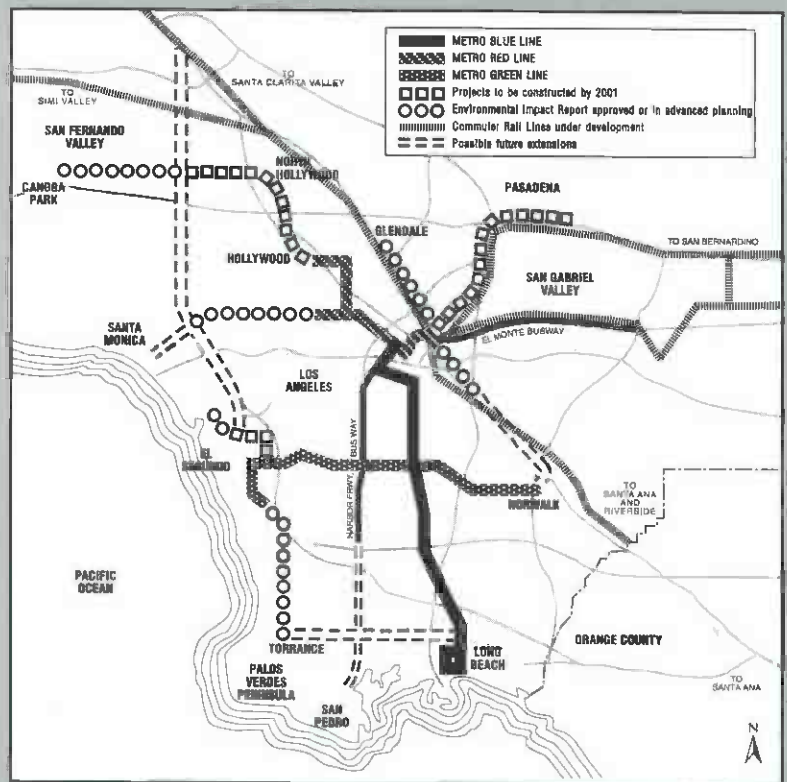


RAIL CONSTRUCTION CORPORATION



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 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 essentially complete with revenue operations date for the Seventh and Flower Station set for February 14, 1991. The Metro Blue Line program status section will no longer be carried in this report. The RCC projects have a combined budget of \$4,277,000,000 and a combined current forecast of \$4,373,000,000, approximately 2% over budget. These figures include the Metro Blue Line budget and forecast of \$877,000,000. Measures continue to be taken to control and mitigate the forecast overrun of the Metro Red Line MOS-1 project.

There were 96 construction change notices 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 two million dollars to \$50.8 million. The backlog of unresolved changes increased by 68 over the previous month. Also, the percentage of outstanding change notices over 30 days old is now 31% of all outstanding changes, down from 32% 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.

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, excluding the Metro Blue Line.

PROGRAM CASH FLOW

Through December 1990, total program expenditures for active projects is \$1,863,709,000. This is an increase of approximately \$76 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.

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

STATUS DATE: 12/28/90

(IN THOUSANDS)

PROJECT: 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	1,991,547	2,021,602	12,408	708,081	2,017	681,805	13,709	525,115	15,354	500,923	2,056,602	35,000
PROFESSIONAL SERVICES	791,879	833,556	3,457	374,554	13,887	489,124	7,145	437,035	7,575	431,130	874,986	41,430
REAL ESTATE	205,817	242,878	6	136,798	14,983	153,330	14,810	152,621	14,809	152,621	246,937	4,059
UTILITY/AGENCY FORCE ACCOUNTS	62,443	52,030	884	20,053	884	16,080	252	9,246	252	9,382	51,853	(177)
SPECIAL PROGRAMS	5,522	5,525	30	568	90	698	26	321	26	241	5,525	0
PROJECT RESERVE	254,750	260,367	0	0	0	0	0	0	0	0	276,174	15,807
PROJECT REVENUE	(16,626)	(16,626)	0	0	0	(984)	0	(317)	0	(2,011)	(16,626)	0
GRAND TOTAL PROJECT	3,295,332	3,399,332	16,785	1,240,054	31,861	1,340,053	35,942	1,124,021	38,016	1,092,286	3,495,451	96,119

Figure 1

Figure 2 - Rail Construction Plan

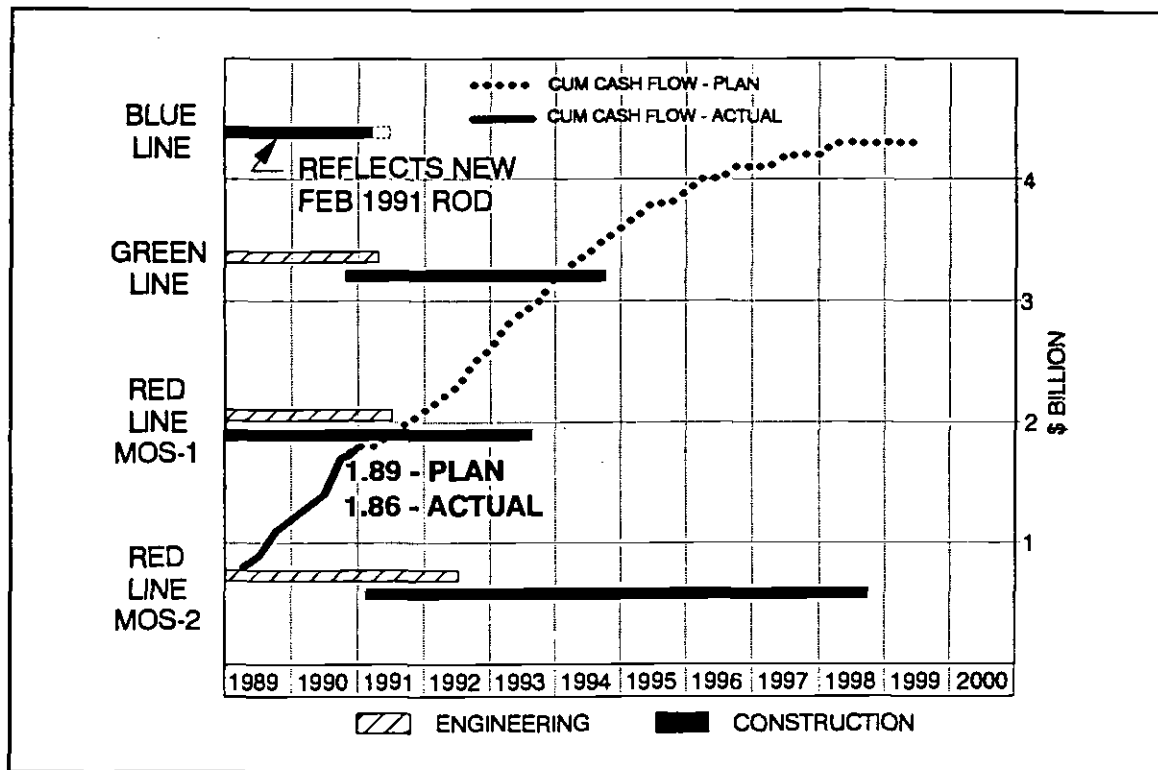


Figure 3 shows the funding sources for each project and for the total program. Data included in this figure is based on the current forecast total cost of each project.

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 (R01) FORECAST

PROGRAM SCHEDULE

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

The Metro Green Line is scheduled for Revenue Operations in October 1994. The project is now 68 days behind schedule. This is an increase of 10 days from the previous month. The increase is due primarily to slippage in the Vehicle Procurement (P1900) contract package. 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: 28 DEC 90

	NOV 90		DEC		JAN 91	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
	PLAN	ACTL	PLAN	ACTL										
60% Design Submittl	1	2	1		1			1	3		1		3	1
85% Design Submittl	2	1	2	1	1			1	1	1	1	2	1	1
100% Design Submittl		2	2	2	7	1	1				1	2		3
TOTAL	3	5	5	3	9	1	1	2	4	1	3	4	4	5
CR Camera Ready	1	1	1	1	5	3	3		1	1		1	1	1
AD Advertise	2	2	3	1	2	5	1	2				1	1	
BD Bid Due	1	1	1	1	2	2		2		1				1
AW Award	1	3	2		3	2	1	3	3	2	4	2	1	
RE Real Estate			1	1	3			1	2	1			1	
NTP Notice to Proc.		2	1		4	1	3	2	2	4	3	3	1	1
MFG Manufacturing							2	2						
VS Vehicle Ship														
FD Delivery Finish														
GREEN													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

Figure 4

REAL ESTATE ACQUISITIONS

The Metro Blue Line real estate status will no longer be carried in this report. To date, one hundred ninety-five (195) real estate parcels have been identified as required for the total program. Of this total, seventy-nine are not yet available for construction. Figure 5 summarizes the real estate status for each project.

Figure 5 - Real Estate Acquisition Status Summary

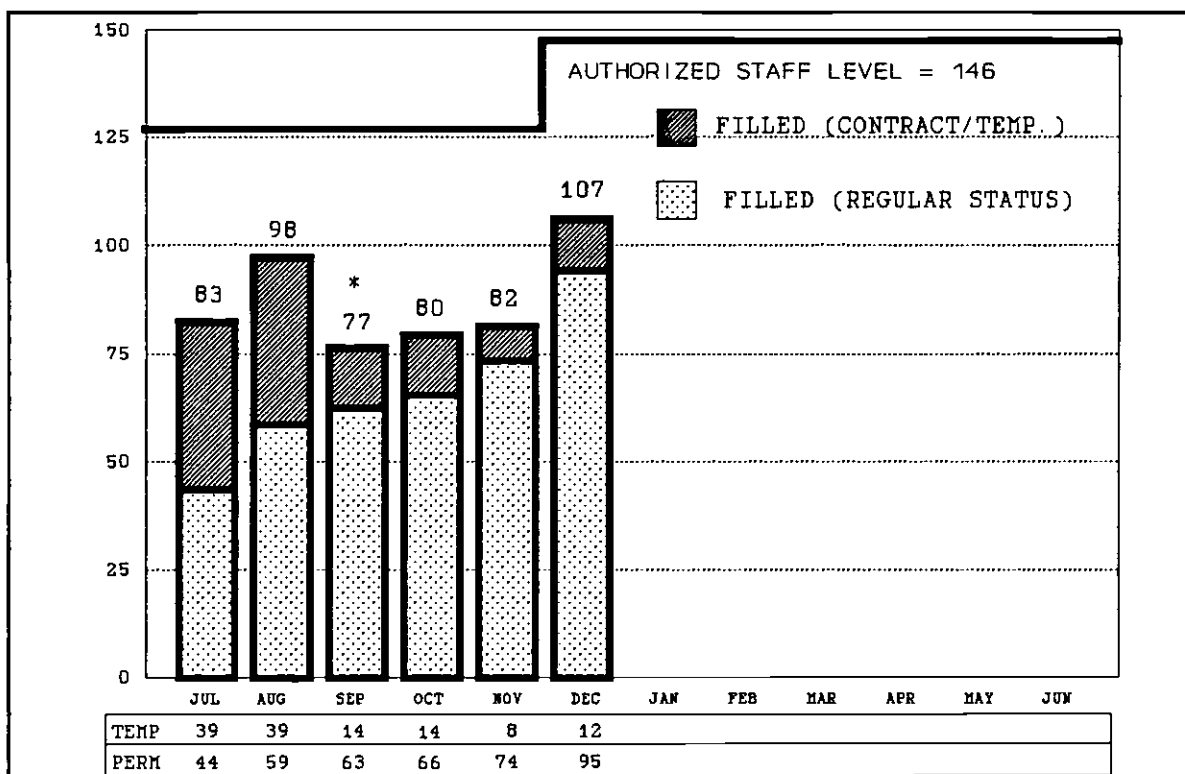
REAL ESTATE - STATUS SUMMARY TOTAL							
PROJECT	NO. OF PARCELS	NUMBER CERT'D	JUST COMP APPROVED	OFFERS MADE	CONDEM- NATION	PARCELS AVAIL	PARCELS NOT AVAIL
GREEN	36	31	NA	NA	3	14	19
MOS-1	94	94	94	94	22	94	0
MOS-2	65	28	20	18	5	5	60
TOTAL	195	153	114	112	30	113	79
PREVIOUS MONTH	193	154	111	107	31	105	88

RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Authorized staff level for the RCC is one hundred forty-six (146) an increase of nineteen from the previous month. The increase is due entirely to the transfer of LACTC Contract Administration personnel to the RCC. Presently, ninety-five (95) positions are filled with regular full time staff and twelve (12) 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 6.

Figure 6 - 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 25 %. The percentage includes all costs previously expended by the SCRTD when the project was under SCRTD management.

