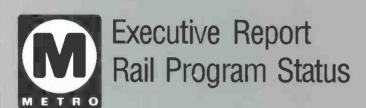
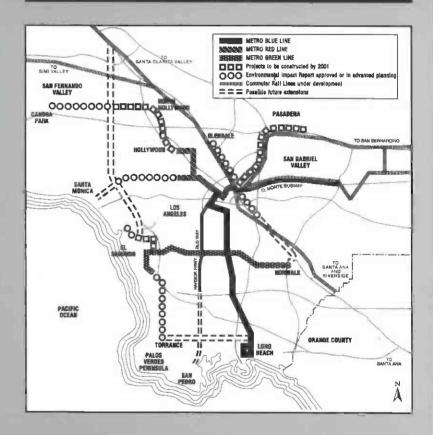
RAIL CONSTRUCTION CORPORATION







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 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. Measures continue to be taken to control and mitigate the forecasted overrun of the Metro Red Line MOS-1 project.

The number of unresolved change notices and changes over 30 days on the Metro Red Line MOS-1 increased due to the concentration on Stage II finish work activity. The total dollar value of executed change orders for the Metro Red Line MOS-1 increased by about one million dollars to \$51.8 million. There were 26 new change notices to the Metro Blue Line and the percent of unresolved change notices went down to 9% from 10% for the previous period. 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.

PROGRAM CASH FLOW

Through January 1991, total program expenditures for active projects is \$1,887,609,000. This is an increase of approximately \$24 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

(IN THOUSANDS)

	PROJECT: RO1,R23,R80,R81	(1)	(2)		(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL RAIL PROGRAM	•	BUDGET	FOR EXE	PENDITURE	COMMITMENTS		190	CURRED COST	EXI	PENO I TURES	FOR	RECAST
	OESCRIPTION	ORIGINAL	CURRENT	PERIOD	TO DATE	PER (OD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	CURRENT	(11-2) VARIANCE
	CONSTRUCTION	2,488,741	2,630,462	14,007	1,283,367	3,489	1,211,453	23,128	1,034,479	11,201	1,012,705	2,665,075	34,613
Figure	PROFESSIONAL SERVICES	913,373	1,020,334	3,457	553,036	2,711	681,220	6,725	632,501	7,072	610,535	1,066,614	46,280
-		245,664	298,469	751	187,006	18,005	226,030	17,944	210,897	17,944	207,030	302,846	4,377
	UTILITY/AGENCY FORCE ACCOUNTS	112,620	99, 408	0	64,487	547	73,155	1,076	62,836	1,077	62,198	99,231	(177)
	SPECIAL PROGRAMS	5,522	11,853	30	568	90	788	8	330	8	250	16,862	5,009
	PROJECT RESERVE	318,879	262,580	0	0	0	0	0	0	0	0	273,697	11,117
	PROJECT REVENUE	(18,115)	(46,503)	0	0	53	(471)	135	(3,415)	135	(5,109)	(51,603)	(5,100)
	GRAND TOTAL PROJECT	4,066,684	4,276,603	18,245	2,088,464	24,895	2,192,175	49,016	1,937,628	37,437	1,887,609	4,372,722	96,119

Page 2

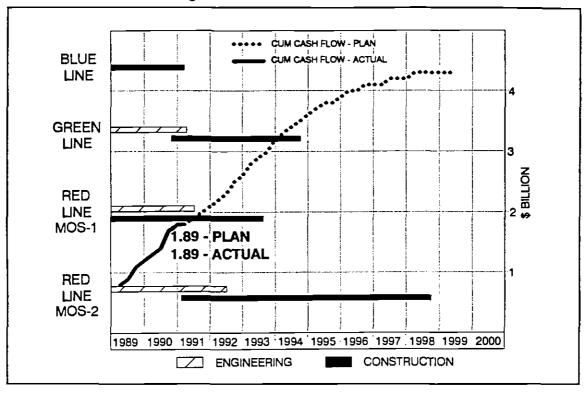


Figure 2 - Rail Construction Plan

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

		מאם			COST I					
	BLUE	LINE	GREEN			LINE	RED :		TOT	
	\$	%	\$	%	\$	_%	\$	%	\$	%
UHTA					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 HC-5 WORK (\$30)
- ** LRT PORTION INCLUDED IN SLUE LINE (RO1) 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 75 days behind schedule primarily because of slippage in the Vehicle Procurement (P1900) contract package. Alternative solutions are being considered to mitigate the schedule delay.

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

The Wilshire Segment of the Metro Red Line, MOS-2 is scheduled to begin Revenue Operations in July 1996, with the Vermont 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: 25 JAN 91 NOV 90 DEC JAN 91 FEB MAR MAY אטנ JUL AUG SEP OCT PLAN SACTE PLAN TACTE PLAN SACTE 60% Design Submitt 85% Design Submitt 100% Design Submitt 5.... - 2 <u>J</u>. 6 9 4 2 .4 TOTAL Comera Ready Advertise **Bid Due** Award RE Real Estate Notice to Proc MFG **Manufacturing** VS Vehicle Ship Delivery Finish FD Vehicle Testing Vehicle Arrival LIO Liquid. Milest. INT Interfc. Milest. Contract Complt.

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

Figure 4

REAL ESTATE ACQUISITIONS

To date, one hundred ninety-seven (197) real estate parcels have been identified as required for the Metro Red Line (MOS-1 and MOS-2) and the Metro Green Line. Of this total, eighty are not yet available for construction. Figure 5 summarizes the real estate status for each project.

Figure 5 - Real Estate Acquisition Status Summary

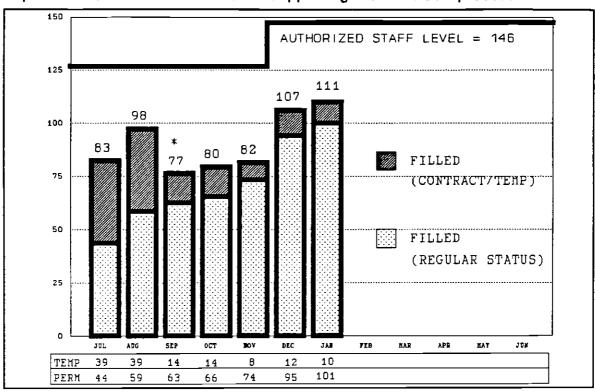
		DEAL E	STATE – ST TOTA		ATAILAN LATER I		
PROJECT	NO. OF	NUMBER CERT'D	JUST COMP	OFFERS MADE	CONDEM-	PARCELS AVAIL	PARCELS NOT AVAIL
GREEN	36	31	NA	NA	1	19	16
MOS-1	94	94	94	94	22	94	0
моѕ-2	67	27	22	22	4	3	64
TOTAL	197	152	116	116	27	116	80
PREVIOUS MONTH	195	153	114	112	30	113	79_

RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Authorized staff level for the RCC is one hundred forty-six (146). Presently, one hundred one (101) positions are filled with regular full time staff and ten (10) 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 24%, 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 still exceeds the corporate goal of 4%, but is an improvement from 6% for last month. Figure 7 illustrates the forecast figures for each project and for total program.

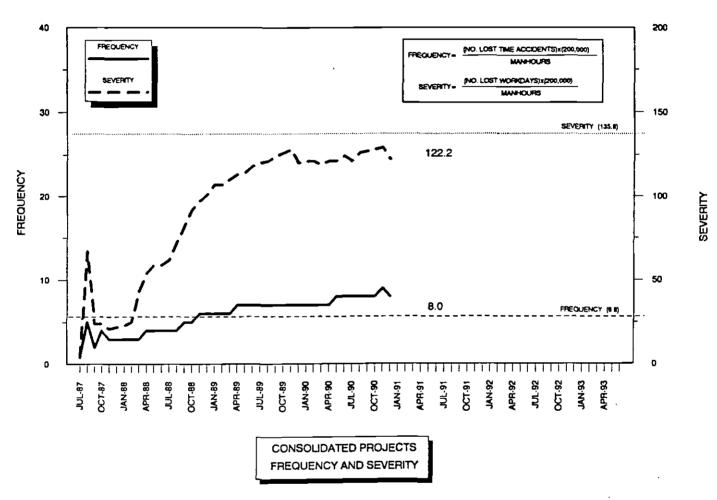
Figure 7

COST PERFORMANCE RELATIVE TO CORPORATE GOALS IN THOUSANDS

	METRO BLU	E LINE	METRO GRE	EN LINE	METRO RI	-	L	RED LINE	PROJECT 1	OTALS	CORPORATE
	201140-	DEDOENT	DOLLARS	DEDGENT	l	DS - 1		10S-2	2011425	0500505	
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	GOAL
CONSTRUCTION	657,487	75 %	410,822	69%	764,494	53%	952,895	66%	2,785,698	64%	
REAL ESTATE	55,592	6 %	37,796	6%	139,820	10%	72,338	5%	305,546	7%	
PROFESSIONAL SERVICES:											
ENGINEERING/DESIGN	69,587	8%	56,249	9%	215,511	15%	82,084	6 %	423,431	10%	
CONSTRUCTION MGMT.	91,642	10%	37,893	6%	138,100	10%	104,977	7%	372,612	9%	
STAFF	17,655	2%	19,760	3%	107,939	7%	56,166	4%	201,520	5%	4%
OTHER	14,222	2%	5,830	1%	948	0%	49,489	3%	70,489	2%	
SUBTOTAL	193,106	22%	119,732	20%	462,498	32%	292,716	20%	1,068,052	24%	20%
PROJECT RESERVE	963	0%	47,276	8%	83,207	6 %	133,583	9%	265,029	6%	
PROJECT REVENUE	(29,877)	-3%	(16,626)	-3%	0	0%	(5,100	-0%	(51,603	-1%	
GRAND TOTAL	877,271	100%	599,000	100%	1,450,019	100%	1,446,432	100%	4,372,722	100%	1

CONSTRUCTION SAFETY

Figure 8 shows the combined Construction Safety report for the Metro Blue Line and the Metro Red Line (MOS-1). It shows that the frequency of accidents and the severity of them is decreasing.

