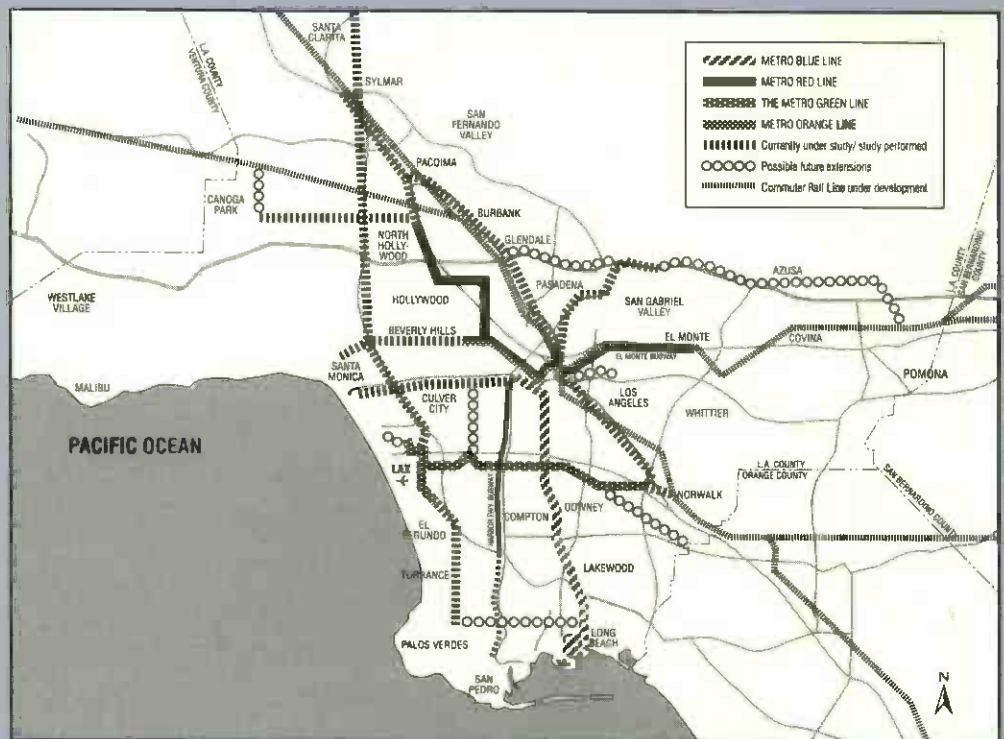


# RAIL CONSTRUCTION CORPORATION



## 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

<b>Cost Status</b>	(\$000)	<b>Project Progress</b>	
Original Budget	1,249,900	Design:	
Expended to Date	1,232,290	Plan	100%
Current Budget	1,450,019	Actual	98%
<b>Schedule Status</b>		Construction:	
Revenue Operations Date:		Plan	94%
Original	April 1992	Actual	93%
Forecast	June 1993		

### Metro Red Line Segment 2

<b>Cost Status</b>	(\$000)	<b>Project Progress</b>	
Original Budget	1,446,432	Design:	
Expended to Date	196,190	Plan	79%
Current Budget	1,446,432	Actual	74%
<b>Schedule Status</b>		Construction:	
ROD: Wilshire Vermont/Hlywd		Plan	9%
Original Jul '96 Sep '98		Actual	7%
Forecast Jul '96 Sep '98			

### Metro Green Line (Budget and forecast excludes North Coast Segment)

<b>Cost Status</b>	(\$000)	<b>Project Progress</b>	
Original Budget	671,000	Design:	
Expended to Date	166,016	Plan	100%
Current Budget	716,000	Actual	99%
<b>Schedule Status</b>		Construction:	
Revenue Operations Date:		Plan	25%
Original	October 1994	Actual	19%
Forecast	May 1995		

### Metrolink (includes 4 start-up lines, shared facilities, and LAUPT)

<b>Cost Status</b>	(\$000)	<b>Project Progress</b>	
Original Budget	473,262	Design:	
Expended to Date	111,937	Plan	100%
Current Budget	473,262	Actual	100%
<b>Schedule Status</b>		** Construction:	
Revenue Operations Date for 3 lines:		Plan	21%
Original	October 1992	Actual	16%
Forecast	October 1992		
Forecast(Union Pac) October 1993			

\*\* Revised construction percentages due to schedule revisions.

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

STATUS DATE: 03/27/92

(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	2,556,544	2,829,275	5,075	1,873,511	22,750	1,384,368	20,767	1,337,056	2,906,328	77,053
PROFESSIONAL SERVICES	916,961	1,055,114	(682)	935,690	6,490	781,136	(6,289)	748,533	1,160,533	105,419
REAL ESTATE	247,495	301,211	303	243,674	298	234,823	298	234,601	318,791	17,580
UTILITY/AGENCY FORCE ACCOUNTS	105,421	88,422	103	82,756	870	66,942	751	65,916	93,616	5,194
SPECIAL PROGRAMS	7,668	14,110	2	2,226	2	908	3	828	25,150	11,040
CONTINGENCY	322,710	245,265	0	0	0	0	0	0	162,794	(82,471)
PROJECT REVENUE	(18,115)	(43,675)	0	(8,205)	(12)	(6,327)	(9)	(7,542)	(107,675)	(64,000)
PROJECT GRAND TOTAL	4,138,684	4,489,722	4,801	3,129,652	30,398	2,461,850	15,521	2,379,392	4,559,537	69,815

# BUDGET STATUS - MARCH 31, 1992

(in \$ Millions)

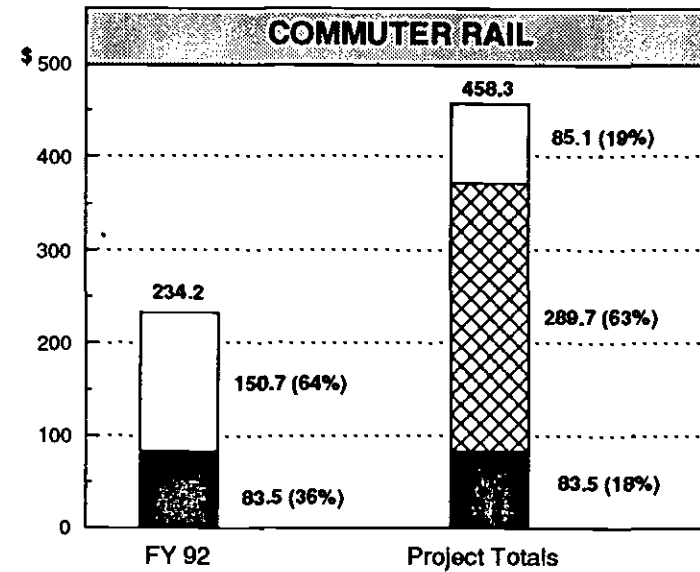
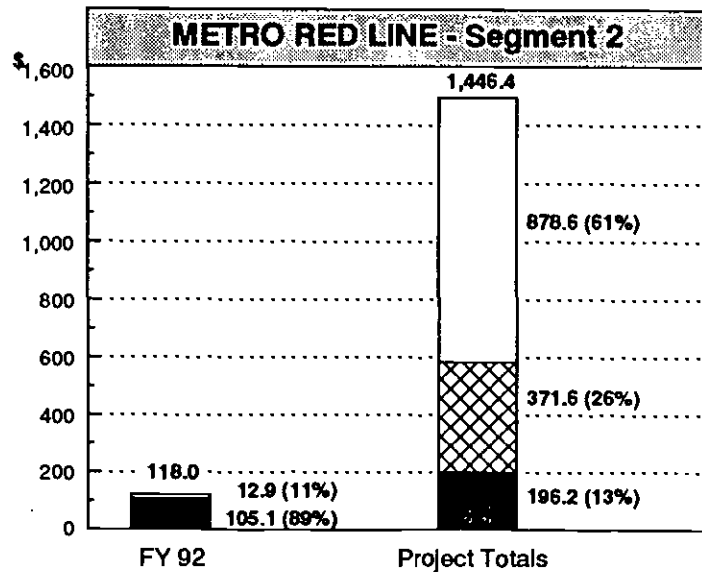
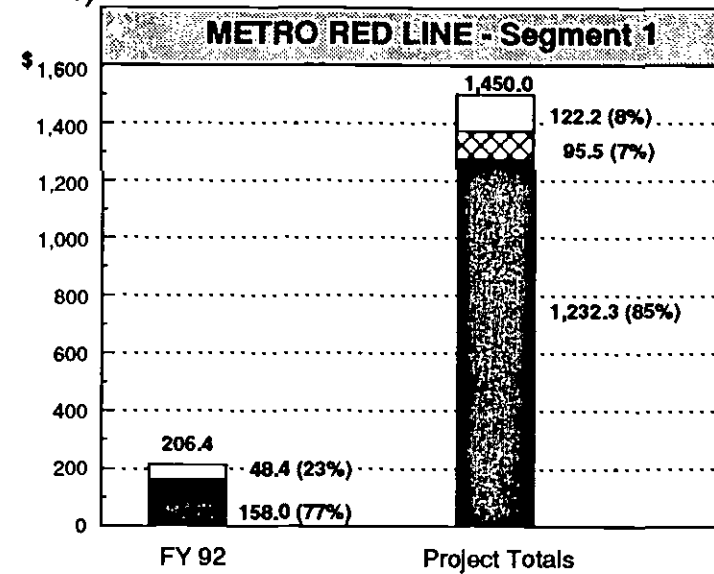
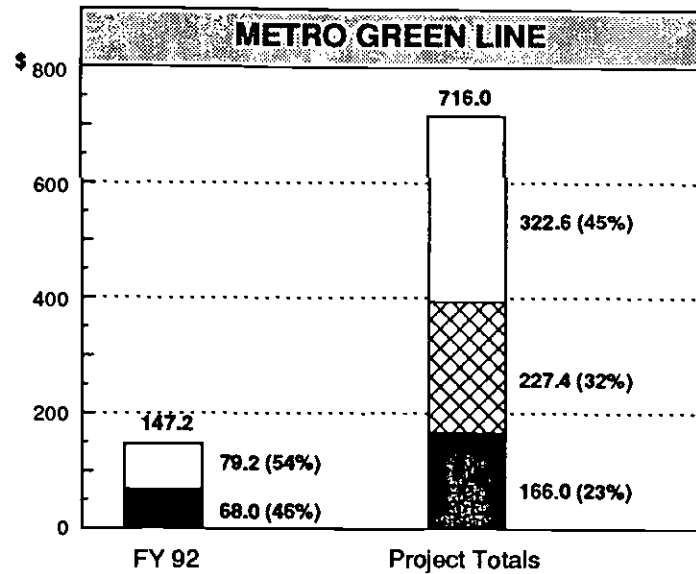


Figure 1 - Rail Construction Plan

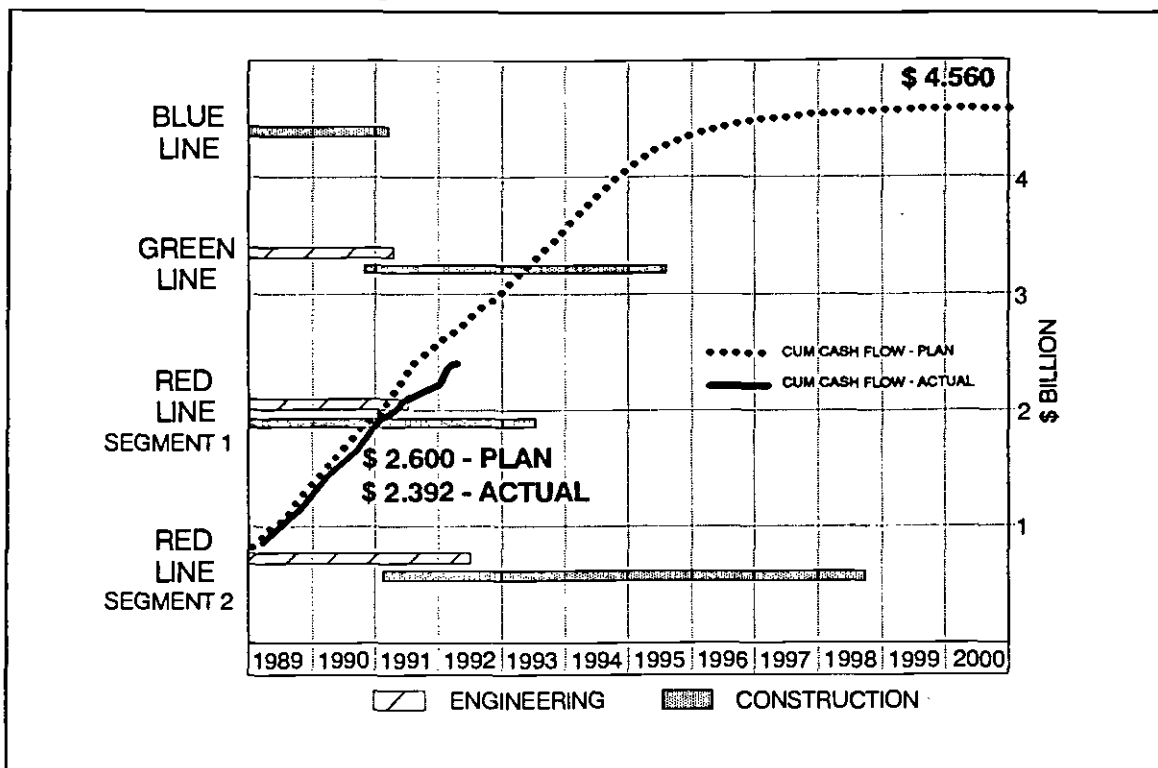


Figure 2 shows the funding sources for each project and for the total program. Data included in this figure is based on the current forecast total cost of each project.

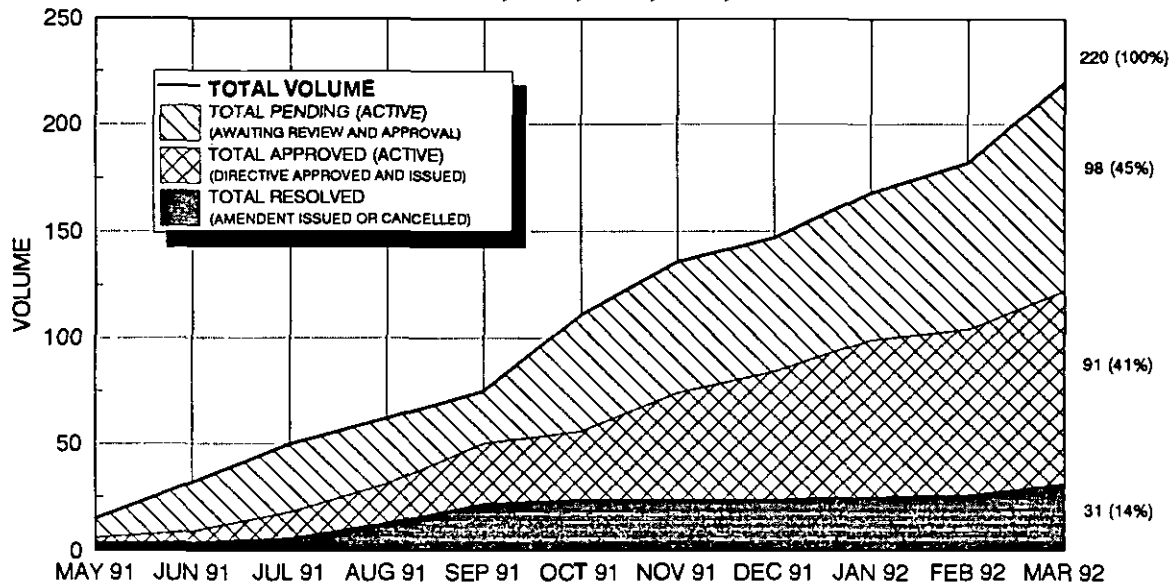
Figure 2 - Rail Construction Funding Sources

(IN MILLIONS)

	METRO BLUE LINE*		METRO GREEN LINE		METRO RED SEGMENT 1**		METRO RED SEGMENT 2		TOTAL PROGRAM	
	\$	%	\$	%	\$	%	\$	%	\$	%
FTA-SEC 3					605.3	42	667.0	46	1272.3	28
FTA-SEC 9					90.6	6			90.6	2
STATE					213.1	15	186.0	13	399.1	9
LOCAL (PROP A)	877.0	100	786.0	100	176.6	12	439.4	30	2279.0	50
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	786.0	100	1450.0	100	1446.4	100	4559.4	100

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

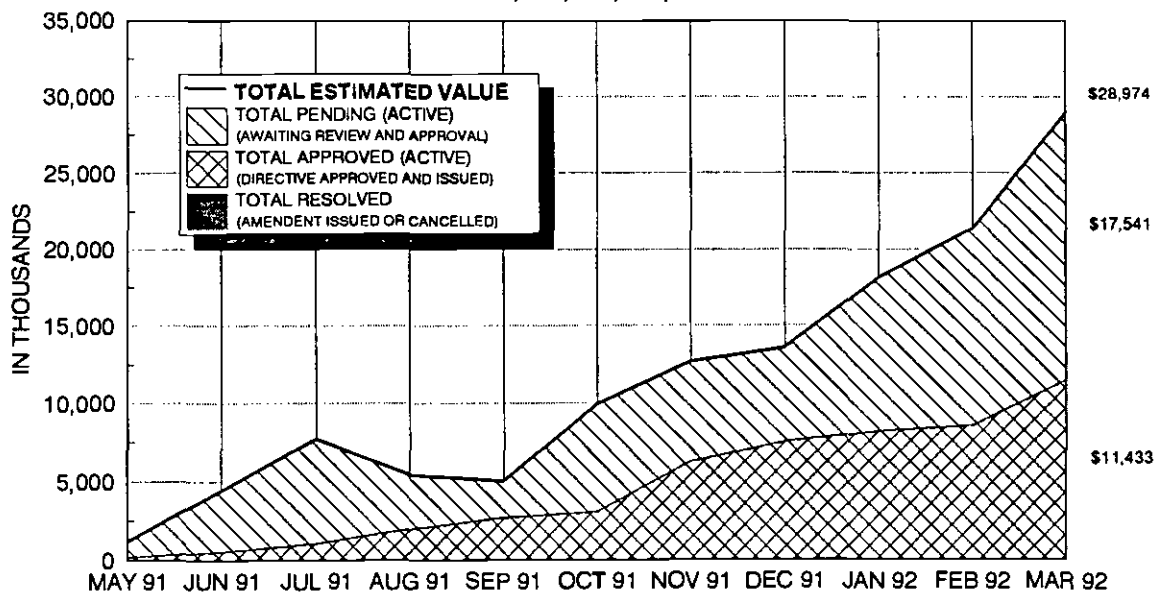
**CONSULTANT CONTRACT CHANGE SUMMARY  
CONSULTANT CHANGE REQUEST RESOLUTION  
CUMULATIVE R05, R23, R80, R81, & R82**



**AGE OF UNRESOLVED CONSULTANT CHANGES**

TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	29	17	16	127	189
PERCENT	15%	9%	9%	67%	100%

**CONSULTANT CONTRACT CHANGE SUMMARY  
CONSULTANT CHANGE REQUEST VALUES  
CUMULATIVE R05, R23, R80, R81, & R82**



## EXECUTIVE SUMMARY

**CONSULTANT CONTRACT CHANGE STATUS SUMMARY  
PENDING CHANGES/AMENDMENTS  
AS OF 03/27/92**

(\$ = THOUSANDS)

CONSULTANT CONTRACTS	TRANSCAL: E2301/MC005		MRTC: 2997/E0002		PD: 3369		OKA: MC008		OTHER		PROJECT TOTAL		LAST MONTH		VARIANCE	
	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$
R01: BLUE LINE	9	1,438									9	1,438	9	1,438	0	0
R05: PASADENA LINE									1	7	1	7	1	7	0	0
R23: GREEN LINE	54	4,386					15	1,162	2	111	71	5,659	68	5,532	3	127
R80: RED LINE S1			3	453	51	8,874					54	9,327	46	7,005	8	2,322
R81: RED LINE S2			30	6,679	23	5,202			1	200	54	12,081	42	8,883	12	3,198
R82: RED LINE S3			9	1,900							9	1,900	7	1,872	2	28
CONTRACT TOTAL	63	5,824	42	9,032	74	14,076	15	1,162	4	318	198	30,412	COMMENTS:			
LAST MONTH	61	5,822	30	7,438	64	10,122	14	1,037	4	318	173	24,737				
VARIANCE	2	2	12	1,594	10	3,954	1	125	0	0	25	5,675				

NOTE: DOLLAR VALUES SHOWN INCLUDE CONSULTANTS ROUGH-ORDER-OF-MAGNITUDE ESTIMATES AND DO NOT NECESSARILY REFLECT RCC'S FORECAST OF FINAL CHANGE COSTS.



## 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	39	1	0	0
Red Line Seg 2	72	33	35	4	171

## RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Figure 4 shows that 155 positions are filled with regular full time staff and 22 positions are filled with contract or temporary employees.

Figure 4 - RCC Staff Levels

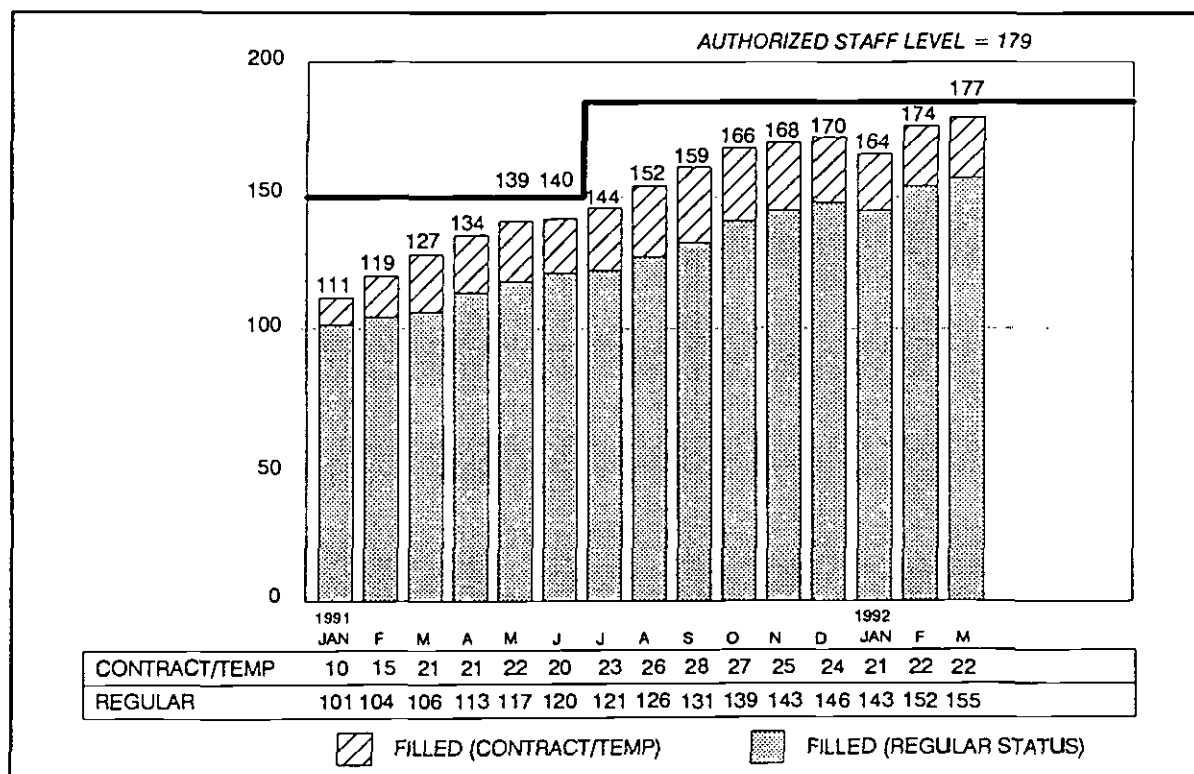


Figure 5 (on the following page) shows the LACTC/RCC staff full time equivalents and wage rate for the rail projects.

### STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 2

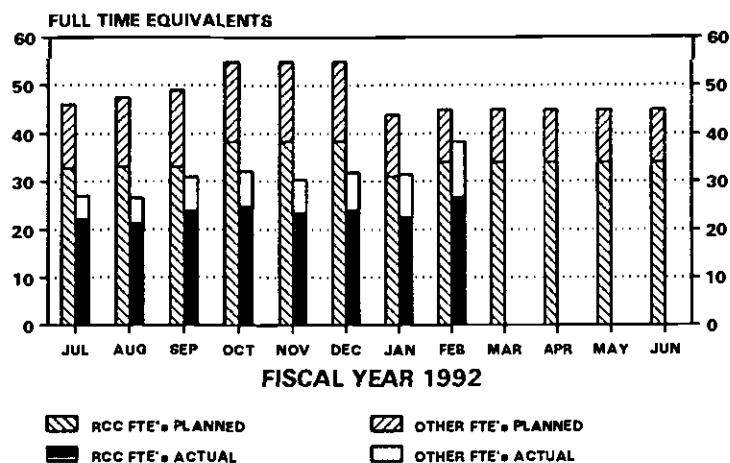
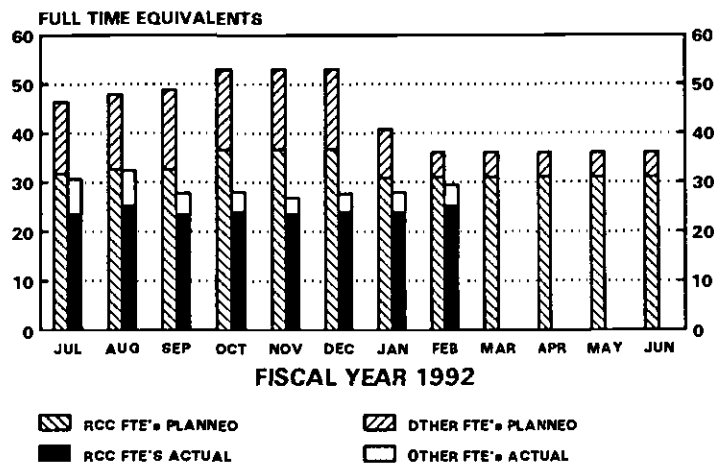


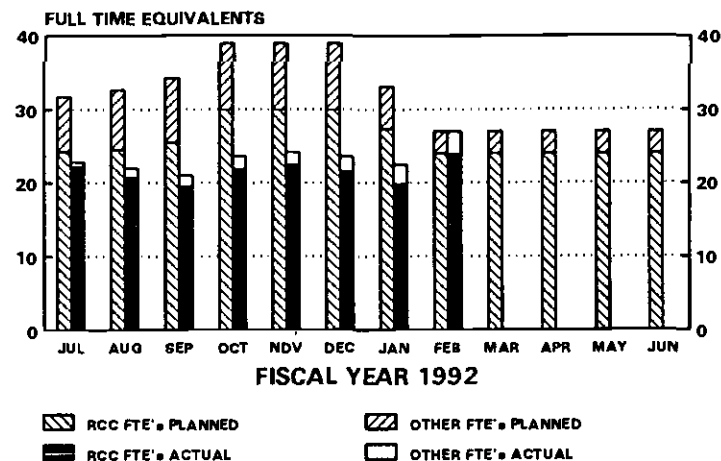
Figure 5  
FY'92 Amended Budget Implemented JAN'92

### STAFFING PLAN VS. ACTUAL GREEN LINE



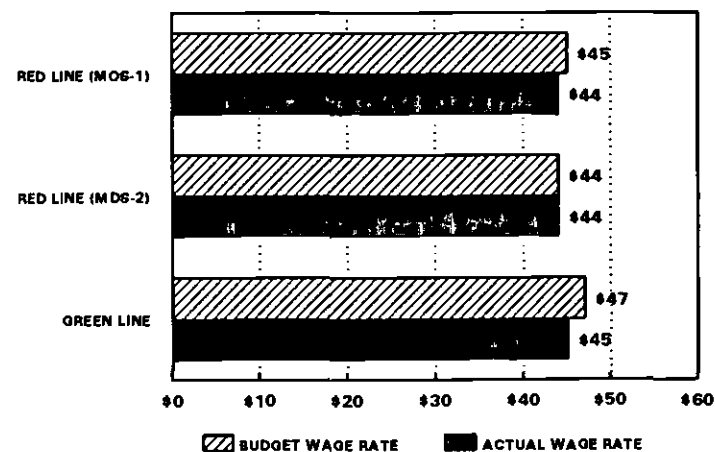
FY'92 Amended Budget Implemented JAN'92

### STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 1



FY'92 Amended Budget Implemented JAN'92

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



\*Salaries and Fringe Benefits Only

AMENDED FY'92 WAGE RATE INCORPORATED IN JAN'92



**RAIL CONSTRUCTION CORPORATION**  
**EXECUTIVE SUMMARY LABOR DISTRIBUTION REPORT**  
 For Period: March 1992  
 (All Figures in FTE Person Months)

Page: 1  
 Date: 4/14/92  
 Time: 3:14 pm

DIVISION		R01 Blue Line		R05 Pasadena		R23 Green Line		R80 Red Seg 1		R81 Red Seg 2		R82 Red Seg 3		Sub Total		R60/70 Comm Rail		Rxx Other Proj		R92 System Wide		000 Overhead		Sub Total		Grand Total		ANNUAL BUDGET
		PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	PER	YTD	
Strategic Group	BUDGET	.8	9.0	1.8	3.9	0.0	18.9	1.4	5.7	4.1	13.6	2.4	5.0	10.5	56.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.5	56.1	87.5
	ACTUAL	1.2	10.1	.4	1.2	2.4	24.6	1.5	6.0	2.4	10.1	0.0	.2	8.0	52.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.0	52.2	
Area Teams	BUDGET	0.0	.6	.9	6.2	0.0	4.2	.2	2.8	.1	4.9	.9	5.5	2.0	24.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.0	24.1	31.0
	ACTUAL	0.0	1.2	.4	5.4	.0	4.3	0.0	2.6	1.4	10.6	1.3	7.4	3.1	31.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.1	31.4	
FAST	BUDGET	1.4	5.0	2.2	6.1	1.8	17.8	1.1	11.1	6.6	51.8	2.1	4.8	15.2	96.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15.2	96.5	146.7
	ACTUAL	1.2	4.9	.6	3.4	1.0	17.4	.8	12.5	7.0	54.6	.2	1.1	10.8	93.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.8	93.9	
Commuter Rail	BUDGET	0.0	.7	0.0	0.0	0.0	.3	0.0	.2	0.0	2.1	0.0	0.0	0.0	3.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	3.4	3.4
	ACTUAL	0.0	0.0	0.0	0.0	0.0	.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	.3	
Rail Construction Corporation	BUDGET	.5	17.7	13.5	39.9	30.6	221.5	24.4	192.5	34.2	225.9	2.4	13.0	105.4	710.5	3.3	24.1	2.4	74.3	41.2	82.5	17.8	269.6	64.6	450.4	170.0	1161.0	1681.0
	ACTUAL	1.4	21.5	5.6	22.5	27.3	216.5	23.1	191.6	28.4	213.2	4.0	15.1	89.7	680.4	0.0	28.8	3.6	80.6	16.7	16.7	31.4	319.1	81.7	445.1	141.5	1125.5	
COMMISSION TOTAL	BUDGET	2.6	32.9	18.3	56.1	32.4	262.7	27.0	212.3	44.9	298.4	7.7	28.3	133.0	890.6	3.3	24.1	2.4	74.3	41.2	82.5	17.8	269.6	64.6	450.4	197.6	1341.0	
	ACTUAL	3.8	37.8	7.0	32.5	30.7	263.0	25.4	212.7	39.2	288.4	5.4	23.7	111.5	858.1	0.0	28.8	3.6	80.6	16.7	16.7	31.4	319.1	51.7	445.1	163.3	1303.3	
ANNUAL BUDGET		40.8		112.2		360.6		294.2		434.0		56.0				33.8		81.5		210.4		326.0						1949.5

## 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%. The current cost forecast data for project administration costs totals 26% which exceeds the corporate goal by 6%. 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 4.3% 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		TOTAL PROGRAM		CORPORATE GOAL
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	
CONSTRUCTION	657,487	74.95%	571,494	72.73%	818,118	56.42%	952,845	65.88%	2,999,944	65.79%	
REAL ESTATE	55,592	6.34%	29,232	3.72%	139,679	9.63%	94,288	6.52%	318,791	6.99%	
PROFESSIONAL SERVICES:											
ENGINEERING/DES	69,587	7.93%	75,425	9.60%	217,418	14.99%	129,574	8.96%	492,004	10.79%	
CONSTR MGMT.	91,642	10.45%	72,889	9.28%	140,036	9.66%	131,790	9.11%	436,357	9.57%	
STAFF	17,655	2.01%	21,390	2.72%	100,386	6.92%	57,541	3.98%	196,972	4.32%	4%
OTHER	14,222	1.62%	15,030	1.91%	988	0.07%	30,110	2.08%	60,350	1.32%	
SUBTOTAL	193,106	22.01%	184,734	23.51%	458,828	31.64%	349,015	24.13%	1,185,683	26.00%	20%
CONTINGENCY	963	0.11%	14,153	1.80%	33,394	2.30%	114,284	7.90%	162,794	3.57%	
PROJECT REVENUE	(29,877)	-3.41%	(13,798)	-1.76%	0	0.00%	(64,000)	-4.42%	(107,675)	-2.36%	
GRAND TOTAL	877,271	100.00%	785,815	100.00%	1,450,019	100.00%	1,446,432	100.00%	4,559,537	100.00%	

## CONSTRUCTION SAFETY

The Safety Report has been excluded this month and will be resumed after a detailed review of the safety program statistics has been completed.

