

RAIL CONSTRUCTION CORPORATION



Executive Report Rail Program Status



**Rail
Construction
Corporation**

A Subsidiary of
the Los Angeles County
Transportation Commission

RAIL PROGRAM STATUS SUMMARY

RAIL PROGRAM STATUS SUMMARY

Metro Red Line Segment 1

Cost Status (\$000)

Original Budget	1,249,900
Expended to Date	1,122,243
Current Forecast	1,450,019

Project Progress

Design:

Plan	100%
Actual	98%

Construction:

Plan	88%
Actual	89%

Schedule Status

Revenue Operations Date:

Original	April 1992
Forecast	September 1993

Metro Red Line Segment 2

Cost Status (\$000)

Original Budget	1,446,432
Expended to Date	118,884
Current Forecast	1,446,432

Project Progress

Design:

Plan	84%
Actual	78%

Construction:

Plan	3%
Actual	2%

Schedule Status

ROD: Wilshire Vermont/Hlywd

Original	Jul '96	Sep '98
Forecast	Jul '96	Sep '98

Metro Green Line

Cost Status (\$000)

Original Budget	814,000
Expended to Date	118,027
Current Forecast	886,000

Project Progress

Design:

Plan	100%
Actual	99%

Construction:

Plan	10%
Actual	7%

Schedule Status

Revenue Operations Date:

Original	October 1994
Forecast	January 1995

Commuter Rail (includes 3 start-up lines, shared facilities, and LAUPT)

Cost Status (\$000)

Original Budget	379,082
Expended to Date	42,579
Current Forecast	379,082

Project Progress

Design:

Plan	83%
Actual	83%

Construction:

Plan	0%
Actual	0%

Schedule Status

Revenue Operations Date:

Original	October 1992
Forecast	October 1992

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

STATUS DATE: 09/27/91

(IN THOUSANDS)

PROJECT: TOTAL RAIL PROGRAM

DESCRIPTION	BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST	VARIANCE (9-2)
	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)		
CONSTRUCTION	2,607,946	2,854,180	7,735	1,632,356	18,982	1,197,242	28,033	1,167,308	2,971,220	117,040
PROFESSIONAL SERVICES	967,497	1,105,748	3,958	882,778	23,869	721,686	11,448	700,815	1,113,288	7,540
REAL ESTATE	260,484	321,895	1,297	237,976	1,324	230,515	1,324	230,426	332,866	10,971
UTILITY/AGENCY FORCE ACCOUNTS	114,075	94,232	110	80,793	171	64,698	171	64,313	99,801	5,569
SPECIAL PROGRAMS	6,063	14,537	30	2,259	78	621	79	522	25,470	10,933
CONTINGENCY	343,734	315,633	0	0	0	0	0	0	163,880	(151,753)
PROJECT REVENUE	(18,115)	(46,503)	0	(681)	0	(6,213)	0	(6,975)	(46,803)	(300)
PROJECT GRAND TOTAL	4,281,684	4,659,722	13,130	2,835,481	44,424	2,208,549	41,055	2,156,409	4,659,722	0

Figure 1 - Rail Construction Plan

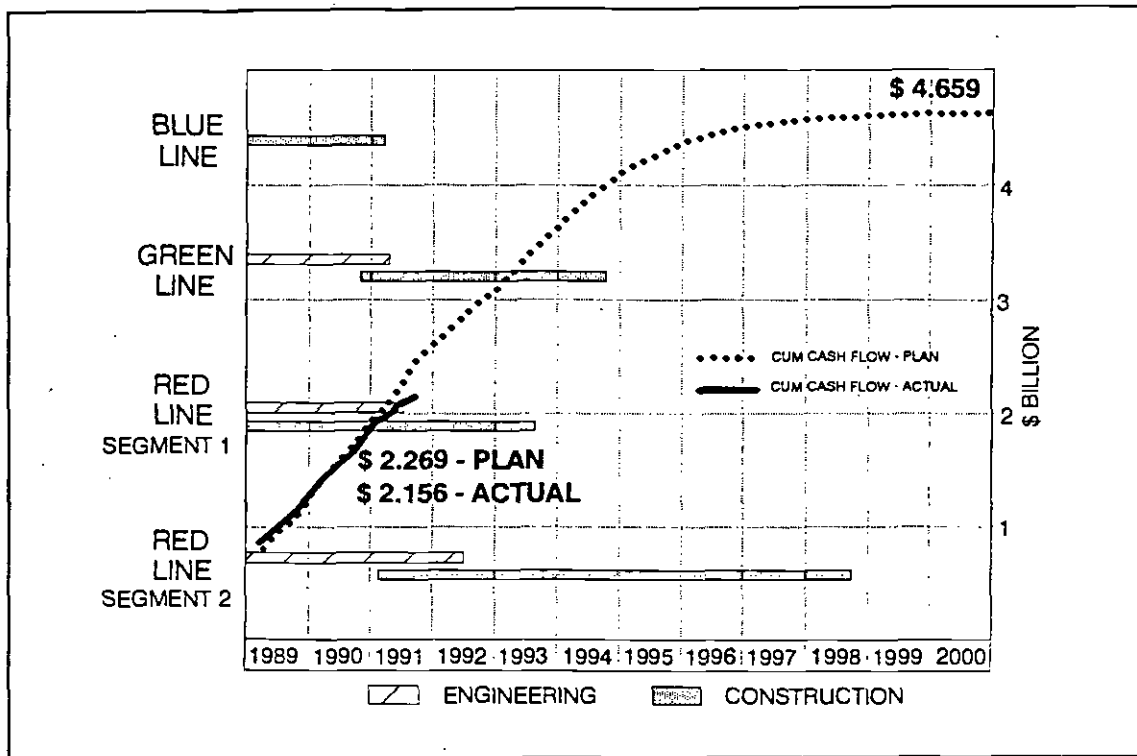


Figure 2 shows the funding sources for each project and for the total program. Data included in this figure is based on the current forecast total cost of each project.

Figure 2 - Rail Construction Funding Sources

	METRO BLUE LINE*		METRO GREEN LINE		METRO RED SEGMENT 1**		METRO RED SEGMENT 2		TOTAL PROGRAM	
	\$	%	\$	%	\$	%	\$	%	\$	%
UMTA-SEC 3					605.3	42	667.0	46	1272.3	27
UMTA-SEC 9					90.6	6			90.6	2
STATE			107.5	12	213.1	15	186.0	13	506.6	11
LOCAL (PROP A)	877.0	100	778.5	88	176.6	12	439.4	30	2271.5	49
CITY OF L.A.					34.0	2	96.0	7	130.0	3
BENEFIT ASSESS					130.3	9	58.0	4	188.3	4
FORECAST					200.1	14			200.1	4
TOTAL	877.0	100	886.0	100	1450.0	100	1446.4	100	4659.4	100

* CONSISTS OF LIGHT RAIL LINE (\$847) AND MC-5 WORK (\$30).

** LRT PORTION INCLUDED IN BLUE LINE FORECAST.

REAL ESTATE

Figure 3 summarizes the real estate status for Metro Green Line and Metro Red Line Segment 2.

Figure 3 - Real Estate Acquisition Status Summary

	Number of Parcels	Number of Parcels Available	Parcels Not Available (on Schedule)	Parcels Not Available (Behind Schedule)	
				Number	Avg. Days Behind
Green Line	40	37	3	0	0
Red Line Seg 2	70	26	29	15	15.6

RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Figure 4 shows that 131 positions are filled with regular full time staff and 28 positions are filled with contract or temporary employees.

Figure 4 - RCC Staff Levels

* The contract/temporary number was revised to exclude SCRTD staff.

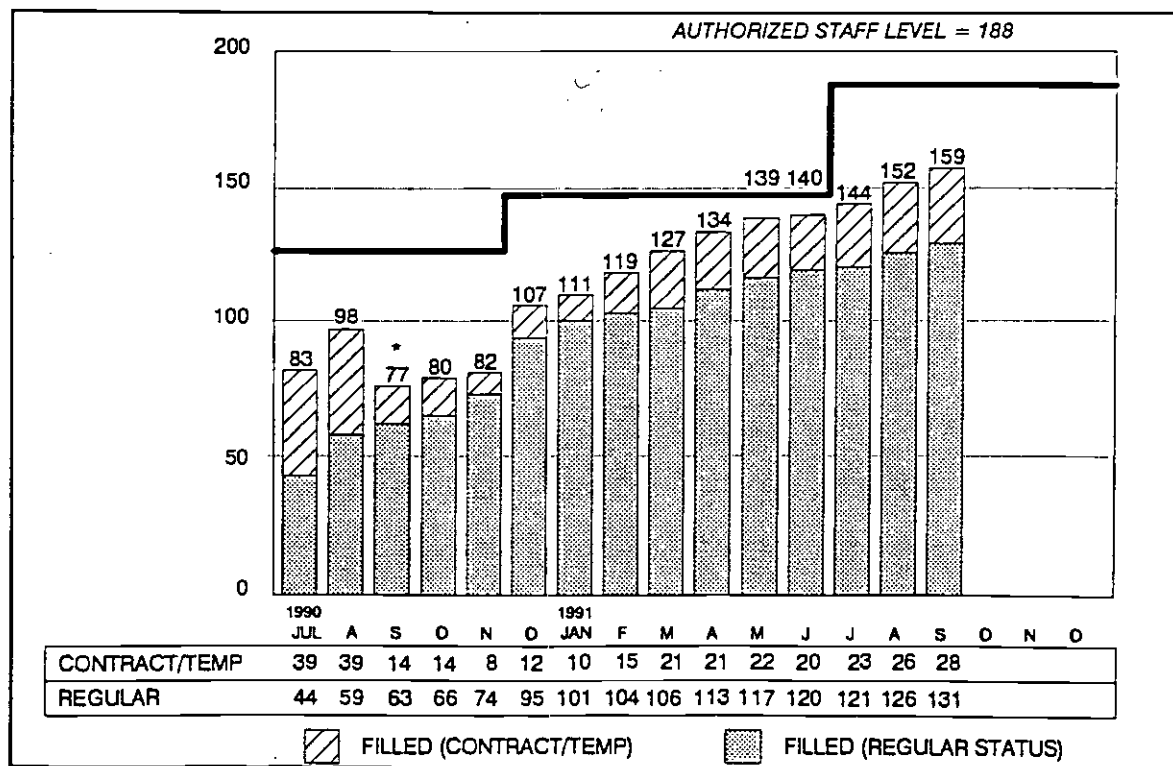
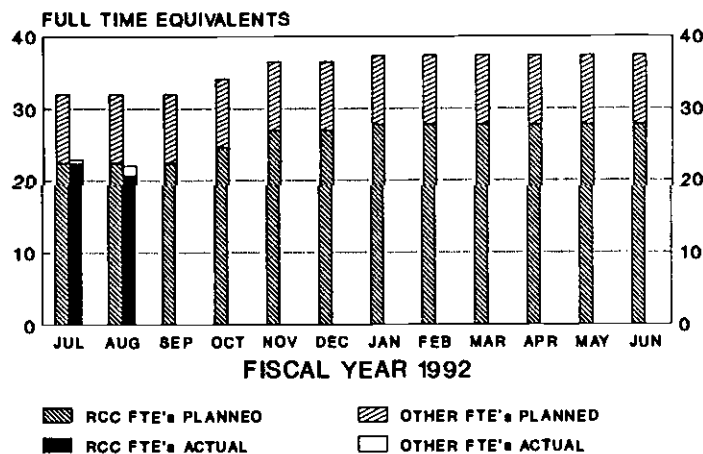
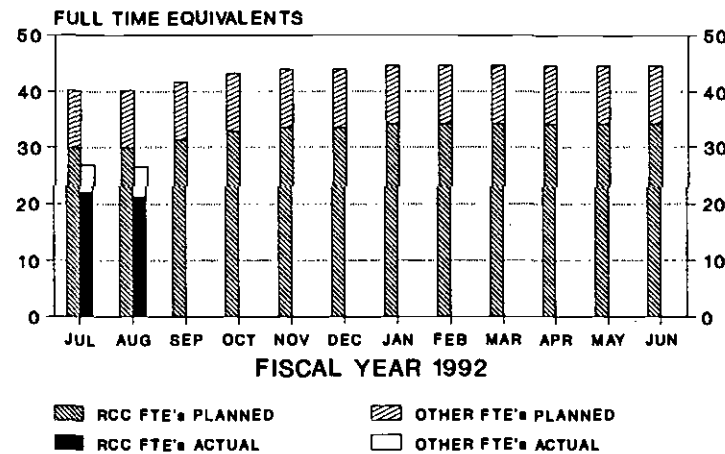


Figure 5 (on the following page) shows the LACTC/RCC staff full time equivalents and wage rate for the rail projects.

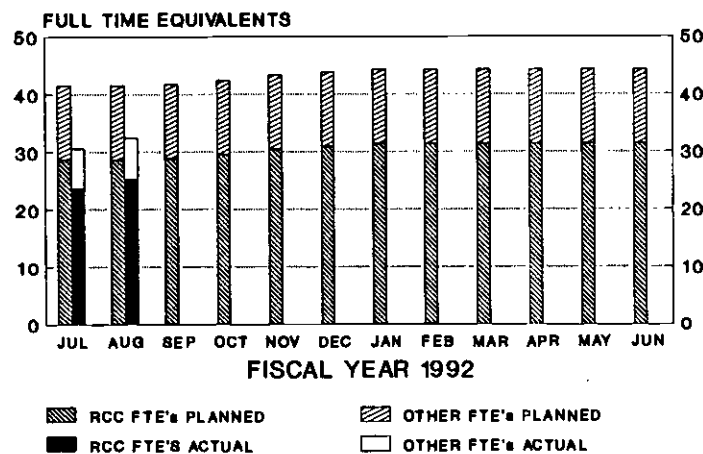
STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 1



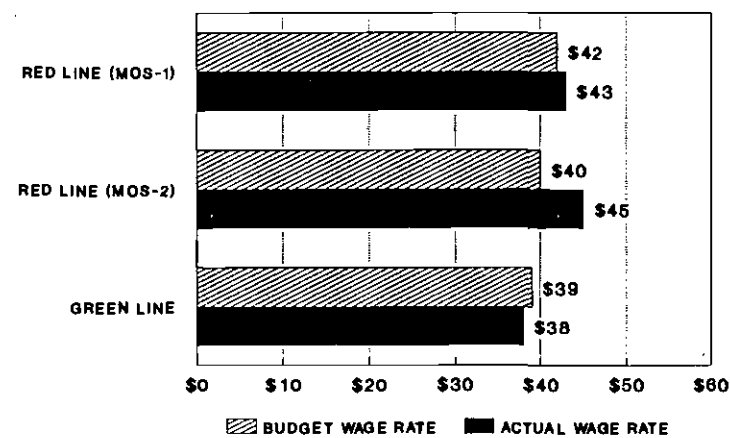
STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 2



STAFFING PLAN VS. ACTUAL GREEN LINE



LABOR WAGE RATE* RED LINE (SEGMENT 1 & 2), GREEN LINE



*Salaries and Fringe Benefits Only

Figure 5

CORPORATE COST TARGETS RELATIVE TO CONSTRUCTION

The corporate goals of the RCC include limitations on the percentage of total project costs which will be spent on project administration and on RCC/LACTC staff.

The RCC corporate goal for project administration costs is 20%. Based on the current cost forecast data for each project, the project administration cost totals 24.4% as compared to 24.5% last month. The percentage includes all costs previously expended by the SCRTD when the Metro Red Line Segment 1 project was under SCRTD management.

Staff costs are projected at 4.5% of total program costs, the same figure as last month, which exceeds the 4.0% corporate goal. Figure 6 illustrates the forecast figures for each project and for total program.

Figure 6 - Cost Performance Relative to Corporate Goals

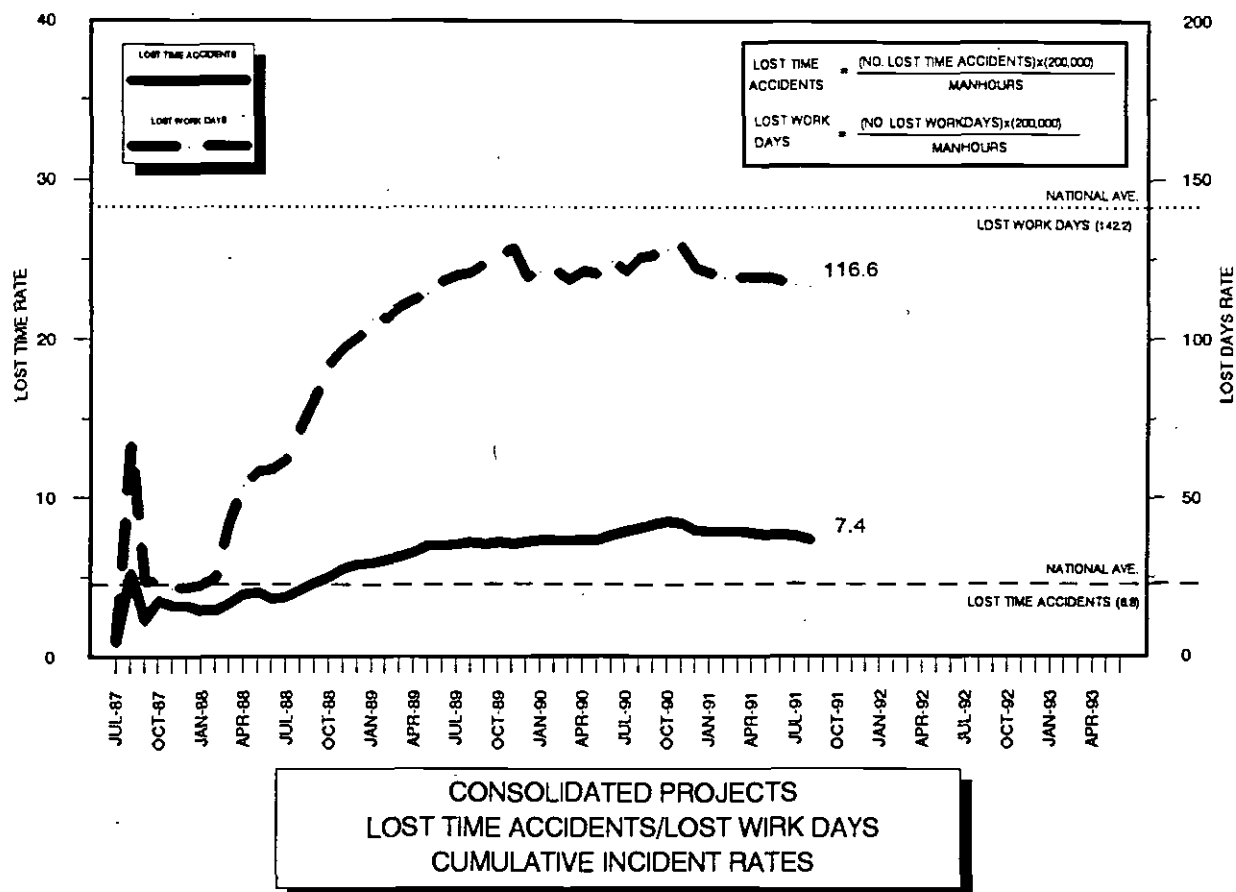
(IN THOUSANDS)

	METRO BLUE LINE		METRO GREEN LINE		METRO RED LINE SEGMENT 1		METRO RED LINE SEGMENT 2		PROJECT TOTALS		CORPORATE GOAL
	DOLLARS	%	DOLLARS	%	DOLLARS	%	DOLLARS	%	DOLLARS	%	
CONSTRUCTION	657,487	75%	653,736	74%	801,481	55%	958,317	66%	3,071,021	66%	
REAL ESTATE	55,592	6%	47,682	5%	139,679	10%	89,914	6%	332,867	7%	
PROFESSIONAL SERVICES											
ENGINEERING/DESIGN	69,587	8%	78,655	9%	219,603	15%	82,803	6%	450,648	10%	
CONSTRUCTION MGMT.	91,642	10%	50,165	6%	139,948	10%	131,058	9%	412,813	9%	4%
STAFF	17,655	2%	26,189	3%	107,365	7%	56,551	4%	207,760	4%	
OTHER	14,222	2%	9,689	1%	988	0%	42,638	3%	67,537	1%	20%
SUBTOTAL	193,106	22%	164,698	19%	467,904	32%	313,050	22%	1,138,758	24%	
CONTINGENCY	963	0%	36,510	4%	40,955	3%	85,451	6%	163,879	4%	
PROJECT REVENUE	(29,877)	-3%	(16,626)	-2%	0	0%	(300)	-0%	(46,803)	-1%	
GRAND TOTAL	877,271	100%	886,000	100%	1,450,019	100%	1,446,432	100%	4,659,722	100%	

CONSTRUCTION SAFETY

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

- The Metro Green Line continues to have a frequency and severity accident index far below the national average after 170,000 manhours worked.
- There has been zero lost time to date on Metro Red Line Segment 2 after nearly 109,000 manhours worked.
- Safety awareness programs are being incorporated into new contracts.



Total manhours as of August 1991: 14,006,162

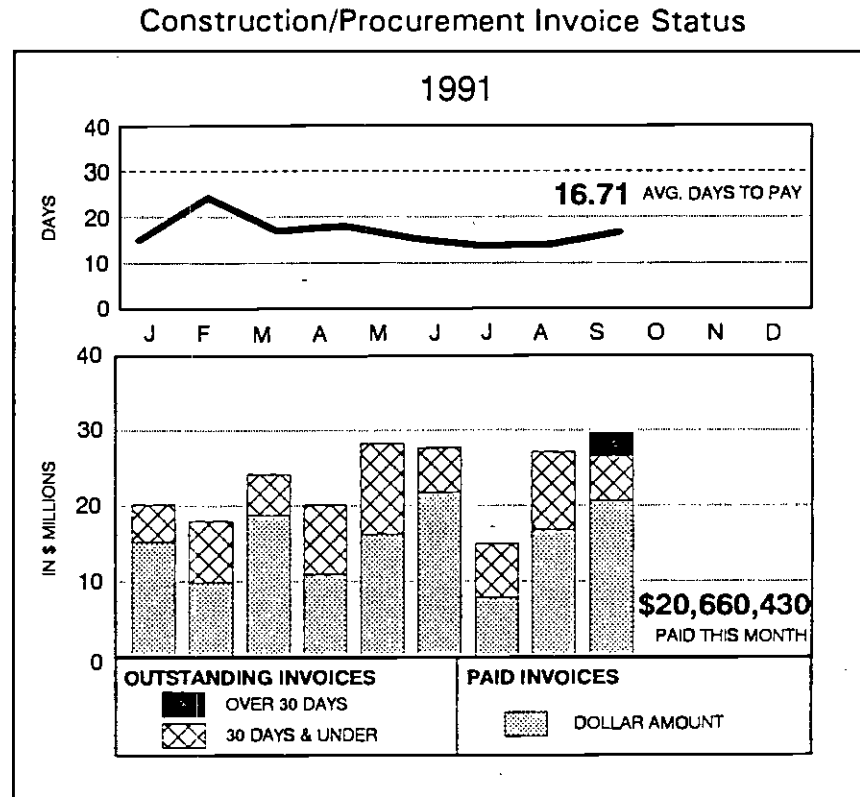
Figure 7

INVOICE PROCESSING

• The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 16.71 days.

• 41 invoices were paid this month for a total value of \$ 20,660,430.

• There were 18 outstanding Construction or Procurement invoices over 30 days old for \$ 3,107,172.



Note: The average days to pay is the time from when the Resident Engineer approves a progress payment (invoice) to when Accounting issues a check for this invoice.

OUTSTANDING INVOICES

Month	Construction/Procurement Invoices				Other Invoices			
	30 Days and Under		Over 30 Days		30 Days and Under		Over 30 Days	
	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value
APR 1991	22	9,142,595	0	0	67	11,848,262	76	8,959,658
MAY 1991	15	12,079,406	1	4,937	46	4,954,639	12	1,260,546
JUN 1991	7	5,919,091	0	0	46	8,366,905	18	882,237
JUL 1991	9	7,105,141	0	0	29	1,232,385	10	860,903
AUG 1991	47	10,276,078	0	0	25	3,553,708	17	1,278,235
SEP 1991	30	5,942,306	18	3,107,172	34	3,436,076	19	1,670,643

PROGRESS REPORT

PROJECT ELEMENT: VEHICLES - PASSENGER COACHES (UTDC)

PERIOD: SEPTEMBER 1991

PROGRESS THIS PERIOD:

- UTDC has major subsections of first two cab car structures on the production line and minor subsections of four (4) additional cab cars in-work.
- Negotiation of design related Change Orders complete except for pricing of ADA modification requirements.
- Change Orders for requested features as well as twenty Option A vehicles (6 cab, 14 trailer) are being processed. Total quantity of each vehicle type including Option A vehicles, is 21 cars and 39 trailer cars.
- Negotiated 3% cost escalation vs. 6% proposed for next 10 car order (reserve).

UPCOMING MILESTONES/ISSUES FOR NEXT THREE MONTHS:

- Issuance of Change Order for spare parts for option cars.
- Ascertaining actual financial impact resulting from recent tariff reduction legislation.
- Decision on optioning last 10 vehicles by October 31, 1991.
- Negotiation of delivery schedule for 30 additional vehicles.

CRITICAL NEEDS:

None

PROGRESS REPORT

PROJECT ELEMENT: VEHICLES - LOCOMOTIVES (GM)

PERIOD: SEPTEMBER 1991

PROGRESS THIS PERIOD:

Finalizing of engineering details of modifications to base locomotives for SCRRA operations, e.g., radios, dynamic braking grids, head-end power, etc., to insure start of production fabrication of sub-components in mid-January 1992.

UPCOMING MILESTONES/ISSUES FOR NEXT THREE MONTHS:

Processing and cleanup of Change Orders and Change Notices.

Decision on optioning additional locomotives above base order of seventeen (17) F59PH's.

