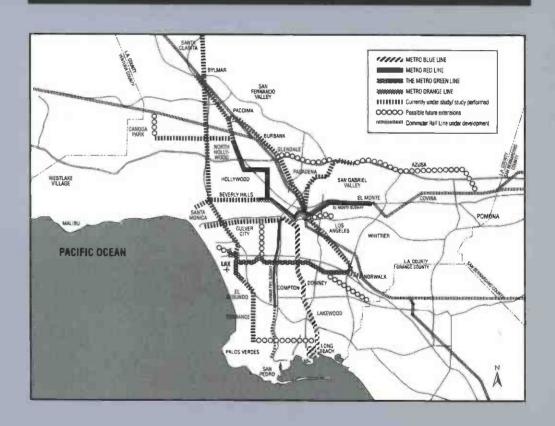
# RAIL CONSTRUCTION CORPORATION



**Executive Report** Rail Program Status







## RAIL PROGRAM STATUS SUMMARY

#### RAIL PROGRAM STATUS SUMMARY

#### Metro Red Line Segment 1

**Cost Status** (\$000) **Project Progress** Original Budget Design: 1,249,900

Plan 100% Expended to Date 1.283.313 Actual 99% **Current Budget** 1,450,019

Construction:

Schedule Status Plan 97% Actual 97% Revenue Operations Date:

Original **April 1992** Forecast March 1993

#### Metro Red Line Seament 2

Cost Status (\$000)**Project Progress Original Budget** Design: 1,446,432 Expended to Date 264,345 Plan 84% Current Budget Actual 78% 1,446,432 Construction: Schedule Status Plan 13% ROD: Vermont/Hlywd Actual 11% Wilshire Original Jul '96 Sep '98 **Forecast** Jul '96 Sep '98

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

**Cost Status Project Progress** (\$000) 671,000 Design: Original Budget Expended to Date 216,122 Plan 100% Current Budget 722,402 Actual 99% Construction: Plan 36% Schedule Status 29% Revenue Operations Date: Actual Original October 1994 **Forecast** May 1995

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

**Cost Status** (\$000) **Project Progress** 473,262 Design: Original Budget Plan 100% Expended to Date 222,102 Current Budget 473,262 Actual 100% Construction:

Plan 67% Schedule Status Revenue Operations Date for 3 lines: Actual 62%

October 1992 Original October 1992 Forecast Forecast(Union Pac) April 1993

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

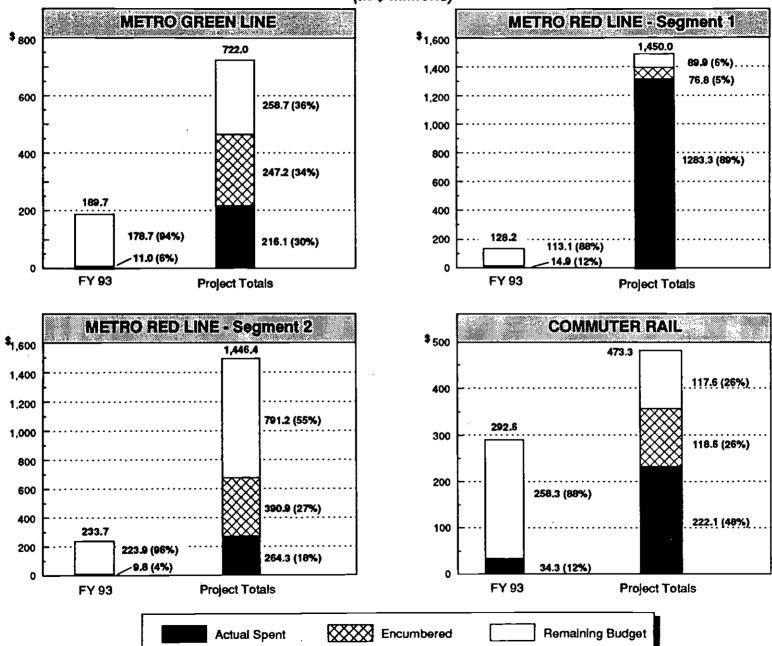
STATUS DATE 07/24/92

(IN THOUSANDS)

PROJECT: TOTAL RAIL PROGRAM

|                                  | BUDGET  DESCRIPTION ORIGINAL CURR |                |               | MENTS          | INCURRE       | D COST         | EXPENDI       | TURES          | CURRENT<br>FORECAST | VARIANCE<br>(9-2) |  |
|----------------------------------|-----------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------------|-------------------|--|
| DESCRIPTION                      | ORIGINAL<br>(1)                   | CURRENT<br>(2) | PERIOD<br>(3) | TO DATE<br>(4) | PERIOD<br>(5) | TO DATE<br>(6) | PERIOD<br>(7) | TO DATE<br>(8) | (9)                 | (10)              |  |
| CONSTRUCTION                     | 2,556,544                         | 2,834,611      | 13,009        | 1,937,169      | 30,223        | 1,484,068      | 25,629        | 1,452,330      | 2,959,502           | 124,891           |  |
| PROFESSIONAL SERVICES            | 916,961                           | 1,056,181      | 4,309         | 1,052,318      | 11,962        | 819,468        | 8,788         | 800,637        | 1,169,688           | 113,507           |  |
| REAL ESTATE                      | 247,495                           | 301,211        | 1,069         | 251,422        | 649           | 248,996        | 648           | 246,905        | 327,878             | 26,667            |  |
| UTILITY/AGENCY<br>FORCE ACCOUNTS | 105,421                           | 88,422         | 140           | 84,196         | 594           | 68,264         | 527           | 67,744         | 97,458              | 9,036             |  |
| SPECIAL PROGRAMS                 | 7,668                             | 14,110         | o             | 2,519          | 58            | 1,117          | 59            | 1,037          | 21,805              | 7,695             |  |
| CONTINGENCY                      | 322,710                           | 245,265        | 0             | 0              | 0             | 0              | 0             | 0              | 116,969             | (128,296          |  |
| PROJECT REVENUE                  | (18,115)                          | (43,675)       | 0             | (8,225)        | (2)           | (6,377)        | (5)           | (7,618)        | (123,759)           | (80,084           |  |
| PROJECT GRAND TOTAL              | 4,138,684                         | 4,496,125      | 18,527        | 3,319,399      | 43,484        | 2,613,536      | 35,646        | 2,561,035      | 4,569,541           | 73,416            |  |

#### BUDGET STATUS - JULY 31, 1992 (in \$ Millions)



Page

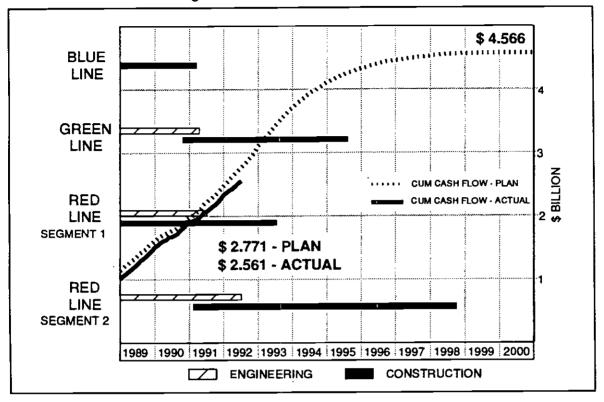


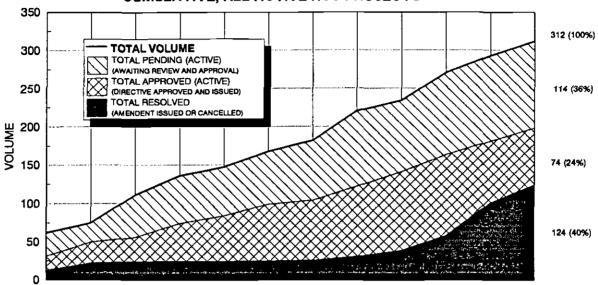
Figure 1 - Rail Construction Plan

Figure 2 - Rail Construction Funding Sources

| •              | METRO E | BLUE | METRO G | REEN | METRO  | RED    | METRO  | RED  | TOTA    | L  |
|----------------|---------|------|---------|------|--------|--------|--------|------|---------|----|
|                | LINE*   | •    | LINE    |      | SEGMEN | IT 1** | SEGME  | NT 2 | PROGRAM |    |
|                | \$      | %    | \$      | %    | \$     | %      | \$     | %    | \$      | %  |
| FTA-SEC 3      |         |      |         | :    | 605.3  | 42     | 667.0  | 46   | 1272.3  | 28 |
| FTA-SEC 9      |         |      |         |      | 90.6   | 6      |        |      | 90.6    | :  |
| STATE          |         |      |         |      | 213.1  | 15     | 186.0  | 13   | 399.1   | •  |
| LOCAL (PROP A) | 877.2   | 100  | 795.8   | 100  | 176.6  | 12     | 439.4  | 30   | 2289.0  | 5  |
| CITY OF L.A.   | :       |      |         |      | 34.0   | 2      | 96.0   | 7    | 130.0   | ;  |
| BENEFIT ASSESS |         |      |         |      | 130.3  | 9      | 58.0   | 4    | 188.3   |    |
| FORECAST       |         |      |         |      | 200.1  | 14     |        |      | 200.1   |    |
| TOTAL          | 877.2   | 100  | 795.8   | 100  | 1450.0 | 100    | 1446.4 | 100  | 4569.4  | 10 |

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

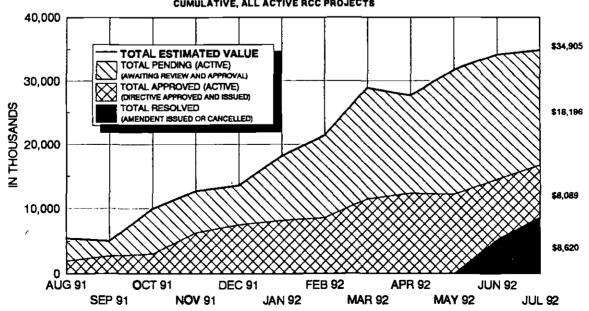
## CONSULTANT CONTRACT CHANGE SUMMARY CONSULTANT CHANGE REQUEST RESOLUTION CUMULATIVE, ALL ACTIVE RCC PROJECTS



AUG 91 SEP 91 OCT 91 NOV 91 DEC 91 JAN 92 FEB 92 MAR 92 APR 92 MAY 92 JUN 92 JUL 92

|         | AGE OF UNRESOLVED CONSULTANT CHANGES |            |            |         |              |  |  |  |  |  |  |  |
|---------|--------------------------------------|------------|------------|---------|--------------|--|--|--|--|--|--|--|
| TIME    | 0-30 DAYS                            | 30-60 DAYS | 61-90 DAYS | OVER 90 | TOTAL ACTIVE |  |  |  |  |  |  |  |
| VOLUME  | 14                                   | 17         | 21         | 138     | 188          |  |  |  |  |  |  |  |
| PERCENT | 6%                                   | 9%         | 11%        | 72%     | 100%         |  |  |  |  |  |  |  |

## CONSULTANT CONTRACT CHANGE SUMMARY CONSULTANT CHANGE REQUEST VALUES CUMULATIVE, ALL ACTIVE RCC PROJECTS



#### **EXECUTIVE SUMMARY**

## CONSULTANT CONTRACT CHANGE STATUS SUMMARY CHANGES/AMENDMENTS \* AS OF 07/31/92

( \$ = THOUSANDS)

| CONSULTANT CONTRACTS    |    | SCAL:<br>1/MC005 | PB/DMJM: PD: OKA: OTHER PROJECT |        |     | MONTH  |    | VARIANCE |              |       |     |        |  |                       |                     |
|-------------------------|----|------------------|---------------------------------|--------|-----|--------|----|----------|--------------|-------|-----|--------|--|-----------------------|---------------------|
|                         | #  | \$               | A                               | \$     | #   | \$     | #  | \$       | #            | \$    |     | \$ %   | #  | \$                    | \$                  |
| RO1: BLUE LINE          | 9  | 1,438            |                                 |        |     |        |    |          | 3            | 125   | 12  | 1,563  | 10   | 1,470                 | 2 93                |
| RO5: PASADENA LINE      |    |                  | 2                               | 14     |     |        |    |          | 2            | 26    | 4   | 40     | 2  | 14                    | 2 26                |
| R23: GREEN LINE         | 73 | 4,508            |                                 |        |     |        | 22 | 1,523    | 3            | 42    | 98  | 6,073  | 97   | 6,142                 | 1 (69)              |
| R80: RED LINE SEGMENT 1 |    |                  | 9                               | 548    | 84  | 8,622  |    |          |              |       | 93  | 9,170  | 92   | 10,880                | 1 (1,710)           |
| R81: RED LINE SEGMENT 2 |    |                  | 49                              | 8,295  | 34  | 5,885  |    |          | 1            | 0     | 84  | 14,180 | 79   | 13,680                | 5 500               |
| R82: RED LINE SEGMENT 3 |    |                  | 13                              | 2,017  |     |        |    |          |              |       | 13  | 2,017  | 13   | 2,037                 | 0 (20)              |
| SYSTEMWIDE & OTHER      |    |                  |                                 |        | 8   | 1,862  |    |          |              |       | 8   | 1,862  | 0  | 0                     | 8 1,862             |
| CONTRACT TOTAL          | 82 | 5,946            | 73                              | 10,874 | 126 | 16,369 | 22 | 1,523    | 9            | 193   | 312 | 34,905 | 41   | MMENTS:               |                     |
| LAST MONTH              | 82 | 5,946            | 69                              | 10,104 | 116 | 16,307 | 22 | 1,523    | 4            | 343   | 293 | 34,223 | n .  | TEGORY AI<br>STEMWIDE | oded for<br>& other |
| VARIANCE                | 0  | 0                | 4                               | 770    | 10  | 62     | 0. | 0        | . <b>5</b> . | (150) | 19  | 682    | (INCLUDES SECURITY,<br>COMMUTER RAIL, ETC.). |                       |                     |

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

\* DOES NOT INCLUDE AMENDMENTS PRIOR TO 05/01/91

#### **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 Not   | Parceis Not A | vailable         |
|----------------|-----------|-----------|---------------|---------------|------------------|
|                | Number of | Parcels   | Available     | (Behind Sche  | dule)            |
|                | Parceis   | Available | (on Schedule) | Number        | Avg. Days Behind |
| Green Line     | 39        | 39        | 0             | 0             | 0                |
| Red Line Seg 2 | 74        | 39        | 27            | 8             | 163              |

#### RAIL CONSTRUCTION CORPORATION STAFF DEVELOPMENT

Figure 4 shows that 164 positions are filled with regular full time staff and 25 positions are filled with contract or temporary employees.

Figure 4 - RCC Staff Levels

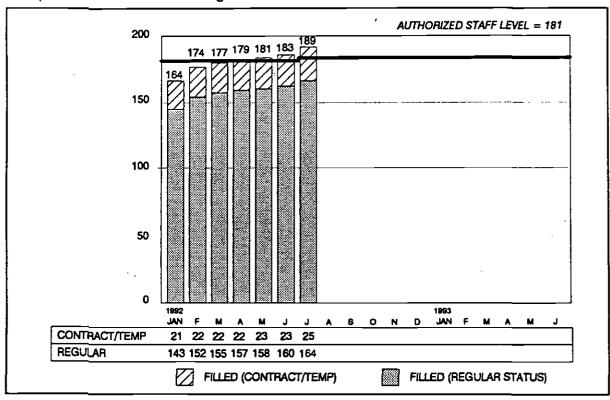


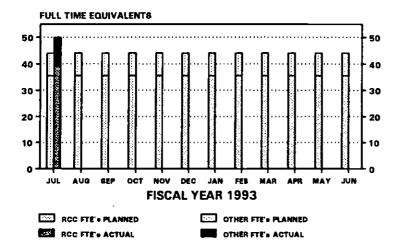
Figure 5 (on the following page) shows the LACTC/RCC staff full time equivalents and wage rate for the rail projects.

Page

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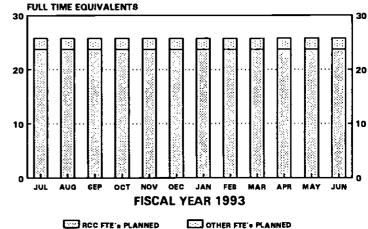
#### STAFFING PLAN VS. ACTUAL

**RED LINE SEGMENT 2** 



### STAFFING PLAN VS. ACTUAL

**RED LINE SEGMENT 1** 

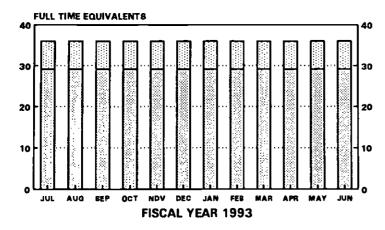


FY'93 Budget

Figure

FY 93 Budget

#### STAFFING PLAN VS. ACTUAL **GREEN LINE**



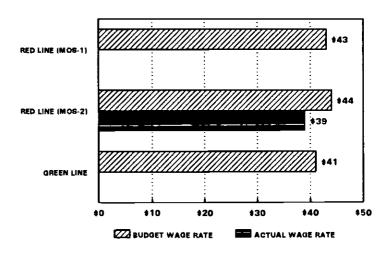
RCC FTE's PLANNED

OTHER FTE's PLANNED

FY'93 Budget

July actuals are not available. Seg 2 reflects June actuals.