## INVOICE PROCESSING

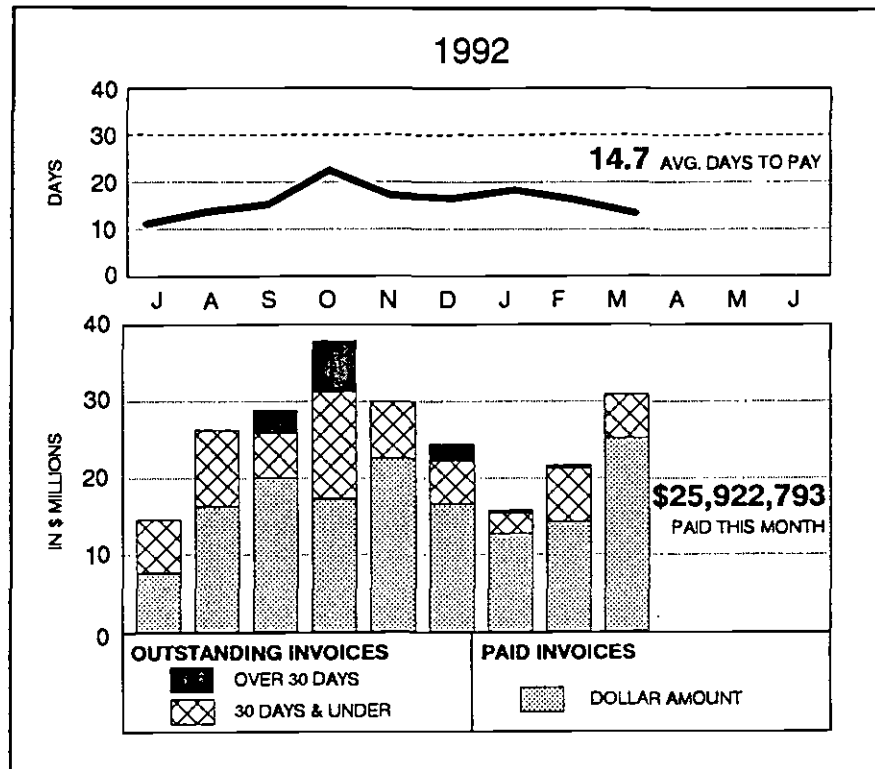
- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 14.7 days.

- 38 invoices were paid this month for a total value of \$ 25,922,793.

- There were 13 outstanding Construction or Procurement invoices under 30 days old for \$ 5,816,794.

- There was 1 outstanding Construction or Procurement invoice over 30 days old for \$ 69,660.

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
OCT 1991	17	14,328,654	30	6,818,530	44	7,513,568	17	876,002
NOV 1991	16	7,640,255	2	27,063	49	7,791,884	22	1,218,880
DEC 1991	13	5,834,032	1	2,240,824	67	3,882,141	31	2,172,469
JAN 1992	3	2,739,635	1	466,820	44	4,660,958	30	1,314,546
FEB 1992	11	7,118,511	1	466,820	75	8,712,405	24	2,086,518
MAR 1992	13	5,816,794	1	69,660	53	7,909,876	23	1,962,201

**METROLINK - COMMUTER RAIL****MARCH 1992  
VEHICLE PROGRESS REPORT  
PASSENGER COACHES (UTDC)****PROGRESS THIS PERIOD:**

- Notification to ship cars number 601 and 602 authorized March 25; scheduled arrival date in Los Angeles is April 3, 1992. Cars number 603 and 604 authorized to ship March 30; tentative date of arrival April 12, 1992.
- Car number 19 of base 40 cars is in "splice"; subsections for additional seven (7) cars are in production floor assembly fixtures.
- Data supporting total contract dollar value reduction, regarding Canadian Custom Duties and Processing Fees, still in detail review; have requested additional justification from UTDC.
- Production rate of one vehicle per week has started and should increment to two per week within the next two months.

**UPCOMING MILESTONES/ISSUES FOR NEXT THREE MONTHS:**

- Issuance of Change Order for spare parts for option cars.
- Pricing for pending Change Orders resulting from modifications required for ADA compliance has been revised and is under review.

**CRITICAL NEEDS:**

- None

**METROLINK - COMMUTER RAIL****MARCH 1992  
VEHICLE PROGRESS REPORT  
LOCOMOTIVES (GM)****PROGRESS THIS PERIOD:**

- Production of three (3) locomotives in various stages on shop floor.
- Total quantity of locomotives presently remains at seventeen (17) - Base Order. (See below)

**UPCOMING MILESTONES/ISSUES FOR NEXT THREE MONTHS:**

- Processing and cleanup of Change Orders and Change Notices.
- Exercising an option for two (2) additional locomotives (F59PH) is being initiated pending funding finalization/approval. Their locomotives are anticipated to undergo engineering study and tests regarding modifications to both prime mover and HEP engines as part of the NOx emission reduction program.
- Arrival of first locomotive anticipated in June 1992.

**CRITICAL NEEDS:**

- None

RAIL CONSTRUCTION CORPORATION  
COMMUTER RAIL  
CONTRACTING SCHEDULE

UPDATE: 27-Mar-92 PAGE: 7 of 9

CONT NO	CONTRACT DESCRIPTION	CAMERA READY	ADVERTISE DATE	PRE-BID MEETING	SUBMISSION DATE	REPORT COMPLETE	SCRRRA APPROVAL		NOTICE TO PROCEED	RESPONSIBLE <small>Engng/Contracts/Proj/Cont</small>
C6090	MIDWAY TRACK & SIGNALS	Apr-92	Apr-92	T.B.D.	T.B.D.	T.B.D.	Dec-92		Jul-92	
C6150	EAST LINE POMONA AND COVINA STATIONS	<del>28-Feb-92</del>	<del>03-Mar-92</del>	<del>17-Mar-92</del>	12-Apr-92	<i>01-Apr-92</i>	<i>10-Apr-92</i>		<i>20-Apr-92</i>	<i>Crary/Lotterman/</i>
C6160	Seismic Retrofit	<del>Mar '92</del>	<del>Mar '92</del>	Apr '92	May '92	<i>01-May-92</i>	<i>08-May-92</i>		<i>May '92</i>	<i>Minihan/Origel/</i>
C6170	Riverside Station	<del>Mar '92</del>	<del>Mar '92</del>	Apr '92	May '92	Jun '92	Jun '92		Jun '92	<i>Shah/Lotterman/</i>
C6180	Glendale/Burbank Stations	<del>Mar '92</del>	<del>Mar '92</del>	Apr '92	<i>Apr '92</i>	<i>Apr '92</i>	<i>Apr '92</i>		<i>Apr '92</i>	<i>Crary/Lotterman/</i>
E0270	Engineering Services Staff Support	<del>21-Feb-92</del>	<del>24-Feb-92</del>		<del>17-Mar-92</del>	<i>01-May-92</i>	<i>08-May-92</i>		<i>20-Apr-92</i>	<i>Rinard/Origel/</i>
H2030	SIGNAGE FABRICATE INSTALL	<del>Mar '92</del>	<del>Mar '92</del>	Apr '92	May '92	<i>Apr '92</i>	<i>Apr '92</i>		Jun '92	<i>Crary/Origel/</i>
H2050	C.T.C. DISPATCH CENTER DESIGN & BUILD	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.		T.B.D.	Rinard/
MS003	Financial Clearing House	<del>Feb '92</del>	<del>Mar '92</del>		<i>Apr '92</i>	<i>01-May-92</i>	<i>08-May-92</i>		<i>Apr '92</i>	<i>Colfax/Origel/</i>
T5020	COMMUTER RAIL OPERATION SERVICE	<del>Mar '92</del>	<del>07-Jun-91</del>	<del>18-Jun-91</del>	<del>06-Jul-91</del>	<del>06-Sep-91</del>	<del>21-Nov-91</del>		<del>21-Feb-92</del>	Solow/Sechler/
TBD	BROADWAY CONNECTOR	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.		T.B.D.	T.B.D.
TBD	CONDUITS	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.		T.B.D.	T.B.D.
TBD	TAYLOR UNDERPASS	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.	T.B.D.		T.B.D.	T.B.D.
C6190	Chatsworth Station	<i>Apr '92</i>	<i>Apr '92</i>	<i>Apr '92</i>	<i>May '92</i>	<i>01-May-92</i>	<i>08-May-92</i>		<i>28-May-92</i>	<i>Crary/Lotterman/</i>
H2070	Station Canopies	<i>Apr '92</i>	<i>Apr '92</i>	<i>Apr '92</i>	<i>May '92</i>	<i>01-May-92</i>	<i>08-May-92</i>		<i>28-May-92</i>	<i>Crary/Lotterman/</i>
H2080	Laupt Signs	<i>Apr '92</i>	<i>Apr '92</i>	<i>Apr '92</i>	<i>May '92</i>	<i>01-May-92</i>	<i>08-May-92</i>		<i>28-May-92</i>	<i>Crary/Origel/</i>
		ACTUAL DATE =				CHANGES SINCE THE LAST UPDATE=				<b>BOLD ITALICS</b>

A: COMMRAIL.MAR



# LACTC COST RECOVERY STATUS REPORT

as of 1/31/92

February changes shaded

## CLAIMS IN PROCESS

Agency	Contract	Description	Claim Amount	Agreed Amount	Involved	Paid	Unpaid Balance	Unbilled Balance	Status	Action Items
<b>BLUE LINE</b>										
Compton	F202	MC-5 Alternative (See Note 1)	10,158,808	5,887,435	5,950,773	5,427,163	523,610	0	See Page 2	LACTC \$ exposure/45 day ltr
HJO	C140	C140 Counterclaim	5,171,204	1,000,000	1,000,000	1,000,000	0	0	HJO Claim	Balance to E&O - TBD
	C117	Thrid Party Backcharges	35,874	Included in line above					Reduction (8/91)	
Long Beach	C335	LB Station Superstructures - Indirect	211,733						Pending Prop A	Follow with Long Beach
	Various	Long Beach Prop A Projects	193,873						Documenting claim	Develop addl documentation
LA-BSL	C117/C140	Betterments & Backcharges	788,848						In Neg - Most issues resolved	Will discuss shortly
LA-CRA	C510	105th Street Pedestrian Crossing	378,000	378,000					Agreed	Waiting on real estate
	C510	105th Street Land Issues	250,000						CRA appraisal scheduled 3/92	Appraisal now in process
LA-DPW	C117	Flower St. Improvements	2,146,803						Meeting soon	Review attorney letter
	C140	8" Sewer Relocation	500,000						In Negotiation	Waiting for DPW analysis
	C140	Roof Drains	150,000						In Preparation	
LA County	F208	Florence-Graham Park-N-Ride	400,000						Developing cash out strategy	
	F208	Graham Avenue Widening	TBD							Monitoring TIA action
So Cal Edison	C325	Install Duct Bank at PCH	19,114	19,114	19,114	19,114	0	0	Cash Collected (2/92)	
SCRTD	H812	Maintenance Parts	70,000	70,000	70,000		70,000	0	RTD wants to include in start-up W/O	Will be negotiated in start-up W/D closeout
	WorkOrders	Blue Line Work Order Closeouts #1*	13,428,331	8,880,505		8,880,505			RTD responded on schedule	Close remainder. Review for backcharges and betterments
		Blue Line Work Order Closeouts #2	3,796,340						Balance of RTD work orders are in closeout process	
SPTC	C415/F208	Firestone Bridge	830,000	830,000	830,000	830,000	0	0	\$48,922 Cash Collected (2/92)	
	C510	105th Street Ped Crossing	17,700						Agmt at SPTC	Awaiting SP response on 105th
	C510	SPTC Share - Caldwell Ave. Ped Xing	32,550	32,550	32,550	32,550	0	0	Cash Collected (2/92)	
CNA Insurance	Various	Errors & Omissions	13,388,055						In Process	
<b>BLUE LINE TOTALS</b>			<b>51,940,833</b>	<b>18,855,804</b>	<b>7,902,437</b>	<b>15,968,332</b>	<b>593,610</b>	<b>0</b>		
<b>RED LINE</b>										
LA-BSL	A185	7th Street Streetscape	300,000						Add bttrmnts to be discussed	Analyze amount of claim
SCRTD	A185	Duplicate Indirect Costs	4,400,000	Credit due Red Line from RTD					In proc - Acknowl by RTD	
CNA Insurance	Various	Errors & Omissions	5,755,900						In process	
<b>RED LINE TOTALS</b>			<b>10,455,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		

\* Release of LACTC obligations rather than cash recovery. Funds to be restored to Blue Line project budget.

18-Mar-92

RAIL PROGRAM STATUS SUMMARY

MARCH 1992

# LACTC COST RECOVERY STATUS REPORT

February changes shaded

as of 1/31/92

Agency	Contract	Description	Claim Amount	Agreed Amount	Invoiced	Paid	Unpaid Balance	Unbilled Balance	Status	Action Items
<b>OTHER LINES</b>										
Various		Refund, Gen Lieb 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	Closeout process started	Check status with Dehaan
Pasadena		Route Refinement Study	150,000	150,000	104,788	104,788	0	45,214	Billed as Bechtel bills LACTC	Check status with Rosales
CalTrans	64K576	LAUPT Access Study	200,000	200,000	149,302	147,809	1,493	50,698		Check status with Ferguson
<b>OTHER LINE TOTALS</b>			<b>915,000</b>	<b>915,000</b>	<b>558,688</b>	<b>557,193</b>	<b>1,493</b>	<b>356,314</b>		
<b>TOTAL CLAIMS IN PROCESS</b>			<b>63,311,733</b>	<b>17,770,604</b>	<b>8,461,123</b>	<b>18,528,525</b>	<b>595,103</b>	<b>356,314</b>		
<b>TOTAL CLAIMS RECOVERED (See Page 3)</b>			<b>7,090,232</b>	<b>6,857,581</b>	<b>8,958,788</b>	<b>8,958,788</b>	<b>0</b>	<b>(101,207)</b>		
<b>GRAND TOTALS</b>			<b>70,401,965</b>	<b>24,628,185</b>	<b>15,419,911</b>	<b>23,485,313</b>	<b>595,103</b>	<b>255,107</b>		

## NOTES

### NOTE 1 - MC-5

COURTESY BILLINGS FOR WILLDAN ASSOCIATES Involving MC-5 projects billed to LA County, through LACTC, on behalf of Compton

	Authorized	Willdan Charges	Invoiced	Paid	Unpaid Balance	Available	Status	Action Items
West Alameda Underpass	702,680	592,238	592,238	567,178	25,062	110,422	In progress	
Administration Charges			10,551	0	10,551		Negotiation with Cmpn started	Set mtg with Hanson
Mealy St - Environmental Assessment	87,899	84,284	84,284	84,284	0	3,415	Completed	
Administration Charges			1,320	0	1,320		Negotiation with Cmpn started	Set mtg with Hanson
SUBTOTALS	790,359	676,522	688,393	651,460	36,933			
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	2,268,790	1,780,113	488,677			
Chevron Oil Relocation			415,210		415,210		LA Co reviewing oblig to pay	Waiting for LA Co response
C420 Design Support & Const Mgt			100,000		100,000		Preparing claim	Assemble backup documents
SUBTOTALS	11,483,498	5,190,913	5,262,380	4,775,703	488,677			
MC-5 TOTALS	(figures transferred to Page 1)		5,887,435	5,950,773	5,427,183	523,610		
OTHER MC-5 ISSUES								
Owens Corning / Mealy Street Spur	80,000						Contingent on MC-5 complete	Bill on completion

16-Mar-92

RAIL PROGRAM STATUS SUMMARY

MARCH 1992

# LACTC COST RECOVERY STATUS REPORT

as of 1/31/92

February changes shaded

## CLAIMS RECOVERED

Agency	Contract	Description	Claim Amount	Agreed Amount	Invoiced	Paid	Unpaid Balance	Unbilled Balance	Status	Action Items
<b>BLUE LINE</b>										
CalTrans	C415	Firestone Bridge	458,000	458,000	458,000	458,000	0	0	Cash Collected (7/91)	
	C415	Firestone Bridge - Indirect	232,651	0	0	0	0	0	Payment capped at \$458,000	
Compton	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	108,984	108,984	108,984	108,984	0	0	Cash Collected (7/91)	
Long Beach	C335	LB Station Superstructures	415,000	415,000	415,000	415,000	0	0	Cash Collected (9/91)	
LA-BSL	C140	Supplemental Agreement	259,000	259,000	259,000	259,000	0	0	Cash Collected (3/91)	
LA-CRA	C510	Century Blvd. Grade Crossing	544,052	544,052	544,052	544,052	0	0	Cash Collected	
LA-DWP-W	C140	HJO Repairs - Faulty DWP Joints	17,500	17,500	17,500	17,500	0	0	Cash Collected (8/91)	
Simmons Cable TV		Install Duct Bank - 10th St. & LB	6,084	6,084	6,084	6,084	0	0	Cash Collected	
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	
United Logistics		K-Line Spur	325,000	325,000	325,000	325,000	0	0	Cash Collected	
<b>BLUE LINE TOTALS</b>			<b>4,968,232</b>	<b>4,735,581</b>	<b>4,735,581</b>	<b>4,735,581</b>	<b>0</b>	<b>0</b>		
<b>OTHER LINES</b>										
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	
Lawndale		Costal Corridor Study	18,800	18,800	18,800	18,800	0	0	Cash Collected	
Redondo Beach		Costal Corridor Study	7,000	7,000	7,000	7,000	0	0	Cash Collected	
Torrance		Costal Corridor Study	48,200	48,200	48,200	48,200	0	0	Cash Collected	
<b>BLUE LINE TOTALS</b>			<b>2,122,000</b>	<b>2,122,000</b>	<b>2,223,207</b>	<b>2,223,207</b>	<b>0</b>	<b>(101,207)</b>		
<b>TOTAL CLAIMS RECOVERED</b>			<b>7,090,232</b>	<b>6,857,581</b>	<b>6,958,788</b>	<b>6,958,788</b>	<b>0</b>	<b>(101,207)</b>		
(figures transferred to Page 2)										

Page 3

18-Mar-92

RAIL PROGRAM STATUS SUMMARY

MARCH 1992

## 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.		
H840	Fare Collection						Board Approval Competed;GFI Submittals Du	Apr. 92
P851	Hi-Rail Trucks						Truck Delivered;Completing Inspection/Repai	May 92
C355R	Long Beach Landscaping	O					Transferred to RCC	May 92

**METRO PASADENA PROJECT  
MARCH 1992 STATUS REPORT****EXECUTIVE SUMMARY**

The Planning Mobility Improvement Committee (PMIC) approved funding for conducting Environmental studies for three separate yard locations. The potential sites are the Cornfield Yard, the Taylor Yard, and a non-revenue connector. The process will take approximately three months to complete and will yield a basis for determining the final location for the Maintenance Facility.

Phase I Preliminary Engineering continued with an emphasis on completion of project specific design criteria. Mapping of existing utilities is in progress and the alignment for Phase I is undergoing further refinement. To date, twenty-two percent of the baseline project scope has been accomplished.

The RCC, Area teams, and EMC are working together to close issues regarding the final Phase I alignment (which includes location of the Chinatown Station and interfaces with the Catellus development) and with the Cities of South Pasadena and Pasadena (Master Cooperative Agreements, Grade Separation, and Civic Center West).

**AREAS OF CONCERN****ONGOING****Yard Site Location**

**Concern:** Neither the Cornfield Site nor the Taylor Yard have been environmentally cleared nor have the Area teams approved either location for the eventual yard site.

**Action:** PMIC has approved funding for environmental studies to be performed for three potential Yard Sites.

**Status:** The EMC continues to refine the yard layout at the Cornfield Site. RCC Real Estate has been given approval to open talks with Southern Pacific regarding purchase of a portion of the Site. At the conclusion of the EIR process, a final yard location will be chosen.

**Civic Center West Development**

- Concern:** The Civic Center West Development, a portion of which will be constructed over the Santa Fe Right of Way is projected to begin construction by the third quarter of 1992. Approval by the City of funding one-half of the cost of performing grade separation preliminary engineering indicates their preference for this option-over an at grade alignment through Colorado Boulevard. This differs markedly from the developers plans which are based on an at grade alignment. If grade separation became the eventual method of construction, Janss Development would have to dramatically change their structural design.
- Action:** The Pasadena team has reviewed the developers plan check drawings and provided comments regarding the LRT operational and safety requirements which must be satisfied.
- Status:** The developer (Janss Corporation) has been informed by the RCC that their current configuration precludes the grade separation option preferred by the City of Pasadena.
- Concern:** Access to the Santa Fe Alignment east of the Los Angeles River is required by April 30, 1992 for surveying, potholing and other design control activities. Access for construction is required one year later (4/30/93). Failure to meet either date would result in a delay to the project.
- Status:** The Pasadena team has held a series of meetings with the Commuter Rail staff in order to underscore critical access need dates and to provide support and information as required regarding the right of way negotiations. Access dates will be known at the conclusion of negotiations scheduled for the end of April 1992.

**KEY ACTIVITIES - MARCH**

- The EMC prepared a grade separation study for the alignment between Avenue 26 and Fremont Avenue submitted on 3/2/92.
- The Planning Mobility Improvement Committee (PMIC) approved funding for Environmental Impact Studies for three alternative yard sites. The Cornfield Site, the Taylor Yard, and a non-revenue connector to the Metro Blue Line Maintenance Facility.

- The Pasadena team reviewed the Glendale/Pasadena Wye connection as developed by Bechtel Corporation for the Glendale EIR and submitted comments regarding the alternatives proposed by the designer. Revised drawing are expected to be received from Bechtel by the end of April 1992.
- RCC received the proposal for Phase II Preliminary Engineering from the EMC on 3/26/92.
- RCC forwarded comments to the Master Cooperative Agreement to the City of Pasadena.
- The EMC delivered a set of preliminary site plans for the Maintenance Facility. The Pasadena Staff, RCC Operations, and RTD, are reviewing the plans. Comments will be returned to the RCC by the first of April.

#### KEY ACTIVITIES - PLANNED FOR APRIL

- RCC to meet with representatives from Catellus and Ratkovich to review interfaces between various Pasadena alignments and the Alameda District development 4/10/92.
- A draft of the Contract Unit Descriptions for the project will be presented to the RCC by April 30, 1992.
- The EMC will begin preparation of the Pasadena Project Schedule (4/20/92).
- Continue the review of the Civic Center West drawings to ensure all LRT interface requirements are met.
- EMC to submit preliminary traffic plans (4/17/92).
- RCC will initiate negotiations with the EMC for Phase II Preliminary Engineering (4/27/92).

## EXECUTIVE SUMMARY

### COST STATUS (in \$ millions)

- Current Budget 716
- Current Forecast 786

### SCHEDULE STATUS

- Current Approved Revenue Operations Date May, 1995
- Design Progress
  - Plan 100%
  - Actual 99%
- Construction Progress
  - Plan 25%
  - Actual 19%
- Contract C0610 (El Segundo Trackwork Installation) was advertised for bid March 19, 1992.

### REAL ESTATE

MONTH	NUMBER OF PARCELS	PARCELS AVAILABLE	PARCELS NOT AVAILABLE (ON SCHEDULE)	PARCELS NOT AVAILABLE (BEHIND SCHEDULE)	
				NUMBER	AVE DAYS BEHIND
MARCH	40	39	1	0	0
FEBRUARY	40	39	1	0	0



## AREAS OF CONCERN

### ONGOING

#### **Vehicle Delivery/Integrated Testing Conflict**

**Concern:** The control line testing schedule has been affected by the January 16, 1992 termination of Contract P1900 (High Performance Transit Vehicles) and the temporary suspension of Contract H1100 (Automatic Train Control). The first two Metro Green Line vehicles will not be available for systems integrated testing; therefore, the control line testing scheduled to start in February, 1994 will have to be performed using substitute vehicles.

**Action:** The H1100 (Automatic Train Control) contractor will be directed to initiate testing using alternate vehicles. Integrated test plans will address the workaround.

**Status:** Addendum 5 to Contract H1100 (Automatic Train Control) has provided the option of using alternate vehicles should the need arise. In order to use the alternate method for testing, the ATC contractor will have to submit plans incorporating this option for review and approval.

#### **Caltrans Contract CT043-2 (I-105 to Studebaker)/Contract C0600 (Century Trackwork Installation) Access Date Conflict**

**Concern:** Bids for Contract CT043-2 were opened on January 9, 1992 and award was made March 25, 1992. The current contract duration is 300 calendar days with no mention of early access for the LRT portion. This omission will deny site access to the trackwork contractor on November 2, 1992, the date given in the Contract C0600 documents. The delayed trackwork installation will impact the follow-on systems contracts and will potentially cause delay damage costs.

**Action:** The LRT special provisions for establishing a November 2, 1992 rail access date were not included in the bid documents. OKA will review the possibility of adding the provisions by change order or accelerating the guideway construction from the crossover at the west end of the Norwalk station to the west end of the project. Caltrans will partner with the proposed contractor and will add the access date as a partnering goal. (The Century Freeway Affirmative Action Committee is recommending award to other than the low bidder).

**Status:** Caltrans, OKA and the contractor have scheduled a partnering meeting the week of April 20, 1992 to negotiate an early LRT access date.

**SCE Power Lines/Contract C0100 (Aerial Guideways) Conflict**

**Concern:** SCE has begun raising the electrical transmission lines by installing new, taller towers at the Kramer property area. One guideway foundation (Bent 97) could not be constructed by the Contract C0101 (Foundations and Utilities) contractor due to the conflict with existing power line height. Consequently, the foundation has been removed from that contract's scope of work and added to Contract C0100. As the SCE line/tower raising work is scheduled to take approximately six months with completion presently set for May, 1992, a conflict exists with the Contract C0100 contractor's scheduled activities at this area.

**Action:** This matter is being discussed and reviewed at each monthly SCE/RCC/OKA coordination meeting.

**Status:** OKA and the RCC are monitoring SCE closely in an attempt to coordinate activities with Contract C0100's construction. A status update with SCE in March indicates that SCE's work will be completed early. Depending on weather and/or other emergencies, SCE may be finished in early April, thereby eliminating impact to Contract C0100 and Contract C0110 (Segmental Bridges).

**Caltrans Permits**

**Concern:** Caltrans encroachment "double" permits (one by the RCC and one by the contractor) are required for each contract working on Caltrans right-of-way. The first requirement is for Contract C0600 (Century Trackwork Installation). The full permit is being held up due to Caltrans concerns over the stray current issue. A provisional permit for survey work and ballast installation (except at the bridges) has been issued. A second provisional permit (revised) has been issued allowing all work for the contract to proceed (except at six bridges).

**Action:** The RCC negotiated with Caltrans and recommended execution of a Contract C0600 option and/or change order. The RCC will apply for all other permits. Clarification with OKA, RCC and Caltrans took place in March which eliminated the Contract C0600 "double" permit requirement. This will also eliminate double permit requirements for the remaining permits being processed by the RCC.

**Status:** Contract C0600 action awaits the results of the RCC's negotiations with Caltrans. The RCC has instructed OKA to allow the stray current option to lapse. Also, the RCC is submitting permit applications to Caltrans for other contracts, identified by OKA, which require permits.

**Remedial Work: Projects CT037 (La Cienega to Inglewood), CT044-1 (Santa Fe to Atlantic), CT046 (Vermont to Main) and CT047 (Atlantic to Garfield)**

- Concern:** It has been noted that there are bent anchor bolts, incorrect anchor bolt sizes, lack of anchor bolt protection, lack of proper grounding, conduits not mandrelled and lack of continuity straps in the above Caltrans projects. The remedial work, if not completed in a timely manner, could impact the follow-on systems Contracts H1200 (Traction Power Supply System) and H1400 (Overhead Contact System).
- Action:** In Project CT044-1, the outstanding items were given to Caltrans as part of the punchlist requiring completion prior to LRT turnover. The Caltrans Resident Engineers on Projects CT037, CT046 and CT047 have been informed of the deficiencies.
- Status:** Per Caltrans, corrective actions will be taken before final acceptance of the projects. This course of action will be monitored against Contracts H1200, H1400 and C0600 (Century Trackwork Installation) schedule requirements.