Staff costs are projected at 6% of total program costs. This exceeds the corporate goal of 4%. The primary reason for this increase is the reallocation of construction management costs to RCC staff costs for the Metro Red Line MOS-2. Figure 7 illustrates the forecast figures for each project and for total program.

COST PERFORMANCE RELATIVE TO CORPORATE GOALS
IN THOUSANDS

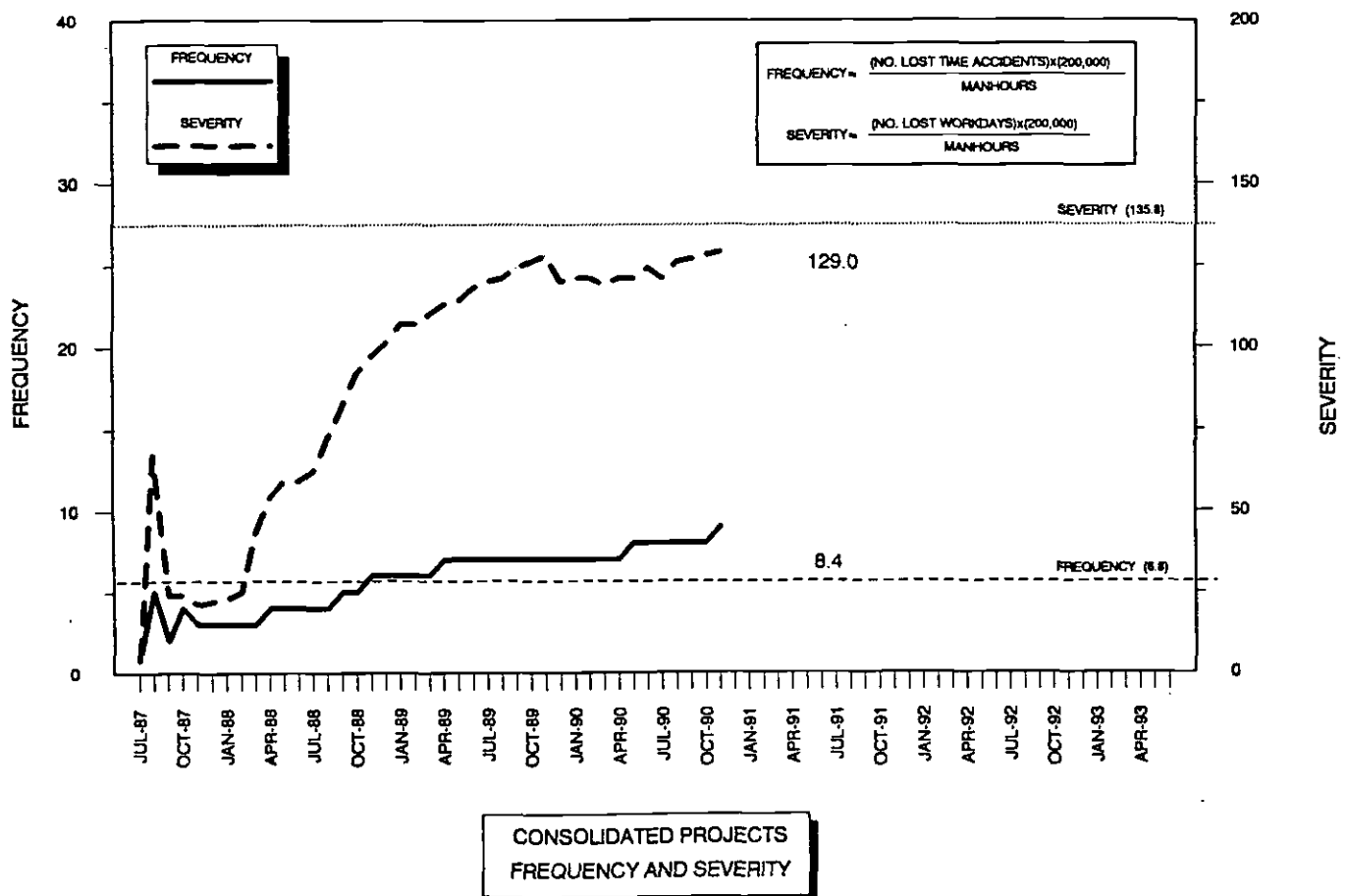
	METRO BLUE LINE		METRO GREEN LINE		METRO RED LINE MOS-1		METRO RED LINE MOS-2		PROJECT TOTALS		CORPORATE
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	GOAL
CONSTRUCTION	656,237	75%	409,186	68%	742,179	51%	957,090	66%	2,764,692	65%	
RIGHT-OF-WAY	55,592	6%	35,096	6%	139,501	10%	72,340	5%	302,529	7%	
SERVICES:											
ENGINEERING/DESIGN	69,587	8%	53,933	9%	210,981	15%	80,818	6%	415,319	10%	
CONSTRUCTION MGMT.	90,722	10%	35,877	6%	159,086	11%	98,603	7%	384,288	9%	
STAFF	17,655	2%	19,760	3%	116,374	8%	96,254	7%	250,043	6%	4%
OTHER	15,142	2%	5,830	1%	948	0%	2,047	0%	23,967	1%	
SUBTOTAL	193,106	22%	115,400	19%	487,389	34%	277,722	19%	1,073,617	25%	20%
RESERVE	2,213	0%	55,944	9%	80,950	6%	139,280	10%	139,277	3%	
REVENUE	(29,877)	-3%	(16,626)	-3%	0	0%	0	0%	0	0%	
GRAND TOTAL	877,271	100%	599,000	100%	1,450,019	100%	1,446,432	100%	4,280,115	100%	

Figure 7

CONSTRUCTION SAFETY

The combined Construction safety reports for the Metro Blue Line and the Metro Red Line (MOS-1) is shown on the following page. The individual reports are shown in their respective project summary.

Figure 8

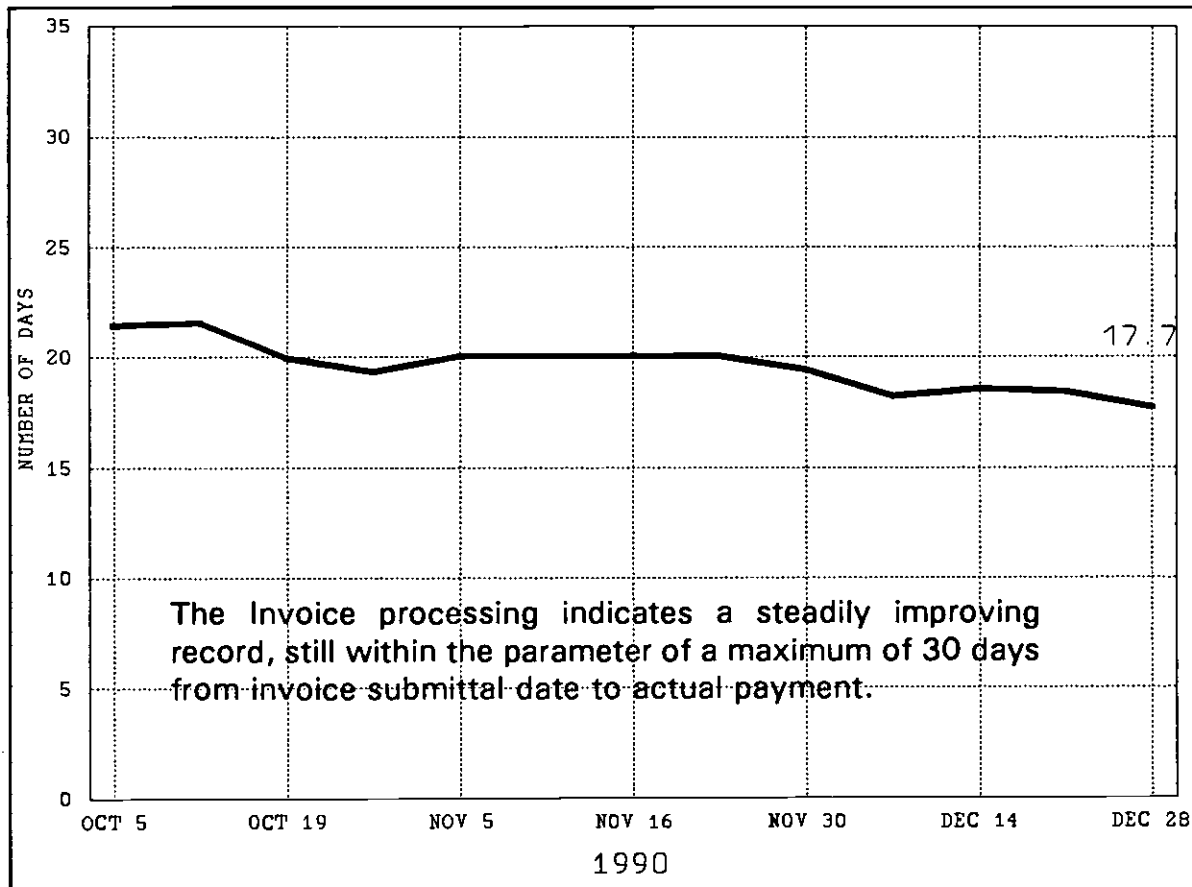


Total manhours as of November 1990: 11,728,202

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.

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



The Metro Blue Line program status will no longer be carried in this report.

Construction progress is essentially complete with the exception of the Seventh and Flower Station. The Revenue Operation Date for the Seventh and Flower Station is scheduled for February 14, 1991.

Refer to the Executive Management Report Supplement for details of the major achievements during construction of the Metro Blue Line.

EXECUTIVE SUMMARY

The cashflow information shows a total project expenditure of \$57.8 million. This represents about 10% of the current total forecast of \$599 million dollars. To-date, the project commitments are \$115.3 million, about 19% of the total budget of \$599 million. O'Brien-Kreitzberg prepared the first progress payment estimate for Contract (C0101), Utility Relocation & Foundations. The \$1.1 million pay request covers cost incurred by Brinderson through the month of December.

The design portion of the project is approximately 93% complete. The current schedule indicates that design will be complete by July 1991. All but two of the system/system-wide design contracts are scheduled to be complete by the end of February 1991.

The Master Schedule, with a status date of December 28, 1990, indicates 68 days behind schedule. Contract Package (P1900) Vehicle Procurement Availability is driving the project Critical Path due to an increase in the duration required for the negotiated procurement process. The result is a 28 day slip in the vehicle procurement NTP. The El Segundo segment continues to be on the Critical Path with activities proceeding through contracts (C0101), Utility Relocation and Foundations, (C0100) Elevated Guideway and Stations, (C0610) Trackwork Installation, (H1400) Overhead Contact System, (H1100) Automatic Train Control, Systems Integration, Testing, Pre-Revenue Operations and Revenue Operations. As the award of civil contracts in the El Segundo segment begins, we are optimistic that a workaround plan can be developed that will enable the project to maintain the current ROD of October 1994.

An RFP based on the procurement of 41 vehicles was released to industry on December 3, 1990. Copies were included to those carbuilders who had expressed a continuing interest in the project. Advertisements were also forwarded to the carbuilding industry as a whole, in the event that changing market conditions would prompt previously uninterested carbuilders to take a second look at the Green Line project. The NTP is scheduled for August 1, 1991. The next significant program event will be the Pre-Proposal Conference, slated for January 9, 1991.

Of the four civil construction contracts in the El Segundo segment, only the Utility Relocation & Foundations contract (C0101) has been awarded. Construction for Contract C0101 is scheduled to commence in January 1991. The RCC advertised the Rosecrans/Aviation & Kramer Bridges contract (C0110) on November 30, 1990. The Elevated Guideway and Stations contract (C0100), which represents more than 30% of the total Metro Green Line Project construction costs, is currently set to advertise in January 1991. The anticipated NTP is May 1991. The Hawthorne Yard & Shops contract (C0400) is currently scheduled to be advertised in late January 1991.

System/System-wide contracts are scheduled to be advertised or to begin negotiated procurement between January 1991 and September 1992. All awards are expected to be complete by the beginning of December 1992.

Negotiations with private property owners, utility companies and railroad representatives continued in the month of December. RCC and AT&SF management met in Chicago on December 14, 1990 to negotiate AT&SF Rail Road right-of-entry. An agreement in principal was reached at this meeting and right-of-entry is expected by the end of January 1991. Issues concerning utilities are difficult to resolve with the most critical being coordination with SCE. Chevron and Four Corners oil lines relocations also remain critical. The most critical utility constraints are from Rosecrans/Aviation Bridge to Compton Station. Obtaining right-of-entry to private properties are being obtained to meet project schedule.

During December the RCC initiated discussions to include the engineering and construction of the North Coast Segment (NCS) as part of the current Metro Green Line construction program. Based on the NTP for design in August 1990, the initial intention was to have the North Coast Segment go into revenue service simultaneously with the Norwalk-El Segundo portion of the project. The RCC issued to Transcal the NTP for the design on December 17, 1990. Schedule analysis is in progress to produce a North Coast Segment ROD concurrent with the Metro Green Line ROD of October 1994.