CRITICAL NEEDS:

None

LACTC COST RECOVERY STATUS REPORT

September changes shaded			Claim	Agreed	Invoiced	Paid	Unpaid	Unbilled	Status	Action Items
Agency	Contract	Description	Amount	Amount			Balance	Balance		
BLUE LINE										
CalTrans	C415	Firestone Bridge	456,000	456,000	456,000	456,000	0	0	Cash Collected (7/91)	
	C415	Firestone Bridge - Indirect	232,651	0	0	0	0	0	Payment capped at \$456,000	
Compton	F202	MC-5 Alternative (See Note 1)	10,156,808	5,812,993	5,823,500	5,381,751	441,839	0	Status of elements assessed	LACTC \$ exposure/45 day ltr
	F202	MC-5 Administration Cost	345,874	345,874	345,874	345,874	0	0	Cash Collected	
	C510	SPTC/Watson Land	24,117	24,117	24,117	24,117	0	0	Cash Collected (7/91)	
	C510	SPTC/Right-of-Way Acquisition	106,984	106,984	106,984	106,984	0	0	Cash Collected (7/91)	
HJO	C140	C140 Counterclaim	5,171,204	1,000,000	1,000,000	1,000,000	0	0	HJO Claim	Balance
	C117	Third Party Backcharges	35,674	Included in line above					Reduction (8/91)	to E&O
LongBeach	C335	LB Station Superstructures	415,000	415,000	415,000	415,000	0	0	Cash Collected (9/91)	
	C335	LB Station Superstructures - Indirect	211,733						In Negotiation	Follow with Long Beach
	Various	Long Beach Prop A Projects	183,673						In Negotiation	Follow with Long Beach
LA-BSL	C140	Supplemental Agreement	259,000	259,000	259,000	259,000	0	0	Cash Collected (3/91)	
	C117/C140	Betterments & Backcharges	788,848						In Negotiation	Resolve issues from Horwitz mtg
LA-CRA	C510	Century Blvd. Grade Crossing	544,052	544,052	544,052	544,052	0	0	Cash Collected	
	C510	105th Street Pedestrian Crossing	376,000						In Negotiation	Structure deal incl land
LA-DPW	C117	Flower St. Improvements	2,148,803						In Negotiation	Verify boundaries (A165/C140)
	C140	8" Sewer Relocation	500,000						In Negotiation	Waiting for DPW analysis
LA-DWP-W	C140	HJO Repairs - Faulty DWP Joints	17,500	17,500	17,500	17,500	0	0	Cash Collected (8/91)	
LA County	F208	Florence-Graham Sta Improvements	0	0	0	0	0	0	Developing cash out strategy	
Owens Corning		Mealy Street Spur	80,000						Wait on W Alameda Grade Sep	Bill on completion
Simmons Cable TV		Install Duct Bank - 10th St. & LB	6,084	6,084	6,084	6,084	0	0	Cash Collected	
So Cal Edison	C325	Install Duct Bank at PCH	19,114	19,114	19,114		19,114	0	Invoiced 8/13/91	Track invoice progress
SCRTD	F815	Central Control Facility	1,580,000	1,580,000	1,580,000	1,580,000	0	0	Cash Collected	
	F815	7th & Flower Sta. Rel of Ins Prem	655,970	655,970	655,970	655,970	0	0	Cash Collected	
	H812	Maintenance Parts	70,000	70,000	70,000		70,000	0	Invoiced 7/30/91	Kane exploring offset
SPTC	C415/F208	Firestone Bridge	830,000	830,000	830,000	783,078	46,922	0	Invoiced 9/11/91	Track invoice progress
	C510	105th Street Ped Crossing	17,700						Agmt at SPTC	Awaiting SPTC response
United Logistics		K-Line Spur	325,000	325,000	325,000	325,000	0	0	Cash Collected	
CNA Insurance	Various	Errors & Omissions	6,040,369						In Process	
BLUE LINE TOTALS			31,606,158	12,487,688	12,478,285	11,900,410	577,875	0		

LACTC COST RECOVERY STATUS REPORT

September changes shaded

Agency	Contract	Description	Claim Amount	Agreed Amount	Invoiced	Paid	Unpaid Balance	Unbilled Balance	Status	Action Items
OTHER LINES										
TIA (Argonaut Insurance)		Refund, W/C Ins premiums	2,052,000	2,052,000	2,153,207	2,153,207	0	(101,207)	Refund larger than estimated	
Various		Refund, Gen Liab Ins premiums	490,000	490,000	247,417	247,417	0	242,583	A/R after Ins Co rate audit	
Glendale		Route Refinement Study	75,000	75,000	57,181	57,181	0	17,819		
Lawndale		Costal Corridor Study	18,800	18,800	18,800	18,800	0	0		
Pasadena		Route Refinement Study	150,000	150,000	104,788	104,788	0	45,214	Billed as Bechtel bills LACTC	
Redondo Beach		Costal Corridor Study	7,000	7,000	7,000	7,000	0	0		
Torrance		Costal Corridor Study	48,200	48,200	48,200	48,200	0	0		
CalTrans	64K576	LAUPT Access Study	200,000	200,000	149,302	147,809	1,493	50,898		
OTHER LINE TOTALS			3,037,000	3,037,000	2,781,893	2,780,400	1,493	255,107		
GRAND TOTALS			34,843,158	15,504,888	15,280,178	14,680,810	579,388	255,107		

NOTES

Note 1 - MC-5

Courtesy Billings for Willden Associates Involving MC-5 projects billed to LA County, through LACTC, on behalf of Compton

	Authorized	Willden Charges	Invoiced	Paid	Unpaid Balance	Available	Status	Action Items
West Alameda Underpass	702,860	537,796	537,796	522,062	15,734	164,864	In progress	
Administration Charges			9,277	0	9,277		Not allowable per LA County	Document authorization to bill
Mealy St - Environmental Assessment	87,699	84,284	84,284	83,992	292	3,415	Completed	
Administration Charges			1,320	0	1,320		Not allowable per LA County	Document authorization to bill
SUBTOTALS	790,359	622,080	632,077	606,054	26,623			

Funding for Compton for its MC-5 share

Grant	Original Amount	Drawdowns	Invoiced	Paid	Unpaid Balance
FWHA (C421)	5,983,498	2,995,590	2,995,590	2,995,590	0
LA County (C420 & other MC-5)	5,500,000	2,195,323	2,195,323	1,780,113	415,210
SUBTOTALS	11,483,498	5,190,913	5,190,913	4,775,703	415,210
MC-5 TOTALS	<i>(figures transferred to Page 1)</i>				
		5,812,993	5,823,590	5,381,757	441,833

LEGEND

O	Open. Action still required.
	Completed or Not Applicable

CONTRACT CLOSE OUT STATUS
METRO BLUE LINE

CONTRACT NUMBER	DESCRIPTION	CLOSE OUT STATUS					COMMENTS	PROJECTED CLOSE-OUT DATE
		CLAIMS/ CHANGE ORDERS	FINAL PROG. PAYMENT	FINAL RELEASE	FINAL ACCEPT. CERTIF.	EQUIP. FINAL DELIV.		
C355R	Long Beach Landscaping	O					Transferred to RCC	Oct 91
H840	Fare Collection						Transferred to BAH; need final board approval	Oct 91
P851	Hi-Rail Trucks						Awaiting Delivery of Truck	Dec 91

EXECUTIVE SUMMARY

COST STATUS

in \$ millions

- Current Budget 886
- Current Forecast 886
- Project Expenditure 118
- Project Commitments 268

SCHEDULE STATUS

- Current Revenue Operations Date October 1994
- Design Progress
 - Plan 100%
 - Actual 99%
- Construction Progress
 - Plan 9.7%
 - Actual 7.1%
- The Green Line is 61 working days behind the target revenue operations date (ROD) of October 1994.
- Contract P1900 (High Performance Transit Vehicles) was not awarded in September as anticipated. Subsequent award of this contract, based on the current projected manufacture and delivery period of 27 months, will directly impact the ATC and integrated testing.

REAL ESTATE

	Number of Parcels	Number of Parcels Available	Parcels Not Available (On Schedule)	Parcels not Available (Behind Schedule)	
				Number	Avg. Days Behind
This Month	40	37	3	0	0
Last Month	40	29	11	0	0

- Real Estate Rights of Entry for access to several Southern California Edison (SCE) parcels were obtained in September 1991, resolving previous related concerns.

AREAS OF CONCERN**ONGOING****Chevron Oil Line Relocation**

Concern: A new and further delay has been caused in the relocation of the six oil lines belonging to Chevron on the TRW property (south of Rosecrans Avenue). Two of the newly installed lines which have a high temperature blue pipe coating have been found to be unacceptable through testing and inspection.

Action: Chevron has located additional pipe for replacement of the defective pipe and is taking steps to minimize the schedule impact this correction will cause.

Status: RCC and Chevron discussions now place the completion of the Chevron oil line relocation to mid-November, approximately three weeks later than the previously scheduled 12 week completion.

Kramer Property Hazardous Waste

- Concern:** The total effect that the treatment and handling of Kramer property hazardous waste material will have on the Kramer Bridge construction or on SCE utility relocations has not yet been determined. A delay to the C0100, C0101 and C0110 contractors may result.
- Action:** The method of construction and the handling of the hazardous waste material located on the Kramer property needs to be closely monitored by the RCC consultant responsible for supervising hazardous waste issues.
- Status:** The contractor was directed to start work at the Kramer Bridge in July, 1991. Coordination efforts continue between DHS and RCC/consultants. Presently, work is progressing at the Kramer site with the close supervision of the RCC's consultant TetraTech.

Vehicle Delivery Schedule

- Concern:** This contract was not recommended for award by the RCC Board in September as scheduled. The delay in award may have further impacts on the project schedule. The ATC control line test, scheduled to start in November, 1993 will have to be performed using substitute vehicles. Furthermore, the integrated testing is scheduled to start in March 1994. The first MGL vehicles will not be available for ATC or integrated testing until late May 1994 provided the contract is awarded in October. Consequently, a workaround has to be developed to use alternate vehicles for much of the control line tests and the initial stages of the integrated tests.
- In addition, if the contract is awarded in October 1991 and given that the manufacture and delivery time for the first two vehicles is 27 months, there will be only eight certified Green Line vehicles available for the ROD of late October, 1994.
- Action:** The H1100 (Automatic Train Control) contractor is expected to plan testing using alternate vehicles. Integrated test plans will address the workaround.
- Status:** Addendum 5 to Contract H1100 (Automatic Train Control) documents has given the option of using alternate vehicles to the proposers. In order to use the alternate method for testing, the successful proposer will have to submit plans incorporating this for review and approval.

Construction Permits

Concern: The City of Los Angeles permit for construction of the guideway crossing Aviation Boulevard and the construction of Bent 15 is not yet in hand. The requirement for approval of the City of Los Angeles permit is potentially a problem to the contractor. Resolution is needed during October prior to the contractor beginning work at this area as scheduled.

Action: The RCC continues to assist the contractor in securing the necessary permits.

Status: It is anticipated that the City of Los Angeles will issue final approval for construction in October 1991 prior to any schedule impacts.

Shell Oil Lines In Conflict with Bent 96

Concern: It was discovered in September that two Shell lines were in conflict with the designed alignment of Bent 96's foundation.

Action: Pot holing and survey of all existing conditions including location of SCE overhead transmission lines adjacent were completed in September.

Status: A redesign of the location of Bent 96 has been implemented by TRANSCAL to resolve this conflict.

KEY ACTIVITIES -- September

- Contract C0600 (Century Trackwork Installation) was advertised for bids.
- Contract C0400 (Hawthorne Yard and Shop) was awarded to Robert E. McKee, Co. and Notice to Proceed issued on September 23, 1991.
- Bids were opened for Contract H1400 (Overhead Contact System). Notice to Proceed is scheduled for November 4, 1991.
- Proposals were received for Contract H0900 (Safety and Security Communications Systems). Notice to Proceed is anticipated on January 8, 1992.
- Best and Final Offers were received for Contract H1100 (Automatic Train Control) and are currently under review.

KEY ACTIVITIES -- Planned for October

- Contract H1100 (Automatic Train Control) will be submitted for RCC and LACTC Board approval and subsequent award.
- Contract H1400 (Overhead Contact System) will be submitted for RCC and LACTC Board approval and award.
- Bids will be opened for Contract C0600 (Century Trackwork Installation).
- Contract P1900 (High Performance Transit Vehicles) will be resubmitted for the RCC and LACTC Board approval. The revised Notice to Proceed date is November 20, 1991.

O'BRIEN-KREITZBERG
RCC
Project: R23
Period: 8/31/91 to 9/27/91

RAIL CONSTRUCTION CORPORATION
METRO GREEN LINE
Project Cost by Element
(\$ x 000's)

Page: 1
Report Date: 10/09/91
Status Date: 09/27/91

		----- Budget -----		--- Commitments ---		-- Incurred Cost --		--- Expenditures ---		Current	
Description		Original	Current	Period	To Date	Period	To Date	Period	To Date	Forecast	Variance
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
T	Construction	521,594	587,519	2,487	147,471	3,439	37,390	2,994	30,768	637,426	49,907
S	Professional Services	159,098	159,196	1,214	92,288	3,038	70,162	4,080	65,183	159,481	285
R	Real Estate	49,916	49,916	0	22,368	0	21,849	0	21,850	47,682	(2,235)
F	Utility/Agency Force Accounts	16,310	16,310	94	5,689	19	505	19	641	16,310	0
D	Special Programs	3,071	5,217	0	987	26	143	27	44	5,217	0
C	Contingency	80,637	84,468	0	0	0	0	0	0	36,511	(47,957)
A	Project Revenue	(16,626)	(16,626)	0	(1,125)	0	(458)	0	(458)	(16,626)	0
Project Grand Total :		814,000	886,000	3,794	267,678	6,522	129,591	7,120	118,027	886,000	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

RAIL CONSTRUCTION CORPORATION
METRO RAIL GREEN LINE PROJECT
(IN THOUSANDS OF DOLLARS)

11-Oct-91
08:50 AM

SEPTEMBER 91

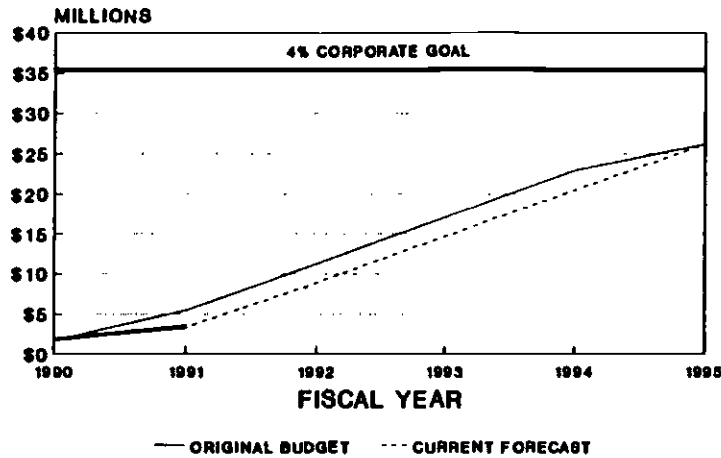
STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
LACTC	\$778,500	\$110,908	\$267,884	34%	\$118,027	15%	\$118,027	15%
STATE	\$107,500 (1)	\$0	\$0	0%	\$0	0%	\$0	0%
TOTAL	\$886,000	\$110,908	\$267,884	30%	\$118,027	13%	\$118,027	13%

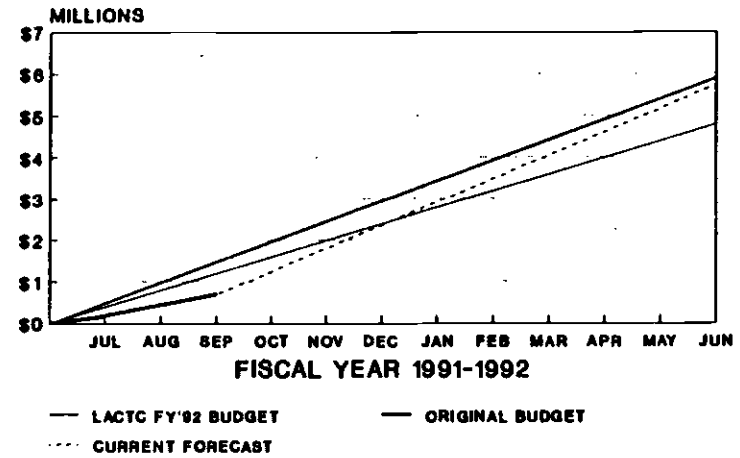
NOTES:

(1) On hold. No requests for funding from the State have been processed.

AGENCY COSTS GREEN LINE



FISCAL 1992 AGENCY COSTS GREEN LINE



PROJECT AGENCY COSTS GREEN LINE (\$000)

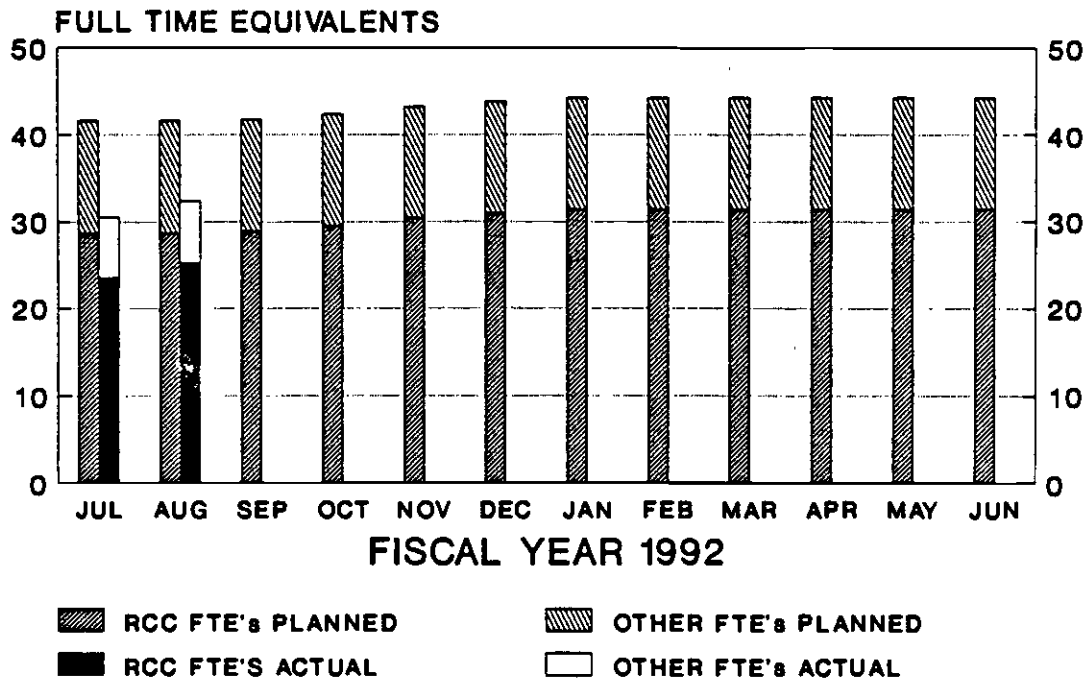
TOTAL PROJECT BUDGET	\$886,000
ORIGINAL BUDGET	\$26,189
BUDGET % OF TOTAL PROJECT	3.0%
CURRENT FORECAST	\$26,189
FORECAST % OF TOTAL PROJECT	3.0%
4% CORPORATE GOAL	\$35,440

FISCAL YEAR 1992 AGENCY COSTS GREEN LINE (\$000)

LACTC FY'92 BUDGET	\$4,781
ORIGINAL BUDGET	\$5,833
CURRENT FORECAST	\$5,721
ACTUAL \$ TO DATE	\$681

Current forecast as of July 1991.

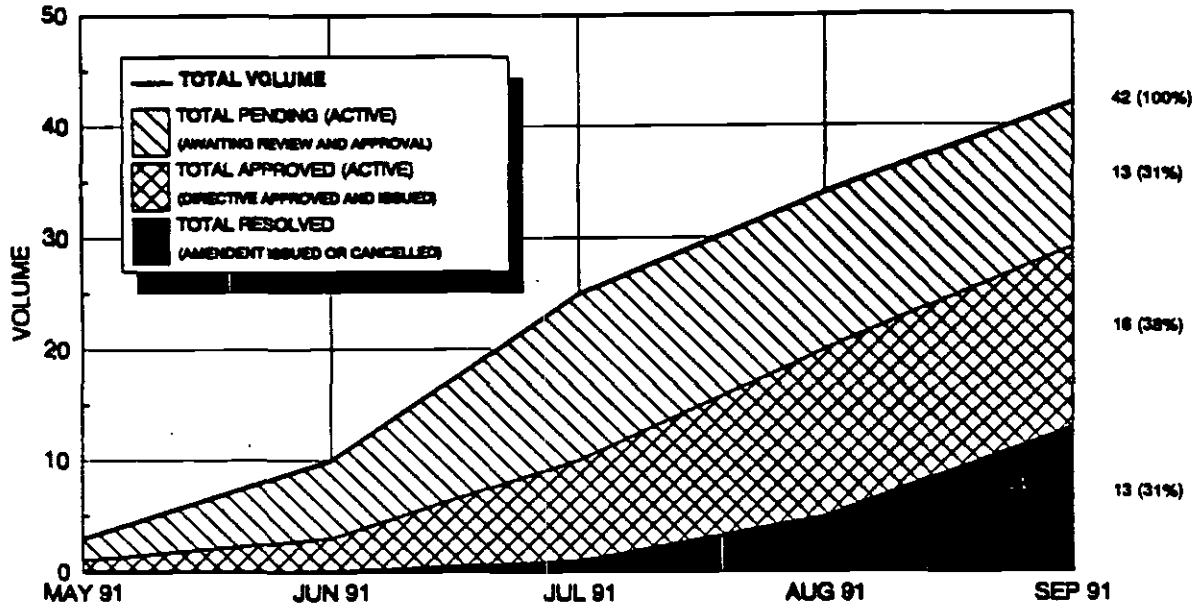
STAFFING PLAN VS. ACTUAL GREEN LINE



GREEN LINE STAFFING PLAN FISCAL YEAR 1992

BUDGET WAGE RATE (\$/HOUR)	\$39
ACTUAL WAGE RATE (\$/HOUR)	\$38
RCC FTE's PLANNED	29
RCC FTE's ACTUAL	25
OTHER FTE's PLANNED	13
OTHER FTE's ACTUAL	7
TOTAL FTE's PLANNED	42
TOTAL FTE's ACTUAL	32

