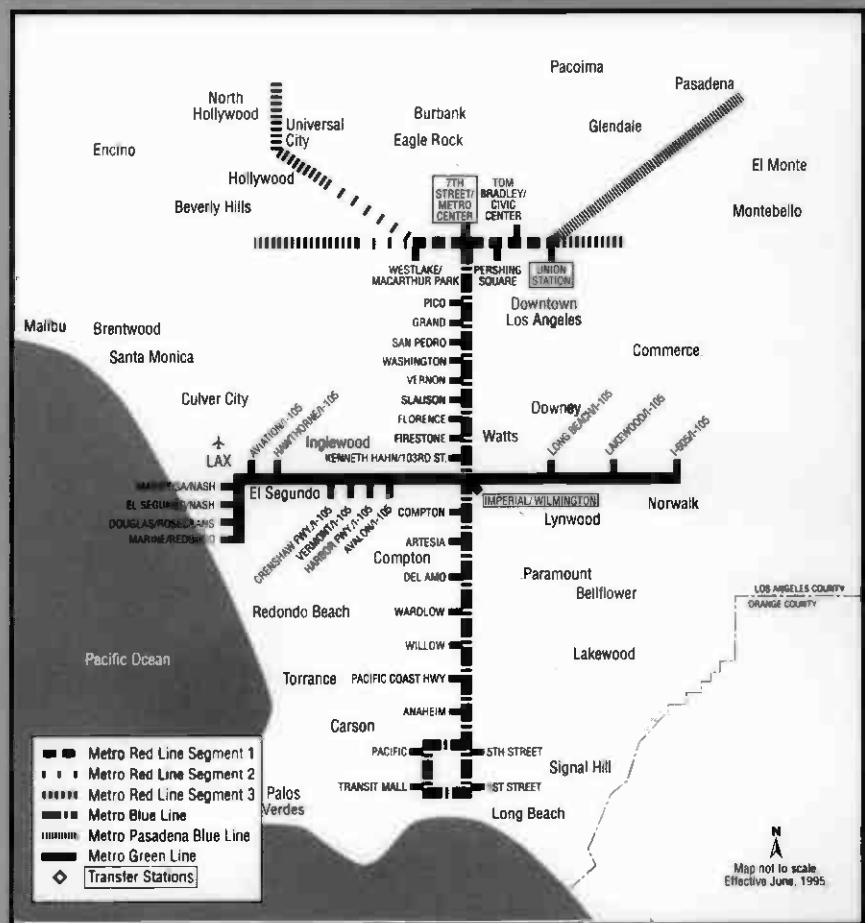


MTA METRO CONSTRUCTION



Executive Report Rail Program Status



RAIL PROGRAM STATUS SUMMARY

**THE LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
METRO CONSTRUCTION DIVISION**

JUNE 1996

RAIL PROGRAM SUMMARY

METRO PASADENA BLUE LINE

Cost Status
Current Budget \$803,868,000

- Scope changes resulted in budget increases/decreases with no change to the overall budget.

Schedule Status		Design Progress	Construction Progress
Current Plan	May 2001	Plan 99.4%	10.0%
		Actual 80.3%	7.2%

- Engineering activity will resume pending completion of the Project Implementation Plan.

Safety Status	Project Rate	National Average
Lost Time Rate	0.0	4.9
Lost Work Days	0.0	148.1

- The project is producing 20,000 construction hours per month with no Lost Time Injuries.

Areas of Concern

- Design criteria must be reconciled by August 8, 1996 to avoid impacting the May 2001 ROD.

Monthly Highlights

- The MTA submitted a report to the MTA Board which assesses project cost and schedule based on current scope and design status.
- MTA's environmental group continued evaluating the potential for supplemental environmental reports due to work scope changes.

METRO RED LINE SEGMENT 2

Cost Status
Current Budget \$1,640,781,000

- Budget adjustments were made in Construction and Professional Services with no change to the overall budget.

Schedule Status		Design Progress	Construction Progress
Wilshire Corridor		Plan 83.8%	83.0%
Current Plan	July 1996	Actual 83.5%	75.0%

- Wilshire Corridor began revenue operations on July 13, 1996.

Vermont/Hollywood - Current Plan Dec 1998

- Vermont/Hollywood Corridor is behind schedule due to tunnel delays under Hollywood Blvd.

Safety Status	Project Rate	National Average
Lost Time Rate	2.7	4.9
Lost Work Days	73.6	148.1

- Sixteen contracts were completed with no Lost Time Injuries.