To-date there have been no reported safety incidents and 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 power lines at the Hawthorne Yard and Compton Station areas.

Action: This matter is currently under SCE review. The 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 December 1990, RCC staff met with the AT&SF management in Chicago and reached an agreement in principle with the AT&SF management to ensure that the Right-of-Entry to the AT&SF railroad property will be available when required by construction. Private property negotiations are progressing and the acquisition of properties is consistent with the project schedule. 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 continues to slip but 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 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. At these meetings, actions that need to be taken to guaranteed 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.

4. Finalization of Overall Project Scope

Concern: The RCC requires a decision regarding the vehicle fleet size and a go/no-go on the full Hawthorne Yard and Shop construction contract. Both issues have a major budget and schedule impact.

Action: The above issues were approved by the LACTC Commission at a meeting held on December 19, 1990. The issues will be presented to the RCC Board in January, 1991.

5. Kramer Property Hazardous Waste

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

Action: Soil reports were given 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 met on December 18, 1990. Construction of the bridge on the Kramer property site was discussed. It was determined at this meeting that the state Department of Health and Services would be the lead agency on this matter. This action is critical as the El Segundo Bridge Construction contract (C0110) was advertised on November 30 1990, and has a NTP scheduled for April 1991.

6. System Testing

Concern: In general, specifications for systems construction and installation do not address contract to contract coordination requirements, nor do they address 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); also systems demonstrations, (01670).

7. Vehicle Delivery Schedule

Concern: When the baseline Project Master Schedule was established in December 1989, a delivery date for the first LRV to site of December 1992 was used. Since that time the delivery of the vehicle has been delayed to August 1993, a schedule slippage of approximately 8 months. Although workarounds in

the schedule have been incorporated to absorb four months of the slippage, the remaining time has pushed the critical path so that the forecast project completion date is January 9, 1995, 68 days behind schedule. Under the current scenario, if the October 1994 date is to be maintained, this would allow only 3 months for overall systems testing and integration. It is felt that this is not sufficient time to fully test and fine tune a driverless automatic train control system. The baseline schedule allowed 7 months for the overall systems testing and integration portion of the project.

Action: Meetings between RCC staff, LTK and OKA need to take place in order to pursue any workarounds that would increase the amount of overall testing and systems integration and allow the project ROD to remain at October 1994.

8. Radio Frequency Requirements

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

Action: During December 1990, the RCC acquired 5 - 900 Mhz frequency channels. These channels are available to the RCC for use in the operations and maintenance of their rail systems.

9. 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, a schedule of design delivery dates extending into late April, is significantly behind schedule and conflicts with the current needs of Caltrans construction. The current construction philosophy of Caltrans contractors preparing the light rail facilities in the Century Freeway may have to be abandoned. The alternative is to establish a new contract package to build the rail facilities in the Caltrans portion of the freeway. This alternative is inherently problematic in that there will be two contractors working within the same freeway Right-of-way, each under separate direction and management. The unanticipated increase in administrative and design packaging requirements of this alternative will significantly increase costs, construction time and claims as well as the burden of coordination and management of the project.

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

O'BRIEN-KREITZBERG
CBE
Project: R23
Period: 12/1/90 to 12/28/90

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

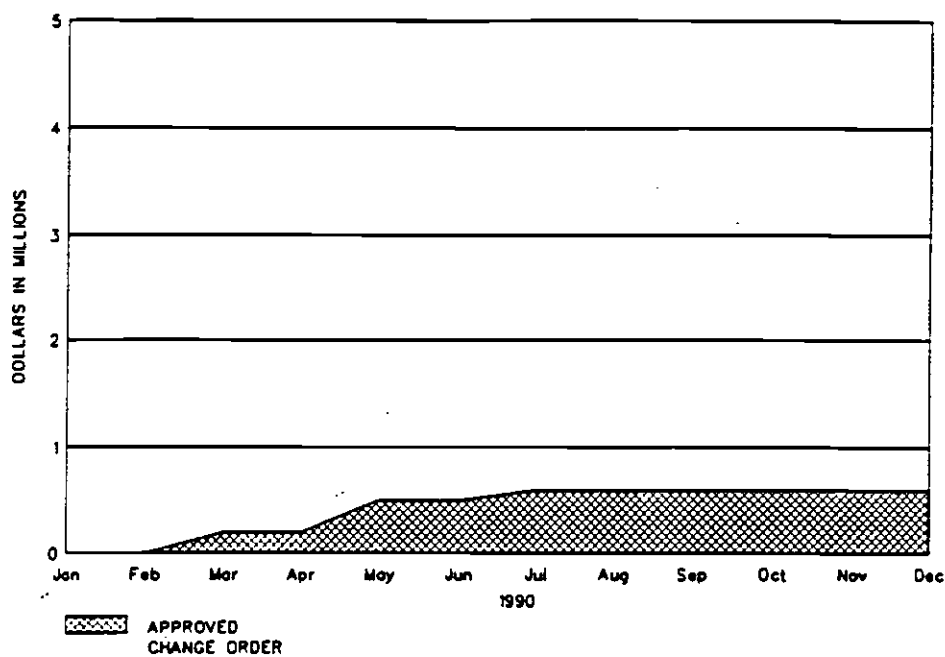
Page: 1
Report Date: 01/16/91
Status Date: 12/28/90

[\$ x 000's]

Description	----- Budget -----		----- Authorized -----		----- Commitments -----		----- Incurred Cost -----		----- Expenditures -----		Current	
	Original (1)	Current (2)	for Expenditure 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	12,408	26,451	32	27,955	1,114	17,521	32	12,653	401,530	(2,737)
S Professional Services	110,295	110,295	0	32,695	992	75,324	1,632	41,595	2,062	35,690	112,870	2,575
R Real Estate	35,096	35,096	0	10,759	528	9,807	529	9,284	528	9,284	35,096	0
F Utility/Agency Force Accounts	7,656	7,656	0	7,091	0	3,049	17	323	17	459	7,656	0
O 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	55,944	162
A Project Revenue	(16,626)	(16,626)	0	0	0	(984)	0	(317)	0	(317)	(16,626)	0
Project Grand Total :	599,000	599,000	12,408	76,995	1,552	115,250	3,293	68,487	2,639	57,769	599,000	0

