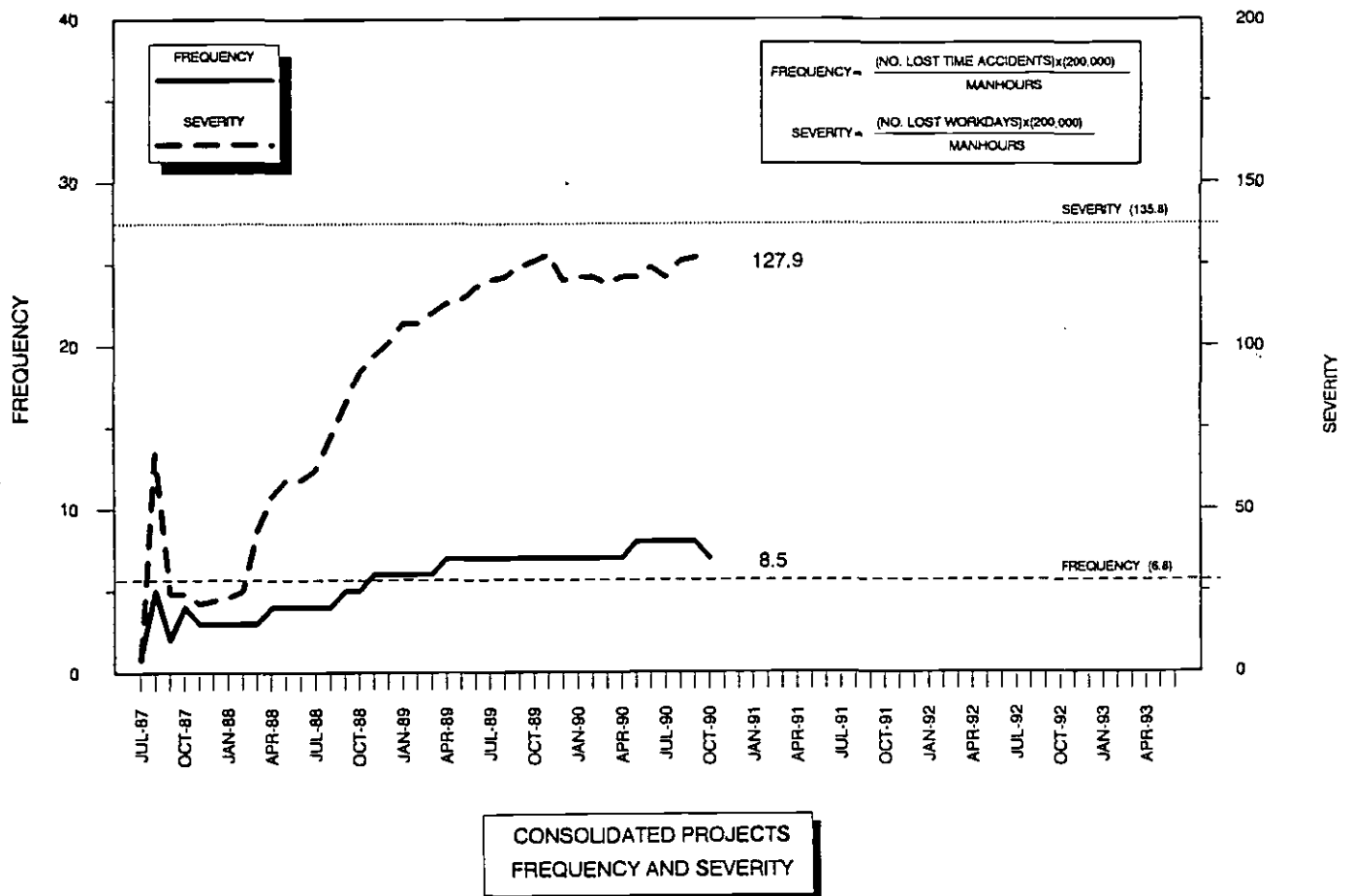
	METRO BLUE LINE		METRO GREEN LINE		METRO RED LINE MOS-1		METRO RED LINE MOS-2		PROJECT TOTALS		CORPORATE
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	GOAL
CONSTRUCTION	656,237	75%	410,764	69%	747,727	52%	958,380	66%	2,773,108	63%	
RIGHT-OF-WAY	55,592	6%	35,096	6%	139,016	10%	70,887	5%	300,591	7%	
SERVICES:											
ENGINEERING/DESIGN	69,587	8%	53,833	9%	221,259	15%	80,818	6%	425,497	10%	
CONSTRUCTION MGMT.	90,722	10%	35,877	6%	140,214	10%	127,446	9%	394,259	9%	
STAFF	17,655	2%	19,760	3%	105,919	7%	56,166	4%	199,500	5%	4%
OTHER	15,142	2%	5,830	1%	14,934	1%	14,746	1%	50,652	1%	
SUBTOTAL	193,106	22%	115,300	19%	482,326	33%	279,176	19%	1,069,908	24%	20%
RESERVE	2,213	0%	54,466	9%	80,950	6%	137,988	10%	275,617	6%	
REVENUE	(29,877)	-3%	(16,626)	-3%	0	0%	0	0%	(46,503)	-1%	
GRAND TOTAL	877,271	100%	599,000	100%	1,450,019	100%	1,446,431	100%	4,372,721	100%	

Figure 7

## SAFETY

Figure 8 shows the combined safety record for the Metro Blue Line and the Metro Red Line MOS-1. The overall frequency of injuries have declined slightly. Although the frequency of injuries is higher than the national incidents index, the severity of injuries is less than the national severity index. RCC plans to pursue an even more vigorous role to further reduce incidence and severity levels.

Figure 8



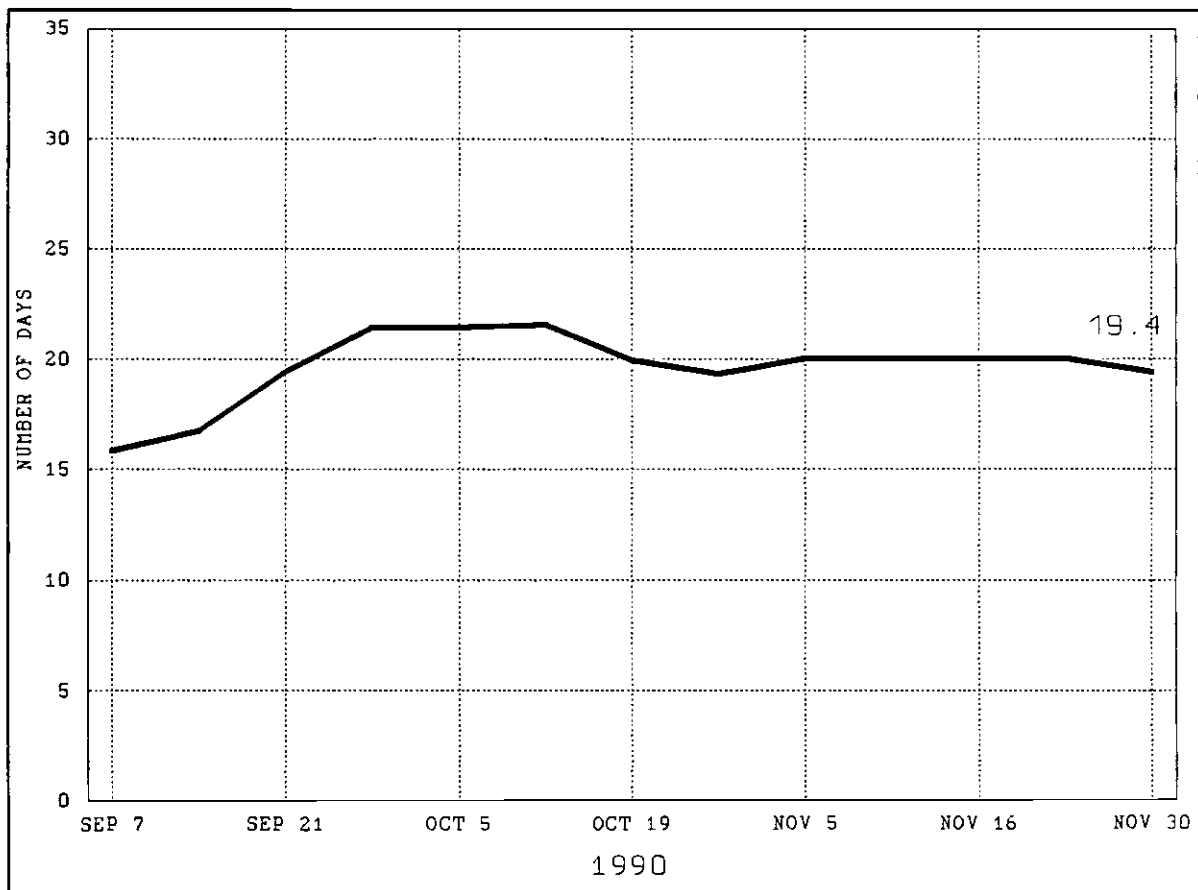
Total manhours as of October 1990: 11,485,444

## INVOICE PROCESSING

Figure 9 illustrates the average time to payment by RCC for contractor invoices. To smooth the irregularities of weekly processing of invoices, four (4) week moving averages have been used for this chart. Week to week variances or short term variances in this average should not be cause for concern; the overall trend, however, will be closely monitored as a measure of LACTC/RCC responsiveness to contractor invoices.

The trend shows a consistent processing cycle of around 20 days from receipt of invoice to payment.

Figure 9 - Average Days to Invoice Payment  
(4 week moving average)



## EXECUTIVE SUMMARY

The current Project Budget is \$877,271,000 which was approved by the Commission in July, 1990. The current 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.

Construction progress through November 1990, was measured at 99.0% compared to the planned progress of 99.0%. The Los Angeles County Transportation Commission board approved a new Revenue Operation Date (ROD) for the Seventh and Flower station of February 14, 1991. This is four months ahead of the previously scheduled ROD.

Systems work in the station area of the Seventh and Flower location remains on schedule despite supplier instigated delays. Switchboards have been received which were missing circuit breakers and the interposing relays will not be available until January 12, 1991. TRANSCAL has created an effective workaround program to bring on line the critical mechanical system elements on schedule.

Phase I safety evaluation work continued which included investigation of a number of proposed alternative measures for improving system safety. Among those items approved for implementation on a test basis are the lowering of fence height to improve visibility and the addition of high intensity lighting on the vehicles. Phase I activities will be concluded in time for a presentation to be given during the second RCC board meeting in January 1991.

The residual responsibility for Phase II of the safety evaluation will be managed by an entity to be identified at a later date.

## AREAS OF CONCERN

### 1. SEVENTH AND FLOWER DELAYS

**Problem:** Supplier delays in the delivery of interposing relays and incomplete switchgear have caused a potential slip in the Seventh and Flower Revenue Operations Date (ROD).

**Action:** TRANSCAL, PDCD, and LACTC are working to develop a workaround plan to enable TRANSCAL to meet the February 14, 1991 ROD.

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

STATUS DATE: 11/30/90

(IN THOUSANDS)

PROJECT: R01 METRO BLUE LINE	(1)	(2)	(3) AUTHORIZED FOR EXPENDITURE		(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	BUDGET				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	284	560,005	1,334	533,041	3,204	498,476	3,271	497,415	610,110	1,251
PROFESSIONAL SERVICES	121,494	186,778	0	164,820	2,489	176,713	2,489	176,711	2,489	174,315	186,778	0
REAL ESTATE	39,847	55,592	0	49,463	1,059	55,223	1,059	54,936	710	51,069	55,592	0
UTILITY/AGENCY FORCE ACCOUNTS	50,177	47,378	0	44,434	994	56,528	1,039	52,632	1,041	51,857	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	962	(1,251)
PROJECT REVENUE	(1,489)	(29,877)	0	0	0	460	(3)	(3,233)	(3)	(3,233)	(29,877)	0
GRAND TOTAL PROJECT	771,352	877,271	284	818,722	5,876	821,965	7,788	779,522	7,508	771,423	877,271	0

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

STATUS DATE: 11/30/90

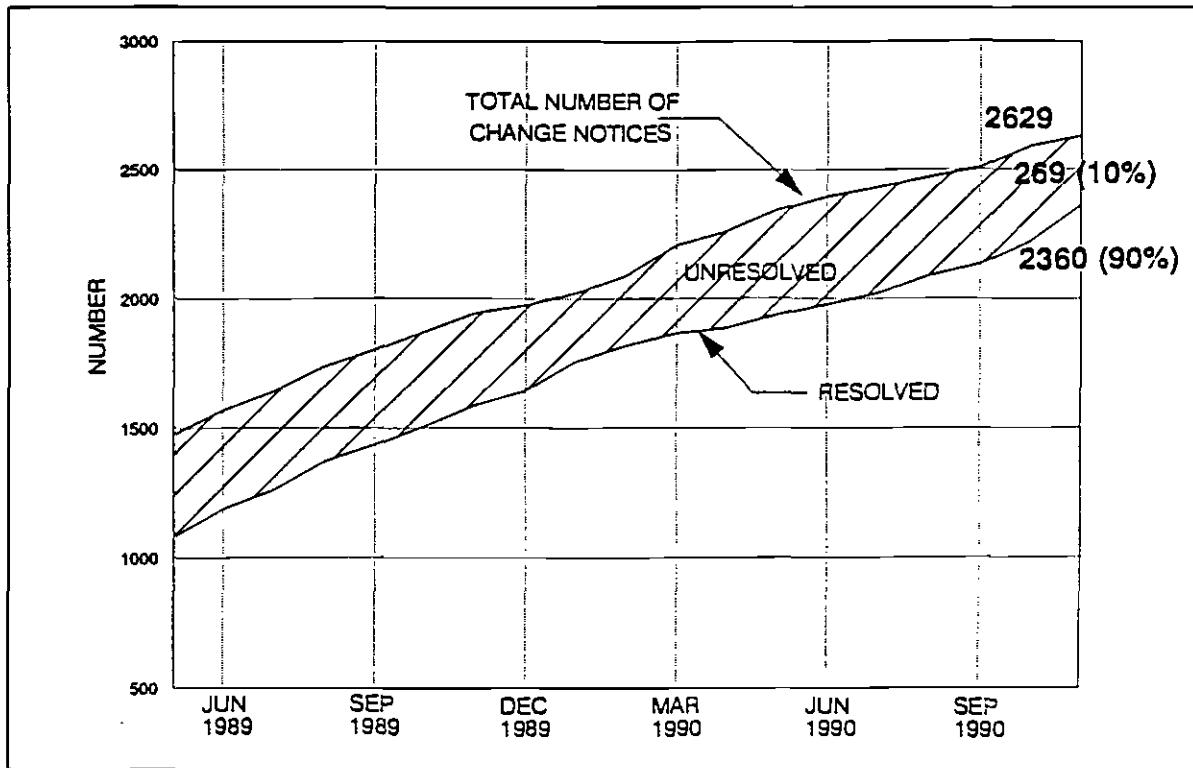
PROJECT: R01 METRO BLUE LINE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	BUDGET		AUTHORIZED FOR EXPENDITURE		COMMITMENTS		INCURRED COST		EXPENDITURES		FORECAST	
DESCRIPTION	ORIGINAL	CURRENT	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	CURRENT	(11-2) VARIANCE
CONSTRUCTION	497,194	578,894	0	556,781	946	530,054	2,739	495,834	2,806	494,773	580,145	1,251
PROFESSIONAL SERVICES	121,494	183,458	0	164,820	2,489	176,713	2,489	176,711	2,489	174,315	183,458	0
REAL ESTATE	39,847	52,065	0	49,463	1,059	55,223	1,059	54,936	710	51,069	52,065	0
UTILITY/AGENCY FORCE ACCOUNTS	50,177	47,378	0	44,434	994	56,528	1,039	52,632	1,041	51,857	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	462	(1,251)
PROJECT REVENUE	(1,489)	(19,287)	0	0	0	460	(3)	(3,233)	(3)	(3,233)	(19,287)	0
GRAND TOTAL PROJECT	771,352	846,949	0	815,498	5,488	818,978	7,323	776,880	7,043	768,781	846,949	0