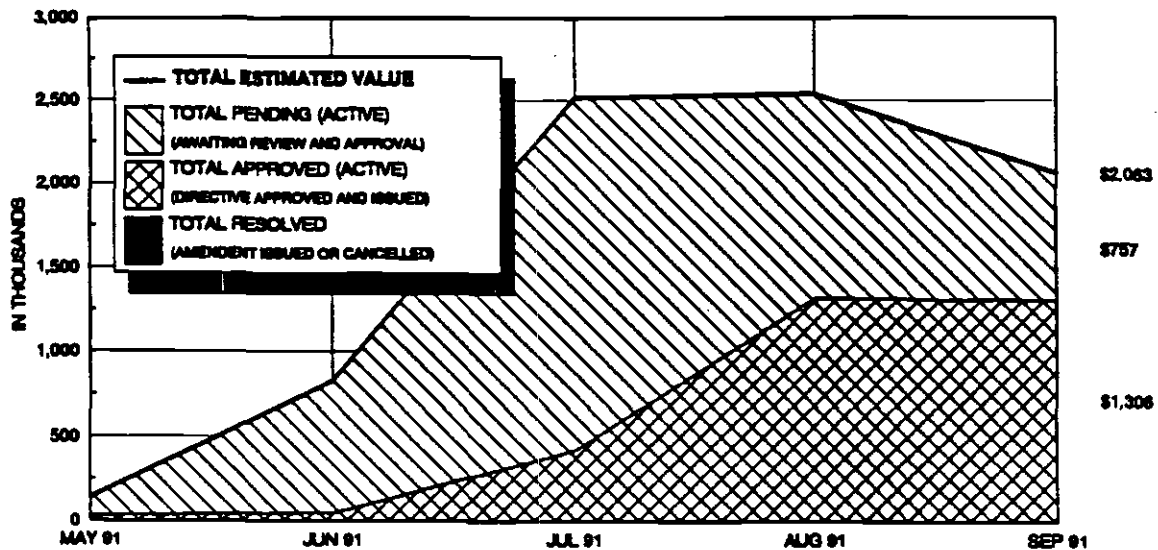
CONSULTANT CONTRACT CHANGE SUMMARY
R23 CONSULTANT CHANGE REQUEST RESOLUTION



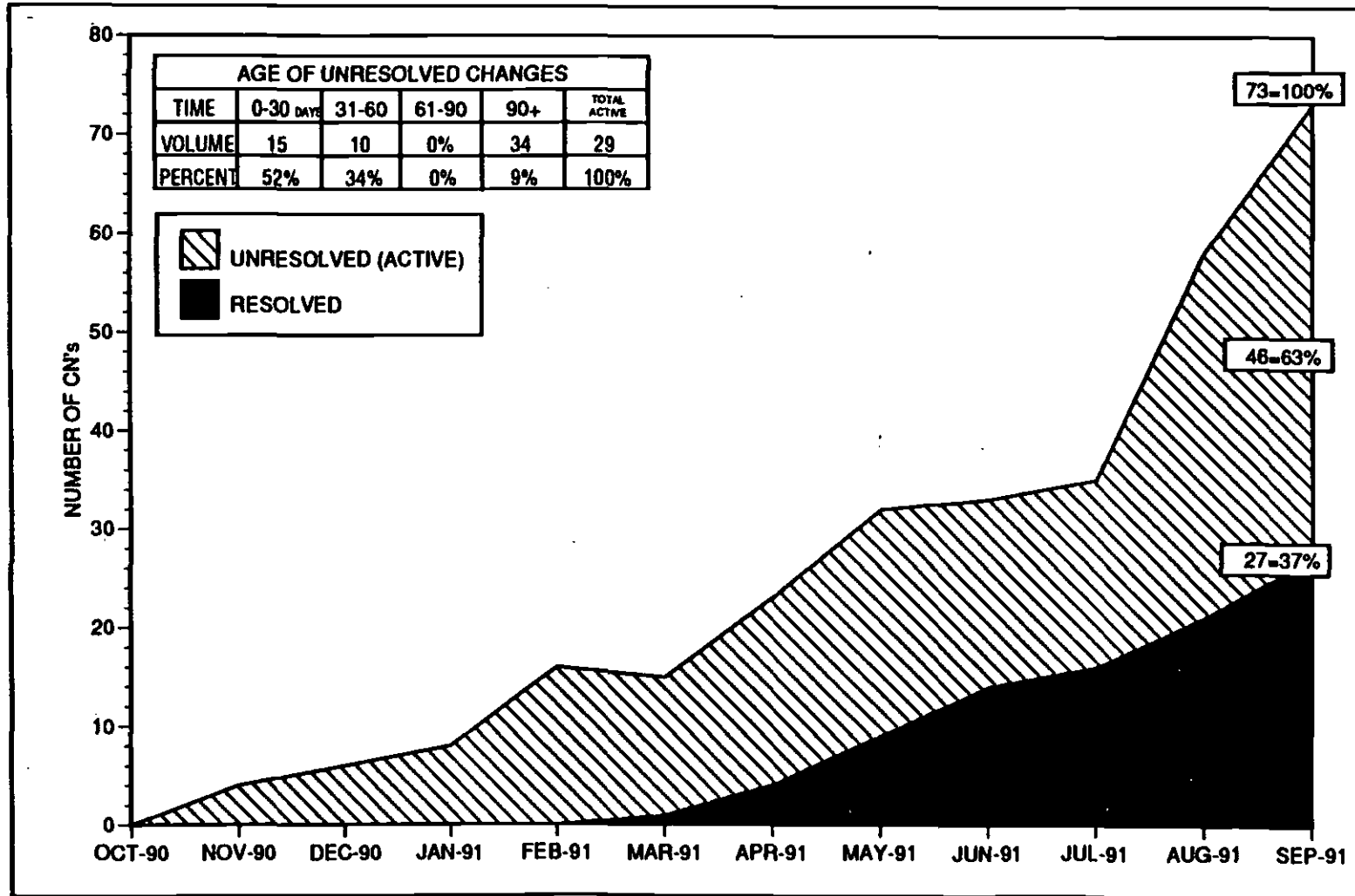
AGE OF UNRESOLVED CONSULTANT CHANGES

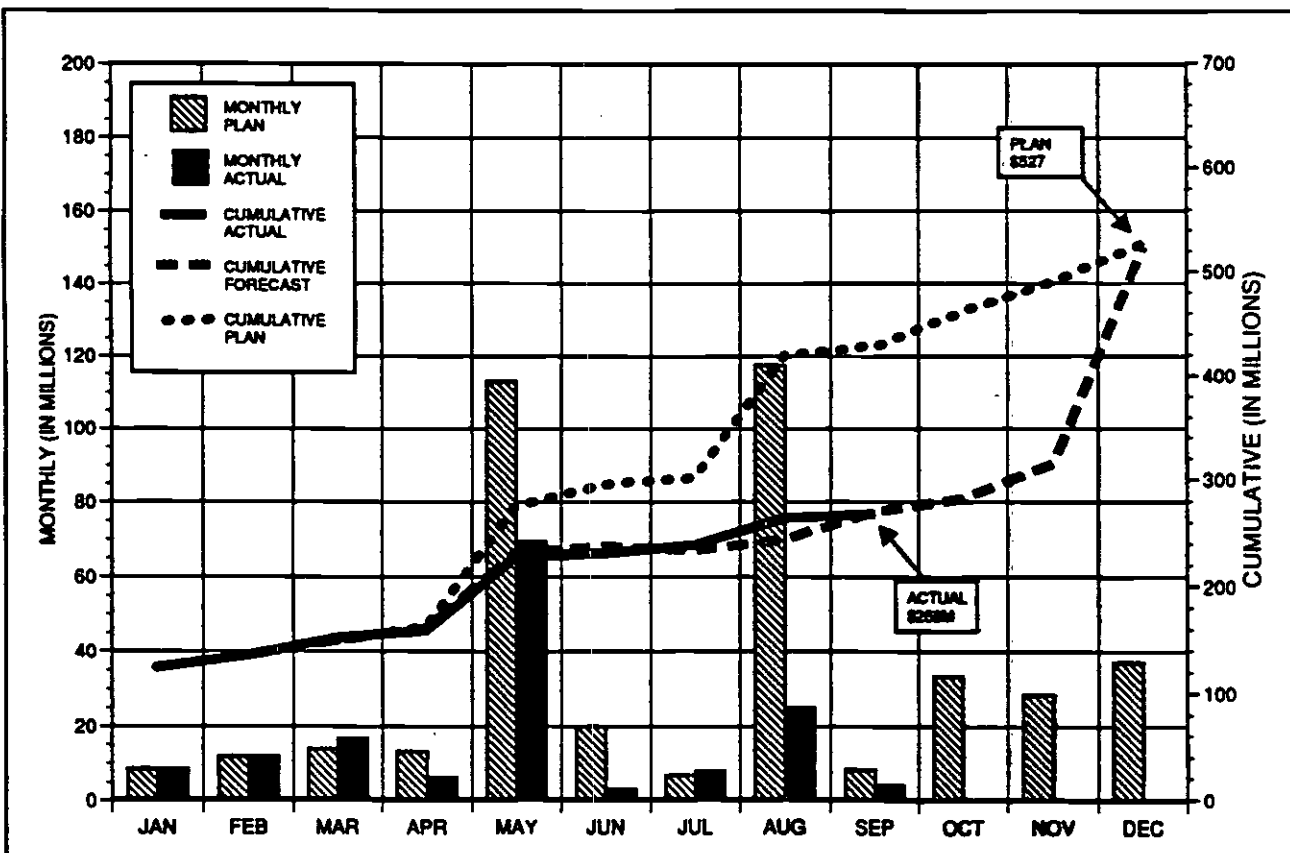
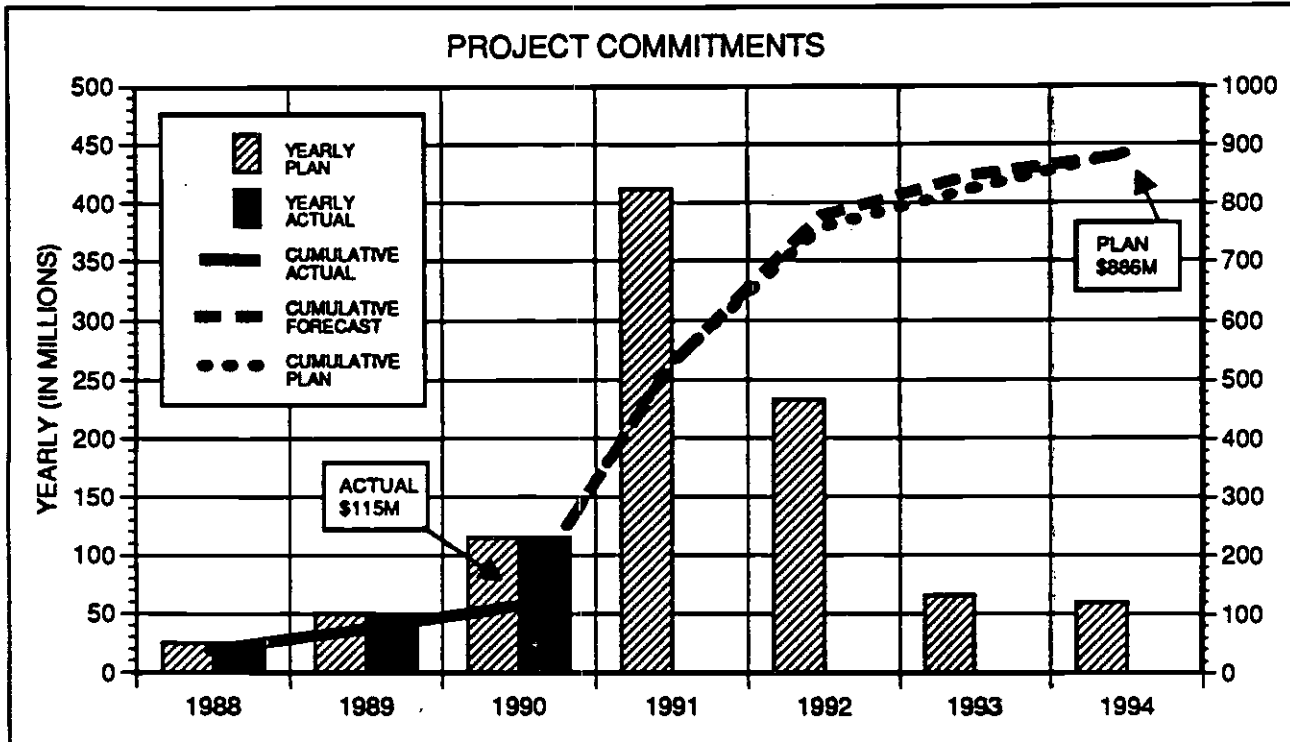
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	5	5	10	9	29
PERCENT	17%	17%	35%	31%	100%

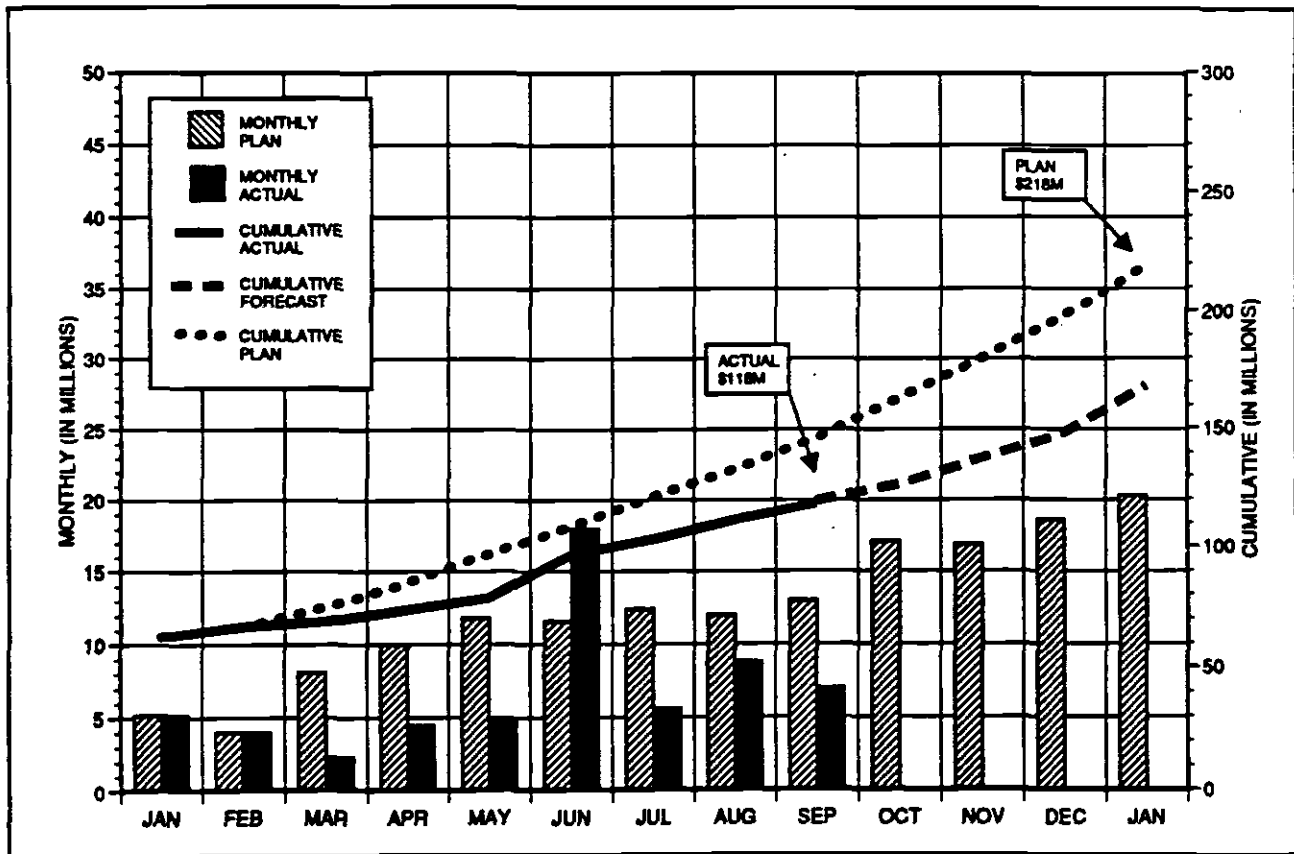
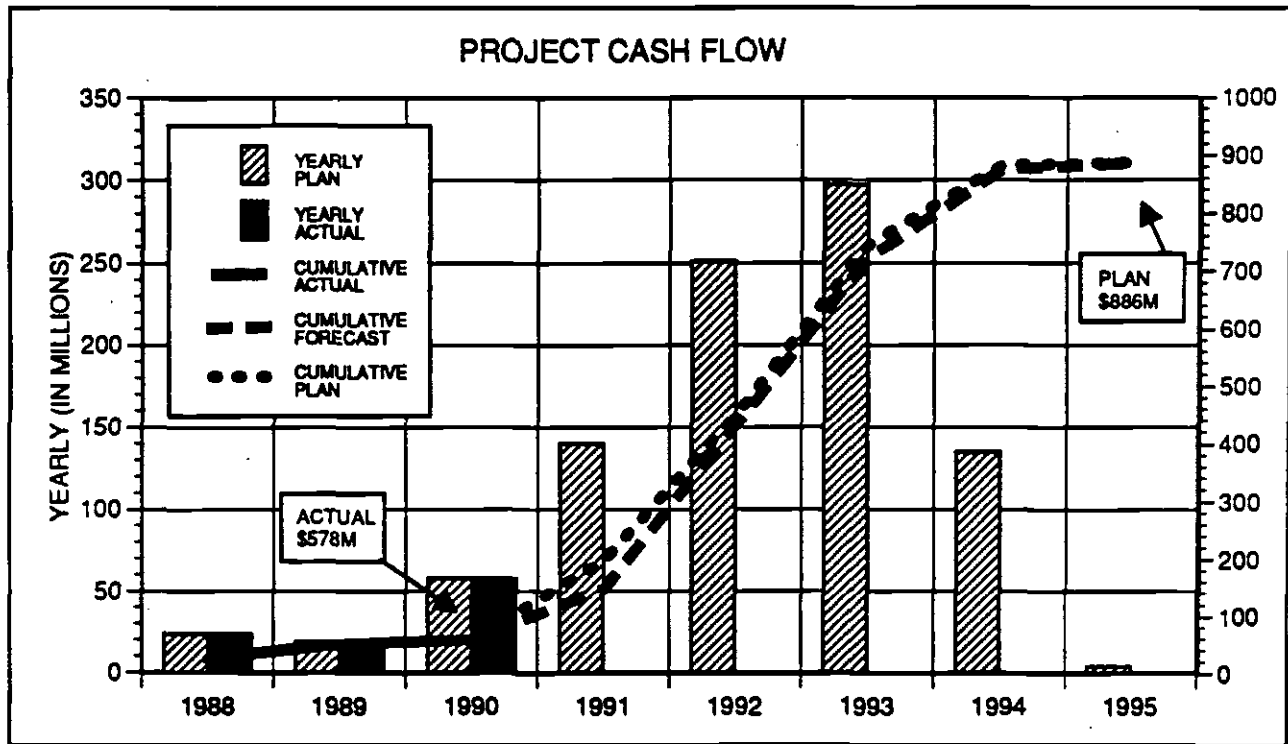
CONSULTANT CONTRACT CHANGE SUMMARY
R23 CONSULTANT CHANGE REQUEST VALUES

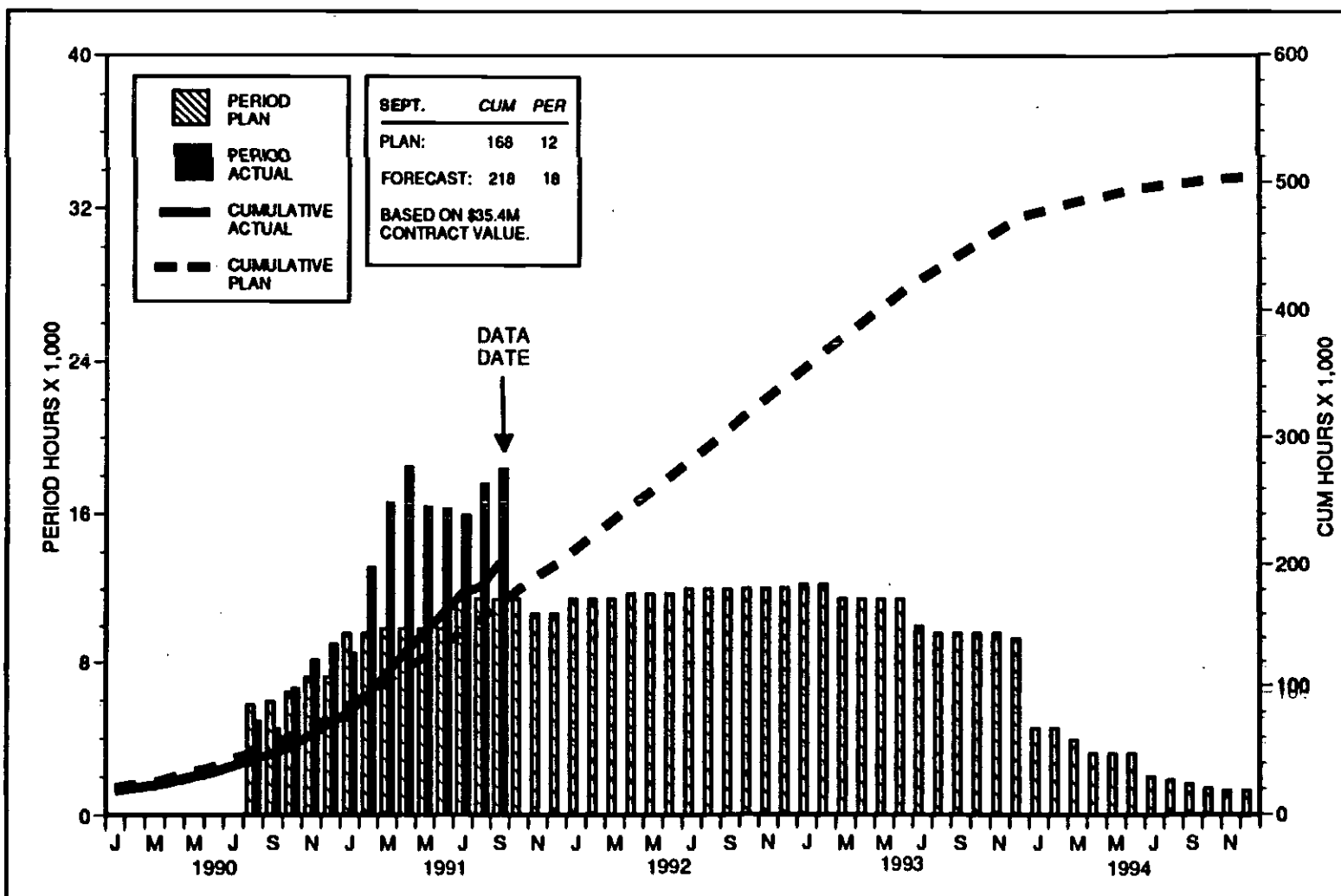


CONSTRUCTION/PROCUREMENT CONTRACT CHANGES Change Notice Resolution

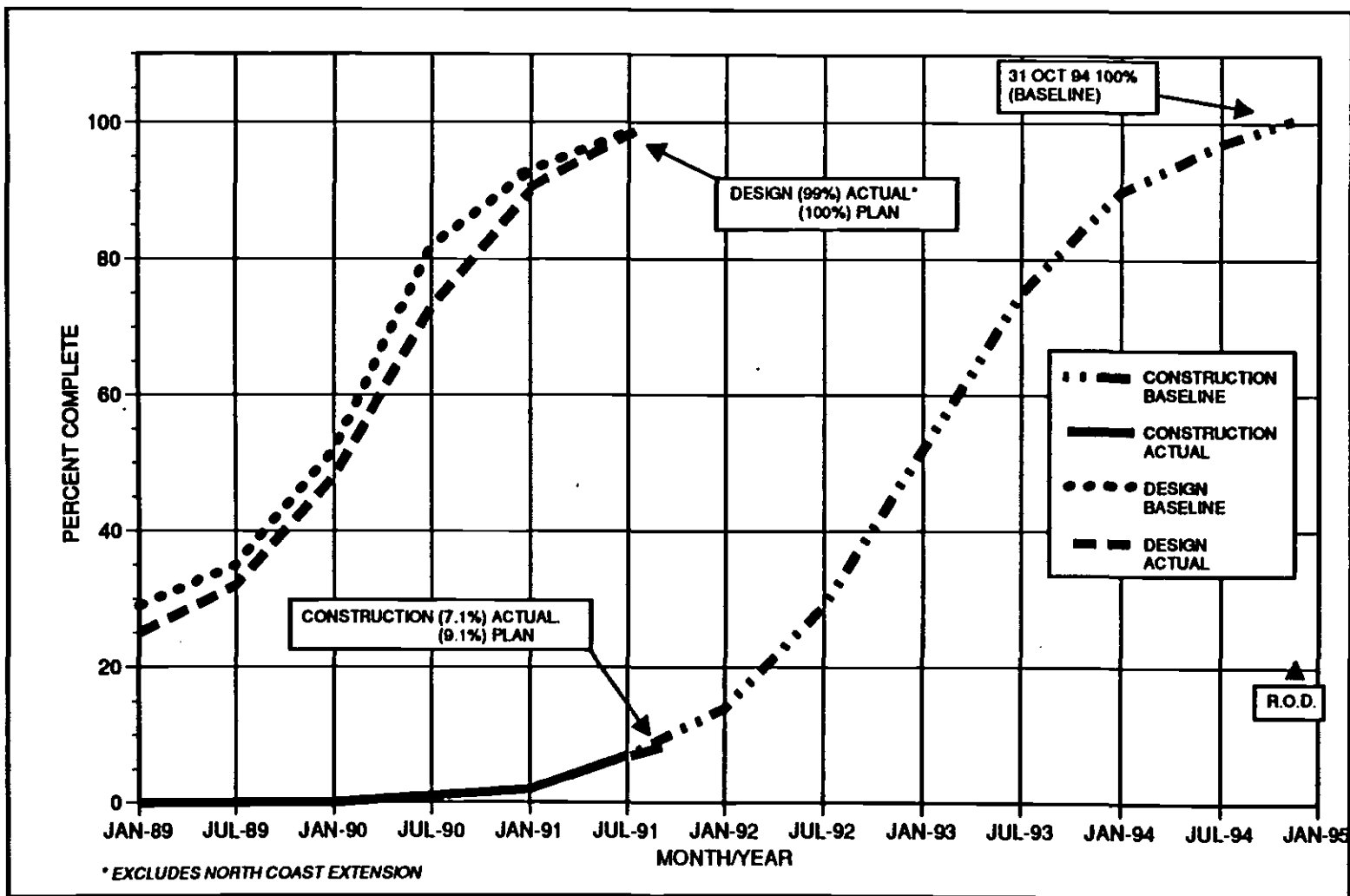


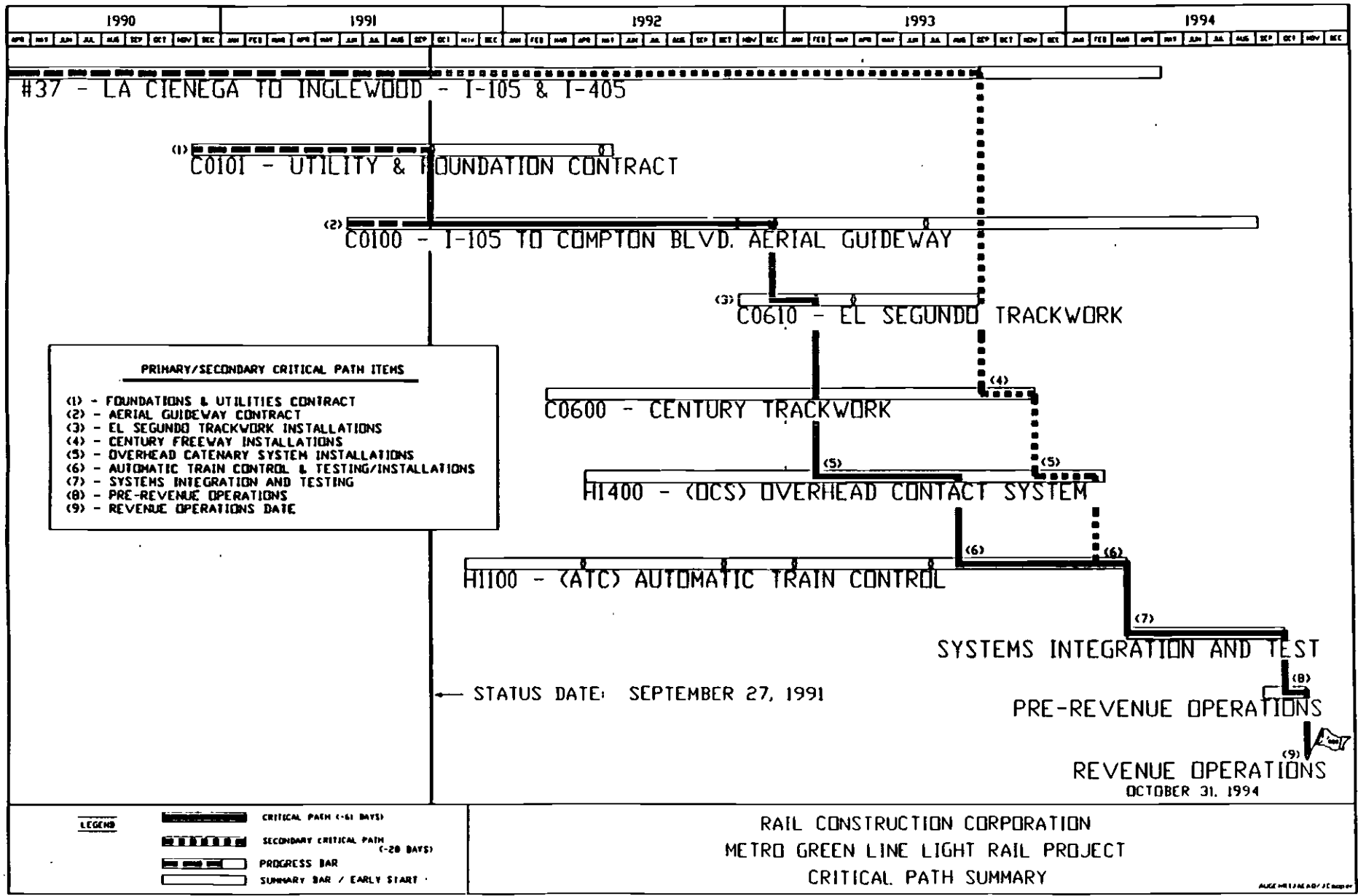






PROGRESS SUMMARY







Total manhours as of August 1991: 170,717

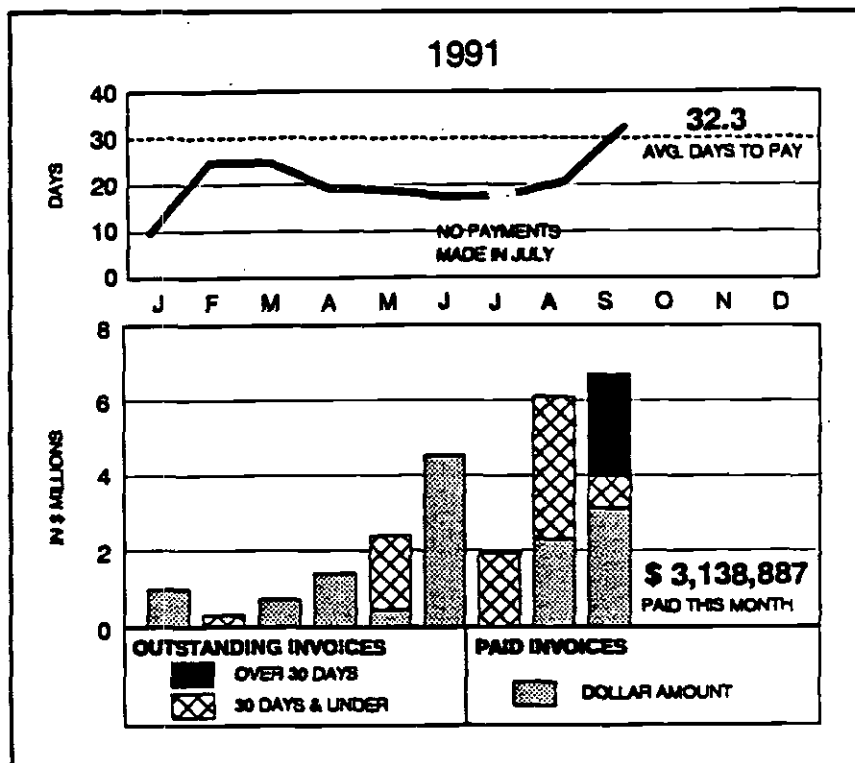
INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 32.3 days.