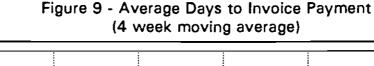


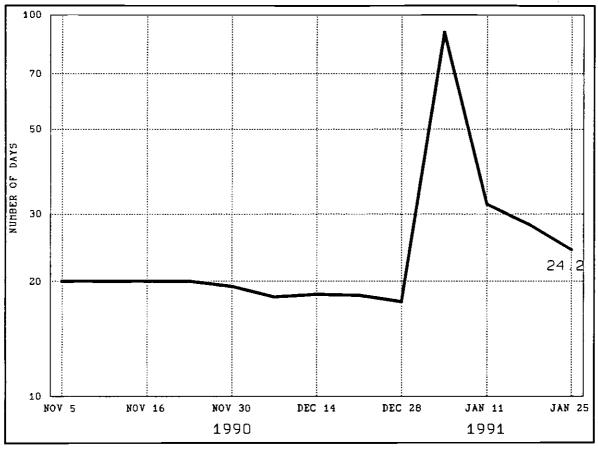
Total manhours as of December 1990: 12,530,487

Figure 8

INVOICE PROCESSING

Figure 9 illustrates the average time to payment by RCC for contractor invoices. The upward spike in the curve at the beginning of the year is the result of several Metro Blue Line invoices being settled which were more than a year overdue. Excluding these oddball items, invoices are still paid well within RCC's goal of 30 days between invoice submittal and issuance of check.





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 as recognized by TRANSCAL. This figure includes the MC-5 contracts valued at \$30,322,000.

Costs totalling \$787,044,129 (90% of the budget) have been incurred to date and \$830,597,413 (95% of the budget) has been committed during the same time period.

Construction progress through January 1991 was measured at 99.8% compared to the planned progress of 99.8%. Status of the remaining work is as follows:

Systems work in the station area of the Seventh and Flower location is nearing completion. All remaining work will be complete in support of the February 14, 1991 R.O.D.

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

(IN THOUSANDS)

PROJECT: RO1 METRO BLUE LINE	(1)	(2) BUDGET		(4) THOR1ZED KPENO1TURE	(5) C	(6) OMRITMENTS	(7) IN	(8)	(9) EX	(10) PEND1 TURES	(11) FO	(12) Recast
OESCRIPTION	ORIGINAL	CURRENT	PERIOD	TO DATE	PERIOD	TO OATE	PERIOD	TO DATE	PER I CO	TO DATE	CURRENT	(11-2) VARIANCE
CONSTRUCTION	497, 194	608,859	1,599	561,604	2,104	538,735	3,851	502,352	3,902	501,317	610,109	1,250
PROFESSIONAL SERVICES	121,494	186,778	0	164,820	355	177,068	355	177,066	351	174,667	186,778	0
REAL ESTATE	39,847	55,592	0	49,463	2,286	57,509	2286	57,222	2287	53,355	55,592	0
UTILITY/AGENCY FORCE ACCOUNTS	50,177	47,378	0	44,434	244	56,772	870	53,502	871	52,728	47,378	0
SPECIAL PROGRAMS	0	6,328	0	0	0	0	0	0	0	0	6,328	0
PROJECT RESERVE	64,129	2,213	0	0	0	0	0	0	0	0	963	(1,250)
PROJECT REVENUE	(1,489)	(29,877)	0	0	53	513	135	(3,098)	135	(3,098)	(29,877)	0
GRAND TOTAL PROJECT	771,352	877,271	1,599	820,321	5,042	830,597	7,497	787,044	7,546	778,969	877,271	0

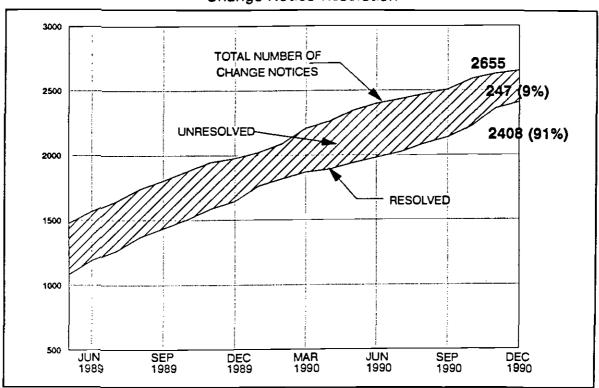
RAIL CONSTRUCTION CORPORATION PROJECT COST REPORT - METRO BLUE LINE (LIGHT RAIL PORTION) SUMMARY BY COST ELEMENT (IN THOUSANDS)

PROJECT: RO1 METRO BLUE LINE	(1) B	(2) UDGET		(4) HORIZED PENDITURE	(5) co	(6) MHITMENTS	(7) INC	(8)	(9) EXI	(10) PENDITURES	(11) FOI	(12) Recast
DESCRIPTION	ORIGINAL	CURRENT	PER 100	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	CURRENT	(11-2) VARIANCE
CONSTRUCTION	497,194	578,894	1,599	55 8,3 80	2,011	535,655	3,712	499,571	3,763	498,536	580,144	1,250
PROFESSIONAL SERVICES	121,494	183,458	0	164,820	355	177,068	355	177,066	351	174,667	183,458	0
REAL ESTATE	39,847	52,065	0	49,463	2,286	57,509	2,286	57,222	2,287	53,355	52,065	0
UTILITY/AGENCY FORCE ACCOUNTS	50,177	47,378	0	44,434	244	56,772	870	53,502	871	52,728	47,378	0
SPECIAL PROGRAMS	0	2,728	0	0	0	0	0	0	0	O	2,728	0
PROJECT RESERVE	64,129	1,713	0	0	o	0	0	0	0	0	463	(1,250)
PROJECT REVENUE	(1,489)	(19,287)	0	0	\$3	513	135	(3,098)	135	(3,098)	(19,287)	0
GRAND TOTAL PROJECT	771,352	846,949	1,599	817,097	4,949	827,517	7,358	784,263	7,407	776,188	846,949	0

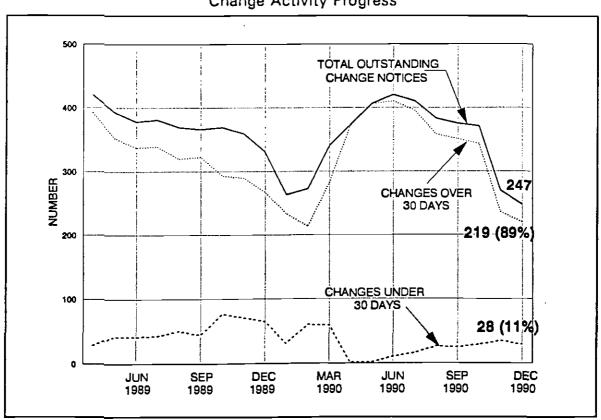
RAIL CONSTRUCTION CORPORATION PROJECT COST REPORT - METRO BLUE LINE (MC5 PDRTION) SUMMARY BY COST ELEMENT (IN THOUSANDS)

PROJECT: RH1	(t)	(2)		(4) THORIZED	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
MC5 RR RELOC.		BUDGET	FOR E	XPENDITURE	C	OMMITMENTS	IN.	INCURRED COST		PENDITURES	FO	RECAST
DESCRIPTION	ORIGINAL	CURRENT	PERIOD	TO DATE	PER 100	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	CURRENT	(11-2) VARIANCE
CONSTRUCTION	0	29,965	0	3,224	93	3,080	139	2,781	139	2,781	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	σ	σ	a
SPECIAL PROGRAMS	0	3,600	0	0	0	0	0	0	0	0	3,600	0
PROJECT RESERVE	0	500	0	0	0	D	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	0	3,224	93	3,080	139	2,781	139	2,781	30,322	0

Change Notice Resolution

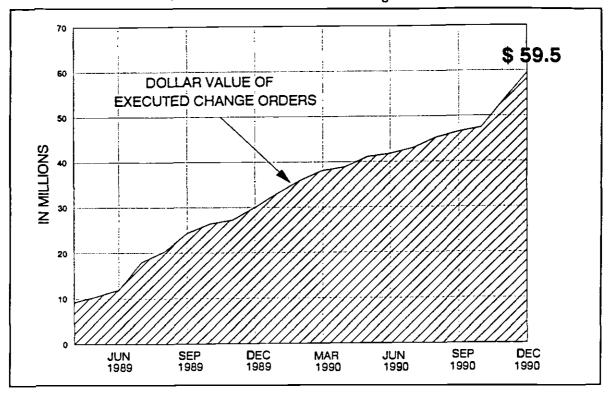


Change Activity Progress

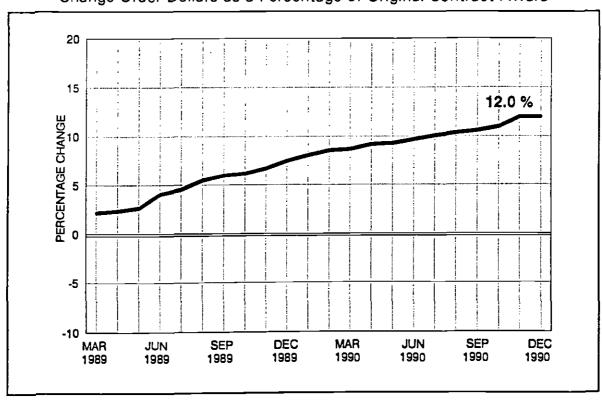


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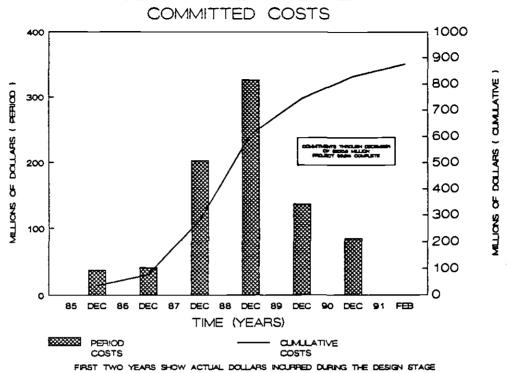
Total Value of Executed Change Orders



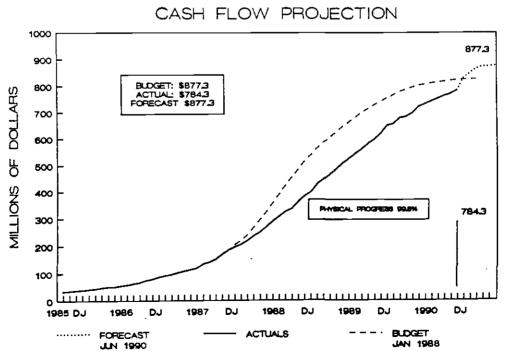
Change Order Dollars as a Percentage of Original Contract Award