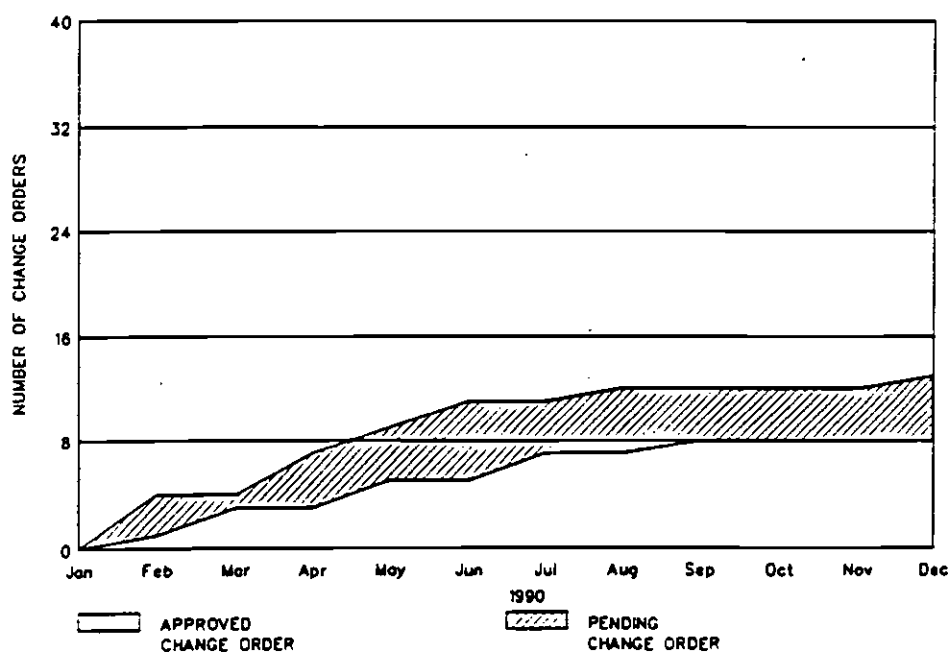
VALUE OF APPROVED CHANGE ORDERS

12/28/90



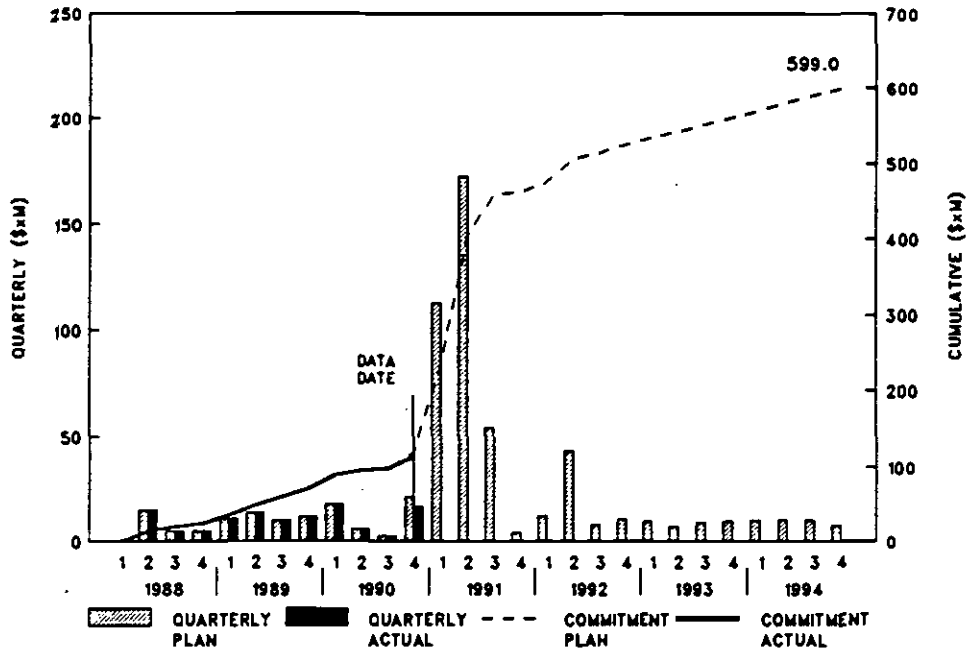
CHANGE ORDER RESOLUTION

12/28/90



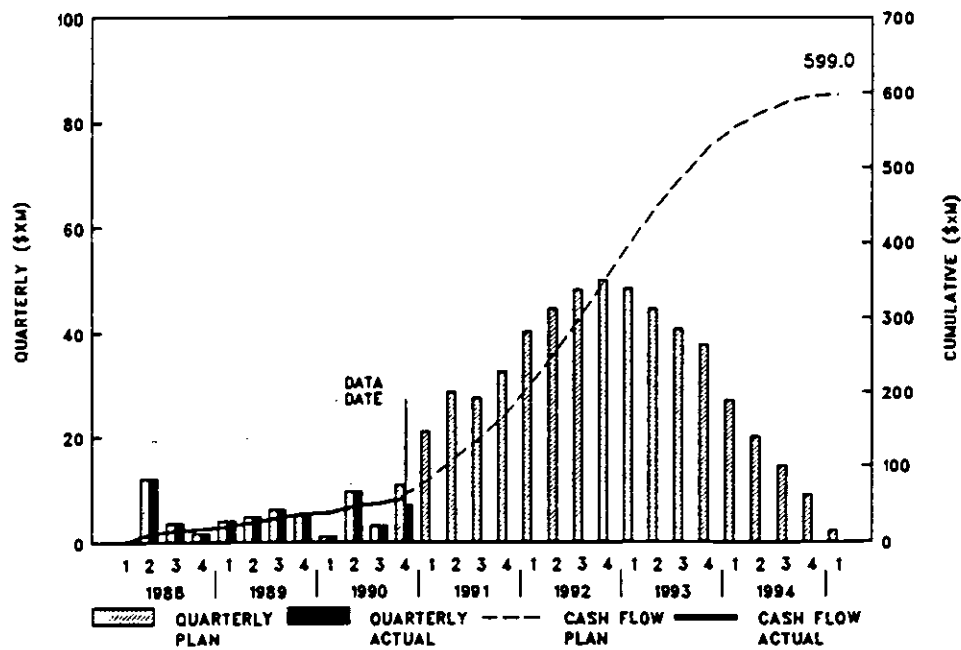
PROJECT COMMITMENTS

12/28/90



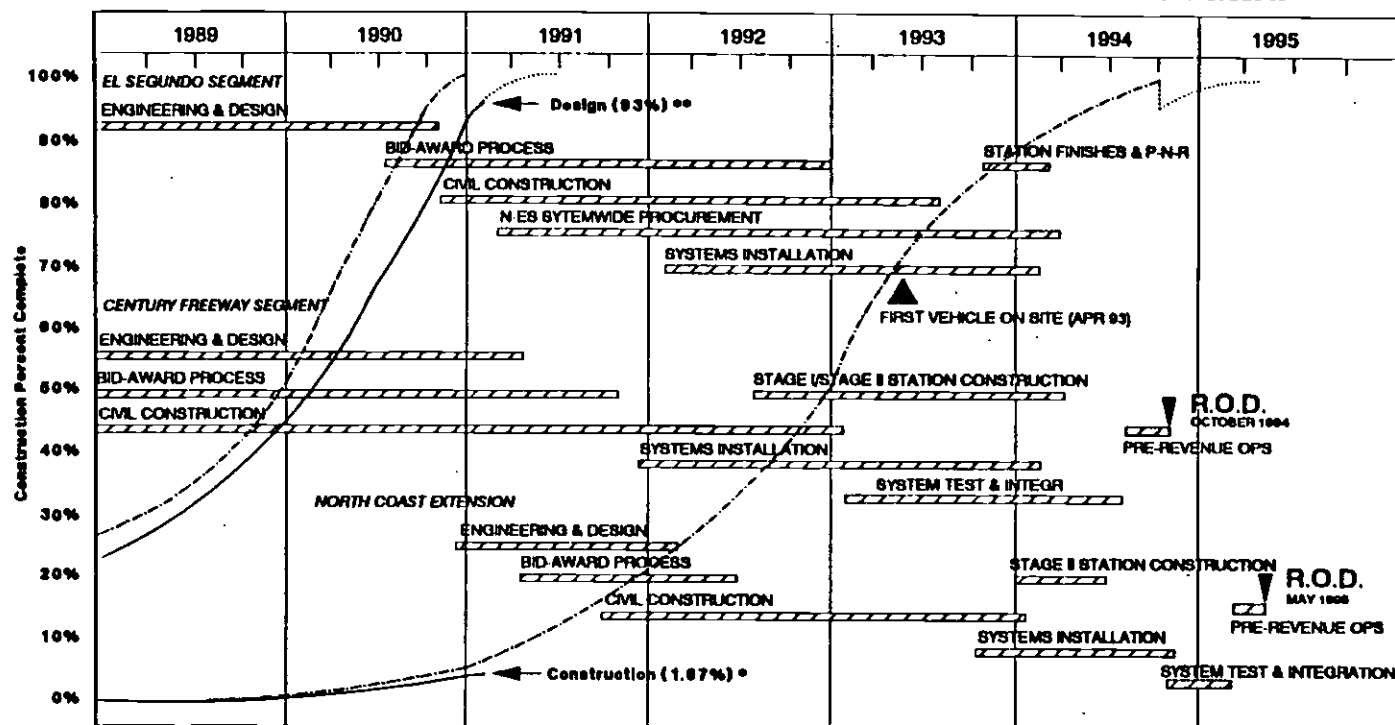
PROJECT CASH FLOW

12/28/90



RAIL CONSTRUCTION CORPORATION
METRO GREEN LINE
EXECUTIVE SUMMARY SCHEDULE

Status Date: 26 DEC 90



Note(s):

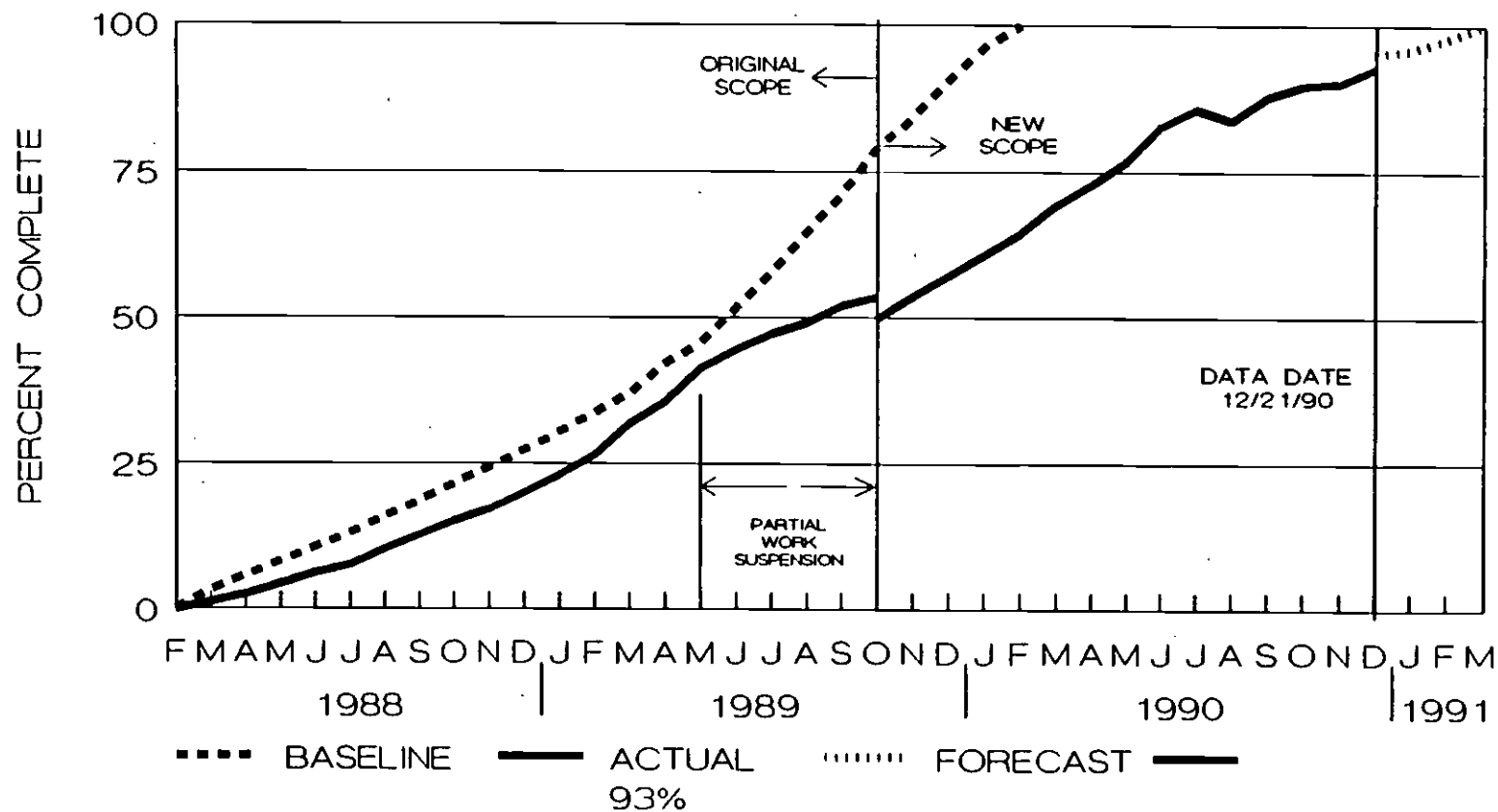
- ** Excludes North Coast Extension
- * Includes North Coast Extension

LEGEND	
Planned	-----
Actual	————
Forecast

EXCLUDED FROM AS

TRANSCAL II DESIGN ENGINEERING

*Progress Curve



*Excludes Administrative Level of Effort Activities

FILE:12RCPROG

1 YEAR OUTLOOK

GREEN LINE PROJECT SCHEDULE STATUS / KEY EVENTS

DATA DATE: 28 DEC 90

R23
90/91

	1990			1991									
	November	December		January	February	March	April	May	June	July	August	September	October
	Actual	Plan	Actual										
80% Design Submittal	1		1										
80% Design Submittal	3	2	2	3	1								
100% Design Submittal	1			4	2	3		1	1				
CR Camera Ready	3	1		1	1	1	1					1	
AD Advertise	2	1		2	1	1	1		2	2	2	1	
SD Bid Due													
AW Award													
RE Real Estate													
NTP Construction	2	1		2		2	1	1	1	2	2	1	1
M&B Veh. Mng. NTP													
VT Vehicle Testing													
VA Vehicle Arrival													
LQ Liquid. Meet.									1				
CC Contract Compl.													

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	10	8	N/A	N/A	N/A	1		9	05/13/91
C101	18*	16	N/A	N/A	N/A	2	11	5*	11/26/91
C110	4	3	N/A	N/A	N/A		1	3	04/01/91
C400	4	4	N/A	N/A	N/A		2	2	04/30/91
TOTAL	36	31	N/A	N/A	N/A	3	14	19	

Note: 1) "N/A" Activities identified above are not directly related to required Right Of Entry for the contract packages specified.

2) C0100 - Parcel #523 was previously listed as impacting C0101 and parcel #524 had been previously deleted.

3) C0110 - Parcel #527 was previously listed as impacting C0101.

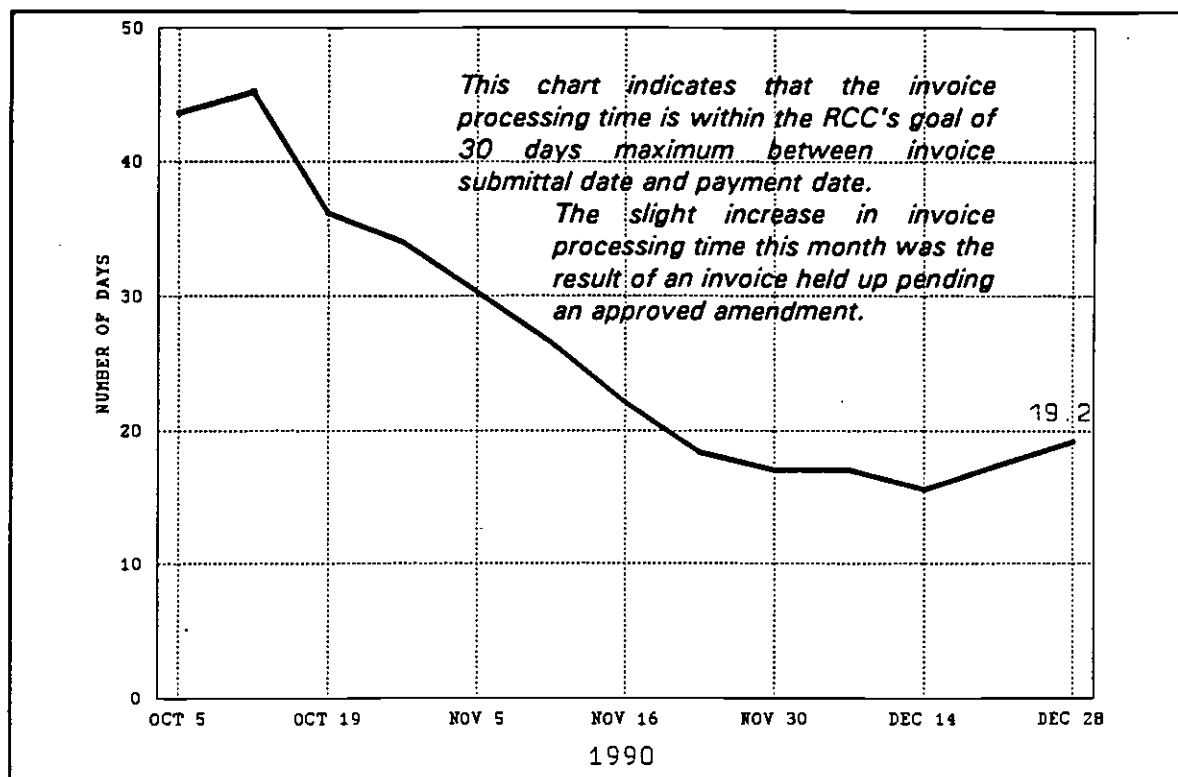
4) C0400 - Parcel #532 was previously listed as impacting C0100.

5) Certs 506 and 523 are being revised (Affects C100 Parcels).

6) Cert 527 is being revised (Effects C110 parcel).

* Number includes exhibit A, railroad right of entry (1st Agreement & 2nd Agreement).

**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
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
12/07/90	0	0
12/14/90	5	1,546,425
12/21/90	1	337,574
12/28/90	0	0

EXECUTIVE SUMMARY

As of December 28, 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 partial trackwork access, leaving only the AL fire tunnel and the Contract A175, Wilshire/Alvarado Station. The AL tunnel construction is proceeding slowly and may result in a change to the plan to work around this delay.

Schedule improvement continued to be a major activity during December. 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.

Contracts A167, 7th/Flower Station, Stage II; A640, Communications; A631, Traction Power Supply System; and A710, Escalators and Elevators, continued to work toward early opening of the Blue Line Station at 7th and Flower.