- 8 invoices were paid for a total value of \$ 3,138,887.

- There were 12 outstanding Construction or Procurement invoices over 30 days old for \$ 2,725,230.

Construction/Procurement Invoice Status



Note: The average days to pay is the time from when the Resident Engineer approves a progress payment (invoice) to when Accounting issues a check for this invoice.

OUTSTANDING INVOICES

Month	Construction/Procurement Invoices				Other Invoices			
	30 Days and Under		Over 30 Days		30 Days and Under		Over 30 Days	
	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value
APR 1991	1	11,840	0	0	14	2,731,169	1	2,778
MAY 1991	4	1,971,943	0	0	17	3,318,597	3	5,006
JUN 1991	0	0	0	0	9	3,346,403	6	21,137
JUL 1991	2	1,944,180	0	0	13	984,391	1	128
AUG 1991	17	3,782,404	0	0	9	1,422,542	2	9,013
SEPT 1991	2	837,776	12	2,725,230	10	1,591,965	1	520

EXECUTIVE SUMMARY

COST STATUS

	in \$ million
• Current Budget	1,450
• Current Forecast	1,450
• Within the approved budget, a breakdown by cost element for the reporting period indicates a difference between the approved budget and the forecast for construction, mainly due to the inclusion of the additional escalators at the Civic Center, Pershing Square and Wilshire/Alvarado Stations.	

SCHEDULE STATUS

• Current Revenue Operations Date	September 1993
• Construction Progress	- Plan 87.6%
	- Actual 89.2%
• A detailed review and analysis of the critical path leading to revenue operations resulted in a 5 day increase to the float.	

REAL ESTATE

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

EXECUTIVE SUMMARY (CON'T)

RAIL ACTIVATION

The Rail Activation Group continued coordination and management activities related to system integration, testing and commissioning activities for the Project.

Activities

During the reporting period, the ongoing activities of the Rail Activation Group included the following:

- Review of training schedule and the availability of associated materials.
- Development of prioritized O&M manual requirements.
- Support of vehicle testing at the Transportation Test center in Pueblo, Colorado.
- Evaluation of current recruitment and training plan to ensure support of dynamic Project requirements.
- Logistical support and coordination for the delivery of Metro-Dade Transit vehicles to Los Angeles.
- Development and implementation of safety measures to ensure safe operations under "Red Tag" conditions following traction power activation in early December 1991.

Future activities will focus on:

- Support of vehicle testing at the Transportation Test Center in Pueblo, Colorado by SCRTD/RCC personnel.
- Develop and redefine training schedule for all contracts with required training.
- Secure, review and approve operations/maintenance/training manuals from all contracts with such requirements.
- Review and refine recruitment and training plan to ensure support of Project requirements.

EXECUTIVE SUMMARY (CON'T)

Concerns

Finalization of SCRTD agreements with labor unions in support of Revenue Operations continues to be a concern. Progress has been slow and delays may impede personnel recruitment.

AREAS OF CONCERN

ONGOING

Contract A650, Vehicles (Booz Allen Hamilton)

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

Action: The Rail Construction Corporation (RCC) has developed a plan which would alter the vehicle testing sequence at the Transportation Test Center (TTC) in Pueblo, Colorado, to release the first pair of vehicles directly to Los Angeles by the dates required to support systems testing.

The RCC has also developed a plan which will use four vehicles from the Metro-Dade Transit System (Miami) in order to support the integrated testing program. These vehicles will arrive by the end of November 1991.

Status: Negotiations have been finalized with the Metro-Dade Transit System and we are currently awaiting delivery of the vehicles to Los Angeles.

The vehicle testing sequence at the Transportation Test Center (TTC) in Pueblo, Colorado, is proceeding to schedule. The required delivery date of January 2, 1992, of the first pair of vehicles to Los Angeles to support systems testing is on target.

AREAS OF CONCERN (CON'T)

Contract A640, Communications

Concern: Completion of the design review of the technical proposal submitted by the A640 contractor, Bechtel, for the Rail Control Center relocation to the Central Control Maintenance Facility (A640-CO-025) is behind schedule.

Action: A "Fast Track" team has been organized to pursue completion of the relocation.

Status: This activity remains on the critical path. The Fast Track team has been successful in keeping the relocation progressing. The required equipment for the Control Center has been ordered.

Negotiations to finalize change order A640-CO-025 are scheduled for mid-October.

Contract A640, Communications

Concern: Procurement of the fire and emergency panels equipment has been delayed due to the submittals review and acceptance process. This delay could potentially impact the Project schedule.

Action: Parsons-Dillingham has taken the following mitigating actions:

- Worked with MRTC/RCC to expedite design submittals.
- Directed contractor to procure critical items; scheduled remaining procurements.
- Met with contractor to target issues and obtain commitment to maintain schedule.
- Worked with the contractor to make up the time lost.
- Established a Quick Response Team Task Force to review design changes and incorporate them immediately.
- Developed a mitigation plan which includes resequencing of work.

AREAS OF CONCERN (CON'T)

Status: As a result of the implementation of the "Fast Track" dedicated engineering team, the conceptual redesign of the Fire and Emergency Management system has been frozen as of August 30, 1991. A manloaded schedule analysis has been developed, design concepts for Fire and Emergency Management throughout the system have been established, and pricing and detailed design is progressing. There still exists a high level of confidence that all contractual milestones will be met. However, since this contract serves as the vehicle that facilitates the systems integration effort, it has the greatest potential for volatility from a cost and schedule standpoint, and will be closely monitored through system start-up.

NEW**Contract A136, Union Station, Stage II**

Concern: The A136 contract completion date may need to be extended due to the lack of resolution of issues concerning Union Station trackyard restoration work and work to the commuter rail facilities. The owners of the trackyard, Catellus and the commuter rail operators, AMTRAK are requiring changes to the original scope of work.

Action: The LACTC, Catellus, and AMTRAK are currently negotiating an acceptable scope of work for the trackyard restoration and commuter rail facilities.

Status: Trackyard restoration and commuter rail facilities work is on hold pending a final agreement between the LACTC and Catellus.

Contract A640, Communications

Concern: Installation of additional radiax cable throughout the tunnels to support LAPD radio frequencies. Costs of this undertaking could directly impact unallocated contingency funds.

Action: Determine costs and schedule impacts to Contract A640, and recommend strategy for implementation.

Status: The installation requirements are currently under review by the Resident Engineer for Contract A640.

UMTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

ONGOING

July 1991, Financial Reporting

Concern: Spot Report No. 14 requires that SCRTD/LACTC respond to several recommendations regarding financial review.

Status: Acknowledgement and agreement have been reached in most cases. This item will be closed when F. Flores produces the CAPRA Accounting Procedures by the 1st week of September.

NEW

NONE

RESOLVED

NONE

KEY ACTIVITIES - SEPTEMBER

- Managed the activation of all programs related to test train arrival and pre-revenue operations. A comprehensive test program is being developed to ensure that all elements of the system provided under the various construction, procurement, and installation contracts conform to specifications, and all elements of the system and personnel who will operate and maintain the system are able to function in an effective, safe, and dependable manner.
- Completed installation of radiax cable in the AL tunnel and communication cables in the AR tunnel.
- Developed a manloaded schedule showing early completion for Contract A640.
- All Stage I contracts referred to final close-out team (except Contract A135).
- Completed A610 contract work.
- Completed closure of the ground water treatment facilities, Contract A144, Operations and Maintenance Water Treatment Plant.

KEY ACTIVITIES - PLANNED FOR OCTOBER

- Continue physical close-out of the following contracts: A130, Yard Leads and Transfer Zone; A135, Union Station, Stage I; A141, Line Section, Union Station to 5th/Hill and Civic Center Station, Stage I; A145, Pershing Square Station, Stage I.
- Complete installation of communication cables in AL tunnel and start radiax cable installation at passenger stations.
- Continue to assess and resolve electrical/mechanical interfaces for all Stage II contracts as they surface.
- Continue management of programs related to test train arrival and pre-revenue operations.
- Energize substations at Wilshire/Alvarado, Civic Center and Pershing Square.

STATUS DATE : SEPTEMBER 27, 1991
 STATUS PERIOD : AUGUST 31, 1991 TO SEPTEMBER 27, 1991

RAIL CONSTRUCTION CORPORATION
 PROJECT COST REPORT
 COST BY ELEMENT
 (\$000)

PROJECT : R80 METRO RAIL RED LINE SEGMENT 1

ELEMENT / DESCRIPTION	ORIGINAL BUDGET (1)	CURRENT BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST		VARIANCE (11-3)
		PERIOD (2)	TO DATE (3)	PERIOD (4)	TO DATE (5)	PERIOD (6)	TO DATE (7)	PERIOD (8)	TO DATE (9)	PERIOD (10)	TO DATE (11)	
T CONSTRUCTION	696,158	0	751,972	5,249	672,949	10,896	586,291	13,882	668,625	2,965	789,463	37,491
S PROFESSIONAL SERVICES	397,755	0	461,830	2,007	406,399	2,878	402,577	2,878	402,577	1,217	466,916	4,986
R REAL ESTATE	90,894	0	139,820	1,147	123,401	1,147	123,401	1,147	123,401	0	139,679	(141)
F UTILITY RELOCATIONS	10,920	0	12,140	0	12,018	92	8,033	92	8,033	0	12,018	(122)
D SPECIAL PROGRAMS	948	0	948	0	948	40	369	40	369	0	968	40
C PROJECT CONTINGENCY	53,225	0	83,209	0	0	0	0	0	0	(4,202)	40,955	(42,254)
A PROJECT REVENUE	0	0	0	0	0	0	0	0	(762)	0	0	0
PROJECT GRAND TOTAL	1,249,900	0	1,450,019	8,403	1,215,715	15,051	1,132,671	18,047	1,122,243	0	1,450,019	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

RAIL CONSTRUCTION CORPORATION
 METRO RAIL PROJECT MOS-1

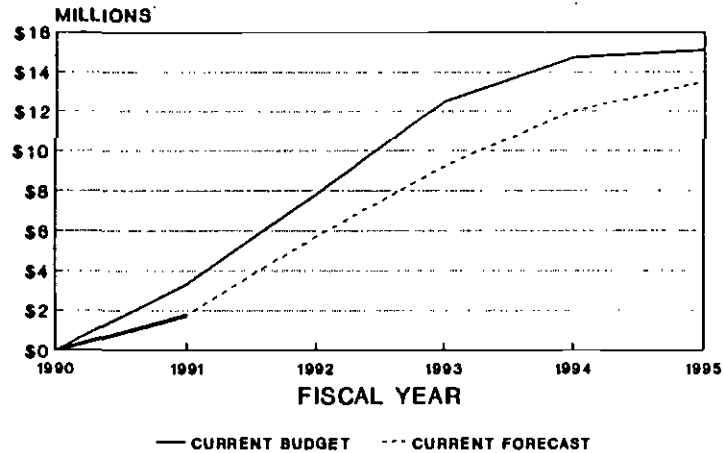
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AUGUST 91

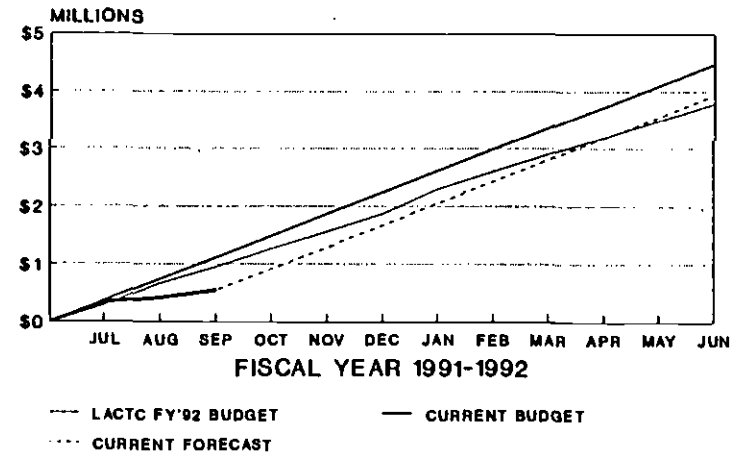
STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
UMTA-SECTION 3	\$605,300,000	\$605,299,997	\$582,245,150	96%	\$546,714,792	90%	\$514,680,458	85%
UMTA-SECTION D	\$90,583,720	\$90,583,720	\$86,721,668	96%	\$85,176,346	94%	\$83,482,798	92%
STATE	\$213,076,630	\$214,015,500	\$197,902,690	93%	\$177,359,129	83%	\$206,390,264	97%
LACTC	\$176,639,650	\$175,700,780	\$176,639,650	100%	\$152,184,937	86%	\$149,596,933	85%
CITY OF L.A.	\$34,000,000	\$34,000,000	\$30,865,557	91%	\$28,022,647	82%	\$26,788,158	79%
BENEFIT ASSESS.	\$130,300,000	\$19,082,432	\$105,560,286	81%	\$110,035,107	84%	\$0	0%
(1) COST OVERRUN ACCOUNT	\$200,119,000	\$34,026,501	\$33,121,000	17%	\$9,734,915	5%	\$9,734,915	5%
(2) BENEFIT ASSESS. SHORTFALL	\$0	\$0	\$0		\$0		\$110,035,107	
TOTAL	\$1,450,019,000	\$1,172,708,930	\$1,213,056,000	84%	\$1,109,227,873	76%	\$1,100,708,633	76%
NOTES:								
(1) The Cost Overrun Account includes CAPRA funds as well as LACTC and City of Los Angeles contributions to cover cost overruns								
(2) The current Benefit Assessment District revenue shortfall is being funded by SCRTD and LACTC								

AGENCY COSTS RED LINE SEGMENT 1



FISCAL YEAR 1992 AGENCY COSTS RED LINE SEGMENT 1



PROJECT AGENCY COSTS RED LINE SEGMENT 1 (\$000)

TOTAL PROJECT BUDGET	\$1,450,019
CURRENT BUDGET *	\$15,091
CURRENT FORECAST *	\$13,516

*Does not include \$80,864 in agency costs expended by SCRTD prior to June 30, 1990.

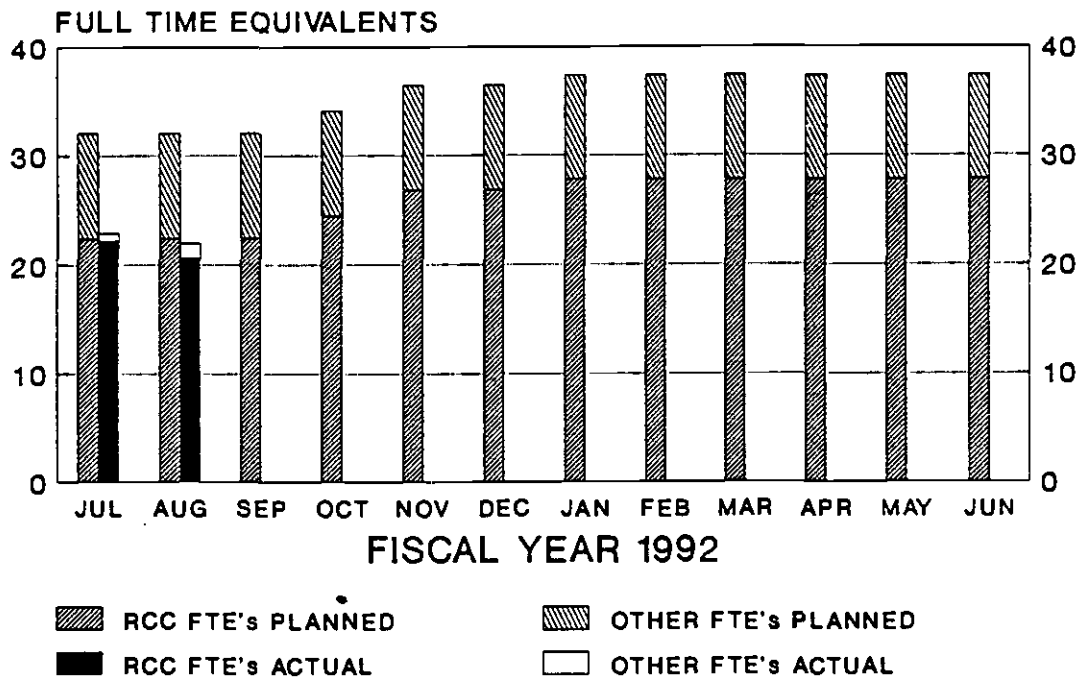
FISCAL YEAR 1992 AGENCY COSTS RED LINE SEGMENT 1 (\$000)

LACTC FY'92 BUDGET	\$3,792
CURRENT BUDGET	\$4,477
CURRENT FORECAST	\$3,941
ACTUAL \$ TO DATE	\$541

Current forecast as of July 1991.

AGENCY STAFFING PLAN VS. ACTUAL

RED LINE SEGMENT 1

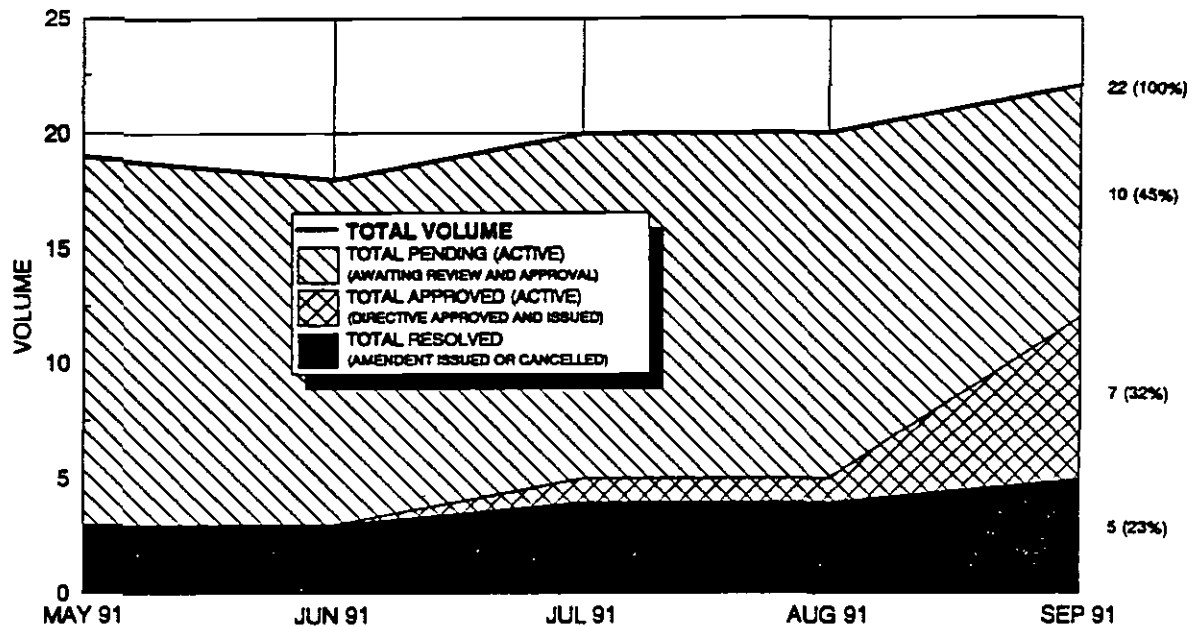


RED LINE (SEGMENT 1) AGENCY STAFFING PLAN

FISCAL YEAR 1992

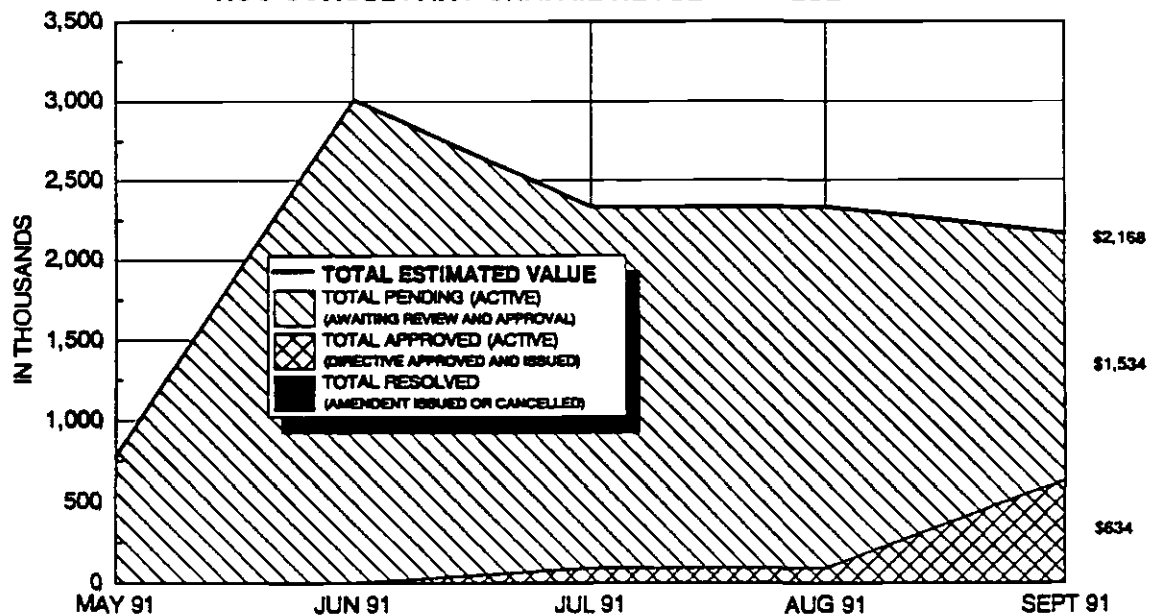
BUDGET WAGE RATE (\$/HOUR)	\$42
ACTUAL WAGE RATE (\$/HOUR)	\$43
RCC FTE's PLANNED	22
RCC FTE's ACTUAL	21
OTHER FTE's PLANNED	10
OTHER FTE's ACTUAL	1
TOTAL FTE's PLANNED	32
TOTAL FTE's ACTUAL	22