**RESOLVED**

No ongoing areas of concern were resolved this reporting period.

**KEY ACTIVITIES -- March**

- Contract C0610 (El Segundo Trackwork Installation) was advertised for bid.

**KEY ACTIVITIES -- Planned for April**

- Contract C0501 (Systems Facilities Sites) bids will be opened.
- Contract C0610 (El Segundo Trackwork Installation) pre-bid meeting will be held.
- Contract H0833 (Radio Systems) bids will be opened on April 20, 1992.

RAIL CONSTRUCTION CORPORATION  
METRO GREEN LINE - NORMALK/EL SEGUNDO  
Project Cost by Element

[ \$ x 000's ]

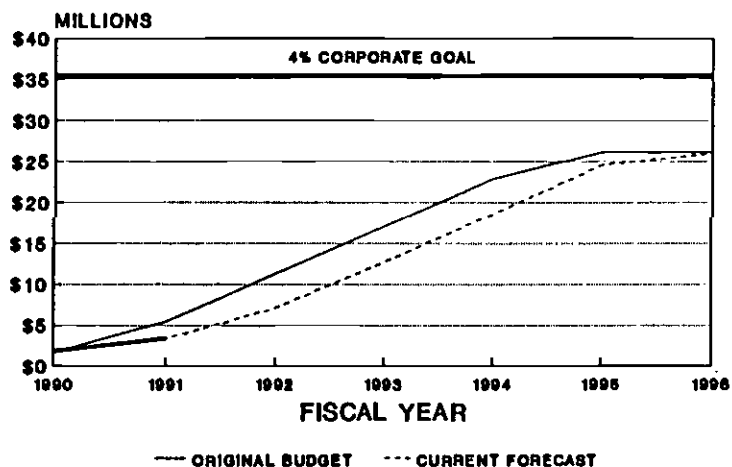
Description	----- Budget -----		--- Commitments ---		-- Incurred Cost --		--- Expenditures ---		Current	Variance (9-2)
	Original (1)	Current (2)	Period (3)	To Date (4)	Period (5)	To Date (6)	Period (7)	To Date (8)	Forecast (9)	
T Construction	470,192	562,614	1,286	267,158	9,593	77,717	5,713	66,448	560,994	(1,620)
S Professional Services	108,562	108,562	478	102,784	2,625	93,396	(7,517)	75,655	179,944	71,382
R Real Estate	36,927	29,232	5	23,570	6	22,756	6	22,763	29,232	0
F Utility/Agency Force Accounts	7,656	10,500	103	7,507	229	1,597	110	1,606	10,500	0
D Special Programs	4,676	4,790	2	1,025	2	183	3	103	4,790	0
C Contingency	59,613	14,100	0	0	0	0	0	0	14,153	53
A Project Revenue	(16,626)	(13,798)	0	(8,649)	0	(559)	0	(559)	(13,798)	0
Project Grand Total :	671,000	716,000	1,874	393,395	12,455	195,091	(1,685)	166,016	785,815	69,815

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

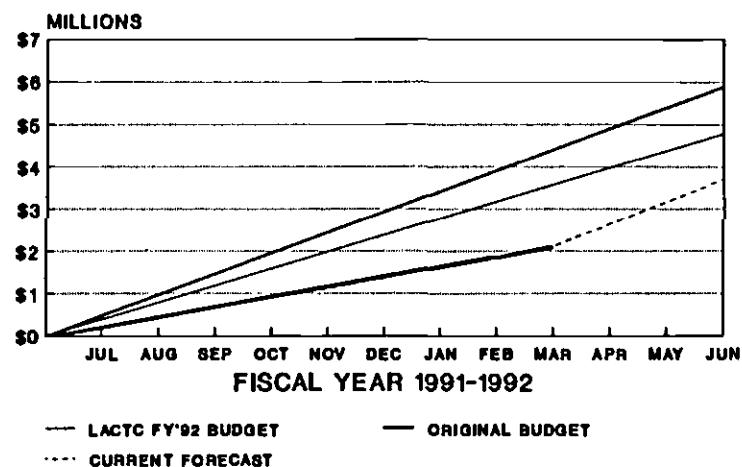
STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
LACTC	\$786,000	\$110,908	\$267,884	34%	\$166,016	21%	\$166,016	21%
TOTAL	\$786,000	\$110,908	\$267,884	34%	\$166,016	21%	\$166,016	21%

## AGENCY COSTS GREEN LINE



## FISCAL 1992 AGENCY COSTS GREEN LINE



## PROJECT AGENCY COSTS GREEN LINE (\$000)

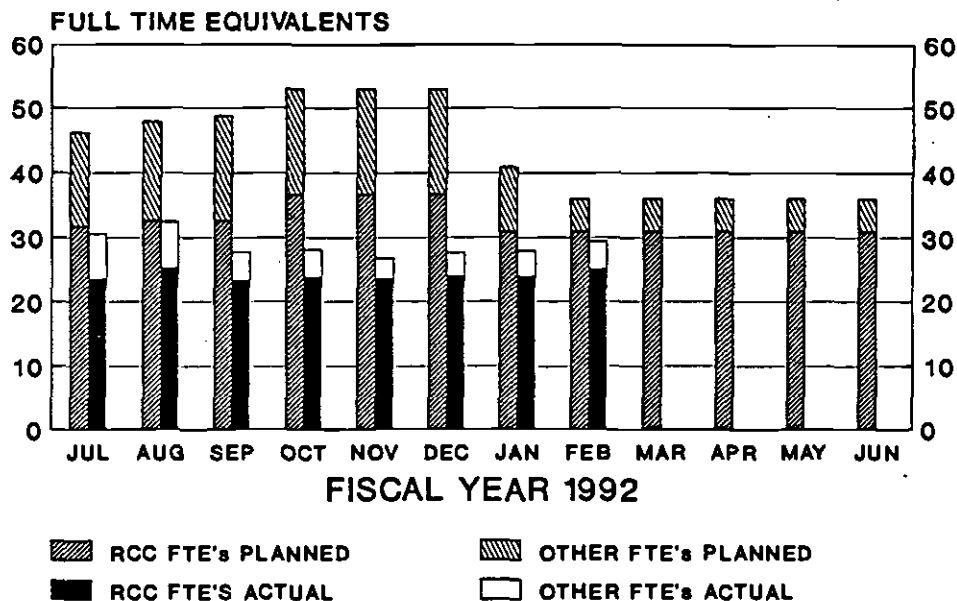
TOTAL PROJECT BUDGET	\$886,000
ORIGINAL BUDGET	\$26,189
BUDGET % OF TOTAL PROJECT	3.0%
CURRENT FORECAST	\$26,084
FORECAST % OF TOTAL PROJECT	2.9%
4% CORPORATE GOAL	\$35,440

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

LACTC FY'92 BUDGET	\$4,781
ORIGINAL BUDGET	\$5,833
CURRENT FORECAST	\$3,712
ACTUAL \$ TO DATE	\$2,109

Revised forecast as of December 1991.

## STAFFING PLAN VS. ACTUAL GREEN LINE



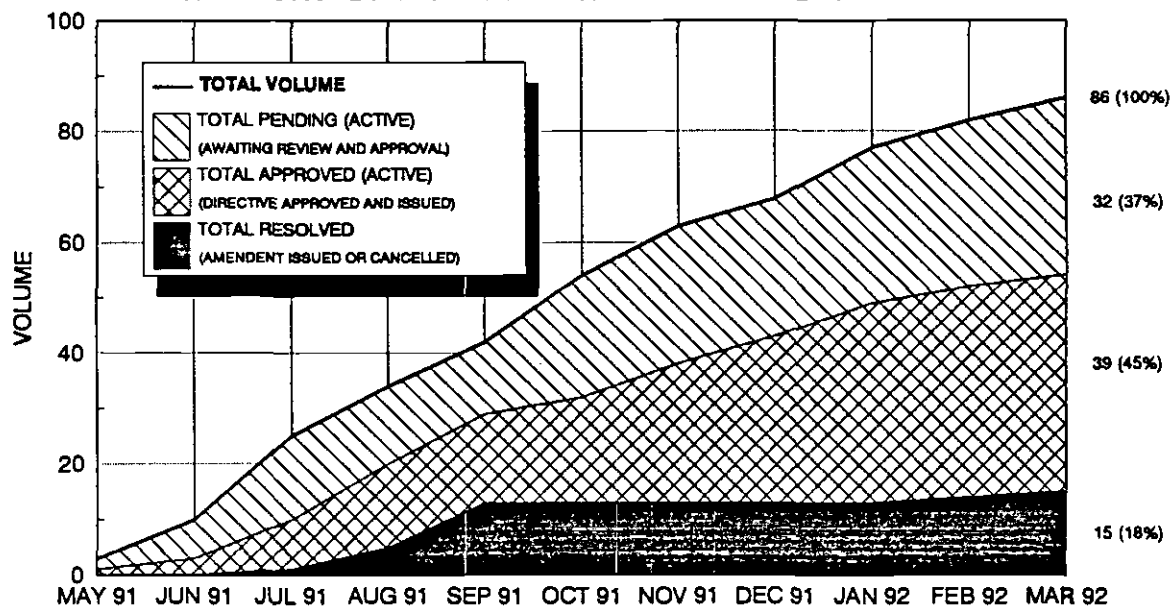
FY'92 Amended Budget Implemented JAN'92

## GREEN LINE STAFFING PLAN FISCAL YEAR 1992

BUDGET WAGE RATE (\$/HOUR)	\$47
ACTUAL WAGE RATE (\$/HOUR)	\$45
RCC FTE's PLANNED	31
RCC FTE's ACTUAL	25
OTHER FTE's PLANNED	5
OTHER FTE's ACTUAL	4
TOTAL FTE's PLANNED	36
TOTAL FTE's ACTUAL	29

AMENDED FY'92 WAGE RATE INCORPORATED IN JAN'92

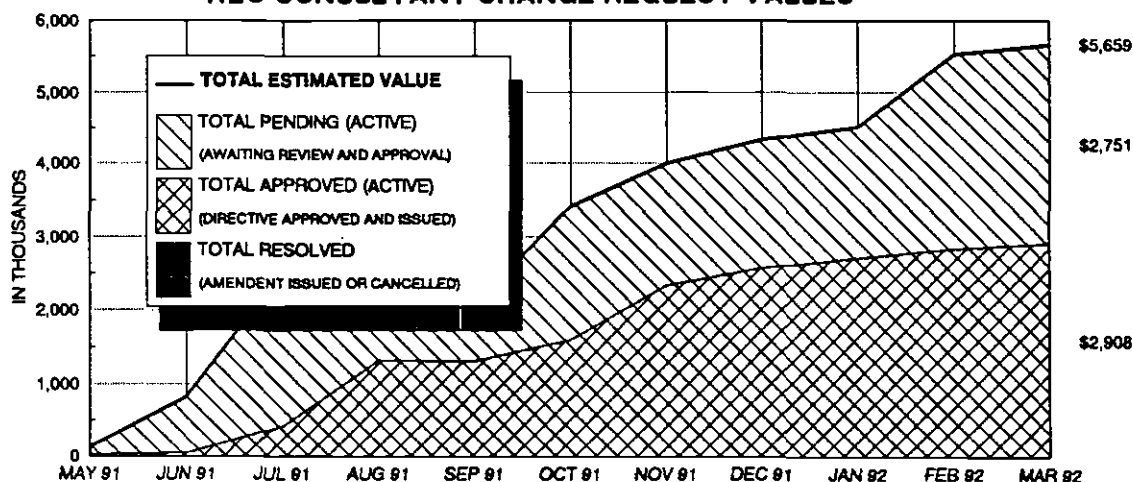
**CONSULTANT CONTRACT CHANGE SUMMARY  
R23 CONSULTANT CHANGE REQUEST RESOLUTION**



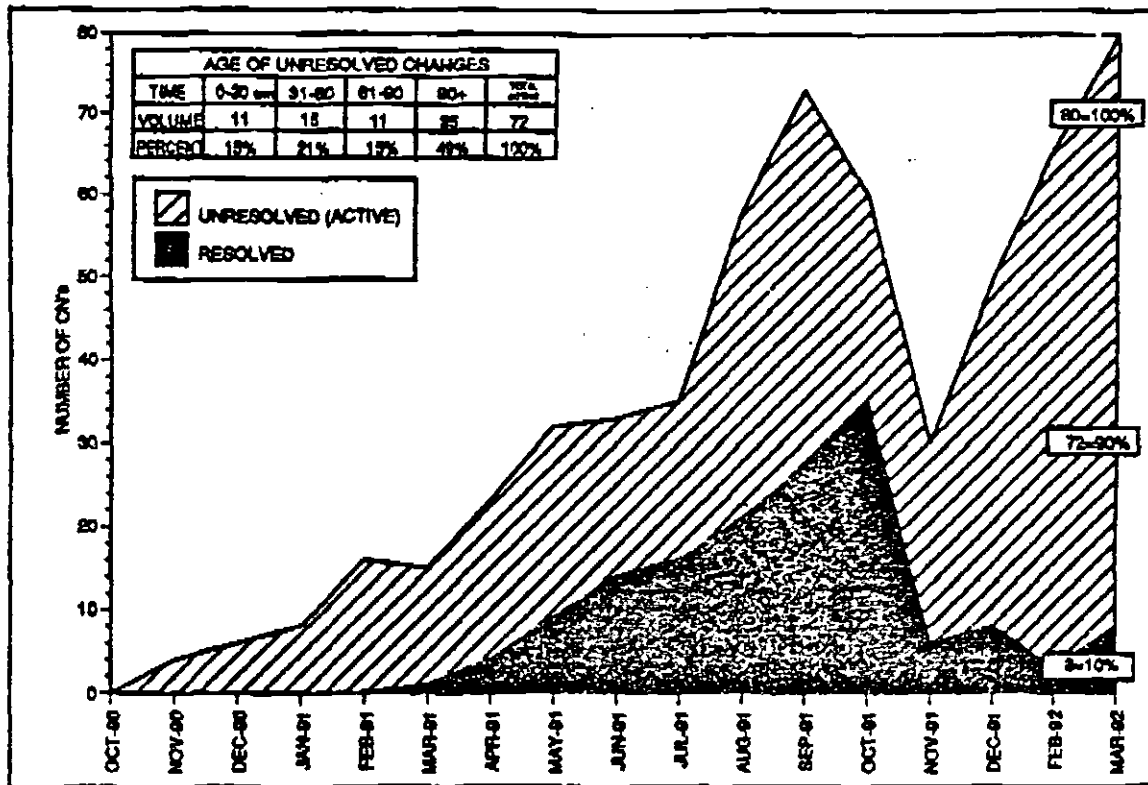
**AGE OF UNRESOLVED CONSULTANT CHANGES**

TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	4	5	6	56	71
PERCENT	6%	7%	6%	79%	100%

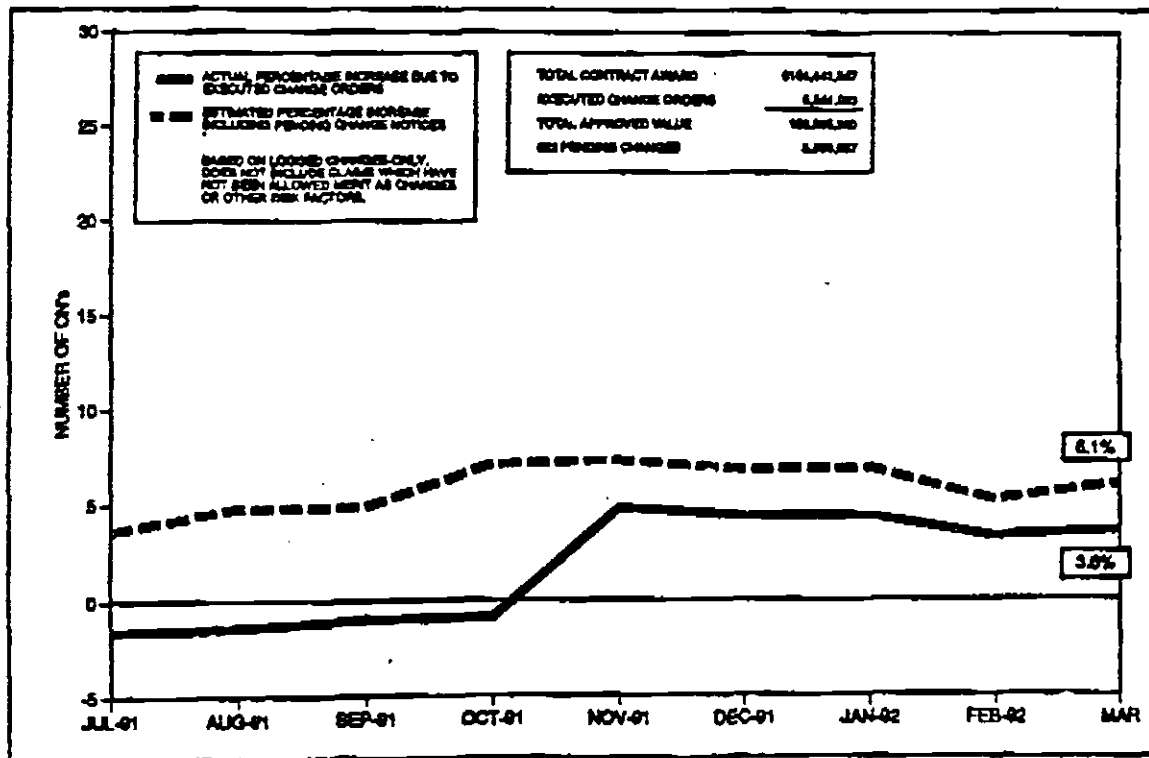
**CONSULTANT CONTRACT CHANGE SUMMARY  
R23 CONSULTANT CHANGE REQUEST VALUES**



CONSTRUCTION/PROCUREMENT CONTRACT CHANGES  
Change Notice Resolution



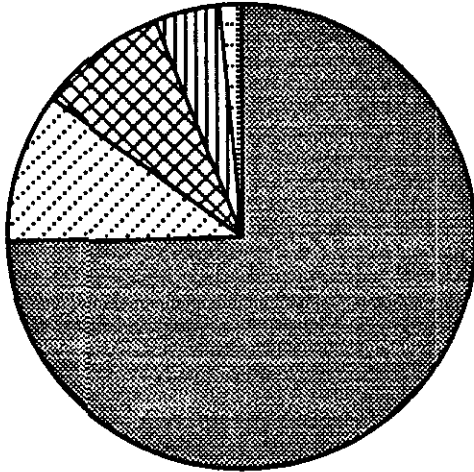
CONSTRUCTION/PROCUREMENT CONTRACT CHANGES  
Change Dollars as a Percentage of Original Contract Award





### CONSTRUCTION/PROCUREMENT

#### Change Volume and Cost By Cost Level



CHANGE BASIS VOLUME  
TOTAL AS OF 3/25/92 = 67

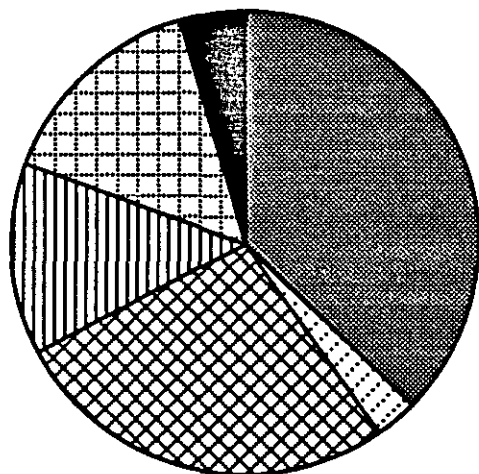
#### CHANGE VOLUME ABSOLUTE VALUES

50	74.62%		<25,000
7	10.45%		<50,000
6	8.96%		<200,000
3	4.48%		>200,000
1	1.49%		>1,000,000

#### CHANGE COST ABSOLUTE VALUES

\$355,148.14		<25,000
\$116,575.98		<50,000
\$638,337.00		<200,000
(\$1,250,375.00)		>200,000
\$5,788,000.00		>1,000,000

# **CONSTRUCTION/PROCUREMENT** **Change Volume and Cost By Change Basis Type**



CHANGE BASIS VOLUME  
TOTAL AS OF 2/25/92 = 67

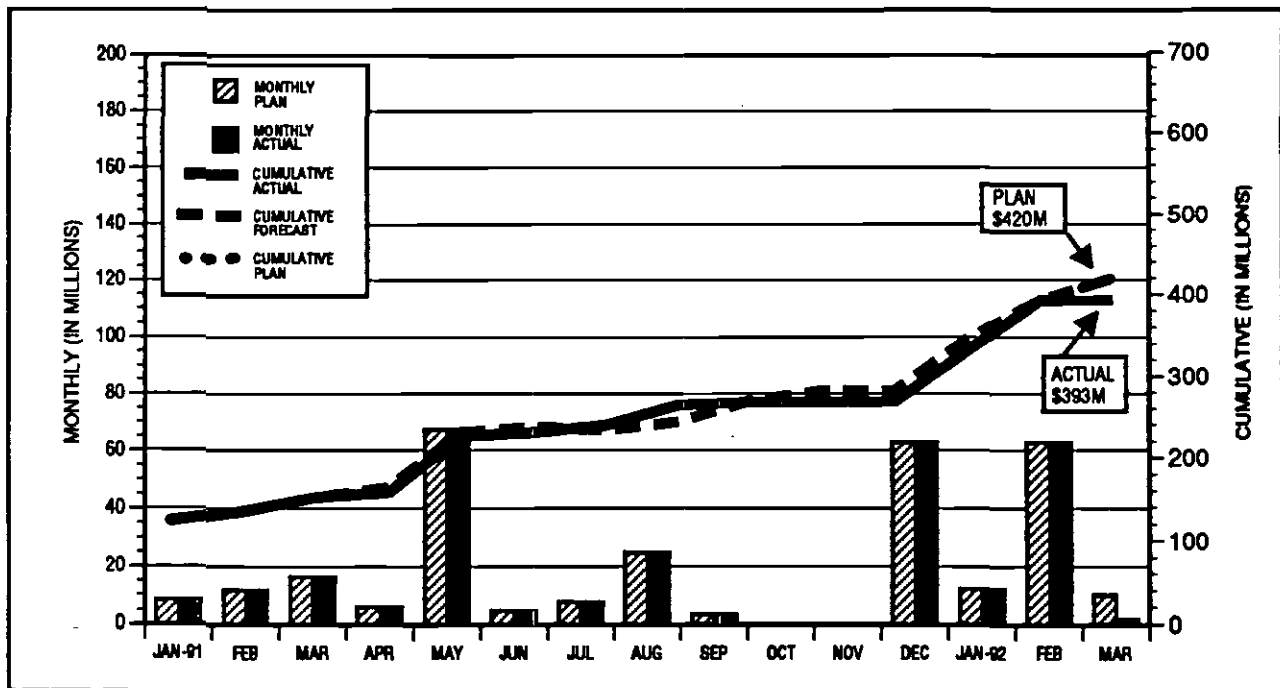
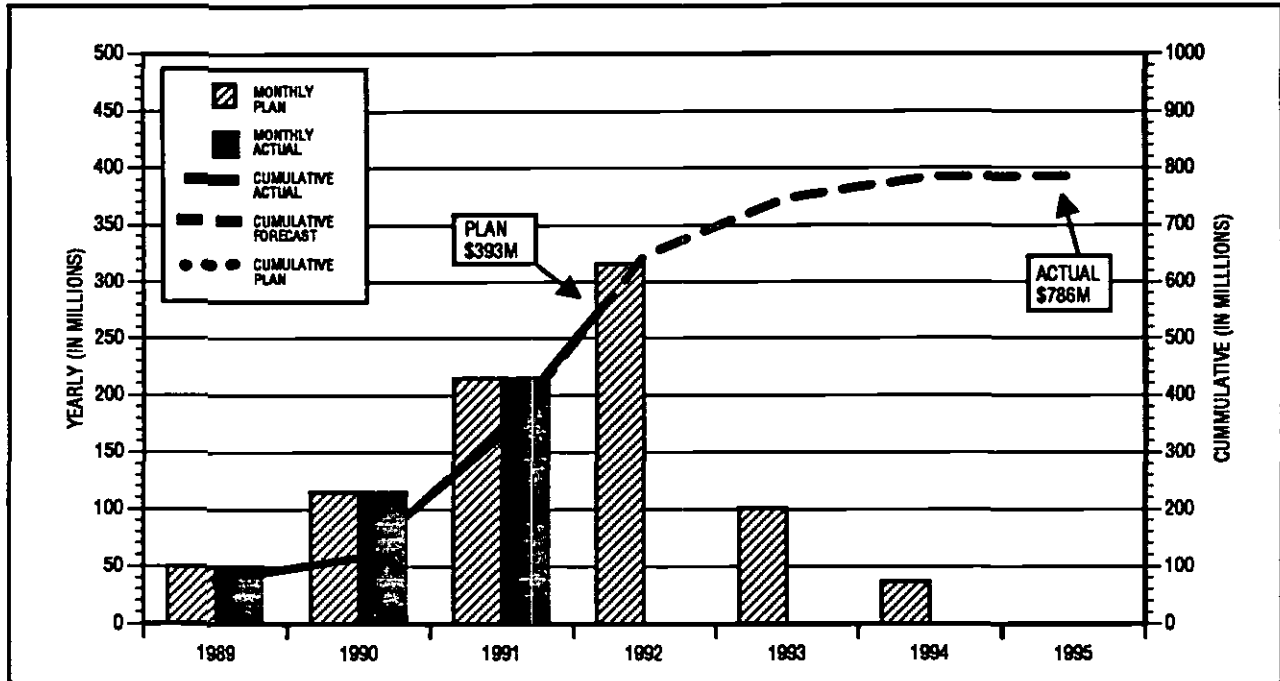
## **CHANGE BASIS VOLUME ABSOLUTE VALUES**

25	37.31%		Work Scope Changes
2	2.99%		Schedule Changes
18	26.87%		Differing Conditions
9	13.43%		Administrative Changes
10	14.92%		Design Changes
3	4.48%		Other

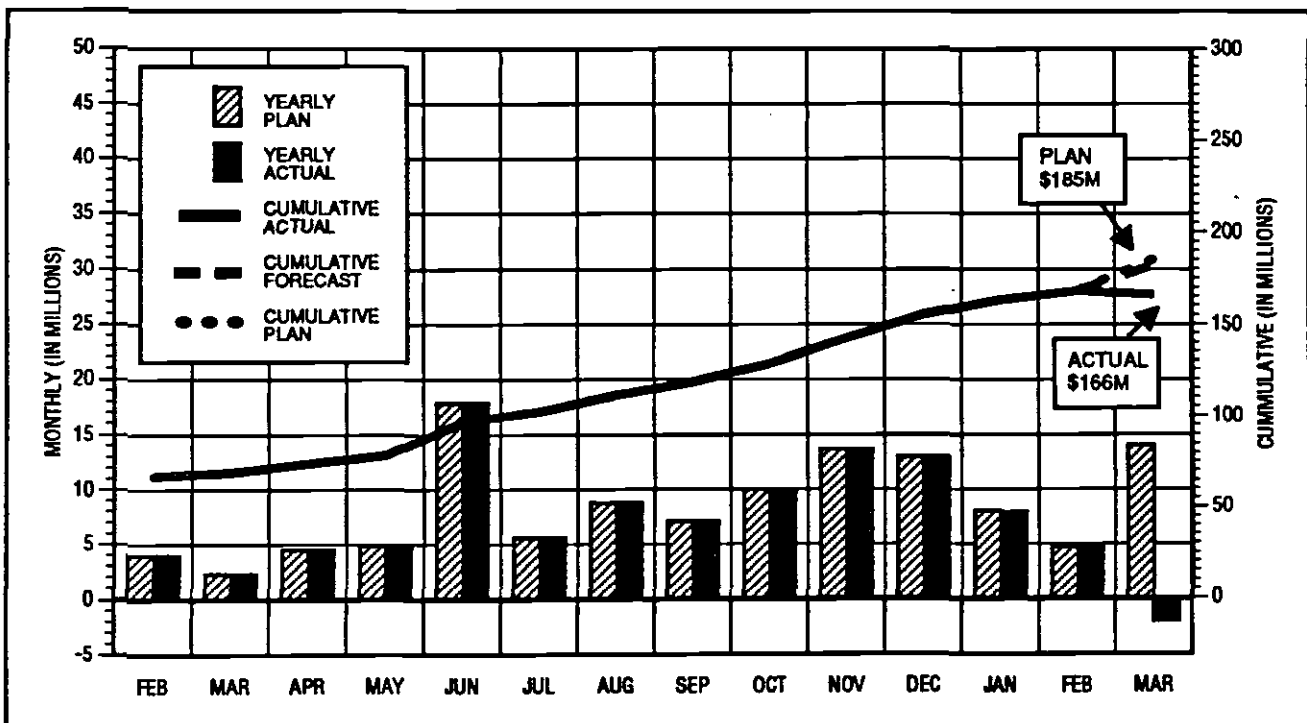
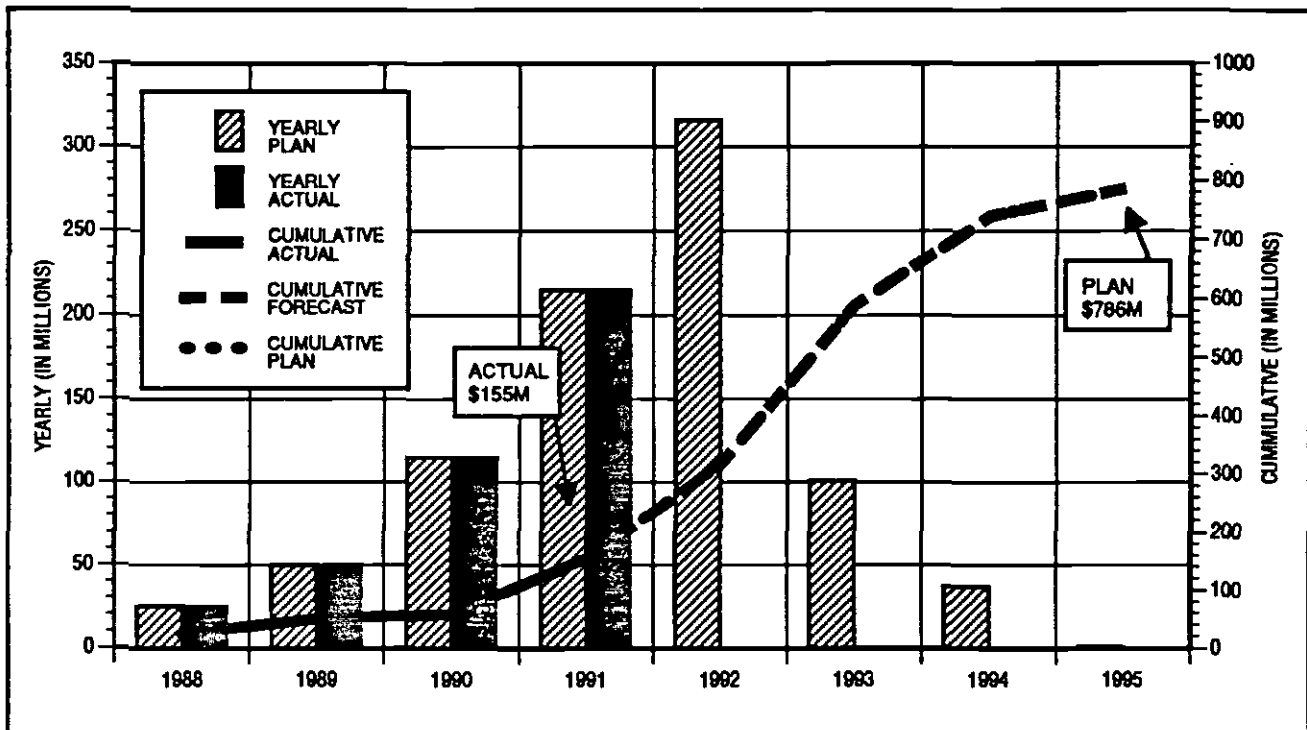
## **CHANGE BASIS COST ABSOLUTE VALUES**