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



\*Salaries end Frings Benefite Only



#### RAIL CONSTRUCTION CORPORATION

EXECUTIVE SUMMARY LABOR DISTRIBUTION REPORT
For Period: June 1992
(All Figures in FTE Person Months)

Page: 1
Date: 7/28/92
Time: 1:51 pm

|                       |                              |           | 01<br>Line   | Pasa        | 05<br>dena    | Green        | 23<br>Line     | Red        | 30<br>Seg 1    | Red S      |                | Red :      | 82<br>Seg 3  | Sub<br>Total                 | R60/70<br>Comm Rail   | Rxx<br>Other Proj    | R92<br>System Wide      | 000<br>Overhead          | Sub<br>Total             | Gra<br>Tot      | nd<br>al         | ANNUAL |
|-----------------------|------------------------------|-----------|--------------|-------------|---------------|--------------|----------------|------------|----------------|------------|----------------|------------|--------------|------------------------------|-----------------------|----------------------|-------------------------|--------------------------|--------------------------|-----------------|------------------|--------|
| DIVISION              |                              | PER       | YTD          | PER         | YTO           | PER          | TTD            | PER        | YTD            | PER        | YTD            | PER        | YTD          | PER YTO                      | PER YTD               | PER YTO              | PER YTO                 | PER YTD                  | PER YID                  | PER             | YTD              | BUDGET |
| Strategic Group       | BLDGET<br>ACTUAL             | .8<br>1.1 |              | 1.8         |               | 0.0<br>3.2   | 18.9<br>31.5   | 1.4<br>1.2 | 10.1<br>9.7    | 4.1<br>2.3 | 25.7<br>16.6   | 2.4<br>0.0 | 12.3         | 10.5 × 87.5<br>8.1 .73.7     | N/A                   | N/A                  | H/A                     | H/A                      | H/A                      | 10.5<br>8.1     | 87.5<br>73.7     | 87.5   |
| Area Teams            | BLIDGET<br>ACTUAL            | 0.0       | .6<br>1.2    | 1.6         |               | 0.0          | 4.2<br>4.3     | .2         | 3.2            | .1<br>1.2  | 5.1<br>14.0    | 1.1<br>1.4 |              | 2.9 31.0<br>2.8 39.6         | H/A                   | H/A                  | H/A                     | N/A                      | N/A                      | 2.9<br>2.8      | 31.0<br>39.6     | 31.0   |
| FAST                  | BUDGET<br>ACTUAL             | 1.4       |              | 2.4         |               | 1.8          | 23.1<br>20.4   | 1.1        | 14.3<br>14.5   | 6.8<br>6.8 | 71.9<br>75.7   | 6.3<br>.6  | 15.3<br>2.9  | 19.8 146.7<br>10.0 124.4     | H/A                   | N/A                  | H/A                     | N/A                      | N/A                      | 19.8<br>10.0    | 146.7<br>124.4   | 146.7  |
| Commuter Rail         | BLDGET<br>ACTUAL -           | 0.0       | 0.0          | 0.0         |               | 0.0          | .3             | 0.0        | .2<br>0.0      | 0.0        | 2.1<br>0.0     | 0.0<br>0.0 | 0.0          | 0.0 3.4<br>0.0 3.3           | N/A                   | N/A                  | N/A                     | H/A                      | N/A                      | 0.0<br>0.0      | 3.4              | 3.4    |
| Rail Construction Con | poration<br>BLDGET<br>ACTUAL | .5<br>1.6 |              | 13.6        |               |              | 314.1<br>292.1 |            | 266.4<br>259.2 |            | 329.1<br>301.3 | 2.4<br>2.8 |              | 106.3 1029.3<br>90.1 945.5   | 3.3 33.8<br>0.0 28.8  | 2.4 81.5<br>3.4 90.4 | 43.3 210.4<br>20.6 77.5 | 18.8 326,0<br>36.1 431.4 | 67.8 651.7<br>6011 628.1 |                 | 1681.0<br>1573.6 | 1681.0 |
| COMMISSION TO         | TAL<br>BLDGET<br>ACTUAL      |           | 40.8<br>46.3 | 19.4<br>6.0 | 112.2<br>55.7 | 32.6<br>30.1 | 360.6<br>348.7 | ∵24.2      | 294.2          | 40.8       | 434.0<br>407.5 | 3,4.9      | 56.0<br>39.3 | 139.5 1297.6<br>111.0 1183.5 | 3.3 \33.8<br>0.0 28.8 | 2.4 81.5<br>3.4 90.4 | 43.3 210.4<br>20.6 77.5 | 18.8 326.0<br>36.1 431.4 | 67.8 651.7<br>60.1 628.1 | -207.2<br>171.2 | 1949.5<br>1811.6 |        |
| ANNUAL BUDGET         | г                            | _         | 40.8         |             | 112.2         |              | 360.6          |            | 294.2          |            | 434.0          | <u> </u>   | 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 26.1% which exceeds the corporate goal by 6.1%. 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)

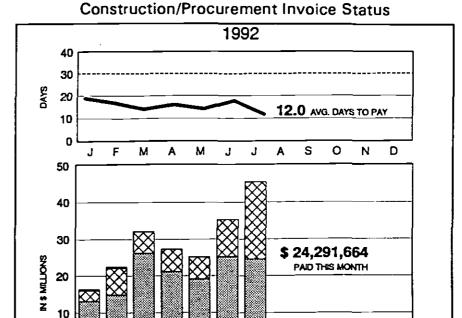
|                           | METRO BLU | IE LINE | METRO GRE | EN LINE | METRO RE  | DLINE   | METRO RE  | D LINE  | TOTAL     |         | CORPORATE |
|---------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
|                           |           |         |           | ļ       | SEGMEN    | Γ1      | SEGMEN    | T 2     | PROGRAI   | М       | GOAL      |
|                           | DOLLARS   | PERCENT |           |
| CONSTRUCTION              | 657,487   | 74.95%  | 574,102   | 72.14%  | 820,310   | 56.45%  | 1,005,061 | 59.49%  | 3,056,960 | 66.85%  |           |
| REAL ESTATE               | 55.592    | 6.34%   | 29,232    | 3,67%   | 139,679   | 9.61%   | 103,375   | 7.15%   | 327,878   | 7.17%   |           |
| PROFESSIONAL<br>SERVICES: |           |         |           |         |           |         |           |         |           |         |           |
| ENGINEERING/DES           | 69,587    | 7.93%   | 76,492    | 9.61%   | 217,418   | 14.96%  | 137,312   | 9.49%   | 500,809   | 10.95%  |           |
| CONSTR MGMT.              | 91,642    | 10.45%  | 72,689    | 9.16%   | 141,234   | 9.72%   | 131,790   | 9.11%   | 437,555   | 9.57%   |           |
| STAFF                     | 17,655    | 2.01%   | 21,390    | 2.69%   | 99,273    | 6.83%   | 57,541    | 3,98%   | 195,859   | 4.28%   | 4%        |
| OTHER                     | 14,222    | 1.62%   | 15,056    | 1,89%   | 924       | 0.06%   | 27,069    | 1.87%   | 57,271    | 1.25%   |           |
| SUBTOTAL                  | 193,106   | 22.01%  | 185,827   | 23.35%  | 458,849   | 31.57%  | 353,712   | 24.45%  | 1,191,494 | 26.06%  | 20%       |
| CONTINGENCY               | 963       | 0.11%   | 20,620    | 2.59%   | 34,418    | 2.37%   | 64,217    | 4,44%   | 120,218   | 2.63%   |           |
| PROJECT REVENUE           | (29,877)  | -3.41%  | (13,949)  | -1.75%  | 0         | 0.00%   | (79,933)  | -5.53%  | (123,759) | -2.71%  |           |
| GRAND TOTAL               | 877,271   | 100.00% | 795,832   | 100.00% | 1,453,256 | 100.00% | 1,446,432 | 100.00% | 4,572,791 | 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 12.0 days.
- 60 invoices were paid this month for a total value of \$ 24,291,664.
- ◆ There were 75 outstanding Construction or Procurement invoices under 30 days old for \$ 20,501,228.
- There was 1 outstanding Construction or Procurement invoice over 30 days old for \$ 77,413.



PAID INVOICES

TOULAR AMOUNT

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** 

OVER 30 DAYS

30 DAYS & UNDER

0

#### **OUTSTANDING INVOICES**

|          | Cons      | struction/Procu | rement Invo | ces    | Other Invoices |           |              |           |  |  |  |
|----------|-----------|-----------------|-------------|--------|----------------|-----------|--------------|-----------|--|--|--|
|          | 30 Days   | and Under       | Over 3      | 0 Days | 30 Days        | and Under | Over 30 Days |           |  |  |  |
|          | Number of | Dollar          | Number of   | Dollar | Number of      | Dollar    | Number of    | Dollar    |  |  |  |
| Month    | Invoices  | Value           | Invoices    | Value  | Invoices       | Value     | Invoices     | Value     |  |  |  |
| APR 1992 | 18        | 5,982,930       | 1           | 69,660 | 56             | 9,482,166 | 24           | 1,333,396 |  |  |  |
| MAY 1992 | 19        | 5,941,186       | 2           | 96,797 | 64             | 4,597,512 | 18           | 1,079,030 |  |  |  |
| JUN 1992 | 14        | 9,937,533       | 0           | 0      | 60             | 4,395,685 | 19           | 1,051,125 |  |  |  |
| JUL 1992 | 75        | 20,501,228      | 1           | 77,413 | 103            | 9,162,351 | 25           | 1,019,011 |  |  |  |
|          |           |                 | <u>م</u> ا  | •      |                |           |              |           |  |  |  |
|          |           |                 |             |        | <u> </u>       |           |              |           |  |  |  |

#### METROLINK - COMMUTER RAIL

## JUNE 1992 VEHICLE PROGRESS REPORT PASSENGER COACHES (UTDC)

#### PROGRESS THIS PERIOD:

- Thirty-four cars (15 cabs, 19 trailers) are presently in Midway Yard. Cars accepted: 21 conditional; 0 final.
- Production rate of two vehicles per week continues for the present.
- Car #48 in "splice", subsections for car #54 are positioned in assembly fixtures on shop floor. [Note: UTDC plant is on a three week shutdown (summer vacation) until August 10, 1992.]
- Cars #611 and #612 (involved in a minor derailment incident en route through Kansas City) were returned to Thunder Bay for detailed inspection and repair/replacement of damaged components as appropriate. The two cab cars arrived at Midway Yard following successful repair on July 2, 1992.

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

- Issuance of change order for an additional 17 cars (total quantity of 87;
   56 trailers and 31 cabs) and for spare parts of Option A and B cars.
- Pricing for pending change orders resulting from modifications required for ADA compliance has been revised and will be processed.

#### **CRITICAL NEEDS:**

None

#### **METROLINK - COMMUTER RAIL**

## JUNE 1992 VEHICLE PROGRESS REPORT LOCOMOTIVES (GM)

#### PROGRESS THIS PERIOD:

- Locomotives #3 thru #9 arrived at Midway Yard and are presently undergoing testing prior to formal SCRRA acceptance. Locomotives #10 thru #14 are en route to Los Angeles.
- Production of the remaining three locomotives in final stages in London, Ontario.
- Total quantity of locomotives presently remains at 17 Base Order, see below.
- Note: Three of the five locomotives en route to Los Angeles were part
  of an 18-car derailment near Utah. These units were rerailed and
  diverted to the Salt Lake City locomotive repair facility for complete
  inspection and repair/replacement of damaged components prior to
  continuing the journey to SCRRA's Midway Yard. Anticipated arrival in
  mid-August.

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

- Processing and cleanup of change orders and change notices.
- An option for two additional locomotives (F59PH) is being exercised pending funding finalization/approval. These locomotives are anticipated to undergo engineering study and tests regarding modifications to both prime mover and HEP engines as part of the NOx emissions reduction program.
- Finalizing quantity of additional option locomotives (#20 and beyond) required for expanded service.

#### **CRITICAL NEEDS:**

None

#### RAIL CONSTRUCTION CORPORATION PRE CONTRACT STATUS SCHEDULE SUMMARY LOOK AHEAD R60 Commuter Rail Program

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UPDATE:04-Aug-92

| Cont.<br>No. | Contractor/<br>Description         | Contract<br>Type | 85% Design<br>Approval | IFB/RFP<br>Ready | Advertise<br>Date | Pre-Bid<br>Meeting | Bid<br>Opening | Bid Report<br>Complete | RCC Board<br>Approval | Comm,<br>Approval | Contracts Lea | ud\Engineering | Lead\Project Controls L |
|--------------|------------------------------------|------------------|------------------------|------------------|-------------------|--------------------|----------------|------------------------|-----------------------|-------------------|---------------|----------------|-------------------------|
| MS021        | FIELD ENGINEERING SERVICES         | T&M              |                        | 07/28/92         | 07/29/92          | 08/05/92           | 08/17/92       | 09/03/92               |                       | 09/11/92          | LOTTERMAN     | 1/             | \                       |
| MS022        | ENGINEERING DESIGN SERVICES        | T&M              |                        | 07/28/92         | 07/29/92          | 08/05/92           | 08/17/92       | 09/03/92               |                       | 09/11/92          | LOTTERMAN     | 1/             | ١                       |
| MS023        | VEGITATION CONTROL                 | T&M              |                        | 08/14/92         | 08/17/92          | 08/26/92           | 09/10/92       | 10/02/92               |                       | 10/09/92          | LOTTERMAN     | 1/             | \                       |
| MS024        | ENVIRONMENTAL DOCUMENTS AND ST     | T&M              |                        | 08/14/92         | 08/17/92          | 08/26/92           | 09/10/92       | 10/02/92               |                       | 10/09/92          | LOTTERMAN     | 4/             | ١                       |
| · MS025      | BRIDGE INSPECTION SERVICES         | T&M              |                        | 08/14/92         | 08/17/92          | 08/26/92           | 09/10/92       | 10/02/92               |                       | 10/09/92          | LOTTERMAN     | 4/             | \                       |
| MS026        | TRACK GEOMETRY REPORTING           | T&M              |                        | 08/14/92         | 08/17/92          | 08/26/92           | 09/10/92       | 10/02/92               |                       | 10/09/92          | LOTTERMAN     | 4/             | ١                       |
| ST007        | LAX-PALMDALE ADVANCED RAIL         |                  |                        |                  | 08/16/91          | 07/31/92           | 11/02/92       | 07/08/93               | 06/15/93              | 06/23/93          | SECHLER       | \SWEDE         | ١                       |
| ST008        | LAX - PALMDALE ADVANCED RAIL(VALLE |                  |                        |                  | 08/16/91          | 07/31/92           | 11/02/92       | 07/08/93               | 06/15/93              | 06/23/93          | SECHLER       | \SWEDE         | ١                       |
| ST009        | SFV EAST - WEST ADVANCED RAIL      |                  |                        |                  | 08/16/91          | 07/31/92           | 11/02/92       | 07/08/93               | 06/15/93              | 06/23/93          | SECHLER       | \SWEDE         | \                       |
| TBD.         | UNION STATION UPGRADE              |                  |                        | 07/10/92         | 07/13/92          | 07/20/92           | 08/05/92       | 08/07/92               | 08/14/92              |                   | TBD           | \TBD           | \                       |

#### LEGEND

Page

| 0 | Open. Action still required. |
|---|------------------------------|
|   | Completed or Not Applicable  |

## CONTRACT CLOSE OUT STATUS METRO BLUE LINE

|          |                 |         | CLOS    | E OUT STA | TUS     |        |  |           |
|----------|-----------------|---------|---------|-----------|---------|--------|--|-----------|
|          |                 | CLAIMS/ | FINAL,  |           | FINAL   | EQUIP. | <u> </u>                                 | PROJECTED |
| CONTRACT |                 | CHANGE  | PROG.   | FINAL     | ACCEPT. | FINAL  |  | CLOSE-OUT |
| NUMBER   | DESCRIPTION     | ORDERS  | PAYMENT | RELEASE   | CERTIF. | DELIV. | COMMENTS                                 | DATE      |
| H840     | Fare Collection |         |         |           |         |        | 5 Manuals Resubmitted for Final Approval | Sept 92   |

#### METRO PASADENA PROJECT JULY 1992 STATUS REPORT

#### **EXECUTIVE SUMMARY**

Preliminary Engineering for the entire alignment is now underway. Aerial mapping for the alignment east of the L.A. River is being completed in segments and Bridge drawings have been obtained from Santa Fe Railroad. A supplemental Environmental Impact Report (SEIR) for three Yard and Shops locations is in the community review phase and the final report will be completed in January 1993. The Project team continues to hold meetings with the Metrolink staff as well as interested third parties (Catellus), the cities of Los Angeles, Pasadena, and South Pasadena, and community groups) in an effort to identify and solve all potential issues which might impact the project.

#### **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:

The Area Teams will prepare an SEIR for the yard options.

Status:

The SEIR has been through the review process and the Area Teams will revise and resubmit the draft for further review and comment. The SEIR will be presented to the Planning Mobility Improvement Committee in August and final approvals from PMIC

and LACTC are scheduled for January 1993.

#### 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 continues to meet with Janss and to review plan check drawings. Fire Life Safety issues and ADA requirements have been reviewed and RCC recommendations to the developer have been delivered in writing.

Status:

Several alternative station locations have been offered by the City of Pasadena. The RCC and EMC analyzed the proposed locations and found them to be unacceptable. The EIR station location (located directly within the proposed Janss development) remains the only site which is operationally viable for the project.

#### Santa Fe Right Of Way Access

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.

Action:

Representatives from the Project have reviewed schedule requirements with the Metrolink staff who are negotiating the purchase with ATSF. Efforts continue to explore alternate construction phasing in an effort to mitigate the effects of a slip to the access dates originally depicted in the Project Schedule.

Status:

Preliminary agreements have been reached with Santa Fe regarding their abandonment of the Pasadena subdivision by January 1st, 1994. There are several outstanding issues which must be addressed prior to finalization of a Term Sheet.

Santa Fe has requested approximately \$10.0 million to accelerate refurbishment of their alternate route along the San Bernardino subdivision in order to abandon the Pasadena alignment by January 1994. A decision must be reached before the end of August or the term sheet for the overall Santa Fe purchase will expire.

#### Catellus Interface At LAUPT

Concern:

Location of the LRT terminus station at Union Station involves interface with Catellus Corporation. The alignment also crosses Catellus interests at Terminal Annex.

Action:

RCC to set up a meeting with Catellus and Ratkovitch to discuss the Pasadena Alignment and its potential interfaces with their proposed developments.

Status:

A meeting was be held with the interested parties during the month of July. The Pasadena team presented the Light Rail interface within and around LAUPT and the Terminal Annex. An alignment review is in progress to determine the potential for shifting the LRT route to the center of Vignes St.