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

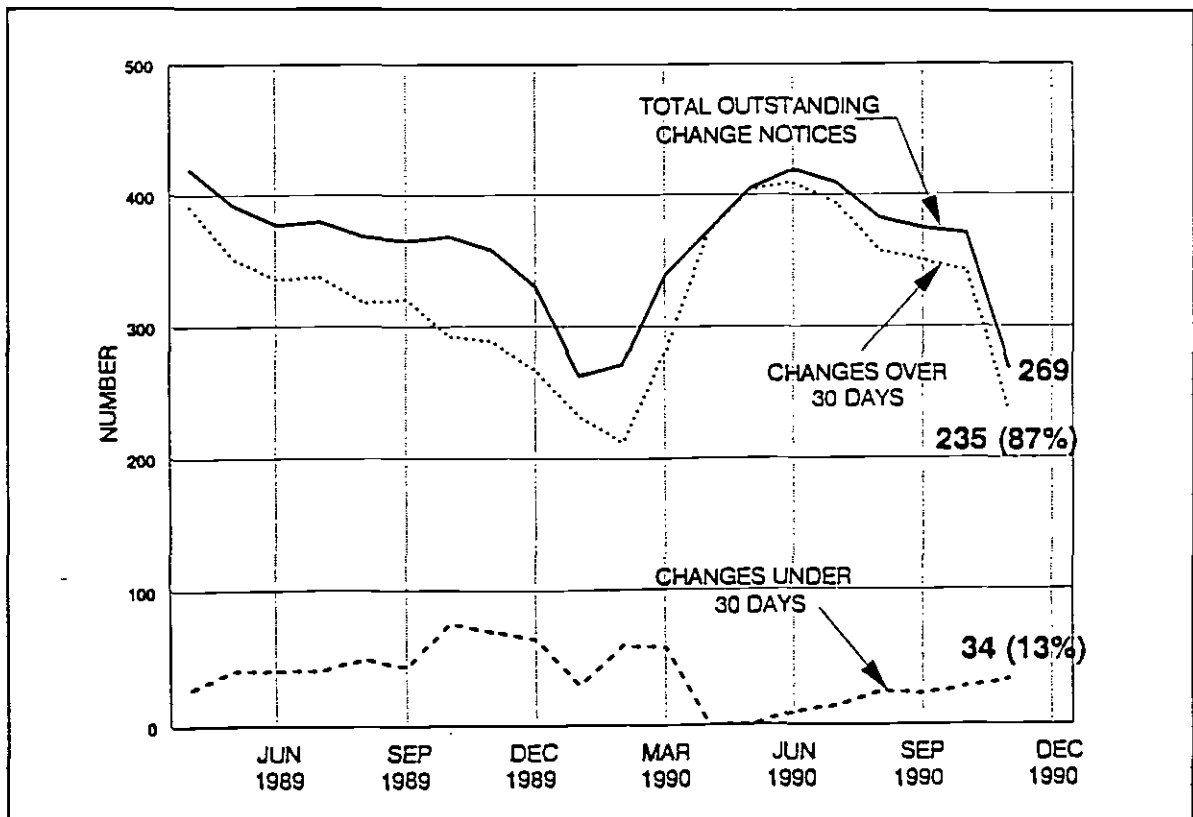
STATUS DATE: 11/30/90

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
PROJECT: RH1 MCS RR RELOC.	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	284	3,224	388	2,987	465	2,642	465	2,642	29,965	0
PROFESSIONAL SERVICES	0	3,320	0	0	0	0	0	0	0	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	0	0	0	0	(10,590)	0
GRAND TOTAL PROJECT	0	30,322	284	3,224	388	2,987	465	2,642	465	2,642	30,322	0

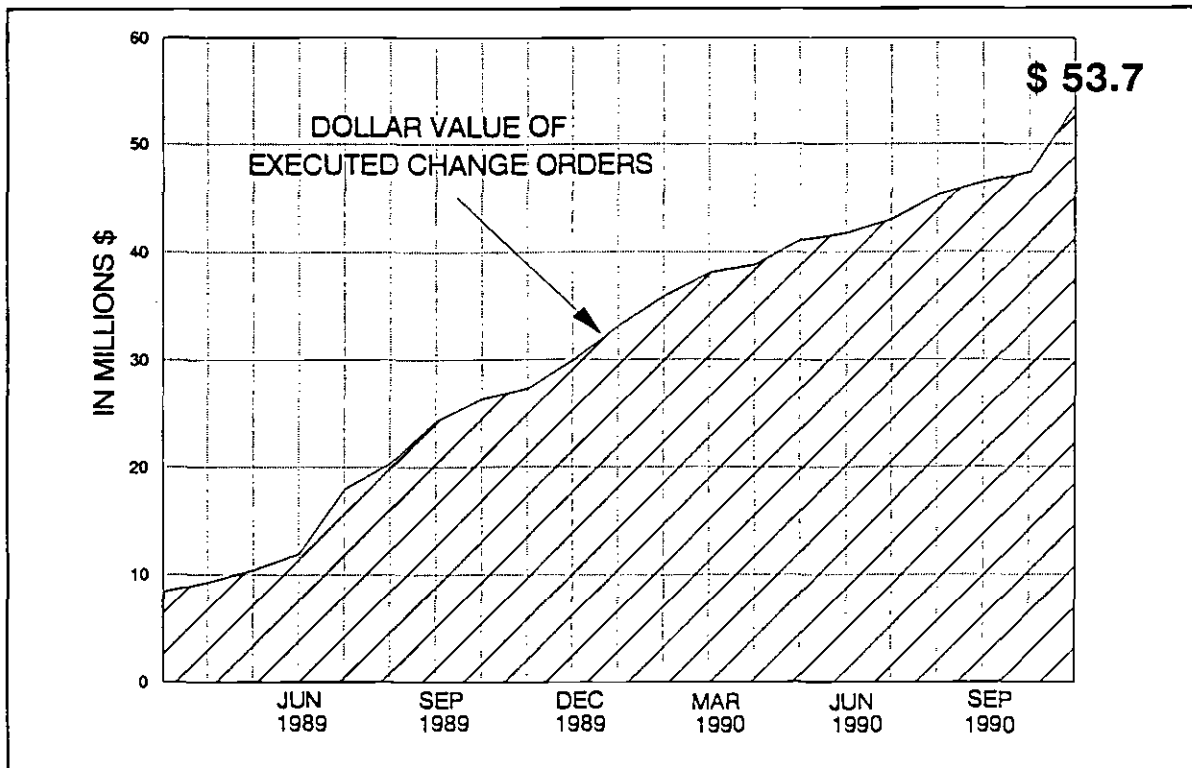
### Change Notice Resolution



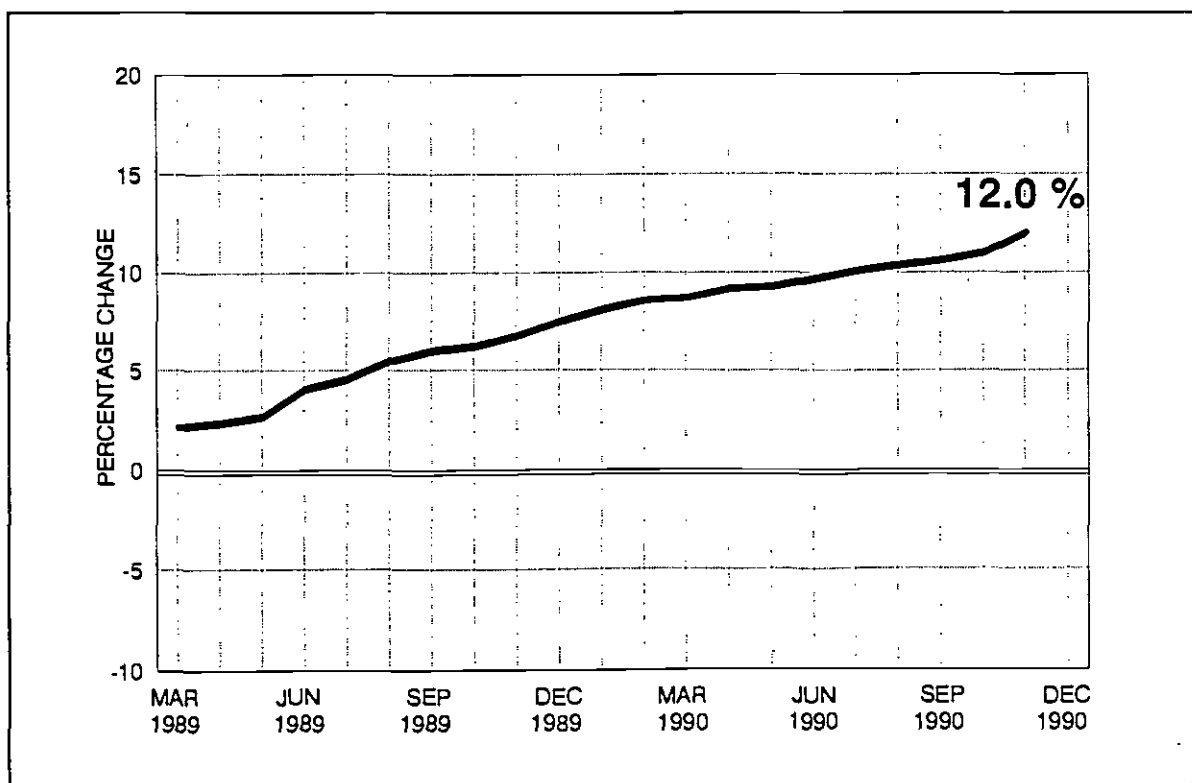
### Change Activity Progress



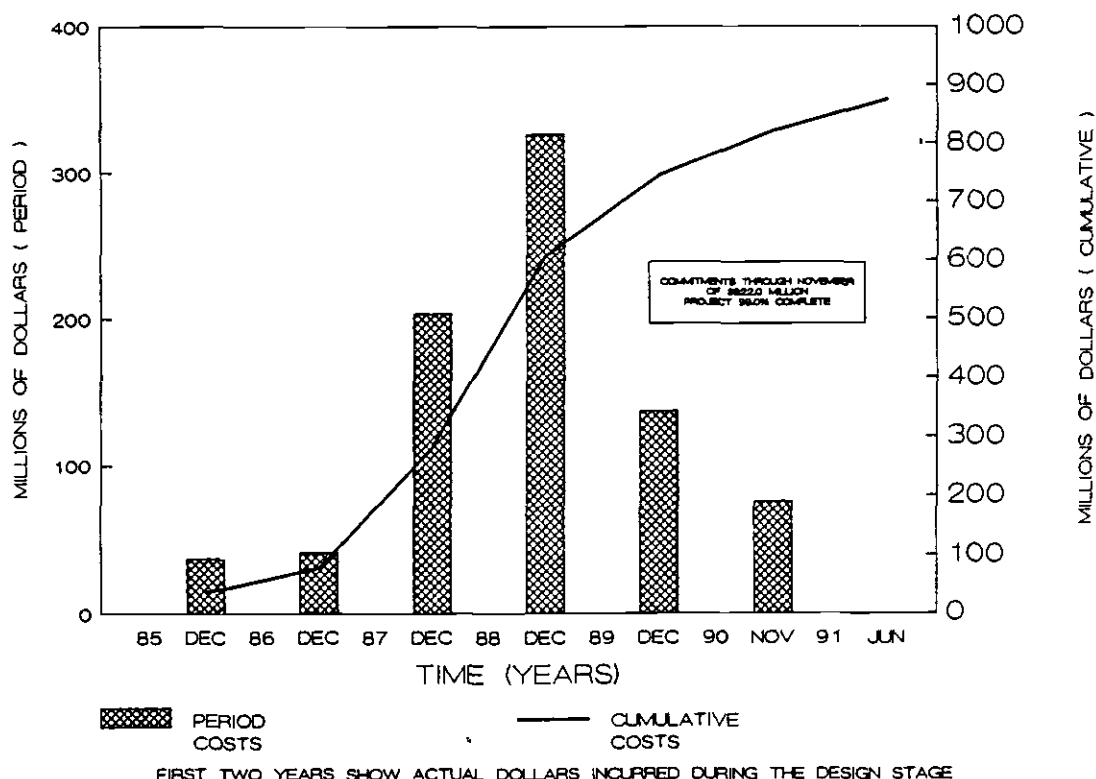
Total Value of Executed Change Orders



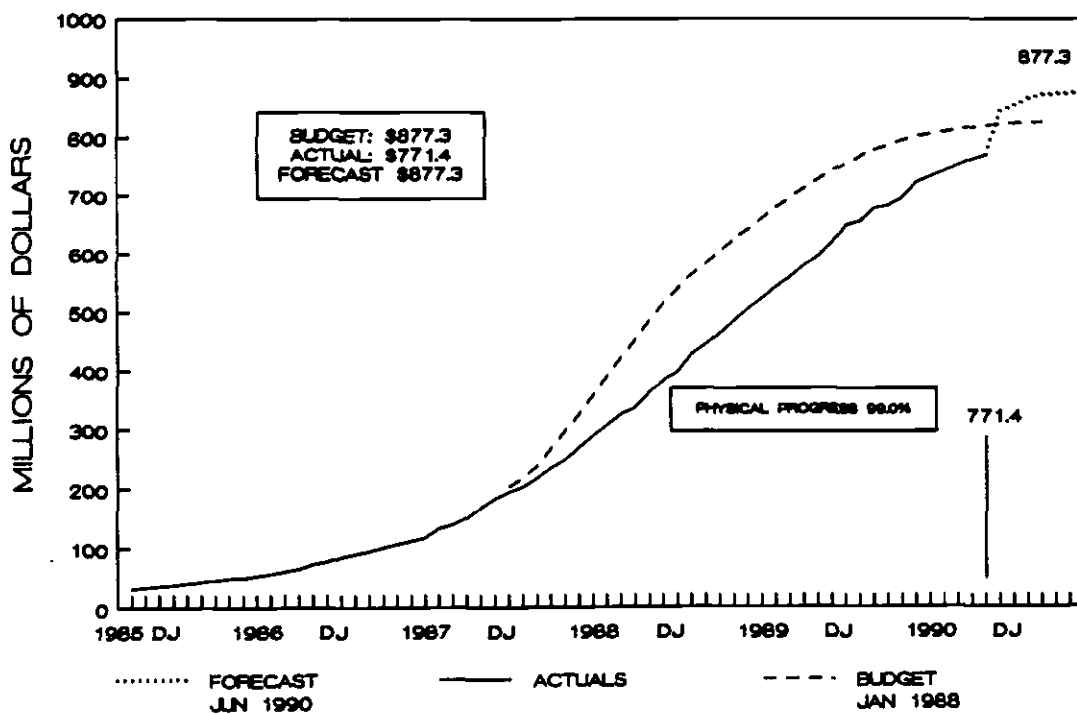
Change Order Dollars as a Percentage of Original Contract Award