**CONSULTANT CONTRACT CHANGE SUMMARY
R80 CONSULTANT CHANGE REQUEST RESOLUTION**

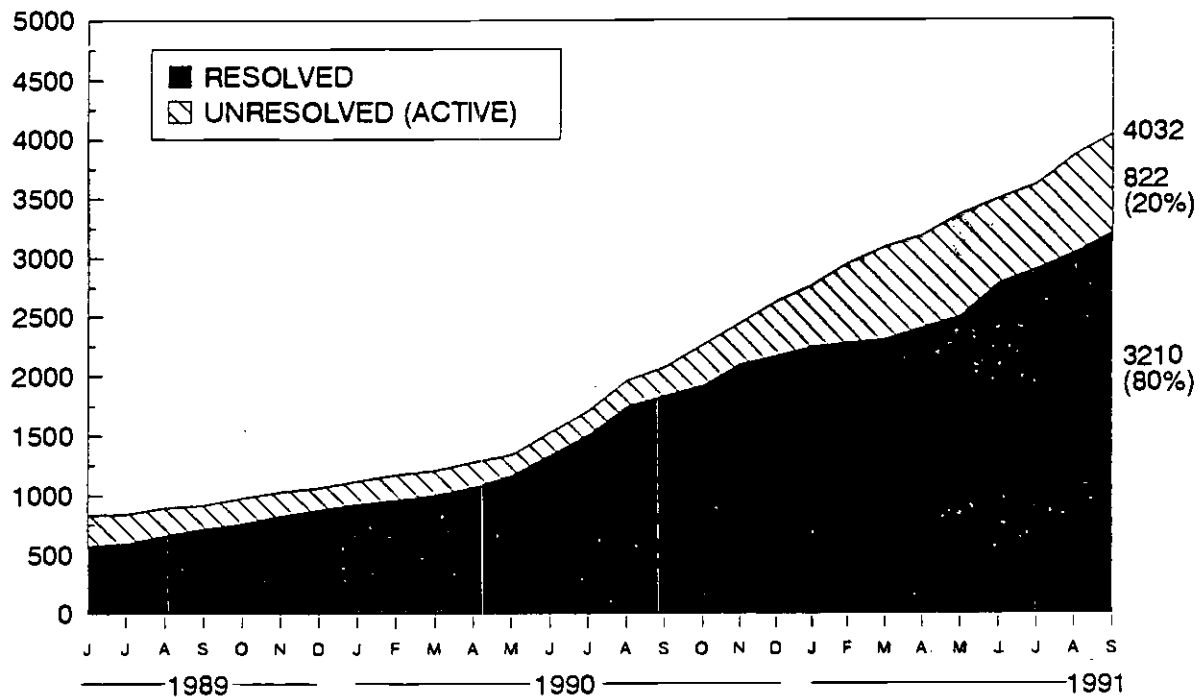


AGE OF UNRESOLVED CONSULTANT CHANGES					
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	2	0	2	13	17
PERCENT	12%	0%	12%	76%	100%

**CONSULTANT CONTRACT CHANGE SUMMARY
R80 CONSULTANT CHANGE REQUEST VALUES**



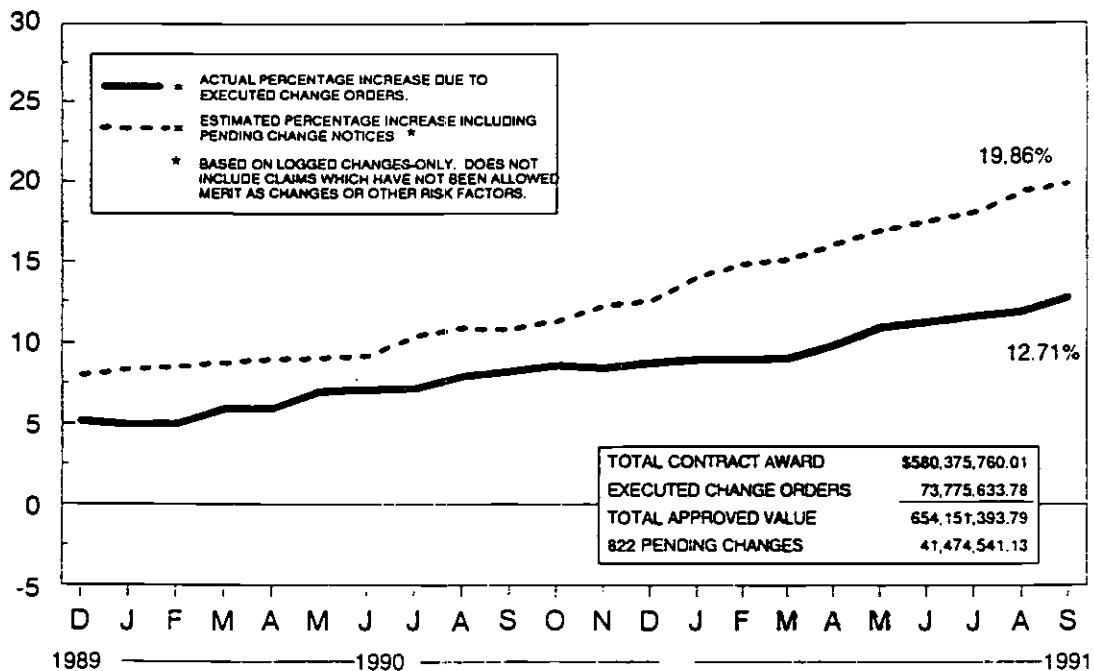
**CONSTRUCTION/PROCUREMENT CONTRACT CHANGES:
CHANGE NOTICE RESOLUTION**



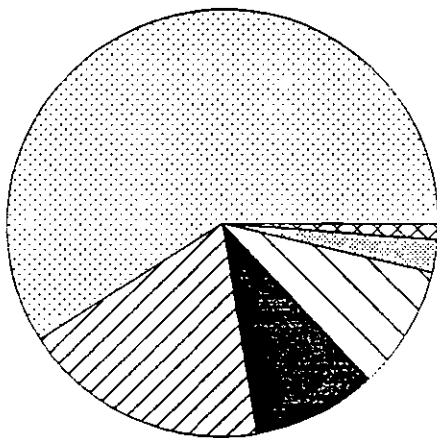
***AGE OF UNRESOLVED CHANGES**

TIME	0-30 DAYS	31-60	61-90	OVER 90	TOTAL ACTIVE
VOLUME	361	65	81	315	822
PERCENT	44%	8%	10%	38%	100%

**CONSTRUCTION/PROCUREMENT CONTRACT CHANGES:
CHANGE DOLLARS AS A PERCENTAGE OF ORIGINAL CONTRACT AWARD**









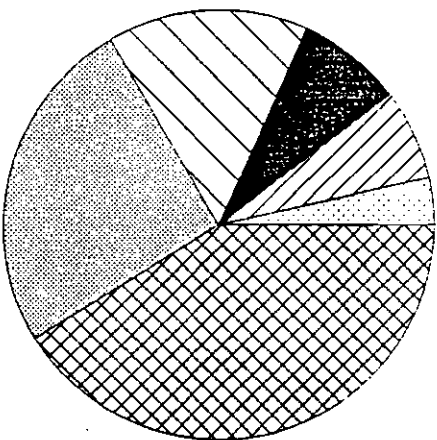
CONSTRUCTION/PROCUREMENT
CHANGE VOLUME AND COST BY COST LEVEL
BASED ON EXECUTED CHANGES AS OF 9/27/91









CHANGE VOLUME
TOTAL VOLUME: 1808 CO'S (2625 CN'S)

ABSOLUTE VALUES

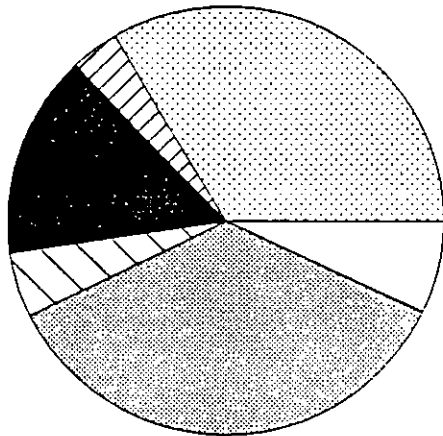
1068	59.1%		< \$10,000
334	18.5%		< \$25,000
170	9.4%		< \$50,000
168	9.3%		< \$200,000
46	2.5%		> \$200,000
22	1.2%		> \$1,000,000



CHANGE COST
TOTAL COST: \$73,775,634

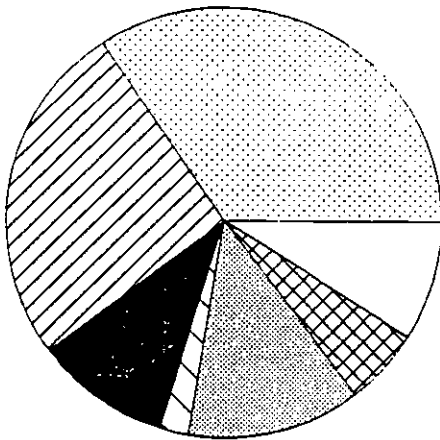
\$2,628,383	3.6%		< \$10,000
\$5,060,433	6.8%		< \$25,000
\$5,873,240	8.0%		< \$50,000
\$11,048,916	15.0%		< \$200,000
\$18,753,040	25.4%		> \$200,000
\$30,411,622	41.2%		> \$1,000,000

**CONSTRUCTION/PROCUREMENT CONTRACT CHANGES
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE
BASED ON EXECUTED CHANGES AS OF 09/27/91**



CHANGE BASIS VOLUME
TOTAL VOL: 2625 CN'S (1808 CO'S)

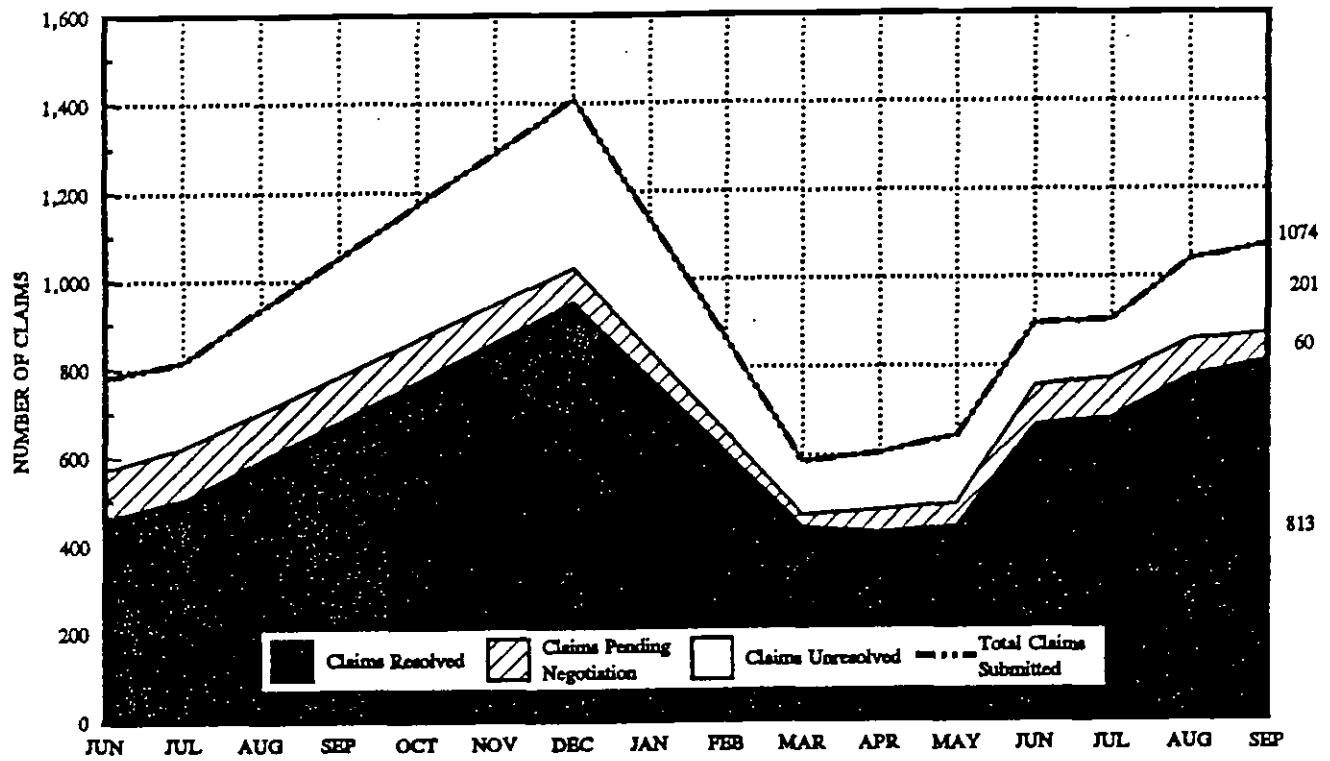
880	33.5%		WORK SCOPE CHANGES
95	3.6%		SCHEDULE CHANGES
404	15.3%		DIFFERING CONDITIONS
126	5.0%		ADMINISTRATIVE
932	35.5%		DESIGN CHANGES
3	0.1%		MANAGEMENT ISSUES
185	7.0%		UNASSIGNED



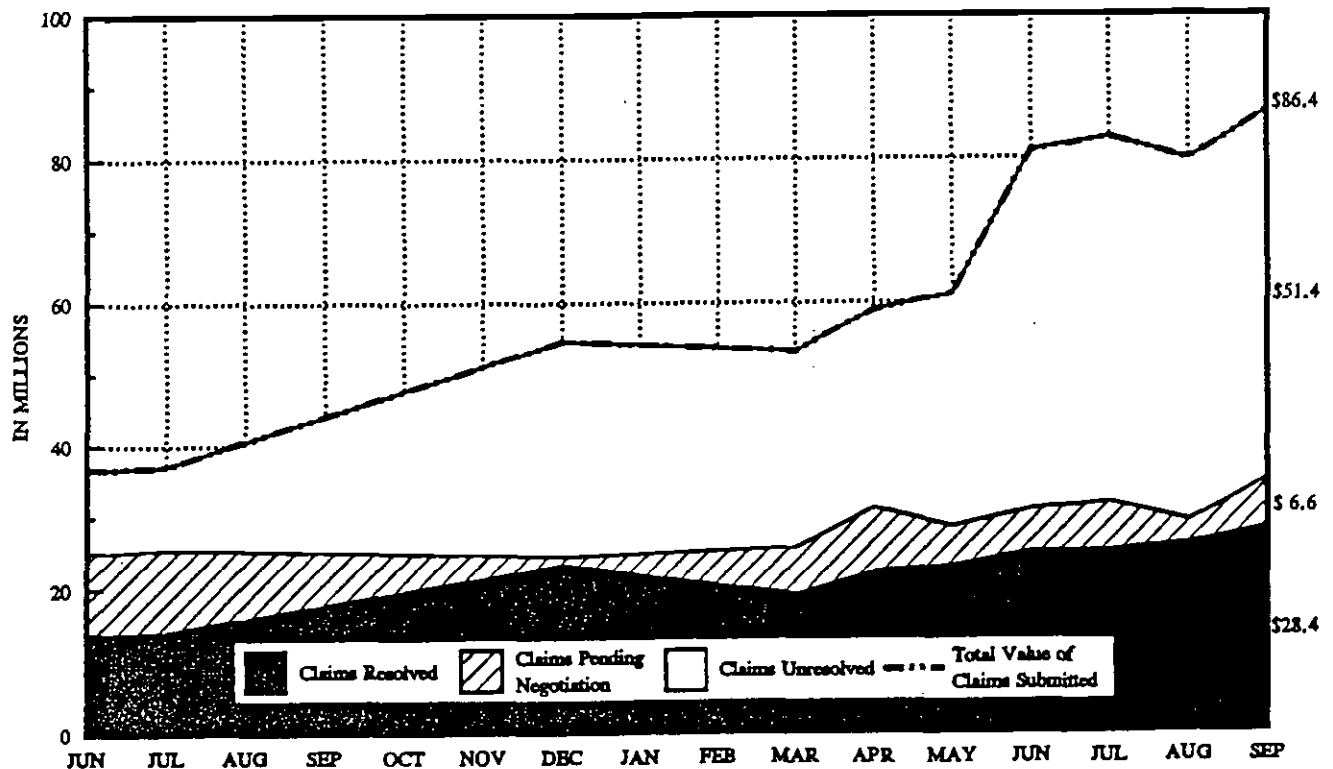
CHANGE BASIS COST
TOTAL COST: \$73,775,634

\$25,427,746	34.4%		WORK SCOPE CHANGES
\$19,075,784	25.9%		SCHEDULE CHANGES
\$7,499,138	10.1%		DIFFERING CONDITIONS
\$1,531,627	2.1%		ADMINISTRATIVE
\$9,496,649	12.9%		DESIGN CHANGES
\$4,232,538	5.7%		MANAGEMENT ISSUES
\$6,512,152	8.9%		UNASSIGNED

CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS
Filed Claims - COUNT



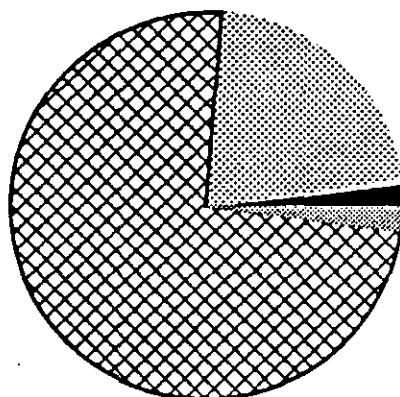
CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS
Filed Claims - COST



CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS






Unresolved Claims Distribution Chart

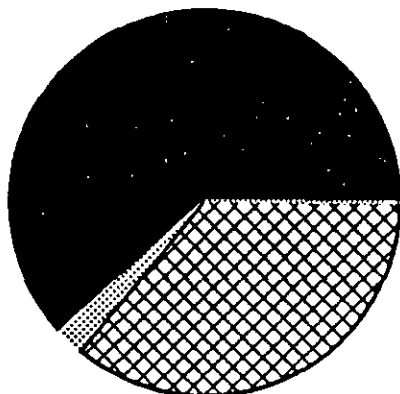
Filed Claims as of 09/27/91



COUNT






TOTAL COUNT: 201

4	2.0%		Litigation
1	0.5%		Closed
43	21.4%		Rejected
149	74.1%		Pending Merit
4	2.0%		In Dispute

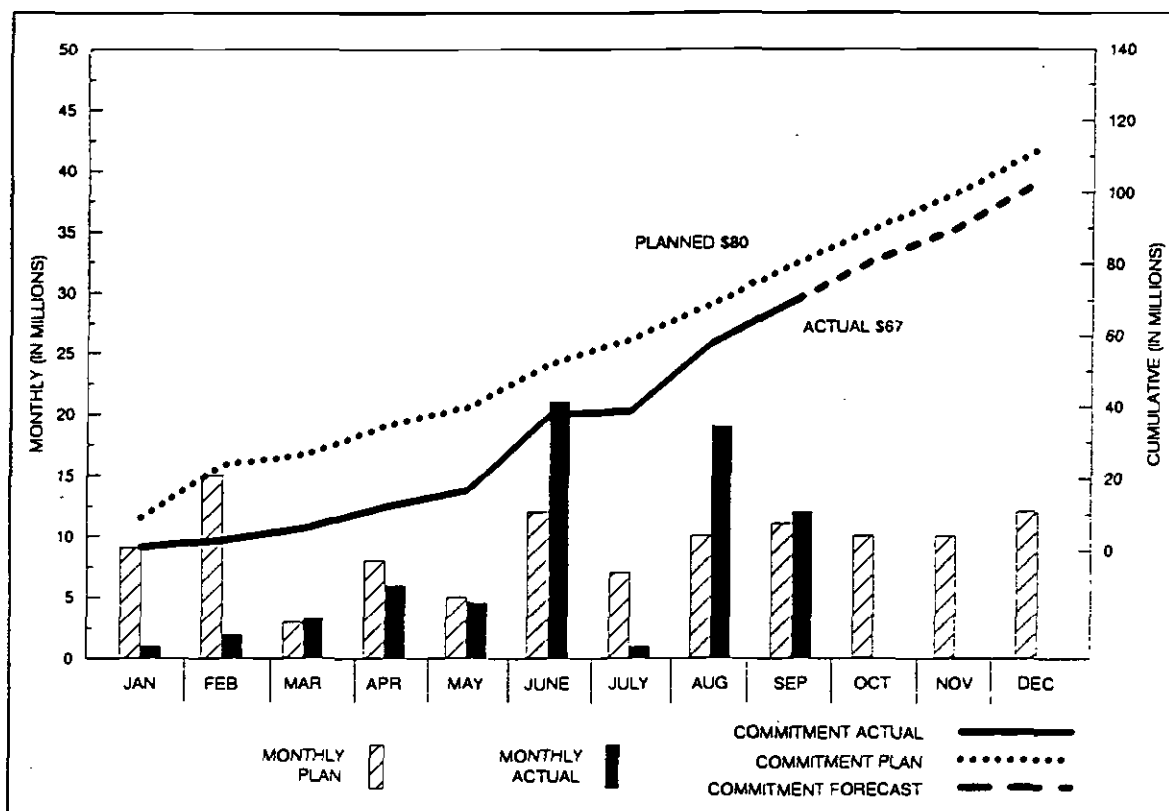


COST

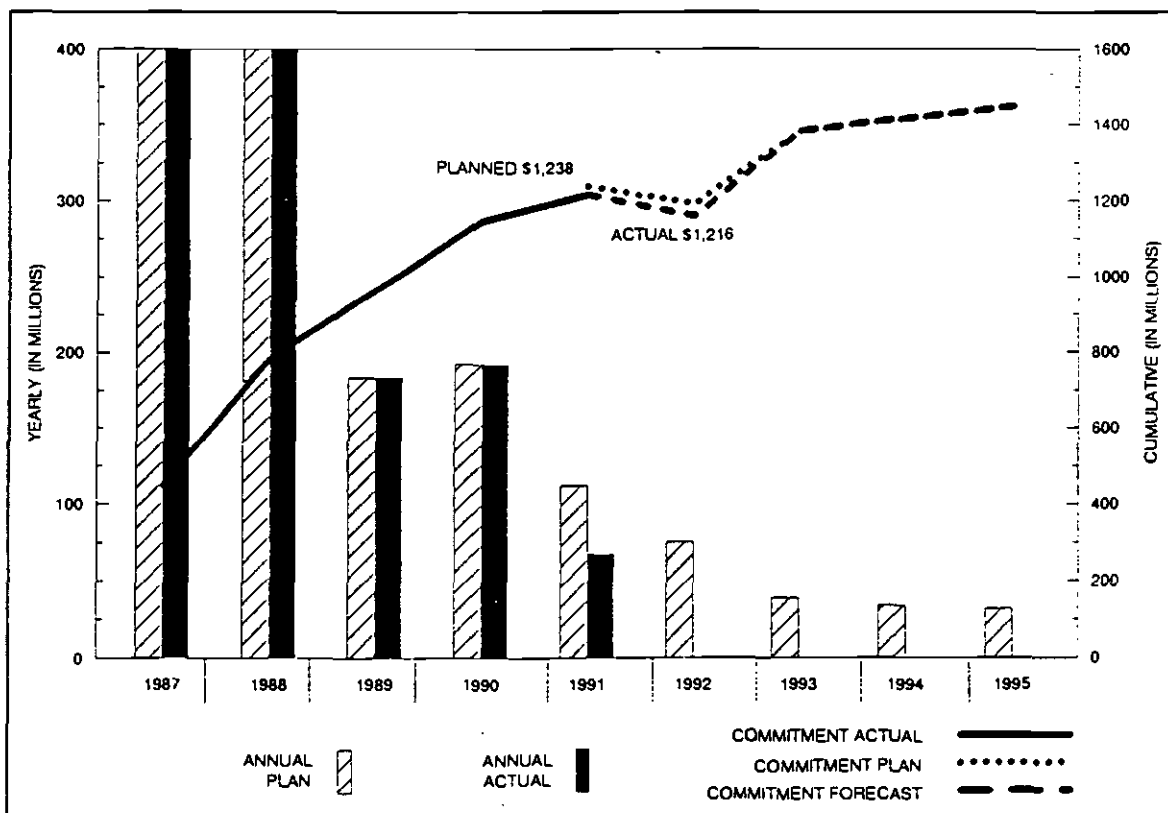
TOTAL COST \$51,382,626

\$31,751,683	61.8%		Litigation
\$56,274	0.1%		Closed
\$1,177,487	2.3%		Rejected
\$18,323,195	35.7%		Pending Merit
\$73,987	0.1%		In Dispute