#### **KEY ACTIVITIES - JULY**

- The mathematized alignment from LAUPT to the Cornfield Yard was submitted by the EMC on 7/16.
- EMC submitted a baseline schedule for Phase II Preliminary Engineering on 7/31.
- RCC obtained Santa Fe As-Built drawings for the L.A. River Bridge. These
  drawings are being reviewed to determine the feasibility of using the existing
  bridge and or piers. If the bridge structure cannot meet structural and seismic
  requirements, a method for demolition will be determined.
- The basis for design for the Traction Power Supply System and the Overhead Contact System was submitted for RCC review on 7/15.
- Existing Utility Drawings from Union Station to the L.A. River Bridge were submitted to the RCC and Agencies for review and comment on 7/10.
- NTP for geotechnical investigation for the Phase II alignment was given to the selected subconsultant on 7/24.
- The control survey and aerial photography for the full alignment was completed on 7/24.

#### **KEY ACTIVITIES - PLANNED FOR AUGUST**

- EMC will present the revised Contract Unit Descriptions (CUD's) for RCC review
   8/31.
- The EMC will present the Pasadena Project Schedule to the RCC for review 8/3.

- Yard and Shops drawings will be delivered for RCC/SCRTD approval.
- The environmental study for the Cornfield yard will be completed by 8/17.
- The EMC will complete an alternate bridge construction study for the L.A. River bridge on 8/31. This will assist in the assessment of an acceleration of the Santa Fe refurbishment of the San Bernardino subdivision (forecasted impact to the RCC budget of \$10.0 million).
- The environmental audit for the balance of the alignment will begin by month end. Firms have been shortlisted and a recommendation will be submitted to the board at the 8/17 RCC meeting.

#### **EXECUTIVE SUMMARY**

COST STATUS (in \$ millions)

• Current Budget 722

• Current Forecast 796

#### **SCHEDULE STATUS**

Current Approved Revenue Operations Date May, 1995
 Design Progress - Plan 100% - Actual 99%
 Construction Progress - Plan 36% - Actual 29%

- Issued Notice to Proceed for Contract C0610 (El Segundo Trackwork Installation) on June 8, 1992.
- Awarded Contract H0900 (Safety and Security Communications Systems).
- Advertised Contract P2000 (Rail Transit Vehicles) on July 1, 1992.

#### **REAL ESTATE**

| MONTH      | NUMBER OF | PARCELS   | PARCELS<br>NOT                |        | OT AVAILABLE<br>SCHEDULE) |
|------------|-----------|-----------|-------------------------------|--------|---------------------------|
| MONTH      | PARCELS   | AVAILABLE | AVAILABLE<br>(ON<br>SCHEDULE) | NUMBER | AVG DAYS<br>BEHIND        |
| THIS MONTH | 39        | 39        | 0                             | 0      | 0                         |
| LAST MONTH | 39        | 39        | 0                             | 0      | 0                         |

#### AREAS OF CONCERN

#### **NEW**

There are no new areas of concern this reporting period.

#### **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 creation of a new vehicle design criteria for procurement of Metro Green Line transit vehicles as specified in Contract P2000 (Rail Transit Vehicles). It appears that Metro Green Line vehicles will not be available for systems integrated testing. In addition, driverless vehicles will not be available for operation until 1996.

Action:

Initial testing and revenue operations will utilize a manual system using Metro Blue Line vehicles. When automated, driverless prototype cars become available, automatic train control and systems integrated testing will be performed.

Status:

Contract P2000 (Rail Transit Vehicles) will provide two prototype vehicles to be used for train control testing. It was advertised for bid on July 1, 1992.

#### Caltrans Permits

Concern:

Caltrans encroachment permits are required for each contract working within Caltrans right-of-way. The first requirement was for Contract C0600 (Century Trackwork Installation).

Action:

The full permits for Contracts C0600 and H1200 (Traction Power Supply Systems) were issued May 15 and June 12, 1992, respectively. The permit for Contract C0501 (Systems Facilities Sites) was issued on July 20, 1992; permits for Contracts H1100 (Automatic Train Control), and H1400 (Overhead Contact System) were both issued on June 4, 1992.

Status:

RCC will apply for additional and remaining contract permits as necessary.

## Caltrans Project CT046 (Vermont to Main)/Contract C0600 (Century Trackwork Installation) Access Date Conflict

Concern:

Site access for Century trackwork installation scheduled May 1, 1992 will be withheld until the contract milestone is satisfied and construction is completed. Complete access is expected September 15, 1992 as currently forecast.

Action:

All work-arounds are being explored. The Caltrans contractor is being requested to control its schedule and the subcontractor's schedule. Partial access to allow the Contract C0600 contractor an opportunity to start work in small areas is being pursued. OKA has published a contractor's schedule for the remaining LRT work which is being used by OKA, Caltrans and the contractor to measure progress and forecast turnover dates.

Status:

The Contract C0600 contractor will be given access to the structures as soon as they become available. The contractor's anticipated revised construction schedule has been initiated as part of the LRT facilities change order. The contractor is working towards a completion date which coincides with information given to the Contract C0600 contractor.

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

Concern:

Documentation indicates 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 contracts. 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 deficient items were given to Caltrans as part of the punch list requiring completion prior to LRT turnover. The Caltrans Resident Engineers on Projects CT037, CT046 and CT047 have been informed of the deficiencies.

Status:

Corrections are being made to Project CT047 bent anchor bolts and the corrections are expected to be completed by the end of August, 1992. Caltrans electrical personnel have been informed of the deficient grounding of OCS anchors and are to make appropriate corrections. All corrections are to take place prior to final acceptance of the LRT facilities supplied by Caltrans.

#### RESOLVED

#### Potential Changes to Contract P1800 (Special Trackwork Procurement)

Concern:

Shop drawing processing delays, comments and modifications may have significant schedule and cost impacts to Contract P1800. Design modifications increased rail lengths to 60 feet causing availability, handling, engineering, and transportation problems. The contractor for P1800, Bethlehem Steel, is presently incorporating the above modifications.

Action:

Re-evaluation by the designer, PB/DMJM, of previous design comments and modifications to shop drawings will enable OKA to better mediate the issue. The contractor is to provide justification and back-up for potential cost increases.

Status:

Preliminary cost data from OKA has been forwarded to PB/DMJM for use in its evaluations. Schedule impacts are being evaluated.

#### **Systems Contracts Modifications**

Concern:

The intent to delete the east end of the non-revenue connector complex may necessitate the preparation of changes and negotiations with the following systems contracts: P1800 (Special Trackwork Procurement), CO600 (Century Trackwork Installation), H1100 (Automatic Train Control), H1200 (Traction Power Supply System), and H1400 (Overhead Contact System). The schedule, cost and operational impacts need to be analyzed.

Action:

The designer, PB/DMJM, is to complete the processing of these change notices.

Status:

Change technical evaluations for Contracts C0600, H1100 and P1800 were performed by PB/DMJM and OKA. It was determined that a change was not warranted for Contract H1400 and that there would be no impact to Contract H1200.

#### **KEY ACTIVITIES - JULY**

- Issued Notice to Proceed on Contract C0610 (El Segundo Trackwork Installation).
- Awarded Contract H0900 (Safety and Security Communication Systems).
- Field construction activities commenced on Contract H1200 (Traction Power Supply Systems).
- Issued Request For Proposals for Contract P2000 (Rail Transit Vehicles).

#### **KEY ACTIVITIES - PLANNED FOR AUGUST**

- Advertise Contract H0888 (Light Rail Radio System) for bid.
- Issue Notice to Proceed for Contract H0900 (Safety and Security Communications Systems).

O'BRIEN-KREITZBERG RCC Project: R23

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#### RAIL CONSTRUCTION CORPORATION HETRO GREEN LINE - HORNALK/EL SEGUNDO Project Cost by Element

Page: 1 Report Date: 08/11/92 Status Date: 07/31/92

[ \$ x 000's ]

|   |                               | Budg         | et                    | Connit        | ments   | Incurred      | Cost    | Expend        | itures         | Current         |                   |
|---|-------------------------------|--------------|-----------------------|---------------|---------|---------------|---------|---------------|----------------|-----------------|-------------------|
|   | <u>Pescription</u>            | Original (1) | <u>Current</u><br>(2) | Period<br>(3) | To Date | Peri∞d<br>(5) | To Date | Period<br>[7] | To Date<br>(8) | Forecast<br>[9] | Variance<br>(9-2) |
| 1 | Construction                  | 470, 192     | 567,950               | 10,035        | 304,460 | 5,345         | 106,978 | 6,380         | 99,202         | 563,602         | (4,347)           |
| S | Professional Services         | 108,562      | 109,629               | 248           | 133,555 | 4,732         | 96,561  | 4,308         | 92,041         | 181,036         | 71,408            |
| R | Real Estate                   | 36,927       | 29,232                | 439           | 24,014  | 181           | 23,021  | 180           | 23,020         | 29,232          | . 0               |
| F | Utility/Agency Force Accounts | 7,656        | 10,500                | 140           | 8,947   | 184           | 2,224   | 117           | 2,224          | 10,500          | 0                 |
| 0 | Special Programs              | 4,676        | 4,790                 | 0             | 1,035   | 6             | 294     | 7             | 214            | 4,790           | 0                 |
| С | Contingency                   | 59,613       | 14, 100               | 0             | 0       | 0             | 0       | 0             | 0              | 20,608          | 6,508             |
| A | Project Revenue               | (16,626)     | (13,798)              | 0             | (8,669) | 0             | (579)   | 0             | (579)          | (13,949)        | (151)             |
|   | Project Grand Total :         | 671,000      | 722,402               | 10,861        | 463,343 | 10,445        | 228,499 | 10,994        | 216,122        | 795,819         | 73,417            |

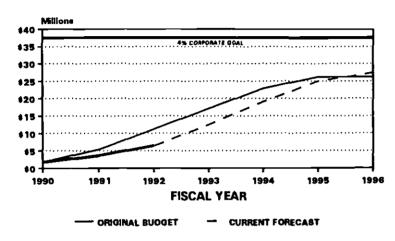
RAIL CONSTRUCTION CORPORATION METRO RAIL GREEN LINE PROJECT (IN THOUSANDS OF DOLLARS)

JULY 92

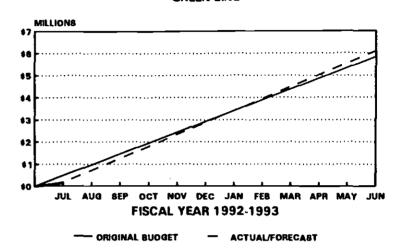
#### STATUS OF FUNDS BY SOURCE

|              | TOTAL<br>FUNDS | TOTAL<br>FUNDS | COMMITM    | ENTS | EXPENDIT   | URES | BILLED TO SOL | URCE |
|--------------|----------------|----------------|------------|------|------------|------|---------------|------|
| SOURCE       | ANTICIPATED    | AVAILABLE      | \$         | *    | \$         | *    | <b>.</b>      | *    |
| LACTO PROP A | \$205,136      | \$205, 136     | \$205, 136 | 100% | \$205, 136 | 100% | \$205,136     | 1009 |
| LACTC PROP C | \$590,683      | \$189,700      | \$258,207  | 44%  | \$10,986   | 2%   | \$10,986      | 21   |
|              | \$795,819      | \$394,836      | \$463,343  | 58%  | \$216,122  | 27%  | \$216,122     | 279  |

## AGENCY COST GREEN LINE



### FISCAL 1993 AGENCY COSTS GREEN LINE



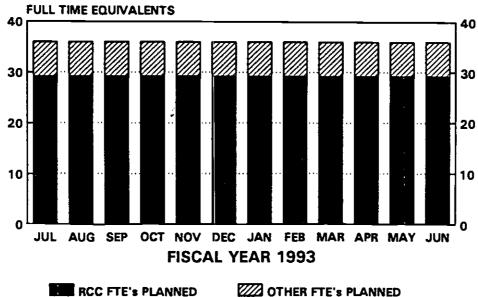
## PROJECT AGENCY COSTS GREEN LINE (\$000)

| TOTAL PROJECT BUDGET        | <b>\$716,000</b> |
|-----------------------------|------------------|
| ORIGINAL BUDGET             | <b>\$ 26,189</b> |
| BUDGET % OF TOTAL PROJECT   | 3.7%             |
| CURRENT FORECAST            | <b>\$ 27,407</b> |
| FORECAST % OF TOTAL PROJECT | 3.8%             |
| 4% CORPORATE GOAL           | \$ 28,640        |

## FISCAL YEAR 1993 AGENCY COSTS GREEN LINE (\$000)

| ORIGINAL BUDGET   | \$5,833 |
|-------------------|---------|
| FORECAST          | \$8,099 |
| ACTUAL \$ TO DATE | \$ 178  |

#### STAFFING PLAN VS. ACTUAL **GREEN LINE**



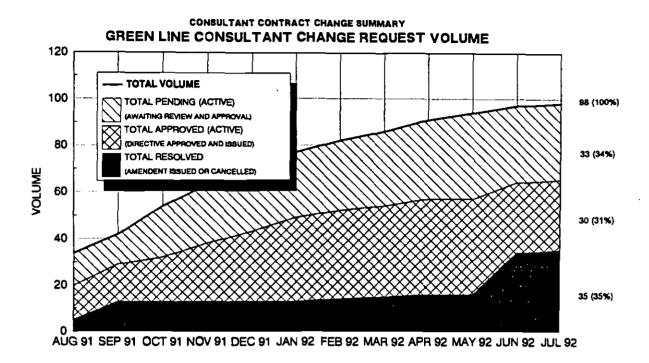
OTHER FTE'S PLANNED

FY'93 BUDGET

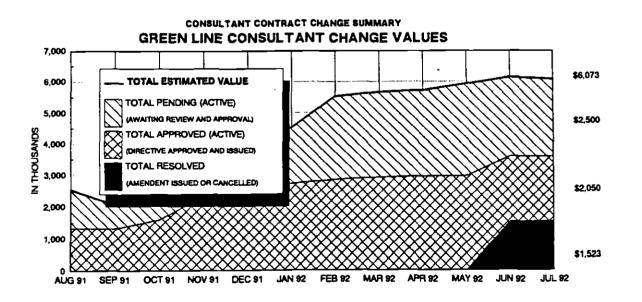
### **GREEN LINE STAFFING PLAN** FISCAL YEAR 1993

| BUDGET WAGE RATE (\$/HOUR)                | \$41 |
|---|------|
| ACTUAL WAGE RATE (\$/HOUR)                | \$   |
| RCC FTE's PLANNED RCC FTE's ACTUAL        | 29   |
| OTHER FTE's PLANNED<br>OTHER FTE's ACTUAL | 7    |
| TOTAL FTE's PLANNED TOTAL FTE's ACTUAL    | 36   |

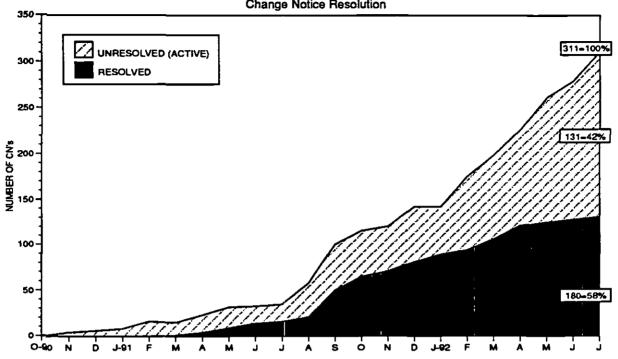
JULY ACTUALS NOT AVAILABLE UNTIL NEXT MONTH



| AGE OF UNRESOLVED CONSULTANT CHANGES |           |            |            |         |              |  |  |
|--------------------------------------|-----------|------------|------------|---------|--------------|--|--|
| TIME                                 | 0-30 DAYS | 30-60 DAYS | 61-90 DAYS | OVER 90 | TOTAL ACTIVE |  |  |
| VOLUME                               | 0         | 4          | 4          | 55      | 63           |  |  |
| PERCENT                              | 0%        | 6%         | 6%         | 88%     | 100%         |  |  |

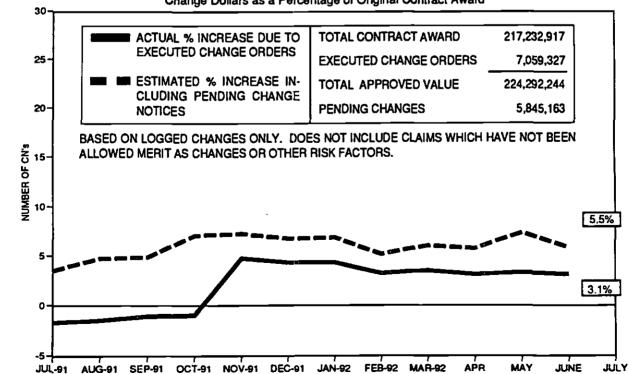




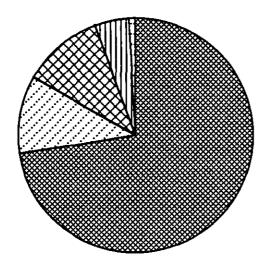


| AGE OF UNRESOLVED CHANGES |           |       |       |     |                 |  |
|---------------------------|-----------|-------|-------|-----|-----------------|--|
| TIME                      | 0-30 days | 31-60 | 61-90 | 90+ | TOTAL<br>ACTIVE |  |
| VOLUME                    | 10        | 19    | 16    | 36  | 131             |  |
| PERCENT                   | 46%       | 15%   | 12%   | 27% | 100%            |  |

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



#### CONSTRUCTION/PROCUREMENT Change Volume and Cost By Cost Level Executed Changes as of 7/31/92



CHANGE VOLUME BY CHANGE VALUE TOTAL AS OF 7/31/92 = 127

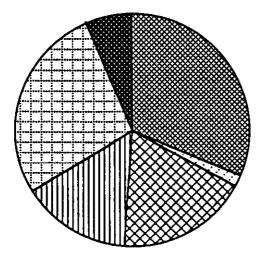
#### CHANGE VOLUME ABSOLUTE VALUES

| 92 | 72.44% |             | <25,000    |
|----|--------|-------------|------------|
| 14 | 11.02% |             | <50,000    |
| 14 | 11.02% | $\boxtimes$ | <200,000   |
| 6  | 4.72%  |             | >200,000   |
| 1  | 0.79%  |             | >1,000,000 |