## METRO BLUE LINE COMMITTED COSTS

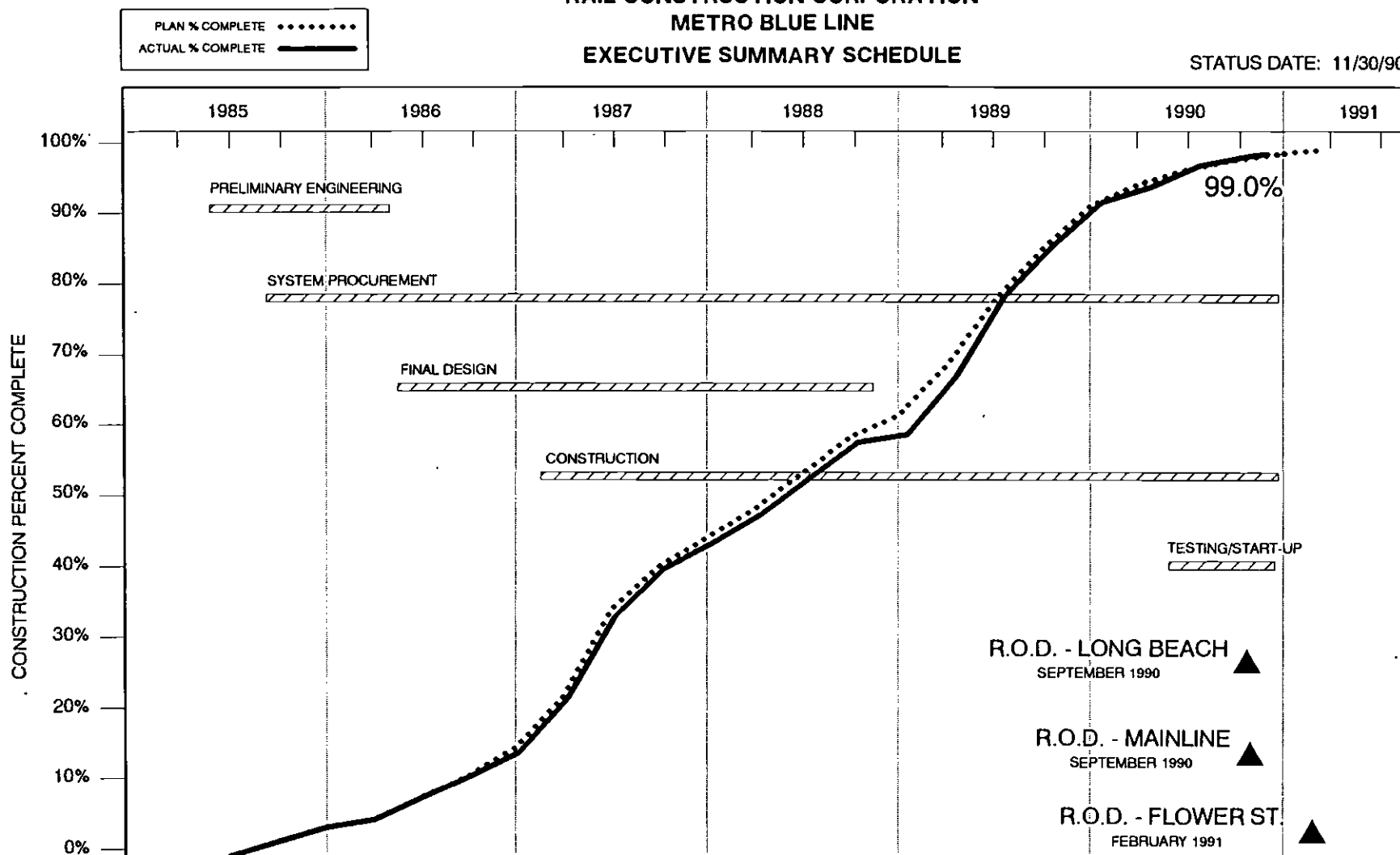


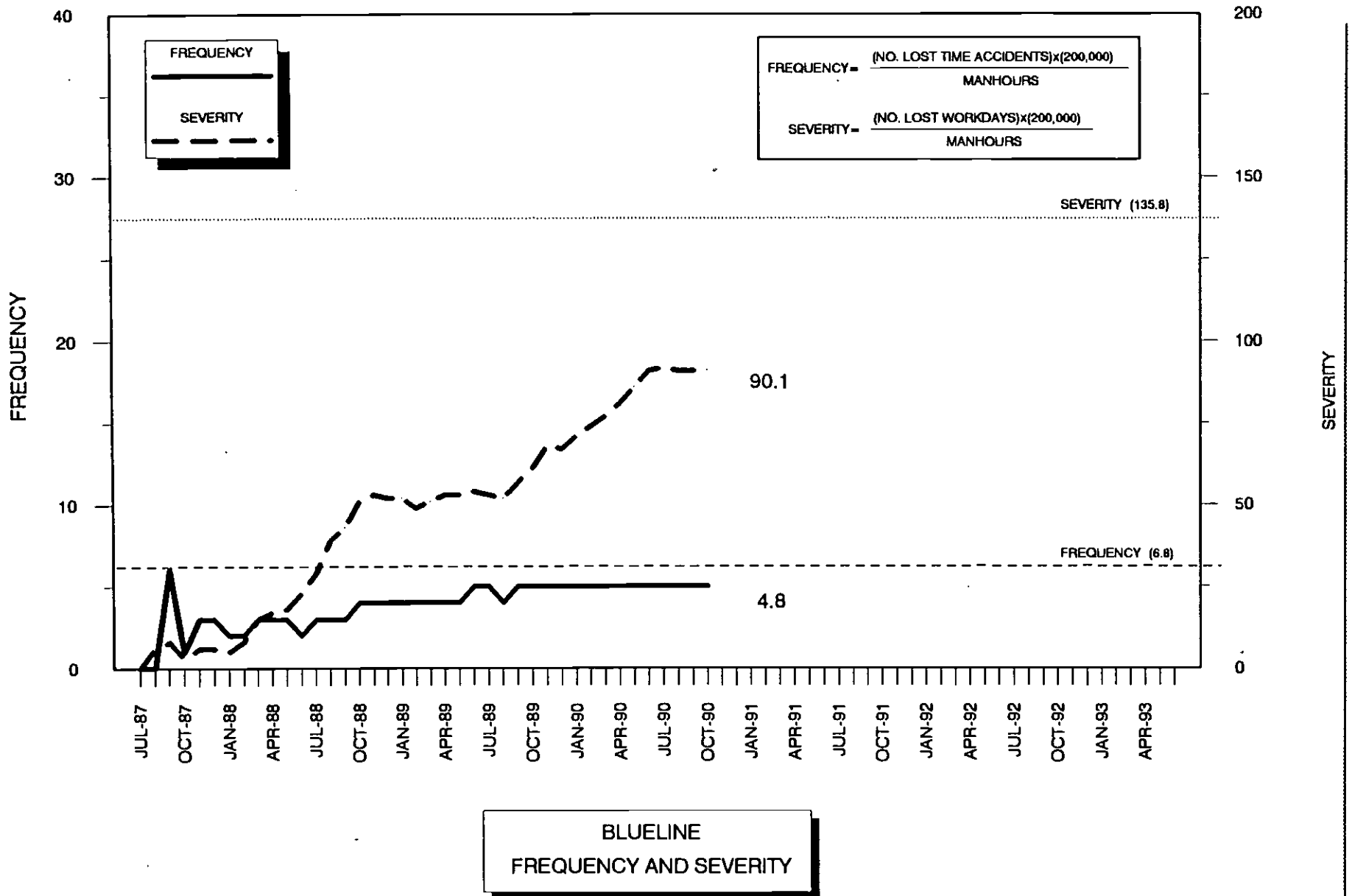
## METRO BLUE LINE CASH FLOW PROJECTION



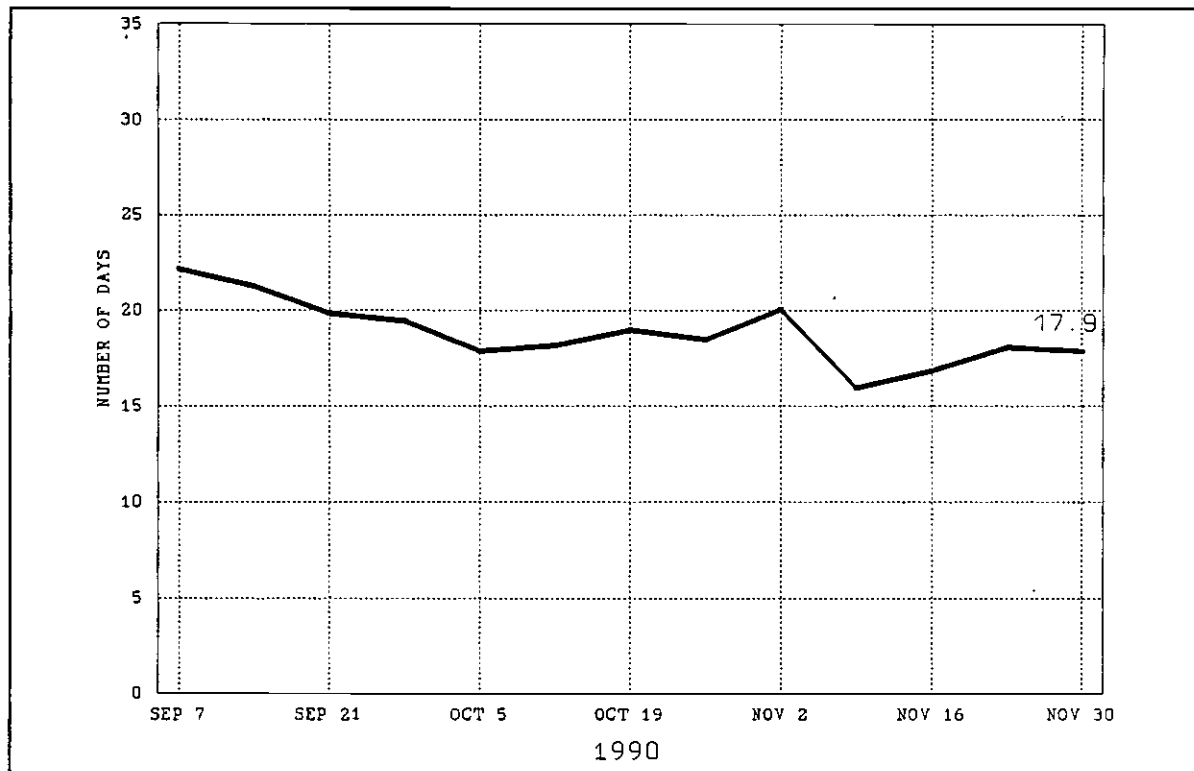
RAIL CONSTRUCTION CORPORATION  
METRO BLUE LINE  
EXECUTIVE SUMMARY SCHEDULE

STATUS DATE: 11/30/90





Average Days to Invoice Payment  
(4 Week Moving Average)



The following is a list of the actual number of invoices and dollar amounts of invoice payments for the past three months.

Date	Number of Invoices	Invoice Amount
09/07/90	7	\$ 118,130
09/14/90	12	3,109,722
09/21/90	9	1,431,620
09/28/90	15	2,231,355
10/05/90	3	258,628
10/12/90	5	437,202
10/19/90	16	838,320
10/26/90	4	141,658
11/02/90	6	1,806,523
11/09/90	13	10,934,561
11/16/90	14	889,488
11/23/90	21	1,348,598
11/30/90	16	243,164

## EXECUTIVE SUMMARY

The cashflow information indicates a total project expenditure to-date of \$55.1 million which represents about 9% of the current total forecast of \$599 million. The project commitments to-date are \$113.7 million, about 19% of the total budget of \$599 million. With the award of the Utility Relocation & Foundations contract (C0101), the value of construction and procurement contracts committed is now \$27.9 million. This amount includes Caltrans construction and systemwide procurement contracts.

The **Master Schedule** update, with a status date of November 30, 1990, indicates that the *project is now 58 days behind schedule*, a negative float reduction of 32 working days from the last update. This improvement is due to the fact that the interface between the Rosecrans/Aviation & Kramer Bridge contract (C0110) and the El Segundo Trackwork Installation contract was refined. The Project Critical Path now runs through third party utility relocations, the Utility Relocations and Foundations contract (C0101), the Elevated Guideway and Stations contract (C0100), Trackwork Installation (C0610), Automatic Train Control Installation and Testing (H1100), overall systems integration, testing, and pre-revenue service. Once the civil contracts in the El Segundo segment of the project have been awarded, a workaround plan will be developed in order to maintain the current ROD of October 1, 1994.

The *design portion of the project is approximately 90% complete* and the current schedule indicates that the design will be complete by June 1991. The design for all but two of the systems/systemwide contracts are scheduled to be complete by the end of February 1991.

The first of the four El Segundo civil contracts, Utility Relocation & Foundations (C0101), was awarded on November 1, 1990 to Brinderson Corporation, the low bidder, and the Notice to Proceed was issued on November 26, 1990. It is anticipated that the contract will mobilize during the month of December and that construction will begin in early January 1991.

Currently, in the Century Freeway Segment of the project *seven of the twelve civil contracts are under construction*. There are four contracts in the bid/award cycle and one is awaiting design completion. Of the four contracts in the bid/award cycle, Contract #38 was awarded on November 14, 1990, to Kasler Corporation, Contract #33 is scheduled to be awarded on December 5, 1990, and the remaining two are scheduled to be awarded in January 1991.

Metro Green Line construction by Caltrans construction forces, based on actual physical work-in-place in the Century Freeway Segment, is currently 1.30% complete. In the El Segundo Segment construction is anticipated to start in January 1991 on the Utility Relocation and Foundations contract (C0101). The El Segundo Elevated Guideway and Stations contract (C0100), which represents more than 30% of the total Metro Green Line Project construction costs, is anticipated to start in the spring of 1991. The El Segundo Bridge Construction contract (C0110) was advertised on November 30, 1990. It has an anticipated NTP of April 1991.

During November meetings were held to discuss the possibility of including the engineering and construction of North Coast Segment (NCS) as part of the current Metro Green Line construction

program. The initial intention, based on NTP for design in August 1990, was to have the North Coast Segment go into revenue service at the same time as the Norwalk-El Segundo portion of the project. However, the NTP for the design is not to be issued until December 1990. Therefore, schedule analysis is in progress to attempt to produce a North Coast Segment ROD for the NCS of October 1994, concurrent with the Metro Green Line ROD.

Of the 19 parcels for which Right-of-Entry is required to construction on the Utilities Relocation & Foundations contract (C0101), *eight have been acquired (two during the November reporting period), three are in condemnation and the remaining 8 are in the final negotiation stage.* An additional 14 parcels have been certified in support of the Elevated Guideway & Stations contract (C0100), the Hawthorne Yard and Shops Contract (C0400), the El Segundo Bridges contract (C0110), with right-of-entry still to be acquired for all 14.

To-date *no safety incidents have been reported* as no RCC administered construction contracts are underway. Reporting on safety related issues is anticipated to begin in early 1991.

## AREAS OF CONCERN

### 1. Decision on Railroad vs. Trolley

**Concern:** The Rail Construction Corporation (RCC) requires that a decision be made by Southern California Edison (SCE) that would allow the Metro Green Line to operate as a trolley (LRT) as opposed to a railroad. This decision would eliminate the need to raise of power lines at the Hawthorne Yard and Compton Station areas.

**Action:** The RCC met again with a SCE Divisional Manager to discuss the issue, which is currently SCE review RCC anticipates a decision from SCE on this matter in January 1991.

### 2. Property Acquisition

**Concern:** Private property right-of-way, AT&SF railroad right of entry and utilities relocation are major hurdles that must be overcome before construction can start.

**Action:** During November negotiations intensified with private property owners, public utilities and railroad representatives. It appears that the Right-of-Entry to the AT&SF railroad property will be achieved by January 1991. A meeting with the AT&SF is scheduled for December in Chicago. Private property negotiations progressing. Utility issues are more difficult to resolve, the most critical being coordination with SCE. Chevron and Four Corners oil line relocations also remain critical.

### 3. Caltrans Rail Access Dates

**Concern:** The completion of Caltrans design packages and the start of Century Freeway construction continue to slip without any change in rail access dates.

**Action:** The OKA task force continues to discuss the projected rail access and light rail construction issues with Caltrans. Regular meetings are being held with Caltrans design, project control and field personnel to determine accurate access dates. After the dates have been identified in early 1991, analysis to determine the effect on the overall project schedule.