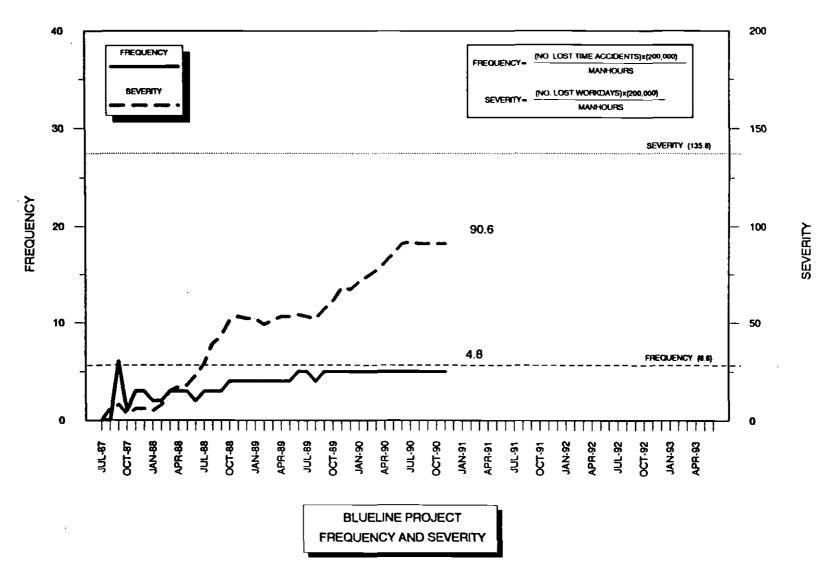


METRO BLUE LINE



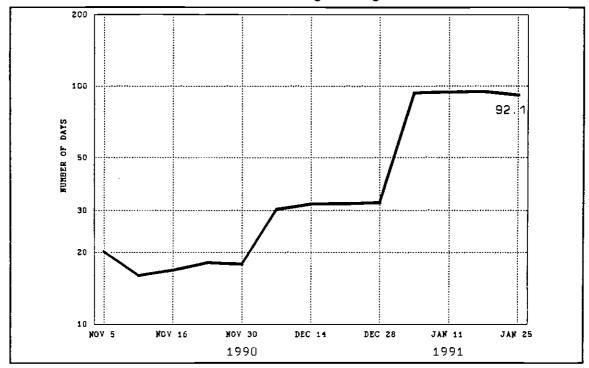
METRO BLUE LINE





METRO BLUE LINE JANUARY 1991

Average Days to Invoice Payment (4 Week Moving Average)



The jump in average days to invoice payment result from the settlement of six invoices that were more than 1 year overdue (value of about \$140,000). The following is a list of the actual number of invoices and dollar amounts of invoice payments for the past three months.

	Number	
	of	Invoice
Date	Invoices	Amount
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
12/07/90	2	539,890
12/14/90	13	2,847,683
12/21/90	14	3,241,195
12/28/90	8	410,862
01/04/91	14	161,323
01/11/91	7	1,559,214
01/18/91	4	207,987
01/25/91	8	1,906,058

EXECUTIVE SUMMARY

The LACTC Board is expected to add \$287 million to the budget to accommodate the North Coast Extension, a full maintenance yard and additional rail cars. The cashflow information indicates a total project expenditure of \$62.9 million, representing approximately 11% of the current total forecast of \$599 million. To date, the project commitments are \$123.8 million, about 21% of the total budget of \$599 million.

The design portion of the project is approximately 95% complete. The current schedule indicates that, except for the North Coast Extension, design will be complete by September 1991. All but four of the system-wide design contracts are scheduled to be complete by the end of March 1991.

The Master Schedule, with a status date of January 25, 1990, indicates that the project is 75 days behind schedule. Contract Package P1900, Vehicle Procurement, is driving the project Critical Path. The El Segundo segment continues to be on the secondary project 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 and Pre-Revenue Operations and Revenue Operations.

A ground breaking ceremony is scheduled for January 28, 1991 to kick off the Metro Green Line construction. 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 commenced in late January 1991. The RCC is scheduled to open bids for the Rose-crans/Aviation & Kramer Bridges contract (C0110) on January 30, 1991. The Elevated Guideway and Stations contract (C0100), which represents more than 30% of the total Metro Green Line Project construction costs, will be advertised on January 28, 1991. The anticipated NTP is May 15, 1991. Advertisement of the Yard & Shops contract (C0400), previously scheduled for late January 1991, has been delayed approximately one month.

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

The RCC purchased the right-of-way to AT&SF property for the Northrop Railroad spur and expects to purchase the right-of-way to the remaining AT&SF property shown on Exhibit "A" by the end of January 1991. This is a major milestone. Access to TRW property at Rosecrans Avenue is required now to relocate Chevron's oil line so that Rosecrans/Aviation Bridge foundation work can start on time. This utility relocation is on the critical path. Timely relocation of Four Corners oil line is also essential. RCC and SCE management must finalize an agreement regarding SCE's property at the Compton Station. Relocation of SCE power lines between Rosecrans/Aviation Bridge and Compton Station remains critical.

Planning and design are underway for the North Coast Segment to achieve an October 1994 Revenue Operations Date (ROD) coincident with the Norwalk-El Segundo portion of the project. Bechtel, as a subconsultant to Transcal II, is refining preliminary design data so that property acquisitions and utilities relocation can commence by early February 1991 - prior to design completion. Civil Construction from Aviation to LAX Lot C must start in September 1991 in order to meet ROD. Successful completion of the North Coast Segment requires maximum team effort and cooperation. RCC staff is being assisted by O'Brien-Kreitzberg, the Construction Management Consultant for the Green Line, in this fast track effort.

A \$215 million budget for the North Coast Extension was approved by the RCC Board. The design and construction of the 3.0 mile segment from Aviation to Westchester Station must be fast tracked to meet the October 1994 ROD. Third Party Utility Relocations and Property Acquisitions must start immediately to meet schedule and to start foundation construction in September 1991.

To date there have been no reported safety incidents; 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 Southern California

Edison (SCE) approval for the Metro Green Line to operate as a trolley (LRT) as opposed to a railroad. This approval would eliminate the need to

raise power lines at the Hawthorne Yard and Compton Station areas.

Action: On January 10, 1991, SCE informed the RCC that the Metro Green Line

project could operate as a trolley (LRT) rather than a railroad. This concern

is now closed.

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: On January 10, 1991, the AT&SF signed an agreement with the RCC for

right-of entry to their property at Lairport. A second agreement for entry into other AT&SF railroad property needed for construction of the El Segundo segment is scheduled to be signed on January 30, 1991. 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. None of the above comments are relevant to the North Coast Segment, where real estate

discussions have just begun.

3. Caltrans Rail Access Dates

Concern:

The completion of Caltrans design packages and the start of Century Freeway construction continues to slip without any adjustments to 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 to identify accurate access dates. In January a meeting with upper level Caltrans management took place to discuss actions required to guarantee rail access dates for each of the Caltrans contracts. Further meetings should be arranged to discuss implementation of these corrective actions. After the dates have been agreed upon by Caltrans and the Metro Green Line staff OKA will perform an analysis to determine the effect on the overall project schedule.

4. Finalization of Overall Project Scope

Concern:

The RCC must make a decision regarding vehicle fleet size and the full Hawthorne Yard and Shop construction contract. Both issues have major budget and schedule implications.

Action:

The above issues were addressed by the LACTC Board on December 19, 1990 and will be presented to the RCC Board in January.

5. Kramer Property Hazardous Waste

Concern:

The RCC is awaiting soils test results to determine the methodology for disposing of hazardous materials on the Kramer property. SCE utility relocations and Kramer Bridge construction will be impacted by this pending decision.

Action:

In January the RCC sent a letter to the state Department of Health and Services (DHS) outlining the proposed methodology for the Kramer Bridge construction. If deemed necessary by the DHS they will set up meetings with the RCC to resolve any outstanding issues. The El Segundo Segmental Bridge Contract (C0110) was advertised on November 30 1990, with bid opening scheduled for January 30, 1991 and an NTP of April 1991.

6. System Testing

Concern:

In general, design 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 the critical timing involved with the testing procedures and remedies.

Action:

All systems contracts should have new CSI format sections entitled, "Facility Start Up/Commissioning," Section 01650, which covers integrated testing requirements; Systems Start-Up, Section 01655; Testing, Adjusting, and Balancing of Systems, Section 01660; as well as Systems Demonstrations, Section 01670. During the review of the various systems contracts, OKA will comment on what sections they feel should be included in each specification section.

7. Vehicle Delivery Schedule

Concern:

When the baseline Project Master Schedule was established in December 1989, the first LRV was to be delivered to the site in December 1992. 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 to the point that the overall systems integration and testing period has been compressed to less than three months. 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 took place in January to pursue workarounds to increase the amount of overall testing and systems integration and still meet the project ROD of October 1994. Further meetings are required to determine methods to mitigate delays due to late vehicle delivery.

8. 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 plan for Caltrans construction contractors to construct the rail medium for the Century Freeway may have to be abandoned. The alternative may be to establish a new contract package to build the rail facilities in the Century Freeway after Caltrans construction is complete and construction contractors have demobilized. This alternative is inherently problematic in that there may be two contractors working within the same freeway Right-of-way, each under separate direction and management. The unanticipated increase in design packaging requirements of this alternative will significantly increase costs, construction time and claims, as well as the burden of administrative 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. Transcal II, in conjunction with the RCC and OKA is endeavoring to reschedule the completion of Caltrans design packages in order to meet current construction requirements.