Contract A610, Trackwork completed second pours in the entire alignment AR tunnels on December 21, 1990, (excluding the cross-over and Station at Wilshire and Alvarado). This means laying of the rail can now begin. Second pours remain to be completed at Contract A141, Line Section Civic Center to Union Station, north AL tunnel; Contract A135, Union Station, AL alignment, and Contract A130 Yard Lead, tunnel AL section.

The value of work in place for MOS-1 construction is 72% complete versus a plan of 74%. 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.

EXECUTIVE SUMMARY (CON'T)

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

Contract A136, Union Station, Stage II, now appears reported in the Construction/Procurement Section. The NTP date was October 22, 1990; the first chargeable day was October 23, 1990.

AREAS OF CONCERN

1. 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 Contract A141, Line Section Union Station to Civic Center Station AL tunnel leaving the Contract A130 Yard Leads YL tunnel for last. This action appears to be adequate to avoid potential delay to the trackwork and follow on systems contractors.

2. 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 Contract A640, Communications. A revised contract schedule incorporating the new negotiated dates was received on December 26, 1990, and is currently under review. This contract change should eliminate the potential delay to the follow-on contractors.

3. Contract A141, Line Section, Union Station 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.

AREAS OF CONCERN (CON'T)

Action: A survey has been conducted which identified areas where corrections are required. A detailed construction plan to make the corrections is under development incorporating the task into the master project schedule so as to avoid delay on impact to other contractors.

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.

Action: A survey has identified critical points with the tunnel and the walkway. The dynamic envelope is being verified and a corrective action plan is being prepared and scheduled, to insure the tunnel and appurtenances are built in accordance with specifications.

5. Contract A167, 7th/Flower Station, Stage II

Concern: The accelerated schedule for a Light Rail revenue operations date of February 14, 1991, continues to require intense additional management, staff, and contractor efforts.

Action: An integrated organization has been assembled under the leadership of the RCC involving RCC, PDCD, and LRT consultants.

This team is working to maximize the efficiency of the effort and insure a timely completion of construction and integrated testing and safety certification is completed to meet the February 14 schedule.

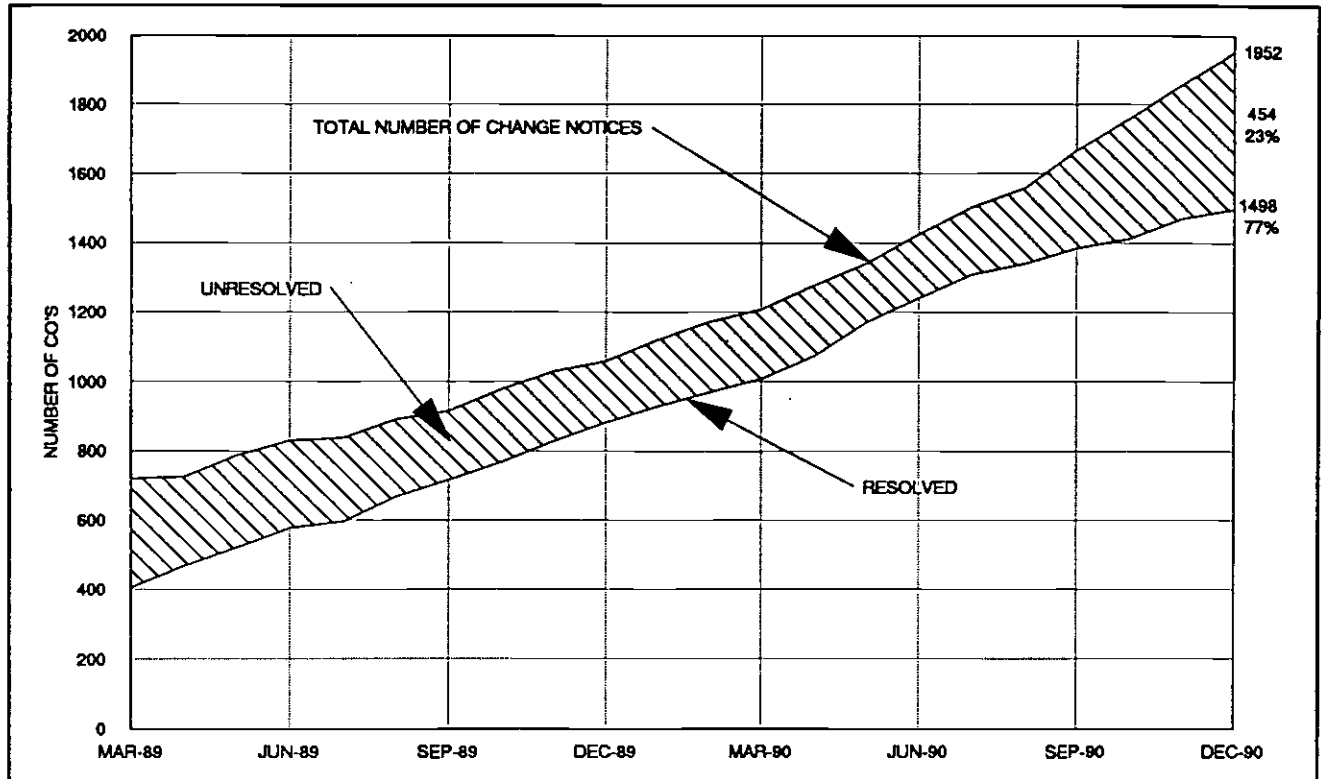
STATUS DATE : DECEMBER 31, 1990
 STATUS PERIOD : DECEMBER 1, 1990 TO DECEMBER 31, 1990

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 PROJECT COST REPORT
 Cost by Element

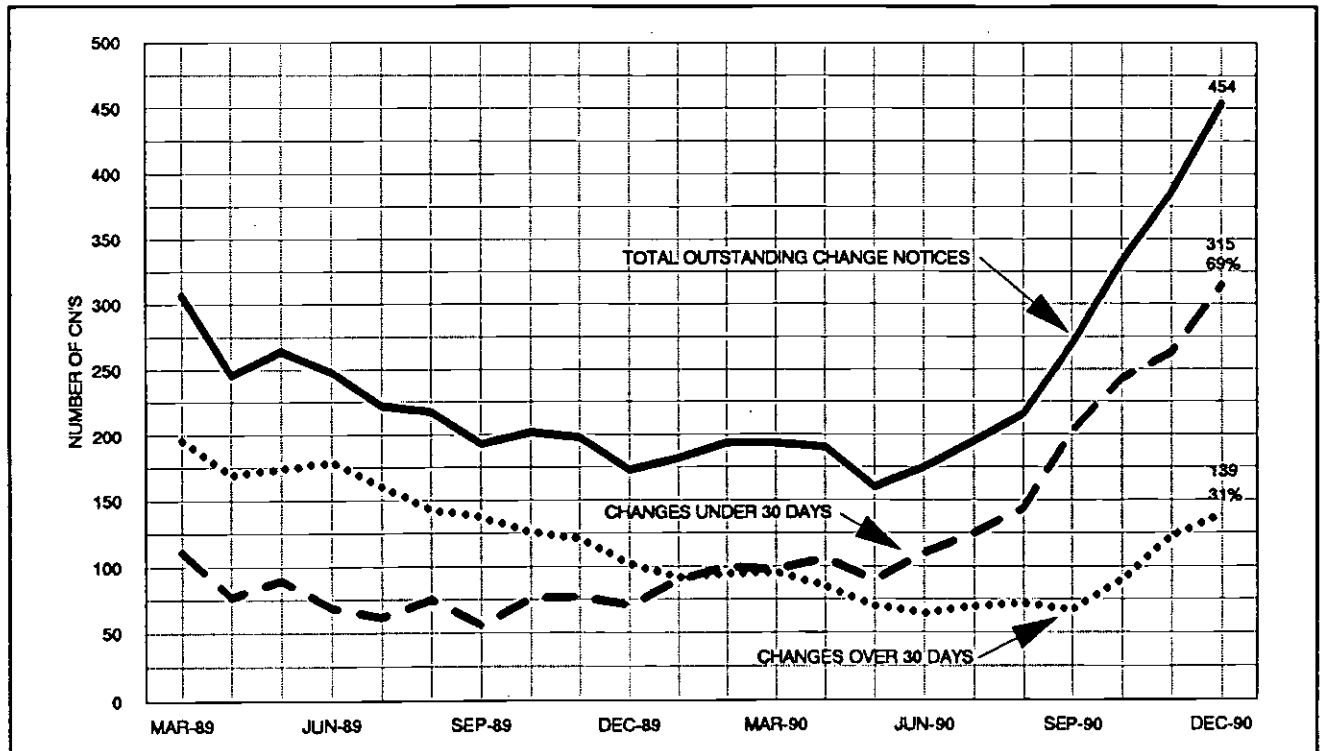
PROJECT : METRO RAIL RED LINE MOS-1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	BUDGET		AUTHORIZED FOR EXPENDITURE		COMMITMENTS		INCURRED		EXPENDITURES		CURRENT FORECAST	VARIANCE
DESCRIPTION	ORIGINAL	MTA APPR	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	(REV. 7F)	(11-2)
T CONSTRUCTION	694,280	698,770	0	678,684	1,924	650,776	12,588	606,893	15,315	488,689	727,924	29,154
B PROFESSIONAL SERVICES	392,434	436,869	0	298,167	0	378,012	3,121	368,200	3,121	368,200	488,441	49,772
R REAL ESTATE	90,894	131,047	0	114,408	0	114,408	0	114,408	0	114,408	139,601	8,454
F UTILITY/AGENCY FORCE ACCOUN	16,119	14,426	884	12,962	884	12,962	236	8,910	236	8,910	14,266	(170)
D SPECIAL PROJECTS	948	948	0	508	0	508	0	216	0	216	948	0
C PROJECT RESERVE	63,226	72,041	0	0	0	0	0	0	0	0	80,950	8,909
A PROJECT REVENUE	0	0	0	0	0	0	0	0	0	(1,694)	0	0
GRAND TOTAL PROJECT	1,249,900	1,353,900	884	1,104,717	2,808	1,154,663	15,944	997,624	18,671	976,606	1,460,019	98,119