**4. Finalization of Overall Project Scope**

**Concern:** Decisions are required by the RCC regarding the vehicle fleet size and a go/no-go on the full Hawthorne Yard and Shop construction contract. Both issues have major budget and schedule impacts.

**Action:** The above issues are on the agenda for the LACTC Commission meeting on December 19, 1990.

**5. Kramer Property Hazardous Waste**

**Concern:** The impact of the final treatment of the Kramer property hazardous material has not been determined on SCE utility relocations or on the Kramer Bridge construction.

**Action:** Soil reports have been submitted to SCE for review. The reports stated that the RCC should construct the pole foundations for SCE. The Department of Health and Services and other involved agencies are to meet on December 18, 1990 to discuss how to proceed with the construction of the bridge on the Kramer property site. This action is critical as the El Segundo Bridge Construction contract (C0110) was advertised on November 30 1990, and has an NTP scheduled for April 1991.

**6. Radio Frequency Requirements**

**Concern:** At present there are no radio frequencies available for Metro Green Line construction and operational requirements.

**Action:** It is incumbent upon the systems designer to specify radio communication needs and to advise the RCC of the impact of not having frequencies for the automated Green Line System.

**7. System Testing**

**Concern:** In general, contract to contract coordination requirements are not addressed in the specifications for systems construction and installation, nor are procedures for integrated systems testing. There are few references to joint testing requirements, testing related correction requirements, staffing requirements to make tests or corrections, or for the critical timing involved with the testing procedures and remedies.

**Action:** All systems contracts should have a new CSI format section entitled, "Facility Start Up/Commissioning", Section 01650, which covers integrated testing requirements, Systems Start-Up, (01655); Testing, adjusting, and balancing of systems, (01660); as well as systems demonstrations, (01670)

---

8.     **Transcal II Design Packages**

Concern:     Transcal II is developing an in-hours" Caltrans design priority list. Transcal's priority list was intended to create a sense of urgency for the design supporting Caltrans construction projects. The most recent publication, a schedule of design delivery dates extending into late April, are in conflict with the needs of current construction. The construction philosophy of Caltrans contractors preparing the light rail facilities in and around the Century Freeway may have to be abandoned, in Lieu of the inherently problematic alternative of two contractors working within the same freeway Right-of-way, each under separate direction and management. The unanticipated increased administrative and design packaging requirement of this alternative will significantly increase costs, construction time, and construction claims and the burden of coordination and management of the project.

Action:     Caltrans light rail design has to be expedited to incorporate all changes in the time table which supports construction and change-order negotiations.

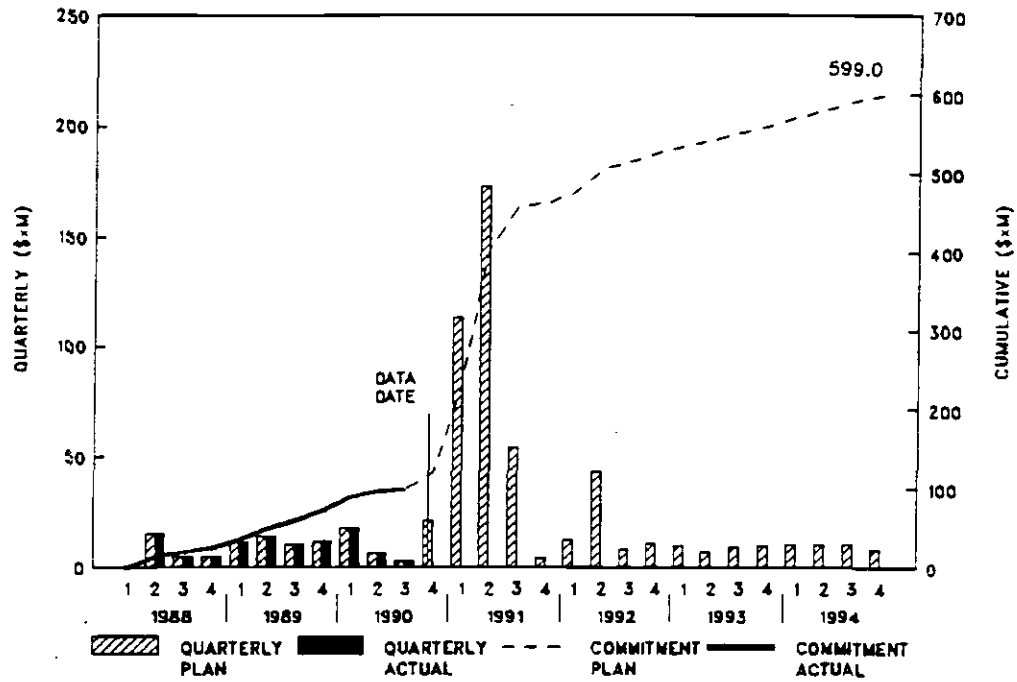
O'BRIEN-KREITZBERG  
CBE  
Project: R23  
Period: 10/27/90 to 11/30/90

L.A. COUNTY TRANSPORTATION COMMISSION  
METRO GREEN LINE  
Project Cost by Element

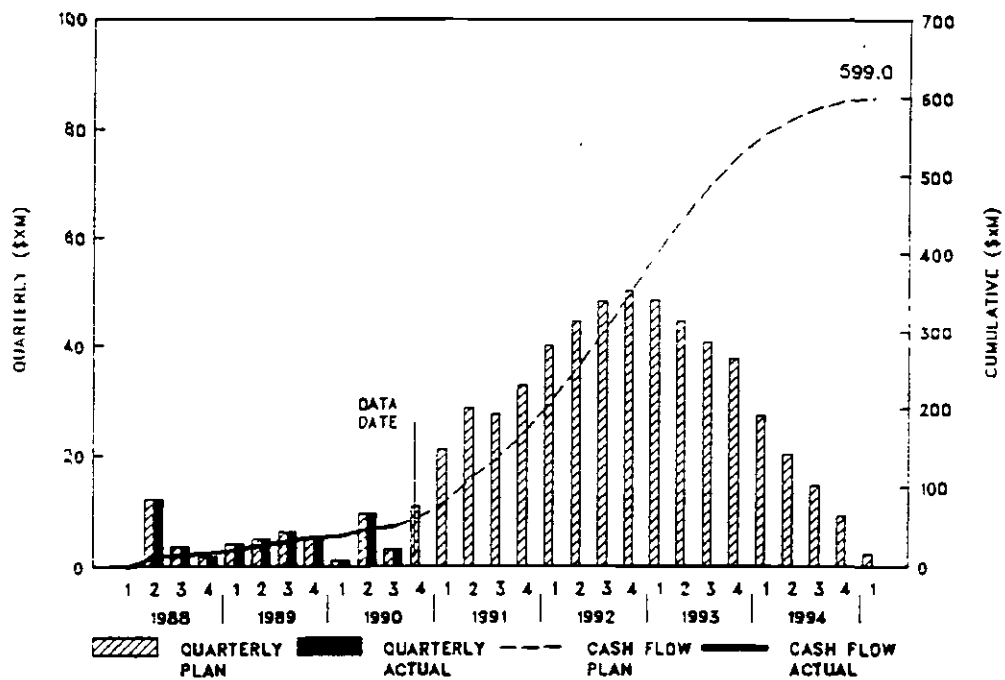
Page: 1  
Report Date: 12/04/90  
Status Date: 11/30/90

( \$ 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)
T	Construction	404,267	404,267	0	14,043	11,280	27,923	0	16,407	5,633	12,621	403,108	(1,159)
S	Professional Services	110,295	110,295	0	32,695	2,335	74,332	2,803	39,963	945	33,628	112,770	2,475
R	Real Estate	35,096	35,096	0	10,759	0	9,279	0	8,756	0	8,756	35,096	0
F	Utility/Agency Force Accounts	7,656	7,656	0	7,091	0	3,049	17	306	(5,622)	442	7,656	0
D	Special Programs	2,530	2,530	0	0	0	100	0	80	0	0	2,530	0
C	Project Reserve	55,782	55,782	0	0	0	0	0	0	0	0	54,466	(1,316)
A	Project Revenue	(16,626)	(16,626)	0	0	(21)	(984)	(21)	(317)	(21)	(317)	(16,626)	0
Project Grand Total :		599,000	599,000	0	64,587	13,594	113,698	2,799	65,194	935	55,130	599,000	0



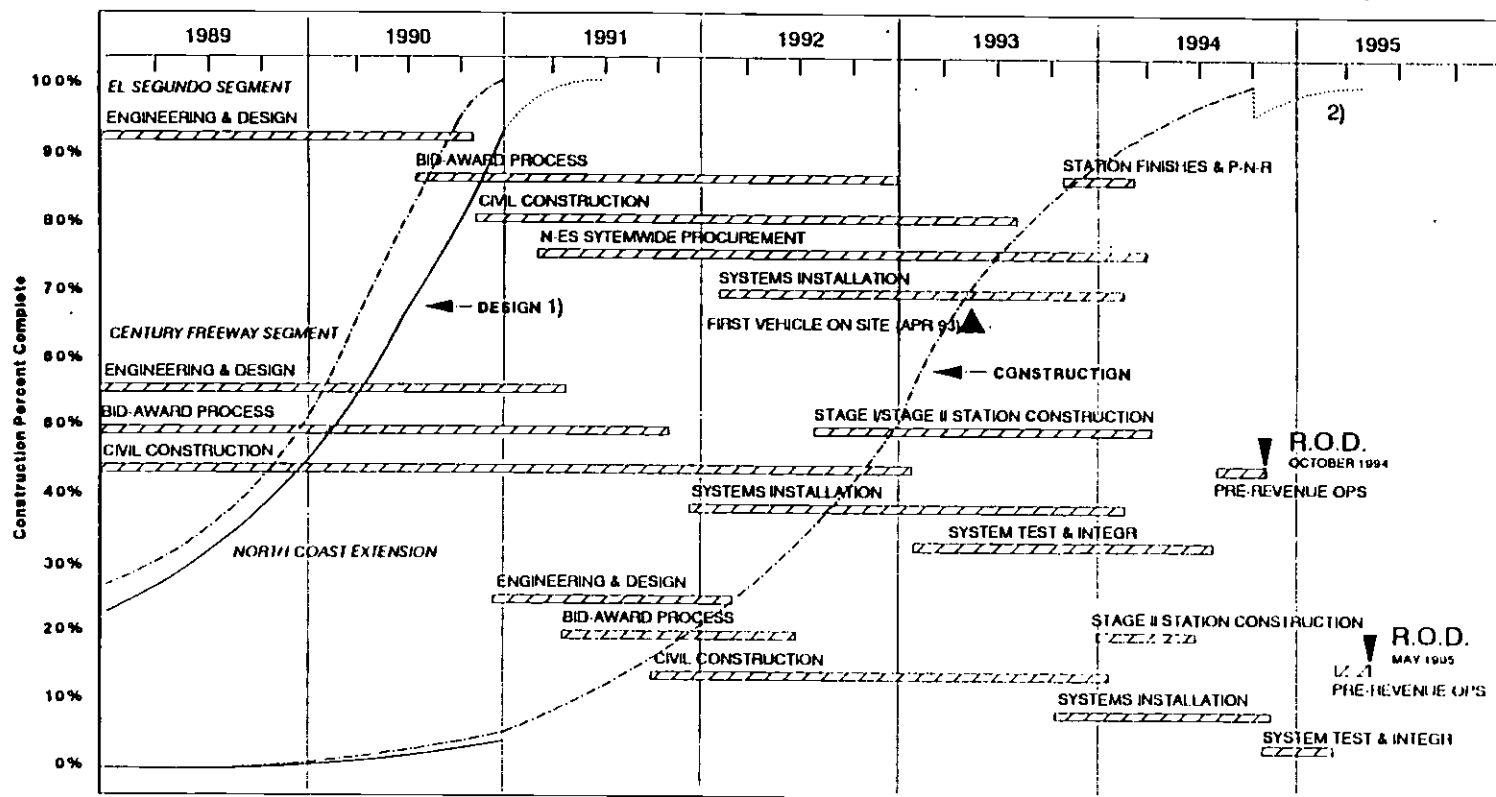
### PROJECT COMMITMENTS



### PROJECT CASH FLOW

# RAIL CONSTRUCTION CORPORATION METRO GREEN LINE EXECUTIVE SUMMARY SCHEDULE

Status Date: 30 NOV 90



Note(s):

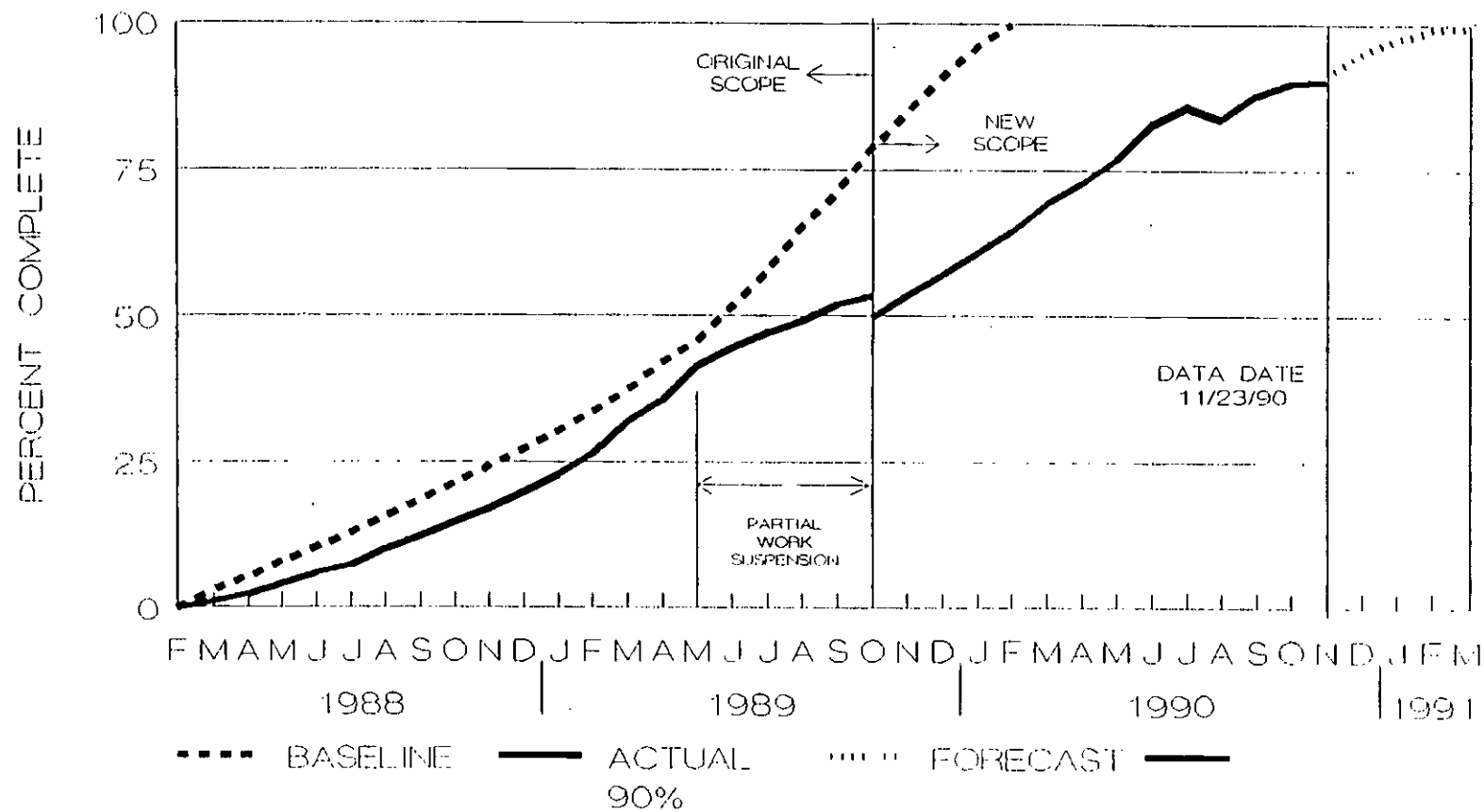
- 1) Excludes North Coast Extension
- 2) Includes North Coast Extension

## LEGEND

Planned -----  
Actual -----  
Forecast -----

## TRANSCAL II DESIGN ENGINEERING

## #Progress Curve



Excludes Administrative Level of Effort Activities

FILE:U10011003

## 1 YEAR OUTLOOK

## GREEN LINE PROJECT SCHEDULE STATUS / KEY EVENTS

R23  
90/91

DATA DATE: 30 NOV 90

	1990		1991									
	November	December	January	February	March	April	May	June	July	August	September	October
	Plan	Actual										
90% Design Submittal												
85% Design Submittal												
100% Design Submittal		2	2	2	1							
CR - Contracts Ready	1	1	2	6	4		1	1				
AD - Advertise	1	2	1	1	1	1					2	
BO - Bid Due												
AW - Award		2	1	2	2	1		3	1	2	1	
RE - Real Estate												
NTP - Construction		2	2	2	1	2	1	2	2	1	1	1
MFG - Veh Mfg NTP												
VT - Vehicle Testing												
VA - Vehicle Arrival												
LQ - Liquid Milet												
CC - Contract Comm								1				

## NOTE:

- 1.) REPORT REFLECTS ONLY CONTRACT PACKAGES FOR MAJOR SYSTEMS.
- 2.) CONSTRUCTION PROGRESS BASED ON LRT WORK ONLY.