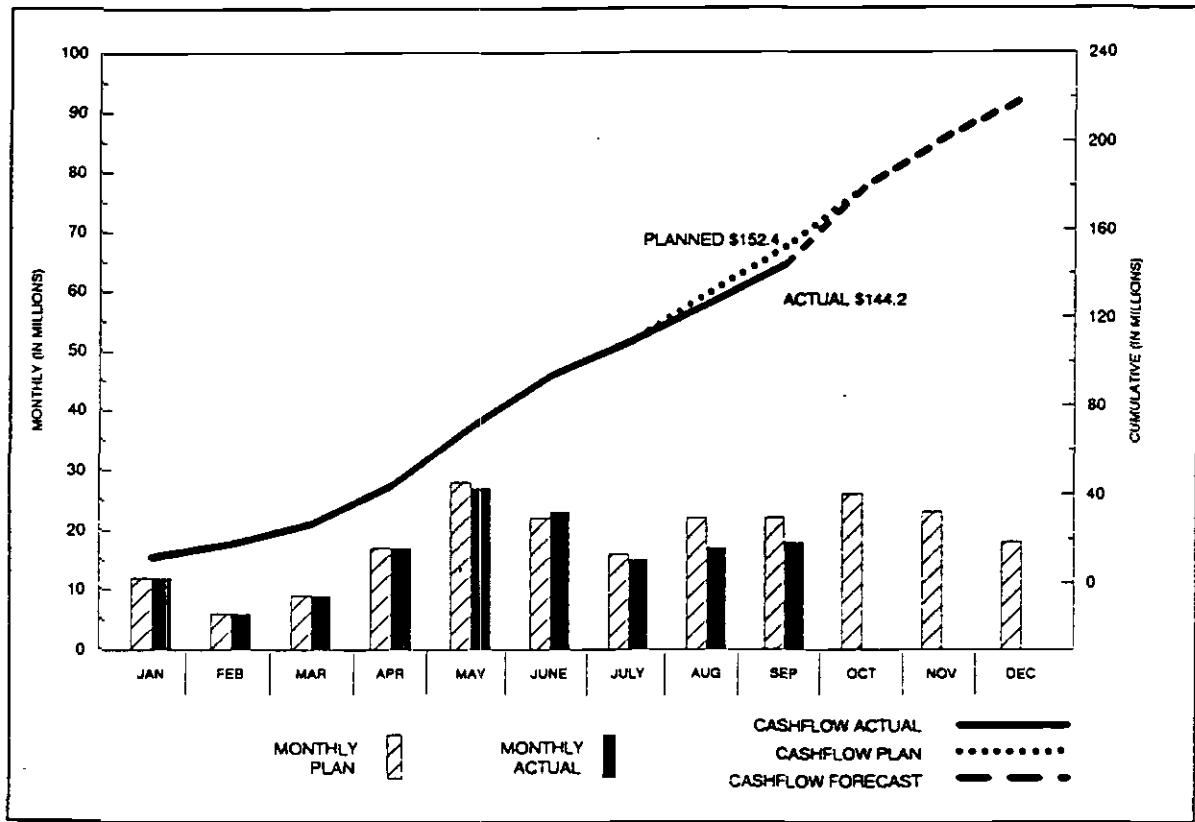
PROJECT COMMITMENTS -- ANNUAL



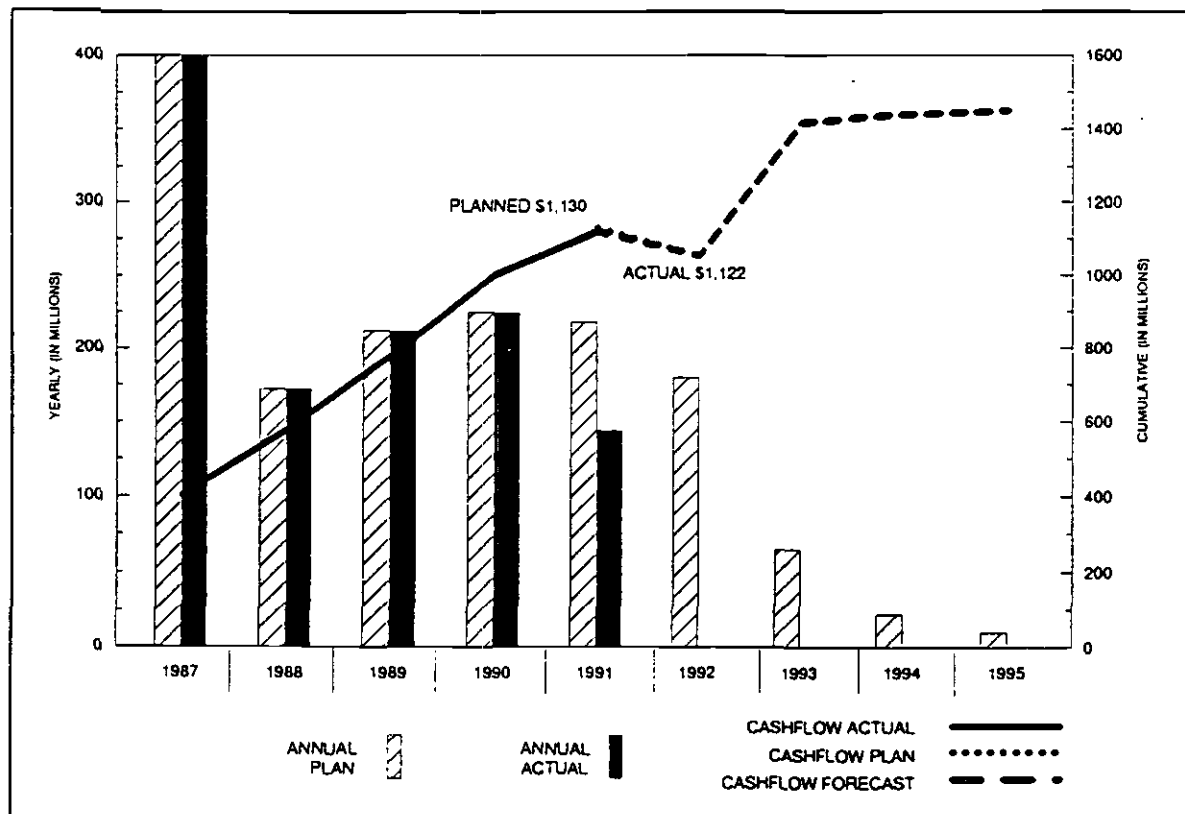
PROJECT COMMITMENTS -- PROJECT



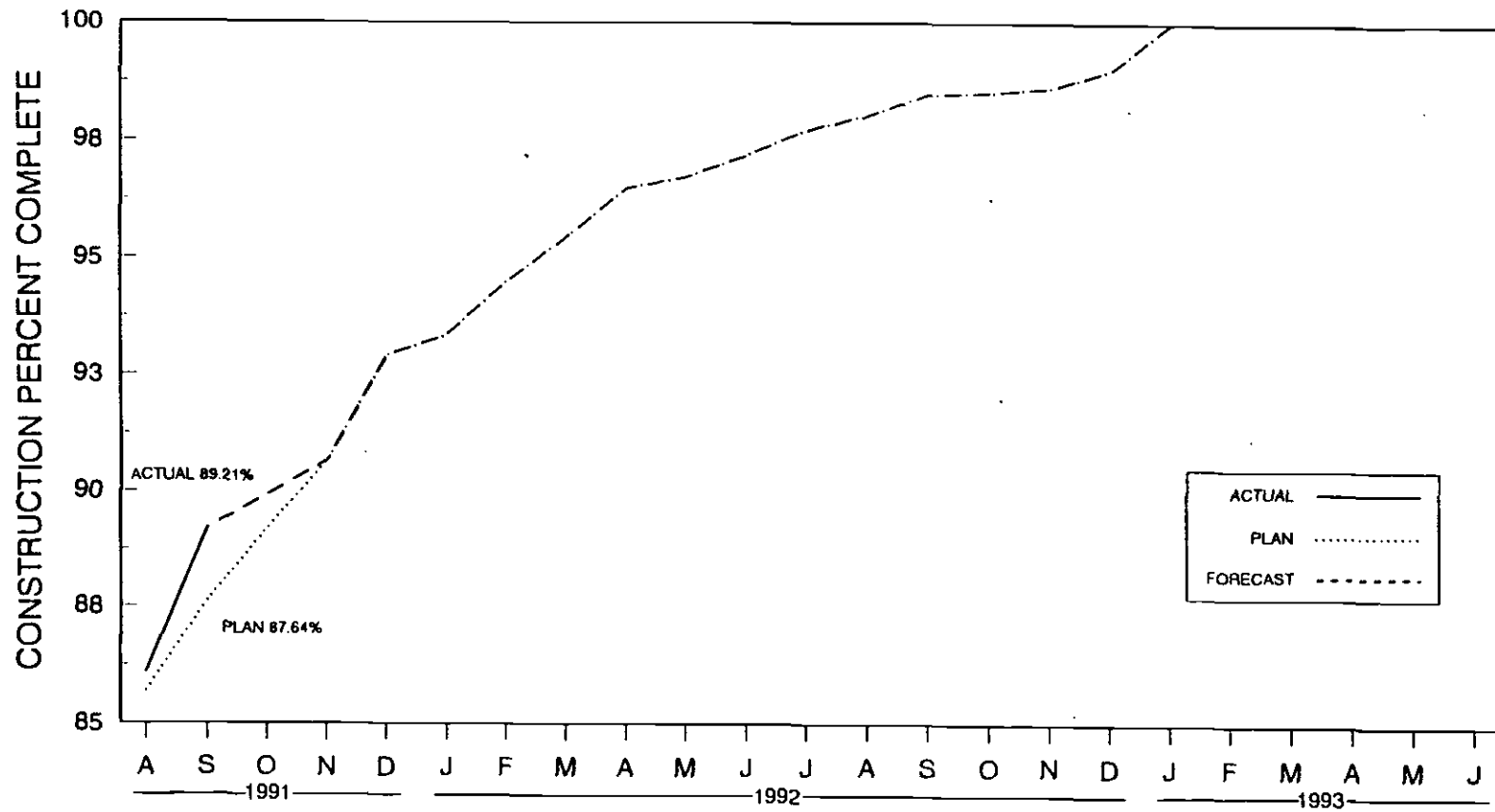
PROJECT CASH FLOW -- ANNUAL

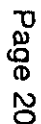


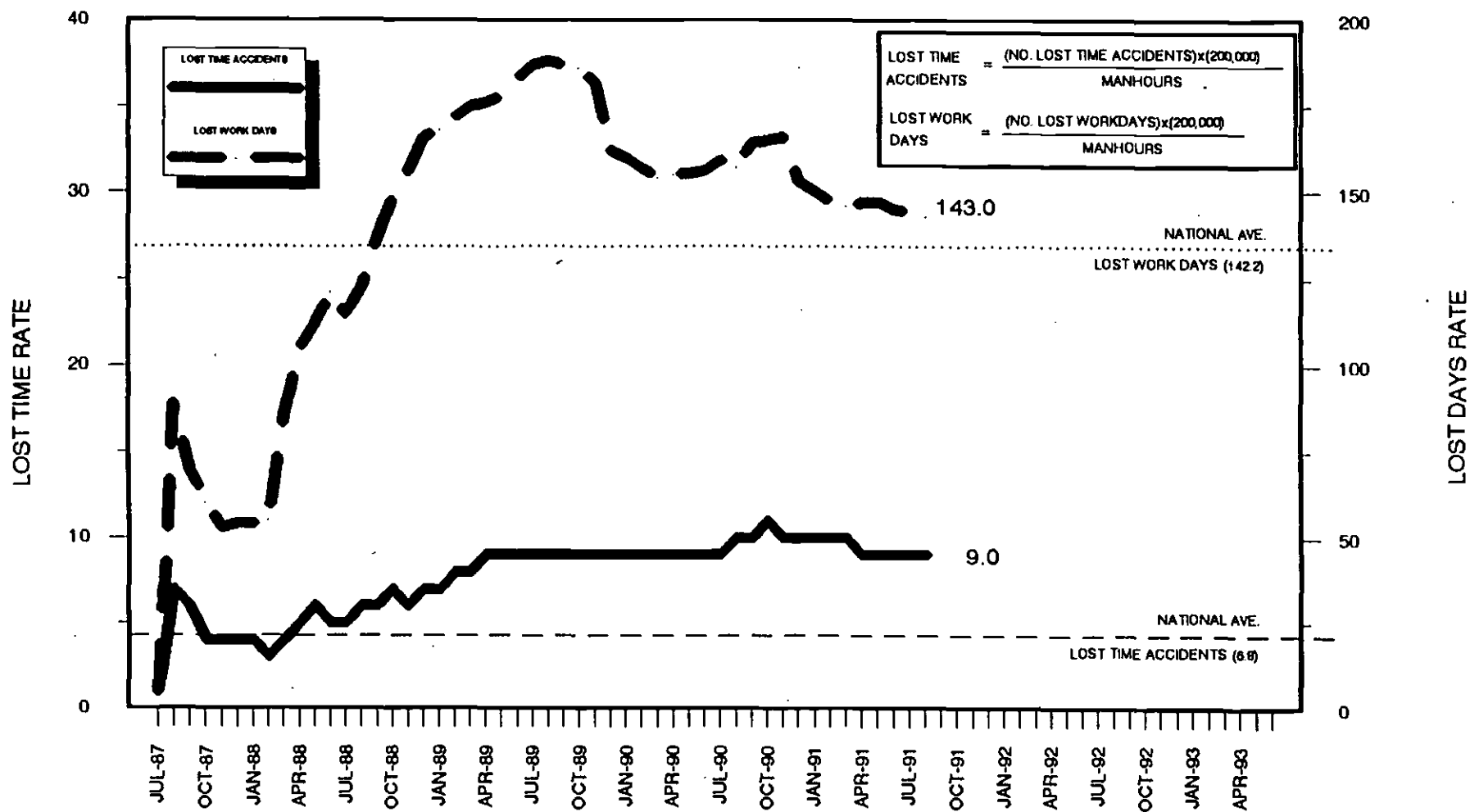
PROJECT CASH FLOW -- PROJECT



RAIL CONSTRUCTION CORPORATION
METRO RED LINE SEGMENT 1
PROGRESS SUMMARY







METRO RED LINE - SEGMENT 1 SUMMARY OF
LOST TIME ACCIDENTS/LOST WORK DAYS
CUMULATIVE INCIDENT RATES

Total manhours as of August 1991: 9,198,297

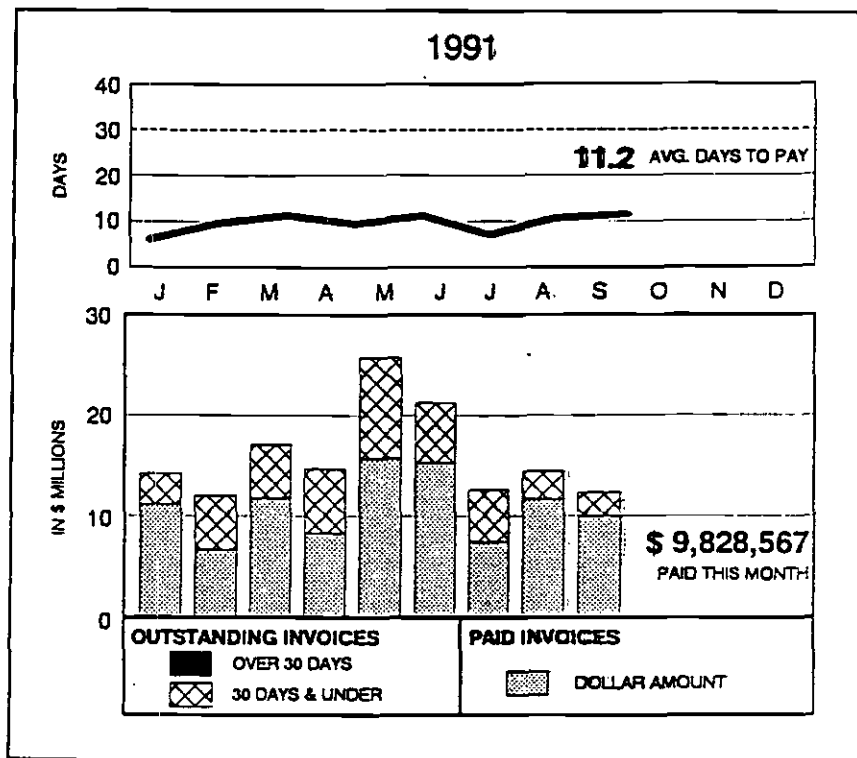
INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 11.2 days.

- 25 invoices were processed for a total value of \$9,828,567.

- There were no outstanding Construction/Procurement invoices over 30 days old.

Construction/Procurement Invoice Status



Note: The average days to pay is the time from when the Resident Engineer approves a progress payment (invoice) to when Accounting issues a check for this invoice.

OUTSTANDING INVOICES

Month	Construction/Procurement Invoices				Other Invoices			
	30 Days and Under		Over 30 Days		30 Days and Under		Over 30 Days	
	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value
APR 1991	9	6,319,949	0	0	21	7,217,508	9	2,374,298
MAY 1991	9	9,855,194	1	4,937	11	1,308,463	5	1,104,039
JUN 1991	7	5,919,091	0	0	18	4,585,626	5	817,685
JUL 1991	7	5,160,961	0	0	8	145,799	5	808,989
AUG 1991	15	2,780,335	0	0	7	2,083,900	6	1,193,922
SEPT 1991	18	2,302,417	0	0	13	1,769,480	7	1,600,881

EXECUTIVE SUMMARY

COST STATUS

in \$ million

- Current Budget \$1,446.4
- The first Project Budget Change Request (PBCR #1) was processed this month. It dealt with transfer of scope budget adjustments between line items and did not impact Project Contingency.
- Current Forecast \$1,446.4
- The Contingency forecast was increased due to the cost savings from combining the Vermont and Hollywood Tunnels. The savings were partially offset by an increase in Real Estate acquisition forecast.

SCHEDULE STATUS

- Current Revenue Operation Date

Wilshire Corridor	July	1996
Vermont/Hollywood Corridor	September	1998
- Design Progress

- Plan	84%
- Actual	78%
- Construction Progress

- Plan	3%
- Actual	2%
- Wilshire Corridor Critical Path remains at 15 days negative float due to delayed Notice to Proceed for Contract B211, Wilshire/Vermont Station, Stage I.

REAL ESTATE

	NUMBER OF PARCELS	NUMBER OF PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)
THIS MONTH	70	26	29
LAST MONTH	70	25	38

PARCELS NOT AVAILABLE (BEHIND SCHEDULE)	
NUMBER	AVG. DAYS BEHIND
15	15.6
7	47

- There are 70 parcels of land required for the Segment 2 Project. The acquisition breakdown for this land is as follows: 21 full takes, two partial takes, 41 subsurface easements, two surface easements, two temporary construction easements, and two leases.
- To date, there have been 26 parcels acquired. 14 of these parcels were acquired through condemnation and the remaining 12 were negotiated acquisitions.

AREAS OF CONCERN

ONGOING

Delay in Real Estate Acquisitions

Concern: Considering the worst case scenario, there are 15 parcels which may not be available by their scheduled need dates. This number has increased by eight since last month.

The projected late availability of two of the parcels is attributable to design changes and the situation cannot be corrected.

There remains substantial time between now and the need date for ten of the parcels. For this reason and because the delay, in five instances, is only three days, it is considered likely that the schedule will be recovered during this time.

Action: Maintain schedule to recover negative float wherever possible and to prevent additional delay.

Status: There remains a high probability that almost all parcels will be acquired by the need dates.

Delay in Design Progress

Concern: Section Designers for Contracts B241, B251, B252, B261, B271A, and B281 are reporting progress less than planned and the cumulative effect of this shows overall progress of 78% vs planned progress of 84%. Recovery plans are in effect. It is expected that the designs will complete on time.

- Action:** MRTC to continue to monitor the schedule recovery plans.
- Status:** During the report period, each of the designers were contacted regarding their schedule recovery plan. In certain instances, additional resources have been brought to bear and improvement in production has been noted. A new schedule for the partial completion reviews, consistent with the overall schedule for Segment 2, has been prepared.

Wilshire Corridor Revenue Operation Date

- Concern:** All four major Facility Contracts for the Wilshire Corridor have been awarded to the same contractor. The contractor has indicated intent to use one tunnel shield machine to excavate both tunnel sections. The resultant schedule anticipates tunnel drive rates that were never attained during the Segment 1 construction experience.
- Action:** A back-up plan must be developed and agreed upon with the contractor to help assure that the milestone dates will be met if the anticipated drive rates are not attained.
- Status:** Parsons-Dillingham has submitted several back-up plans to the RCC for consideration and eventual discussion with the contractor.

Blast Relief Shafts Relocation

- Concern:** Recent decisions by the City require that the Under-Platform Exhaust and Blast Relief Shafts penetrate the surface at locations away from the traveled way.
- Action:** Alternative solutions are under investigation. The full cost impact of these decisions is expected to be very large.
- Status:** MRTC is currently working to provide alternatives with estimates.

NEW

GC Contract Negotiations

- Concern:** Negotiations with the General Consultant for a long term contract indicate a potential reduction in the Project Contingency account. Actions are under discussion which, if implemented, will reduce the potential cost impact.

Action: Re-examine the cost plan for all Professional Service accounts to align them with the current scopes of work.

Noise Mitigation

Concern: The noise level of construction work at Contract B221 has raised complaints from the Hyatt Wilshire Hotel. Without the implementation of noise mitigation measures, construction work could be held up, resulting in possible delays to the contract.

Action: RCC is implementing noise mitigation measures at all construction sites with special emphasis at the B221 site. Elements of the mitigation plan include:

- 1) Communication of a clear interpretation of the specification for allowable noise to the contractor, subcontractors, city work crews and utility company subcontractors.
- 2) Enforcement of the noise specification through modifications to contractor equipment, attention to sensitive noise times, and use of sound tents and screens to maintain noise within allowable units.
- 3) Preparation of studies by experts to examine the situation and recommend actions to mitigate the noise.
- 4) Numerous meetings with the property owners, police and others to work out consensus agreements by which the noise can be mitigated and the work performed.

UMTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

ONGOING

Contract B231 Depth of Design Drawing Detail

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

Action: Fluor-Daniels has reviewed the B231 drawings to determine the adequacy of design detail. The LACTC has a draft copy of the report and will provide the PMOC with a copy of the results.

Status: To be closed after the transmittal of Fluor-Daniels' report, and receipt of MRTC's response to audit findings.

NEW

NONE

RESOLVED

Project Procedures

Concern: Project procedures are not being issued.

Action: Complete and publish policies and procedures manual.

Status: Accepted as resolved by Hill International at the October 2nd meeting. Final drafts of high priority items were delivered to the PMOC in September.

KEY ACTIVITIES - SEPTEMBER

- Combined tunnel sections of Contracts B251, B271, and C301 to form a new Vermont/Hollywood Tunnel Contract. (Contract B251). The resultant contract will help mitigate disruption on Hollywood Boulevard and Vermont Avenue and is expected to generate substantial cost savings. Contracts B271 and C301 are station contracts only.
- Reviewed schedules to mitigate impacts to contractual milestones as a result of the contractor consolidating the tunneling portions of Contract B201, Wilshire/Alvarado to Wilshire/Vermont and Pocket Track and Utilities; and Contract B221, Wilshire/Vermont to Wilshire/Western, Wilshire/Normandie Station Including Utility Work.
- Contract B211, Stage I Station Construction - Wilshire/Vermont Station Including Utility Work, was given Notice to Proceed on September 3, 1991.
- Continued evaluation of alternative station construction methods for the Vermont/Hollywood Corridor. These alternatives are being evaluated to reduce disruption to streets and the surface relative to cut and cover construction.
- Continued modifications to the tunneling shield to increase its hydraulic capacity, increase its diameter and reinforce supports for the digger attachment.
- Installed 228 soldier piles in the Portal and Pocket Track areas of MacArthur Park, and along Wilshire Boulevard.

KEY ACTIVITIES - PLANNED FOR OCTOBER

- Delivery of the tunnel shield machine to Contract B201.
- Continue to identify and implement noise mitigation measures for Segment 2 contracts.
- Continue mined station evaluation.
- Conduct constructibility review for tunnel construction for Contracts B251, Wilshire/Vermont/Santa Monica, and B271, Vermont/Santa Monica Station to Hollywood/Western Station and Line, and C301, Hollywood/Highland.
- Issue Prefinal Design Submittal for Contract B241, Vermont/Beverly Station.
- Issue In-progress Design Submittal for Contract B281, Hollywood/Vine Station.
- Review the current contract specifications for the tunneling shield to determine applicability to future work.

RAIL CONSTRUCTION CORPORATION
PROJECT COST REPORT
COST BY ELEMENT

Project: RB1 METRO RED LINE MOS-2

Period: 31-Aug-91 to 27-Sep-91
Run Date: 23-Oct-91
Units: Dollars in Thousands

ELEMENT / DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		INCURRED COSTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
T Construction	893,000	12,830	905,830	0	258,808	4,847	28,435	11,147	25,374	(8,063)	804,222	28,382
S Professional Services	289,150	8,884	297,844	737	203,888	17,958	88,747	4,482	58,284	(5,511)	300,113	2,289
R Real Estate	79,827	(3,280)	76,567	150	43,478	177	37,288	177	37,288	8,888	88,914	13,347
F Utility/Agency Force Account	38,868	(18,262)	18,404	19	4,824	80	950	80	950	708	24,085	5,881
D Special Programs	2,044	0	2,044	30	324	12	108	12	108	3,328	12,837	10,883
C Contingency	145,743	0	145,743	0	0	0	0	0	0	2,581	85,481	(80,282)
A Project Revenue	0	0	0	0	0	0	(132)	0	(132)	0	(300)	(300)
Project Grand Total:	1,448,432	0	1,448,432	833	511,422	22,851	138,408	18,888	118,884	0	1,448,432	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS.

STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
UMTA-SECTION 3	\$887,000	\$329,868 (1)	\$210,143	32%	\$22,338	3%	\$13,926	2%
STATE	\$185,985	\$27,000 (2)	\$71,916	38%	\$23,037	12%	\$0	0%
LACTC	\$439,447	\$65,081	\$182,188	41%	\$33,181	8%	\$33,181	8%
CITY OF L.A.	\$96,000	\$40,000	\$39,993	42%	\$33,184	35%	\$20,000	21%
BENEFIT ASSESSMENT	\$58,000	\$0	\$7,183	12%	\$7,184	12%	\$0	0%
COST OVERRUN ACCOUNT (3)	\$0	\$5,208	\$0		\$0		\$0	
BENEFIT ASSESSMENT SHORTFALL (4)	\$0	\$0	\$0		\$0		\$7,183	
TOTAL	\$1,448,432	\$466,937	\$511,422	35%	\$118,884	8%	\$74,270	5%

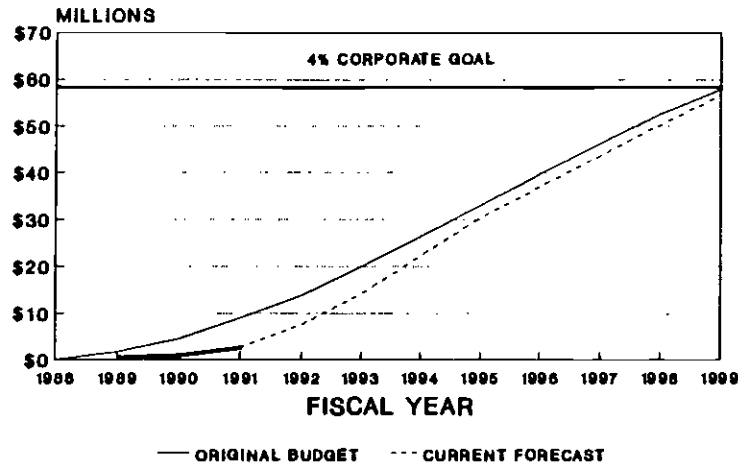
(1) ON JUNE 28, 1991, AN AMENDMENT REQUEST WAS SUBMITTED TO UMTA FOR \$150M FOR FEDERAL SHARE.

(2) STATE FUND TRANSFER AGREEMENT HAS BEEN EXECUTED. BILLINGS TO COMMENCE IN OCTOBER 1991.