Page: 1 Report Date: 02/05/91 Status Date: 01/25/91

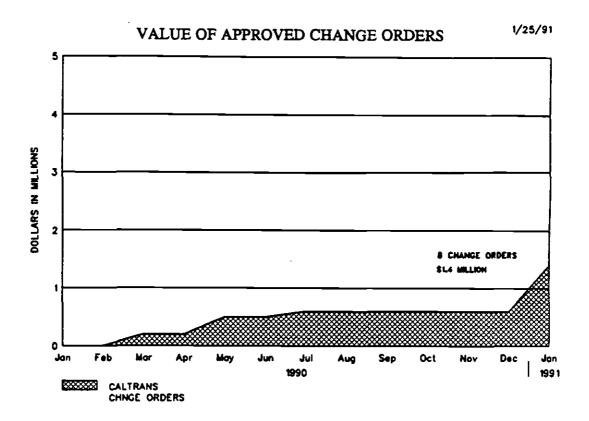
O'BRIEN-KREITZBERG

CBE
Project: R25
Period: 12/29/90 to 12/25/91

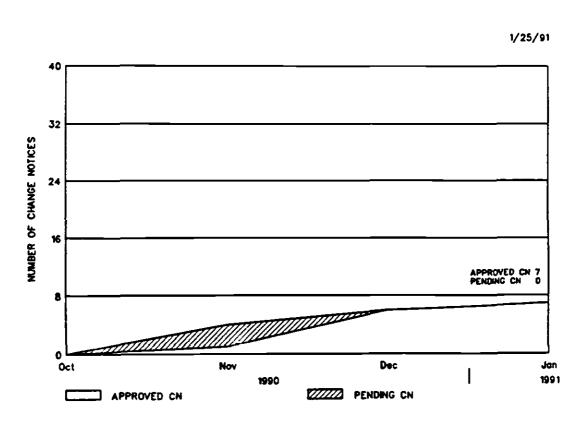
L.A. COUNTY TRANSPORTATION COMMISSION METRO GREEN LINE Project Coat by Element

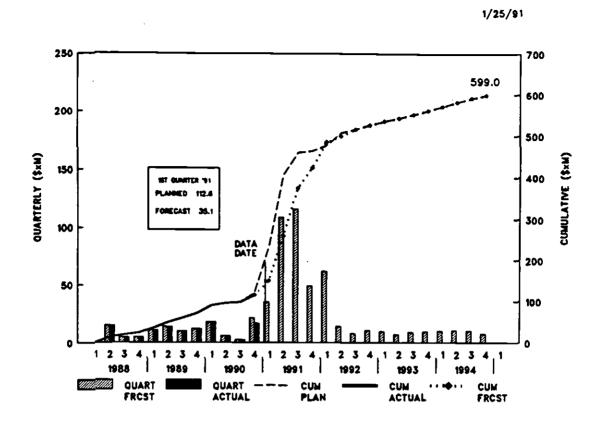
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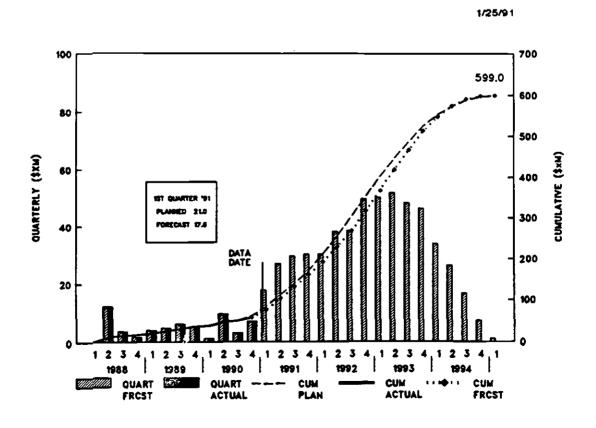
		Budg	et	Author		Count t	mersta	Incurre	d Coat	Expand	itures	Current	
	<u>Description</u>	<u>Original</u>	_Output (2)	for Expe Per lod	To Date	Period (5)	To Date (6)	Per fod	<u>To Dute</u> (E)	Period	<u>To Dete</u> [10]	forecast [11]	Yet lence
t	Construction	404,267	404,267	0	26,451	3,690	31,644	369	17,890	985	13,658	403,166	(1,101)
\$	Professional Services	110,295	110,295	0	32,695	4,694	80,018	3,141	44,736	4,211	39,900	117,202	6,907
R	Real Extate	35,096	35,096	0	10,759	0	9,807	0	9,284	0	9,255	37,796	2,700
F	Utility/Agency Force Accounts	7,656	7,656	0	7,091	182	3,250	30	353	30	4.56	7,656	0
0	Special Programs	2,530	2,530	0	0	0	100	. 0	80	0	0	2,530	0 .
c	Project Reserve	95,782	55,762	0	0	0	0	0	0	0	0	47,276	(8,506)
A	Project Revenue	(16,626)	(16,626)	0	0	(48)	(1,052)	(48)	(365)	(48)	(365)	(16,626)	0
	Project Brand Total 1	599,000	599,000		76,995	6.517	123.767	3.492	71.979	5.178		599,000	



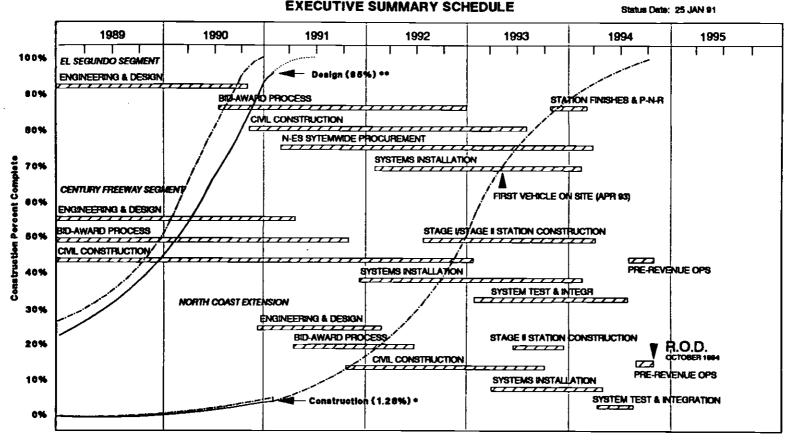
CHANGE ORDER RESOLUTION







RAIL CONSTRUCTION CORPORATION METRO GREEN LINE



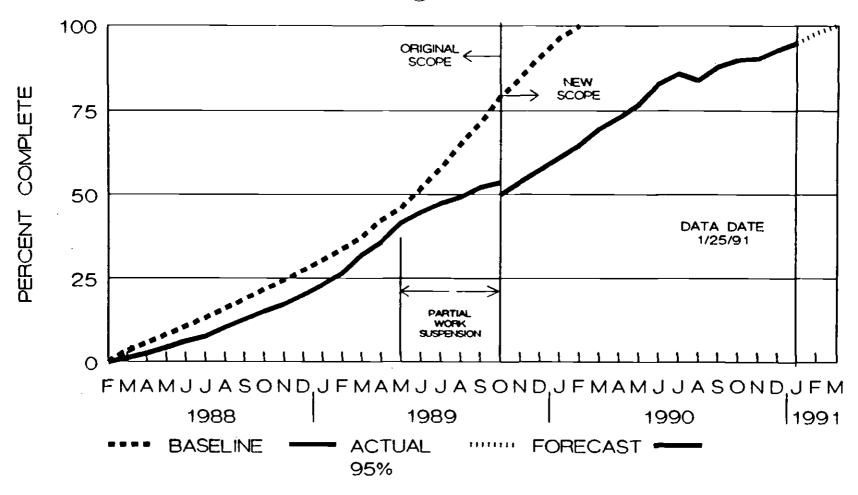
Note(s):

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

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

đ

TRANSCAL II DESIGN ENGINEERING **Progress Curve



***Excludes Administrative Level of Effort Activities**

FILE: IRCPROG

GREEN LINE PROJECT SCHEDULE STATUS / KEY EVENTS

R23 90/91

1 YEAR OUTLOOK

DATA DATE: 25 JAN 91

·	19	90						1991	-		_		
	Nov	Dec	Ja	1	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	Act	Act	Pin	Act	Pin	Pin	Pin	Pin	Pin	Pin	Pin	Pin	Pin
60% Design Submittal													
85% Design Submittal	1	1			i								
100% Design Submittal	2	2	3	1	1								
CR Camera Ready	2		2	2	4	4	2	1	1			1	
AD Advertise	2	1	1	1	3	2	1	(800,000,000,000,000)			2	160011686.4686.466	1 (1000)
BD Bid Due			1	1		2	3					2	
AW Award	2	1			2	1			1	2	1	2	1
RE Real Estate													
NTP Construction	2	5 .00000.000000.00000	1		.0010700000197-600.	1	200000-00000000000000000000000000000000	2	1	1	1	2	1
MFG Veh. Mfg. NTP													
VT Vehicle Testing													
VA Vehicle Arrival													
LIQ Liquid. Milest.	P. 1981 B. 1869 B. 1860 B. 186		1		pensaattiinet	1987,831,111,231,8388	00.0000.00048.00004	: s.u.: :::ensessessess);		106,000,000,000 			
CC Contract Complt.									1				
						:							

^{1.)} REPORT REFLECTS ONLY CONTRACT PACKAGES FOR MAJOR SYSTEMS.

123-RPT4.WK1-JC

^{2.)} CONSTRUCTION PROGRESS BASED ON LRT WORK ONLY.

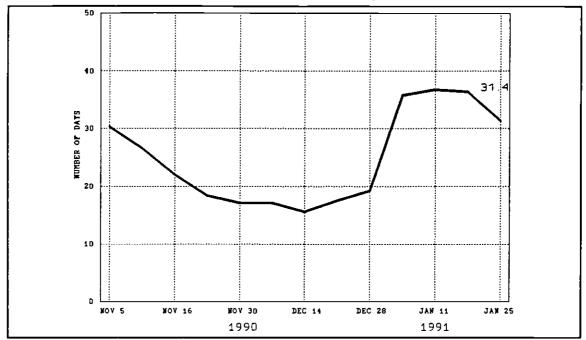
Real Estate - Status Summary

CCU	NO. OF	NUMBER	JUST COMP	OFFERS	AGREEMENT	CONDEM-	PARCELS	PARCELS	CONSTRUCT
	PARCELS	CERT'D	APPROVED	MADE	SIGNED	NATION	AVAIL.	NOT AVAIL	NTP DATE
C100	10	8	N/A	N/A	N/A	1		9	05/15/91
C101	18*	18	N/A	N/A	N/A	0	16	2	11/26/91
C110	4	4	N/A	N/A	N/A		1	3	04/01/91
C400 TOTAL	4 36	4 31	N/A N/A	N/A N/A	N/A N/A	1	2 19	2 16	04/30/91

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 jad 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 average invoice processing time increased substantially at the beginning of the month because of the effect of three invoices which were held for amendment. The following is a list of the actual number of invoices and dollar amounts of invoice payments for the past three months.

	Number	
Invoice	of	
Amount	Invoices	Date
\$ 464,040	4	11/02/90
0	0	11/09/90
361,506	2	11/16/90
2,301	1	11/23/90
5,896	1	11/30/90
0	0	12/07/90
1,546,425	5	12/14/90
337,574	1	12/21/90
0	0	12/28/90
89,566	3	01/04/91
1,161,124	3	01/11/91
9,412	1	01/18/91
3,848,126	3	01/25/91

EXECUTIVE SUMMARY

As of January 25, 1991, the MOS-1 Revenue Operations Date (ROD) remains September 1993. The Project critical path is dependent on trackwork access. All tunnel and station contracts must complete their work in the trackbed area to enable the trackwork contractor (Contract A610) to place the second level concrete, and lay the rail. Contract A130, Yard Leads and Transfer Zone is the latest contract to achieve partial trackwork access, leaving only the AL fire tunnel, and the crossover at Contract A175, Wilshire/Alvarado Station. The Contract A130 AL tunnel construction is proceeding as scheduled and will no longer be a factor as a potential impact to the ROD.