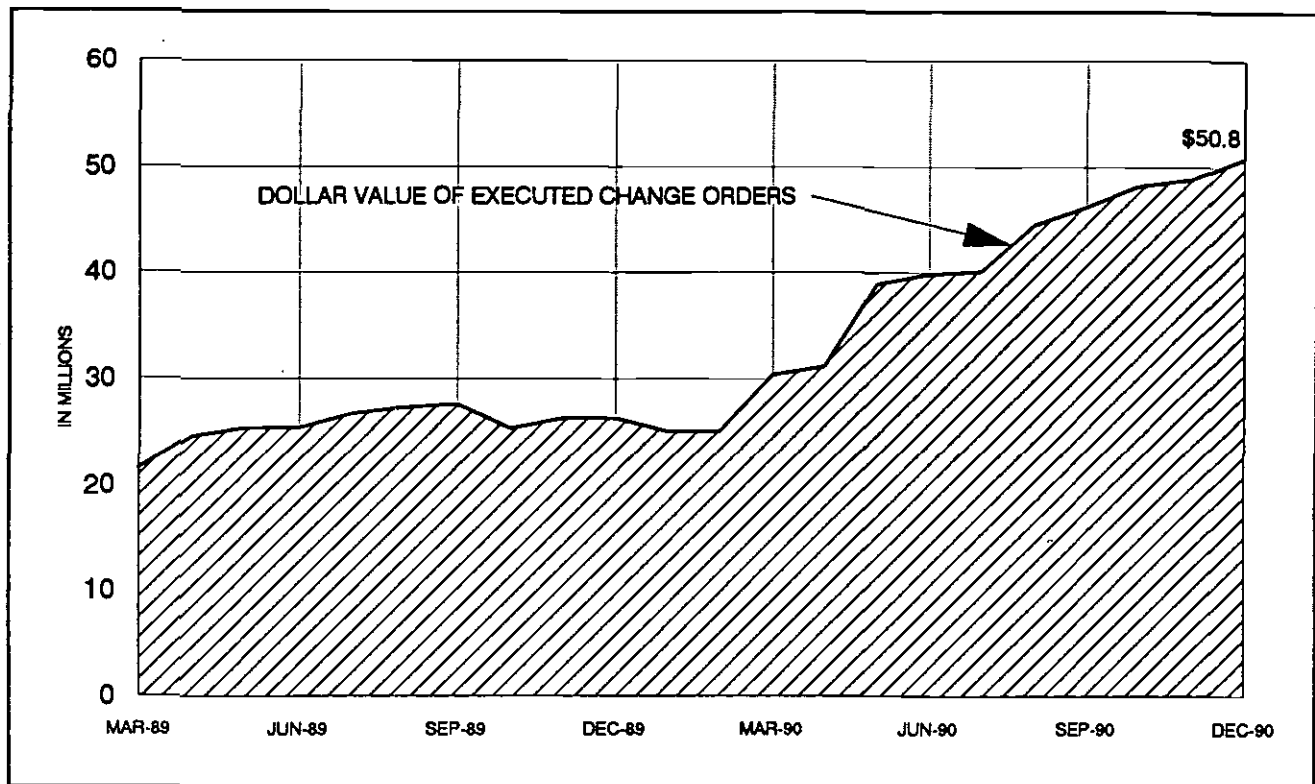
Change Notice Resolution



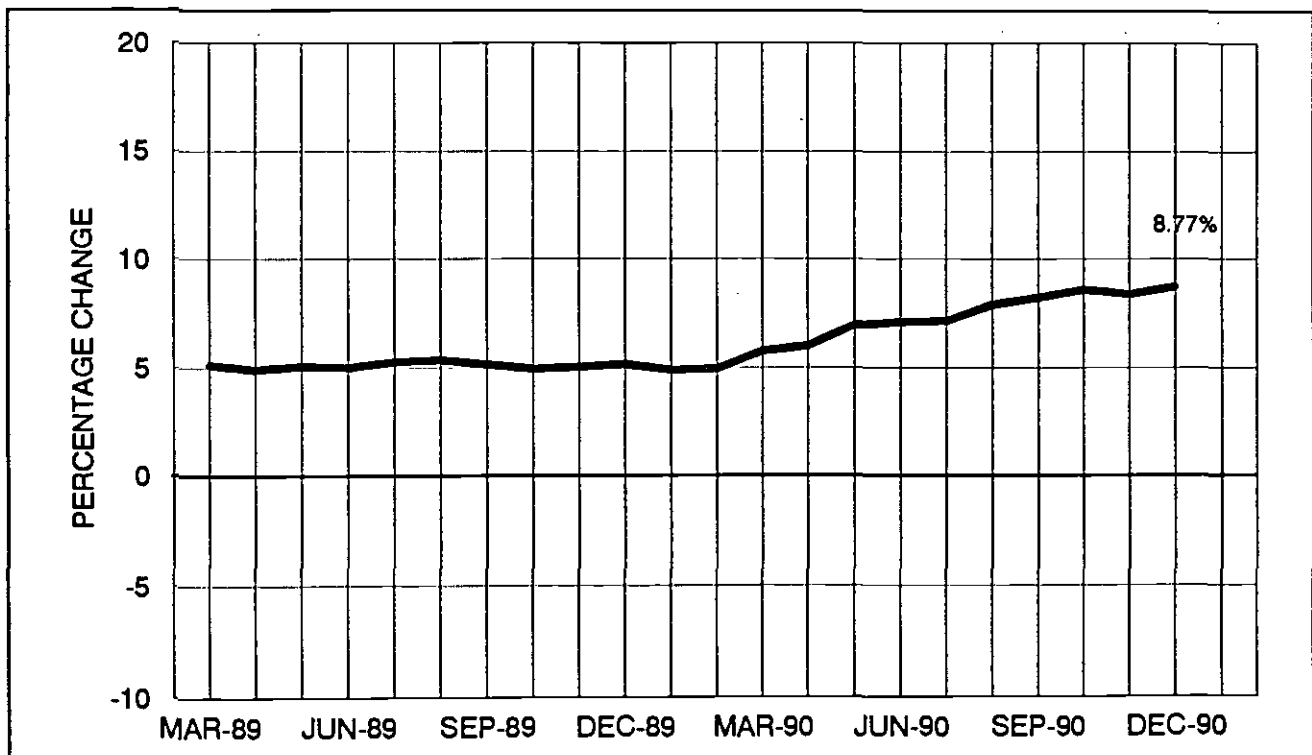
Change Activity Progress



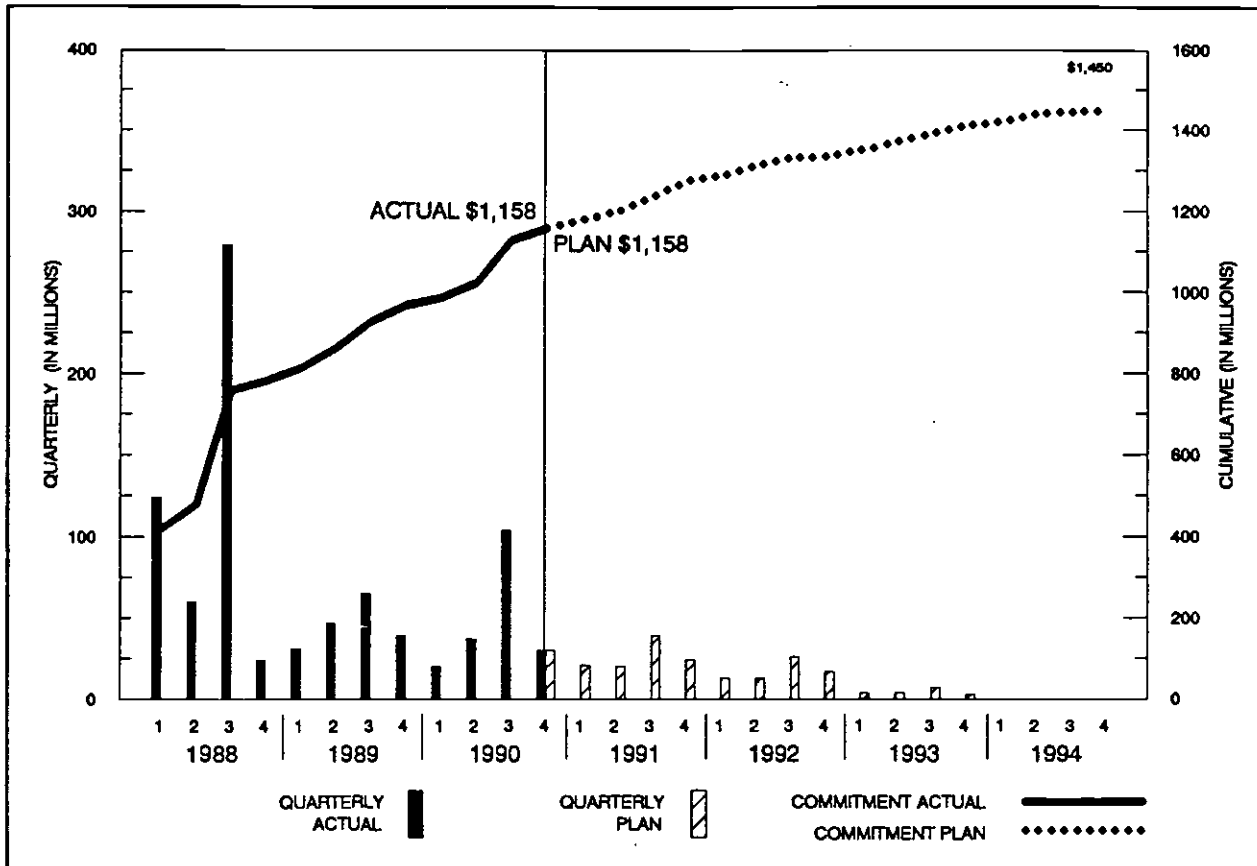
Total Value of Executed Change Orders



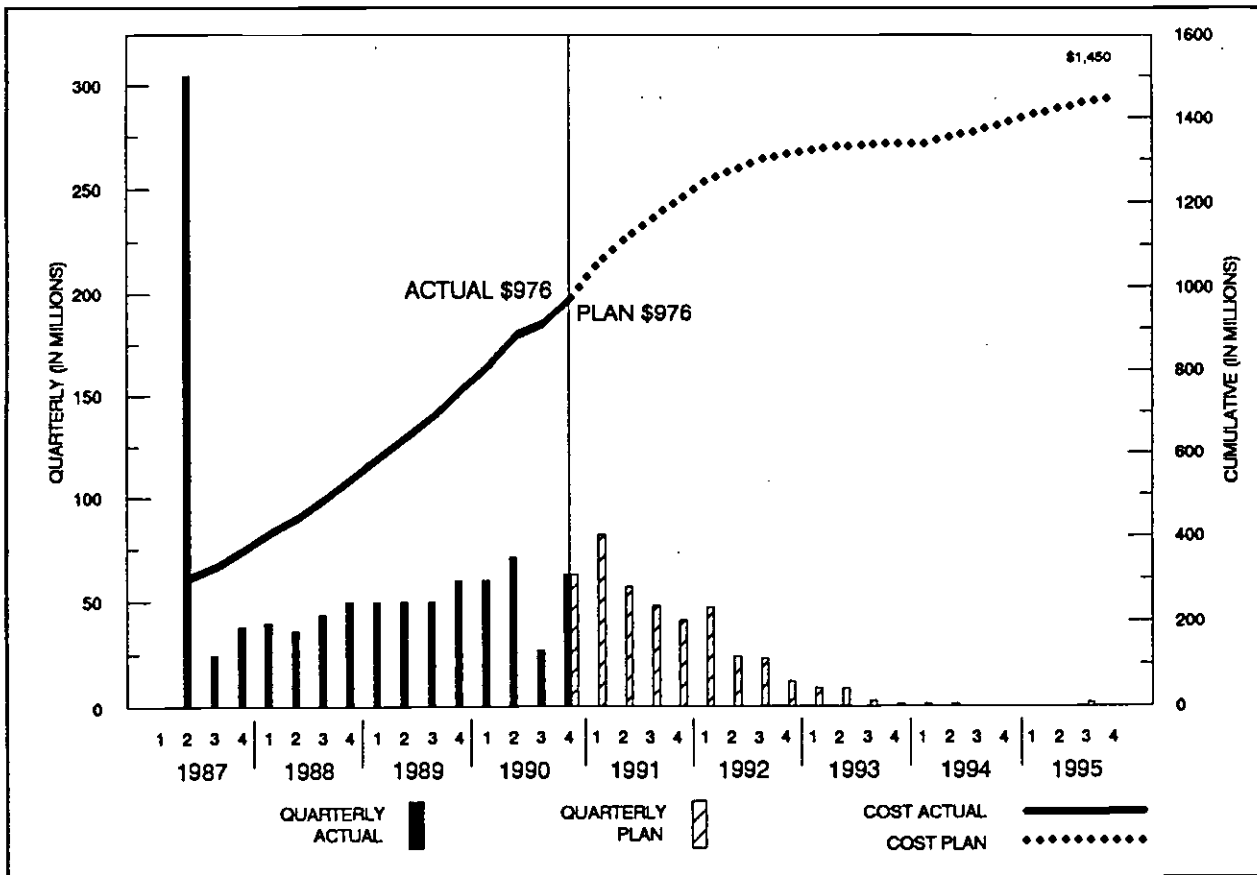
Change Order Dollars as a Percentage of Original Contract Award