#### CHANGE COST ABSOLUTE VALUES

| \$515,496.72    |             | <25,000    |
|-----------------|-------------|------------|
| \$200,714.68    |             | <50,000    |
| \$1,255,505.00  | $\boxtimes$ | <200,000   |
| (\$594, 847.11) |             | >200,000   |
| \$5,788,000.00  |             | >1,000,000 |

# CONSTRUCTION/PROCUREMENT Change Volume and Cost By Change Basis Type Executed Changes as of 7/31/92



CHANGE BASIS VOLUME TOTAL 7/31/92 = 127

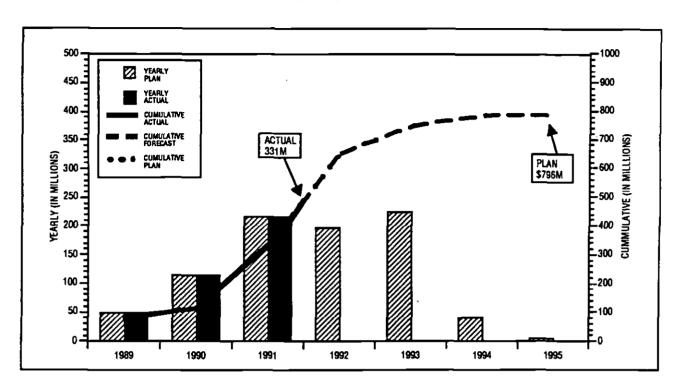
### CHANGE BASIS VOLUME ABSOLUTE VALUES

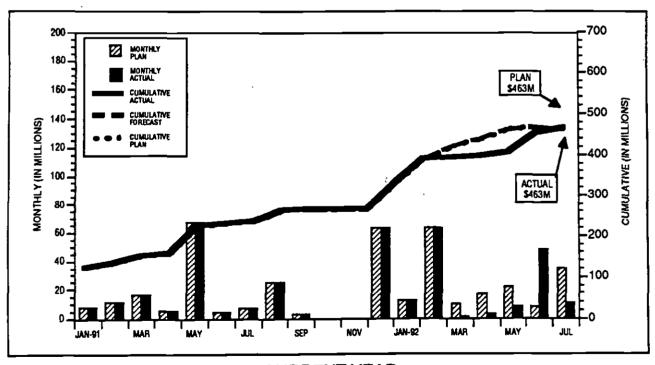
| 40 | 31.49% | Work Scope Changes     |
|----|--------|------------------------|
| 2  | 1.57%  | Schedule Changes       |
| 23 | 18.11% | Differing Conditions   |
| 19 | 14.96% | Administrative Changes |
| 35 | 27.55% | Design Changes         |
| 8  | 6.29%  | Other                  |

#### CHANGE BASIS COST ABSOLUTE VALUES

| \$298,115.83   |             | Work Scope Changes     |
|----------------|-------------|------------------------|
| \$10,685       |             | Schedule Changes       |
| \$6,425,613.00 | $\boxtimes$ | Differing Conditions   |
| \$151,774.29   |             | Administrative Changes |
| (\$739,950.19) |             | Design Changes         |
| \$1,018,630.42 |             | Other                  |

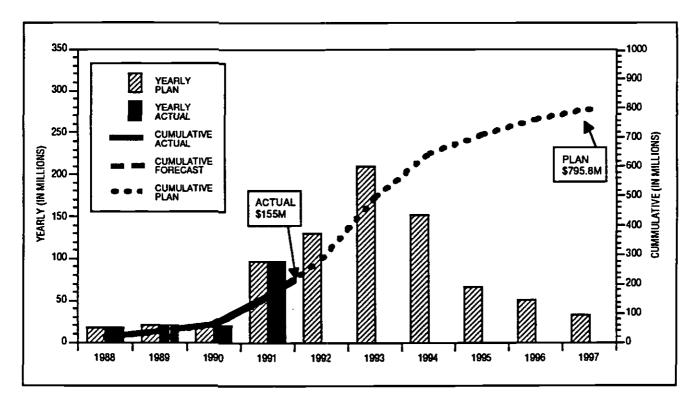
#### **PROJECT COMMITMENTS**

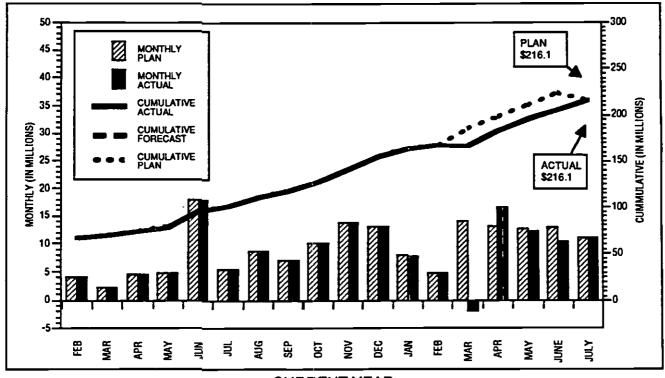




**CURRENT YEAR** 

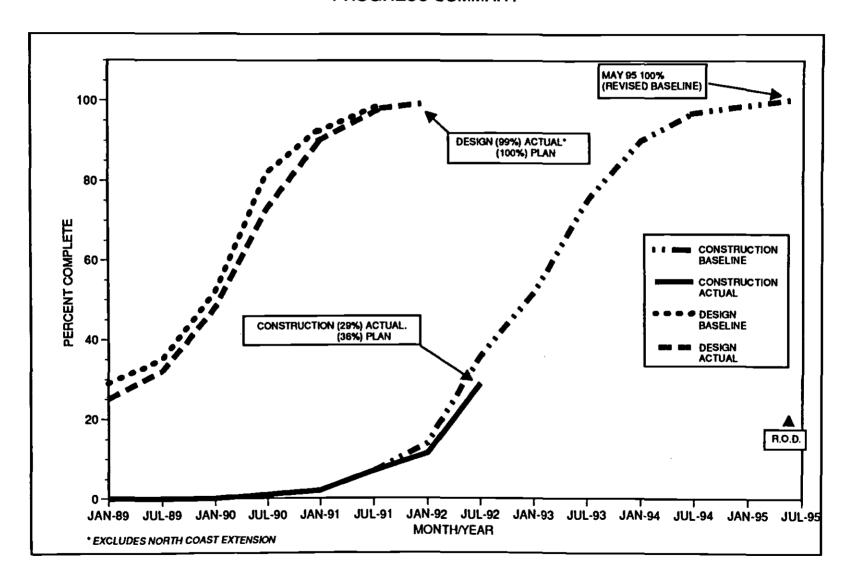
#### PROJECT CASH FLOW

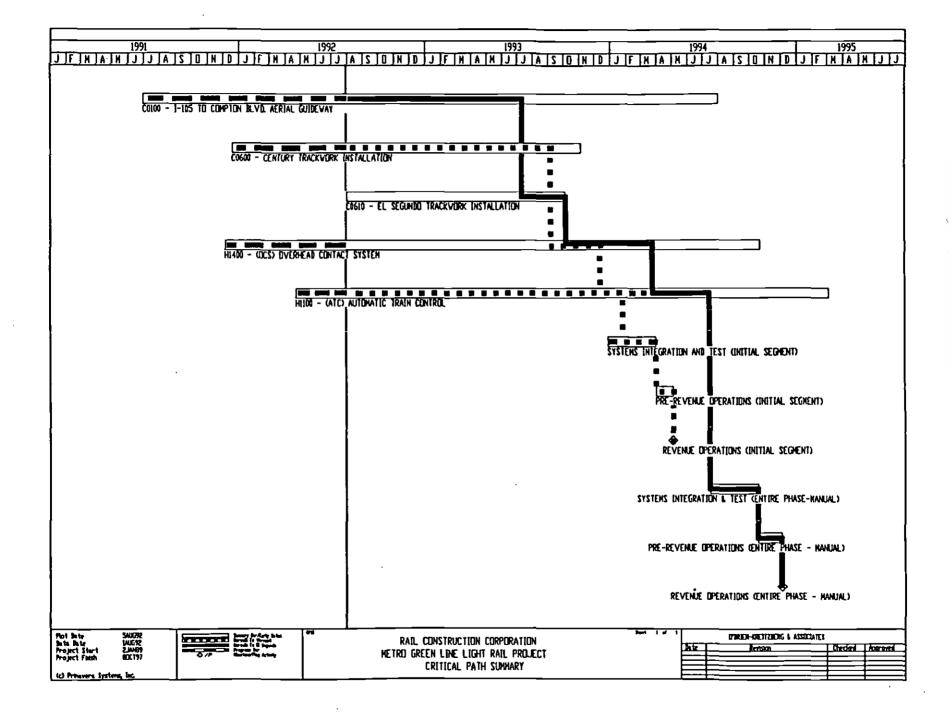




**CURRENT YEAR** 

#### **PROGRESS SUMMARY**



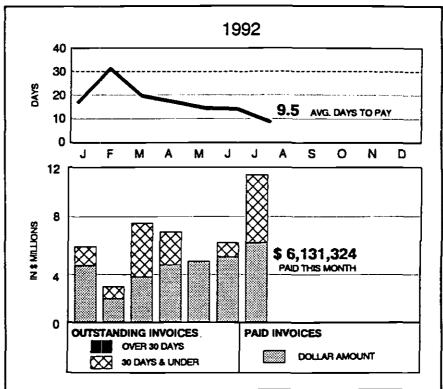


SAFETY GRAPHS ARE UNDER REVISION

## **INVOICE PROCESSING**

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 9.5 days.
- 21 invoices were paid for a total value of \$ 6,131,324.
- There were 21 outstanding Construction or Procurement invoices under 30 days old for \$ 5,235,399.
- 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**

|          | Con       | struction/Procu | rement Invo  | ices   | Other Invoices |           |              |               |
|----------|-----------|-----------------|--------------|--------|----------------|-----------|--------------|---------------|
|          | 30 Days   | and Under       | Over 30 Days |        | 30 Days        | and Under | Over 30 Days |               |
| }        | Number of |                 | Number of    | Dollar | Number of      | Dollar    | Number of    | Dollar        |
| Month    | Invoices  | Value           | Invoices     | Value  | Invoices       | Value     | Invoices     | Value         |
| APR 1992 | 5         | 2,580,289       | 0            | 0      | 16             | 5,242,814 | 9            | 88,784        |
| MAY 1992 | 1         | 10,299          |              | 0      | 14             | 1,350,268 | 7            | 83,001        |
| JUN 1992 | 3         | 1,116,012       |              | 0      | 7              | 1,406,962 | 7            | <u>88,545</u> |
| JUL 1992 | 21        | 5,235,399       |              | 0      | 7              | 270,616   | 7            | 88,545        |
|          | -         | ,,              | Ì            |        |                |           |              |               |
|          |           |                 |              |        |                |           |              |               |

## **EXECUTIVE SUMMARY**

#### **COST STATUS**

|   |                  | in \$ million |
|---|------------------|---------------|
| • | Current Budget   | 1,450         |
| • | Current Forecast | 1,450         |

• The July Construction Forecast increased primarily as a result of the additional work scope awarded to Contract A147 for the grouting of water leaks in the stations and the application of wall coatings where seepage has occurred. The Construction Forecast was also impacted by additional Task Orders identified for Contract A190; an increase in Contract A650 due to a change in the California State Sales Tax which occurred after the contract had been awarded; Contract A640 for additional Change Notices and Contract A136 for a reconciliation of Cost-Plus Change Notices (CPCN's).

## **SCHEDULE STATUS**

| • | Current Revenue Opera | March 1993 |     |
|---|-----------------------|------------|-----|
| • | Construction Progress | - Plan     | 97% |
|   |                       | - Actual   | 97% |

 The A640 contract schedule incorporating Fire & Emergency Management (F & EM) system re-configuration (CN 224) shows an expected finish date of December 3, 1992. The ROD of March 1993 is supported and there are 30 days of total float in the Project Schedule.

## **SAFETY STATUS**

• The main focus of current Safety activities is on the transition from a construction oriented work environment to an operational environment. In support of this effort 2,100 Project personnel have received Rail Activation Safety training. In addition, Safety staff participate in weekly Resident Engineer's meetings and monthly progress meetings.

## **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, two 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 Metro Red Line.

#### **Activities**

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

- Continued review of training schedule and availability of associated materials.
- Continued research and development of equipment operation training program.
- Assigned task order to contract A190 for facility maintenance support.
- Supported acceptance testing with Breda passenger vehicles.
- Supported delivery of Breda passenger vehicles 507 and 510.
- Successfully conducted two emergency response drills in support of Revenue Operations: "Fire in Shop Building Requiring Evacuation" and "De-rail in Yard with No Injuries."

## Future activities will focus on:

- Further support of delivery and testing of Breda passenger vehicles.
- Continue refinement of the recruitment and training plan to ensure support of Project requirements.
- Continue review and integration of the Breda/BAH Delivery, testing and training schedule into the Project Schedule.

## **EXECUTIVE SUMMARY (CON'T)**

- Submit plans for the safe exercise of Emergency Response Drills in accordance with the Test Integration Schedule.
- 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.
- Continue refinement of the test integration schedule.

## **AREAS OF CONCERN**

## **ONGOING**

Concern:

## Contract A640, Communications

•

LAPD radio requirements have not been incorporated into the radio

system due to lack of agreement on number of frequencies and

interface.

Action: Reach agreements with LAPD so that cost and potential schedule

impacts can be determined.

Status: LAPD has not responded to requests for meetings. A technical proposal

has been sent to LAPD and we are awaiting response to parameters

provided in the proposal.

## **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 analyzing individual Change Notices and Change Orders for cost recovery potential. This analysis is complete. All contract backcharges with recovery potential have been identified. Negotiations with contractors regarding backchargeable items have been scheduled throughout the month of August.

All individual Change Notices and Change Orders identified as having cost recovery potential have been reviewed and analyzed for merit. Six contracts have been determined to have no recoverable backcharges, negotiations have been completed recovering \$41.1-thousand on Contract A165 and four contracts remain to be negotiated with a potential recovery of \$714.5-thousand. Additional potential recovery of \$1.2-million from insurance has been identified. Contract A141 Backcharges are close to being finalized. Awaiting RCC authorization to write a Change Order for the \$41.1-thousand recovery on Contract A165.

## Increase in Change Notice Backlog

Concern:

The status of Change Notices and Cost Plus Change Notices related to

Contract A136.

Action:

Identify all issues associated with Change Notices and Cost-Plus Change Notices and establish forecast as to the maximum exposure.

Additional staff has been assigned to reduce the backlog.

Status:

Initial review of all Change Orders and Change Notices complete. Lump Sum bid packages have been developed and issued for significant efforts that were previously being performed on a Cost-Plus basis. Finalization of open Change Notices in progress.

## **AREAS OF CONCERN (CON'T)**

## **RESOLVED**

## 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. Contract A620

testing using Metro-Dade vehicles has begun.

Status:

Ten Breda vehicles have been delivered to Los Angeles and are

currently undergoing acceptance testing. Two more Breda vehicles are forecast to arrive in August. These deliveries, together with use of the Metro-Dade vehicles should provide an adequate vehicle fleet to support integrated testing without impact to the ROD. Continued monitoring of

status is required.

## FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT ITEMS FOR RCC ACTION

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

## **ONGOING**

## May 1992, Spot Report #15.

Concern:

The spot report addresses four areas of concern that need SCRTD

attention.

Action:

SCRTD has responded to the spot report.

Status:

Waiting for FTA review of response.

## FTA PROJECT MANAGEMENT OVERSIGHT CONSULTANT (CON'T) ITEMS FOR RCC ACTION

## May 1992, Grant Close-out Plan

Concern:

SCRTD has not responded to Hill's December request to prepare a

close-out plan for the grant.

Action:

SCRTD should complete a grant close-out plan in conjunction with the

RCC.

Status:

This plan is currently being drafted. SCRTD has not identified a forecast

completion date.

**NEW** 

NONE

**RESOLVED** 

NONE

## **KEY ACTIVITIES - JULY**

- Completed installation of SCADA central configuration at Contract A640, Communications.
- Completed all of the interior and exterior restoration work for the Roosevelt Building, Contract A167, 7th/Metro Station.
- Continued efforts toward certification and close-out by the Public Utilities Commission for Contracts A630, Traction Power Equipment; A631, Traction Power Installation; and A795, Uninterruptible Power Supply.
- Continued resolution of punchlist items at Contracts A147, Civic Center Station;
   A157, Pershing Square Station; A167, 7th/Metro Station; and A187, Westlake/MacArthur Station.
- Closed Resident Engineer offices at Contracts A147, Civic Center Station; A157,
   Pershing Square Station; A167, 7th/Metro Station; and A187, Westlake/
   MacArthur Station and moved contract completion activities to the Project office.
- Commenced safe braking distance brake calibration runs in the Yard and tunnel, Contract A620, Automatic Train Control.

## **KEY ACTIVITIES - PLANNED FOR AUGUST**

- Continue close-out of the following contracts: A130, Yard Leads and Transfer Zone; A135, Union Station; A141, Line Section, Union Station to Pershing Square and Civic Center Station; A144, Water Treatment Plant Operation; A145, Pershing Square Station; A165, 7th/Metro Station; A610, Trackwork Installation; A147, Civic Center Station; A157, Pershing Square Station; A167, 7th/Metro Station; A187, Westlake/MacArthur Station.
- Continue support of Breda vehicle arrival and testing.
- Complete installation and testing for the Metro Red Line Station and Change Order and close-out activities on Contract A136, Union Station.
- Complete trackyard restoration at Union Station, Contract A136.
- Complete wheel press testing and training, Contract A732, Wheel Truing Machine.