Schedule improvement continued to be a major activity during January. 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 Installation, and A710, Escalators and Elevators, continued to work toward the February 14, 1991, opening of the Blue Line Station at 7th and Flower.

Contract A610, Trackwork, started laying rail in the AR tunnel on January 16, 1991. 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 74% complete versus a plan of 76%.

The original MOS-1 baseline budget was \$1,249,900,000. The current forecast is \$1,450,019,000. Current contingency for MOS-1 is listed in the Revision 7G financial plan at \$83 million.

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.

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 delayed tunnel construction which may

ultimately delay access to the trackwork contractor.

Action: Direction to complete tunnel reconstruction and proceed with

> tunnel completion in order to meet a February 16, 1991, turnover to the trackwork contractor is on schedule. 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 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.

Action: After an in-depth analysis, PDCD has determined that any

existing tunnel variance will not impact the dynamic envelope.

PDCD will continue to evaluate the tunnel alignment.

3. Contract A146, Line Section 5th/Hill Station to 7th/Flower Station

Certain portions of the tunnel alignment are in conflict with the Concern:

dynamic envelope.

Action: PDCD has determined that two approaches are required for

> Modification of the walkway, and resolution of this issue:

modification of the tunnel liner.

modifications being Walkway are reviewed

Fire/Life/Safety Committee with approval to proceed anticipated

in February.

AREAS OF CONCERN (CON'T)

The tunnel liner modifications are being reviewed by MRTC. Work on both areas must be complete by April 15, 1991, to avoid schedule impact.

Concern:

The Contract A146 Field Office is currently leasing a site located at the corner of 1st./Hill. The site lease expires March 1, 1991. In order to avoid a substantial rent increase, the site must be vacated and restored to its original condition before March 1.

Action:

PDCD is working with the contractor on a daily basis to meet the March 1 deadline.

4. 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.

Work is on schedule to meet the February 14, 1991, date.

5. Contract A650, Vehicles

Concern:

A potential 5-month late delivery of the vehicles to Los Angeles could impact the system testing and 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.

the quarterly review meeting in really.

AREAS OF CONCERN (CON'T)

6. Cost Management

Concern: Based on current forecast information, all contract

Authorizations For Expenditure (AFE) amounts need to be

increased.

Action: RCC Program Management is preparing RCC Board action

implementation.

7. Contract A610, Trackwork Installation, Yard Storage Area

Contract A612, Contact Rail

Contract A620, Automatic Train Control

Contract A631, Traction Power Installation

Concern: Many problems exist including rail welds, contact rail end

approaches, roads, conduit stub ups, junction boxes, and

switch machines.

Action: Quantify and identify the cause of the various problems,

develop solutions, and carry out corrective work. Augment

yard staff to ensure all items are completed.

8. Actions to Maintain the Early ROD

Concern: Delays experienced by A610 must be mitigated to maintain the

September 1993 ROD with the float for the early ROD. Other System Contractors A620/A631/A640 require resequencing/ change of milestone dates to achieve the early ROD of June 1993. Also, possibility exists that facility contract delays may

impact an accelerated contractor.

Action: Complete the change order for A610. Develop strategy and

negotiate with A620/A631/A640 to obtain commitment to new dates. Management attention placed on meeting all scheduled

facility turnover dates.

AREAS OF CONCERN (CON'T)

9. Stage II Contracts

Concern: Timely incorporation of as-built conditions from Stage I

construction into Stage II contracts.

Action: In process of mobilizing a design/construction team to

incorporate as-built conditions from Stage I construction into

Stage II contracts.

10. Contract A147, Civic Center Station, Stage II

Contract A157, 5th/Hill Station, Stage II

Contract A187, Wilshire/Alvarado Station, Stage II

Concern: The Stage I/Stage II Systems, electrical, and HVAC interfaces

problems need to be resolved.

Action: PDCD and MRTC engineering staff are working towards

problem resolution.

KEY ACTIVITIES - JANUARY

- Resolved yard junction box installation problems at Contract A620, Automatic Train Control.
- Completed installation and testing of CCTV, radio, P.A., gas, fire and emergency management subsystems at the 7th/Flower Station in anticipation of LRT early activation for Contract A640, Communications.
- Initiated testing of ventilation power, controls and fans for the LRT portion of the station at Contract A167, 7th/Flower Station, Stage II.
- Developed a survey, and implemented corrective action in the tunnel inverts and station inverts to enable the trackwork contractor to proceed with his work. A plan has been developed to mitigate the effects of late access to stations and tunnels.

KEY ACTIVITIES - PLAN FOR FEBRUARY

- Assess and provide resolution to the electrical and HVAC misalignment at the interface between Contract A157, 5th/Hill Station, Stage II, and Contract A631, Traction Power Installation.
- Continue working with RCC, and LRT consultants to ensure a timely completion of construction, integrated testing, and safety certification to meet the February 14, 1991, opening of the 7th/Flower LRT Station.
- Initiate shutdown of dewatering pumps for Contracts A130, Yard Leads and Transfer Zone; Contract A135, Union Station, Stage I; and Contract A141, Line Section, Union Station to 5th/Hill Station and Civic Center Station on February 15, 1991.
- Continue closing-up Union Station shaft, and vacating project staff site (parcel A1-047), on Contract A141 Line Section, Union Station to 5th/Hill and Civic Center Station.

STATUS DATE : JANUARY 31, 1991

STATUS PERIOD: JANUARY 1, 1991 TO JANUARY 31, 1991

LOS ANGELES COUNTY TRANSPORTATION COMMISSION

PROJECT COST REPORT
Cost by Element
(\$000)

PROJECT: METRO RAIL RED LINE MOS-1

	BUC	OGET	AUTHO FOR EXPE	RIZED NOTURE	СОММІТ	MENTS	INCURR	ED COST	EXPEND	ITURES	CURRENT FORECAST	VARIANCE
DESCRIPTION	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE	PERIOD (5)	TO DATE	PERIOD (7)	TO DATE	PERIOD (9)	TO DATE (10)		(11~2) (12)
T CONSTRUCTION	694,280	698,770	0	692.366	1.292	641,628	17,800	512.542	6,904	496,671	730,483	31,713
S PROFESSIONAL SERVICES	392,434	436,669	0	311,819	829	390,503	1.595	383.457	1,516	369,795	481,308	44,637
R REAL ESTATE	90,894	131,047	745	115,151	745	115,151	745	115,151	745	115,151	139,820	8,773
F UTILITY/AGENCY FORCE ACCOUNT	18,119	14,425	0	12,962	0	12,962	183	8,992	183	8,992	14,255	(170
D SPECIAL PROJECTS	948	948	0	508	0	508	1	217	1	217	948	0
C PROJECT RESERVE	53,225	72,041	0	0	0	0	0	O	0	0	83,207	11,166
A PROJECT REVENUE	0	0	0	0	0	0	O	0	0	(1,694) [#]	0	0
GRAND TOTAL PROJECT	1,249,900	1,353,900	745	1,132,806	2,866	1,160,752	20 ,324	1,020,359	9,349	989,132	1,450,019	96,119

ORIGINAL BUDGET - THE ORIGINAL BUDGET AS ESTABLISHED BY THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT (S C R T D) AND INCORPORATED INTO THE FULL FUNDING GRANT AGREEMENT ENTERED INTO WITH THE URBAN MASS TRANSIT ADMINISTRATION.

CURRENT BUDGET - THE 9 C R T D'S FORECASTED COST AT COMPLETION WHEN LACT C ASSUMED THE MANAGEMENT RESPONSIBILITY FOR THE PROJECT ON JULY 1,1990.

AUTHORIZED FOR EXPENDITURE (A F E) - THE MAXIMUM AMOUNT OF FUNDS AUTHORIZED FOR EXPENDITURE BY THE SCRTD AND LACTO FOR EACH CONTRACT OR WORK ORDER.

COMMITMENTS - THE TOTAL OF ACTUAL CONTRACT AWARDS, EXECUTED CHANGE ORDERS OR AMENDMENTS. APPROVED WORK ORDERS OF MASTER COOPERATIVE AGREEMENTS, OFFERS ACCEPTED FOR PURCHASE OF REAL ESTATE, AND OTHER RCC/LACTC ACTIONS WHICH WILL RESULT IN SPECIFIC EXPENDITURES AT A FUTURE TIME.

INCURRED COST - THE TOTAL VALUE OF WORK PERFORMED TO DATE, OF SERVICES RECEIVED, AND OF ACQUIRED MATERIALS OR PROPERTIES.

EXPENDITURES - THE TOTAL DOLLAR AMOUNT OF CHECKS CUT BY LACTO'S ACCOUNTING DEPARTMENT FOR CONTRACTOR OR CONSULTANT INVOICES, THIRD PARTY INVOICES, STAFF SALARIES, AND CLOSING PAYMENTS FOR ESCROW ACCOUNTS.

CURRENT FORECAST - THE BEST ESTIMATE OF THE FINAL COST OF THE PROJECT WHEN ALL CHECKS HAVE BEEN ISSUED AND THE PROJECT IS CLOSED OUT.

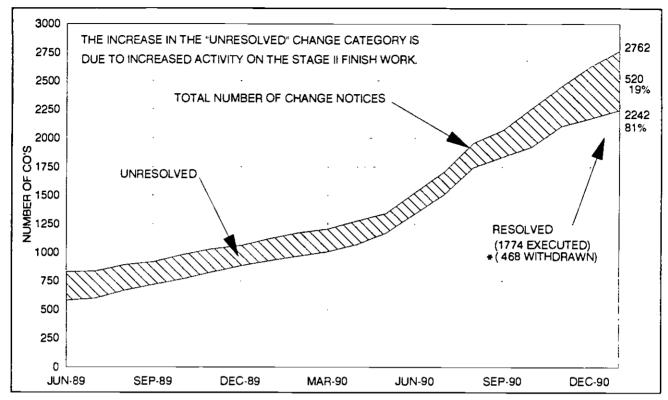
VARIANCE - THE DIFFERENCE BETWEEN THE CURRENT FORECAST AND THE AND THE CURRENT BUDGET. A POSITIVE FORECAST INDICATES A PROJECTED COST OVERRUN WHILE A NEGATIVE VARIANCE INDICATES A PROJECTED COST UNDERRUN.

^{*} REPRESENTS LEASE REVENUES RECEIVED BY RCC AT EARLY STAGES OF REAL ESTATE.