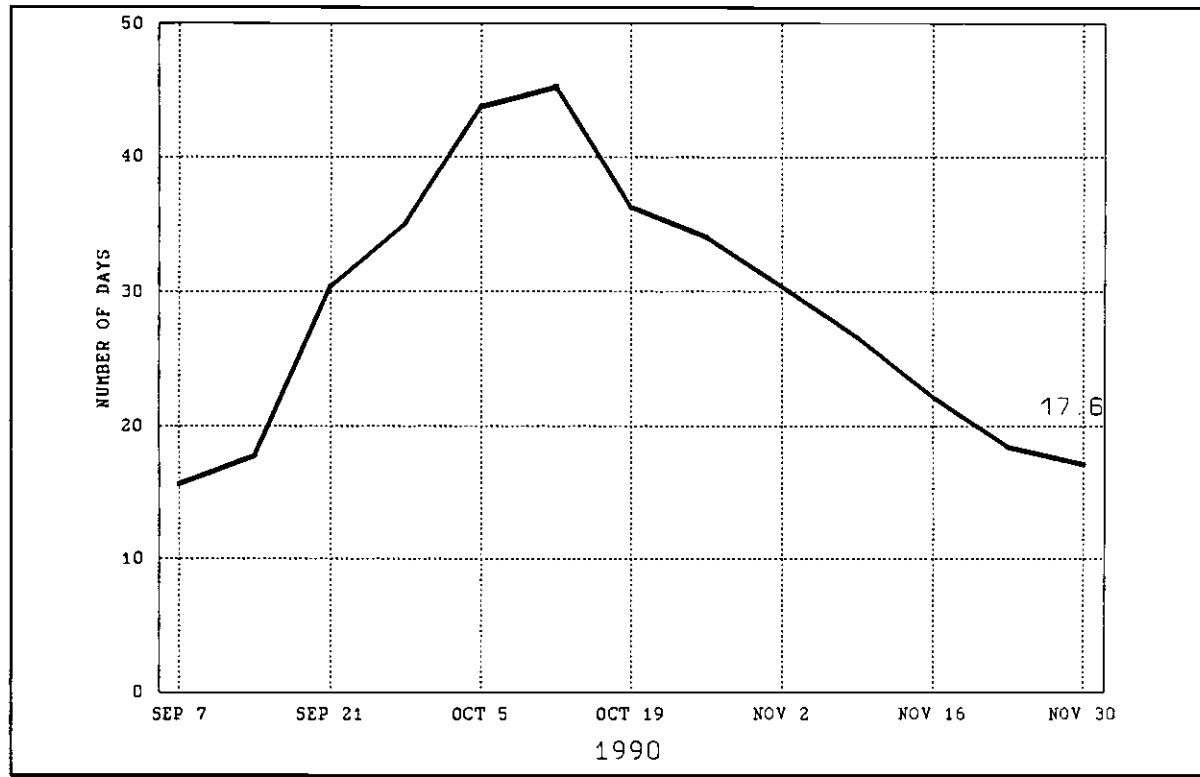
### Real Estate - Status Summary

CCU	NO. OF PARCELS	NUMBER CERT'D	JUST COMP APPROVED	OFFERS MADE	AGREEMENT SIGNED	CONDEM- NATION	PARCELS AVAIL.	PARCELS NOT AVAIL.	CONSTRUCT NTP DATE
C100	8	8	N/A	N/A	N/A	1		7	05/13/91
C101	19*	18	N/A	N/A	N/A	3	8	8*	11/26/91
C110	3	3	N/A	N/A	N/A			3	04/01/91
C400	3	3	N/A	N/A	N/A		2	2	04/30/91
<b>TOTAL</b>	<b>34</b>	<b>33</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>4</b>	<b>10</b>	<b>20</b>	

Note: "N/A" Activities identified above are not directly related to required Right Of Entry for the contract packages specified.

\* Number includes exhibit A, railroad right of entry

Average Days to Invoice Payment  
(4 Week Moving Average)



The following is a list of the actual number of invoices and dollar amounts of invoice payments for the past three months.

Date	Number of Invoices	Invoice Amount
09/07/90	0	0
09/14/90	3	\$ 327,891
09/21/90	4	35,187
09/28/90	1	308,820
10/05/90	3	1,420,998
10/12/90	0	0
10/19/90	0	0
10/26/90	4	1,766,389
11/02/90	4	464,040
11/09/90	0	0
11/16/90	2	361,506
11/23/90	1	2,301
11/30/90	1	5,896

## EXECUTIVE SUMMARY

As of November 30, 1990, The MOS-1 Revenue Operations Date (ROD) remains September 1993. The critical path in this schedule is dependent on trackwork access, whereby all tunnel and station contracts must complete their work in the trackbed area so that the trackwork contractor (Contract A610) can place the top concrete level and lay the rail. Contract A141, Line Section from Union Station to 5th/Hill and Civic Center Station and Contract A130, Yard Leads and Transfer Zone are the latest contracts to achieve trackwork access. Delays to either contract could impact the MOS-1 schedule. The trackwork contractor has completed work in the Contract A141 south tunnels and is now working the north AR tunnel which should be complete by January 1991. Remaining work in the AR tunnel of the Contract A130, Yard Leads and Transfer Zone can then be completed in January 1991, leaving only the AL fire tunnel and the Contract A175, Wilshire/Alvarado Station. The AL tunnel construction is proceeding slowly and it may be necessary to change the plan to work around this delay.

Schedule improvement continued to be a major activity during November. Work arounds and mitigation measures were implemented with Contract A610, Trackwork, and Contract A130, Yard Leads and Transfer Zone, due to delays caused by the July 13, 1990, fire in the YL tunnel.

Contract A165, 7th/Flower Station, Stage I, substantially completed construction on November 2, 1990, in time for the holiday shopping season. The 7th Street merchants celebrated restoration of the street. Contract A167 7th/Flower Station, Stage II continued to work toward early opening of the Blue Line Station.

The value of work in place for MOS-1 construction is 70.2% complete versus a plan of 72%. 47 of the total 68 MOS-1 contracts have been advertised and eleven contracts are complete.

The original MOS-1 baseline budget was \$1,249 million. The current forecast is \$1,450 million. Current contingency for MOS-1 is listed in the Revision 7F financial plan at \$80 million.

All of the Real Estate required for MOS-1 construction is available either under ownership or under a right-of-entry. 14 parcels are in the acquisition process.

**EXECUTIVE SUMMARY (CON'T)**

PDCD has activated a systemwide conduit activation team to alleviate problems with station conduit prior to impact dates. The team consists of a manager, two Engineers, and two Inspectors and is currently focusing its efforts at the 7th and Flower Station and in the Yard.

---

**AREAS OF CONCERN****1. Contract A136, Union Station, Stage II**

**Concern:** Contract A136 was given NTP on October 22, 1990, instead of July 30, 1990, as planned. This delay could potentially impact the follow-on contractors.

**Action:** A change notice was negotiated with the A136 contractor changing access requirements which will support earlier turnover of the Train Control Room to contracts A620, Automatic Train Control, and A640, Communications. PDCD will continue to monitor these dates to ensure on-time completion.

**2. Contract A141, Line U/S to 5th/Hill and Civic Center Station**

**Concern:** Certain portions of the tunnel appear to be out of alignment which could potentially impact the dynamic envelope.

**Action:** The contractor submitted a proposal for resolution and resumed work in the tunnel. PDCD is conducting additional surveys of tunnel alignments.

**3. Contract A130, Yard Leads and Transfer Zone**

**Concern:** Slow progress in reconstruction of the YL Tunnel damaged by the July 13, 1990, fire is delaying tunnel construction which may ultimately delay access to the trackwork contractor.

**Action:** The contractor has been directed to complete tunnel reconstruction and progress with tunnel completion in order to meet a February 16, 1991, turnover to the trackwork contractor. In order to mitigate impact to the Project critical path, the trackwork contractor has been resequenced to pour the A141 AL tunnel leaving the A130 YL tunnel for last.

---

**AREAS OF CONCERN (CON'T)****4. Contract A167, 7th/Flower Station, Stage II**

Concern: The Blue Line portion of the station must be available for integrated testing and pre-revenue operations by December 20, 1990.

Action: PDCD has increased management influence at the construction site and is working with RCC personnel and the contractor to meet the required dates.

**5. Contract A650, Vehicles**

Concern: Previously reported concerns about the propulsion system delay may impact delivery of the vehicles to Los Angeles for system testing. This could impact the Project critical path.

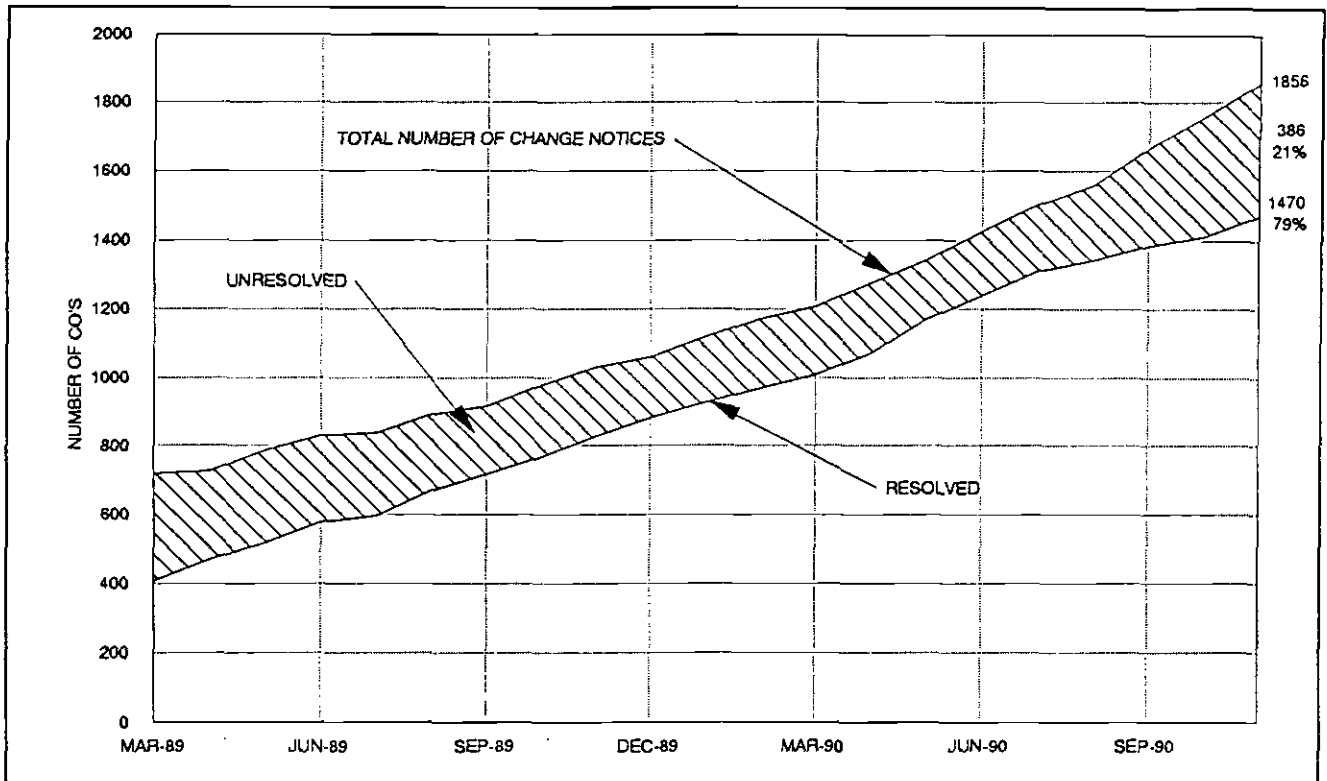
Action: The RCC has reviewed a plan which would alter vehicle testing sequence at the Transportation Test Center to release the first pair of vehicles directly to Los Angeles by the dates required to support systems testing. Other measures may be implemented following the quarterly review meeting in Italy.