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

STATUS PERIOD: JUNE 27, 1892 TO JULY 31, 1992

STATUS DATE : JULY 31, 1992

UNITS : DOLLARS IN THOUSANDS

PROJECT: REO METRO RAIL REOLINE SEGMENT 1

|         |                       | ORIGINAL  | CURREN | T BUDGET  | COMM   | TMENTS           | INCUR  | RED COST  | EXPER  | DITURES   | CURRENT | FORECAST  | VARIANCE<br>(11-3) |
|---------|-----------------------|-----------|--------|-----------|--------|------------------|--------|-----------|--------|-----------|---------|-----------|--------------------|
| ELEMENT | DESCRIPTION           |           | PERIOD | TO DATE   | PERIOD | TO DATE          | PERIOO | TO DATE   | PERIOD | TO DATE   | PERIOD  | TO DATE   |                    |
|         |                       | (1)       | (2)    | ដា_       | (4)    | (5)              | (6)    | (7)       | (8)    | (9)       | (10)    | (11)      | (12)               |
| T       | CONSTRUCTION          | 696,158   | 0      | 751,972   | 2,381  | 769,413          | 17,756 | 718,608   | 12,058 | 712,041   | 3,237   | 809,292   | 58,320             |
| \$      | PROFESSIONAL SERVICES | 397,755   | 0      | 461,930   | 0      | 451,632          | 2,768  | 436,973   | 2,768  | 436,973   | 0       | 457,925   | (4,005)            |
| R       | REAL ESTATE           | 90,894    | 0      | 139,820   | o      | 126, <b>2</b> 37 | 0      | 126,237   | 0      | 126,237   | o       | 139,679   | (141)              |
| F       | UTILITY RELOCATIONS   | 10,920    | 0      | 12,140    | 0      | 12,018           | 43     | 8,702     | 43     | 8,702     | ٥       | 12,018    | (122)              |
| 0       | SPECIAL PROGRAMS      | 948       | ۰      | 948       | 0      | 847              | 37     | 601       | 37     | 601       | ٥       | 924       | (24)               |
| ε       | PROJECT CONTINGENCY   | 53,225    |        | 83,209    | 0      | 0                | 0      | ۰         | ٥      | ۰         | (3,237) | 31,181    | (52,028)           |
| A       | PROJECT REVENUE       |           | 0      | ۰         | 0      | 0                | 0      | 0         | (3)    | (1,241)   | 0       | 0         | 0                  |
|         | PROJECT GRAND TOTAL   | 1,249,900 | 0      | 1,450,019 | 2,381  | 1,360,147        | 20,604 | 1,291,121 | 14,903 | 1,283,313 | O       | 1,450,019 |                    |

NOTE: REFER TO APPENDEX FOR REPORT DEFINITIONS

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

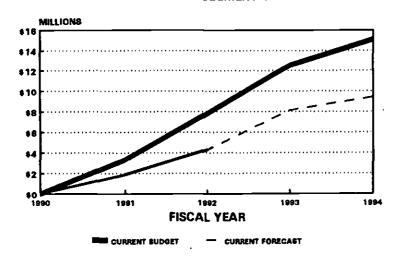
#### STATUS OF FUNDS BY SOURCE

|                               | TOTAL       | * TOTAL     | COMMITI     | MENTS | EXPENDI     | TURES | BILLED TO S       | OURCE |
|-------------------------------|-------------|-------------|-------------|-------|-------------|-------|-------------------|-------|
|                               | FUNDS       | FUNDS       |             |       |             |       |                   |       |
| SOURCE                        | ANTICIPATED | AVAILABLE   | \$          | %     | <b>\$</b>   | *     | <u> </u>          | *     |
| FTA-SECTION 3                 | \$605,300   | \$605,300   | \$594,201   | 98%   | \$573,983   | 95%   | \$564,566         | 93%   |
| FTA-SECTION 9                 | \$90,584    | \$90,584    | \$87,610    | 97%   | \$86,510    | 96%   | \$79,290          | 88%   |
| STATE                         | \$213,076   | \$214,016   | \$210,063   | 99%   | \$169,183   | 89%   | <b>\$209</b> ,213 | 98%   |
| LACTO                         | \$176,640   | \$175,701   | \$175,701   | 99%   | \$172,291   | 98%   | \$167,564         | 95%   |
| CITY OF LA.                   | \$34,000    | \$34,000    | \$32,348    | 95%   | \$31,706    | 93%   | \$29,508          | 87%   |
| BENEFIT ASSESS.               | \$130,300   | \$19,082    | \$125,262   | 96%   | \$125,282   | 96%   | \$19,08 <u>2</u>  | 15%   |
| 1) COST OVERRUN ACCOUNT       | \$200,119   | \$34,816    | \$134,680   | 67%.  | \$82,053    | 41%   | \$82,053          | 41%   |
| (2) BENEFIT ASSESS, SHORTFALL |             | \$0         |             |       | \$0         |       | \$106,2 <u>00</u> |       |
| TOTAL                         | \$1,450,019 | \$1,173,501 | \$1,359,884 | 94%   | \$1,261,008 | 87%   | \$1,257,476       | 87%   |
| NOTES:                        |             |             | ·           |       |             |       |                   |       |

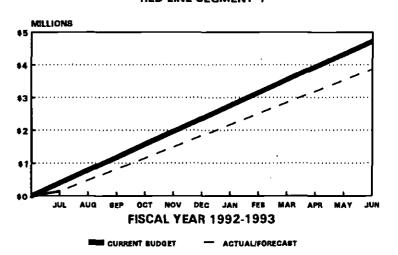
- (1) The Cost Overrun Account includes CAPRA funds as well as LACTC and City of Los Angeles contributions to cover cost overruns
- (2) The current Benefit Assessment District revenue shortfall is being funded by SCRTD and LACTC
  - Fund available are computed on a cumulative basis.

# יחרג ואאי

## AGENCY COSTS RED LINE SEGMENT 1



## FISCAL YEAR 1993 AGENCY COSTS RED LINE SEGMENT 1

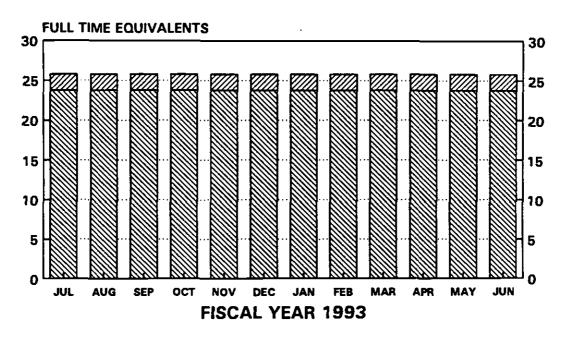


## PROJECT AGENCY COSTS RED LINE SEGMENT 1 (\$000)

## FISCAL YEAR 1993 AGENCY COSTS RED LINE SEGMENT 1 (#000)

| *Does not include \$80,864 in agency<br>by SCRTD prior to June 30, 1990. | costs expended     | ACTUAL TO DATE   | \$ 141         |
|--|--------------------|------------------|----------------|
| CURRENT FORECAST *   | <b>\$9,436</b>     | CURRENT FORECAST | <b>\$3,866</b> |
| CURRENT BUDGET *   | <b>*</b> 15,091    |                  |                |
| TOTAL PROJECT BUDGET   | <b>\$1,450,019</b> | CURRENT BUDGET   | \$4,722        |

## STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 1



RCC FTE's PLANNED

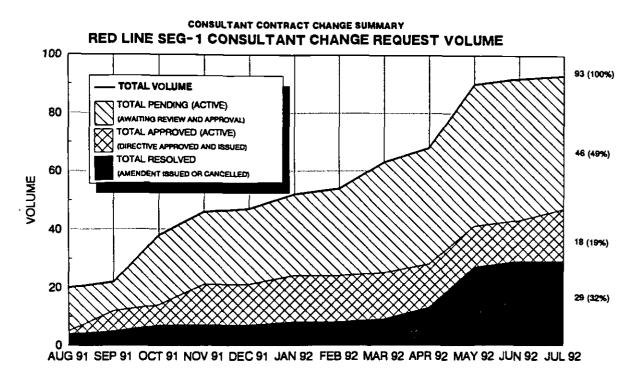
OTHER FTE's PLANNED

FY'93 Budget

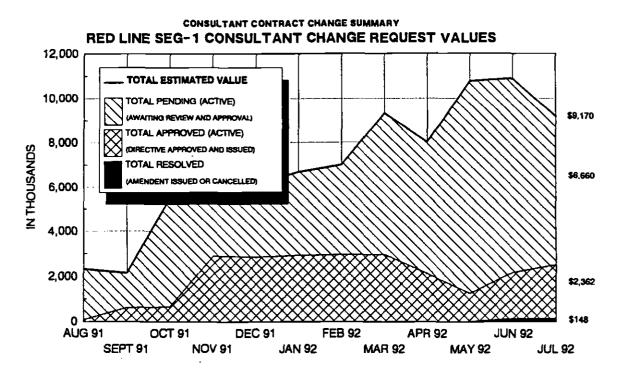
## RED LINE (SEGMENT 1) STAFFING PLAN FISCAL YEAR 1993

| BUDGET WAGE RATE (\$/HOUR)             | \$43 |
|--|------|
| ACTUAL WAGE RATE (\$/HOUR)             | \$   |
| RCC FTE's PLANNED RCC FTE's ACTUAL     | 24   |
| OTHER FTE's PLANNED OTHER FTE's ACTUAL | 2    |
| TOTAL FTE's PLANNED TOTAL FTE's ACTUAL | 26   |

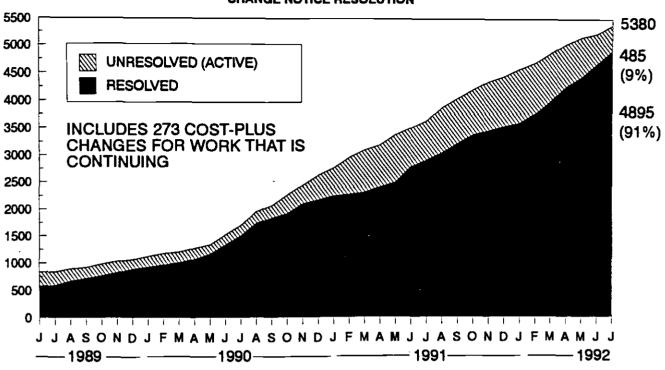
JULY ACTUALS NOT AVAILABLE UNTIL NEXT MONTH



| AGE OF UNRESOLVED CONSULTANT CHANGES |           |            |            |         |              |
|--------------------------------------|-----------|------------|------------|---------|--------------|
| TIME                                 | 0-30 DAYS | 30-60 DAYS | 61-90 DAYS | OVER 90 | TOTAL ACTIVE |
| VOLUME                               | 6         | 2          | 12         | 44      | 64           |
| PERCENT                              | 9%        | 3%         | 19%        | 69%     | 100%         |

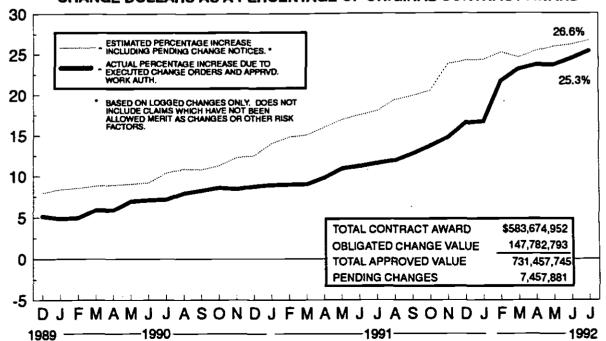


## CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE NOTICE RESOLUTION

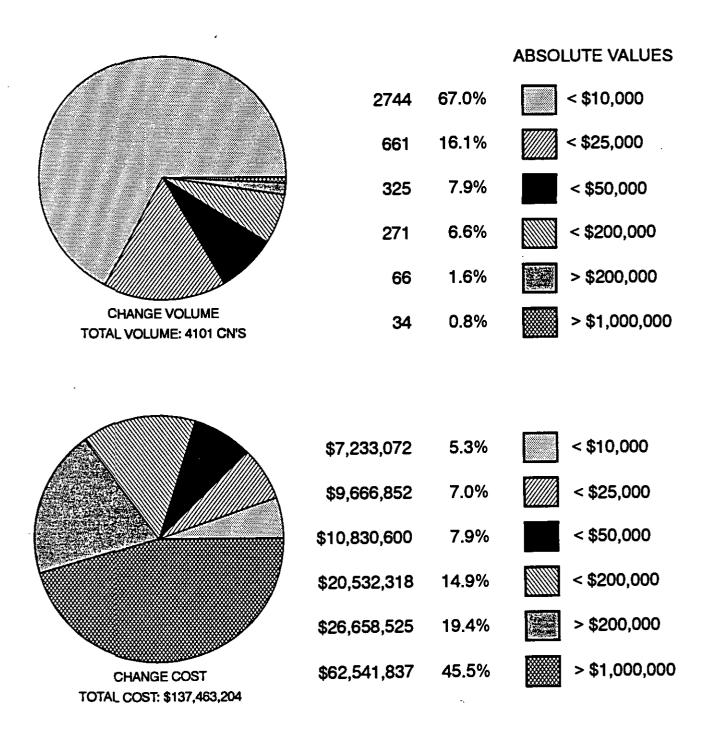


| AGE OF UNRESOLVED CHANGES |           |       |       |         |              |
|---------------------------|-----------|-------|-------|---------|--------------|
| TIME                      | 0-30 DAYS | 31-60 | 61-90 | OVER 90 | TOTAL ACTIVE |
| VOLUME                    | 69        | 40    | 47    | 329     | 485          |
| PERCENT                   | 14%       | 8%    | 10%   | 68%     | 100%         |

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

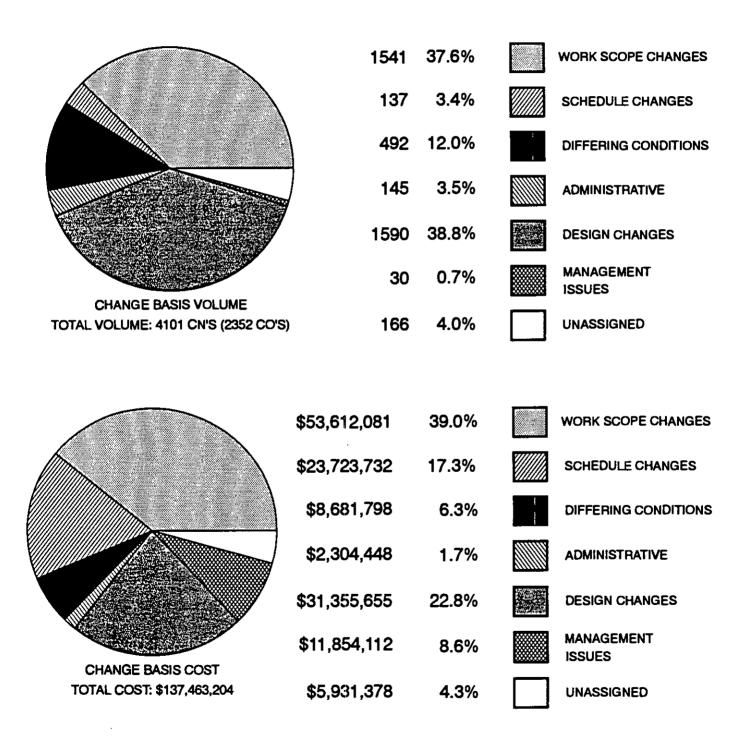


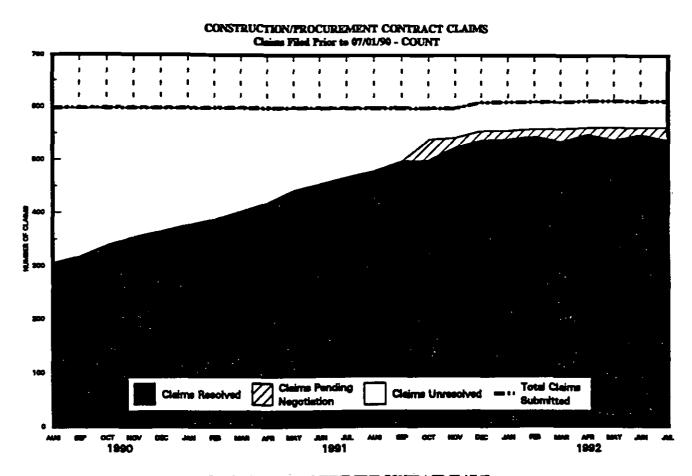
## CONSTRUCTION/PROCUREMENT CHANGE VOLUME AND COST BY COST LEVEL BASED ON EXECUTED CHANGES AS OF 07/31/92

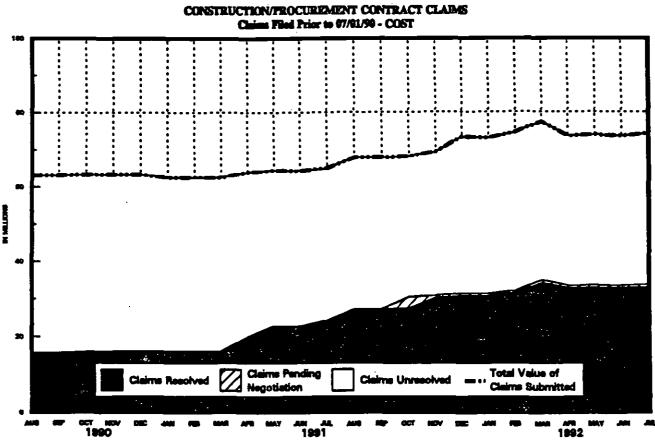


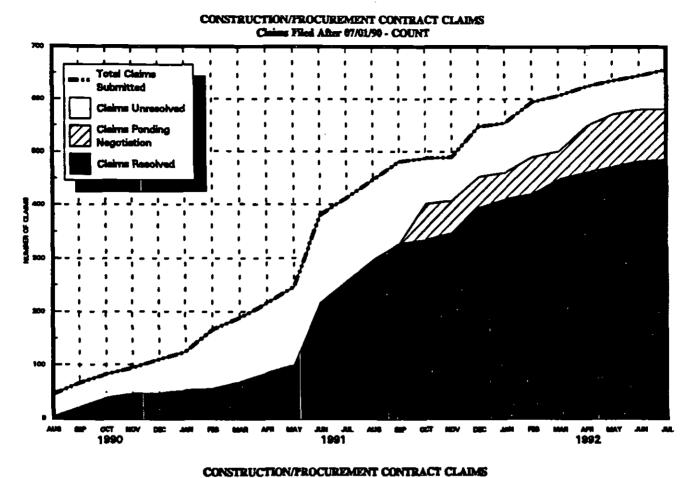
NOTE: COST LEVEL IS BASED ON CHANGE NOTICE VALUE

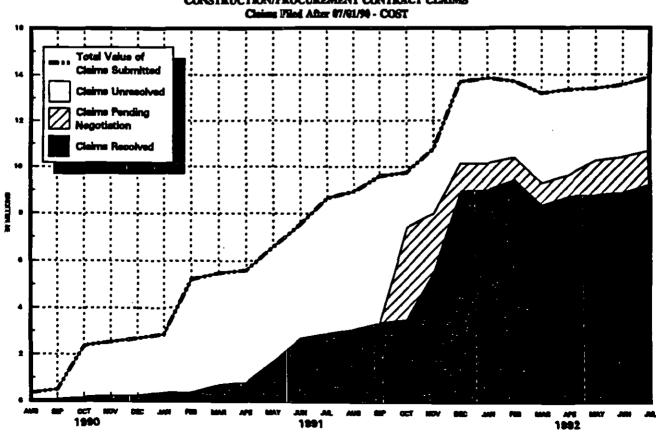
## CONSTRUCTION/PROCUREMENT CHANGE VOLUME AND COST BY CHANGE BASIS TYPE BASED ON EXECUTED CHANGES AS OF 07/31/92