(\$121,928.99)		Work Scope Changes
\$10,685.00		Schedule Changes
\$6,216,070.57		Differing Conditions
(\$256,523.71)		Administrative Changes
(\$539,008.75)		Design Changes
\$144,534.00		Other

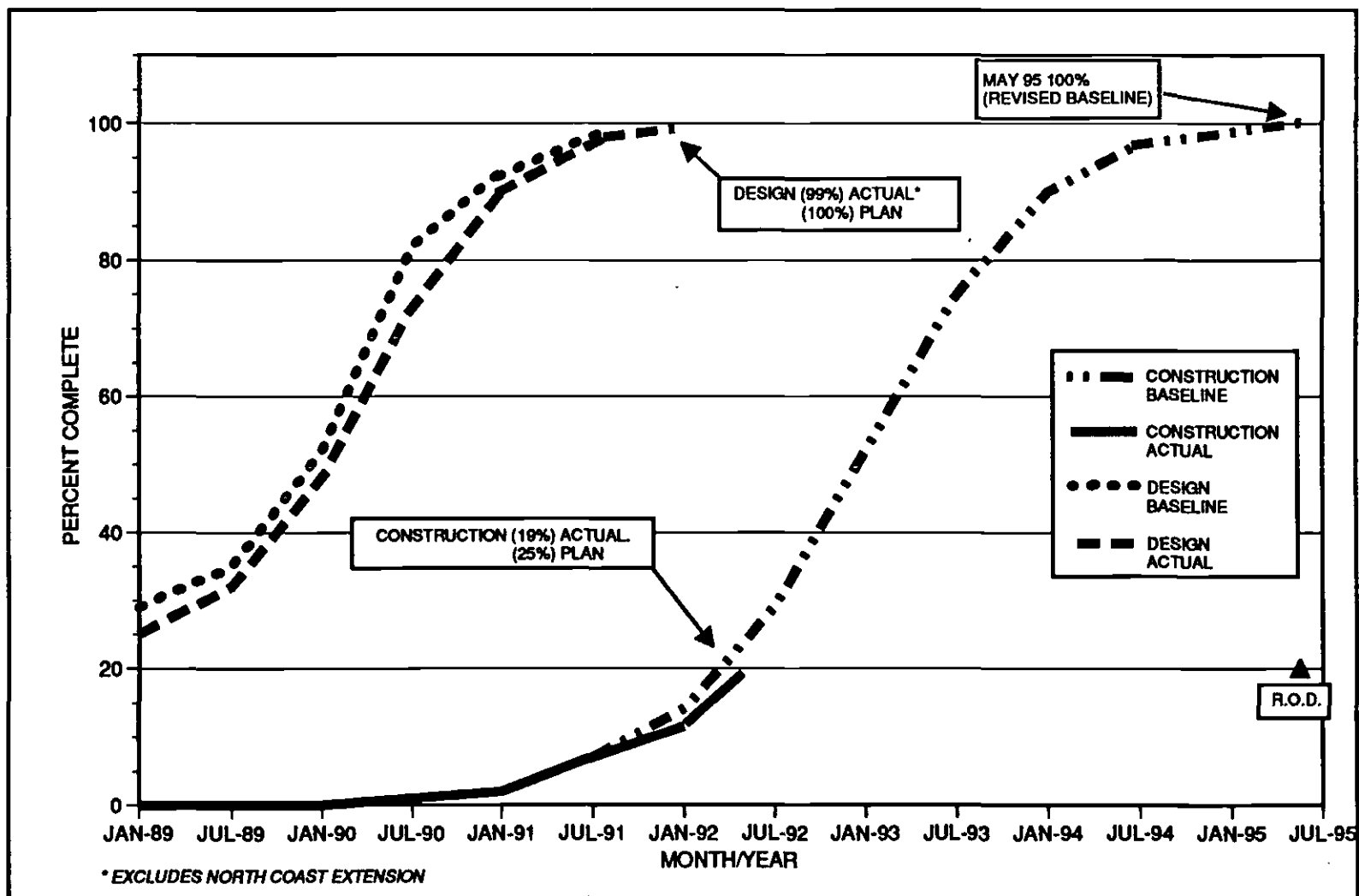
# PROJECT COMMITMENTS

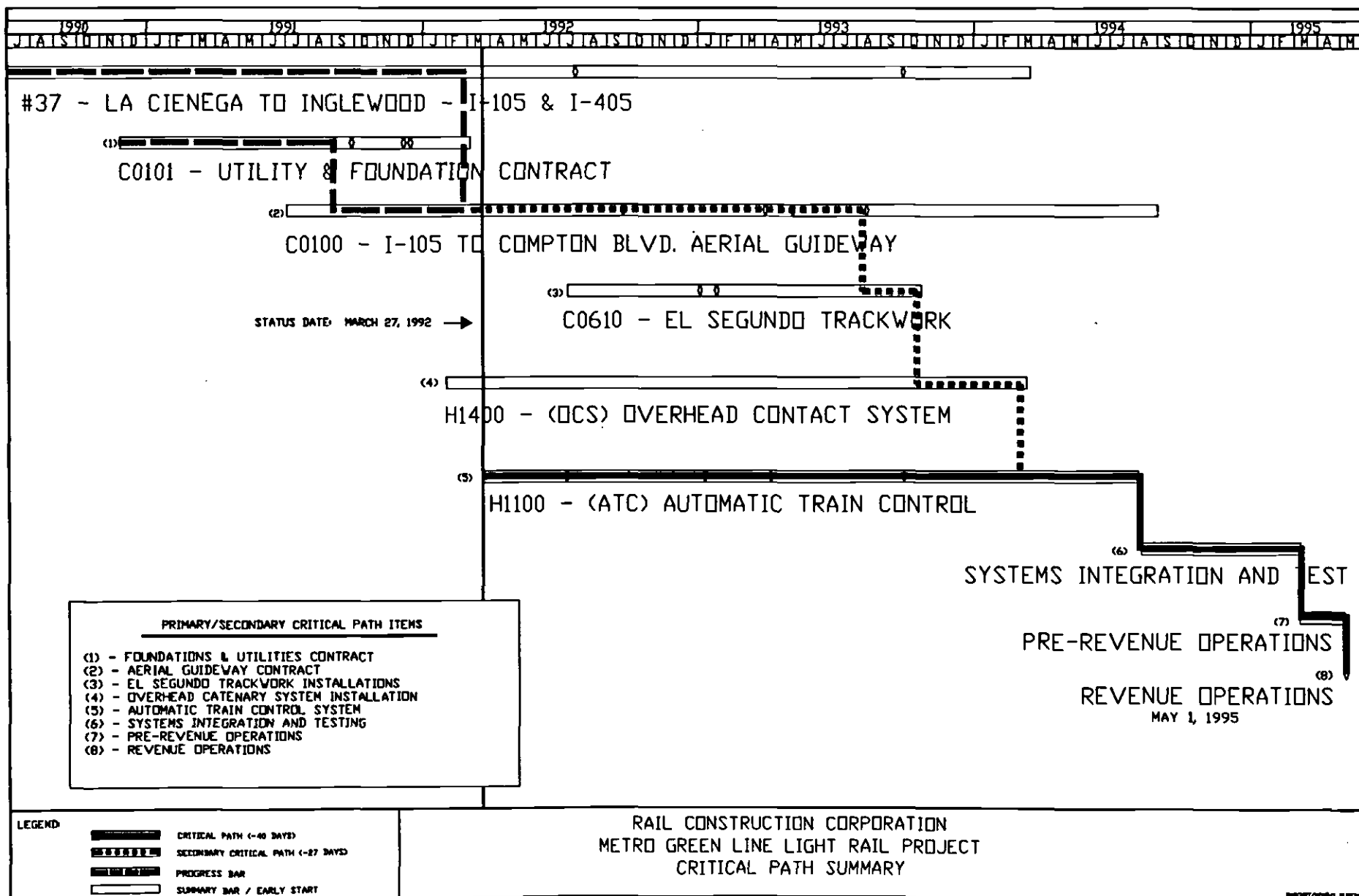


PROJECT CASH FLOW



## PROGRESS SUMMARY



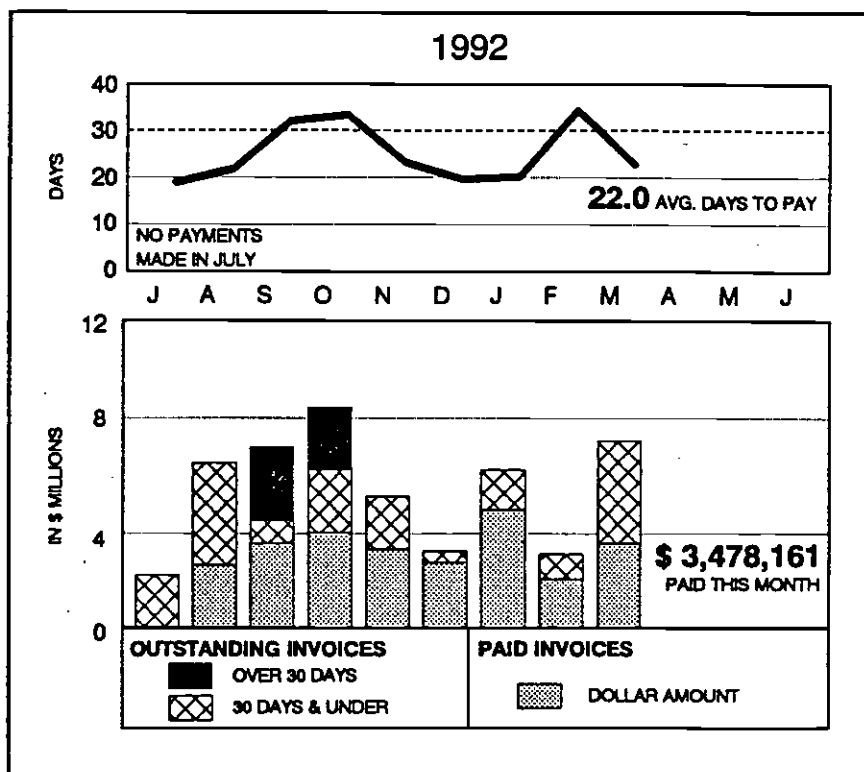


SAFETY GRAPHS ARE UNDER REVISION

## INVOICE PROCESSING

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 22.0 days.
- 7 invoices were paid for a total value of \$ 3,478,161.
- There were 8 outstanding Construction or Procurement invoices under 30 days old for \$ 4,179,533.
- There were no outstanding Construction or 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
OCT 1991	2	2,334,769	10	2,271,025	12	3,566,036	3	8,800
NOV 1991	5	1,953,086	0	0	15	4,892,586	6	105,454
DEC 1991	1	413,186	0	0	13	406,258	8	107,071
JAN 1992	1	1,499,133	0	0	13	2,147,064	8	58,882
FEB 1992	2	930,943	0	0	32	5,368,321	8	58,882
MAR 1992	8	4,179,533	0	0	18	2,752,846	10	73,276



## EXECUTIVE SUMMARY

### COST STATUS

in \$ million

- Current Budget 1,450
- Current Forecast 1,450
- The March Construction Forecast decreased primarily as a result of revisions to the reported forecast for the Contract A640 Police/Fire Radio System and a reduction in insurance costs reflecting anticipated SCRTD credits of payments received by SCRTD for administering Light Rail (LRT).

### SCHEDULE STATUS

- Current Revenue Operations Date June 1993
- Construction Progress
  - Plan 94%
  - Actual 93%
- The A640 contract schedule incorporating F&EM system re-configuration (CN 224) shows an expected finish date of December 18, 1992. The ROD of June 1993 is still supported and 24 days of total float remain in the Project Schedule.

### SAFETY STATUS

- The main focus of the Safety Program is the transition from a construction oriented work environment to an operational environment. In support of this effort 1,800 Project personnel from RCC, Parsons-Dillingham, Cal-OSHA, MRTC, High-Point Schaer and the contractor have received this training.

## EXECUTIVE SUMMARY (CON'T)

### 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.

### RAIL ACTIVATION

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

#### Activities

During March, the activities of the Rail Activation Group included the following:

- Conducted "Dead Rail" clearance tests with Breda vehicles in the Yard.
- Successfully conducted high speed train testing with Miami vehicles, operating at 55 mph from Union Station to Westlake/MacArthur Station.
- Continued review of the training schedule and development of O&M manuals.
- Exercised beneficial occupancy for traction power substations at 7th/Metro and Civic Center Stations, the Main Shop and the Main Yard.
- Exercised beneficial occupancy for emergency trip stations and emergency telephones at the Main Shop, the Main Yard and the Mainline, and tested three temporary trip stations in the Main Control Tower.

Future activities will focus on:

- Support of delivery and testing of Breda passenger vehicles.
- Refinement of the recruitment and training plan to ensure support of Project requirements.
- Review and incorporation of the Breda/BAH Delivery/Testing/Training schedule into the Project Schedule.

## EXECUTIVE SUMMARY (CON'T)

- Continue exercising beneficial occupancy; focusing on equipment and the systems and subsystems necessary for train testing.
- Continue preliminary integrated testing in support of train testing.

## AREAS OF CONCERN

### NEW

#### **Contract A640, Operational Control Center Harris Console**

**Concern:** Contract A640 needs the Operational Control Center (OCC) Harris control console operational by mid-June to support the SCADA installation and testing. Current fabrication schedule does not support the need date.

**Action:** RCC will expedite fabrication and delivery of the OCC Harris control console to Bechtel. In the meantime, an alternative plan to use existing control console elements will be developed.

**Status:** Harris has received a Cost Plus Change Notice to fabricate the OCC console. It is estimated to take 90 days to fabricate. Parsons-Dillingham has authorized the temporary use of existing console elements in order to support the progress of testing.

### ONGOING

#### **Contract A650, Vehicles (Booz Allen Hamilton)**

**Concern:** Booz Allen Hamilton is forecasting that subsequent passenger vehicle deliveries will be late to the contract schedule and may not support testing of the train control system.

**Action:** Provisions have been made through a Change Order with the A620 contractor to configure the Metro-Dade Transit vehicles (two married pairs) to support the first series of train control tests.

## AREAS OF CONCERN (CON'T)

**Status:** The second pair of Breda vehicles from the Transportation Test Center (TTC), is expected in May and the third pair has been shipped and is forecasted to arrive in Los Angeles in early May. These deliveries together with the Contract A620 Change Order should provide an adequate vehicle fleet to support integrated testing without impact to the ROD. Continued monitoring of status is required.

### Contract A640, Communications

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

**Action:** Review of alternate design concepts is underway to provide data allowing for the determination of cost and schedule impacts to Contract A640.

**Status:** Tests conducted in February determined that additional radiax cabling may not be required due to system reconfiguration and new requirements. Review of the new requirements has begun and a price proposal incorporating changes is being developed by the contractor. Successful tests have been conducted; technical and cost proposal is under review. Meetings with the LAPD have been scheduled to evaluate system reconfiguration.

### Contingency Drawdown Rate

**Concern:** The rate of contingency drawdown is an on-going concern as a result of projections based on the current rate indicating a possible depletion of the contingency fund prior to Project completion.

**Action:** Continue to monitor the contingency fund against the Project Estimate at Completion, identify and mitigate cost increases where possible and pursue backchargeable and betterment items to their final resolution.

## AREAS OF CONCERN (CON'T)

**Status:** The cost exposure associated with pending claims is the single greatest factor potentially affecting the Project Contingency. Efforts continue to bring claims issues to a positive conclusion. The Construction Manager has completed an extensive review and identified potential construction contract backcharges. Staff has been dedicated to analyze individual Change Notices and Change Orders for cost recovery potential. Recommendations have been made for disposition of 55% of backchargeable items; many items were identified as design issues and will be referred to other agencies.

### **Increase in Change Notice Backlog**

**Concern:** An increase in Change Notice backlog as a result of electrical/mechanical interface issues.

**Action :** In an effort to mitigate the Change Notice backlog the CM has increased the estimating staff to expedite processing of Change Notices on all facilities and systems contracts.

**Status:** The Change Notice/Change Order monitoring system has been established. Productivity analysis of change administration is on-going and is a vital tool in managing the Change Notice/Change Order workload. The Resident Engineers and Contract Administrators are making progress in reducing the backlog. The Construction Manager continues to review the weekly status of this Change Order production. 321 Change Notices were in process during March.

## RESOLVED

### **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

## AREAS OF CONCERN (CON'T)

- 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

**Status:** A manloaded schedule is being used to track and manage the critical path items. Design requirements for Fire and Emergency Management throughout the system have been established, pricing and design data (CN 224) was issued in late November.

The complete impact of CN 224 is now being evaluated. As a result, a formal Change Notice has been defined and issued to Bechtel. There still exists a high level of confidence that all contractual milestones will be met.

Analyses were conducted of Bechtel's proposed schedules which show impacts of CN 224 to the A640 contract schedule. A recommendation was made of an acceptable mitigated schedule to be incorporated into the Project schedule. Negotiations were completed in February. Change Order 52 with commitments from Bechtel in support of the overall schedule has been executed and will be closely monitored by the Construction Manager, Parsons-Dillingham.

### **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 Facility (A640-CO-025).

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

### AREAS OF CONCERN (CON'T)

Status: This activity is no longer 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 delivered and SCADA equipment will be delivered by the end of April. Installation activities related to the Rail Control Center relocation are on schedule.

Negotiations to finalize Change Order A640-CO-025 were completed in March.

### FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

ONGOING      NONE

NEW            NONE

#### RESOLVED

#### December 1991      Resolution of CPCNs to COs

Concern: The number and dollar value of the unresolved CPCNs was continuing to rise.

Action: RCC allowed Parsons-Dillingham to delay the transfer of field staff to Segment 2 after their planned completion date, to support the close out of Segment 1 CPCNs.

Status: This effectively increased the staff available to be applied to decreasing the backlog. The total number of unresolved CPCNs has been reduced from 983 on 2/11/92 to 884 on 3/24/92.

**KEY ACTIVITIES - MARCH**

- Completed installation of all signal cables.
- Completed turnover of the Main Shop, Main Yard, Civic Center, 7th/Metro, and Westlake/MacArthur traction power substations to the RCC/Rail Activation Group.
- Completed systemwide installation of PA speakers, CCTV cabling, and CTS copper cabling and terminations.
- Completed Control Center Facility installation of FEM intrusion alarm racks, CCTV racks, and wiring and cabling.
- Successfully completed Cal-OSHA safety inspection for escalators 501, 502, 503 and 504.
- Completed installation of the wheel truing, boring and press machines.
- Continued final facility contract testing activities at Civic Center, Pershing Square, 7th/Metro, and Westlake/MacArthur Stations.

**KEY ACTIVITIES - PLANNED FOR APRIL**

- Continue close-out of the following contracts: A116, Fencing; A130, Yard Leads and Transfer Zone; A135, Union Station, Stage I; A141, Line Section, Union Station to Pershing Square and Civic Center Station, Stage I; A145, Pershing Square Station, Stage I; A165, 7th/Metro Station, Stage I; A175, Westlake/MacArthur, Stage I; A610, Trackwork Installation.
- Continue support of Breda vehicle arrival and testing.
- Complete testing and attain substantial completion of Contracts A147, A157, A167 and A187.
- Complete turnover of Union Station traction power substation.
- Commence turnover of Ventilation Equipment, Contract A740 and Air Handling Equipment, Contract A745, to Rail Activation.



**RAIL CONSTRUCTION CORPORATION**  
PROJECT COST REPORT  
COST BY ELEMENT

STATUS PERIOD: MARCH 1, 1992 TO MARCH 27, 1992  
STATUS DATE : MARCH 27, 1992  
UNITS : DOLLARS IN THOUSANDS

PROJECT : R80 METRO RAIL RED LINE SEGMENT 1

ELEMENT	DESCRIPTION	ORIGINAL BUDGET (1)	CURRENT BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST		VARIANCE (11-13)
			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	896,158	0	751,872	3,753	753,438	4,121	885,376	5,501	878,838	(3,580)	806,100	54,128
S	PROFESSIONAL SERVICES	397,755	0	481,830	(2,184)	438,817	(838)	420,848	(838)	420,848	(304)	457,840	(4,090)
R	REAL ESTATE	90,894	0	138,820	153	124,889	153	124,889	153	124,889	0	138,879	(141)
F	UTILITY RELOCATIONS	10,820	0	12,140	0	12,018	128	8,502	128	8,502	0	12,018	(122)
D	SPECIAL PROGRAMS	848	0	848	0	847	0	564	0	564	0	888	40
C	PROJECT CONTINGENCY	53,225	0	83,209	0	0	0	0	0	0	3,884	33,394	(48,815)
A	PROJECT REVENUE	0	0	0	0	0	0	0	3	(1,227)	0	0	0
PROJECT GRAND TOTAL		1,249,900	0	1,450,019	1,712	1,327,787	3,484	1,240,257	4,847	1,232,280	0	1,450,019	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS

RAIL CONSTRUCTION CORPORATION  
METRO RAIL PROJECT SEGMENT 1  
(IN THOUSAND OF DOLLARS)

FEBRUARY 92

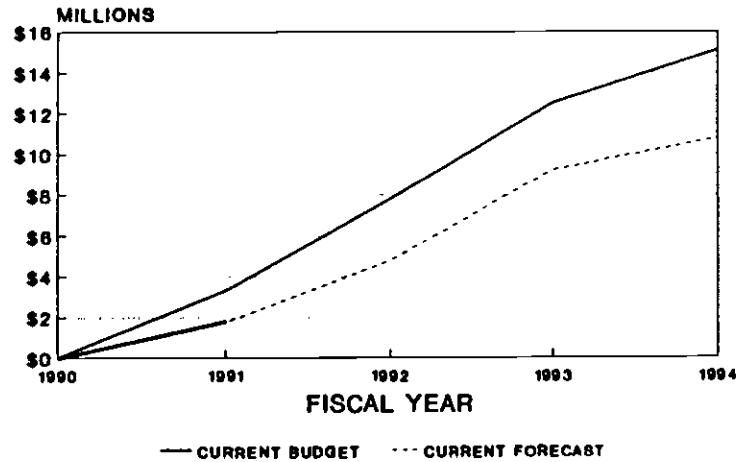
## STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
FTA-SECTION 3	\$605,300	\$605,300	\$605,300	100%	\$577,274	95%	\$570,433	94%
FTA-SECTION 9	\$90,584	\$90,584	\$88,201	97%	\$86,410	95%	\$79,176	87%
STATE	\$213,076	\$214,016	\$200,105	94%	\$186,858	88%	\$209,752	98%
LACTC	\$176,640	\$175,701	\$175,701	99%	\$160,574	91%	\$158,836	90%
CITY OF L.A.	\$34,000	\$34,000	\$30,655	90%	\$29,765	88%	\$29,074	86%
BENEFIT ASSESS.	\$130,300	\$19,082	\$117,062	90%	\$117,062	90%	\$19,082	15%
(1) COST OVERRUN ACCOUNT	\$200,119	\$34,818	\$111,919	56%	\$62,902	31%	\$62,902	31%
(2) BENEFIT ASSESS. SHORTFALL	\$0	\$0	\$0		\$0		\$97,980	
TOTAL	\$1,450,019	\$1,173,501	\$1,328,944	92%	\$1,220,845	84%	\$1,227,235	85%

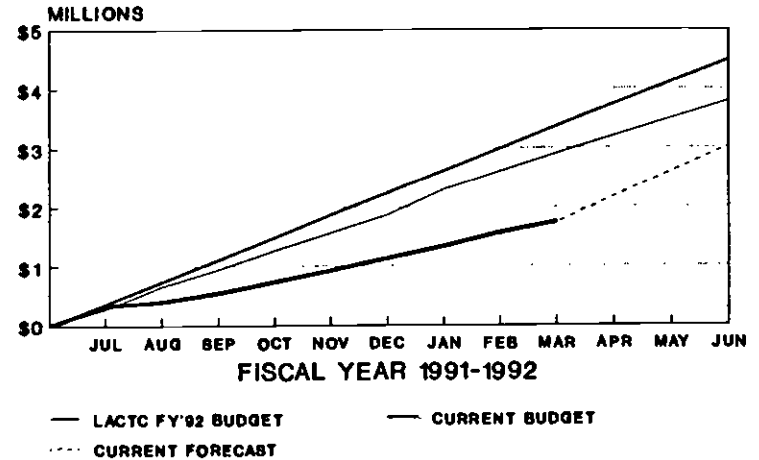
## NOTES:

- (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 *	\$10,818

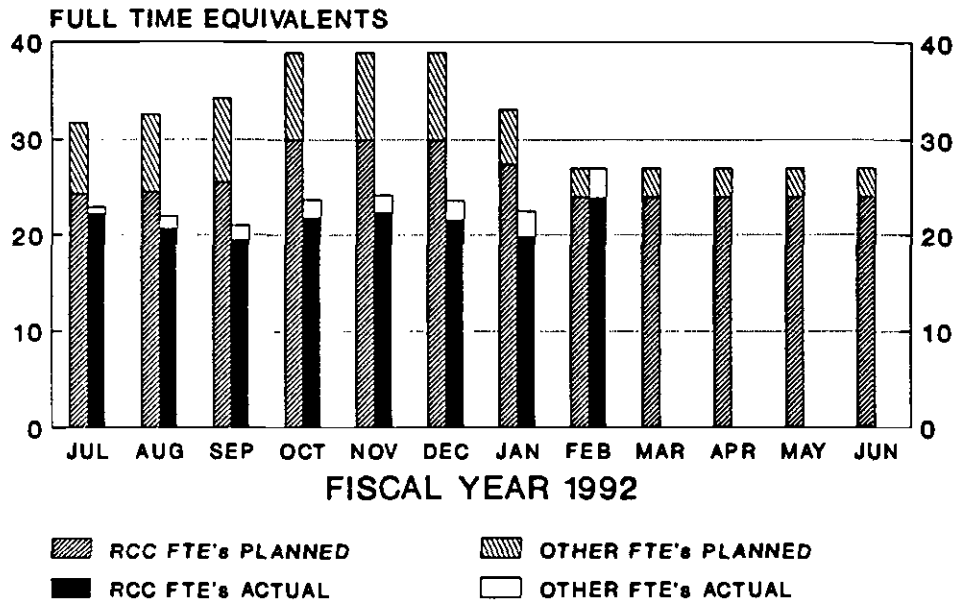
\*Does not include \$80,864 in agency costs expended by SCRTD prior to June 30, 1990.

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

LACTC FY'92 BUDGET	\$3,792
CURRENT BUDGET	\$4,477
CURRENT FORECAST	\$3,027
ACTUAL \$ TO DATE	\$1,744

Current forecast as of December 1991.

## STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 1



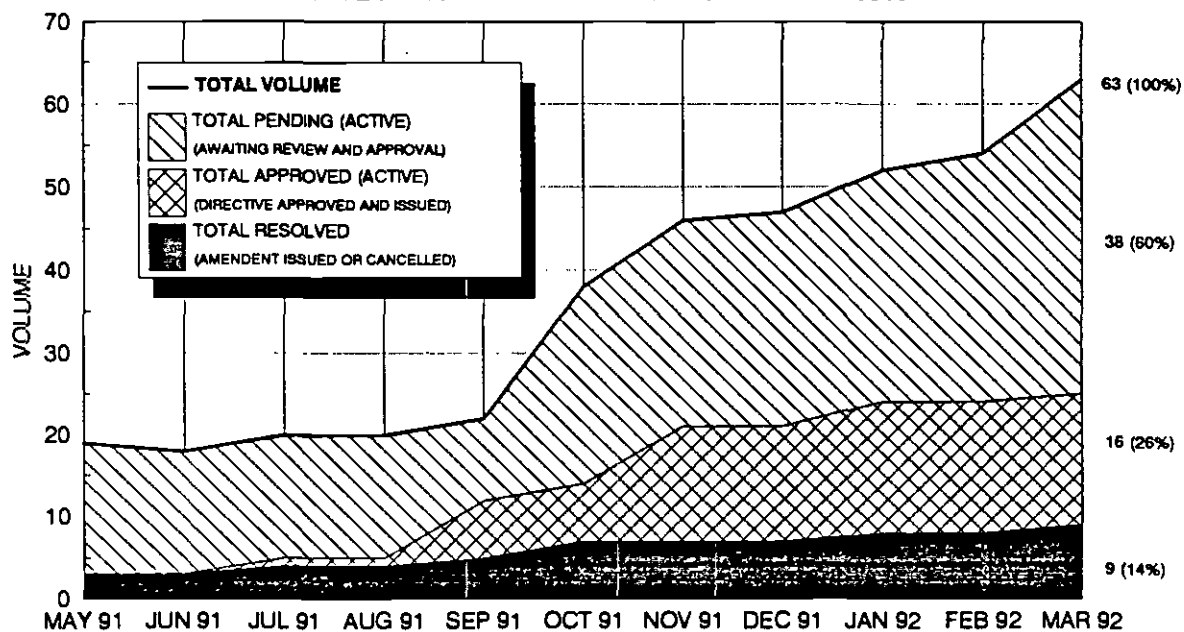
FY'92 Amended Budget Implemented JAN'92

## RED LINE (SEGMENT 1) STAFFING PLAN FISCAL YEAR 1992

BUDGET WAGE RATE (\$/HOUR)	\$45
ACTUAL WAGE RATE (\$/HOUR)	\$44
RCC FTE's PLANNED	24
RCC FTE's ACTUAL	24
OTHER FTE's PLANNED	3
OTHER FTE's ACTUAL	3
TOTAL FTE's PLANNED	27
TOTAL FTE's ACTUAL	27

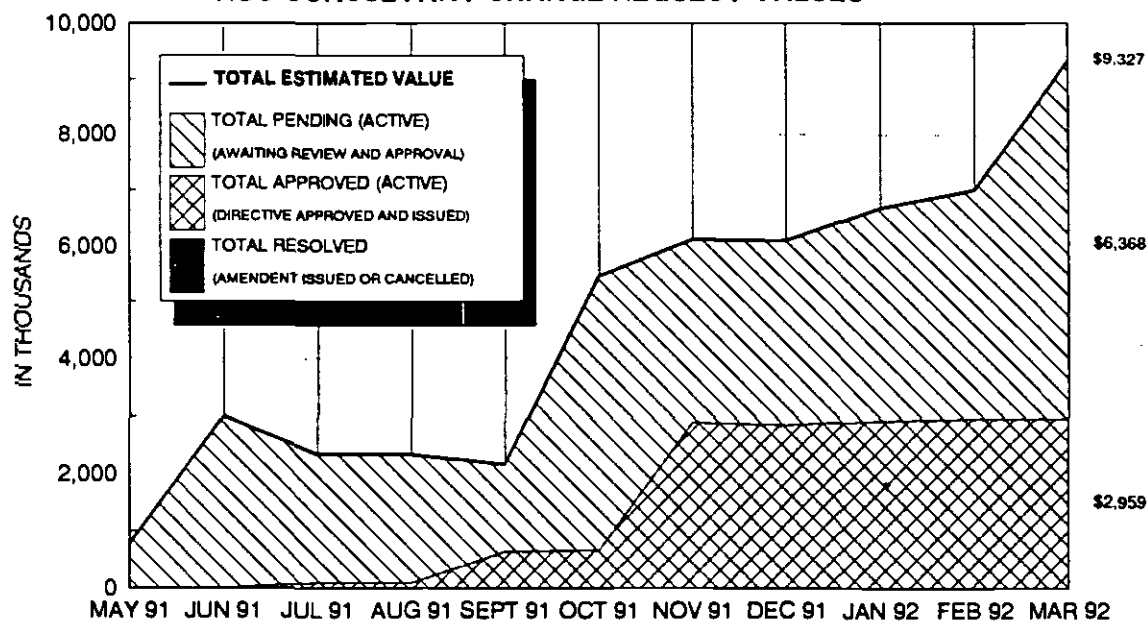
AMENDED FY'92 WAGE RATE INCORPORATED IN JAN'92

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

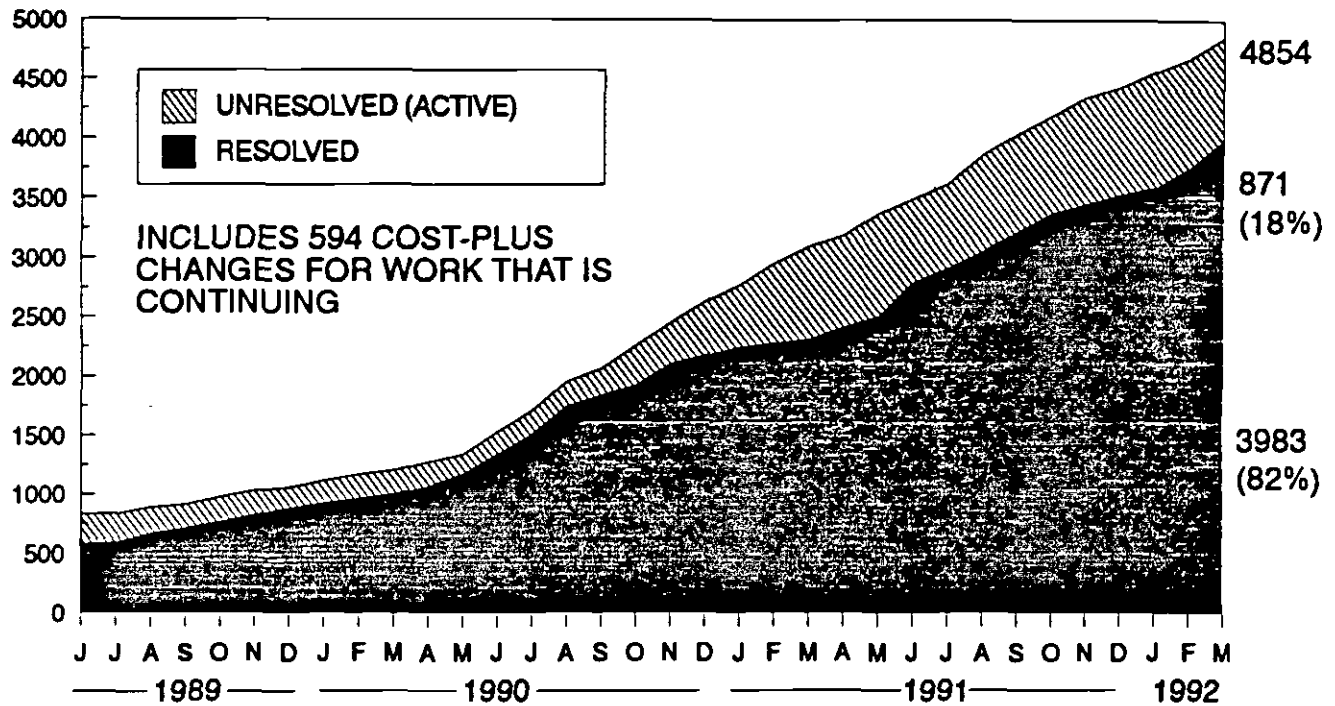


AGE OF UNRESOLVED CONSULTANT CHANGES					
TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	10	2	5	37	54
PERCENT	18%	4%	9%	69%	100%

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



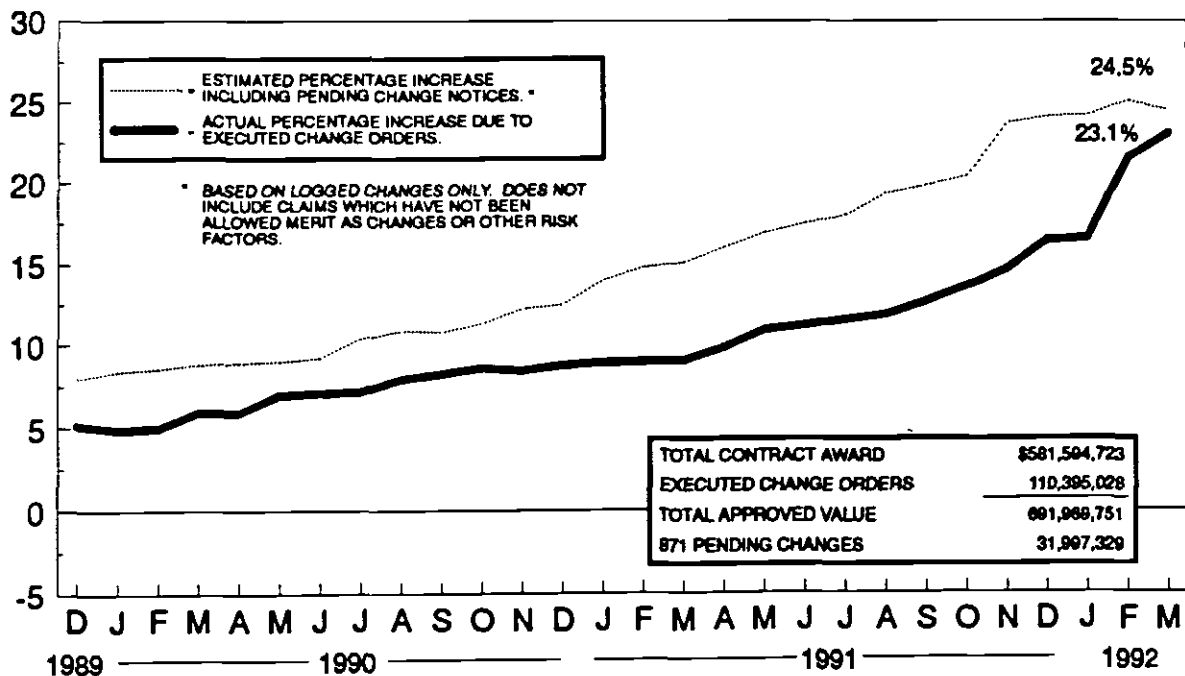
**CONSTRUCTION/PROCUREMENT CONTRACT CHANGES  
CHANGE NOTICE RESOLUTION**



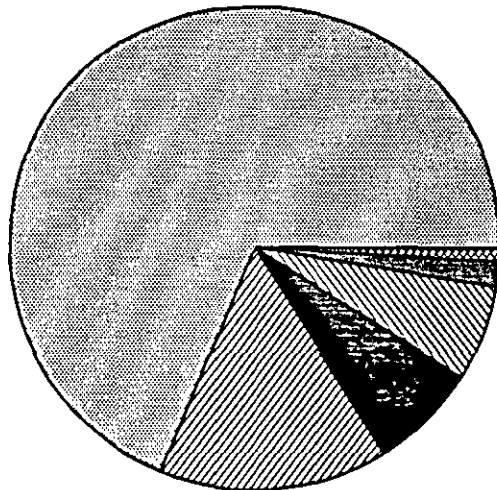
**AGE OF UNRESOLVED CHANGES**

TIME	0-30 DAYS	31-60	61-90	OVER 90	TOTAL ACTIVE
VOLUME	125	88	64	594	871
PERCENT	15%	10%	7%	68%	100%

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









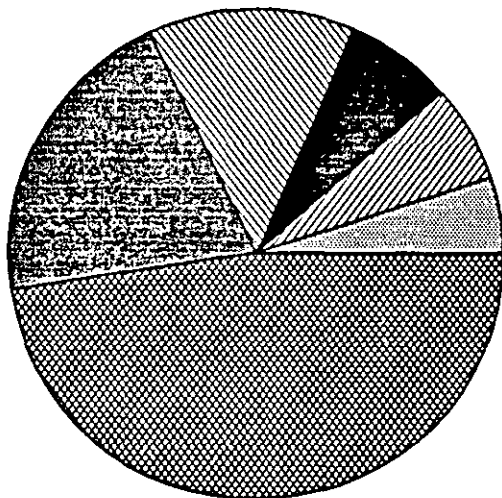
**CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY COST LEVEL  
BASED ON EXECUTED CHANGES AS OF 03/27/92**









CHANGE VOLUME  
TOTAL VOLUME: 3283 CN'S

**ABSOLUTE VALUES**

2254	68.7%		< \$10,000
495	15.1%		< \$25,000
240	7.3%		< \$50,000
208	6.3%		< \$200,000
56	1.7%		> \$200,000
30	0.9%		> \$1,000,000

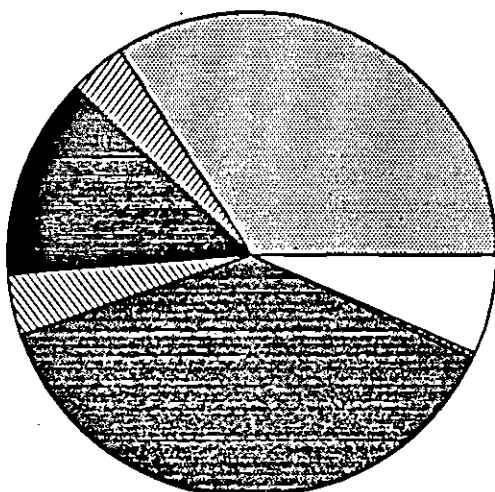


CHANGE COST  
TOTAL COST: \$110,395,028








\$5,614,054	5.1%		< \$10,000
\$7,073,689	6.4%		< \$25,000
\$7,867,429	7.1%		< \$50,000
\$14,899,683	13.5%		< \$200,000
\$22,493,552	20.4%		> \$200,000
\$52,446,621	47.5%		> \$1,000,000

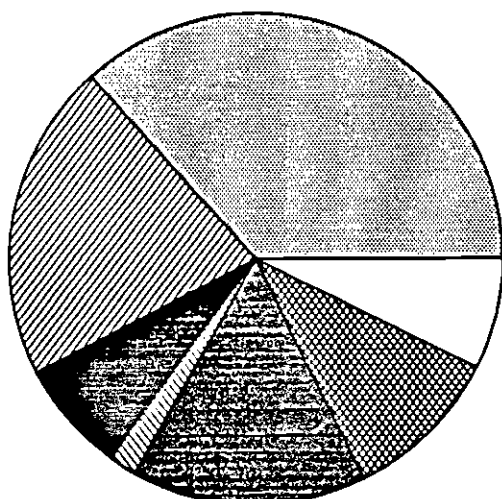
NOTE: COST LEVEL IS BASED ON CHANGE NOTICE VALUE

**CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE  
BASED ON EXECUTED CHANGES AS OF 03/27/92**










CHANGE BASIS VOLUME  
TOTAL VOLUME: 3283 CN'S (2076 CO'S)

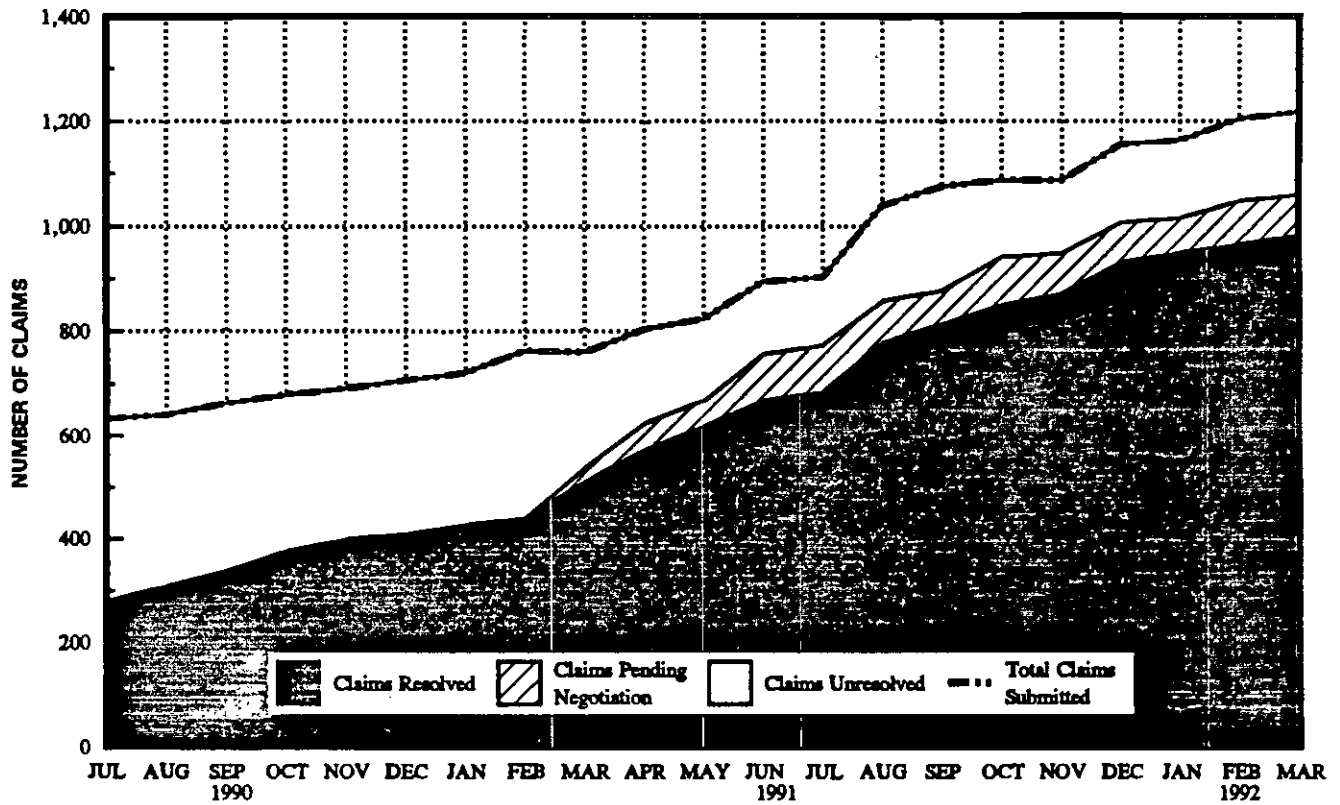
1114	34.0%		WORK SCOPE CHANGES
122	3.7%		SCHEDULE CHANGES
447	13.6%		DIFFERING CONDITIONS
135	4.1%		ADMINISTRATIVE
1231	37.5%		DESIGN CHANGES
14	0.4%		MANAGEMENT ISSUES
220	6.7%		UNASSIGNED



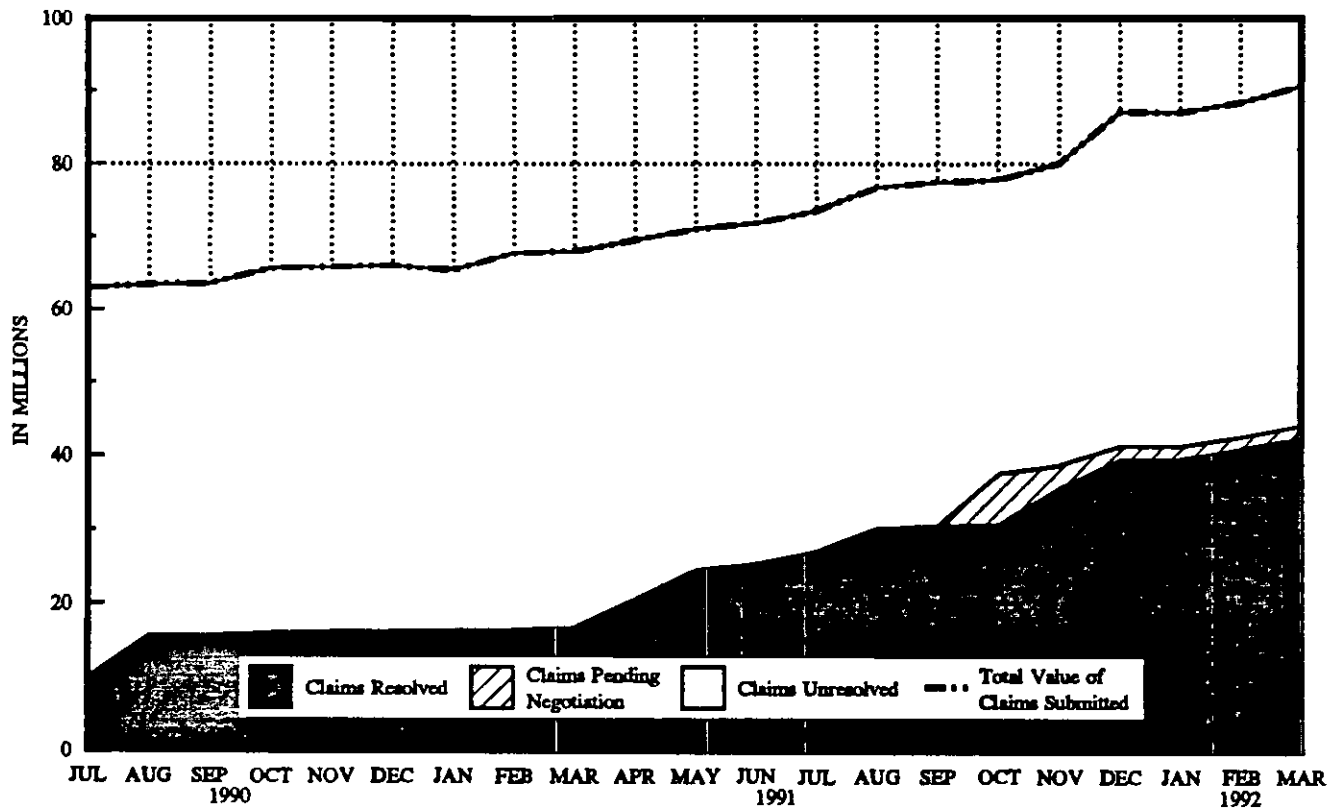
CHANGE BASIS COST  
TOTAL COST: \$110,395,028

\$40,410,237	36.6%		WORK SCOPE CHANGES
\$23,081,885	21.0%		SCHEDULE CHANGES
\$8,333,230	7.5%		DIFFERING CONDITIONS
\$1,969,578	1.8%		ADMINISTRATIVE
\$16,909,678	15.3%		DESIGN CHANGES
\$11,480,333	10.4%		MANAGEMENT ISSUES
\$8,210,087	7.4%		UNASSIGNED

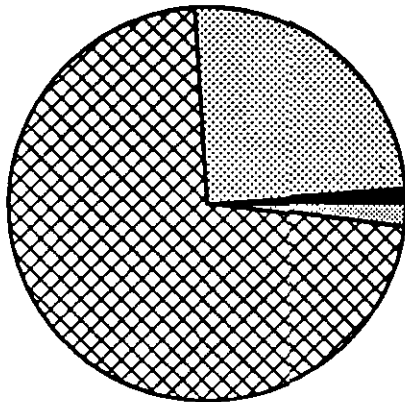
CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Total All Filed Claims - COUNT








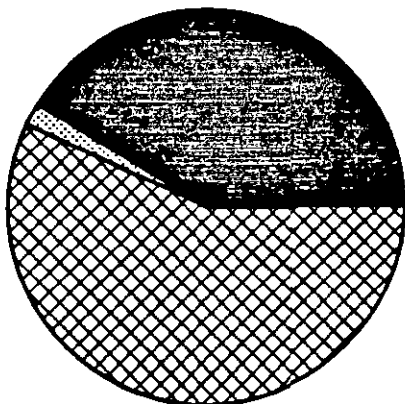
CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Total All Filed Claims - Cost










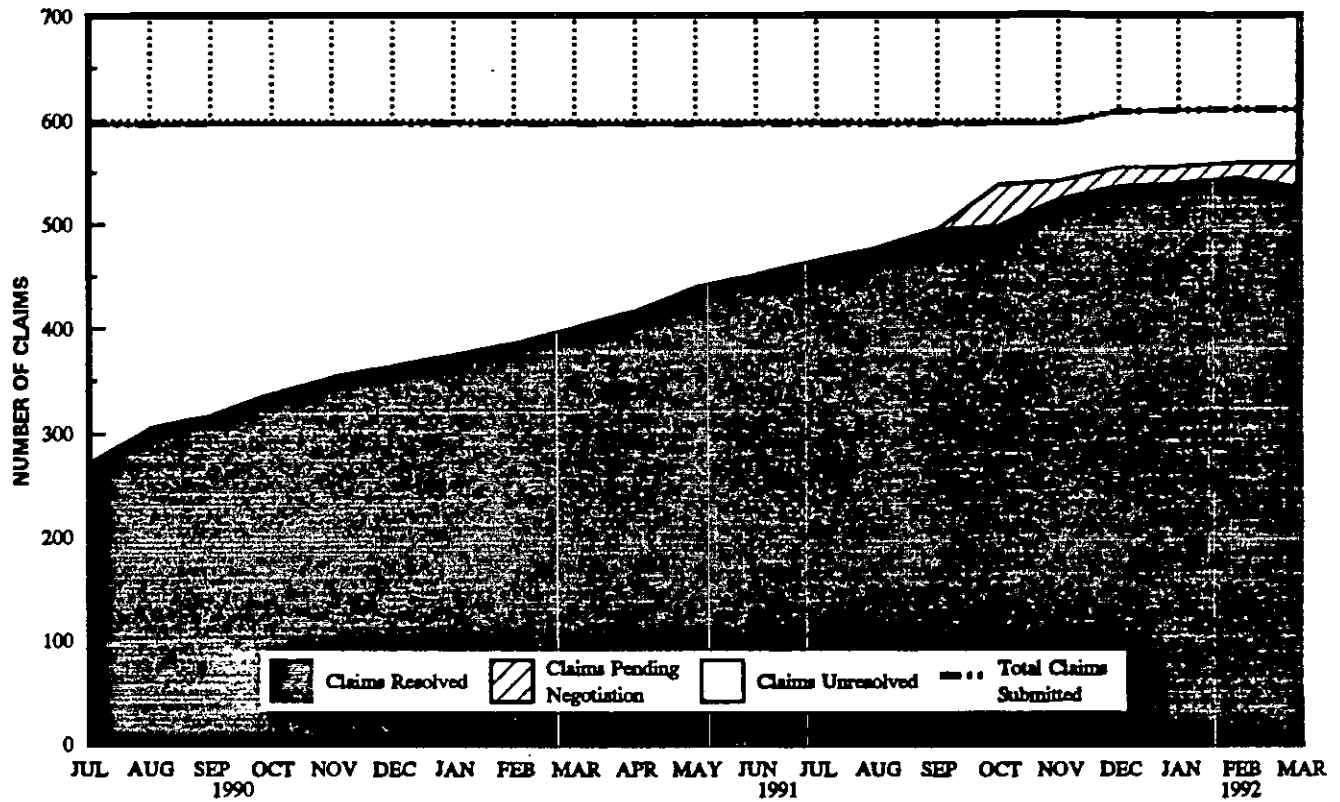
**CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS****Unresolved Claims Distribution Chart****Total All Filed Claims as of 03/27/92****COUNT****TOTAL = 157**

2	1.3%		Litigation
0	0.0%		Closed
39	24.8%		Rejected
113	72.0%		Pending Merit
3	1.9%		In Dispute

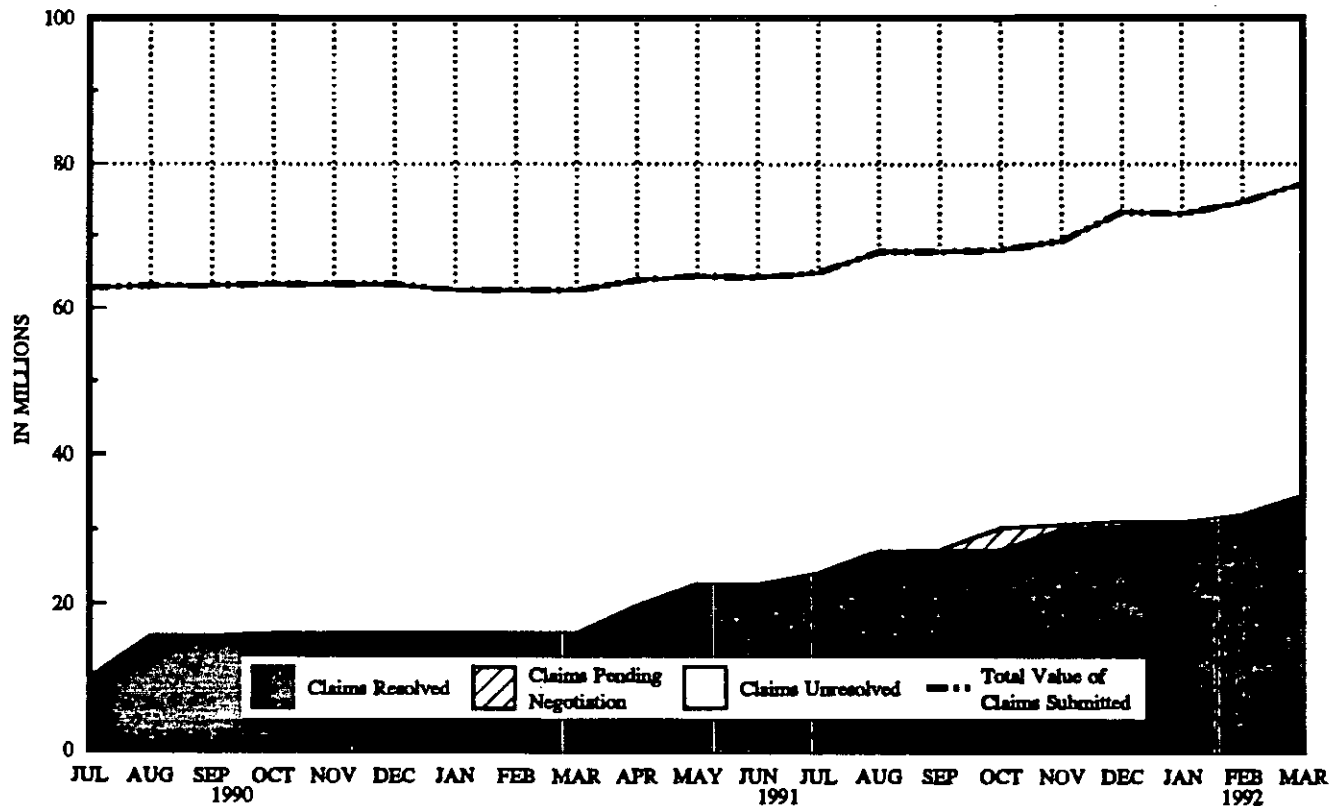
**COST****TOTAL = \$46,483,509**

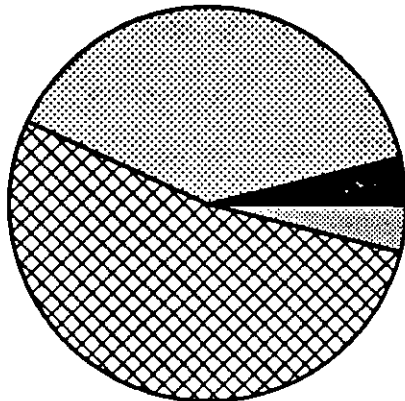
\$19,207,120	41.3%		Litigation
\$0	0.0%		Closed
\$857,282	1.8%		Rejected
\$26,394,752	56.8%		Pending Merit
\$24,356	0.1%		In Dispute

CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Claims Filed Prior to 07/01/90 - COUNT



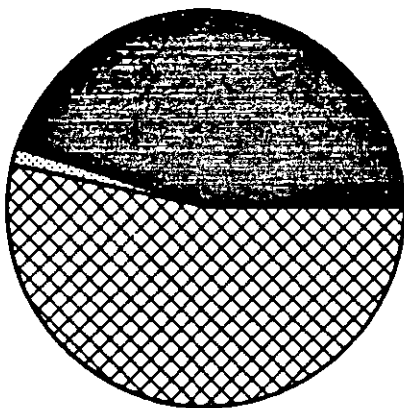
CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Claims Filed Prior to 07/01/90 - COST



**CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS****Unresolved Claims Distribution Chart****Claims Filed Prior to 07/01/90 as of 03/27/92**