STATUS OF FUNDS BY SOURCE

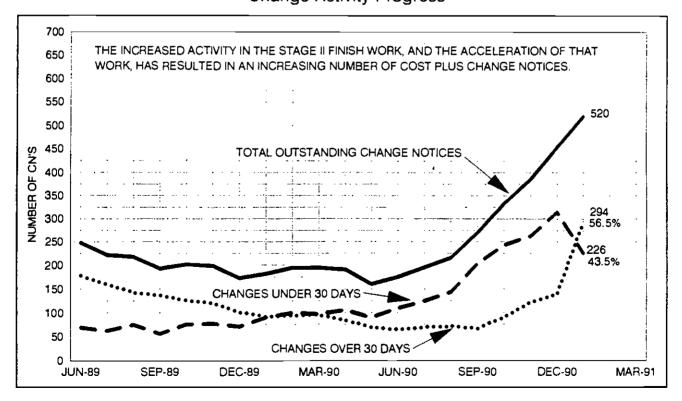
	TOTAL ANTICIPATED	TOTAL FUNDS	OBLIGATIO	NS	EXPENDITUR	ES	BILLED TO SO	URCE
SOURCE	FUNDS	RECEIVED	\$	%	\$	96	\$	96
UMTA-SECTION 3	\$805 300 000	\$605 299 997	\$575 904 650	95%	\$489 247 937	81%	\$431 198 636	719
UMTA-SECTION 9	\$90 583 720	\$90 583 720	\$87 792 800	97%	\$85 291 764	94%	\$76 339 908	84%
STATE	\$213 076 630	\$214 015 500	\$181 313 140	85%	\$168 821 721	79%	\$200 444 131	94%
LACTC	\$176 639 650	\$175 700 780	\$173 501 302	98%	\$135 256 235	77%	\$122 459 696	6994
CITY OF L.A.	\$34 000 000	\$34 000 000	\$27 102 080	80%	\$24 230 057	71%	\$21 830 92 5	64%
BENEFIT ASSESS.	\$130 300 000	\$19 082 432	\$101 397 029	78%	\$86 206 286	66%	\$19 082 432	15%
TOTAL	\$1 249 900 000	\$1 138 682 429	\$1 147 0 11 000	92%	\$989 053 000	79%	\$871 355 728	70%
FUNDS REQUIRED- FORECAST COST GROWTH	104,000,000		•					
GRAND TOTAL	\$1,353,900,000							

Change Notice Resolution

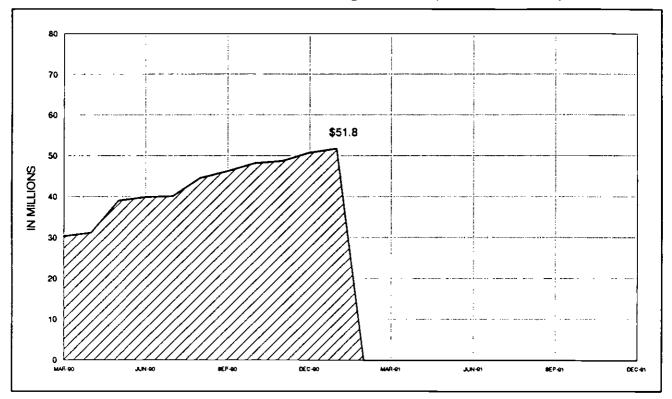


* PRIOR TO JANUARY 1991, WITHDRAWN CN'S WERE NOT INCLUDED IN THIS CHART

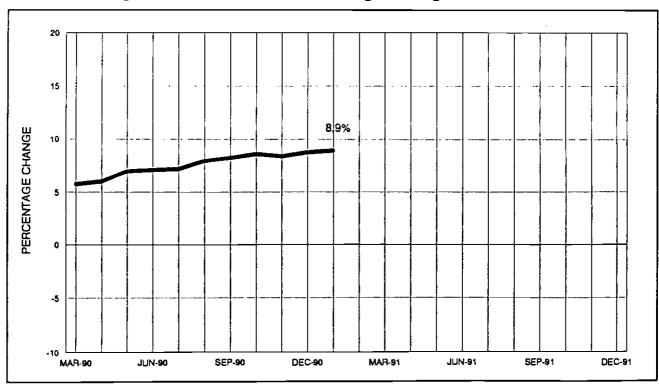
Change Activity Progress



Total Value of Executed Change Orders (\$51,809,682.15)

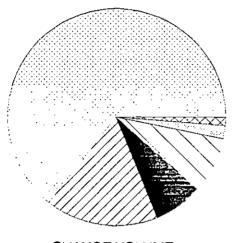


Change Order Dollars as a Percentage of Original Contract Award



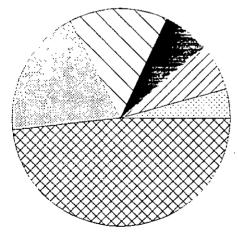
CONSTRUCTION/PROCUREMENT CHANGE VOLUME AND COST BY COST LEVEL BASED ON EXECUTED CHANGES AS OF 1/25/91

ABSOLUTE VALUES



CHANGE VOLUME TOTAL VOLUME: 1531 CO'S (1774 CN'S)

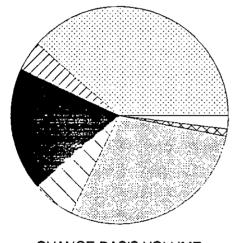
987	64.5%		< \$10,000
256	16.7%		< \$25,000
110	7.2%	to the state of th	< \$50,000
129	8.4%		< \$200,000
30	2%		> \$200,000
19	1.2%		> \$1,000,000



CHANGE COST TOTAL COST: \$51,809,682

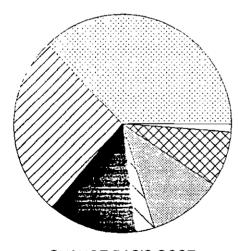
\$2,221,956	4.3%	< \$10,000
\$3,580,968	6.9%	< \$25,000
\$3,556,607	6.9%	< \$50,000
\$7,585,061	14.6%	< \$200,000
\$9,877,227	19.1%	> \$200,000
\$24,987,863	48.2%	> \$1,000,000

CONSTRUCTION/PROCUREMENT CHANGE VOLUME AND COST BY CHANGE BASIS TYPE BASED ON EXECUTED CHANGES AS OF 1/25/91



CHANGE BASIS VOLUME
TOTAL VOL: 1774 CN'S (1531 CO'S)

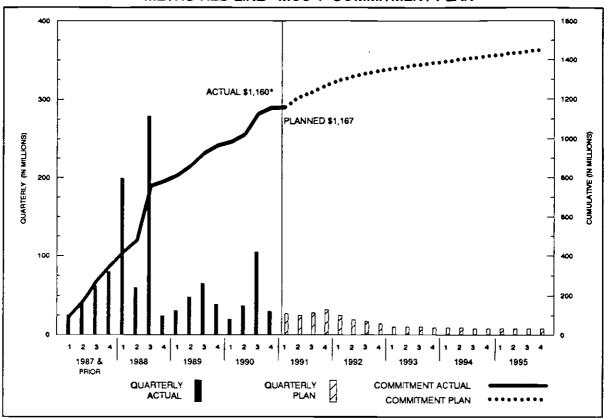
694	39%		WORK SCOPE CHANGES
79	4.5%		SCHEDULE CHANGES
328	18.5%	,	DIFFERING CONDITIONS
115	6.5%		ADMINISTRATIVE
518	29.1%		DESIGN CHANGES
3	0.3%		MANAGEMENT ISSUES/CLAIMS
37	2.1%		UNASSIGNED



CHANGE BASIS COST TOTAL COST: \$51,809,682

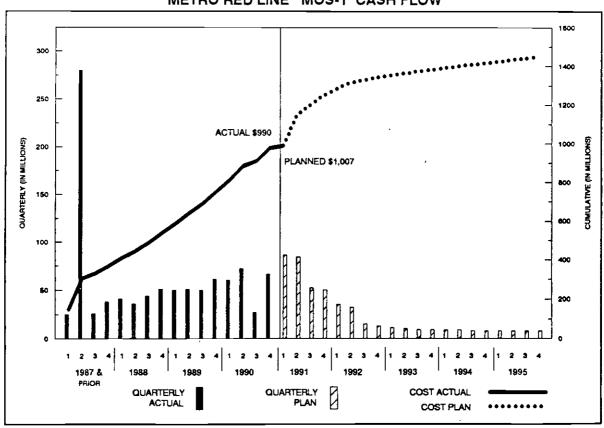
\$19,444,249	37.5%		WORK SCOPE CHANGES
\$13,884,954	26.8%		SCHEDULE CHANGES
\$6,812,852	13.1%	48 1	DIFFERING CONDITIONS
\$1,450,670	2.8%		ADMINISTRATIVE
\$5,601,892	10.8%		DESIGN CHANGES
\$4,232,538	8.2%		MANAGEMENT ISSUES/CLAIMS
\$382,527	0.8%		UNASSIGNED