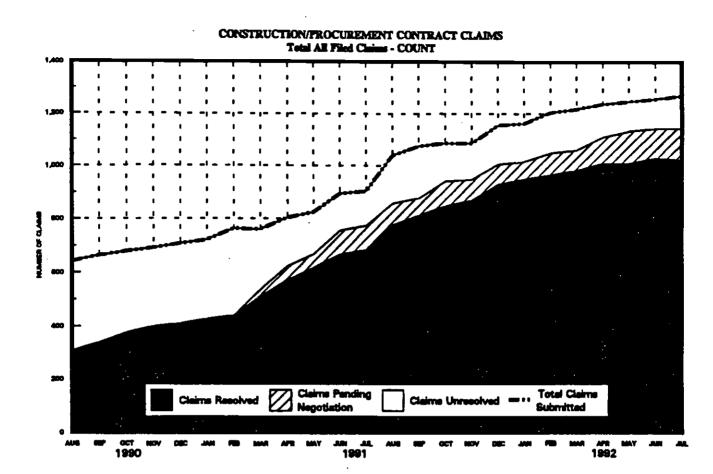


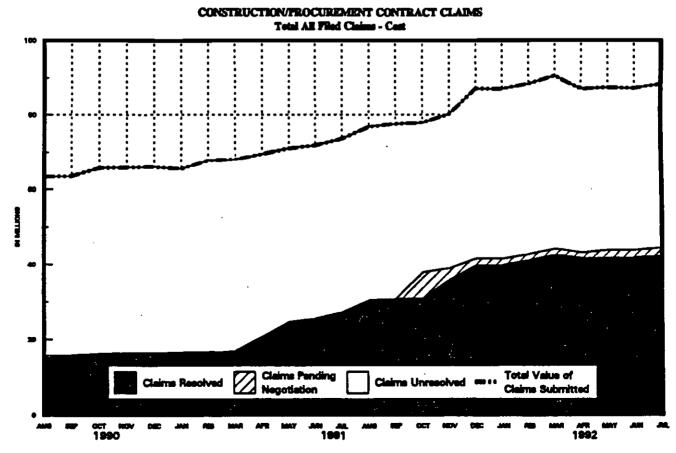




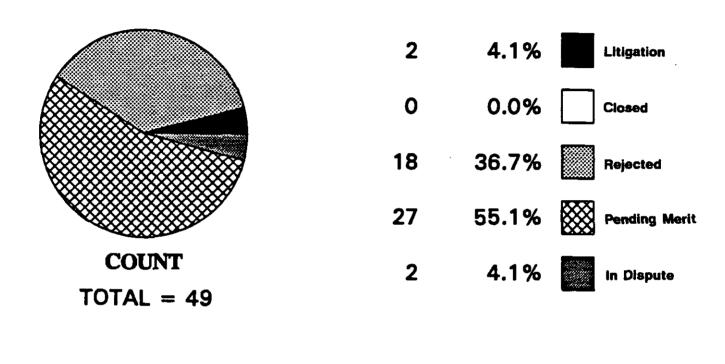


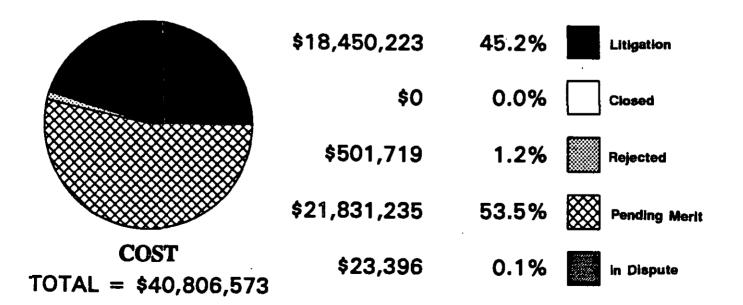




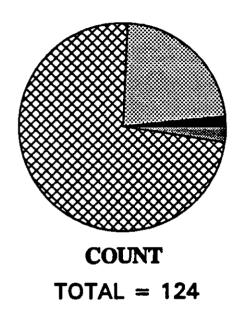


# CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS Unresolved Claims Distribution Chart Claims Filed Prior to 07/01/90 as of 07/31/92

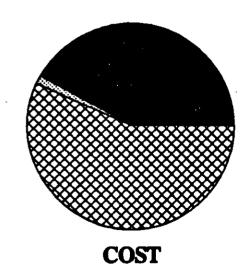


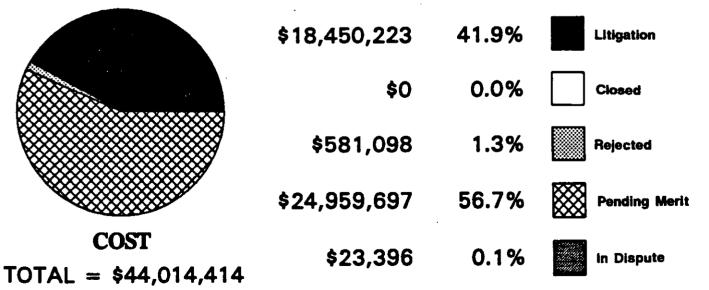


## CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS **Unresolved Claims Distribution Chart** Total All Filed Claims as of 07/31/92

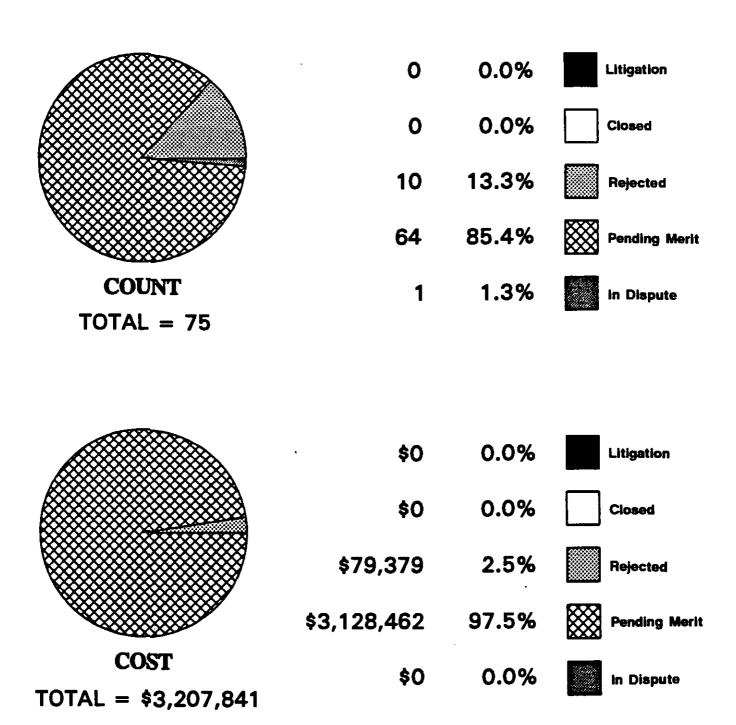


| 2        | 1.6%  | Litigation    |
|----------|-------|---------------|
| 0        | 0.0%  | Closed        |
| 28       | 22.6% | Rejected      |
| 91       | 73.4% | Pending Merit |
| <b>3</b> | 2.4%  | In Dispute    |

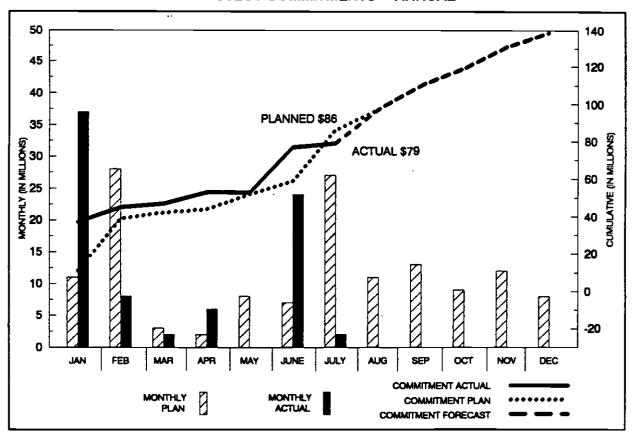




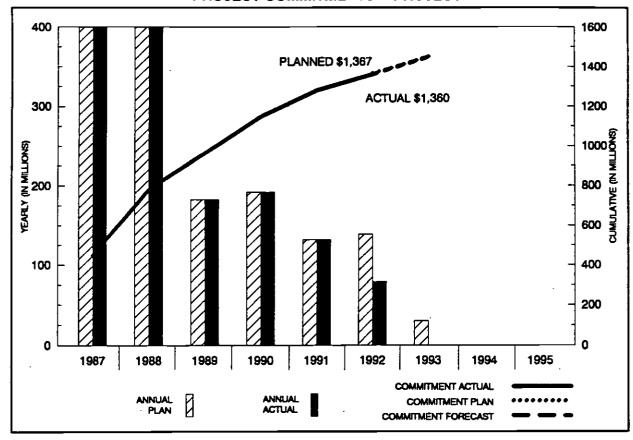
# CONSTRUCTION/PROCUREMENT CONTRACT CLAIMS Unresolved Claims Distribution Chart Claims Filed After 07/01/90 as of 07/31/92



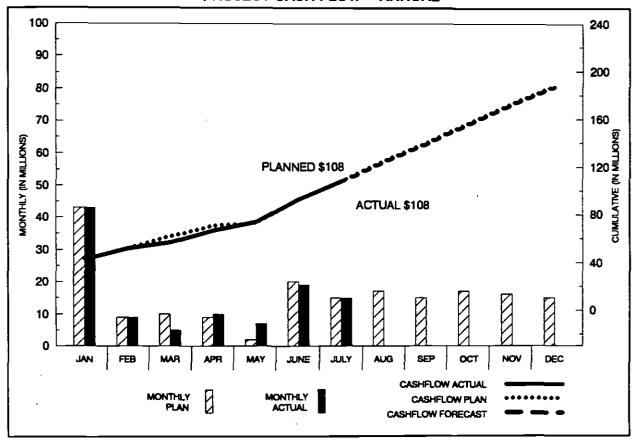
PROJECT COMMITMENTS - ANNUAL



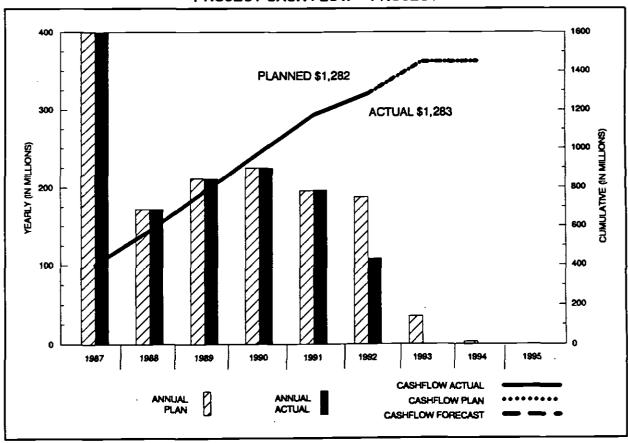
PROJECT COMMITMENTS - PROJECT

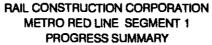


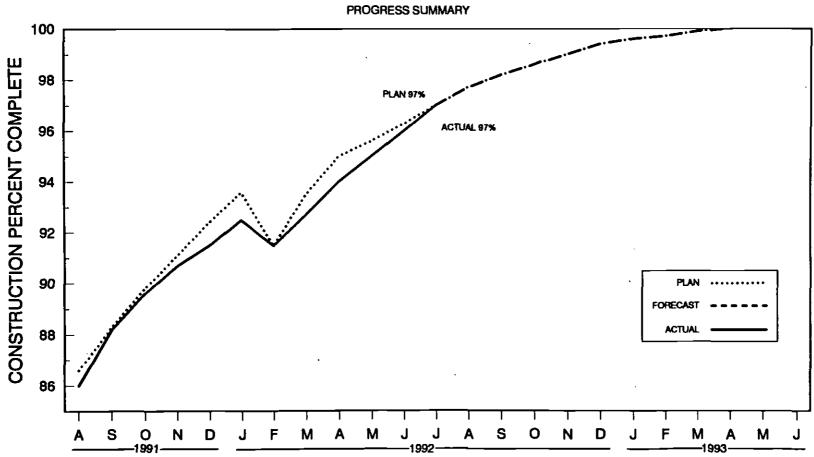
PROJECT CASH FLOW -- ANNUAL



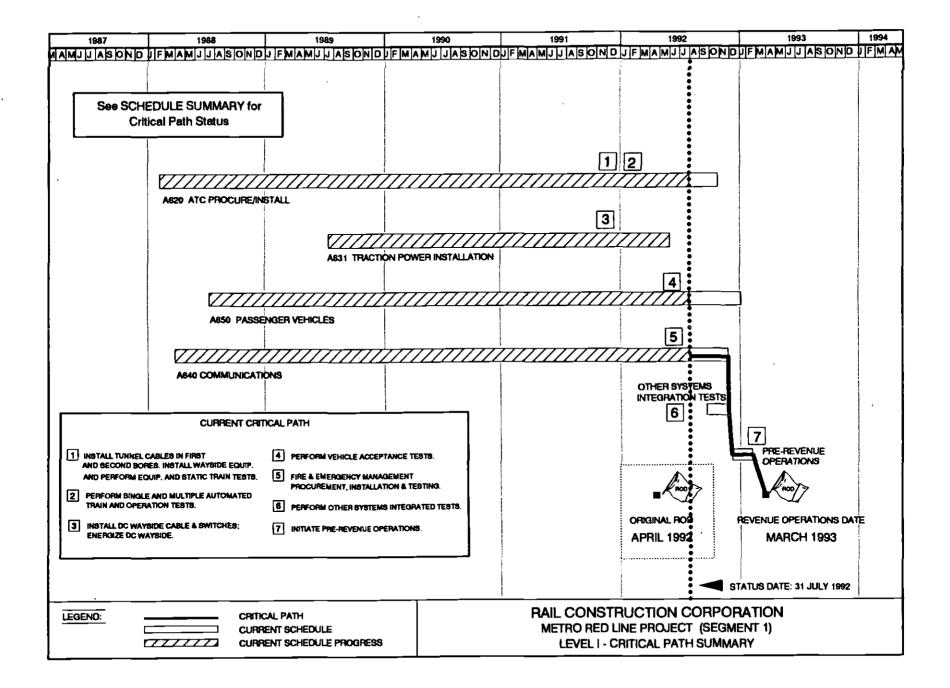
PROJECT CASH FLOW -- PROJECT







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   | JULY 1992     |
|--|---------------|
| METRO RED LINE SEGMENT 1   | JULY 1992     |
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| Safety graphs have been removed pending audit of safety progress | s statistics. |
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LEGEND

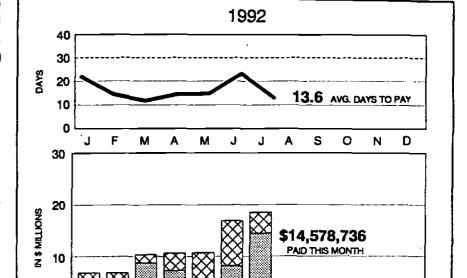
|   | <del>-</del>                 |  |  |  |
|---|------------------------------|--|--|--|
| 0 | Open. Action still required. |  |  |  |
|   | Completed or Not Applicable  |  |  |  |

## CONTRACT CLOSE OUT STATUS METRO RED LINE SEGMENT 1

|          |                               |         | CLOS    | E OUT STA | ATUS    |        | ]  |           |
|----------|-------------------------------|---------|---------|-----------|---------|--------|--|-----------|
|          |                               | CLAIMS/ | FINAL   |           | FINAL   | EQUIP. |  | PROJECTED |
| CONTRACT |                               | CHANGE  | PROG.   | FINAL     | ACCEPT. | FINAL  |  | CLOSE-OUT |
| NUMBER   | DESCRIPTION                   | ORDERS  | PAYMENT | RELEASE   | CERTIF. | DELIV. | COMMENTS                                       | DATE      |
| A130     | Yard Lead Transfer Zone       | 0       | 0       | 0         | 0       |        | Outstanding claims. Package delivery Sept 92.  |           |
| A135     | Union Station Stage I         | 0       | 0       | 0         | 0       |        | Outstanding claims. Package delivery Nov 92.   | Nov 92    |
| A136     | Union Station Stage II        | 0       | ō       | 0         | 0       |        | Outstanding claims to be resolved.             | Nov 92    |
| A141     | U/S - 5 & Hill Tunnels        | 0       | 0       | 0         | 0       |        | Outstanding claims to be resolved.             | Nov 92    |
| A144     | Op. Water Plant U/S           | 0       | 0       | 0         | 0       | 0      | Expect package delivery Aug 92.                | Aug 92    |
| A145     | Pershing Square Stage I       | 0       | 0       | 0         | 0       | 0      | Package delivered. RCC reviewing close-out.    | Sept 92   |
|          | Pershing Square/Civic Cntr    | 0       | 0       | 0         | 0       | 0      | Grouting/epoxy for water leaks continuing.     | Nov 92    |
|          | 7th & Flower Station Stage I  |         | 0       | 0         | 0       | 0      | RCC meeting with Granite to discuss settlement | Oct 92    |
| A167     | 7th & Flower Station Stage I  | 0       | 0       | 0         | 0       | 0      | Parsons-Dillingham 3 weeks behind schedule.    | Sept 92   |
|          | Wilshire/Alvar Stat. Stage II |         | 0       | 0         | 0       | 0      | Expect package delivery Sept 92.               | Sept 92   |
|          | Track Installation            | 0       | 0       | 0_        | 0       | 0      | Package delivered. RCC reviewing close-out.    | Oct 92    |

## **INVOICE PROCESSING**

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 13.6 days.
- 32 invoices were paid for a total value of \$14,578,736.
- There were 10 outstanding Construction/ or Procurement invoices under 30 days old for \$ 4,044,540.
- There was 1 outstanding Construction or Procurement invoices over 30 days old for \$ 77,413.