**COUNT**  
TOTAL = 51

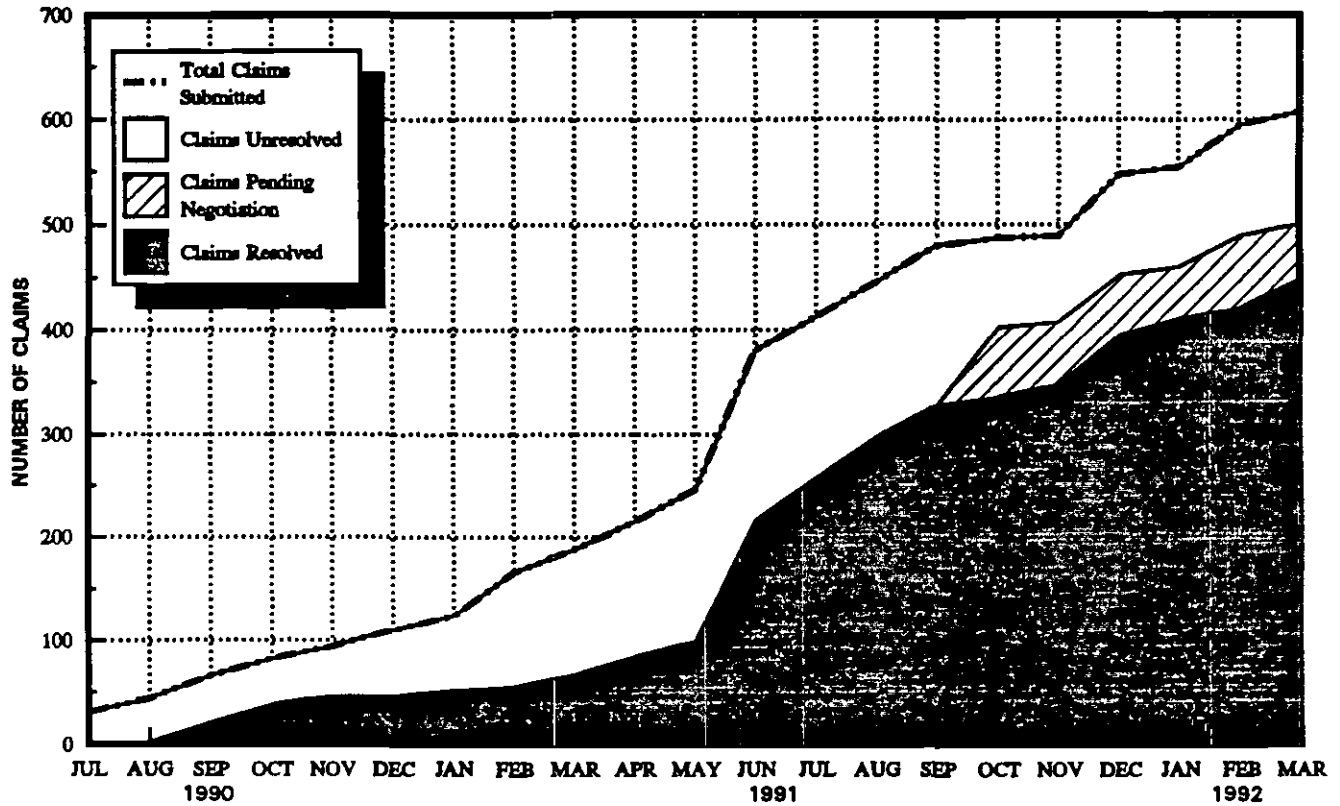
2	3.9%		Litigation
0	0.0%		Closed
20	39.3%		Rejected
27	52.9%		Pending Merit
2	3.9%		In Dispute



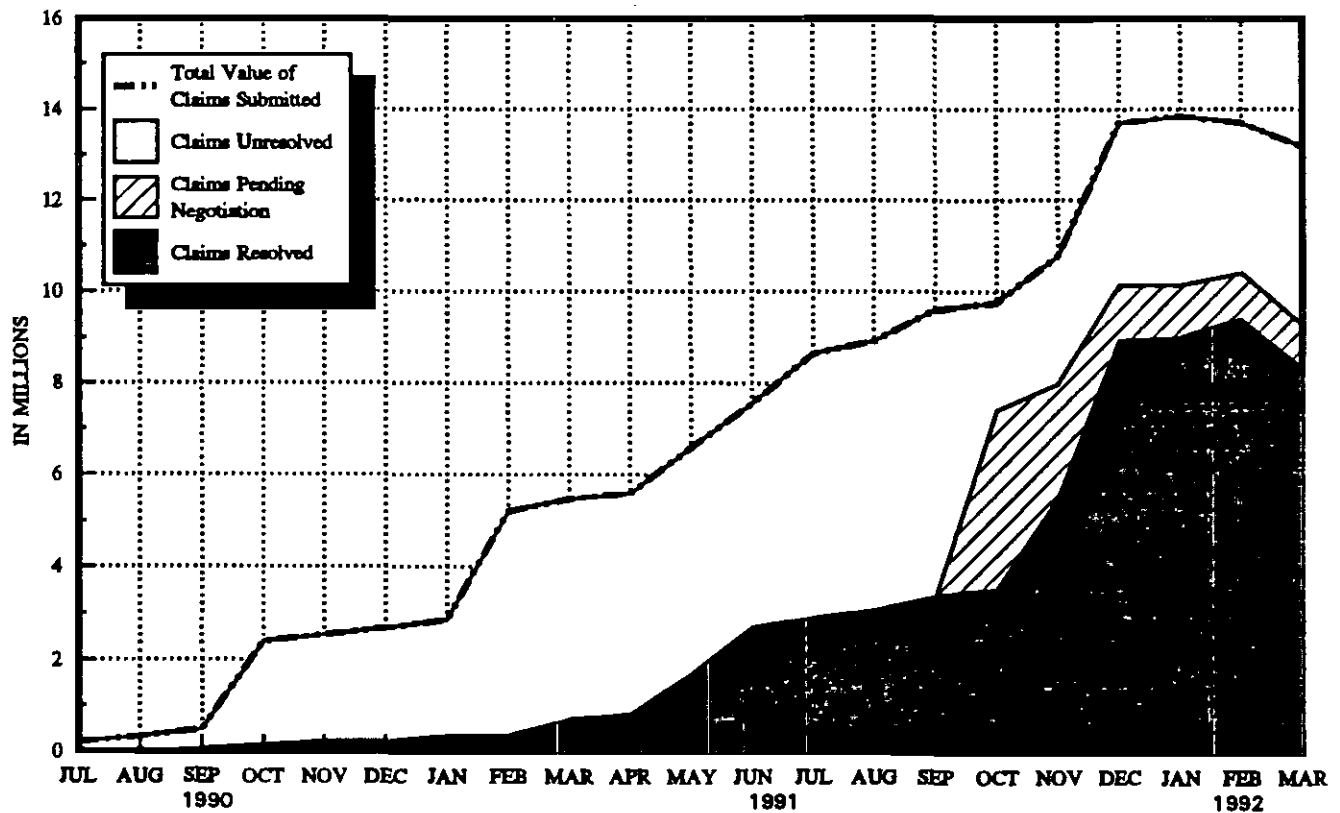
**COST**  
TOTAL = \$42,583,711

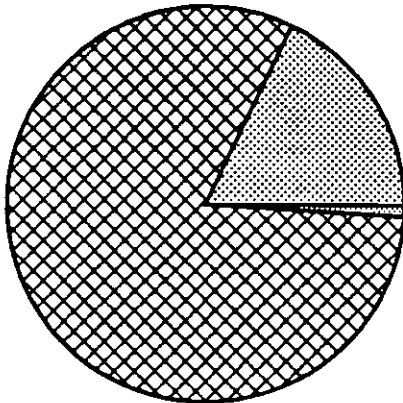
\$19,207,120	45.1%		Litigation
\$0	0.0%		Closed
\$617,722	1.5%		Rejected
\$22,734,513	53.3%		Pending Merit
\$24,356	0.1%		In Dispute

CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Claims Filed After 07/01/90 - COUNT



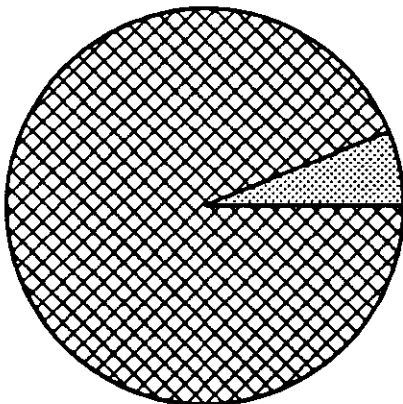
CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS  
Claims Filed After 07/01/90 - COST



**CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS**
**Unresolved Claims Distribution Chart**  
**Claims Filed After 07/01/90 as of 03/27/92**


**COUNT**  
TOTAL = 106

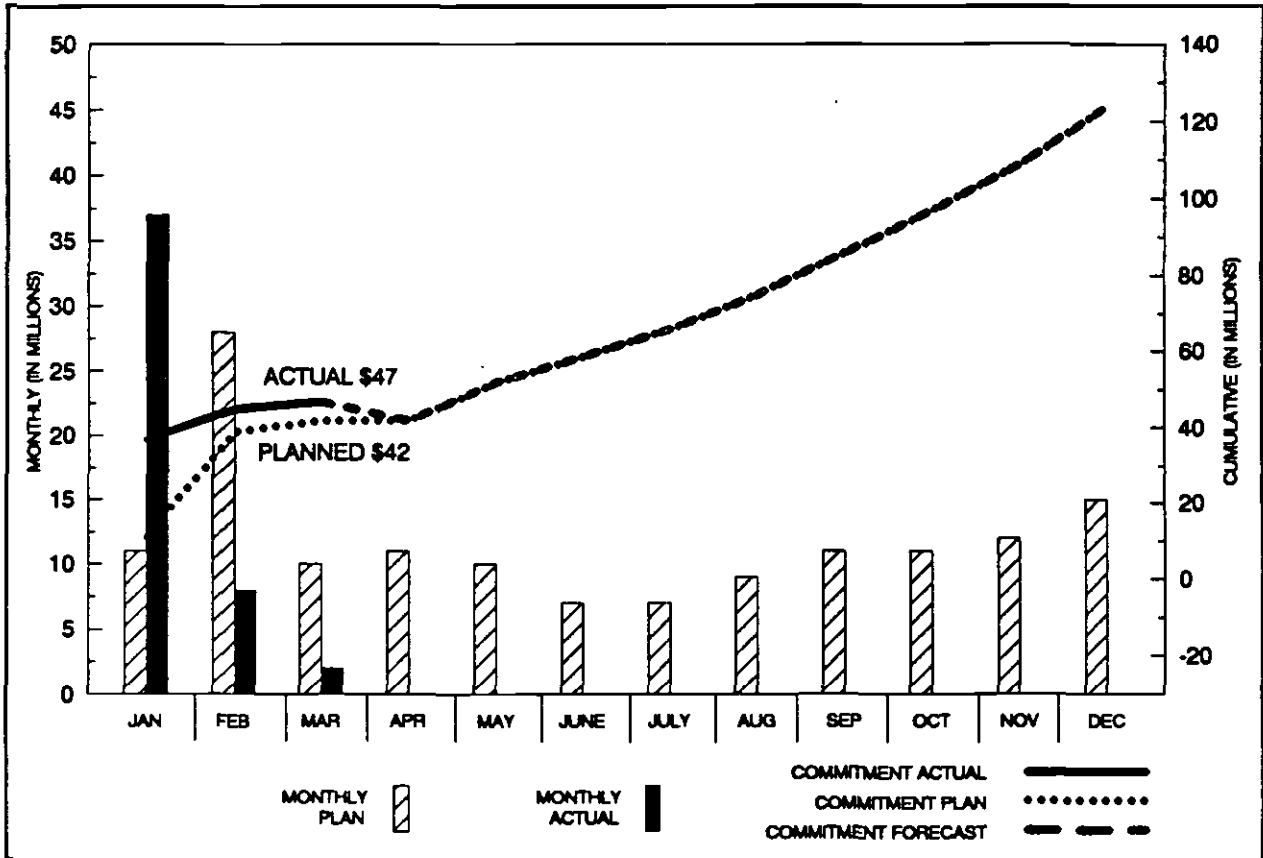
0	0.0%		Litigation
0	0.0%		Closed
19	17.9%		Rejected
86	81.1%		Pending Merit
1	2.0%		In Dispute



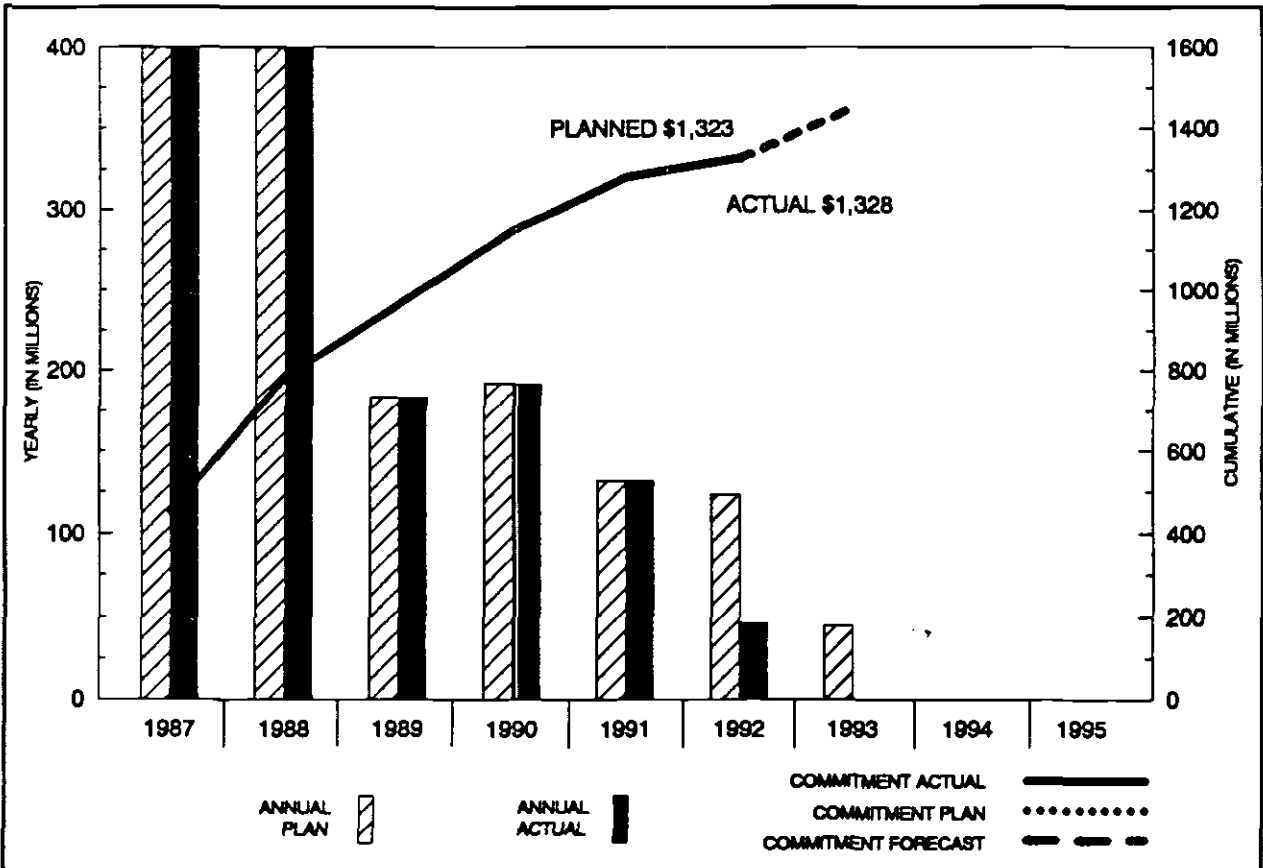
**COST**  
TOTAL = \$3,899,798

\$0	0.0%		Litigation
\$0	0.0%		Closed
\$239,559	6.1%		Rejected
\$3,660,239	93.9%		Pending Merit
\$0	0.0%		In Dispute

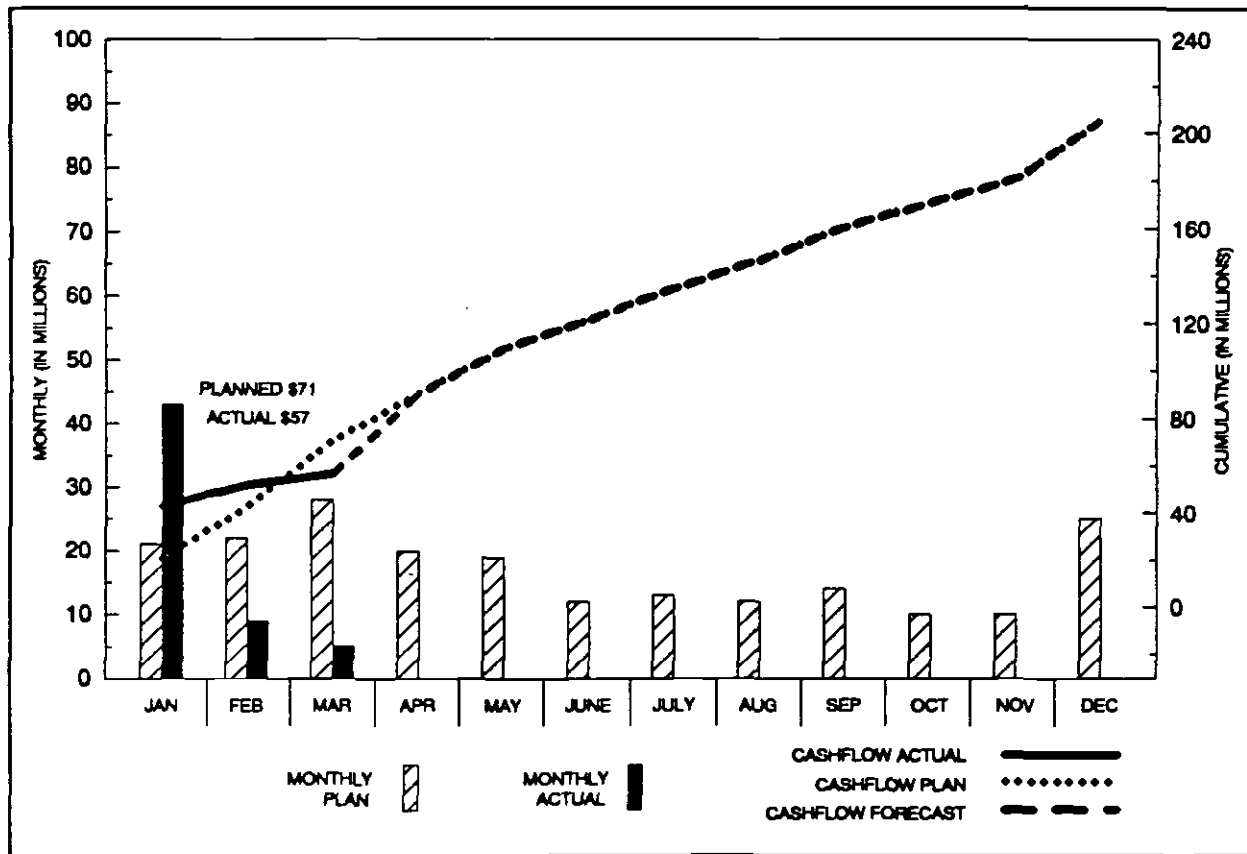
PROJECT COMMITMENTS - ANNUAL



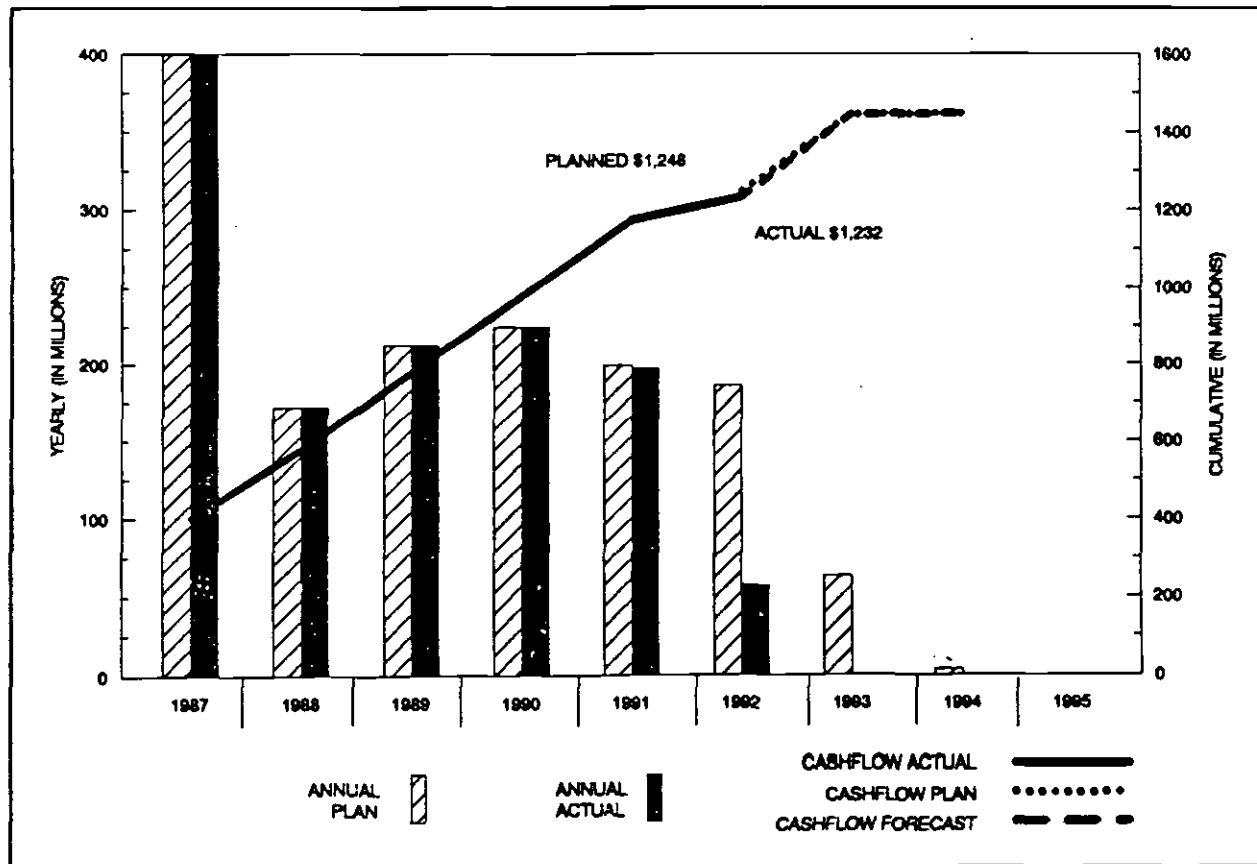
PROJECT COMMITMENTS - PROJECT



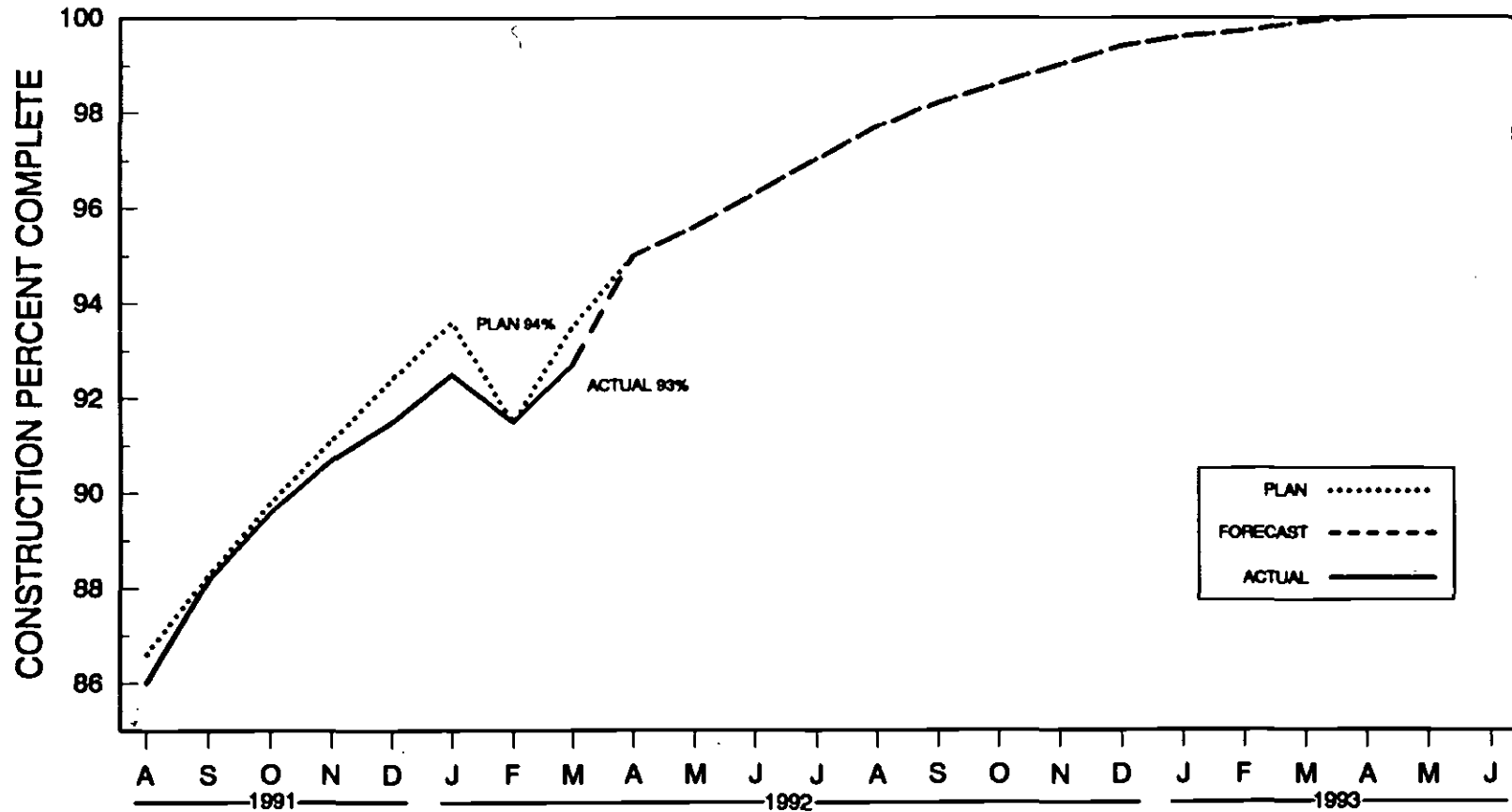
PROJECT CASH FLOW -- ANNUAL



PROJECT CASH FLOW -- PROJECT

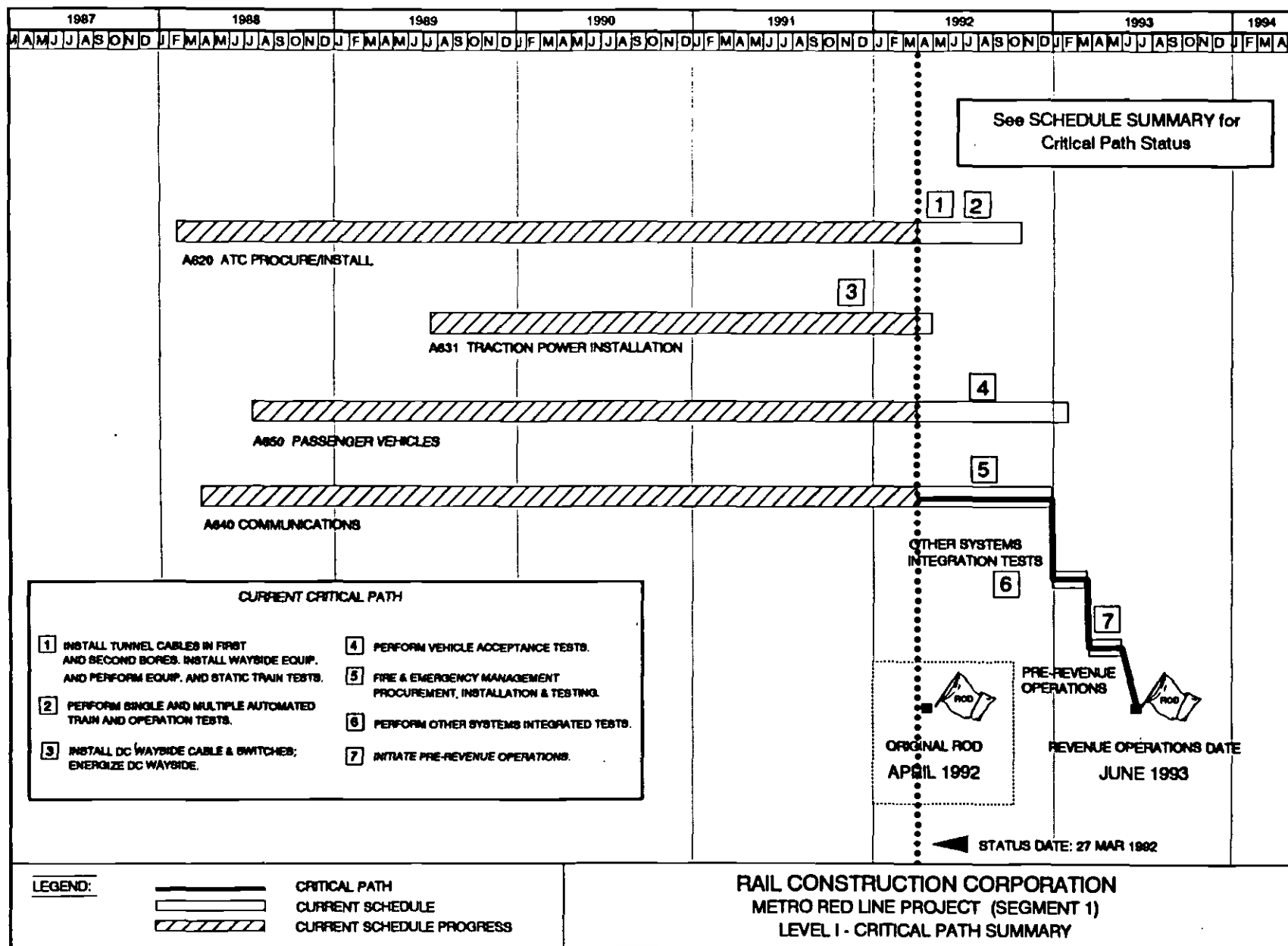


RAIL CONSTRUCTION CORPORATION  
METRO RED LINE SEGMENT 1  
PROGRESS SUMMARY



NOTE: BASELINE WAS ADJUSTED TO REFLECT AN INCREASE TO THE FEBRUARY 1992 COST FORECAST VALUES AND TO REFLECT FEBRUARY SCHEDULE ADJUSTMENTS.