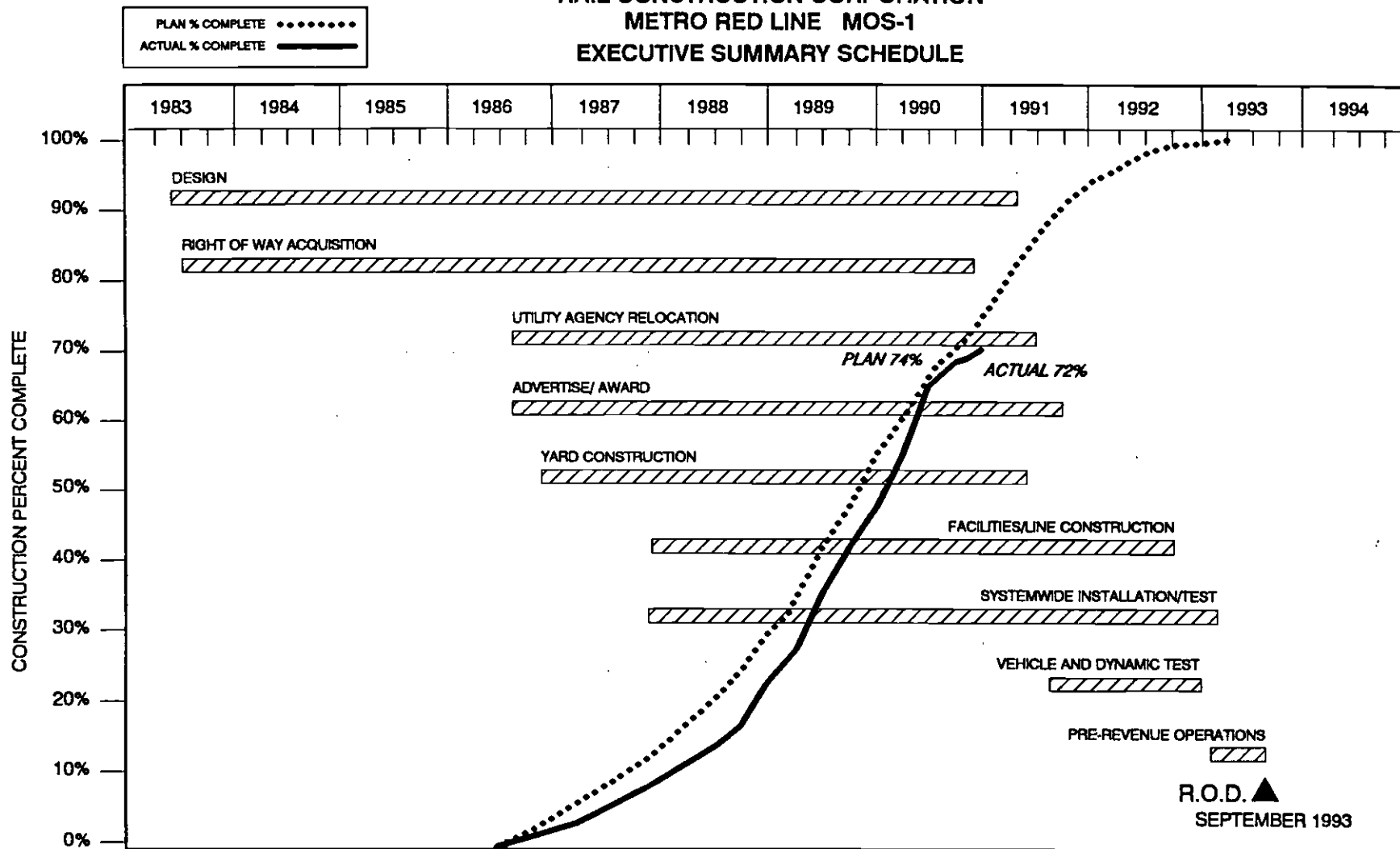
METRO RED LINE MOS-1 COMMITMENT PLAN

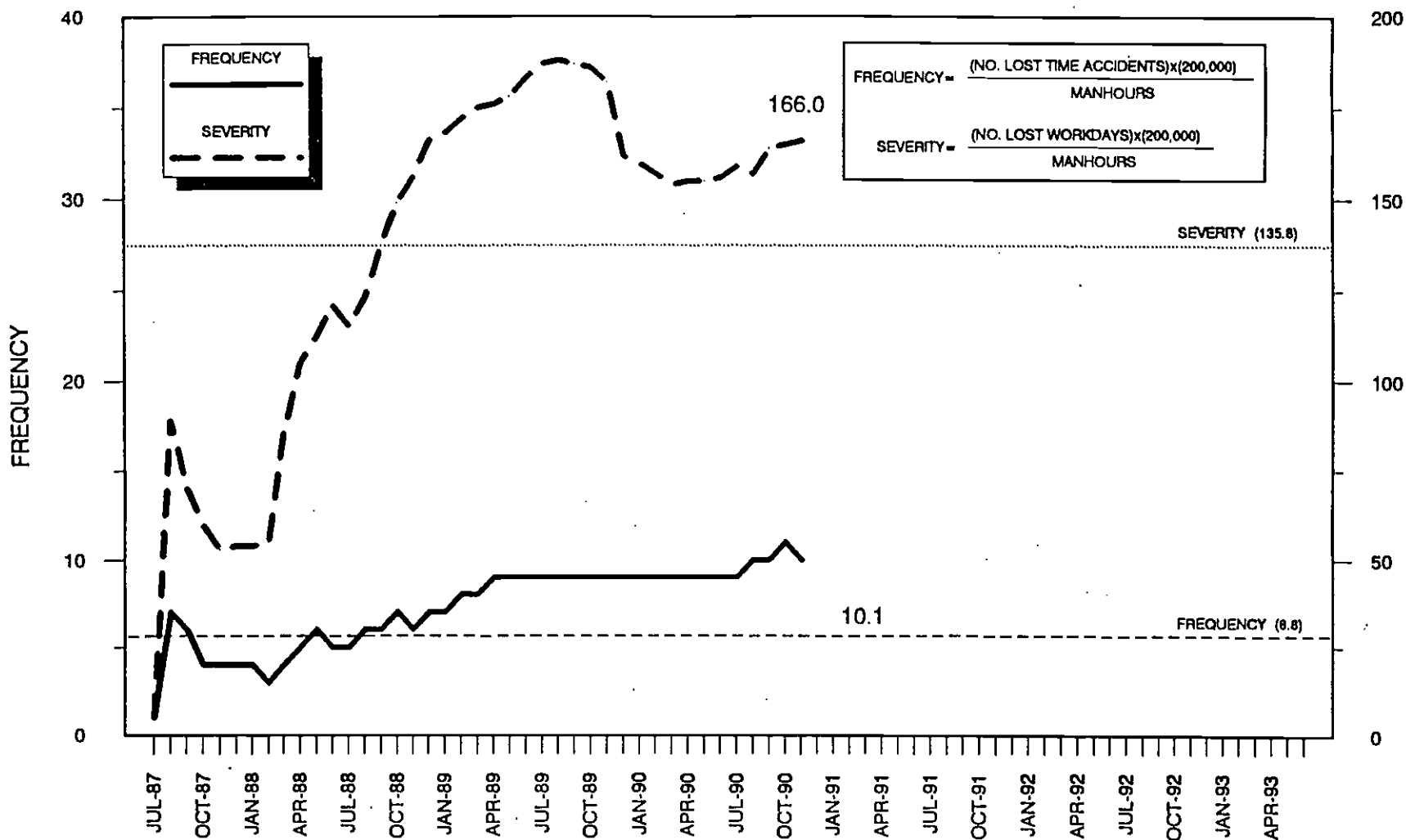


METRO RED LINE MOS-1 CASH FLOW



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





REDLINE PROJECT
FREQUENCY AND SEVERITY

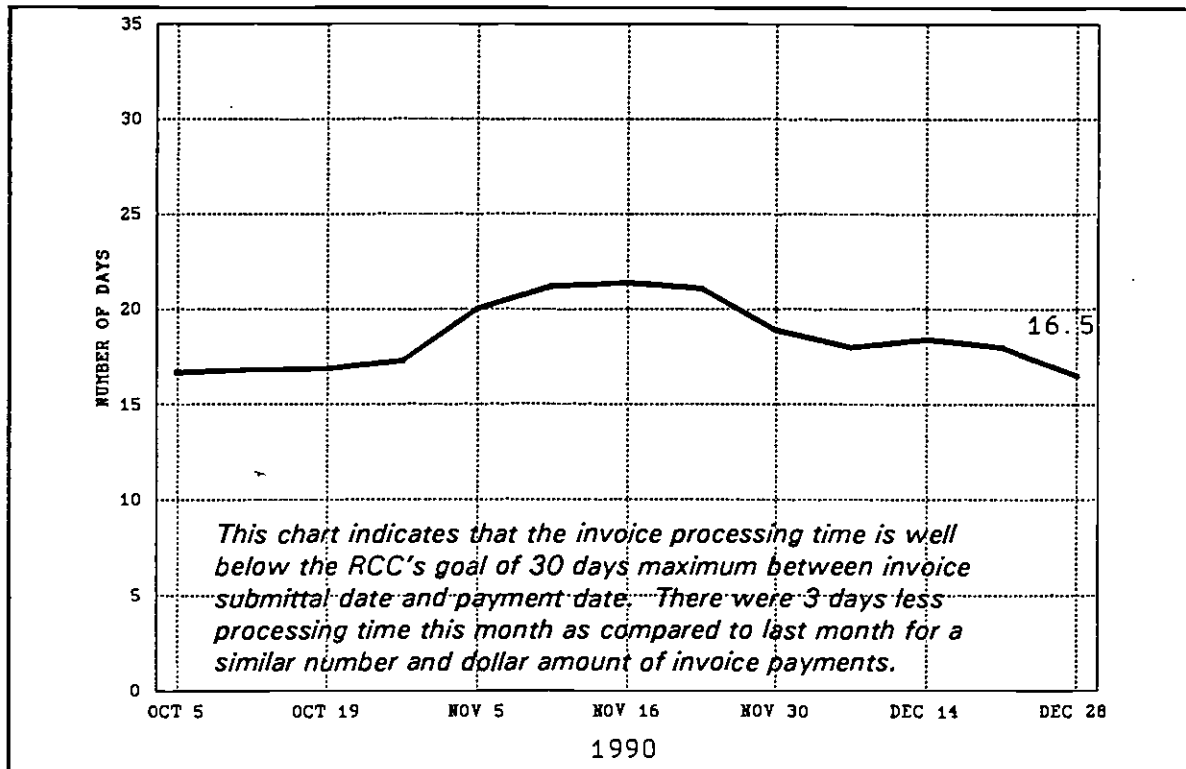
Total manhours as of November 1990: 7,233,143

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
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
12/07/90	8	4,569,319
12/14/90	15	7,581,545
12/21/90	14	7,801,858
12/28/90	7	1,716,301

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 \$57.9 million or 4% of the total forecast. The project commitments to date are \$70.1 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: the addition of a configuration management contract, schedule update revisions, and refined construction estimates.

The **Master Schedule** update with status through December 28, 1990, shows that the *project is currently on schedule.*

The overall MOS-2 **design** *is approximately 41% complete* versus the planned 45% completion. **Construction** *is scheduled to commence in February 1991.* Bids were opened for Wilshire/Western Station, Contract B231.

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. MacArthur Park Agreement

Concern: Completion of negotiations with the Department of Recreation and Parks prior to Contract B201 construction NTP.

Action: RCC to obtain approval from Parks Commission by January 28, 1991.

2. Bid Viability

Concern: The Engineer's Estimate has been less than bids received for two facilities construction contracts.

Action: Analysis has been initiated to determine if this trend has any effect on the construction budget.

MRTC
Project: R81

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

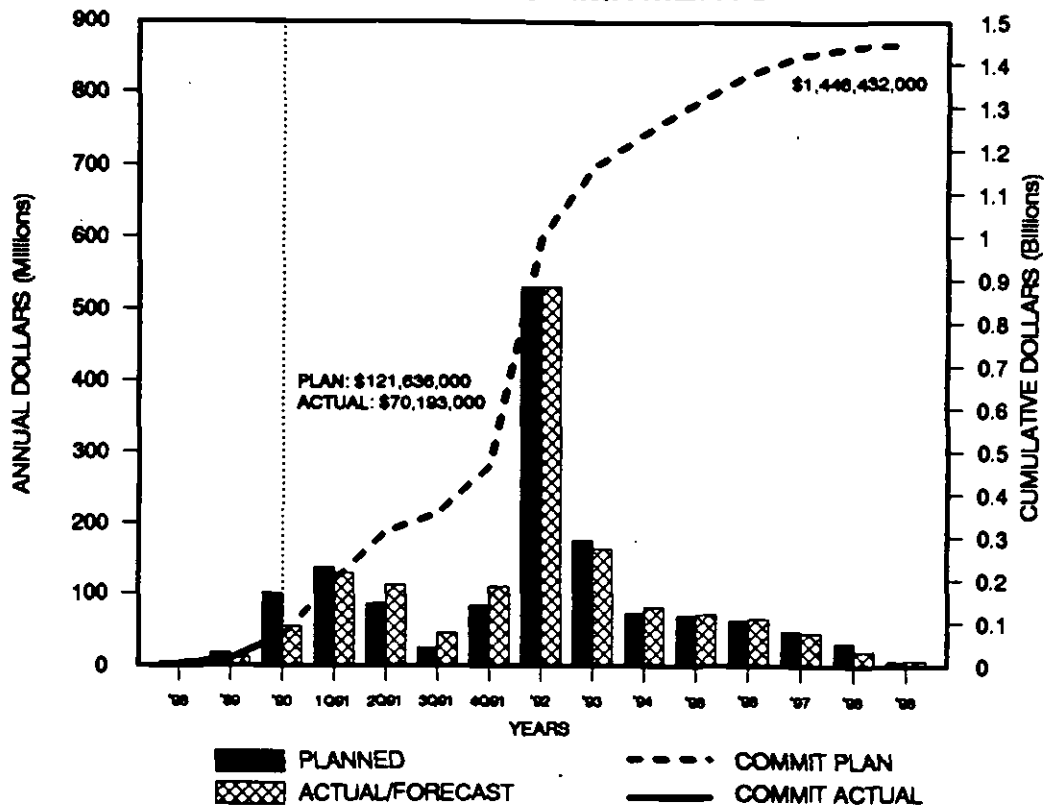
(\$ x 000's)