**PAID INVOICES** 

**DOLLAR AMOUNT** 

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
OVER 30 DAYS

30 DAYS & UNDER

0

## **OUTSTANDING INVOICES**

|                 | Con               | struction/Procu | rement Invoic | es      | Other Invoices    |           |              |           |  |
|-----------------|-------------------|-----------------|---------------|---------|-------------------|-----------|--------------|-----------|--|
| ĺ               | 30 Days and Under |                 | Over 30 Days  |         | 30 Days and Under |           | Over 30 Days |           |  |
|                 | Number of         | Dollar          | Number of     | Dollar  | Number of         | Dollar    | Number of    | Dollar    |  |
| Month           | Invoices          | Value           | Invoices      | Value _ | Invoices          | Value     | Invoices     | Value     |  |
| <b>APR 1992</b> | 12                | 3,401,258       | 0             | 0       | 15                | 2,717,095 | 7            | 1,181,178 |  |
| MAY 1992        | 18                | 5,930,887       | 2             | 96,797  | 18                | 2,257,948 | 3            | 921,181   |  |
| JUN 1992        | 10                | 8,814,433       | 0             | 0       | 24                | 1,364,108 | 4            | 878,023   |  |
| JUL 1992        | 10                | 4,044,540       | 1             | 77,413  | 57                | 6,219,425 | 4            | 807,593   |  |
|                 | ]                 |                 | ] ]           |         | J j               |           | ]            |           |  |
|                 |                   |                 | ļ.            |         |                   |           |              |           |  |

## **EXECUTIVE SUMMARY**

#### **COST STATUS**

in \$ million

• Current Budget \$1,446.4

Current Forecast \$1,446.4

The direct cost increased by \$2,676,000. There were increases to Contract B611, Running Rail Procurement, In-Progress Estimate; Contract B252, Vermont/Santa Monica Station, Re-issue Prefinal Estimate; Contract B645, SCADA, Forecast Revision; Awarded Contracts Forecast Changes; and Estimate Status Revision #9 Update of \$3,831,000. There were decreases to Contract H840, Fare Collection Equipment, Forecast Revision; Contract B241, Vermont/Beverly Station, Re-issue Prefinal Estimate; and Contract B650, Passenger Vehicle Procurement, Forecast Revisions of \$1,155,000.

## **SCHEDULE STATUS**

Current Revenue Operation Date

|   | Wilshire Corridor          | July               | 1996 |            |
|---|----------------------------|--------------------|------|------------|
|   | Vermont/Hollywood Corridor | September          | 1998 |            |
| • | Design Progress            | - Plan<br>- Actual |      | 84%<br>78% |

 Actual design progress percent complete decreased this month by a net of 2%. This decrease is due to reassessment of progress by the Section Designers to implement the ADA Program and Option 1 Station Enhancements.

| • | Construction Progress | - Plan   | 13% |
|---|-----------------------|----------|-----|
|   | •                     | - Actual | 11% |

Metro Red Line Segment 2 overall percent complete is 11% actual versus 13% planned based on an early start curve. The variance between actual and planned is due to the extension of the Notice to Proceed dates for Contract B201- Wilshire/Alvarado to Wilshire/Vermont Line and Contract B211 - Wilshire/Vermont Station, Stage I. A small portion of the variance can also be attributed to lower overall excavation rates for the station boxes along Wilshire Boulevard.

#### **REAL ESTATE**

|            | NUMBER OF  | NUMBER OF<br>PARCELS | PARCELS NOT<br>AVAILABLE | PARCELS NOT AVAILABLE<br>(BEHIND SCHEDULE) |                     |
|------------|------------|----------------------|--------------------------|--|---------------------|
|            | PARCELS AV | AVAILABLE            | (ON SCHEDULE)            | NUMBER                                     | AVG. DAYS<br>BEHIND |
| THIS MONTH | 74         | 39                   | 27                       | 8  | 163                 |
| LAST MONTH | 72         | 37                   | 31                       | 4  | 190                 |

- There are 74 parcels of land required for the Segment 2 Project. A parcel was added to both Contract B241 and Contract B252 this month. The acquisition breakdown is as follows: 29 full takes, 44 subsurface easements, and one temporary construction easement.
- To date, there have been 39 parcels acquired. Twenty-four of these parcels were acquired through condemnation, and fifteen were negotiated acquisitions.

## AREAS OF CONCERN

#### <u>ONGOING</u>

## Delay in Real Estate Acquisitions

Concern:

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

Of the eight parcels, two parcels were delayed for Environmental Studies. Three others were late certifications caused by design changes.

Action:

Maintain schedule to avoid negative float.

Status:

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

#### Blast Relief Shafts Relocation

Concern: In August 1991, 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 Parsons Brinckerhoff/DMJM Project Managers, and Parsons

Brinckerhoff/DMJM Estimating Department.

## Noise Mitigation

Concern: The noise level of construction work at Contract B221 caused

complaints from the local community. 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. No major construction work will be performed at Normandie Station during the hours of 10 p.m. to 6 a.m. A limited scope of work can be performed at night beneath the decking. Noise monitoring is conducted on a daily

basis.

Status: Noise mitigation measures continue to be implemented to reduce the level of construction noise to limits specified under the contract.

Although noise levels are generally within the contract limits, noise complaints from the public are still being received. This has resulted in rescheduling or preventing construction work during specific hours. The frequency of the noise complaints is dependent upon the type of construction activity or operation performed. Studies continue to be performed to determine if additional specific mitigation measures for a particular construction activity or operation can be employed to reduce

the noise to a publicly acceptable level.

## 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 seven months after Notice-to-Proceed (February 10, 1993). Further delay may impact

the Revenue Operations Date.

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 June Monthly Project Report submitted to FTA by their Project Management Oversight Consultant, Hill International.

## **ONGOING**

April 1992

**Quality Assurance** 

Concern:

The EMC has not completed the internal QA procedures.

Action:

RCC needs to complete its review of the final draft of the

procedures.

Status:

The RCC is reviewing the final draft of the QA procedures.

<u>NEW</u>

NONE

#### RESOLVED

February 1992

Project Management Plan

Concern:

Progress in revising the PMP has been too slow.

Action:

Complete typing and release.

Status:

**RESOLVED** - Final version in wordprocessing.

#### **KEY ACTIVITIES - JULY**

- Continued pocket track structure concrete and began turn-under for left alignment tunnel excavation at Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line.
- Continued station vault excavation/support at Contract B211, Wilshire/Vermont Station.
- Continued turnout structure excavation, station vault excavation, installation of soldier piles for appurtenant structures, completed utility support at station at Contract B221, Wilshire/Normandie Station and Wilshire/Vermont to Wilshire/Western Line.
- Completed soldier pile installation for appurtenant structures and utility excavation/support at station and continue station vault excavation at Contract B231, Wilshire/Western Station and Crossover.
- Commission Notice to Proceed for Contract B251,
   Vermont/Hollywood Tunnel issued on July 16, 1992.
- Commenced Final Design on Option 1 Station Entrance Enhancements for Contract B241, Vermont/Beverly Station, Contract B252, Vermont/Santa Monica Station, and Contract B261, Vermont/Sunset Station.
- Bid openings were held on July 30, 1992, for Contract B740,
   Ventilation Equipment, and Contract B745, Air Handling Equipment,
   with Notice-to-Proceed planned for September 14, 1992.
- The In-Progress Estimate was issued for Contract B611, Running Rail Procurement.

#### **KEY ACTIVITIES - PLANNED FOR AUGUST**

- Continue excavation of left alignment tunnel and pocket track concrete at Contract B201, Wilshire/Alvarado to Wilshire/Vermont Line.
- Continue station vault excavation at Contract B211, Wilshire/Vermont Station, Stage I.
- Continue station vault and turnout structure excavation at Contract B221, Wilshire/ Normandie Station and Wilshire/Vermont to Wilshire/Western Line.
- Begin station invert concrete and continue station excavation at Contract B231, Wilshire/Western Station.
- Conduct initial construction meeting and review site and traffic plan at Contract B251, Vermont/Hollywood Tunnels.
- Issuance of In-Progress Estimates for Trackwork Contract B612, Contact Rail, Contract B614, Specialty Rail, and Contract B616, Direct Fixation Rail Fasteners.
- Issuance of Final Estimate for Contract B630, Traction Power System.

## RAIL CONSTRUCTION CORPORATION PROJECT COST REPORT COST BY ELEMENT

Project: METRO RED LINE SEGMENT 2

Period: 27-Jun-92 to 31-Jul-92 Run Date: 18-Aug-92

Units: Dollars in Thousands

| _                                 | ORIGINAL<br>BUDGET | CURRENT BUDGET |           | COMMITMENTS |         | INCURRED COSTS |         | EXPENDITURES |         | CURRENT FORECAST | FORECAST    | FORECAST |
|-----------------------------------|--------------------|----------------|-----------|-------------|---------|----------------|---------|--------------|---------|------------------|-------------|----------|
| ELEMENT / DESCRIPTION             |                    | PERIOD         | TO DATE   | PERIOD      | TO DATE | PERIOD         | TO DATE | PERIOD       | TO DATE | PERIOD           | TO DATE     | _        |
| T Construction                    | 893,000            | ٥              | 905,830   | 593         | 310,269 | 7,122          | 126,358 | 7,191        | 118,546 | 2,676            | 977,499     | 71,689   |
| S Professional Services           | 289,150            | ٥              | 297,844   | 4,061       | 286,929 | 4,462          | 105,734 | 1,712        | 93,852  | 0                | 343,949     | 46,105   |
| R Real Estate                     | 79,827             | ۰              | 76,567    | 630         | 52,440  | 468            | 49,772  | 468          | 49,772  | ۰                | 103,375     | 26,808   |
| F Utility/Agency<br>Force Account | 36,668             | 0              | 18,404    | 0           | 4,969   | 387            | 2,128   | 367          | 2,128   | o                | 27,682<br>· | 9,158    |
| D Special Programs                | 2,044              | ٥              | 2,044     | o           | 637     | 15             | 222     | 15           | 222     | ٥                | 9,763       | 7,719    |
| C Contingency                     | 145,743            | ٥              | 145,743   | ۰           | 0       | •              | 0       | ٥            | 0       | (2,676)          | 64,217      | (81,526) |
| A Project Rovenue                 | ٥                  | 0              | 0         | 0           | 0       | (2)            | (175)   | (2)          | (175)   | o                | (79,933)    | (79,933) |
| Project Grand Total:              | 1,446,432          | ٥              | 1,446,432 | 5,284       | 655,244 | 12,432         | 264,037 | 9,751        | 264,345 | 0                | 1,448,432   | •        |

NOTE: REFER TO APPENDIX FOR REPORT DEFINITIONS.

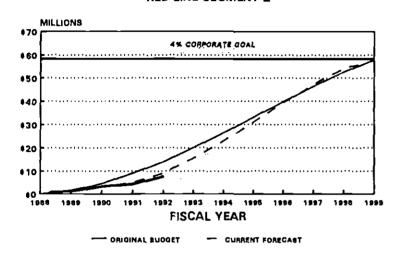
#### STATUS OF FUNDS BY SOURCE

|                                     | TOTAL<br>FUNDS | TOTAL<br>FUNDS | COMMITMENTS |     | EXPENDITURES |            | BILLED TO<br>SOURCE |     |
|-------------------------------------|----------------|----------------|-------------|-----|--------------|------------|---------------------|-----|
| SOURCE                              | ANTICIPATED    | AVAILABLE      | s           | %   | s            | *          | <b>s</b>            | %   |
| UMTA-SECTION 3                      | \$667,000      | \$478,918      | \$242,102   | 36% | \$94,282     | 14%        | \$79,079            | 124 |
| STATE                               | \$185,985      | \$27,000       | \$98,753    | 53% | \$40,583     | 22%        | \$27,000            | 15  |
| LACTC                               | \$439,447      | \$97,856       | \$247,891   | 56% | \$95,875     | 22%        | \$95,875            | 72  |
| CITY OF L.A.                        | \$96,000       | \$21,400       | \$54,415    | 57% | \$20,952     | 22%        | \$20,000            | 21  |
| BENEFIT ASSESSMENT                  | \$58,000       | so             | \$12,653    | 22% | \$12,653     | 22%        | \$0                 | 0   |
| COST OVERRUN ACCOUNT (1)            | so             | \$5,208        | \$0         | 0%  | \$0          | o <b>%</b> | \$0                 | 0   |
| BENEFIT ASSESSMENT<br>SHORTFALL (2) | \$0            | so             | so          | 0%  | \$0          | \$0        | \$12,653            | _   |
| TOTAL                               | \$1,446,432    | \$630,382      | \$655,814   | 45% | \$264,345    | 18%        | \$234,607           | 16  |

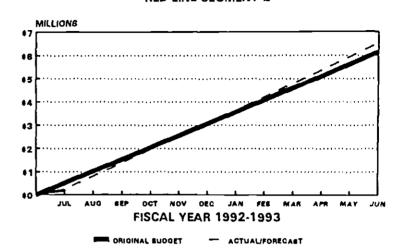
<sup>(1)</sup> THE COST OVERRUN ACCOUNT INCUDES CAPRA FUNDS ONLY.

<sup>(2)</sup> THE CURRENT BENEFIT ASSESSMENT DISTRICT REVENUE SHORTFALL IS BEING FUNDED BY LACTC.

## AGENCY COSTS RED LINE SEGMENT 2



## FISCAL YEAR 1993 AGENCY COSTS RED LINE SEGMENT 2



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

FORECAST % OF TOTAL PROJECT

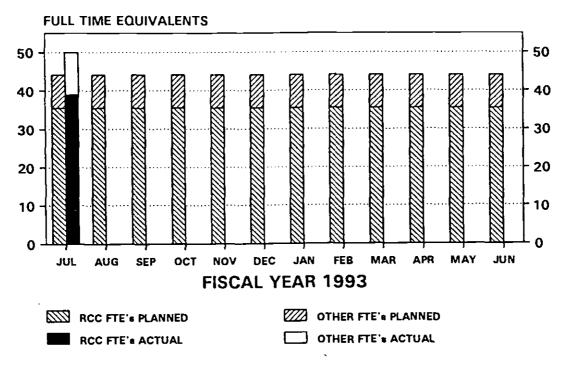
# TOTAL PROJECT BUDGET \$1,446,432 ORIGINAL BUDGET \$6,131 ORIGINAL BUDGET \$57,840 BUDGET % OF TOTAL PROJECT 4.0% CURRENT FORECAST \$6,509 CURRENT FORECAST \$244

4.0%

### FISCAL YEAR 1993 AGENCY COSTS

RED LINE SEGMENT 2 (\$000)

# STAFFING PLAN VS. ACTUAL RED LINE SEGMENT 2

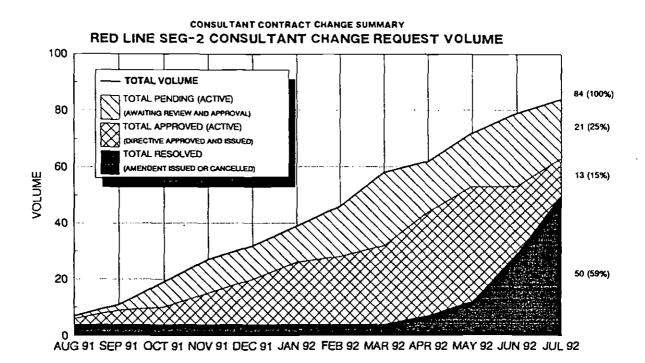


FY'93 Budget

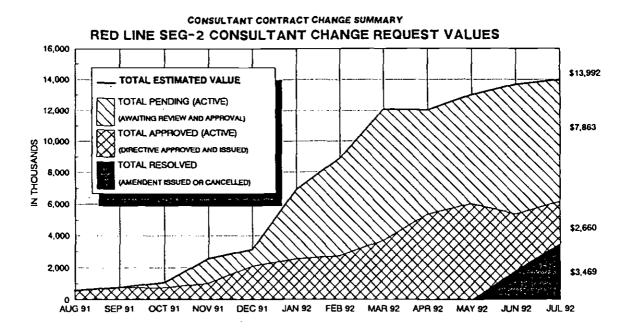
# RED LINE (SEGMENT 2) STAFFING PLAN FISCAL YEAR 1993

| BUDGET WAGE RATE (\$/HOUR)             | \$44     |
|--|----------|
| ACTUAL WAGE RATE (\$/HOUR)             | \$39     |
| RCC FTE's PLANNED RCC FTE's ACTUAL     | 35<br>39 |
| OTHER FTE's PLANNED OTHER FTE's ACTUAL | 9<br>11  |
| TOTAL FTE's PLANNED TOTAL FTE's ACTUAL | 44<br>51 |