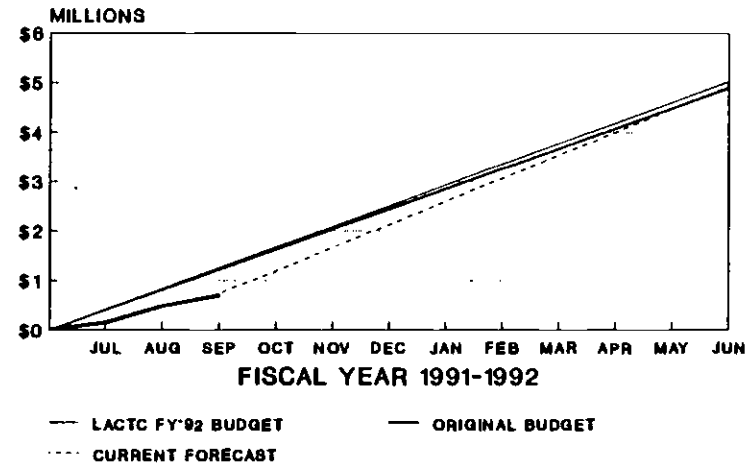
(3) THE COST OVERRUN ACCOUNT INCLUDES CAPRA FUNDS ONLY.

(4) THE CURRENT BENEFIT ASSESSMENT DISTRICT REVENUE SHORTFALL IS BEING FUNDED BY LACTC.

AGENCY COSTS RED LINE SEGMENT 2



FISCAL YEAR 1992 AGENCY COSTS RED LINE SEGMENT 2



PROJECT AGENCY COSTS RED LINE SEGMENT 2 (\$000)

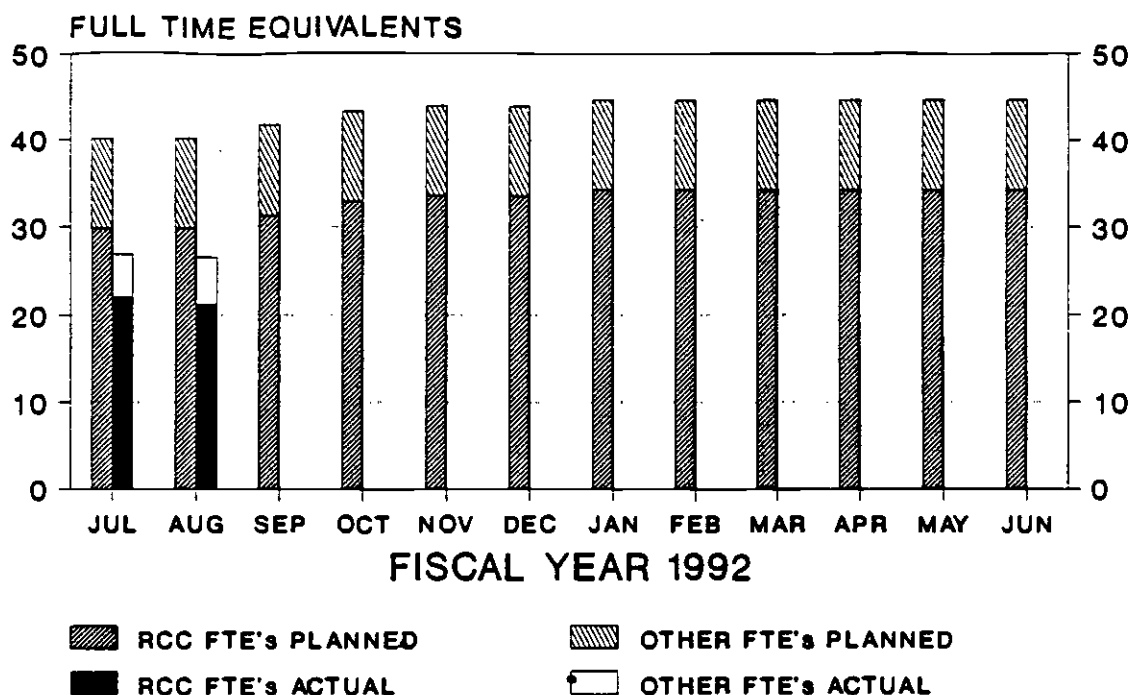
TOTAL PROJECT BUDGET	\$1,446,432
ORIGINAL BUDGET	\$57,840
BUDGET % OF TOTAL PROJECT	4.0%
CURRENT FORECAST	\$56,551
FORECAST % OF TOTAL PROJECT	3.9%

FISCAL YEAR 1992 AGENCY COSTS RED LINE SEGMENT 2 (\$000)

LACTC FY'92 BUDGET	\$5,021
ORIGINAL BUDGET	\$4,894
CURRENT FORECAST	\$4,932
ACTUAL \$ TO DATE	\$728

Current forecast as of July 1991.

STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 2



RED LINE (SEGMENT 2) STAFFING PLAN FISCAL YEAR 1992

BUDGET WAGE RATE (\$/HOUR) \$40

ACTUAL WAGE RATE (\$/HOUR) \$45

RCC FTE's PLANNED 30

RCC FTE's ACTUAL 21

OTHER FTE's PLANNED 10

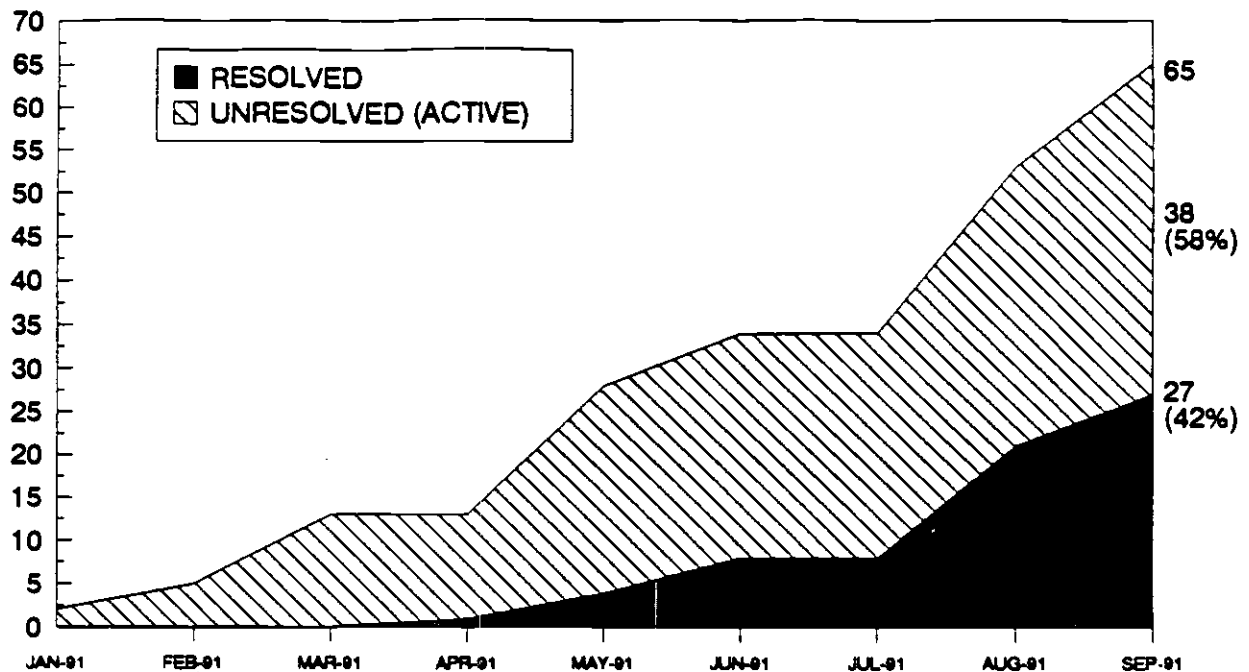
OTHER FTE's ACTUAL 6

TOTAL FTE's PLANNED 40

TOTAL FTE's ACTUAL 27

AUGUST 91'

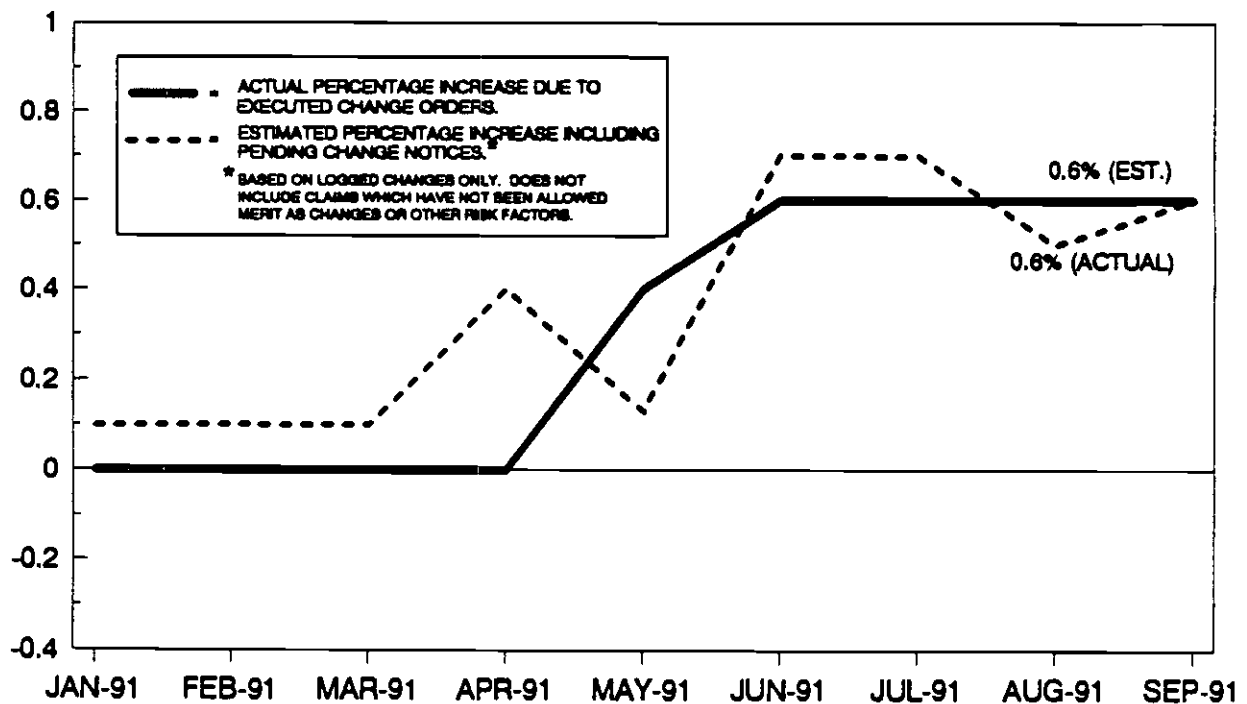
CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE NOTICE RESOLUTION



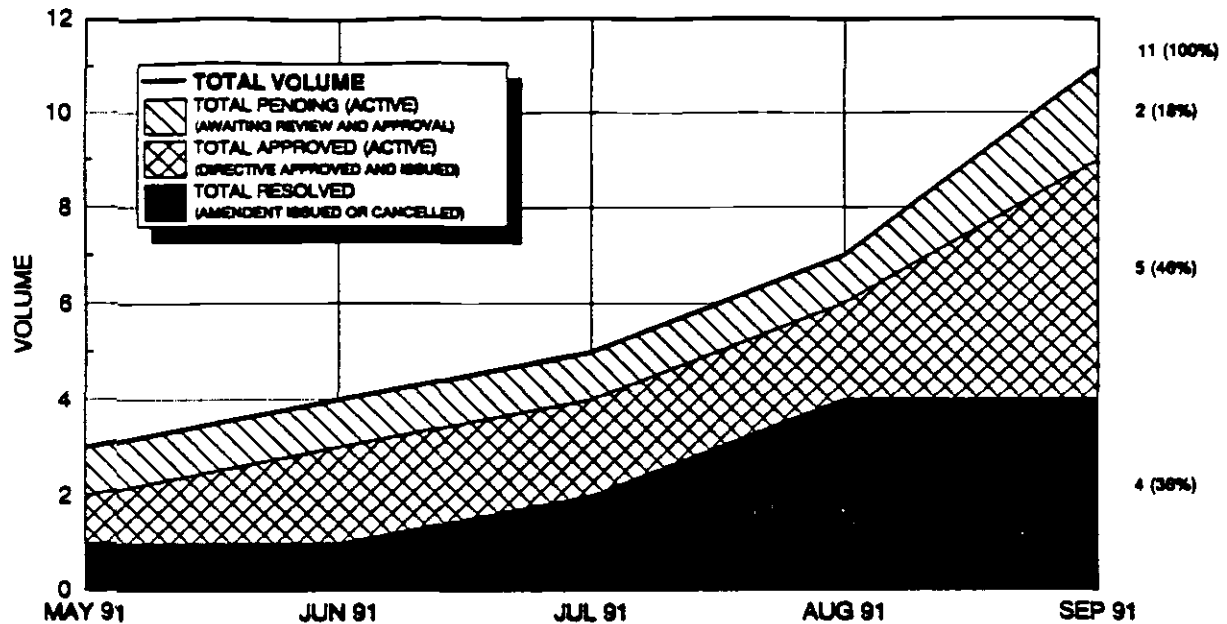
AGE OF CHANGES AWAITING ACTION

TIME	0-30 DAYS	31-60	61-90	OVER 90	TOTAL ACTIVE
VOLUME	20	7	2	9	38
PERCENT	53%	18%	5%	24%	100%

CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE DOLLARS AS A PERCENTAGE OF ORIGINAL CONTRACT AWARD



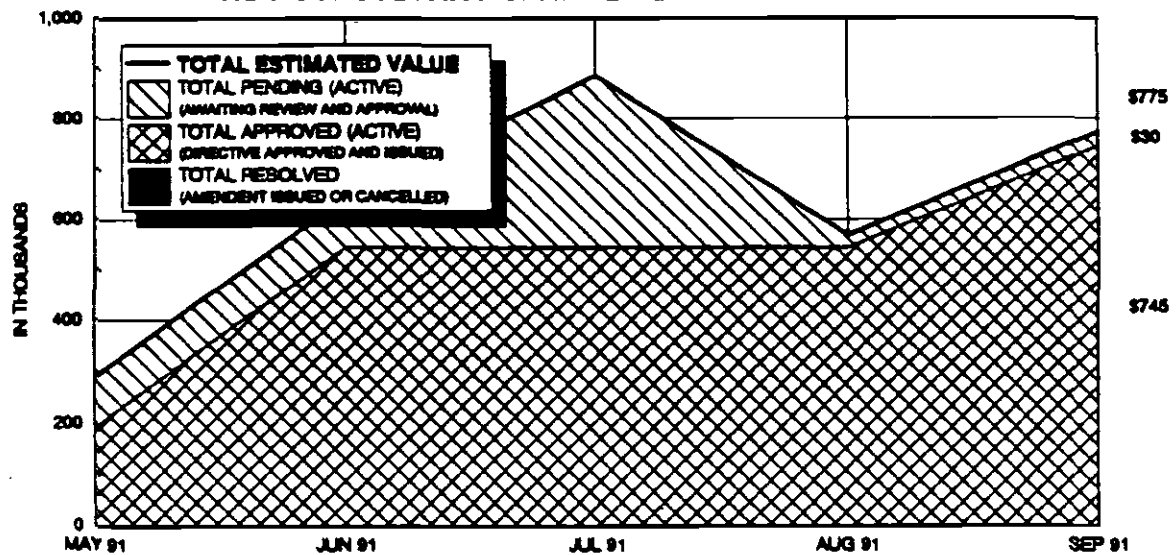
**CONSULTANT CONTRACT CHANGE SUMMARY
R81 CONSULTANT CHANGE REQUEST RESOLUTION**



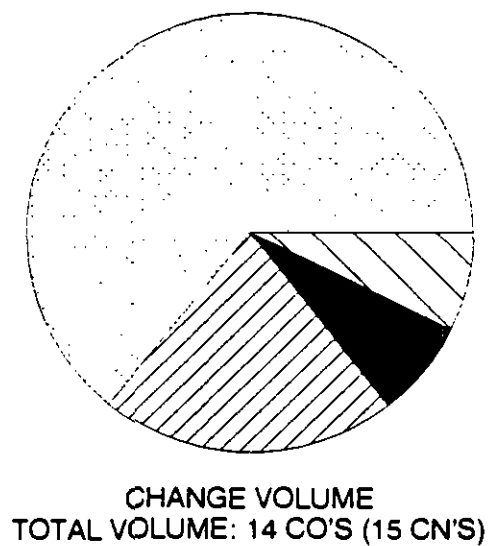
AGE OF UNRESOLVED CONSULTANT CHANGES







TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	4	1	0	2	7
PERCENT	57%	14%	0%	29%	100%

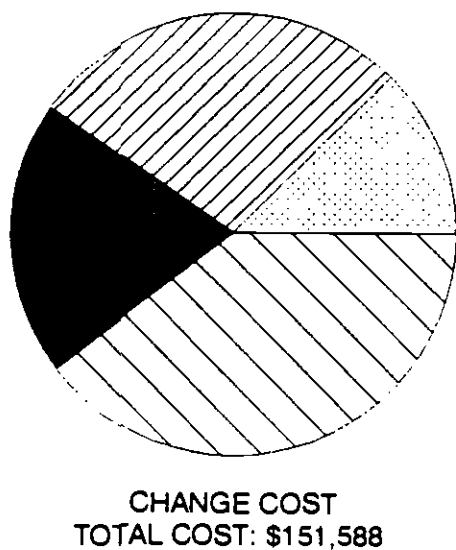
**CONSULTANT CONTRACT CHANGE SUMMARY
R81 CONSULTANT CHANGE REQUEST VALUES**









**CONSTRUCTION/PROCUREMENT
CHANGE VOLUME AND COST BY COST LEVEL
BASED ON EXECUTED CHANGES AS OF 09/27/91**

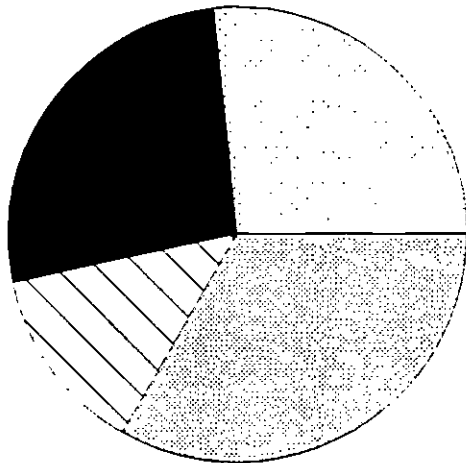
**ABSOLUTE VALUES**

9	64.2%		< \$10,000
3	21.4%		< \$25,000
1	7.2%		< \$50,000
1	7.2%		< \$200,000
0	0.0%		> \$200,000
0	0.0%		> \$1,000,000

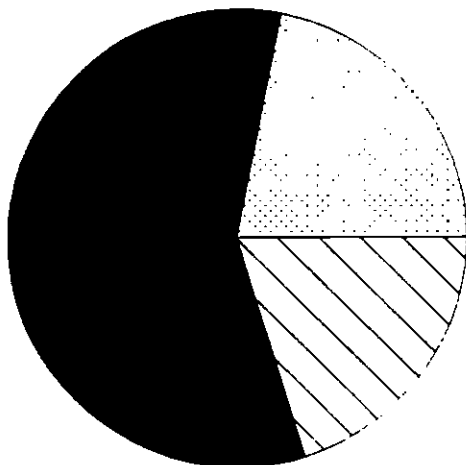


\$19,136	12.6%		< \$10,000
\$41,962	27.7%		< \$25,000
\$30,590	20.2%		< \$50,000
\$59,900	39.5%		< \$200,000
\$0	0.0%		> \$200,000
\$0	0.0%		> \$1,000,000

**CONSTRUCTION/PROCUREMENT
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE
BASED ON EXECUTED CHANGES AS OF 09/27/91**



CHANGE BASIS VOLUME
TOTAL VOL: 15 CN'S (14 CO'S)

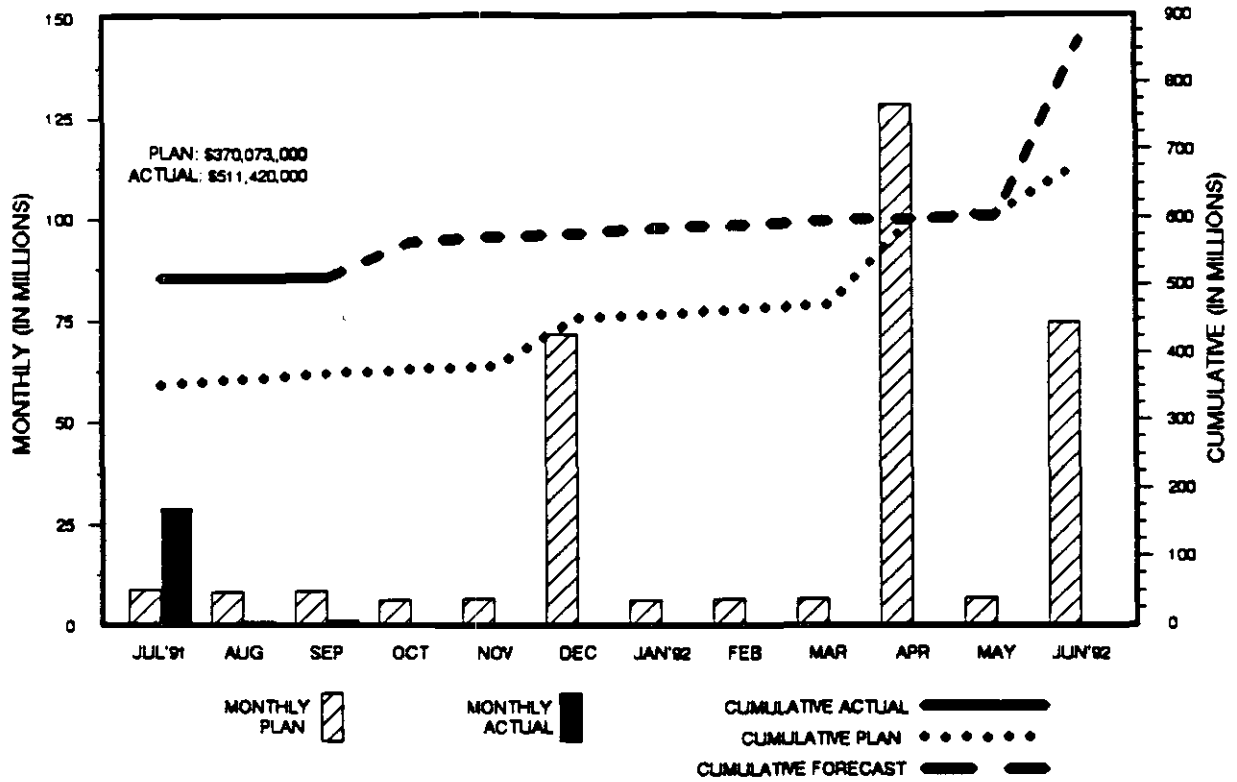


CHANGE BASIS COST
TOTAL COST: \$151,588

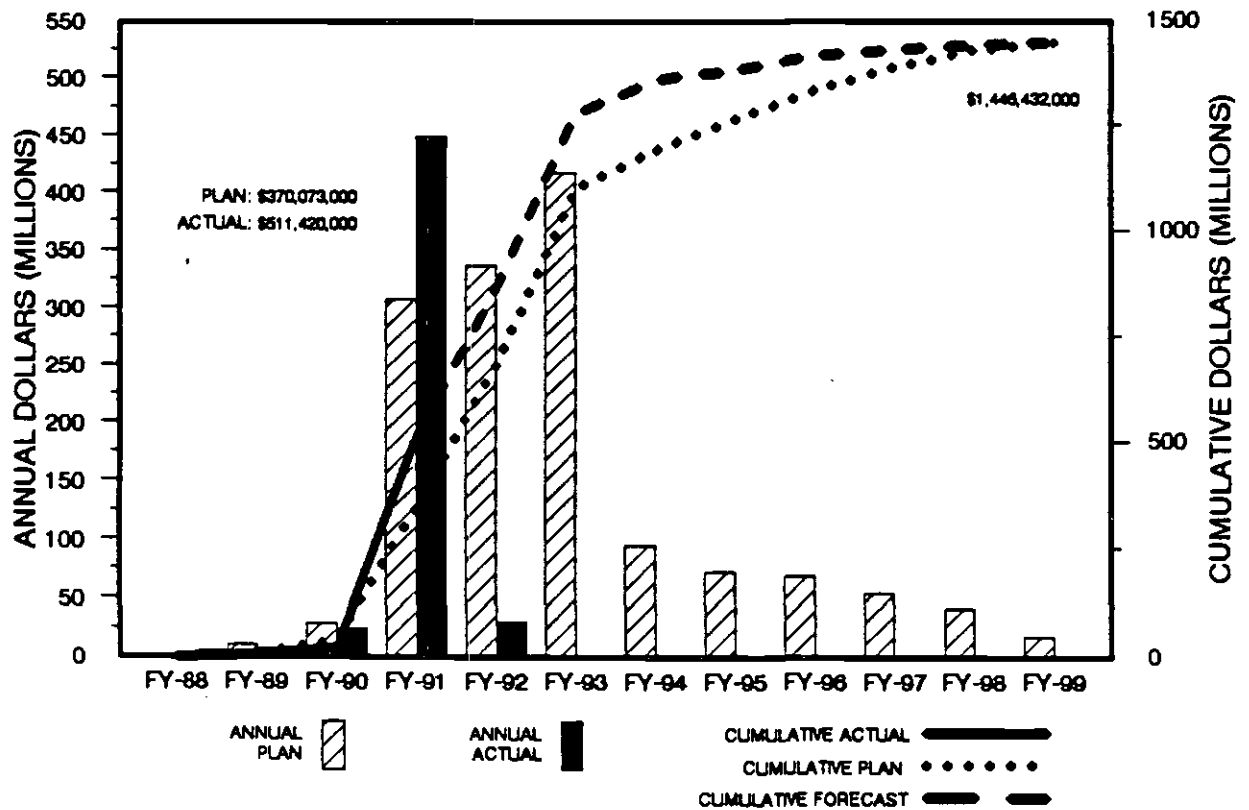
4	26.7%		WORK SCOPE CHANGES
0	0%		SCHEDULE CHANGES
4	26.7%		DIFFERING CONDITIONS
2	13.3%		ADMINISTRATIVE
5	33.3%		DESIGN CHANGES
0	0%		MANAGEMENT ISSUES/CLAIMS
0	0%		UNASSIGNED