RAIL CONSTRUCTION CORPORATION  
PROJECT COST REPORT - METRO RED LINE (MOS-1)  
SUMMARY BY COST ELEMENT

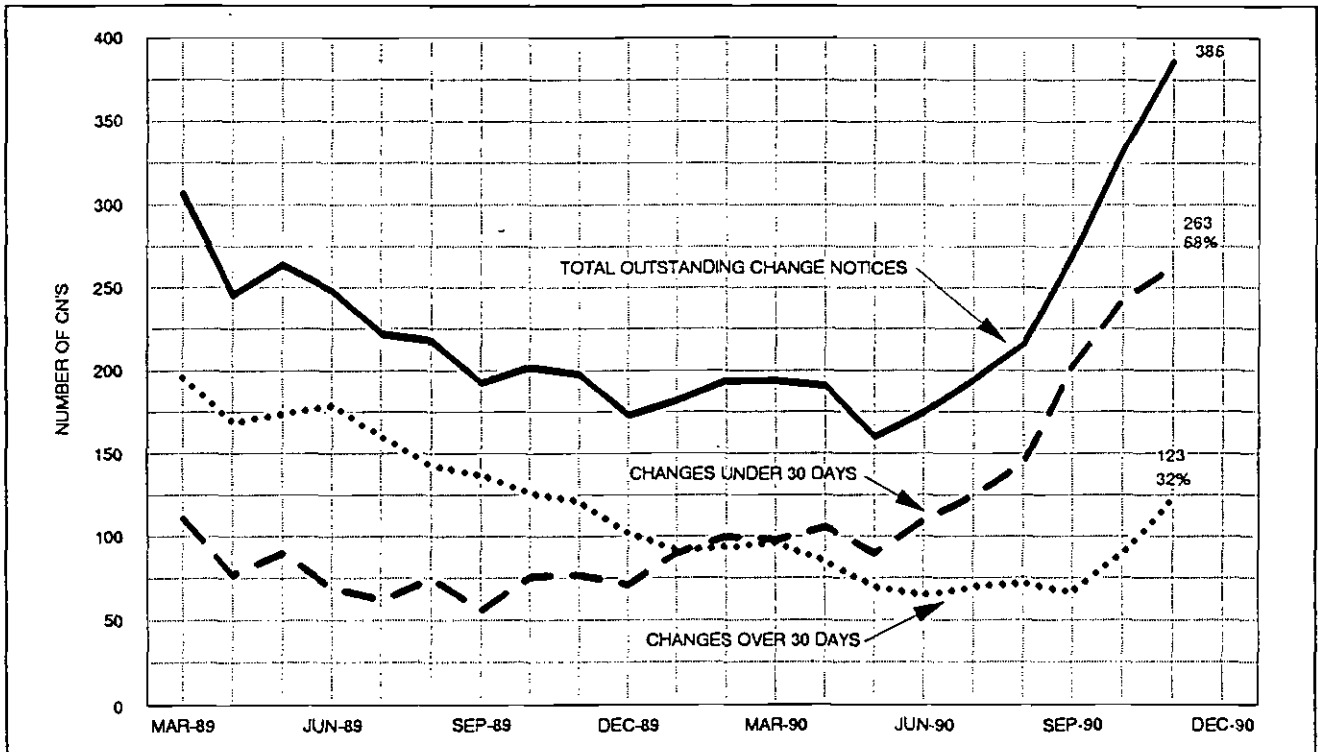
STATUS DATE: 11/30/90

(IN THOUSANDS)

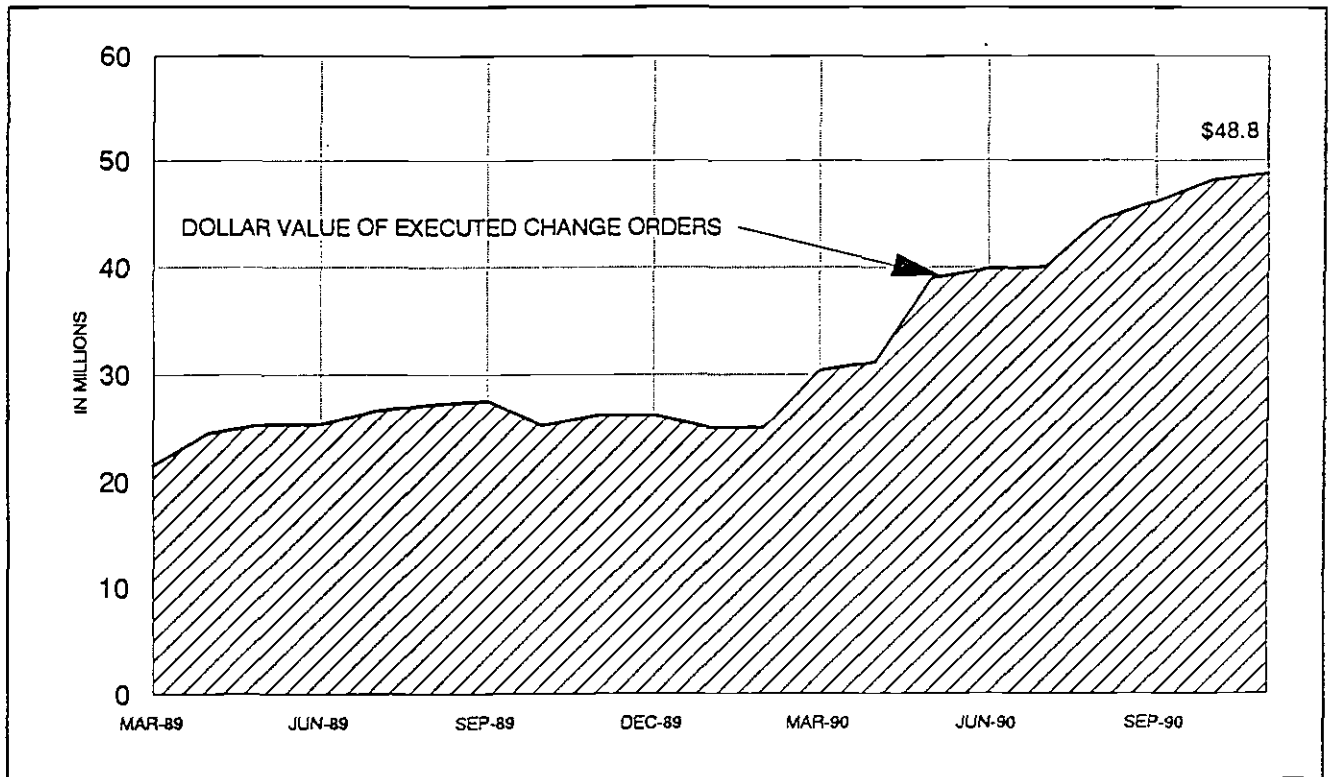
PROJECT: RBO METRO RED LINE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	BUDGET		AUTHORIZED FOR EXPENDITURE		COMMITMENTS		INCURRED COST		EXPENDITURES		FORECAST	
DESCRIPTION	ORIGINAL	CURRENT	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	CURRENT	(11-2) VARIANCE
CONSTRUCTION	695,849	700,288	0	669,474	48,889	628,509	5,588	442,195	8,475	446,514	729,624	29,336
PROFESSIONAL SERVICES	397,760	432,851	0	318,543	0	316,529	7,163	310,410	6,590	359,219	482,571	49,720
REAL ESTATE	90,894	131,047	0	110,331	0	110,331	0	105,315	0	105,315	139,501	8,454
UTILITY/AGENCY FORCE ACCOUNTS	11,224	16,725	0	10,128	0	10,128	0	8,598	269	8,598	16,425	(300)
SPECIAL PROGRAMS	948	948	0	508	0	508	0	196	0	196	948	0
PROJECT RESERVE	53,225	72,041	0	0	0	0	0	0	0	0	80,950	8,909
PROJECT REVENUE	0	0	0	0	0	0	0	0	0	(1,694)	0	0
GRAND TOTAL PROJECT	1,249,900	1,353,900	0	1,108,984	48,889	1,066,005	12,751	866,714	15,334	918,148	1,450,019	96,119