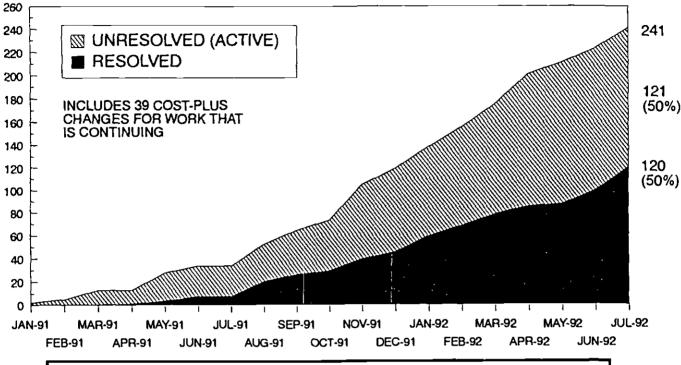
**ACTUAL DATA THROUGH JUNE 1992** 



| AGE OF UNRESOLVED CONSULTANT CHANGES |           |            |            |         |              |  |  |  |
|--------------------------------------|-----------|------------|------------|---------|--------------|--|--|--|
| TIME                                 | 0-30 DAYS | 30-60 DAYS | 61-90 DAYS | OVER 90 | TOTAL ACTIVE |  |  |  |
| VOLUME                               | 6         | 7          | 10         | 11      | 34           |  |  |  |
| PERCENT                              | 18%       | 21%        | 29%        | 32%     | 100%         |  |  |  |

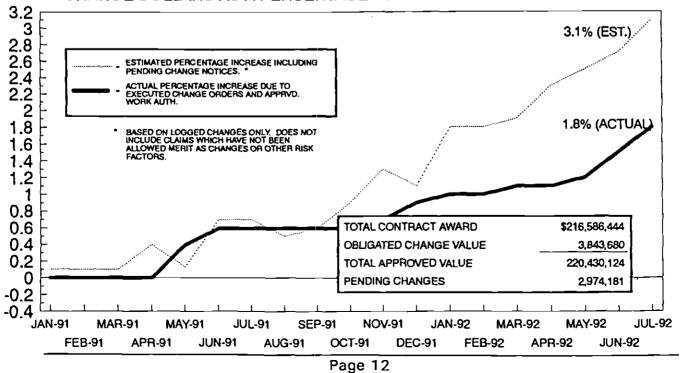


## CHANGE NOTICE RESOLUTION

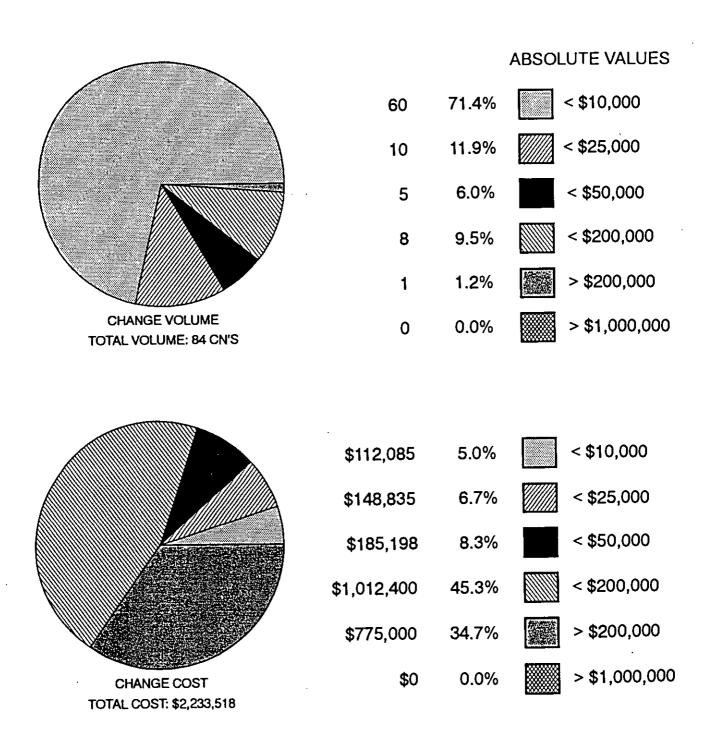


| AGE OF UNRESOLVED CHANGES |           |       |       |         |              |  |  |  |
|---------------------------|-----------|-------|-------|---------|--------------|--|--|--|
| TIME                      | 0-30 DAYS | 31-60 | 61-90 | OVER 90 | TOTAL ACTIVE |  |  |  |
| VOLUME                    | 35        | 7     | 9     | 70      | 121          |  |  |  |
| PERCENT                   | 29%       | 6%    | 7%    | 58%     | 100%         |  |  |  |

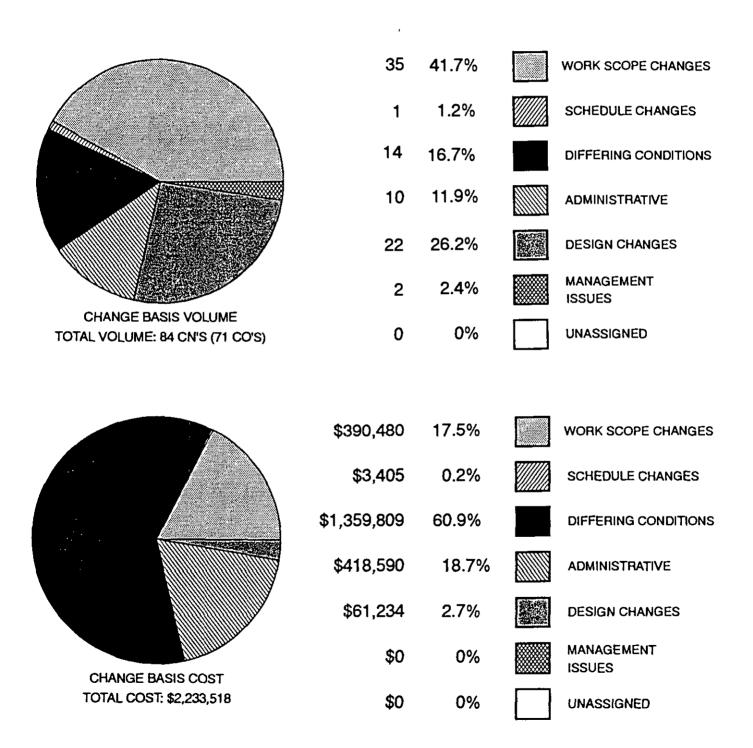
## CONSTRUCTION/PROCUREMENT CONTRACT CHANGES CHANGE DOLLARS AS A PERCENTAGE OF ORIGINAL CONTRACT AWARD



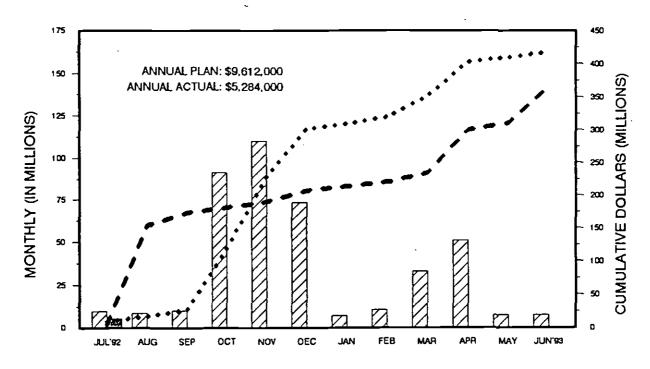
# CONSTRUCTION/PROCUREMENT CHANGE VOLUME AND COST BY COST LEVEL BASED ON EXECUTED CHANGES AS OF 07/31/92



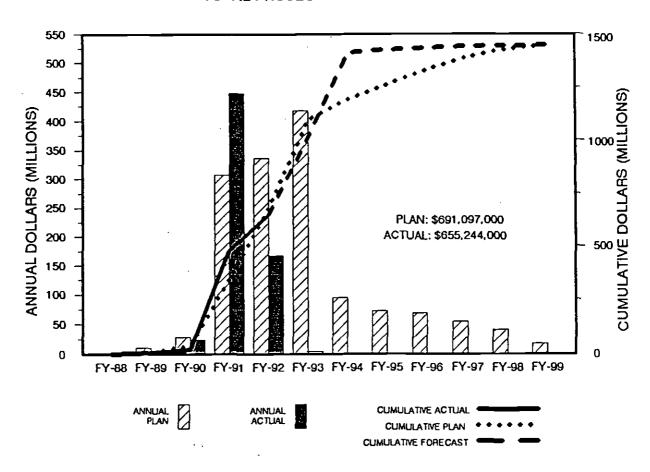
# CONSTRUCTION/PROCUREMENT CHANGE VOLUME AND COST BY CHANGE BASIS TYPE BASED ON EXECUTED CHANGES AS OF 07/31/92

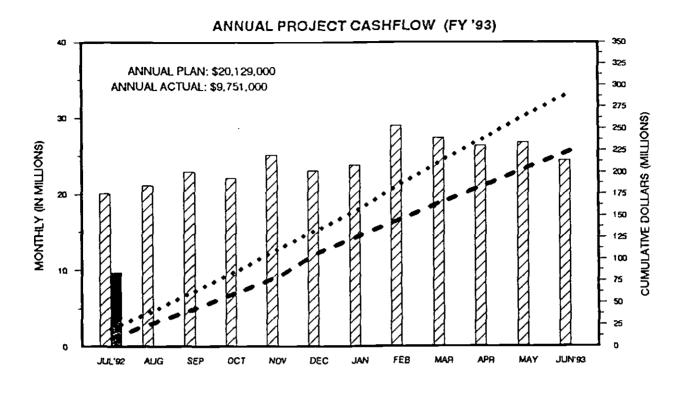


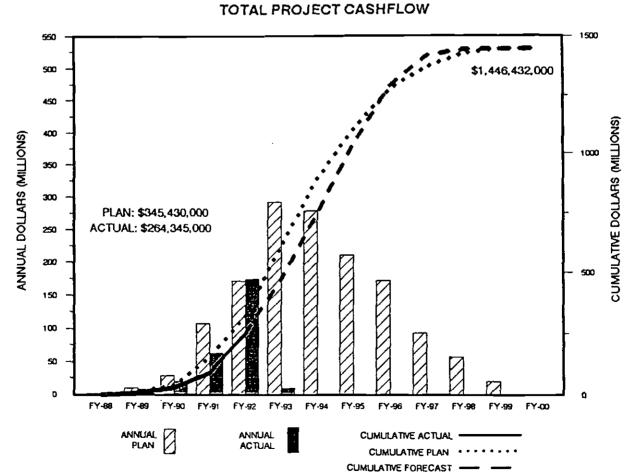
ANNUAL PROJECT COMMITMENTS (FY '93)



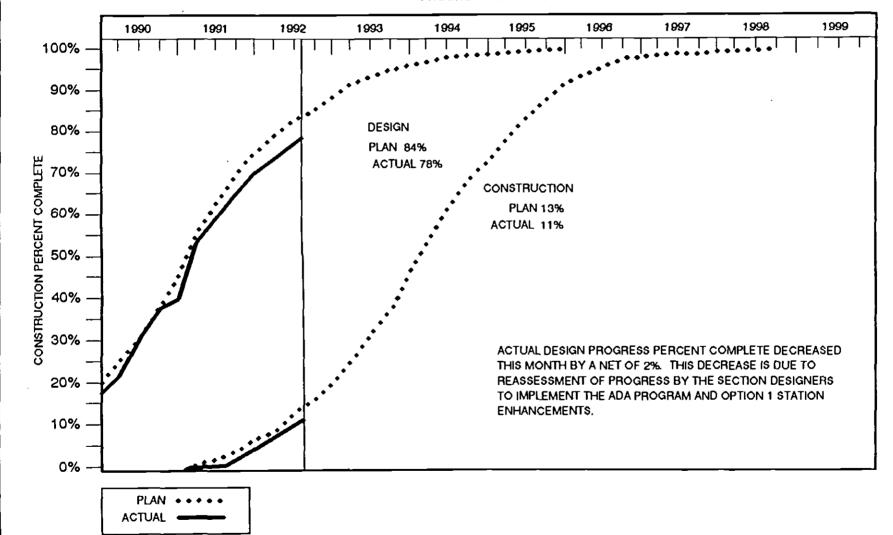
TOTAL PROJECT COMMITMENTS



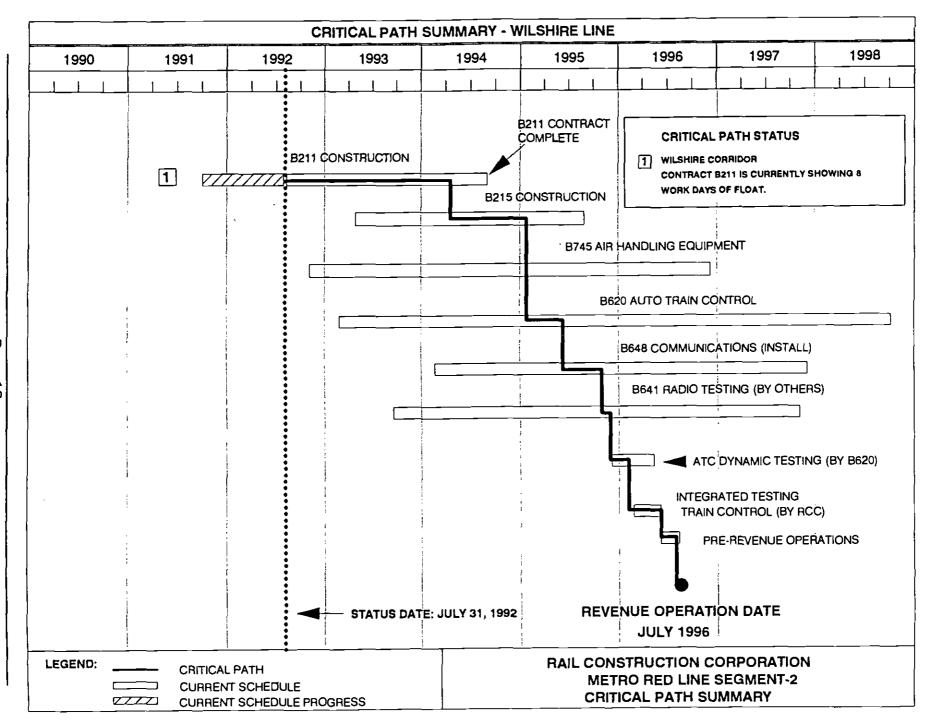




# RAIL CONSTRUCTION CORPORATION METRO RED LINE SEGMENT 2 PROGRESS SUMMARY



Page

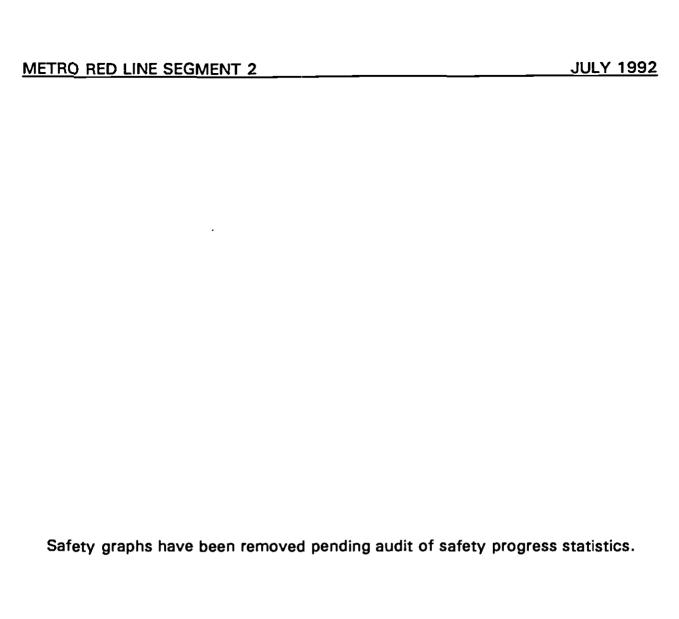


Page

METRO RED LINE SEGMENT 2

Page 19

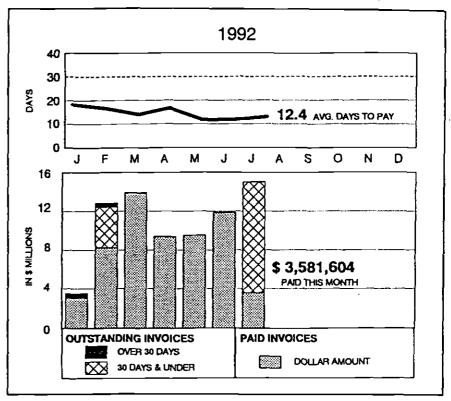
JULY 19



#### **INVOICE PROCESSING**

- The average time taken to pay invoices for Construction and Procurement contracts (including Insurance) was 12.4 days.
- 7 invoices were paid for a total value of \$ 3,581,604.
- There were 22 outstanding Construction or Procurement invoices under 30 days old for \$ 11,221,289.
- 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**

|          | Cons              | struction/Procu | rement Invoic | es     | Other Invoices |           |              |         |  |  |
|----------|-------------------|-----------------|---------------|--------|----------------|-----------|--------------|---------|--|--|
|          | 30 Days and Under |                 | Over 30 Days  |        | 30 Days        | and Under | Over 30 Days |         |  |  |
| -        | Number of         | Dollar          | Number of     | Dollar | Number of      | Dollar    | Number of    | Dollar  |  |  |
| Month    | Invoices          | Value           | Invoices      | Value  | Invoices       | Value _   | Invoices     | Value   |  |  |
| APR 1992 | 1                 | 1,383           | 1             | 69,660 | 25             | 1,522,257 | 8            | 63,434  |  |  |
| MAY 1992 | l ol              | . 0             | 0             | 0      | 32             | 989,296   | 8            | 74,848  |  |  |
| JUN 1992 | ] 1]              | 7,088           | 0.            | 0      | 29             | 1,624,615 | 8            | 84,557  |  |  |
| JUL 1992 | 22                | 11,221,289      | 0             | 0      | 39             | 2,672,310 | 14           | 122,873 |  |  |
|          | ļ                 | •               |               |        |                |           |              |         |  |  |
| [        | 1                 |                 | !             |        |                |           |              | _       |  |  |