\$33,187	21.9%		WORK SCOPE CHANGES
\$0	0%		SCHEDULE CHANGES
\$87,811	57.9%		DIFFERING CONDITIONS
\$30,590	20.2%		ADMINISTRATIVE
\$0	0%		DESIGN CHANGES
\$0	0%		MANAGEMENT ISSUES/CLAIMS
\$0	0%		UNASSIGNED

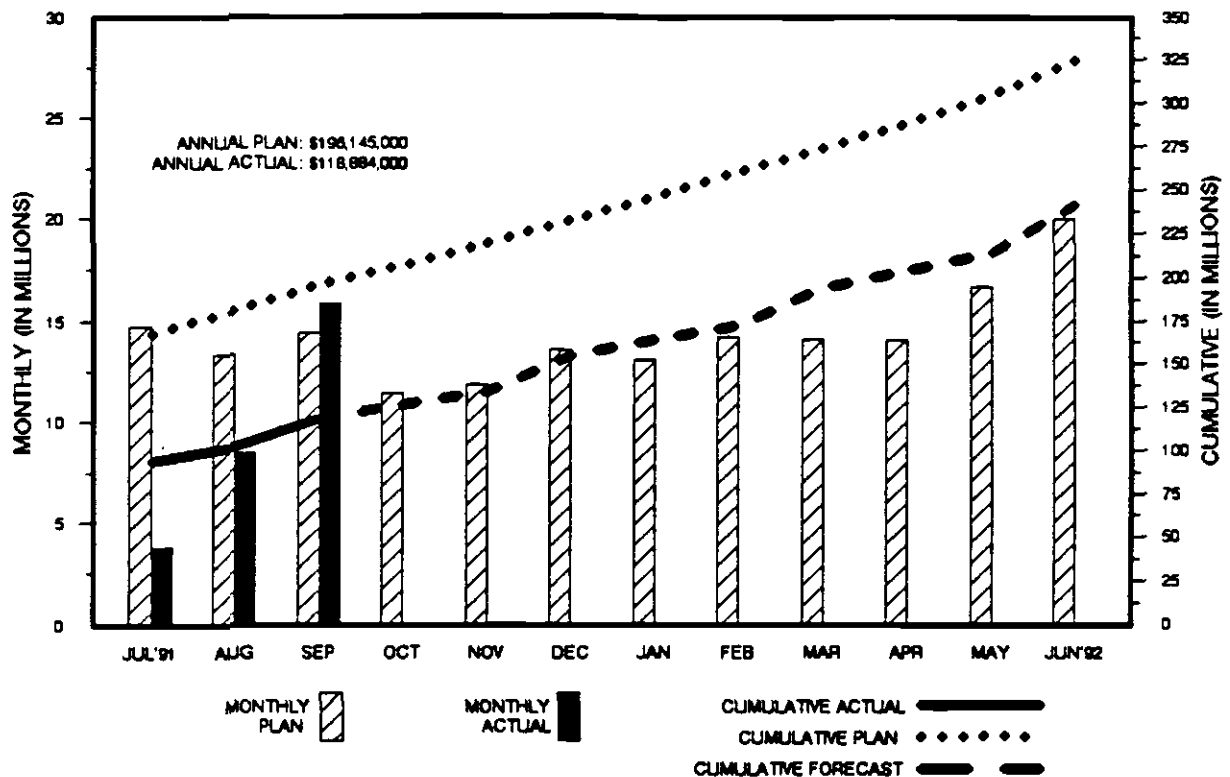
ANNUAL PROJECT COMMITMENTS (FY '92)



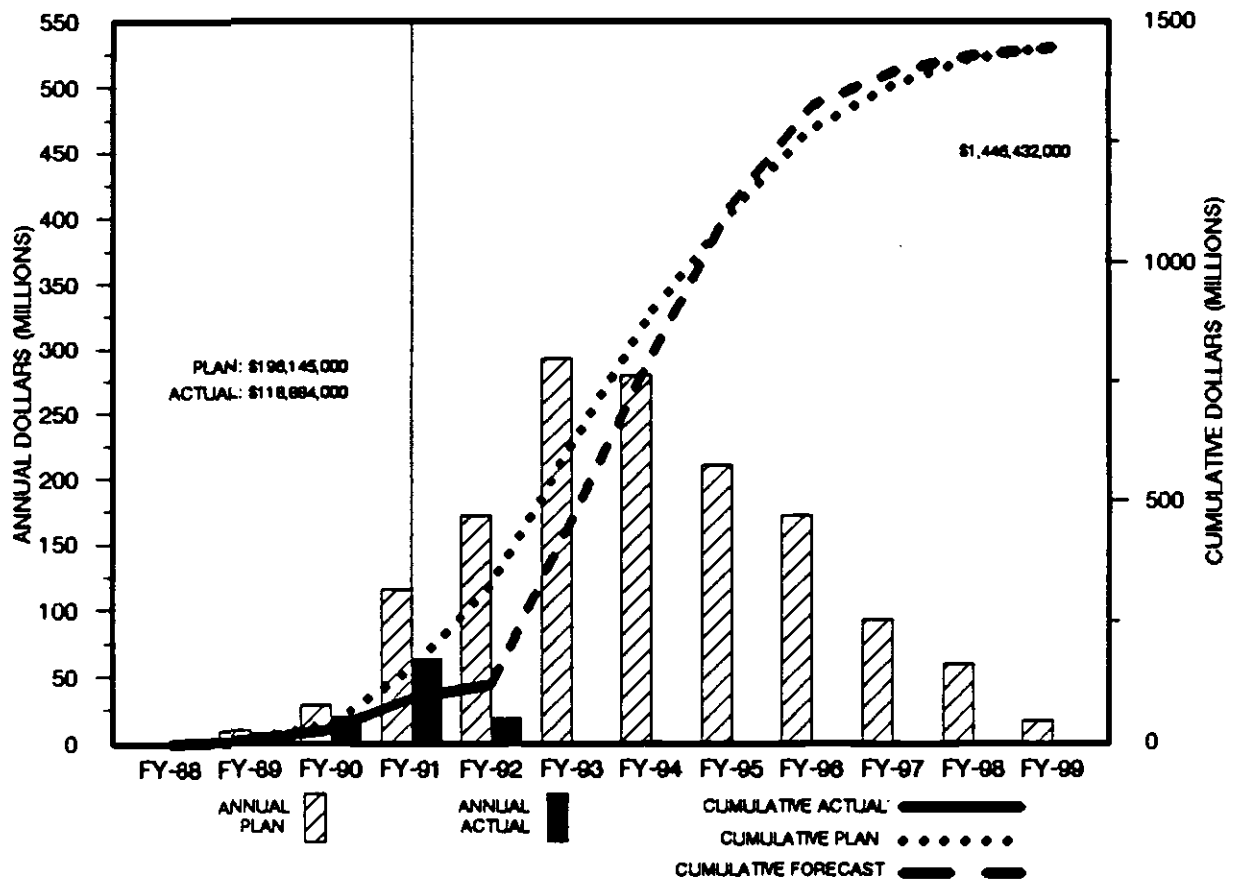
TOTAL PROJECT COMMITMENTS



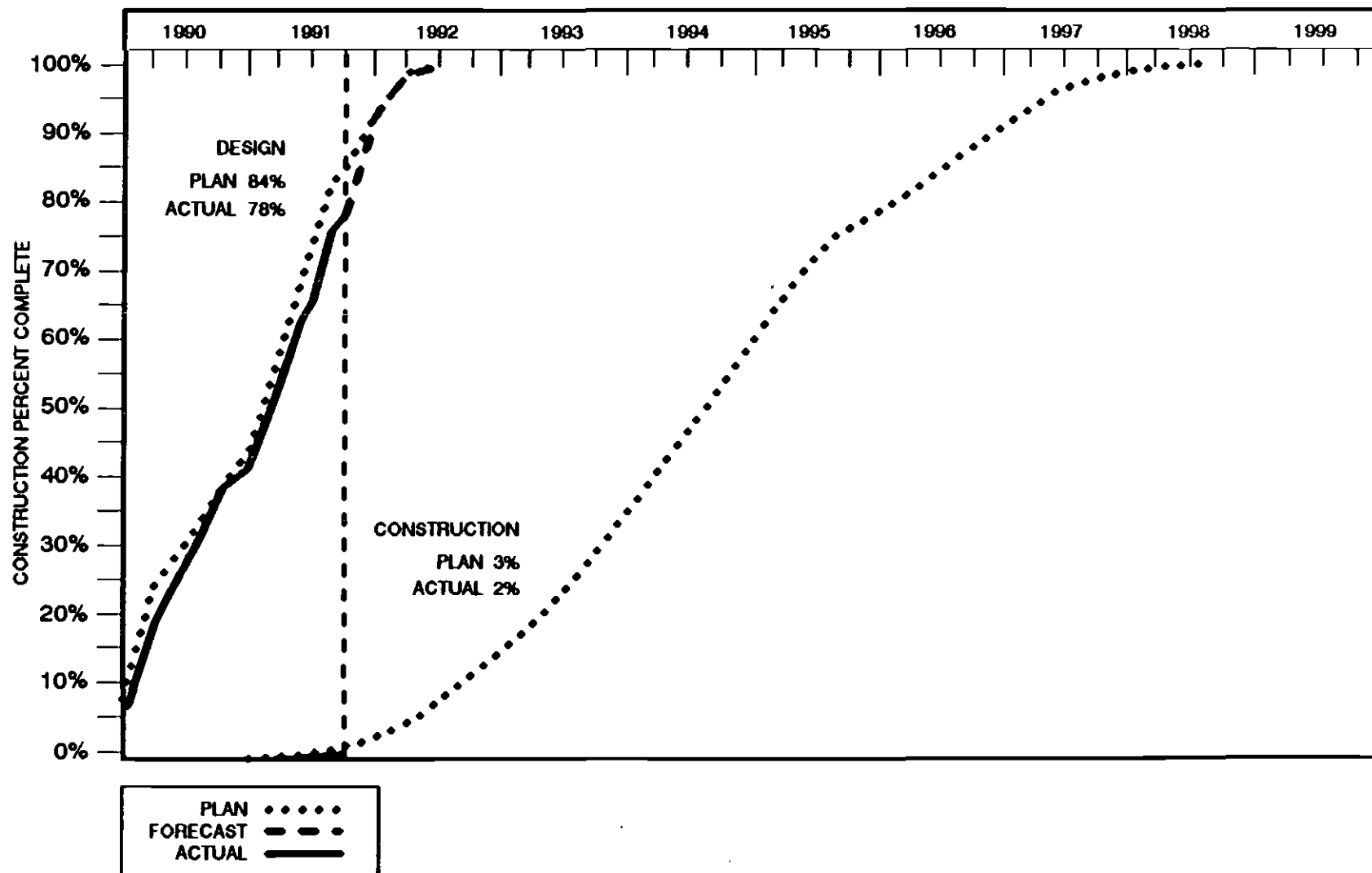
ANNUAL PROJECT CASHFLOW (FY '92)



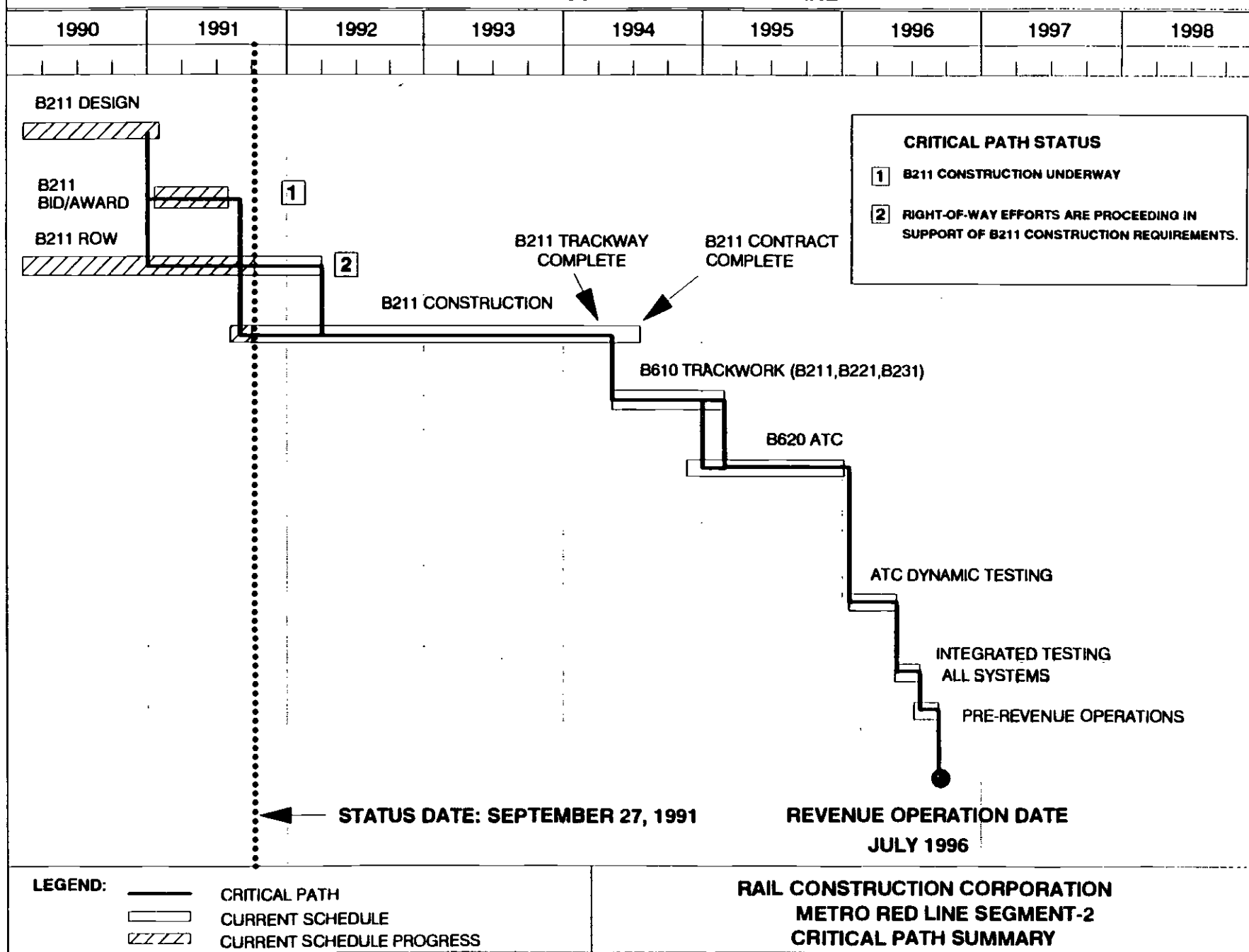
TOTAL PROJECT CASHFLOW

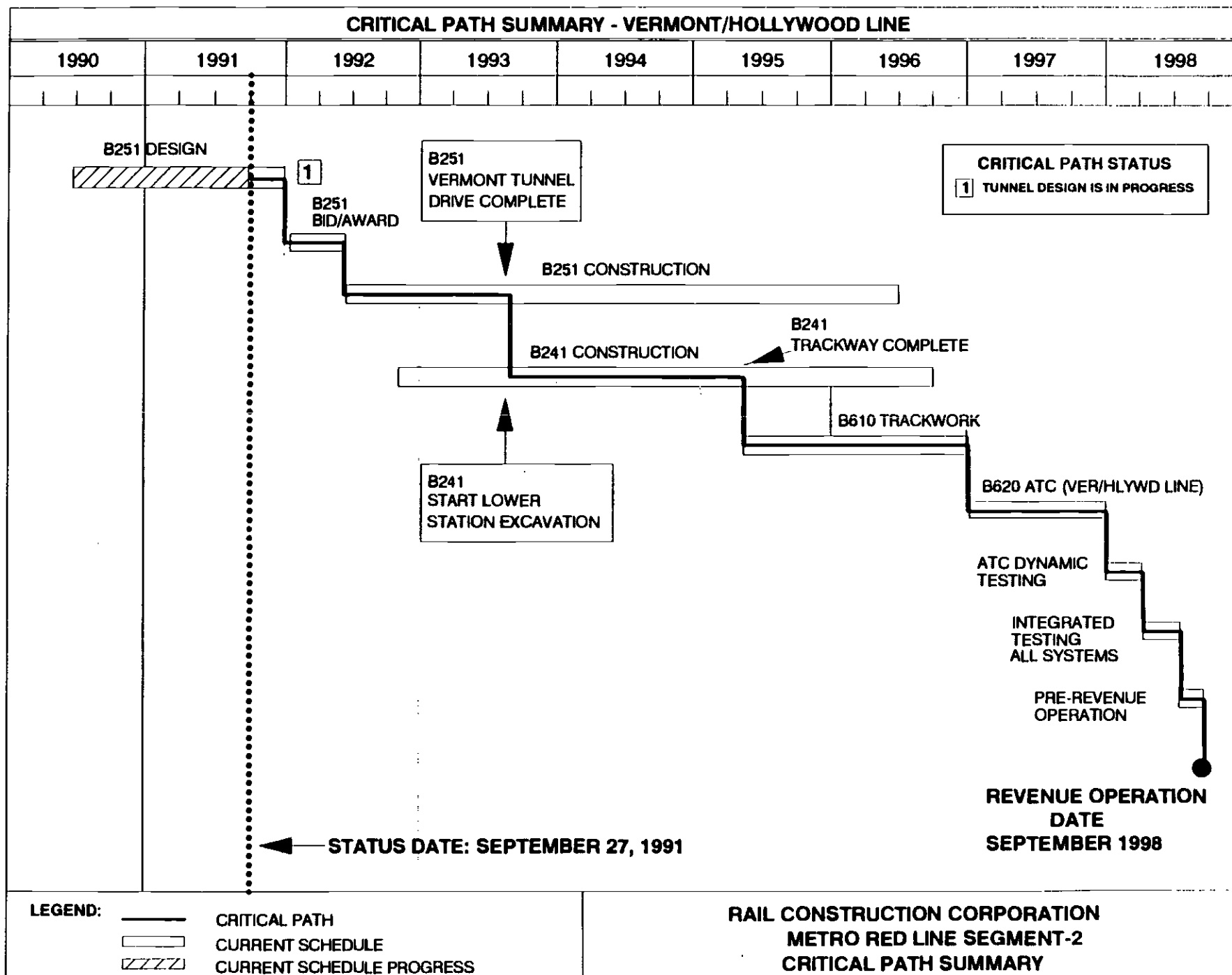


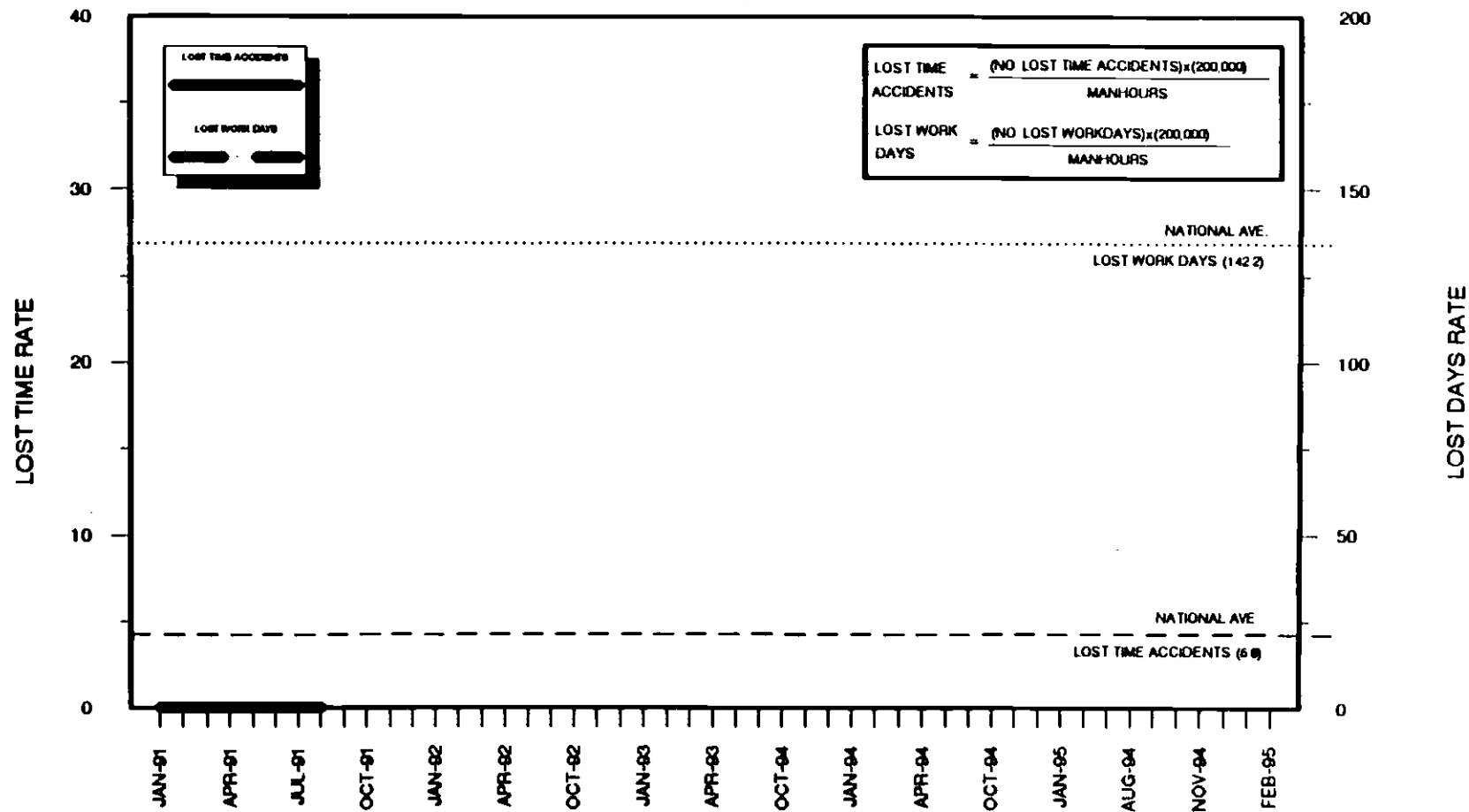
RAIL CONSTRUCTION CORPORATION
METRO RED LINE SEGMENT 2
PROGRESS SUMMARY



CRITICAL PATH SUMMARY - WILSHIRE LINE







**METRO RED LINE - SEGMENT 2 SUMMARY OF
LOST TIME ACCIDENTS/LOST WORK DAYS
CUMULATIVE INCIDENT RATES**

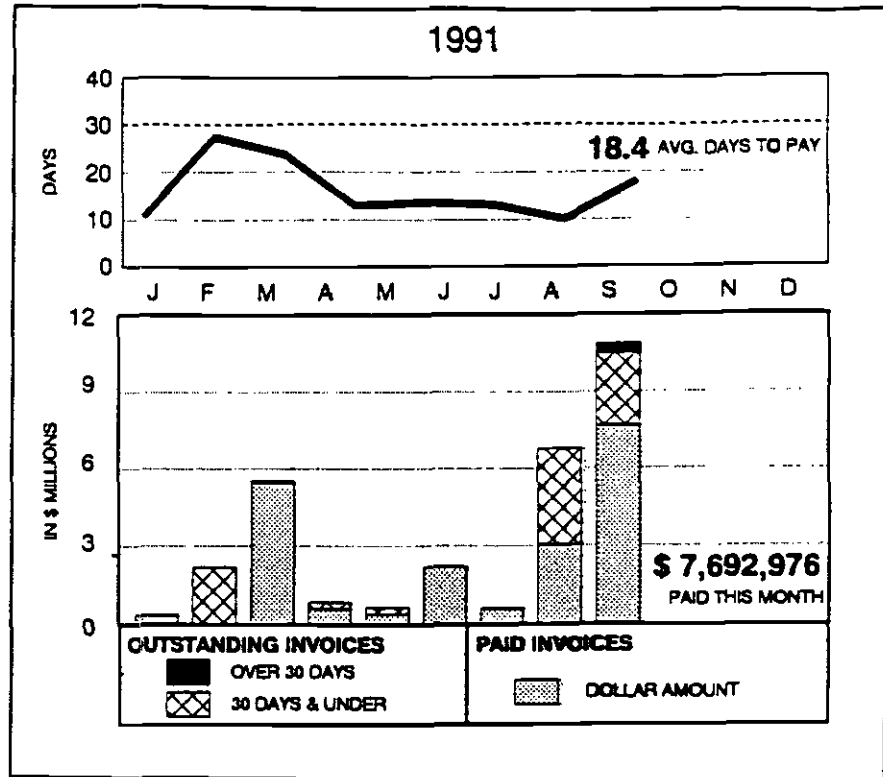
INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 18.4 days.

- 8 invoices were paid for a total value of \$ 7,692,976.

- There were 6 outstanding Construction or Procurement invoices over 30 days old for \$ 381,942.

Construction/Procurement Invoice Status



Note: The average days to pay is the time from when the Resident Engineer approves a progress payment (invoice) to when Accounting issues a check for this invoice.

OUTSTANDING INVOICES

Month	Construction/Procurement Invoices				Other Invoices			
	30 Days and Under		Over 30 Days		30 Days and Under		Over 30 Days	
	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value	Number of Invoices	Dollar Value
APR 1991	3	235,308	0	0	8	261,468	6	304,850
MAY 1991	2	252,270	0	0	18	327,579	4	151,501
JUN 1991	0	0	0	0	19	434,876	7	43,415
JUL 1991	0	0	0	0	8	102,195	4	51,786
AUG 1991	15	3,713,339	0	0	9	47,266	9	75,300
SEPT 1991	10	2,802,113	6	381,942	11	74,631	11	69,242