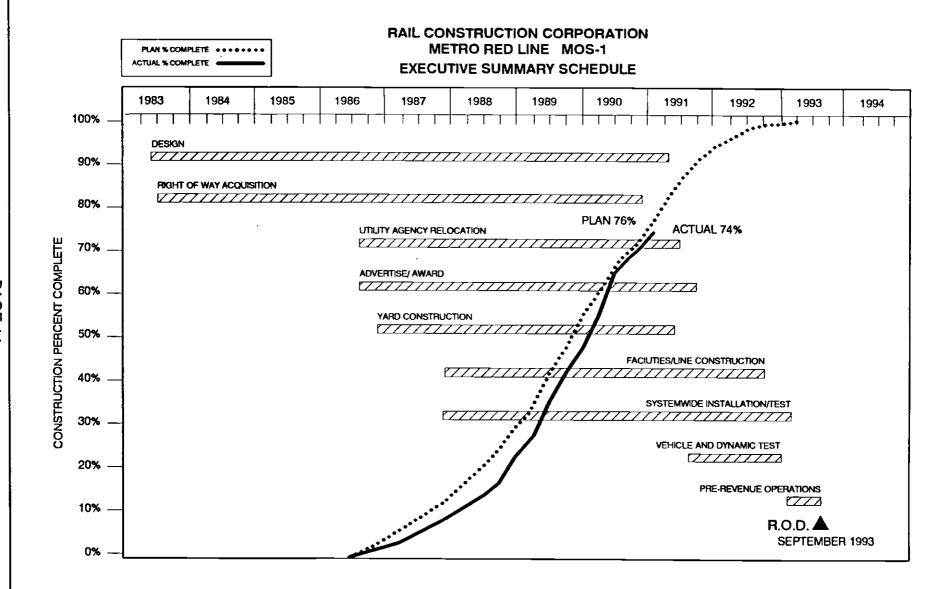
METRO RED LINE MOS-1 COMMITMENT PLAN



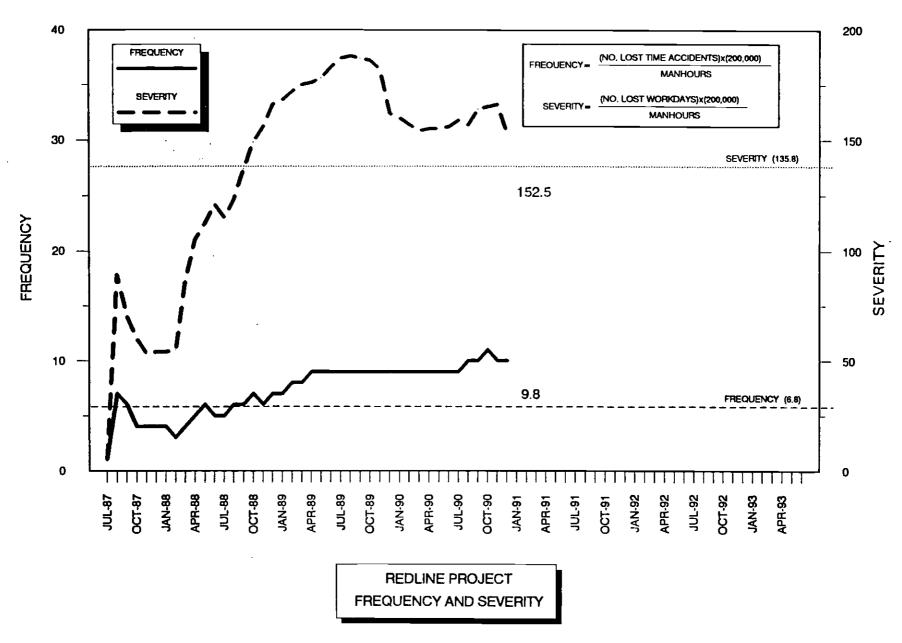
* ACTUALS ARE ESTIMATED PENDING RECEIPT OF RCC AND RTD COMMITTED INFORMATION

METRO RED LINE MOS-1 CASH FLOW





Total manhours as of December 1990: 8,012,429

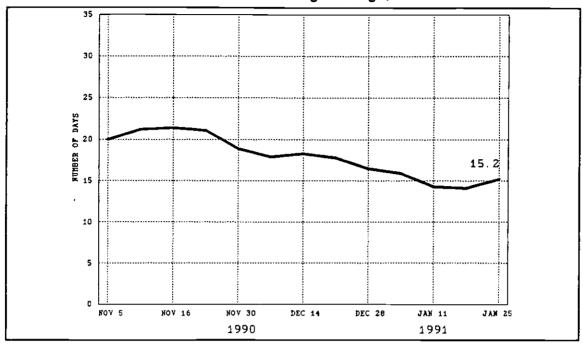


MOS-1 REAL ESTATE - STATUS SUMMARY

ccu	NO. OF PARCELS	•	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

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 invoice processing time is still within RCC's goal of 30 days maximum between invoice submittal date and payment date. The following is a list of the actual number of invoices and dollar amounts of invoice payments for the past three months.

	Number	
	of	Invoice
Date	Invoices	Amount
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
01/04/91	7	2,774,108
01/11/91	7	1,642,074
01/18/91	4	1,812,670
01/25/91	15	3,350,497

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 \$61.7 million or 4% of the total forecast. The project commitments to date are \$71.3 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: schedule update revisions and refined construction estimates.

The Master Schedule update with status through January 25, 1991, shows that the project is currently on schedule.

The overall MOS-2 design is approximately 45% complete versus the planned 50% completion. Construction is scheduled to commence in February 1991 with the release of Contract B231, Wilshire/Western Station.

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

There are 67 parcels of land required for MOS-2 with status as follows: 16 full takes, 4 partial takes, 44 subsurface easements, and 3 temporary construction easements. These acquisitions will involve the relocation of approximately 114 commercial businesses. To date 1 MOS-2 parcel has been acquired, 22 offers to purchase are open, and 4 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. Asbestos Findings

Concern: The first two construction contracts (B218, B231) are experienc-

ing start-up perturbations caused by unanticipated asbestos

disposal problems.

Action: LACTC Real Estate will survey properties to ensure all associated

cost and schedule impacts are evaluated concerning asbestos.

2. Design Status

Concern: Design progress is planned at 50% but actual completion is 45%.

Action: MRTC to accelerate design to meet planned completion dates.

There is no project schedule impact.

3. MacArthur Park Agreement

Concern: Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line,

construction NTP will be slipped due to late completion of

Negotiations with the Department of Recreation and Parks.

Action: The schedule completion and duration dates remain unchanged.

There is no project schedule impact.

KEY ACTIVITIES - PAST MONTH

- Contract B218, Building Demolition, was issued Notice to Proceed.
- Issued Notice to Proceed to section designer for Contract B281, Hollywood/Vine Station.
- Reviewed in-progress design submittal documents for Contract B215,
 Wilshire/Vermont Station, Stage II, and Contract B251, Wilshire/Vermont to Vermont/Santa Monica Line.
- Issued final design documents for Contract B221, Wilshire/Normandie Station and Line.
- Continued negotiations with section designer for Contract B261, Vermont/Sunset Station.

KEY ACTIVITIES - PLAN FOR THIS MONTH

- Issue Notice to Proceed for Contract B231, Wilshire/Western Station.
- Complete negotiations and issue Notice to Proceed to section designer for Contract B261, Vermont/Sunset Station.
- Continue environmental assessment Stage II in the Wilshire Corridor and Vermont/Beverly Station areas.
- Submit Contract B211, Wilshire/Vermont Station, Stage 1, final design documents for review.

MRTC Project: R81

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

(\$ x 000's)

		Budge	t		orized enditure-		tments	Incuri	ed Cost	Exper	nditures	- Current	
	DESCRIPTION	ORIGINAL	CURRENT	PERIOD	TO DATE		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	3,135	363	2,064	363	2,064	922,953	4,387
s	Professional Services	289, 150	286,592	3,457	43,701	535	38,324	3,143	30,383	3,143	30,383	285,660	(932)
R	Real Estate	79,827	76,734	6	11,633	14,446	43,563	14,384	29,240	14,384	29,240	72,338	(4,3%)
F	Utility Relocation	36,668	29,949	0	0	303	372	6	19	6	19	29,942	(7)
D	Special Programs	2,044	2,047	30	60	90	180	7	33	7	33	7,056	5,009
C	Project Reserve	145,743	132,544	0	0	0	0	0	0	0	0	133,583	1,039
A	Project Revenue	0	0	0	0	0	0	0	0	0	0	(5,100)	(5,100)
	Project Grand Total:	1,446,432	1,446,432	3,493	58,341	15,435	85,575	17,903	61,739	17,903	61,739	1,446,432	0

ORIGINAL BUDGET THE ORIGINAL BUDGET AS ESTABLISHED BY THE LACTC AT THE TIME IT AUTHORIZES THE RCC TO COMMENCE FINAL DESIGN AND CONSTRUCTION.

CURRENT BUDGET

THE ORIGINAL BUDGET PLUS ALL BUDGET AMENDMENTS ADOPTED BY FORMAL RCCA.ACTC ACTION, BUDGET AMENDMENTS ARE CHANGES TO THE "SCOPE OF WORK," THE PROJECT MANAGER HAS THE AUTHORITY TO APPROVE BUDGET FUND SHIFTS FROM ONE BUDGET CHANGE REQUEST IPBCRIPROCEDURE AS LONG AS THE "BOTTOM LINE" PROJECT TOTAL IS MAINTAINED.

AUTHORIZED FOR EXPENDITURE (AFE)

THE MAXIMUM AMOUNT OF FUNOS AUTHORIZED FOR EXPENDITURE BY THE RECELECTE FOR EACH CONTRACT OR WORK ORDER.

COMMITMENTS THE TOTAL OF ACTUAL CONTRACT AWARDS, EXECUTED CHANGE ORDERS OR AMENOMENTS, APPROVED WORK ORDERS OF MASTER COOPERATIVE AGREEMENTS, OFFERS ACCEPTED FOR PURCHASE OF REAL ESTATE, AND OTHER RCC/LACTC ACTIONS WHICH WILL RESULT IN SPECIFIC EXPENDITURES AT A FUTURE TIME.

INCURRED COST THE TOTAL VALUE OF WORK PERFORMED TO DATE, OF SERVICES RECEIVED.

AND OF ACOURED MATERIALS OR PROPERTIES.

EXPENDITURES THE TOTAL DOLLAR AMOUNT OF CHECKS CUT BY LACTC'S ACCOUNTING DEPARTMENT FOR CONTRACTOR OR CONSULTANT INVOICES, THIRD PARTY INVOICES, STAFF SALARIES, AND CLOSING PAYMENTS FOR ESCROW ACCOUNTS.

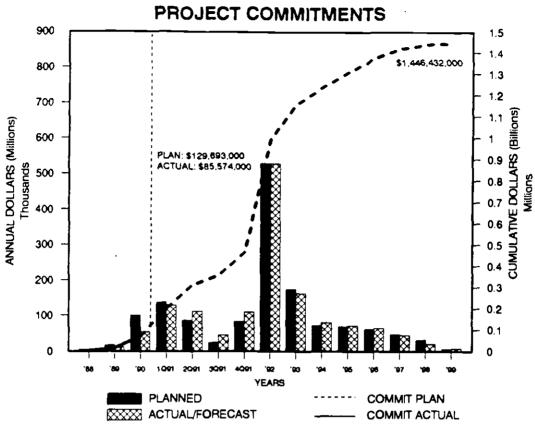
CUMPLENT FORECAST THE BEST ESTIMATE OF THE FINAL COST OF THE PROJECT WHEN ALL CHECKS HAVE BEEN ISSUED AND THE PROJECT IS CLOSED OUT.