Areas of Concern

- Installation of piles and excavation of 8251E/F are delaying trackwork access. station

Monthly Highlights

- MTA began revenue operations of the Wilshire Corridor on July 13, 1996.
- Continued system integration testing at all stations and Westlake/MacArthur Park pocket track.

METRO RED LINE SEGMENT 3 NORTH HOLLYWOOD EXTENSION

Cost Status
Current Budget \$1,313,848,000

- There were no changes to the Current Budget during the period.

Schedule Status		Design Progress	Construction Progress
Current Plan	September 2000	Plan 98.0%	48.3%
		Actual 91.0%	25.6%

- System and pre-revenue operation schedules are being reviewed to mitigate schedule delays.

Safety Status	Project Rate	National Average
Lost Time Rate	0.3	4.9
Lost Work Days	14.9	148.1

- The project completed 140,000 labor hours with no Lost Time Injuries.

Areas of Concern

- Project impacts due to tunneling under the Santa Monica Mountains are under review.

Monthly Highlights

- The MTA Board approved mitigation measures for tunneling in June 1996.
- Continued work on finalizing a new revised baseline schedule.

METRO RED LINE SEGMENT 3 MID-CITY EXTENSION

Cost Status
Current Budget \$490,663,000

- The Current Budget value is contingent on the preferred alternative selected.

Schedule Status		Design Progress	Construction Progress
Current Plan	TBD	Plan 0%	0%
		Actual 0%	0%

Safety Status	Project Rate	National Average
Lost Time Rate	N/A	4.9
Lost Work Days	N/A	148.1

- No Construction Safety activity for this period.

Areas of Concern

- The overall schedule for final design and construction is on hold pending the MTA Board determination of the preferred alternative.

Monthly Highlights

- The Tunnel Review Board evaluated subsurface conditions along the new alignment.
- The EMC continues to evaluate configuration and alignment alternatives.
- Enviro-Rail completed preliminary cone penetrometer tests logs and gas data.

METRO RED SEGMENT 3 EAST SIDE EXTENSION

Cost Status

Current Budget \$979,601,000

- There were no changes to the Current Budget during the period.

Schedule Status

Current Plan November 2002

Design Progress

Plan 27.8%
Actual 23.6%

Construction Progress

0.0%
0.0%

- The plan reflects the revised scope of work included in the Project Implementation Plan.

Safety Status

Project Rate

National Average

Lost Time Rate

N/A

4.9

Lost Work Days

N/A

148.1

- No Construction Safety activity for this period.

Areas of Concern

- MTA/EMC are evaluating potential cost/schedule impacts due to the repackaging of demolition contracts.

Monthly Highlights

- The MTA and EMC began PIP negotiations of final design scope of services and associated costs.
- The MTA is reviewing design and project schedule, results are scheduled for July.
- MTA's Fire/Life Safety is reviewing recommendations for the deletion of Under Platform Exhaust (UPE) fans at each station.

VEHICLE ACQUISITION PROJECT

Cost Status

Current Budget \$257,597,000

- There were no changes to the Current Budget during the period.

Schedule Status

Design Progress

Fabrication Progress

Schedule Car Delivery

1st Car June 1997

90%

25%

52nd Car Oct 1998

- The schedule from the contractor reflects eight months delay in first car deliveries due to design and manufacturing problems.

Areas of Concern

- The MTA received the Vehicle Weight Report which forecast a weight 240 lbs. over the specified limit.

Monthly Highlights

- MTA met with STS and Duewag regarding structural compression testing of Carshell #2.
- Life Cycle Tests on the Power Truck were halted due to cracks in the caliper arm.
- First Article Inspection of the first carshell was completed.

METROPOLITAN TRANSPORTATION AUTHORITY
PROJECT COST REPORT - TOTAL RAIL PROGRAM
SUMMARY BY COST ELEMENT
(IN THOUSANDS)