DESCRIPTION	-----Budget-----		----Authorized-- -for Expenditure-		---Commitments---		--Incurred Cost--		---Expenditures---		Current	
	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	893,000	918,566	0	2,946	61	3,074	7	1,701	7	1,701	927,148	8,582
S Professional Services	289,150	286,592	3,457	43,701	12,895	37,788	2,392	27,240	2,392	27,240	275,675	(10,917)
R Real Estate	79,827	76,734	6	11,633	14,455	29,117	14,281	28,931	14,281	28,931	72,338	(4,396)
F Utility Relocation	36,668	29,949	0	0	0	69	0	13	0	13	29,942	(7)
D Special Programs	2,044	2,047	30	60	90	90	26	26	26	26	2,047	0
C Project Reserve	145,743	132,544	0	0	0	0	0	0	0	0	139,277	6,733
A Project Revenue	0	0	0	0	0	0	0	0	0	0	0	0
Project Grand Total:	1,446,432	1,446,432	3,493	58,341	27,501	70,139	16,706	57,911	16,706	57,911	1,446,432	0
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

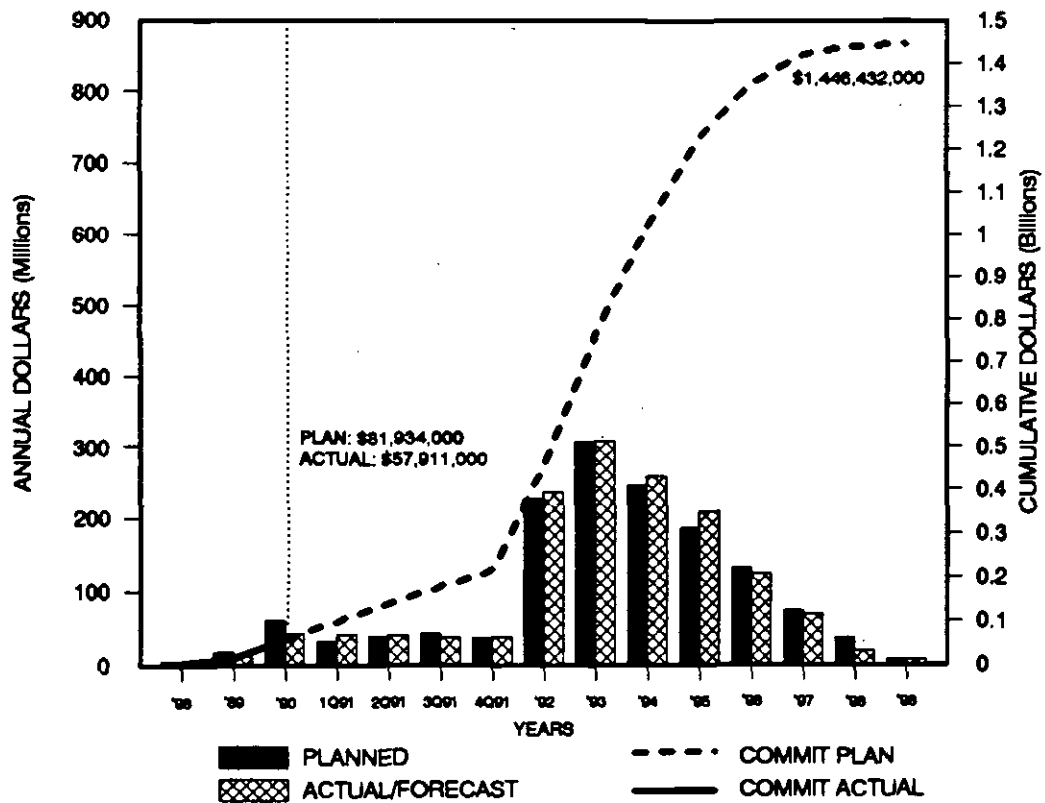
Original Budget = UMTA Full Funding Grant Agreement

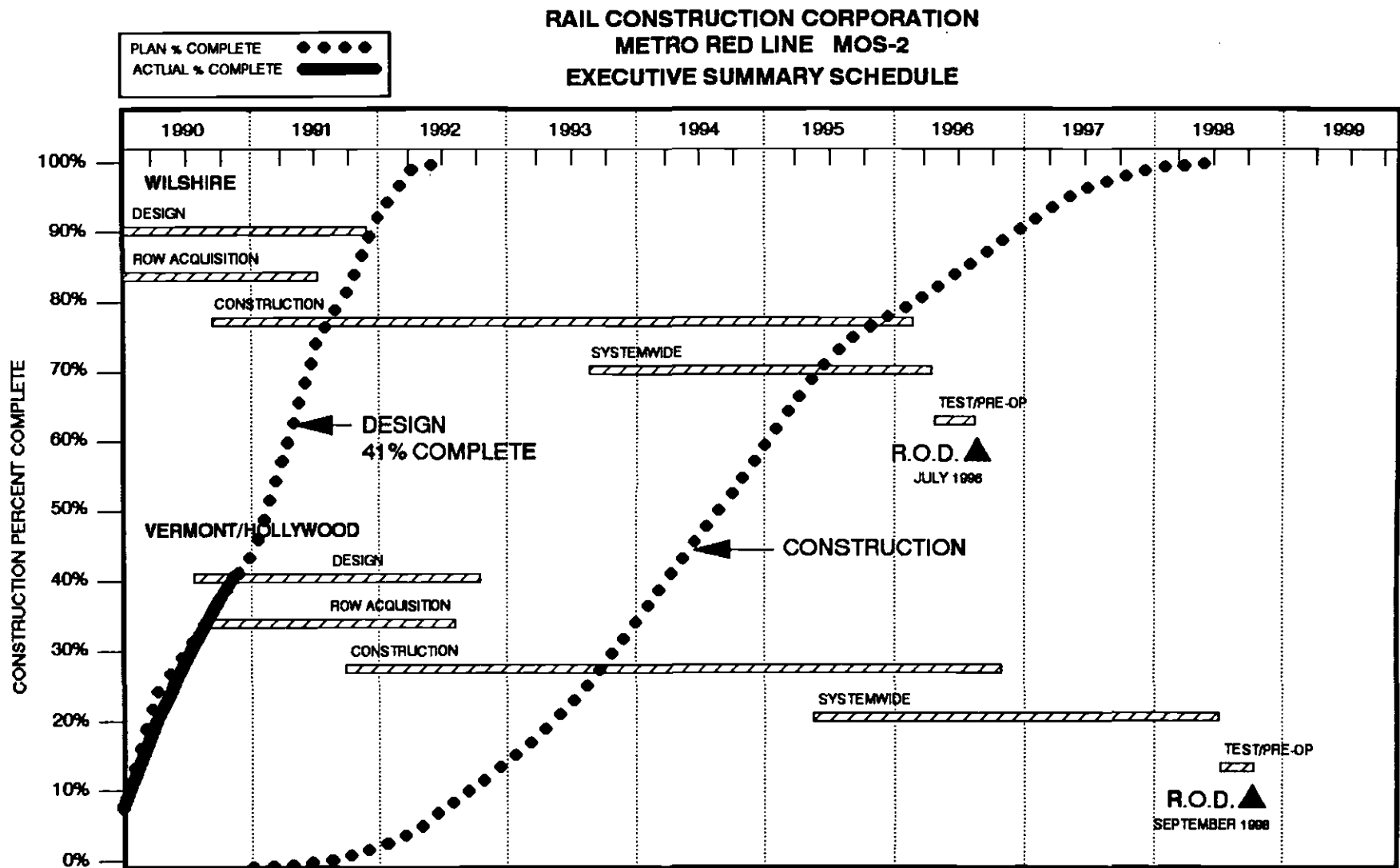
Current Budget = Original Budget & PBCR's (Project Budget Change Request)

PROJECT COMMITMENTS



PROJECT CASHFLOW





MOS-2 PROJECT STATUS / KEY EVENTS
TOTAL

1 YEAR OUTLOOK

DATA DATE: 31 DEC 90

			NOV 90		DEC		JAN 91	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
			PLAN	ACT	PLAN	ACT										
60% Design Submittal							1			1	3		1		3	1
85% Design Submittal			1	1						1	1	1	1	2	1	1
100% Design Submittal							1					1	1	2		3
TOTAL			1				2			2	4	1	3	4	4	5
CR Camera Ready					1	1	1	1							1	1
AD Advertise					1	1	1	1						1		
BD Bid Due			1	1	1	1		2		1						1
AW Award			1		1		1			2			1			
RE Real Estate					1	1	3			1	2	1			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.

This month Contract B221 documents were camera ready and advertised. Bids were due for Contract B231 and Real Estate was available. Contract B201 was planned to be awarded but will be awarded next month.

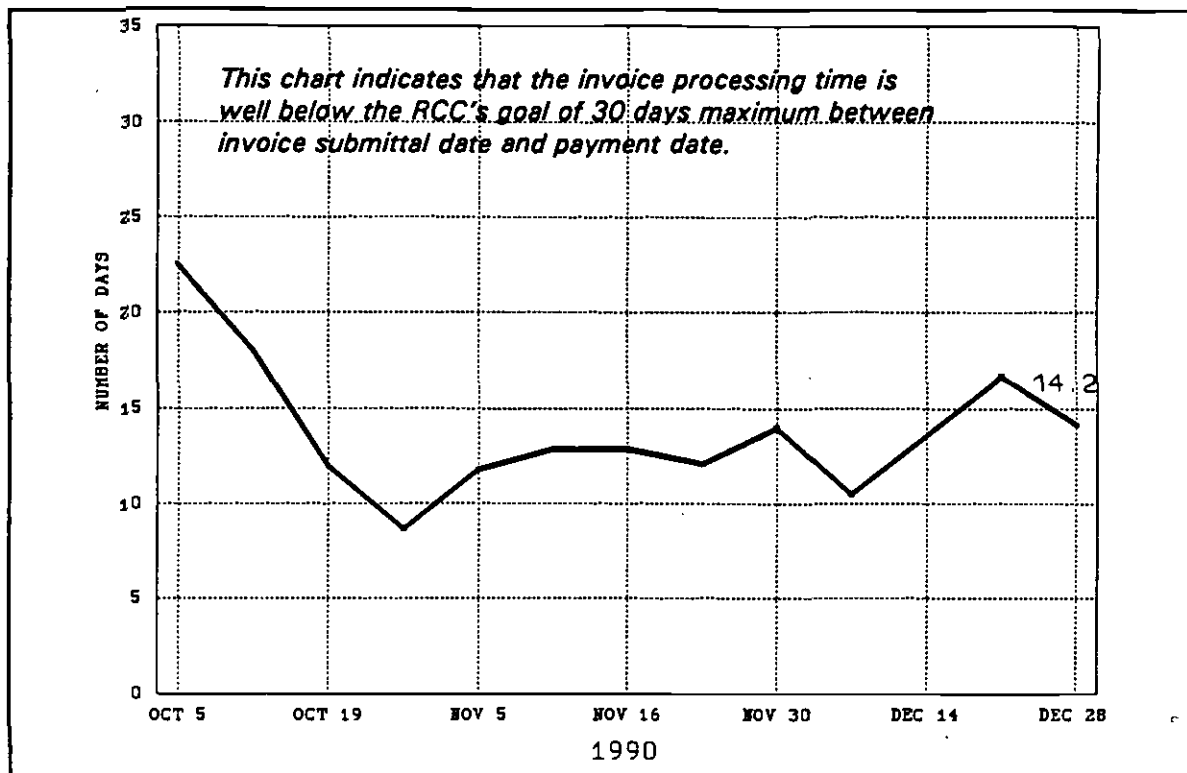
REAL ESTATE - STATUS SUMMARY

CCU	NO. OF PARCELS	NUMBER CERT'D	JUST APPROVED	COMPO MADE	OFFERS SIGNED	AGRMNT FILED	CONDEMN AVAIL	PARCELS NOT AVAIL	PARCELS CONSTRUCT NTP DATE
B201	5	5	3	2		2		5	02/25/91
B211	5	4	2	2	1		1	4	07/25/91
B218	1	1	1	1		1		1	01/10/91
B221	15	13	12	10	3		3	12	04/24/91
B231	3	3	1	2		2		3	02/11/91
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		1	6	06/04/92
B281	1	1						1	11/25/92
TOTAL	65	28	20	18	5	5	5	60	

During this month , Contract B219 was deleted and its real estate parcels assigned to Contracts B201 and B211. Four offers were made for Contract B221, Parcels B2-122, 147, 148, and 158. One agreement for Contract B221, Parcel B2-140, was signed.

The status of the 65 parcels required for Metro Red Line MOS-2 is as follows: 15 full takes, six partial takes, 42 subsurface easements, and two temporary construction easements.

**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
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
12/07/90	2	9,375
12/14/90	3	27,959
12/21/90	8	2,391,130
12/28/90	5	12,974