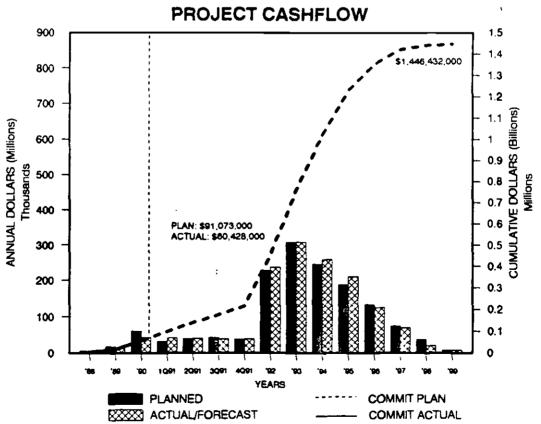
VANANCE THE DIFFERENCE BETWEEN THE CURRENT FORECAST AND THE CURRENT BUDGET. A POSITIVE FORECAST INDICATES A PROJECTED COST OVERRUN WHILE A NEGATIVE VARIANCE INDICATES A PROJECTED COST UNDERRUN.

FUND SOURCE STATUS

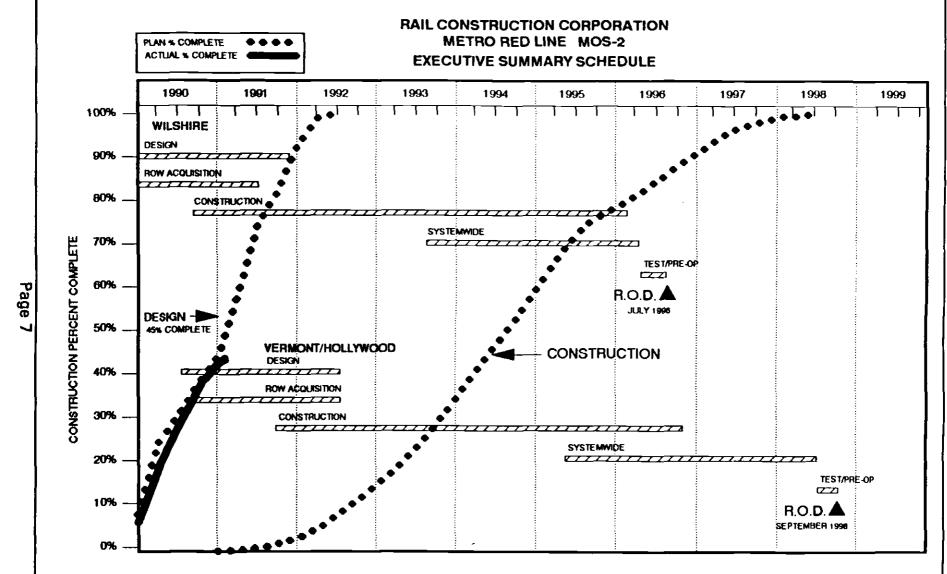
(IN THOUSANDS OF DOLLARS)

	TOTAL ANTICIPATED		COMMITH	ENTS	EXPENDIT	BILLED TO SOURCE		
SOURCE	FUNDS	FUNDS RECEIVED	\$	x	\$	*	\$	*
UMTA-SECTION 3	\$667,000,000	\$329,668,113	\$6,371,000	1%	\$4,075,563	1%	\$3,641,751	1%
STATE	\$186,000,000	\$0	\$0	0%	\$0	0%	\$0	0%
LACTC	\$439,432,667	\$0	\$79,204,00D	18%	\$57,663,437	13%	\$57,552,437	13%
CITY OF L.A.	\$96,000,000	\$10,000,000	\$0	0%	\$0	0%	\$0	0%
BENEFIT ASSESS	\$58,000,000	\$0	\$0	0%		0%	\$0	0%
TOTAL	\$1,446,432,667	\$339,668,113	\$85,575,000	6%	\$61,739,000	4%	\$61,194,188	4%





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MOS-2 PROJECT STATUS / KEY EVENTS TOTAL

1 YEAR OUTLOOK

DATA DATE: 31 JAN 91

		NOV	90	DEC		JAN	91	FEB	MAR	APR	MAY	JUN	JUL	AUG	TSEP	OCT
	· · · · · · · · · · · · · · · · · · ·	PLA	ACT	PLAN	ACT	PLAN	ACT	_							1	
60%	Design Submittal	į		1	1	1	1			1	3			1	1	2
85%	Design Submittal	1	1							1	1	2		3		1
100%	Design Submittal					1	1						1	2	1	2
	TOTAL	1	1	1	1	2	2			2	4	2	1	6	2	5
CR	Camera Ready	1	1	T	_			2		Ĭ		-	1		1	
AD	Advertise		ļ	1	1			2						1		
BD	Bid Due	Ĺ		1	1	_	_		2	1						1
AW	Award	1	1			1	1			2			1			
RE	Real Estate	1	1				-				ŀ	2		1 2	1	,
NTP	Notice to Proc.					1	1	1		2			1			
MEG	Manufacturing															
SD	Delivery Start								i							- 1
FD	Delivery Finish		İ	<u> </u>								_				
LIG	Liquid. Milest.															
INT	Interfo. Milest.															
CC	Contract Compit.									1	ĺ					

NOTE: REPORT REFLECTS ONLY CONTRACT PACKAGES FOR MAJOR SYSTEMS.

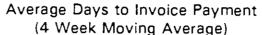
This month Contract B218 Notice to Proceed was issued, Contract B251 was submitted for a 60% design review, Contract B211 was submitted for a 100% design review, and Contract B231 was awarded.

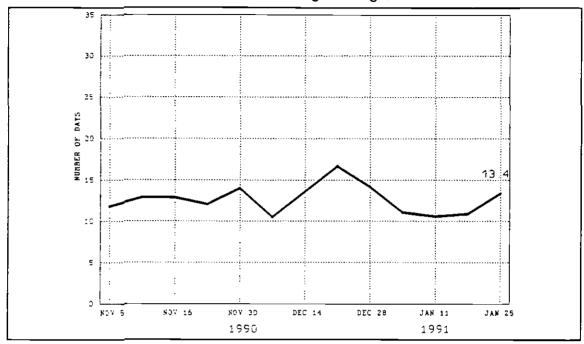
REAL ESTATE - STATUS SUMMARY MOS-2

	T								
				OFFERS	AGRMNT	CONDEMN	PARCELS	PARCELS	CONSTRUCT
CCU	PARCELS	CERT'D	APPROVED	MADE	SIGNED	FILED	AVAIL	NOT AVAIL	NTP DATE
								-	
B201	5	5	4	4	0	1	0	5	04/08/91
		•	,	•	•	•	J	J	04/00/01
B211	5	4	3	4	0	2	1	4	07/25/01
6211	3	-+	3	4	U	2	ı	4	07/25/91
		_			_			_	
B218	1	1	1	1	0	1	1	0	01/10/91
B221	15	13	13	11	6	0	0	15	04/24/91
B231	3	3	1	2	0	0	1	2	02/11/91
						-		_	
B241	2	0	0	0	0	0	0	2	01/06/93
D24.	-	•	· ·	•	•	U	•	2	01/00/93
DOES	20	^	•	^	^	•	•	20	00104100
B251	20	0	0	0	0	0	0	20	02/04/92
1									
B252	5	0	0	0	0	0	0	5	06/24/92
						•			
B261	3	0	0	0	0	0	0	3	04/21/93
B271	7	0	0	0	0	0	0	7	06/04/92
"-"	,	Ū	•	U	· ·	U	0	,	30104132
_{B204}			^	^	^	•		٠	44 105 100
B281	1	1	0	0	0	0	0	1	11/25/92
_		_							
TOTAL	67	27	22	22	6	4	3	64	

During the month, Parcels B2-187 and B2-188 were added and Parcel B2-199 was deleted from Contract B252. Three agreements for Contract B221, Parcels B2-133, B2-147, B2-148, were signed. Two offers were made for Contract B211, Parcels B2-114 and B2-123. One condemnation was filed for Contract B201, Parcel B2-113 and one condemnation was filed for Contract B211, Parcel B2-115.

The status of the 67 parcels required for Metro Red Line MOS-2 is as follows: 16 full takes, 4 partial takes, 44 subsurface easements, and three temporary construction easements. There are approximately 44 relocations associated with the full, or partial, takes.



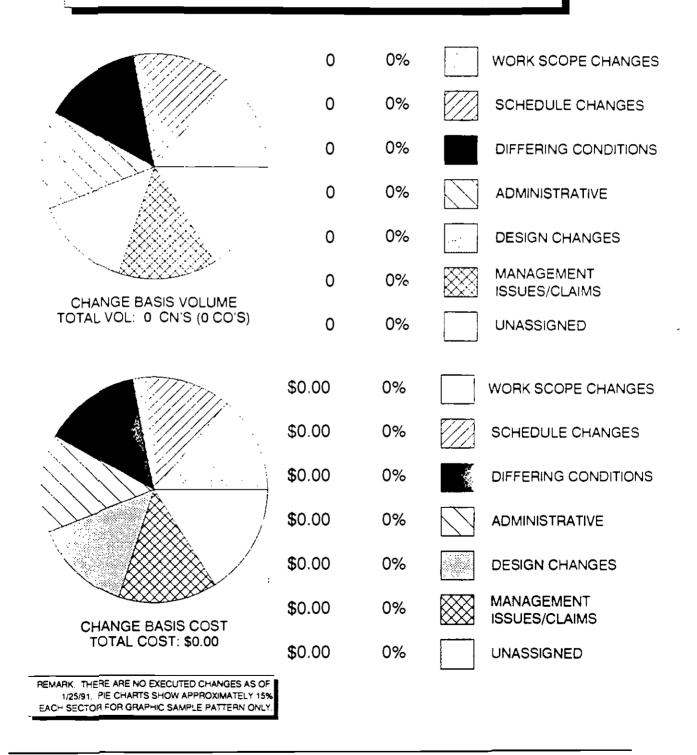


The average days to invoice payment are well within the RCC goal of 30 days maximum between invoice submittal and invoice payment. The following is a list of the actual number of invoices and dollar amounts of invoice payments for the past three months.

Date	Number of Invoices	Invoice Amount
11/02/90 11/09/90 11/16/90 11/23/90 11/30/90	2 2 4 1	\$ 3,173,876 (3,145,668) 2,139,286 724 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
01/04/91	0	0
01/11/91	2	60,878
01/18/91	1	13,744
01/25/91	7	1,693,648

RED LINE MOS-2 PROJECT

CONSTRUCTION/PROCUREMENT
CHANGE VOLUME AND COST BY BY CHANGE BASIS TYPE
BASED ON EXECUTED CHANGES AS OF 01/25/91



RED LINE MOS-2 PROJECT

CONSTRUCTION/PROCUREMENT
CHANGE VOLUME AND COST BY COST LEVEL
BASED ON EXECUTED CHANGES AS OF 01/25/91