**METRO RED LINE (SEGMENT - 1) PROJECT  
SUMMARY OF LOST TIME ACCIDENTS (FREQUENCY)**

**Graph removed pending audit of safety program statistics**

**METRO RED LINE (SEGMENT - 1) PROJECT  
SUMMARY OF LOST WORK DAYS (SEVERITY)**

**Graph removed pending audit of safety program statistics**

## LEGEND

O	Open. Action still required.
	Completed or Not Applicable

CONTRACT CLOSE OUT STATUS  
METRO RED LINE SEGMENT 1

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.		
A135	Union Station - Stage 1	O					Minor dispute resolution	Aug 92
A175	Wilshire/Alvarado - Stage 1	O						May 92

## INVOICE PROCESSING

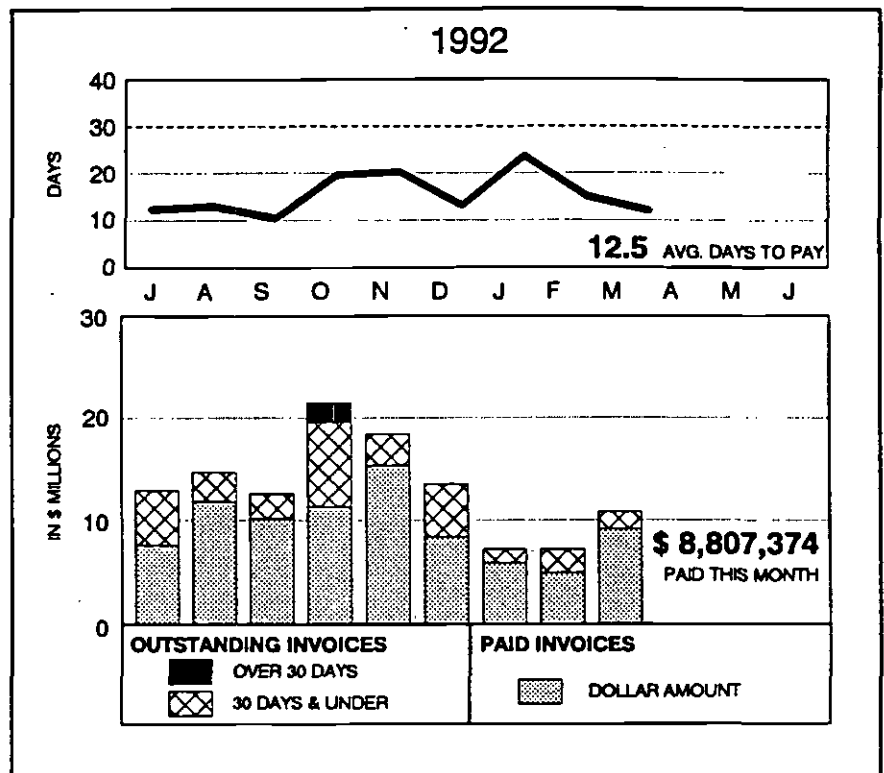
• The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 12.5 days.

• 17 invoices were paid for a total value of \$ 8,807,374.

• There were 5 outstanding Construction/ or Procurement invoices under 30 days old for \$ 1,637,261.

• There were no outstanding Construction or 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
OCT 1991	13	7,927,716	10	1,895,120	19	3,487,114	3	798,966
NOV 1991	6	2,956,345	2	27,063	18	2,800,800	4	1,040,811
DEC 1991	10	4,952,526	0	0	23	2,850,368	9	1,991,918
JAN 1992	2	1,240,502	0	0	11	2,384,087	7	1,138,991
FEB 1992	3	2,133,198	0	0	14	2,297,054	9	1,937,446
MAR 1992	5	1,637,261	0	0	16	1,380,964	6	1,812,005

## EXECUTIVE SUMMARY

## COST STATUS

in \$ million

- Current Budget \$1,446.4
- Current Forecast \$1,446.4
- The defined costs forecast increased primarily due to Project Revenue and Cost Deletion Candidates. The increase is partially offset by Contract B740 and B745 In-Progress Estimates; Splitting Escalators and Addition of two Elevators at Contract B261; Awarded Contracts Forecast Changes; MC01, Construction Management, Forecast Revisions; OCIP Forecast Revisions; and Contract E002, Engineering Consultants' Forecast Revisions.

## SCHEDULE STATUS

- Current Revenue Operation Date
 

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

- Plan	79%
- Actual	74%
- Construction Progress
 

- Plan	9%
- Actual	7%

## 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	72	33	35	4	171
LAST MONTH	70	32	36	2	130

- There are 72 parcels of land required for the Segment 2 Project. Of the two parcels added this month, one is for Contract B241, and the other is for Contract B281. The acquisition breakdown is as follows: 20 full takes, three partial takes, 41 subsurface easements, two surface easements, one temporary construction easement, two leases, and three parcels for the tunnel project.
- To date, there have been 33 parcels acquired. Nineteen of these parcels were acquired through condemnation, and the remaining were negotiated acquisitions.

## AREAS OF CONCERN

### ONGOING

#### Delay in Real Estate Acquisitions

**Concern:** There are four parcels which may not be available by their scheduled need dates. This number has increased by two since last month.

Of the four parcels, one parcel may be decertified and two parcels are being delayed for the completion of environmental studies. The other parcel is expected to be available before needed for construction.

There is a good probability that all parcels will be available on time, given the time span until their scheduled need dates.

**Action:** Maintain schedule to avoid negative float.

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

#### Wilshire Corridor Revenue Operation Date

**Concern:** The 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 schedules are tight with tunnel drive rates that were never attained during the Segment 1 construction experience.

**Action:** The contractor's tunneling production performance will be monitored to determine if other factors (other than encountering harder ground than anticipated) are affecting the tunneling progress so that corrective action can be taken to ensure that milestone dates will be achieved.

A Change Notice was given to the contractor providing for the purchase of a roadheader attachment for the tunnel shield machine in the event of the contractor tunneling through harder ground than may have been anticipated.

**Status:** A contingency plan has been 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 as a result of encountering harder ground than anticipated.

A roadheader attachment for tunnel shield machine is on-site and available for use when required. During the past month the tunneling progress has improved and the contractor is currently ahead of plan. If progress continues to improve, this area of concern will be deleted in the next report.

#### **Blast Relief Shafts Relocation**

**Concern:** In August, the City of Los Angeles required that the Under Platform Exhaust (UPE) and Blast Relief Shafts (BRS) penetrate the surface at locations away from the traveled (vehicle and pedestrian) way.

**Action:** Continue to work with the City Bureau of Engineers and Department of Transportation to find the most cost effective solution to the City's concerns.

**Status:** Vermont/Hollywood Stations UPE and BRS are still being analyzed and studied for placement on adjacent sidewalks, streets, or private properties. This effort is being coordinated with LACTC Real Estate, RCC and MRTC Project Managers, and MRTC Estimating Department.

#### **Noise Mitigation**

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

**Action:** Resolution of noise complaints and implementation of noise mitigation measures throughout the Segment 2 construction.

**Status:** As a result of the increased level of public concern over construction noise in the Normandie Station area, the noise level at Contract B221 is closely monitored by the Construction Manager, the Contractor, and the Wilshire Koreana Hotel. The noise mitigation measures to be implemented at B221 will include a reduction in the number of pile drilling rigs as a result of drilling efforts nearing completion; an alternate location for material staging night work; a reroute of construction traffic from North Ardmore Avenue; and a reduction in volume for the safety back-up alarms on equipment.

Decking and soldier pile installation on the north side of Wilshire Boulevard will be completed in April, significantly reducing noise levels. Parsons-Dillingham/RCC have implemented noise mitigation measures at all active construction contracts. Steps undertaken include enforcement of noise regulations, site monitoring, review and upgrading of equipment as required, and installation of sound barriers/acoustical enclosures for night work, and rescheduling and/or resequencing construction activities to minimize the effort on ambient noise levels. LADOT now requires noise mitigation plans to be submitted by utility subcontractors. Site specific noise mitigation measures have been identified and are being implemented at each Segment 2 contract work area.

#### Mined Station Concept

**Concern:** Cut and cover plans for the Vermont/Hollywood Corridor are currently showing negative float to the Vermont/Hollywood Revenue Operations Date (ROD). Any Mined Station Concepts that exceed the current station construction time frames will be a direct impact to ROD.

**Action:** The RCC has requested a comprehensive review of the Mined Station Concept by an outside consultant.

**Status:** Consultant's Deloitte and Kellogg completed their technical review of the Mined Station Concept, and held a constructibility review meeting with RCC on March 11, 1992. Further analysis is being performed to examine potential time and cost impacts associated with the Mined Station Concept. Recommendations to be given to RCC Board on April 13, 1992, and LACTC Board on April 22, 1992.



**Contract B251, Vermont/Hollywood Line**

**Concern:** Delays in securing Real Estate Parcels B2-226 and B2-227 could impact construction on this Project. The parcels are for the lay-down yard and haul route for this contract, and will not be available until six months after Notice-to-Proceed (January 10, 1993).

**Action:** Expedite procurement of Parcels B2-226 and B2-227.

**Status:** The Construction Manager, Parsons Dillingham, is currently investigating possible work-around plans.

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

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

**ONGOING**

**April 1991              Project Procedures**

**Concern:**      Although a plan has been developed and implementation started in December, implementation is proceeding very slowly and requires support at a senior level. Additionally, some of the procedures reviewed were not in accordance with the Project Management Plan (PMP).

**Action:**        Complete and publish remaining policies and procedures.

**Status:**        A revised PMP has been submitted to Hill, and is expected to be approved at the next FTA Quarterly Meeting. A memo from the executive office is being prepared with a due date for all outstanding procedures set at April 10, 1992.

**NEW**              NONE

**RESOLVED**        NONE

## KEY ACTIVITIES - MARCH

- Completed excavation of the AR tunnel from the portal at MacArthur Park, Contract B201, through the Wilshire/Vermont Station, Contract B211, and commenced excavation of the AR tunnel at the turnout structure, Contract B221.
- Commenced station vault excavation for the Wilshire/Vermont Station, Contract B211.
- Commenced street decking operations for Wilshire/Normandie Station, Contract B221.
- Continued station vault excavation for the Wilshire/Western Station, Contract B231.
- Completed Prefinal Design Submittal for Contract B271, Hollywood/Western Station.
- Completed In-Progress Design Submittal for Contract B620, Automatic Train Control (Design/Supply/Install).
- Completed Prefinal Design Submittal for Contract B630, Traction Power (Design/Supply).

## KEY ACTIVITIES - PLANNED FOR APRIL

- Complete structural excavation of the pocket track and continue structural concrete work, Contract B201.
- Complete soldier pile installation at Wilshire/Normandie Station and continue decking operations, Contract B221.
- Complete soldier pile installation for station vault and continue pile installation for side structures at Wilshire/Western Station Contract B231.
- Continue developing designs for mined stations concept along Hollywood Boulevard, including field testings.
- Complete Final Design Submittal for Contract B740, Ventilation Equipment, and Contract B745, Air Handling Equipment.

RAIL CONSTRUCTION CORPORATION  
PROJECT COST REPORT  
COST BY ELEMENT

Project: R81 METRO RED LINE MOS-2

Period: 29-Feb-92 to 27-Mar-92  
Run Date: 22-Apr-92  
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	883,000	0	905,830	36	209,890	9,036	89,148	9,553	78,984	(27,872)	929,125	23,295
S Professional Services	289,150	0	297,844	1,034	216,087	4,801	86,594	2,164	76,325	3,140	335,971	38,127
R Real Estate	79,827	0	76,567	145	46,504	139	39,232	139	39,232	(2,000)	94,268	17,721
F Utility/Agency Force Account	36,868	0	18,404	0	4,969	515	1,833	515	1,833	0	23,720	5,316
D Special Programs	2,044	0	2,044	0	354	0	181	0	181	0	13,044	11,000
C Contingency	145,743	0	145,743	0	0	0	0	0	0	90,219	114,284	(31,459)
A Project Revenue	0	0	0	0	0	(12)	(145)	(12)	(145)	(63,700)	(64,000)	(64,000)
Project Grand Total:	1,446,432	0	1,446,432	1,215	567,804	14,479	216,623	12,359	196,190	0	1,446,432	0

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS.

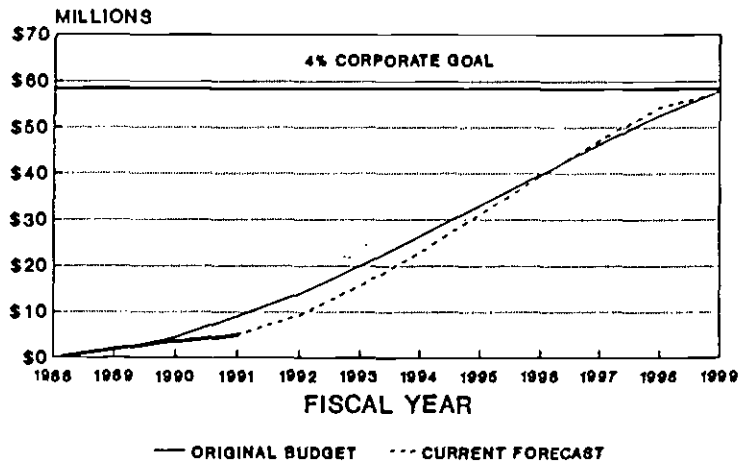
## STATUS OF FUNDS BY SOURCE

SOURCE	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
UMTA-SECTION 3	\$667,000	\$478,918	\$232,833	35%	\$63,682	10%	\$55,907	8%
STATE	\$185,985	\$27,000	\$80,005	43%	\$31,620	17%	\$21,327	11%
LACTC	\$438,447	\$97,856	\$201,152	46%	\$74,704	17%	\$74,704	17%
CITY OF L.A.	\$98,000	\$21,400	\$44,155	46%	\$16,325	17%	\$20,000	21%
BENEFIT ASSESSMENT	\$58,000	\$0	\$9,859	17%	\$9,859	17%	\$0	0%
COST OVERRUN ACCOUNT (1)	\$0	\$5,208	\$0	0%	\$0	0%	\$0	0%
BENEFIT ASSESSMENT SHORTFALL (2)	\$0	\$0	\$0	0%	\$0	0%	\$9,859	
TOTAL	\$1,446,432	\$630,382	\$567,804	39%	\$196,190	14%	\$181,797	13%

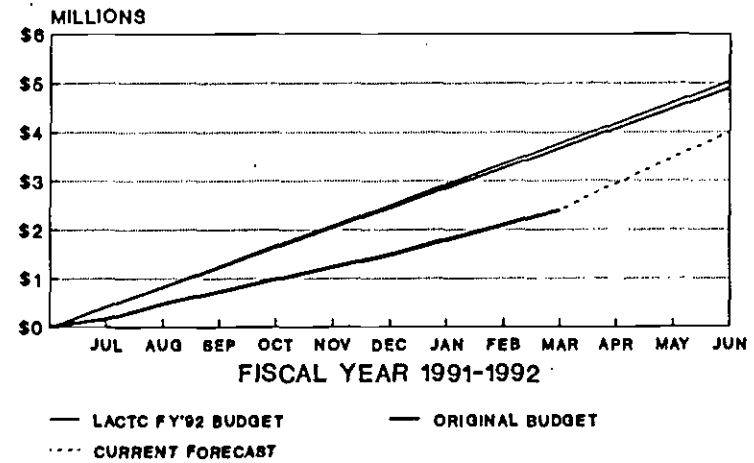
(1) THE COST OVERRUN ACCOUNT INCLUDES CAPRA FUNDS ONLY.

(2) 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)

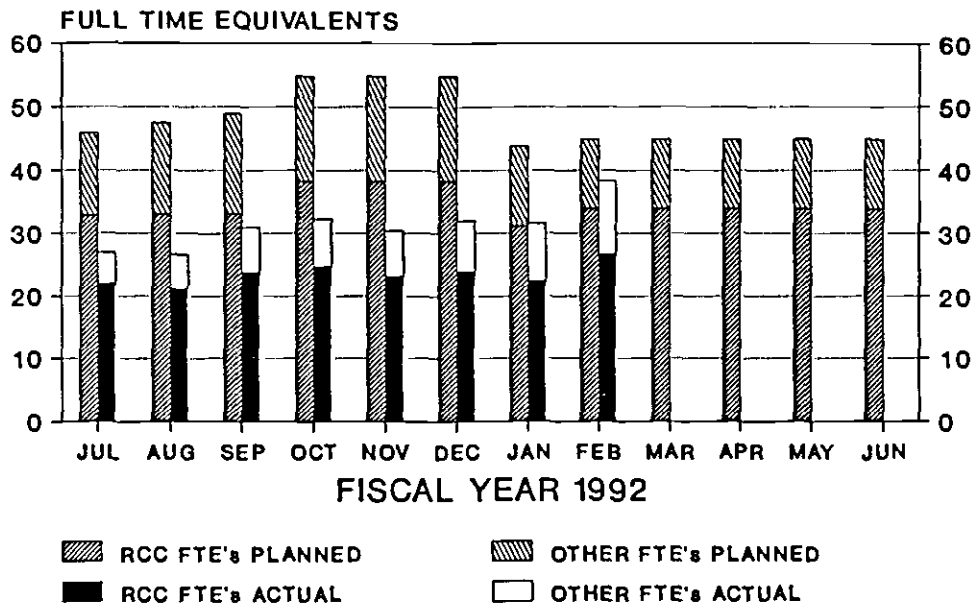
TOTAL PROJECT BUDGET	\$1,446,432
ORIGINAL BUDGET	\$57,840
BUDGET % OF TOTAL PROJECT	4.0%
CURRENT FORECAST	\$57,541
FORECAST % OF TOTAL PROJECT	3.9%

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

LACTC FY'92 BUDGET	\$5,021
ORIGINAL BUDGET	\$4,894
CURRENT FORECAST	\$4,001
ACTUAL \$ TO DATE	\$2,407

Current forecast as of December 1991.

## STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 2



FY'92 Amended Budget Implemented JAN'92

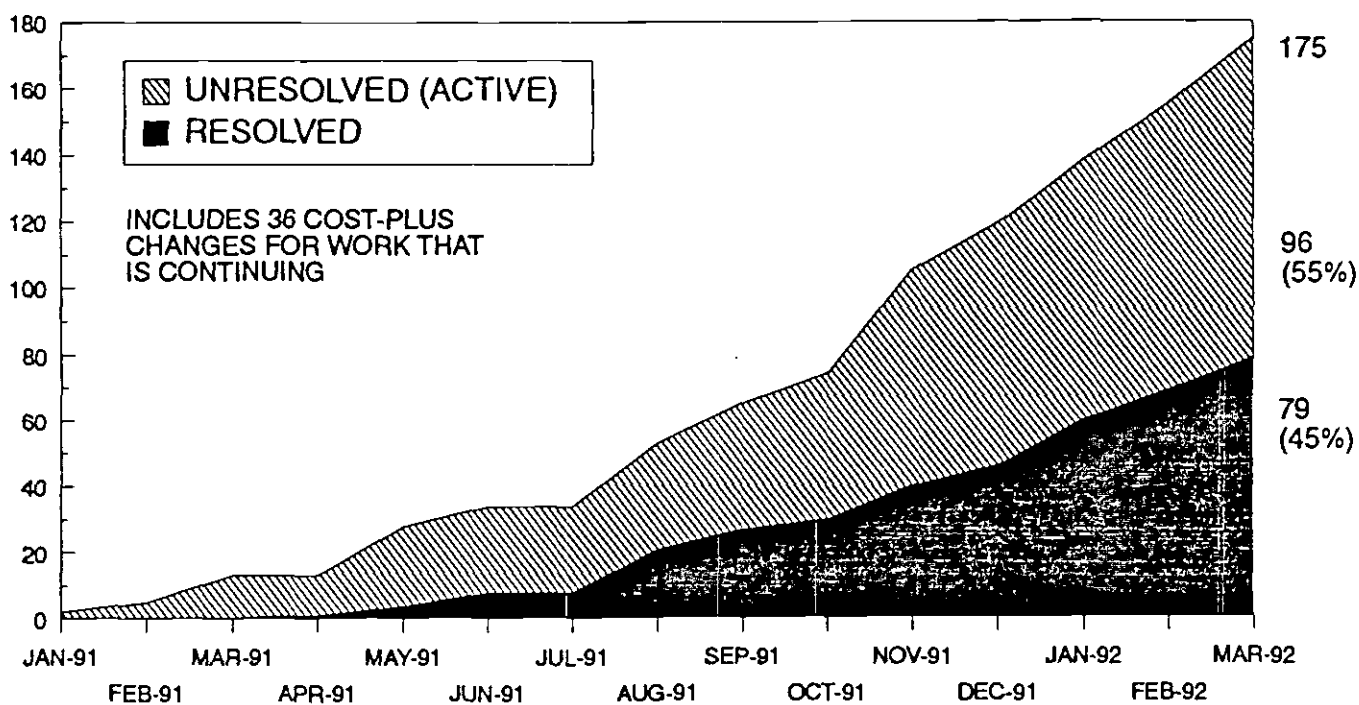
## RED LINE (SEGMENT 2) STAFFING PLAN FISCAL YEAR 1992

BUDGET WAGE RATE (\$/HOUR)	\$44
ACTUAL WAGE RATE (\$/HOUR)	\$44
RCC FTE's PLANNED	34
RCC FTE's ACTUAL	27
OTHER FTE's PLANNED	11
OTHER FTE's ACTUAL	11
TOTAL FTE's PLANNED	45
TOTAL FTE's ACTUAL	38

AMENDED FY'92 WAGE RATE INCORPORATED IN JAN'92

# CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

## CHANGE NOTICE RESOLUTION

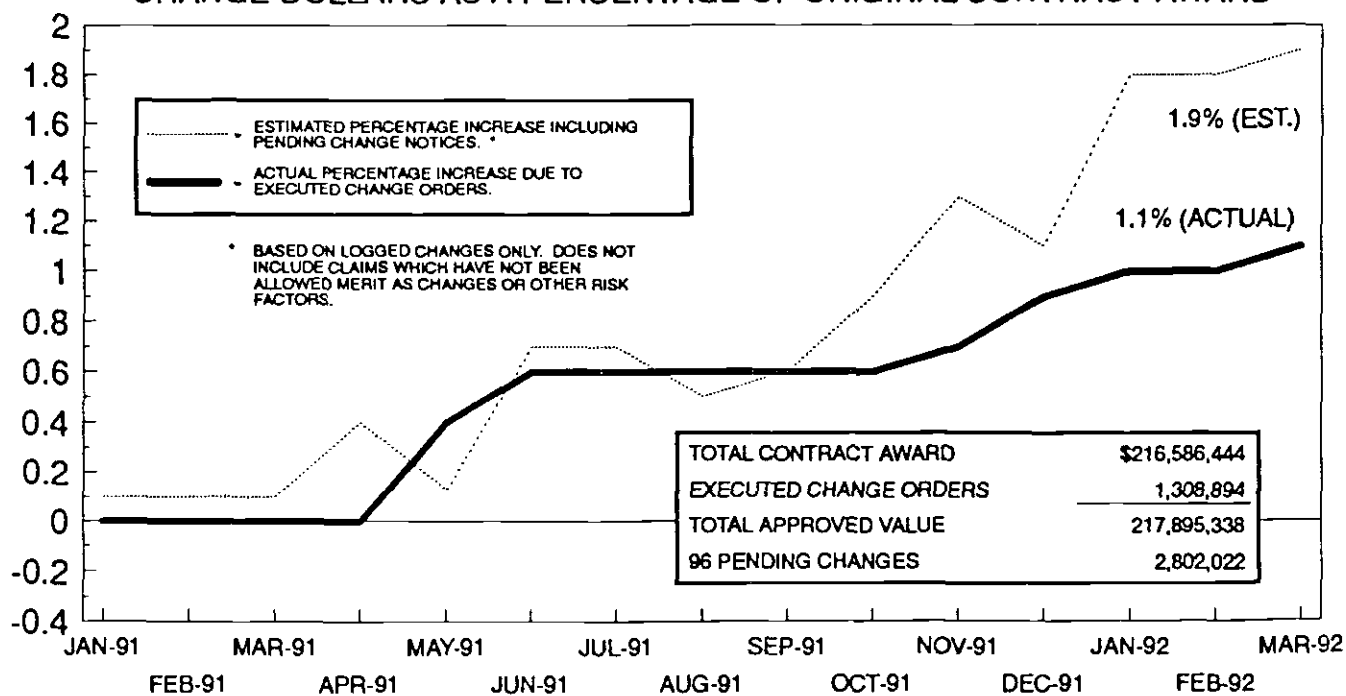


## AGE OF UNRESOLVED CHANGES

TIME	0-30 DAYS	31-60	61-90	OVER 90	TOTAL ACTIVE
VOLUME	38	7	17	34	96
PERCENT	40%	7%	18%	35%	100%

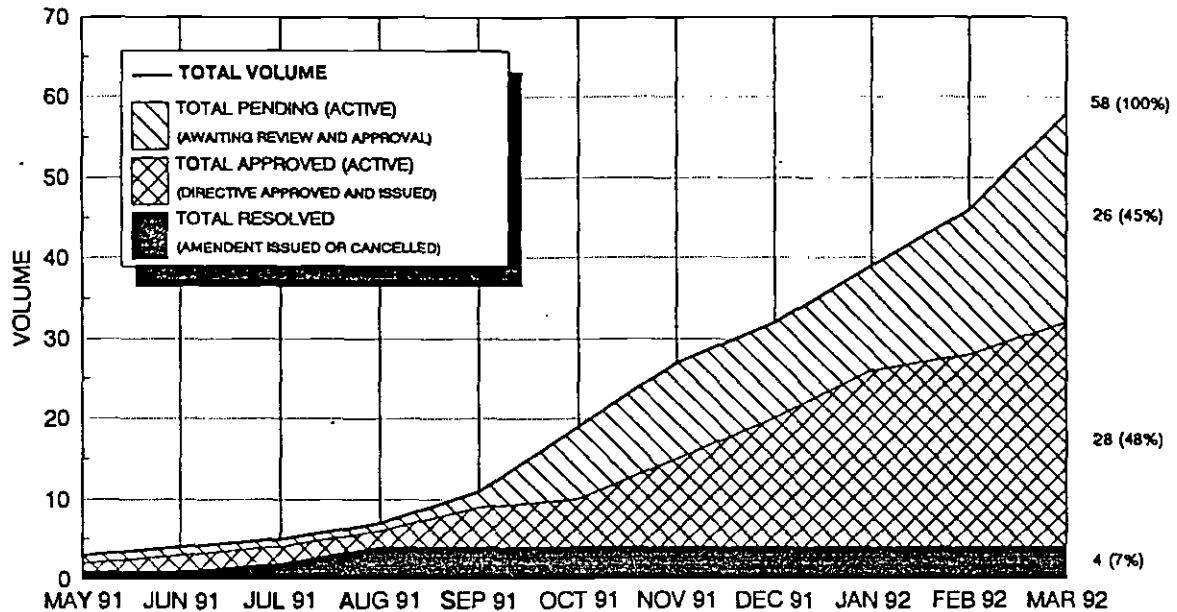
## CONSTRUCTION/PROCUREMENT CONTRACT CHANGES

### CHANGE DOLLARS AS A PERCENTAGE OF ORIGINAL CONTRACT AWARD





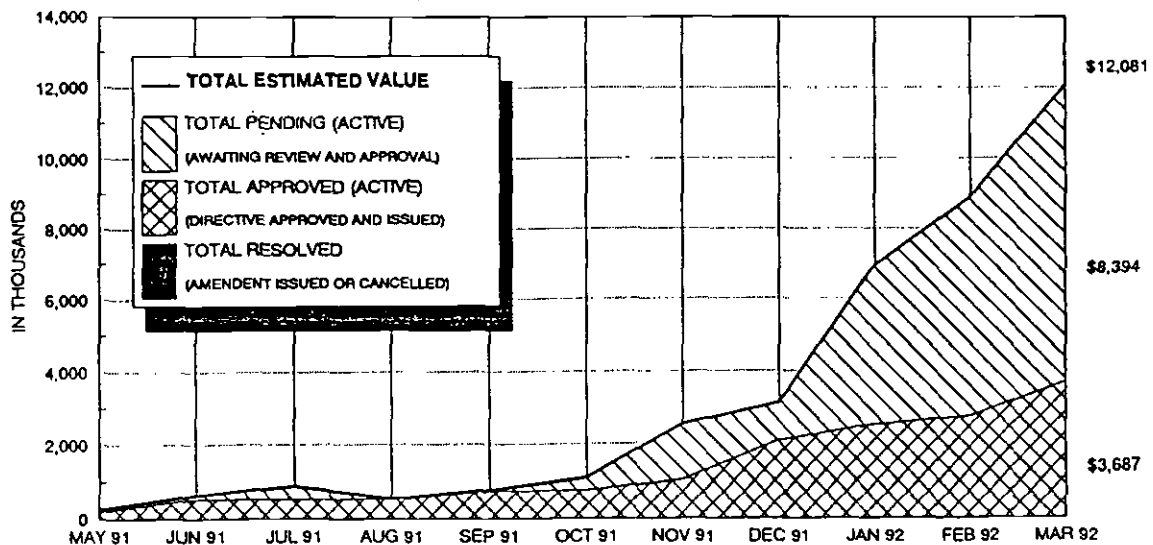
**CONSULTANT CONTRACT CHANGE SUMMARY  
R81 CONSULTANT CHANGE REQUEST RESOLUTION**



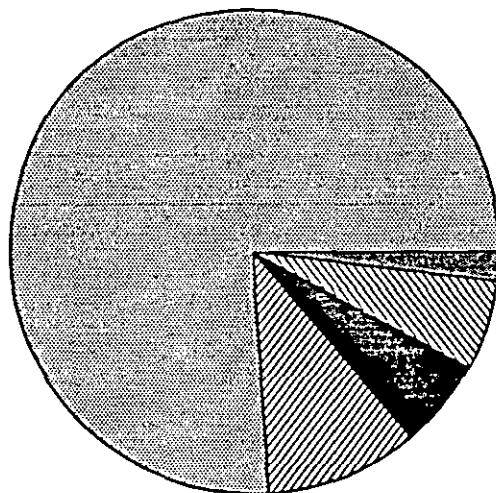
**AGE OF UNRESOLVED CONSULTANT CHANGES**

TIME	0-30 DAYS	30-60 DAYS	61-90 DAYS	OVER 90	TOTAL ACTIVE
VOLUME	13	7	5	29	54
PERCENT	24%	13%	9%	54%	100%

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









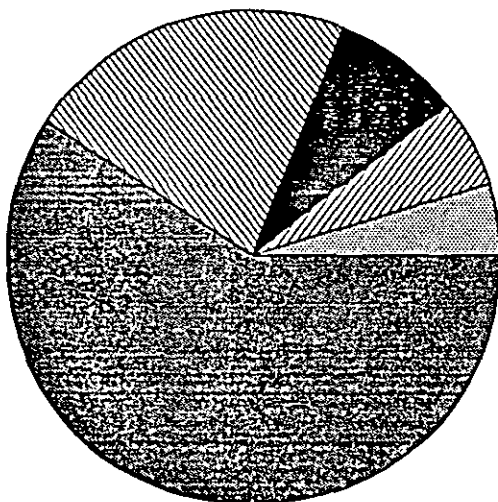
**CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY COST LEVEL  
BASED ON EXECUTED CHANGES AS OF 03/27/92**