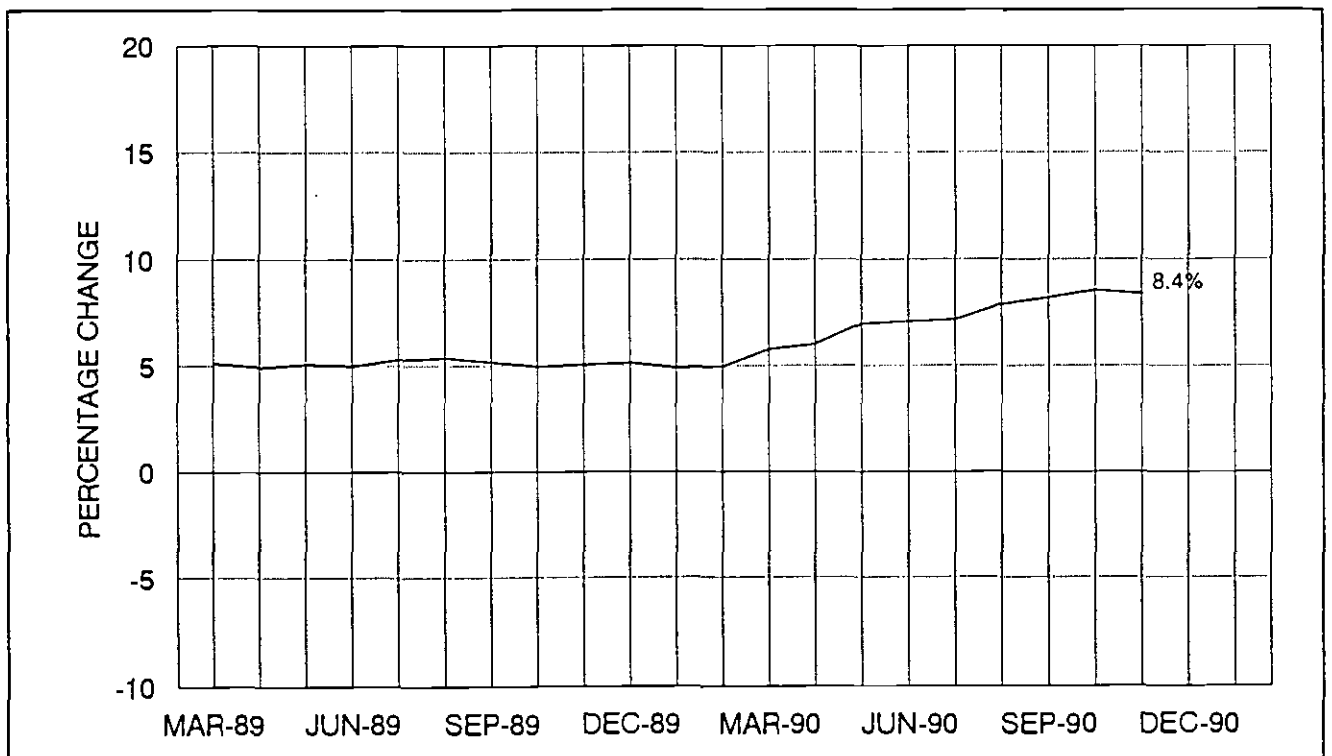
Change Notice Resolution



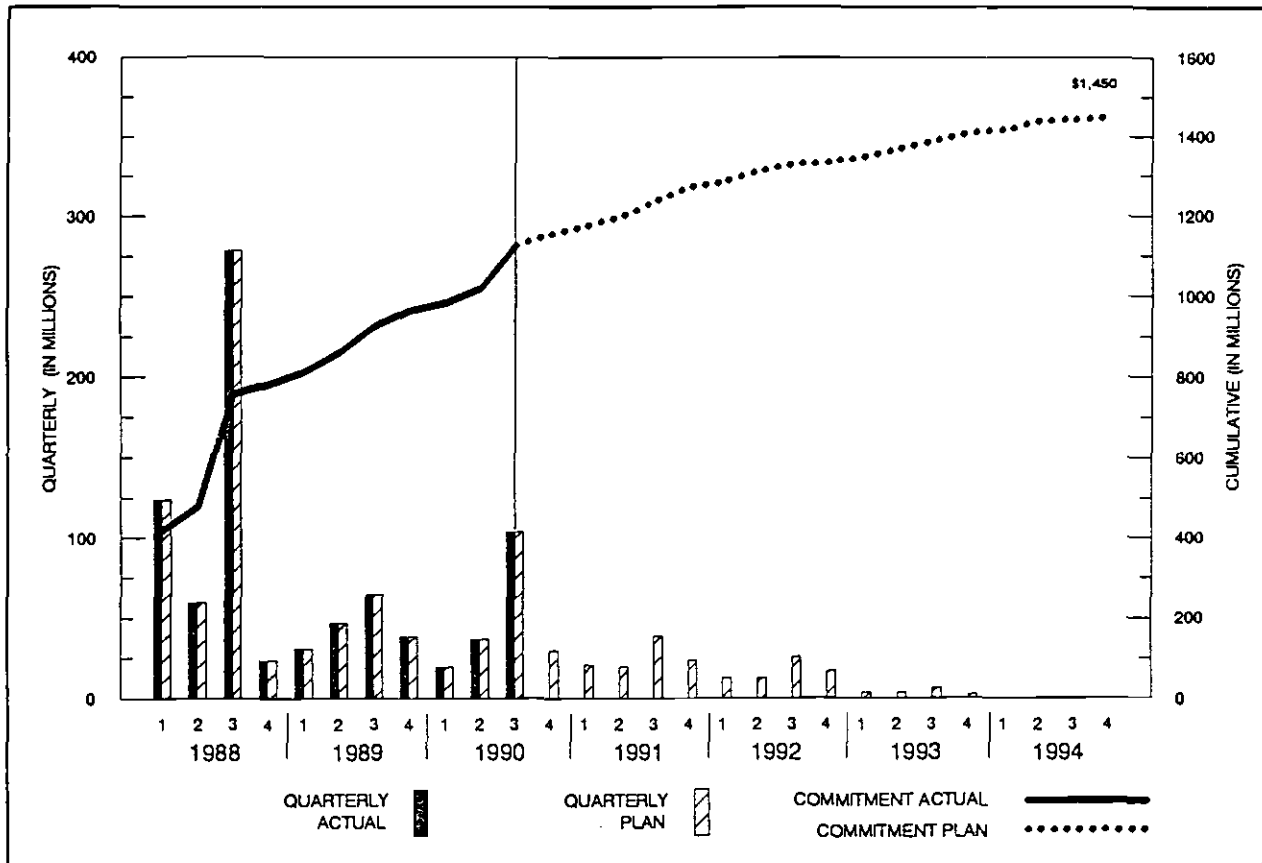
Change Activity Progress



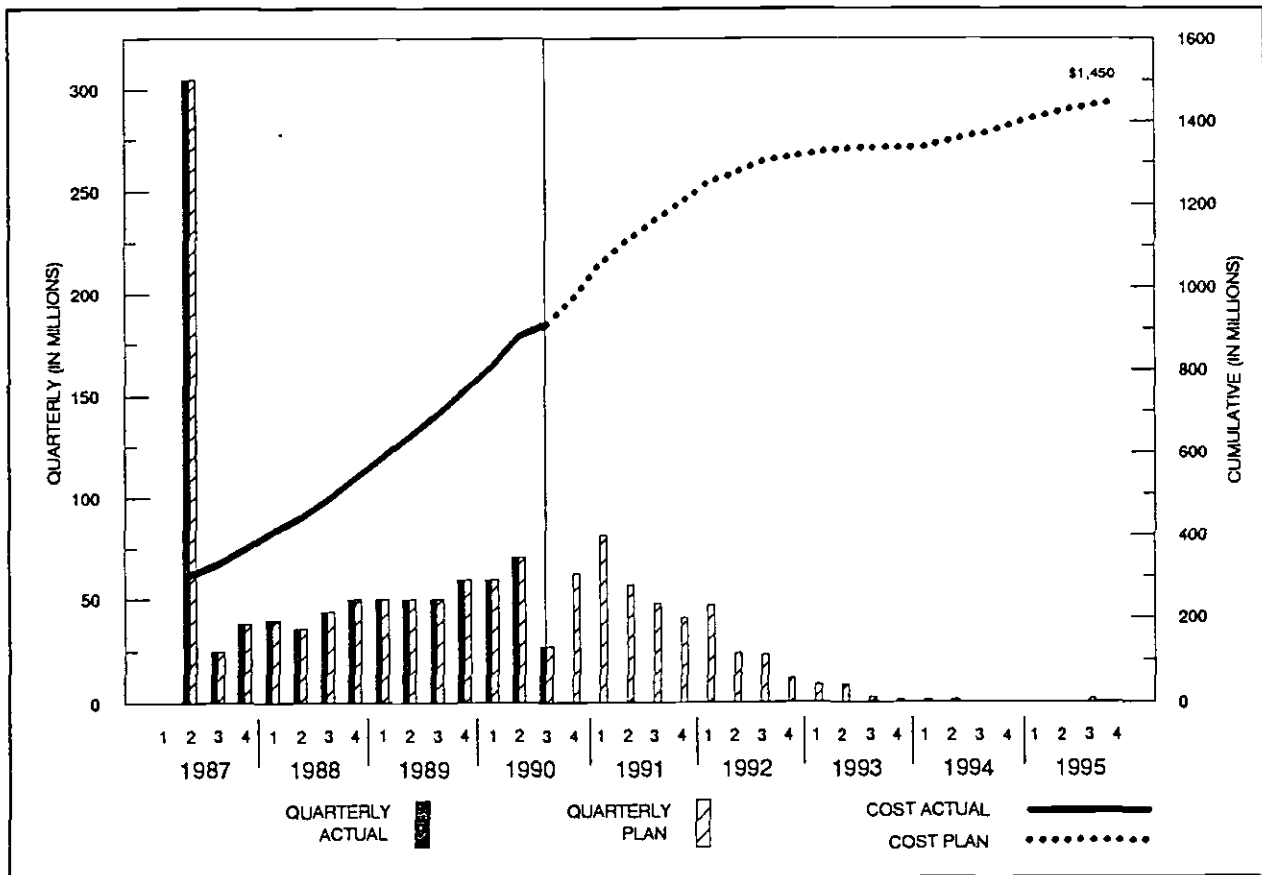
Total Value of Executed Change Orders



Change Order Dollars as a Percentage of Original Contract Award

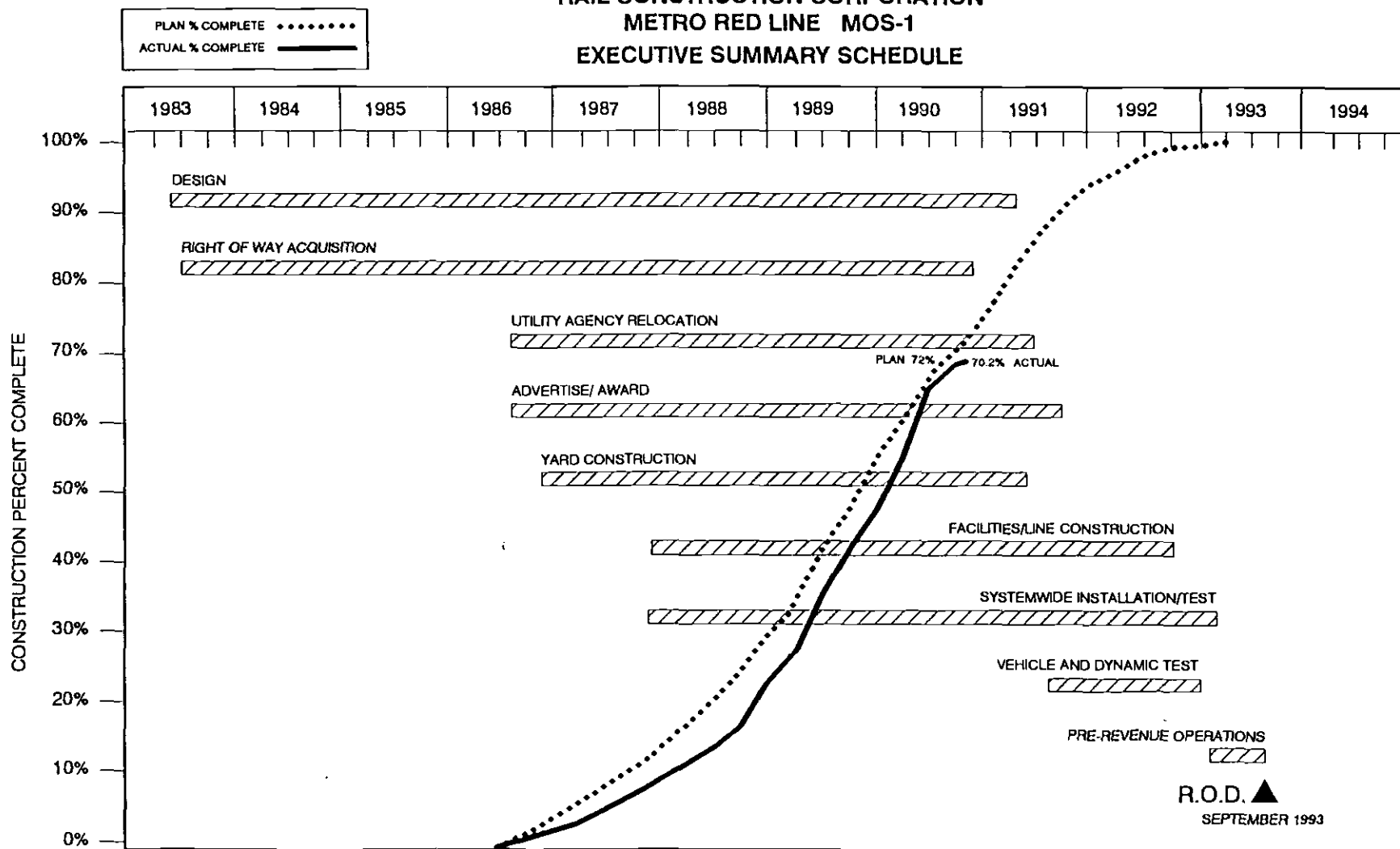


METRO RED LINE MOS-1 COMMITMENT PLAN



METRO RED LINE MOS-1 CASH FLOW

# RAIL CONSTRUCTION CORPORATION METRO RED LINE MOS-1 EXECUTIVE SUMMARY SCHEDULE



## MOS-1 KEY PROJECT EVENTS

## ONE YEAR OUTLOOK

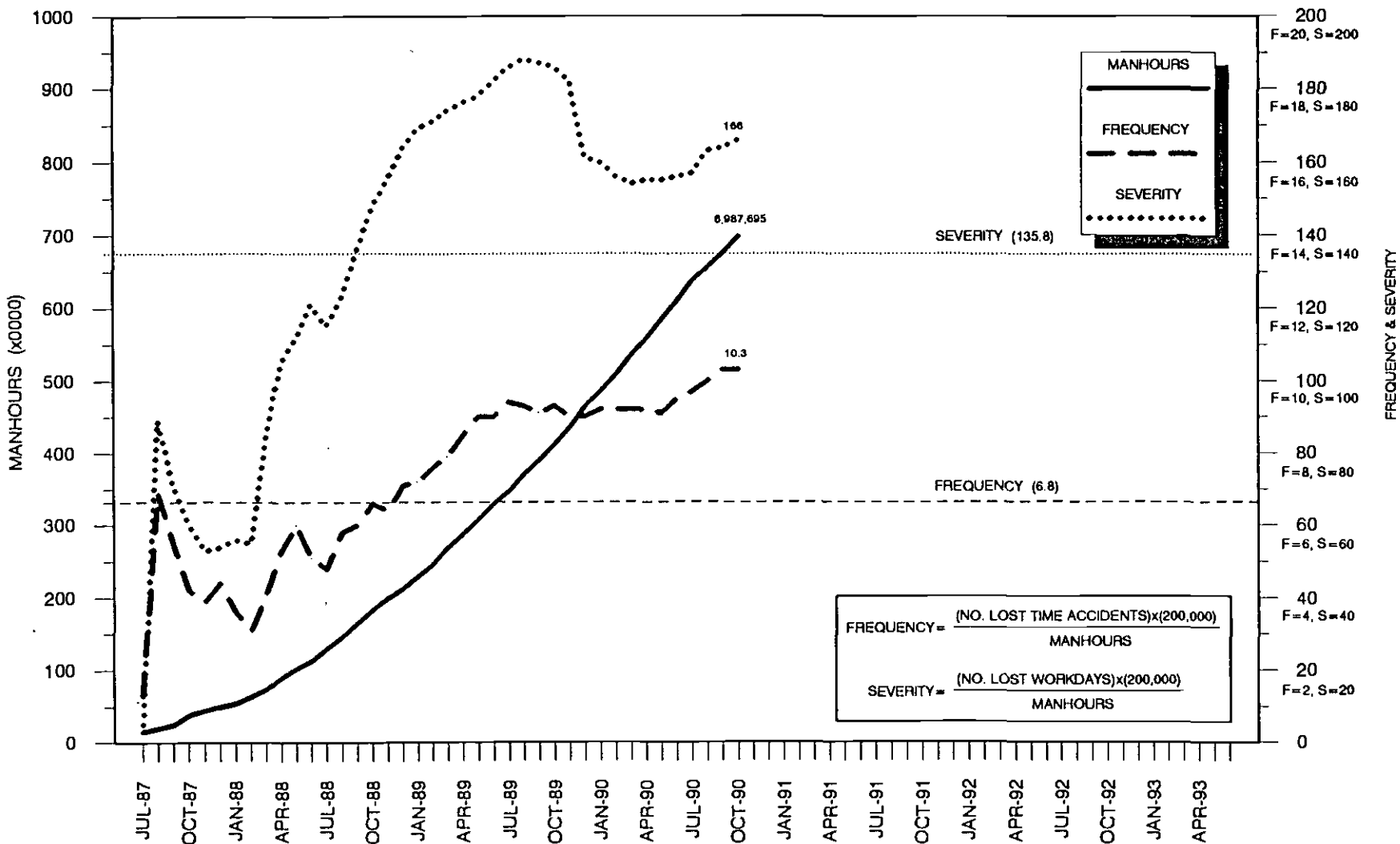
	PLAN		ACT	NOV	90	DEC	JAN 91	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
60% Design Submittal	1	2	1													
85% Design Submittal	1		2			1										
100% Design Submittal						3			1							
TOTAL	2	2	3			4			1							
CR Camera Ready																
AD Advertise	1		1				3			1						
BD Bid Due						1				1		1				
AW Award	1	1					1				3		1			
RE Real Estate																
NTP Notice to Proc.			1					1				3		1		
VS Veh. Ship									2	2						
VT Veh. test (TTC)															2	2
VA Veh. Arrival (LA)																
LIQ Liquid. Milest.	2	3	3			2	4	2	10	5	2	4	3	3	3	4
CC Contract Complt.			1				1	2	2	3	1		2			2

NOTE: Report reflects only contract packages for major systems.

## SUMMARY

Award of Contract A118, Yard Landscaping, was rescheduled to a later date to allow inclusion with the maintenance plan. Contract A710, Escalators/Elevators, liquidated damage milestone in the 7th/Flower Station was extended to December 1990 by a change order. This change order was issued to insure completion of escalators and elevators for the early opening of the Blue Line Station. Due to an access window to move equipment into the stations, Contract A710 fans were delivered early to Contract A136, Union Station, Contract A147, Civic Center and Contract A157, 5th/Hill Station.

# MOS-1 MANHOURS & FREQUENCY, SEVERITY RATES

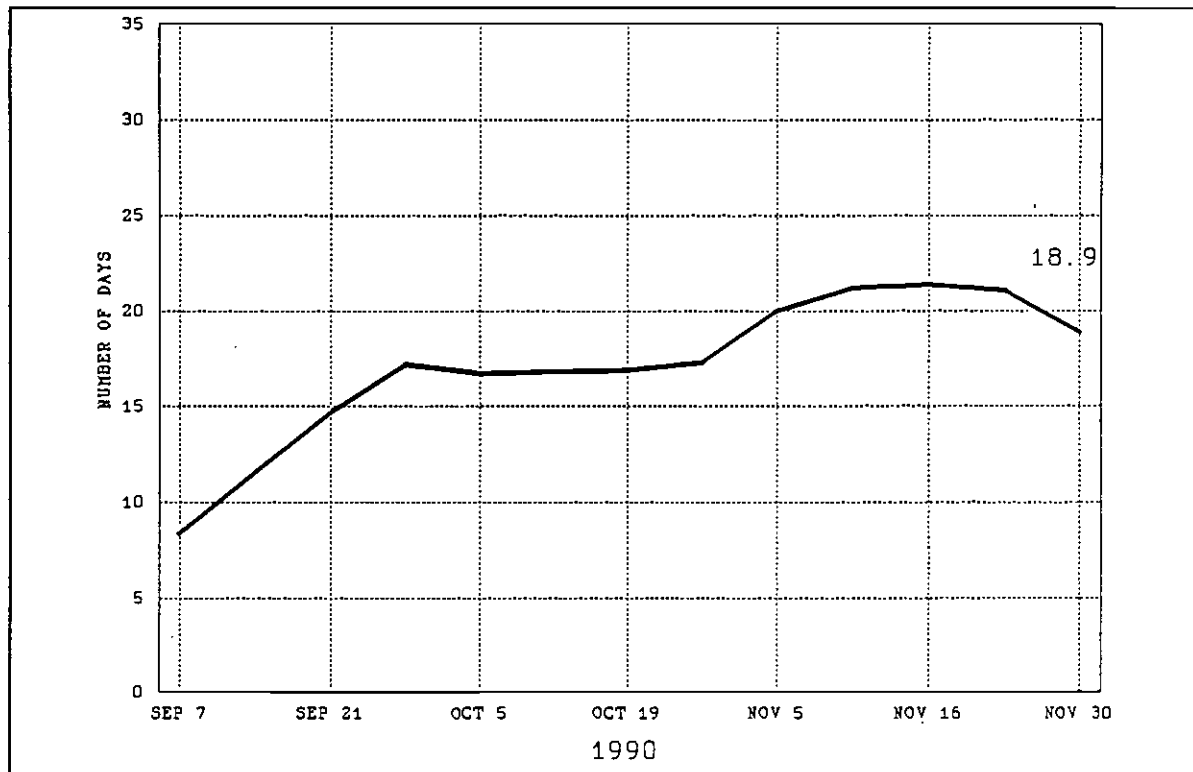


CCU	NO. OF PARCELS	NUMBER CERT'D	JUST COMP APPROVED	OFFERS MADE	AGR'MNT SIGNED	CONDEM- NATION	CLOSED PARCELS	OPEN/ROP PARCELS	PARCELS AVAIL	PARCELS NOT AVAILABLE
A112	1	1	1	1	1	0	1	0	1	0
A130	16	16	16	16	12	4	14	2	16	0
A135	7	7	7	7	5	2	4	3	7	0
A141	18	18	18	18	18	0	17	1	18	0
A145	13	13	13	13	12	1	11	2	13	0
A146	11	11	11	11	4	7	7	4	11	0
A165	3	3	3	3	1	2	2	1	3	0
A171	14	14	14	14	13	1	14	0	14	0
A175	10	10	10	10	5	5	9	1	10	0
A610	1	1	1	1	1	0	1	0	1	0
TOTAL	94	94	94	94	72	22	80	14	94	0

## MOS-1 REAL ESTATE - STATUS SUMMARY

All of the real estate required for MOS-1 construction is available either under ownership by the District or under a Right-of-Entry. There are 14 parcels which are currently in the acquisition process.

Average Days to Invoice Payment  
(4 Week Moving Average)



The following is a list of the actual number of invoices and dollar amounts of invoice payments for the past three months.

Date	Number of Invoices	Invoice Amount
09/07/90	13	5,980,869
09/14/90	2	1,487,779
09/21/90	4	867,397
09/28/90	5	1,150,809
10/05/90	11	5,283,436
10/12/90	11	5,058,663
10/19/90	7	2,478,417
10/26/90	14	4,760,021
11/02/90	5	3,173,876
11/09/90	23	13,193,824
11/16/90	11	864,680
11/23/90	5	2,585,946
11/30/90	5	817,613

## EXECUTIVE SUMMARY

The Metro Red Line MOS-2 **current budget** is \$1,446 million with a current forecast of \$1,446 million. The cashflow plan reflects a total project expenditure to date of \$42.5 million or 3% of the total forecast. The project commitments to date are \$42.6 million which are 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: disputes review board; new quality control measures; contractor safety awareness program; addition of Contract B731 Major Shop Equipment; and the addition of a configuration management contract.

The **Master Schedule** update with status through November 30, 1990, shows that the *project is currently on schedule*.

The overall MOS-2 **design** *is approximately 38% complete* versus the planned 40% completion. **Construction** *is scheduled to commence in January 1991*. Bids were opened for Wilshire/Alvarado to Wilshire/Vermont Line, Contract B201.

The **critical path for the Wilshire Line** is through the Wilshire/Normandie Station and Line, Contract B221, 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.

There are *65 parcels of land required* for MOS-2 with status as follows: *15 full takes, 6 partial takes, 42 subsurface easements, and 2 temporary construction easements*. These acquisitions will involve the relocation of approximately *114 commercial businesses*. To date *1 MOS-2 parcel has been acquired, 13 offers to purchase are open, and 5 condemnations have been obtained* from the Los Angeles Superior Court.

To date no safety incidents have been reported as no construction contracts have been issued Notice to Proceed. Reporting on safety-related issues is anticipated to begin in early 1991.

## AREAS OF CONCERN

### 1. **Property Availability**

Concern: Assure required property is available for NTP for Demolition Contract, B218.