CHANGE VOLUME  
TOTAL VOLUME: 50 CN'S

**ABSOLUTE VALUES**

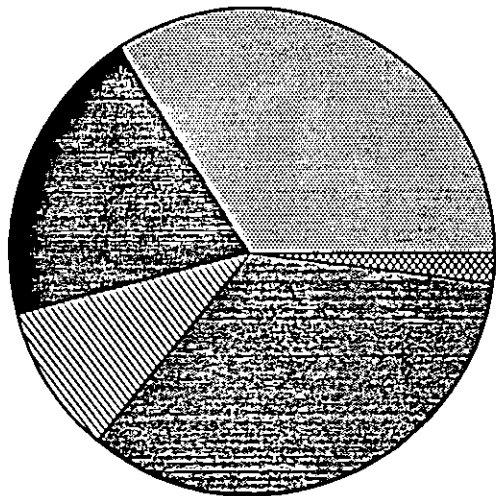
38	76.0%		< \$10,000
5	10.0%		< \$25,000
3	6.0%		< \$50,000
3	6.0%		< \$200,000
1	2.0%		> \$200,000
0	0.0%		> \$1,000,000










CHANGE COST  
TOTAL COST: \$1,308,894

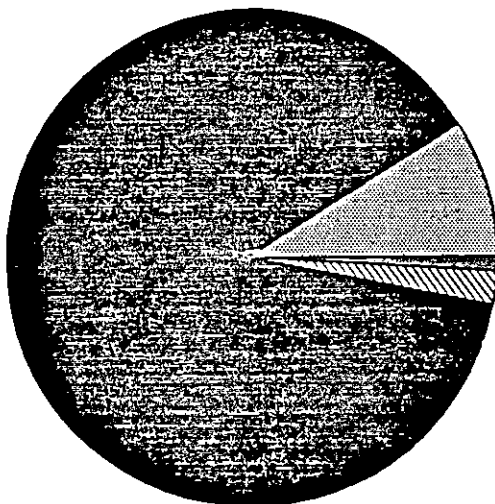
\$61,191	4.7%		< \$10,000
\$75,613	5.8%		< \$25,000
\$111,190	8.5%		< \$50,000
\$285,900	21.8%		< \$200,000
\$775,000	59.2%		> \$200,000
\$0	0.0%		> \$1,000,000

**CONSTRUCTION/PROCUREMENT  
CHANGE VOLUME AND COST BY CHANGE BASIS TYPE  
BASED ON EXECUTED CHANGES AS OF 03/27/92**










CHANGE BASIS VOLUME  
TOTAL VOLUME: 50 CN'S (44 CO'S)

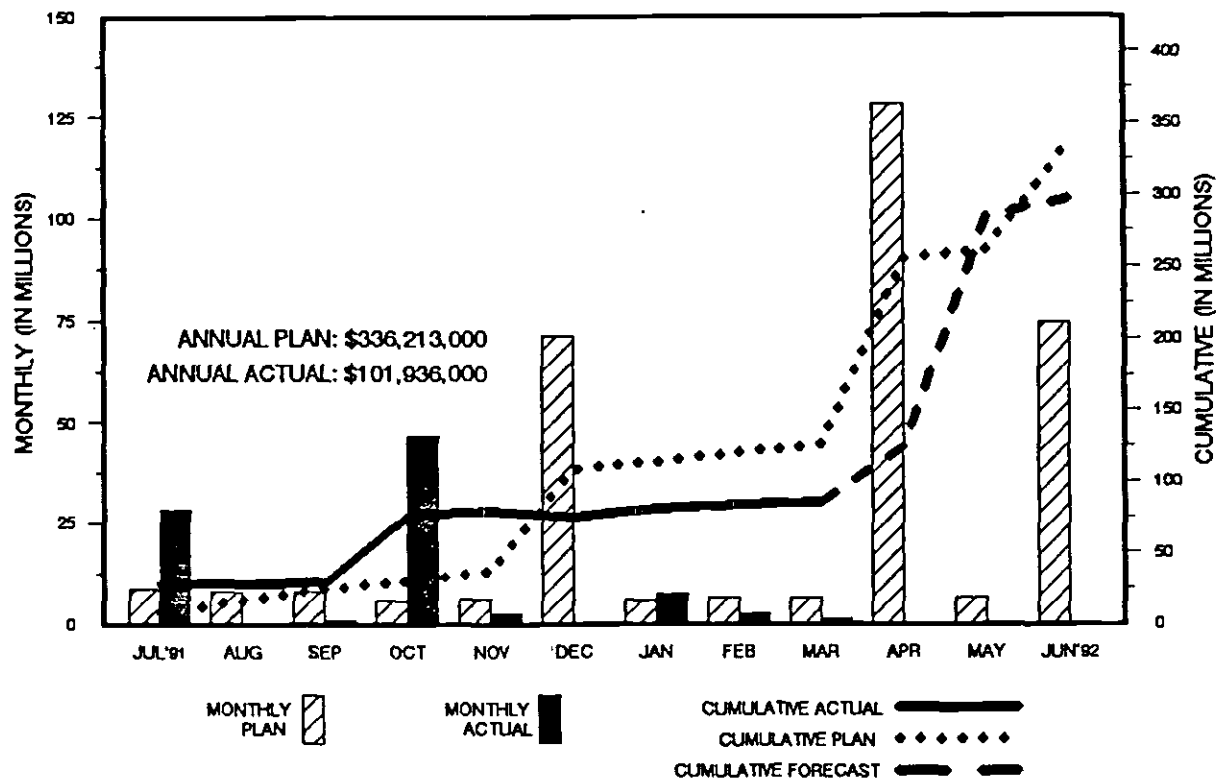
17	34.0%		WORK SCOPE CHANGES
0	0%		SCHEDULE CHANGES
10	20.0%		DIFFERING CONDITIONS
5	10.0%		ADMINISTRATIVE
17	34.0%		DESIGN CHANGES
1	2.0%		MANAGEMENT ISSUES
0	0%		UNASSIGNED



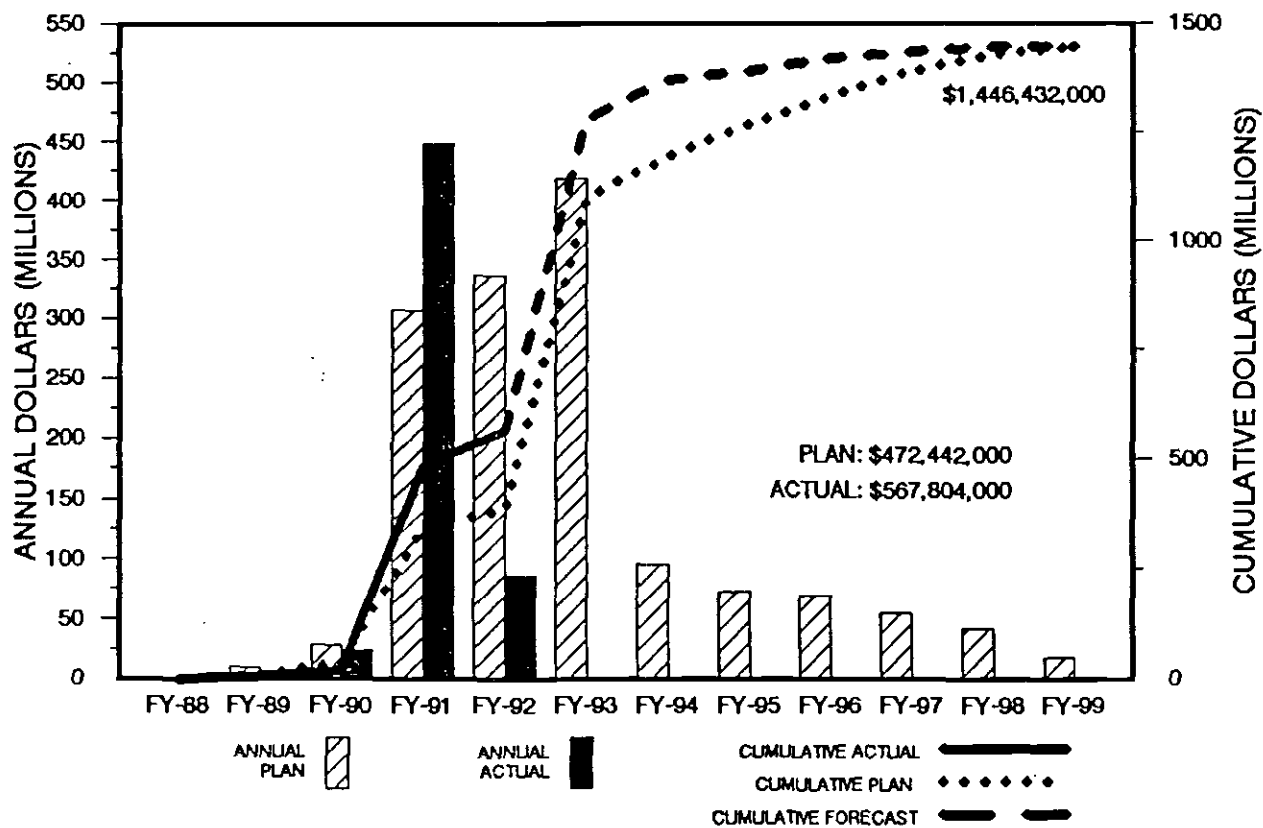
CHANGE BASIS COST  
TOTAL COST: \$1,308,894

\$117,424	9.0%		WORK SCOPE CHANGES
\$0	0%		SCHEDULE CHANGES
\$1,149,515	87.8%		DIFFERING CONDITIONS
\$28,590	2.2%		ADMINISTRATIVE
\$13,365	1.0%		DESIGN CHANGES
\$0	0%		MANAGEMENT ISSUES
\$0	0%		UNASSIGNED

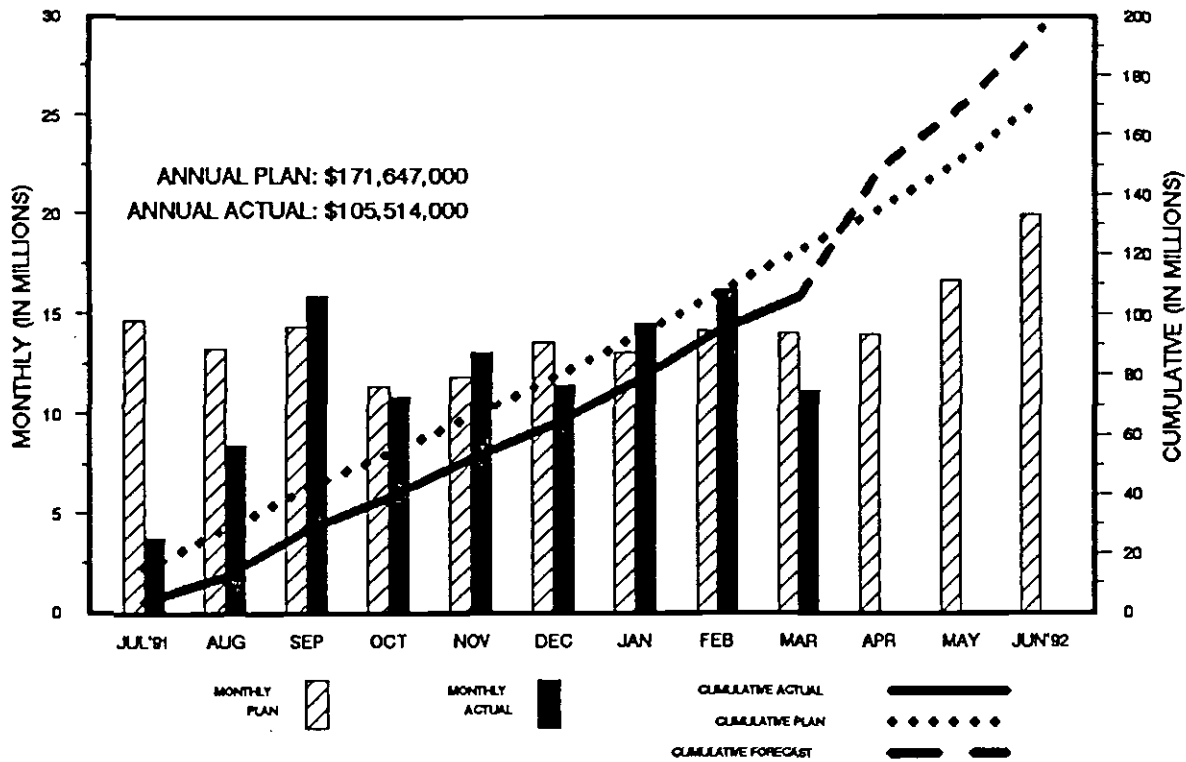
## ANNUAL PROJECT COMMITMENTS (FY'92)



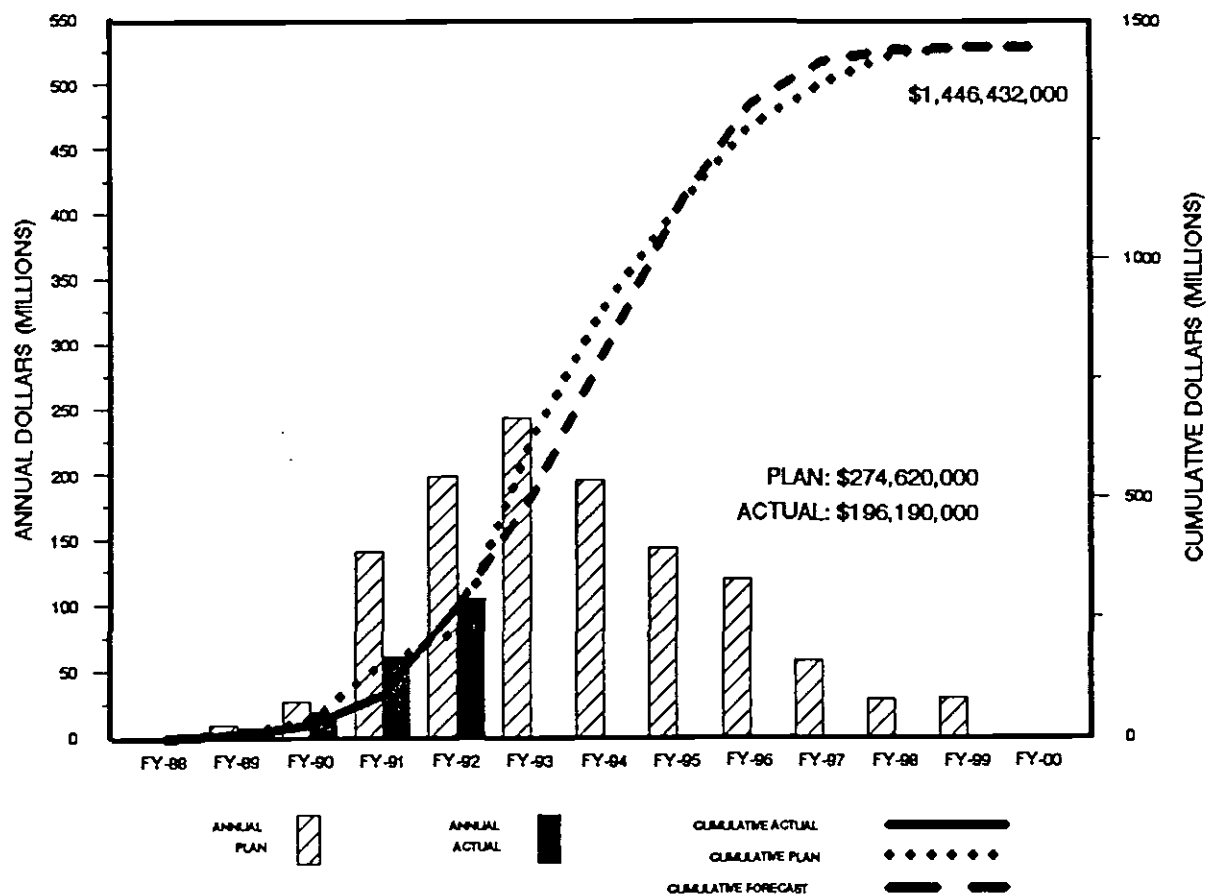
## TOTAL PROJECT COMMITMENTS



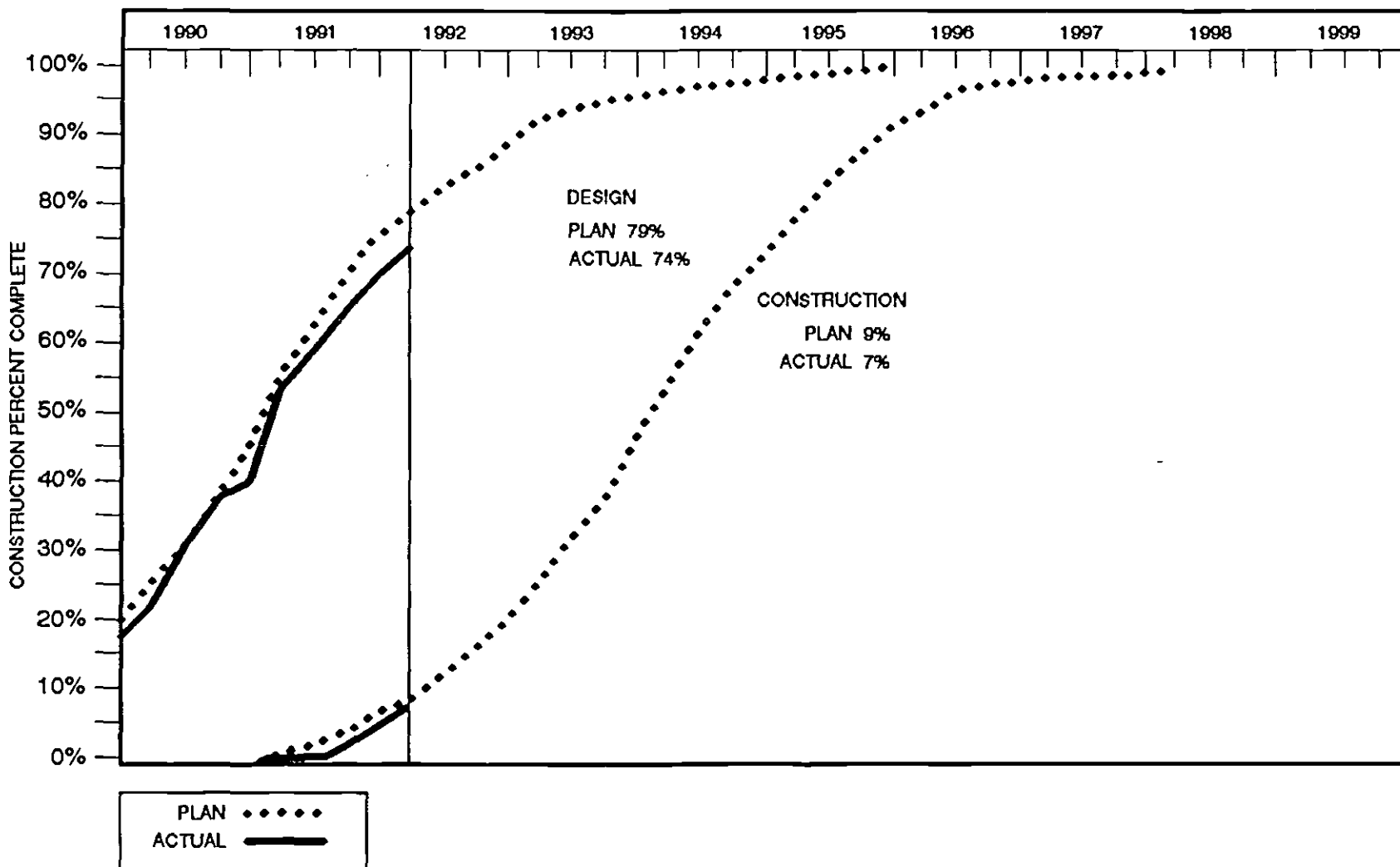
## ANNUAL PROJECT CASHFLOW (FY'92)

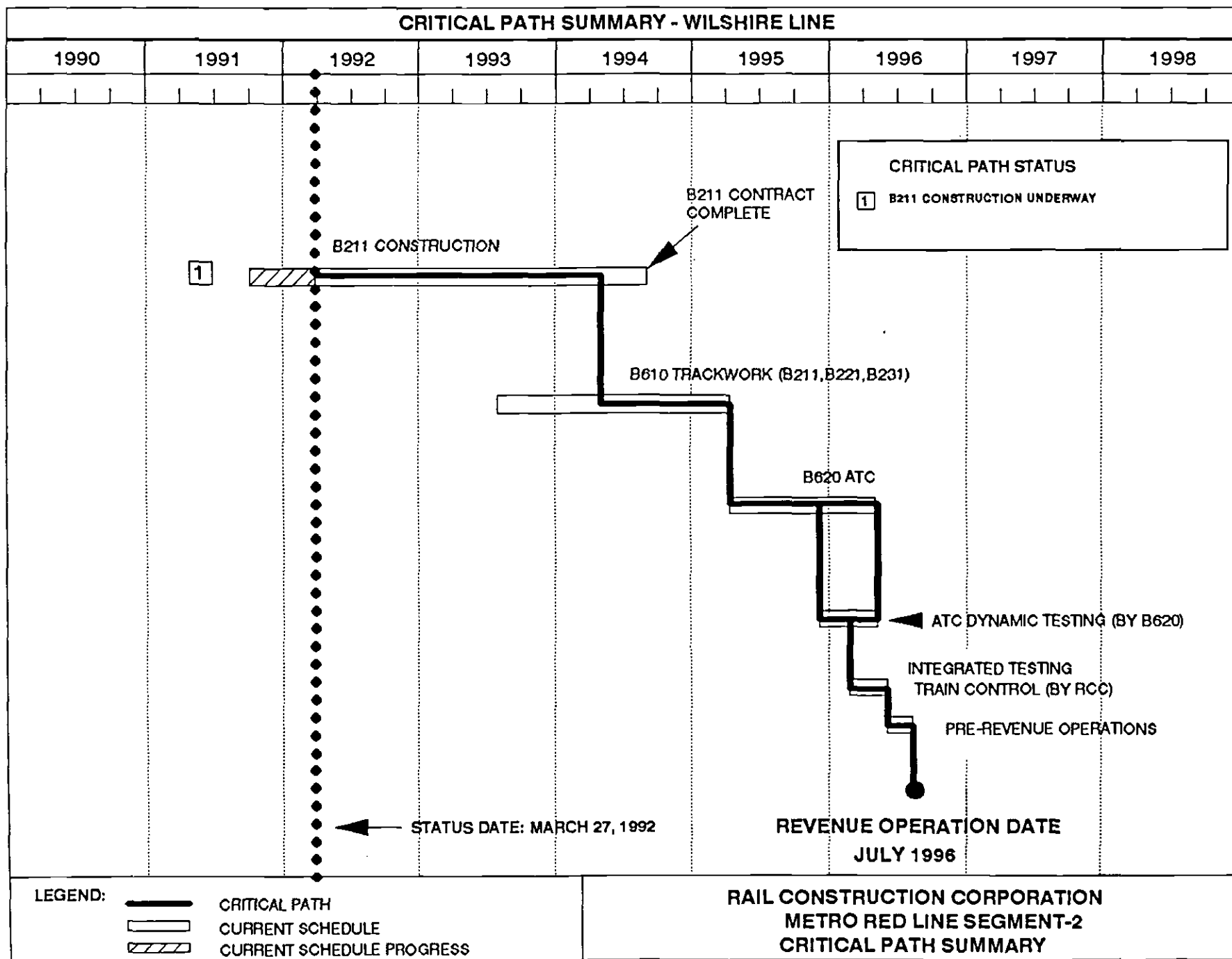


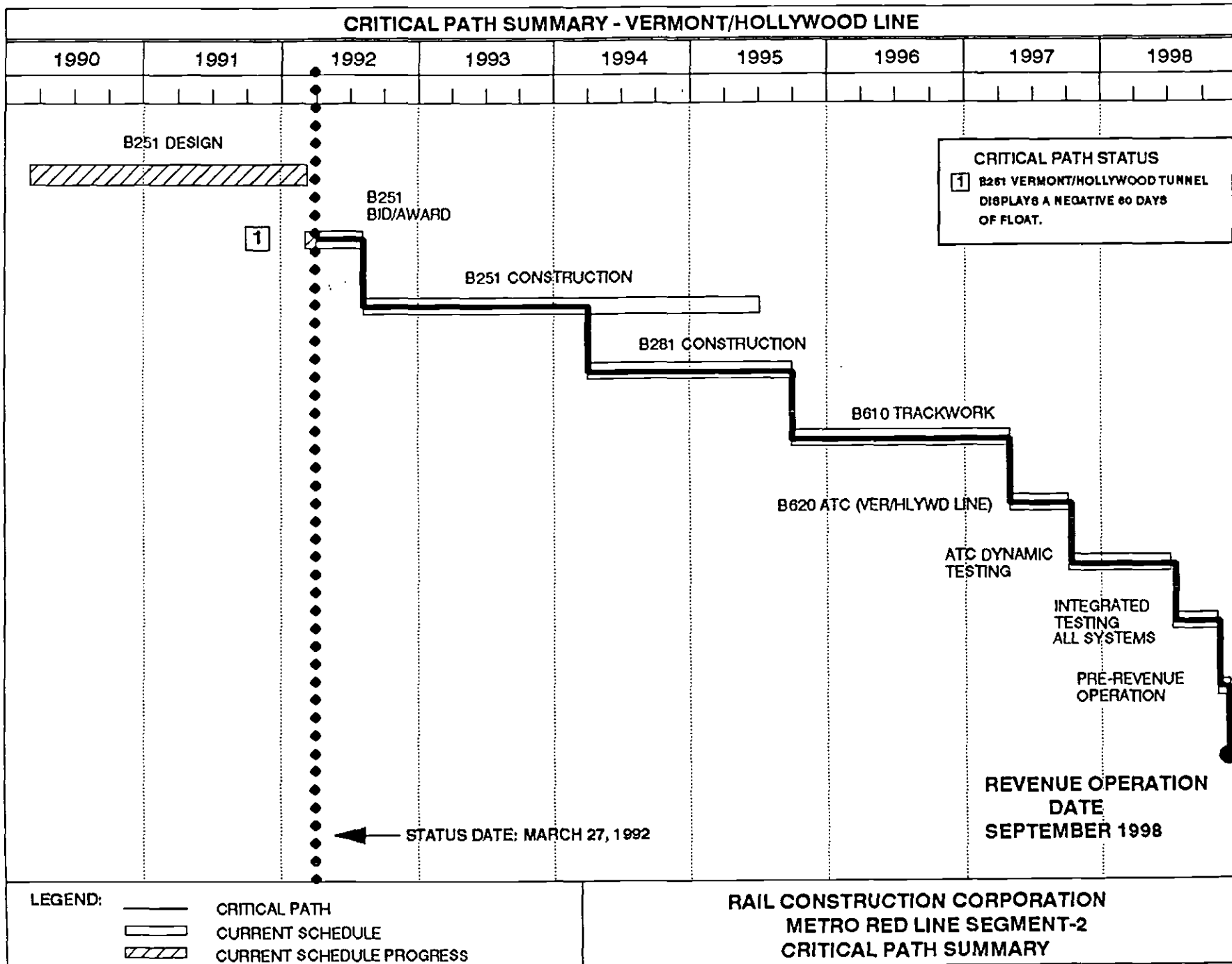
## TOTAL PROJECT CASHFLOW



RAIL CONSTRUCTION CORPORATION  
METRO RED LINE SEGMENT 2  
PROGRESS SUMMARY









Safety graphs have been removed pending audit of safety progress statistics.

## INVOICE PROCESSING

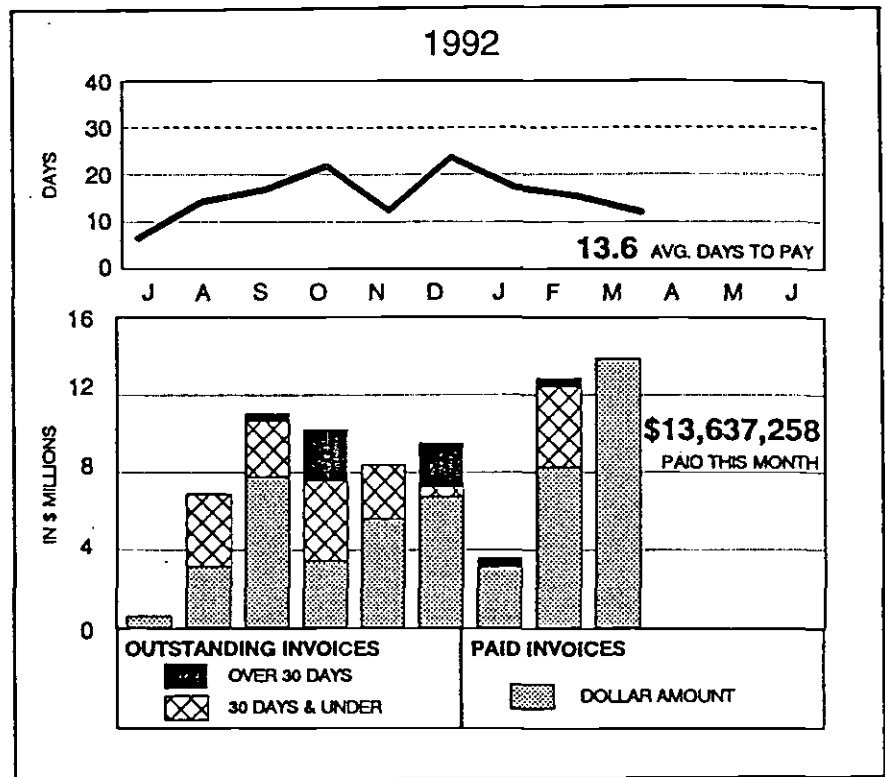
- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 13.6 days.

- 14 invoices were paid for a total value of \$ 13,637,258.

- There were no outstanding Construction or Procurement invoices under 30 days old.

- There was 1 outstanding Construction or Procurement invoice over 30 days old for \$ 69,660.

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
OCT 1991	2	4,066,169	10	2,652,385	13	460,418	11	68,236
NOV 1991	5	2,730,824	0	0	17	96,407	12	72,615
DEC 1991	2	468,320	1	2,240,824	31	625,515	14	73,480
JAN 1992	0	0	1	466,820	20	129,807	15	116,673
FEB 1992	6	4,054,370	1	466,820	29	1,047,030	7	90,190
MAR 1992	0	0	1	69,660	19	3,776,066	7	76,920