Action: RCC to investigate and provide recommendations.

### 2. **Insurance**

Concern: Owner-Controlled Insurance Plan not assigned for Contract B201.

Action: RCC to approve.

### 3. **MacArthur Park Agreement**

Concern: There are potential cost and schedule impacts if agreement is not reached between the RCC and Los Angeles Department of Recreation and Parks (DRP) for the MacArthur Park agreement and easement. (NTP scheduled 14-Jan-91)

Action: RCC to negotiate and finalize agreement with the City.

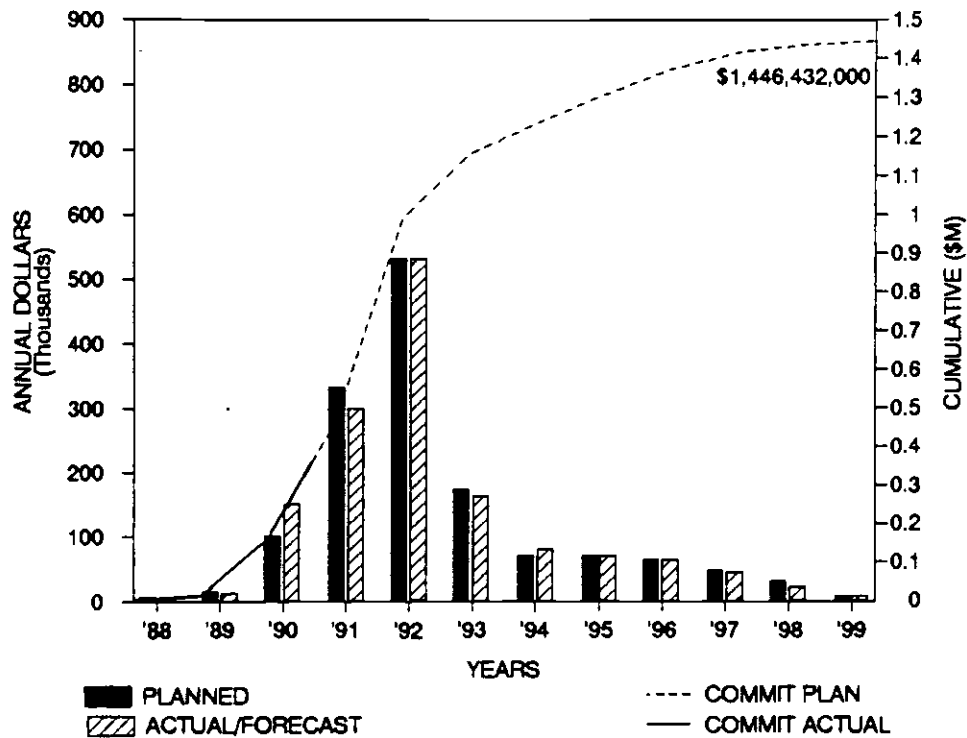
MRTC  
Project: R81

RAIL CONSTRUCTION CORPORATION  
METRO RED LINE MOS-2  
Project Cost by Element

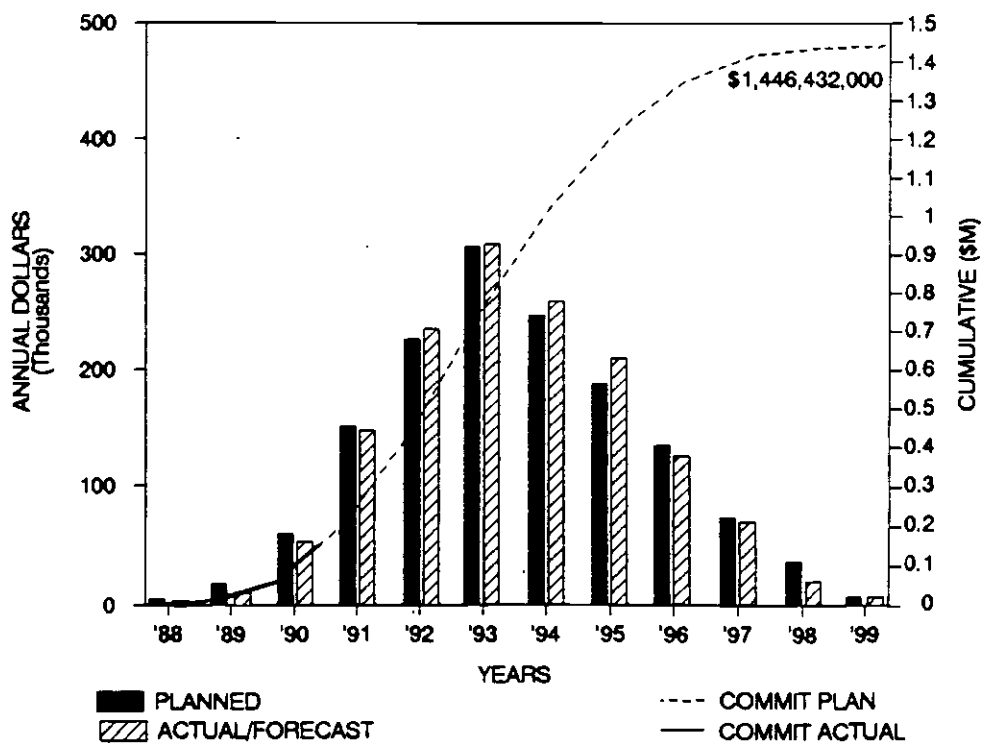
(\$ x 000's)

DESCRIPTION	-----Budget-----		-----Authorized----- -for Expenditure-		---Commitments---		--Incurred Cost--		---Expenditures---		Current	VARIANCE
	ORIGINAL	CURRENT	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	FORECAST	
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[11-2]
T Construction	893,000	918,565	0	2,946	14	3,013	14	3,013	14	3,013	928,438	9,872
S Professional Services	289,150	286,592	17,690	40,244	1,325	24,894	1,485	24,849	1,511	24,849	275,675	(10,917)
R Real Estate	79,827	76,735	258	11,616	195	14,662	195	14,650	195	14,650	72,339	(4,396)
F Utility Relocation	36,668	29,949	0	0	0	69	1	13	1	13	29,942	(7)
D Special Programs	2,044	2,047	0	0	0	0	0	0	0	0	2,047	0
C Project Reserve	145,743	132,544	0	0	0	0	0	0	0	0	137,988	5,444
A Project Revenue	0	0	0	0	0	0	0	0	0	0	0	0
Project Grand Total:	1,446,432	1,446,432	17,948	54,806	1,534	42,638	1,695	42,525	1,721	42,525	1,446,432	0
	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

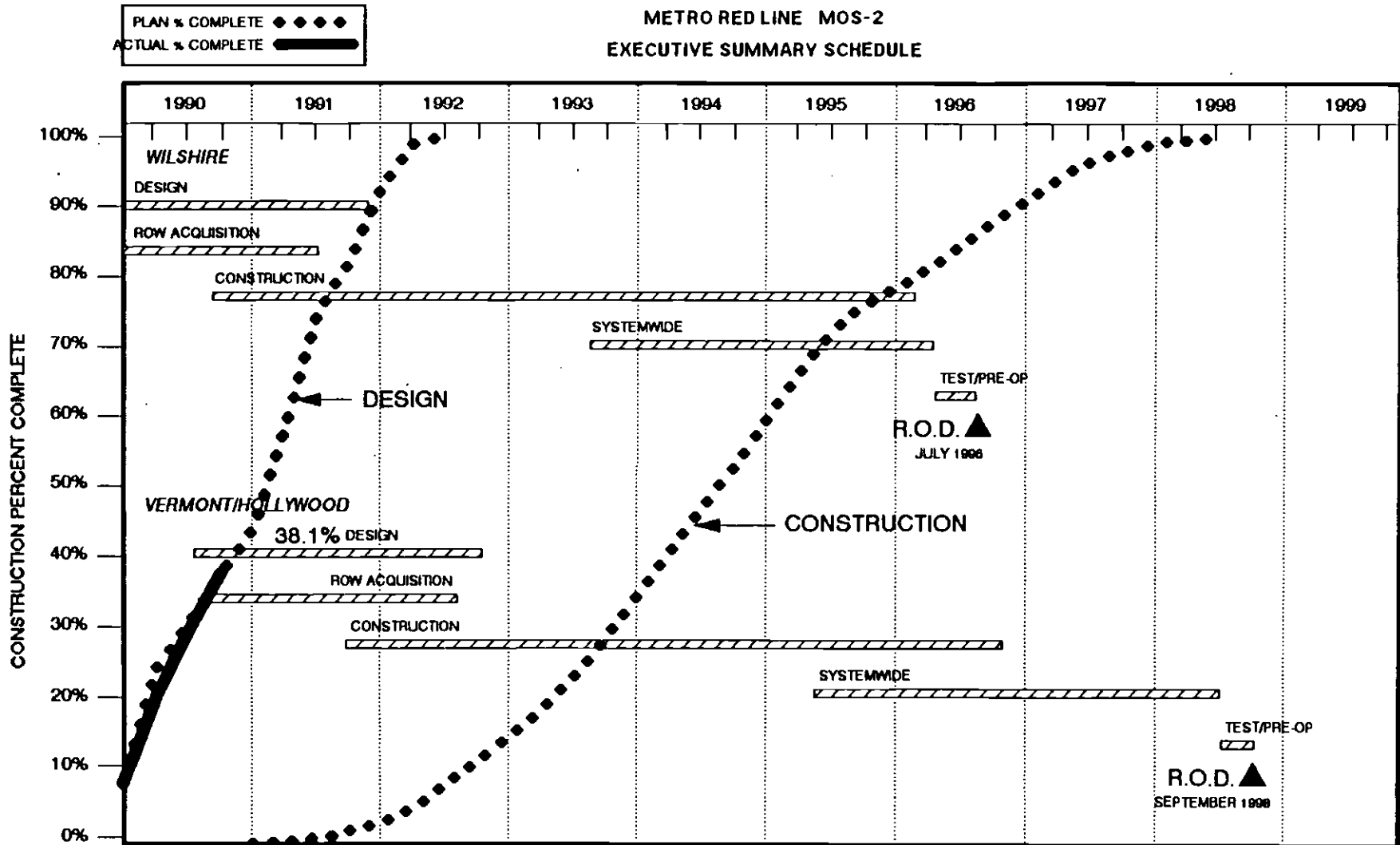
## PROJECT COMMITMENTS



## PROJECT CASHFLOW



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



## 1 YEAR OUTLOOK

MOS-2 PROJECT STATUS / KEY EVENTS  
TOTAL

DATA DATE: 30 NOV 90

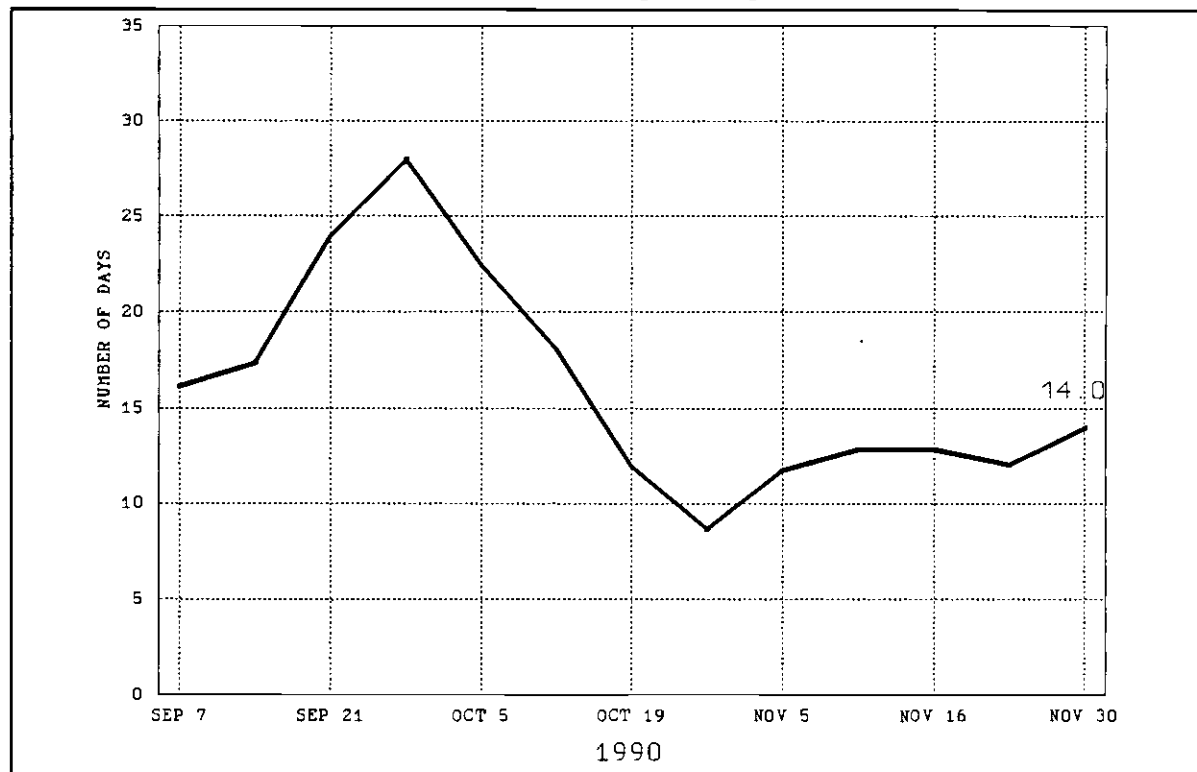
PKG	LOC	DSM	CON	NOV 90	DEC	JAN 91	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
				PLAN	ACT										
60% Design Submittal				1		1			2	2		1		3	1
85% Design Submittal				1	1			1		1	1	2	1	1	1
100% Design Submittal						1						1	2	2	2
<b>TOTAL</b>				<b>2</b>		<b>2</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>4</b>
CR Camera Ready					1	1	1						1	2	
AD Advertise					1	1	1						1		
BD Bid Due				1	1		2		1						1
AW Award					2	1			2			1			
RE Real Estate					2	1			1	2				1	
NTP Notice to Proc.						2	1		1	1		1			
MFG Manufacturing															
SD Delivery Start															
FD Delivery Finish															
LIQ Liquid. Milest.															
INT Interfc. Milest.															
CC Contract Complt.							1					1			

NOTE: REPORT REFLECTS ONLY CONTRACT PACKAGES FOR MAJOR SYSTEMS.

## Real Estate - Status Summary

CCU	NO. OF PARCELS	NUMBER JUST CERT'D	COMPOFFERS APPROVED	AGRMNT MADE	CONDEMN SIGNED	PARCELS FILED	PARCELS AVAIL	CONSTRUCT NOT AVAIL	NTP DATE
B201	4	4	1					4	01/11/91
B211	1							1	07/25/91
B218	1	1		1	1	1		1	01/03/91
B219	5	5	3	3		2		5	05/13/91
B221	15	13	9	6	1			15	04/24/91
B231	3	3	3	2		2		3	01/28/91
B241	2							2	01/06/93
B251	20							20	02/04/92
B252	3							3	06/24/92
B261	3							3	04/21/93
B271	7		1	1	1		1	6	06/04/92
B281	1	1						1	11/25/92
TOTAL	65	27	17	13	3	5	1	64	

Average Days to Invoice Payment  
(4 Week Moving Average)



The following is a list of the actual number of invoices and dollar amounts of invoice payments for the past three months.

Date	Number of Invoices	Invoice Amount
09/07/90	1	\$ 4,483
09/14/90	3	349,345
09/21/90	3	14,341
09/28/90	2	1,463,140
10/05/90	0	0
10/12/90	0	0
10/19/90	4	4,165,505
10/26/90	2	13,000
11/02/90	2	3,173,876
11/09/90	2	(3,145,668)
11/16/90	4	2,139,286
11/23/90	1	724
11/30/90	1	7,500