STATUS DATE: 6/28/96

RAIL PROGRAM STATUS SUMMARY

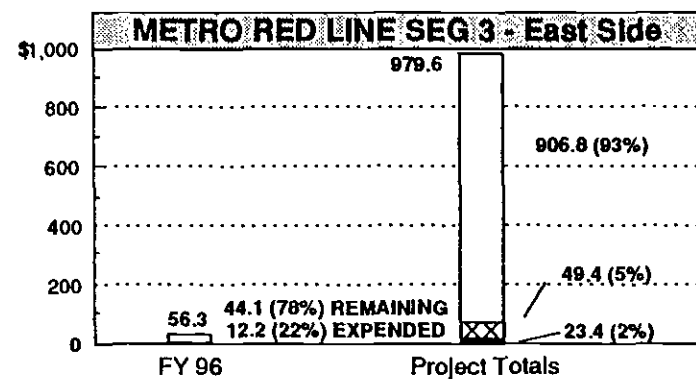
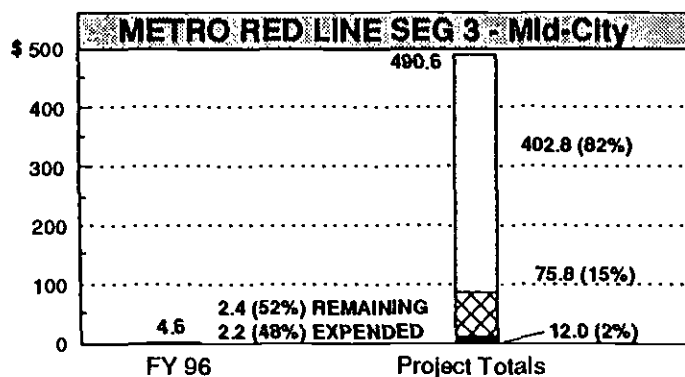
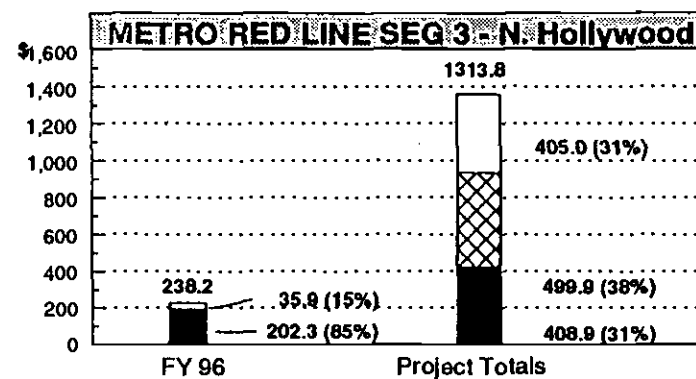
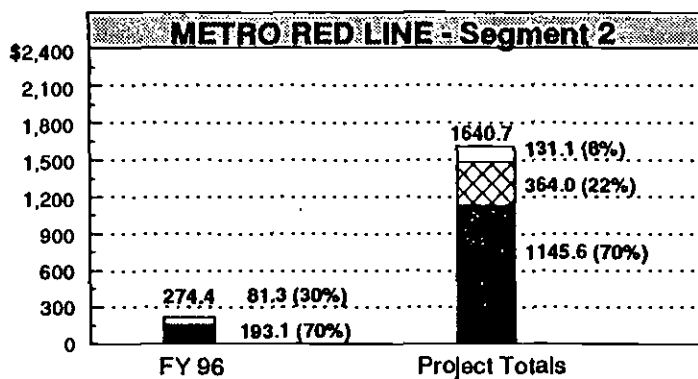
JUNE 1996

PROJECT: TOAL RAIL PROGRAM

ELEMENT DESCRIPTION	BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST (9)	VARIANCE (9-2) (10)
	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)		
T CONSTRUCTION	5,153,507	5,342,839	45,981	3,716,335	0	0	94,908	2,713,065	4,972,957	(35,744)
S PROFESSIONAL SERVICES	1,685,529	2,105,187	12,626	1,555,832	0	0	32,581	1,387,985	2,059,974	52,917
R REAL ESTATE	480,002	536,539	2,143	400,344	0	0	1,234	398,609	485,863	2,627
F UTILITY/AGENCY FORCE ACCOUNTS	146,279	160,748	519	129,395	0	0	460	105,826	156,911	1,250
D SPECIAL PROGRAMS	11,045	16,747	0	5,753	0	0	40	4,730	15,701	(1,046)
C CONTINGENCY	560,120	339,286	0	0	0	0	0	0	266,517	(72,764)
A PROJECT REVENUE	(18,115)	(38,152)	0	(2,822)	0	0	0	(11,284)	(33,161)	4,992
PROJECT GRAND TOTAL	8,018,367	8,463,194	61,269	5,804,837	0	0	129,223	4,598,931	7,924,762	(47,768)

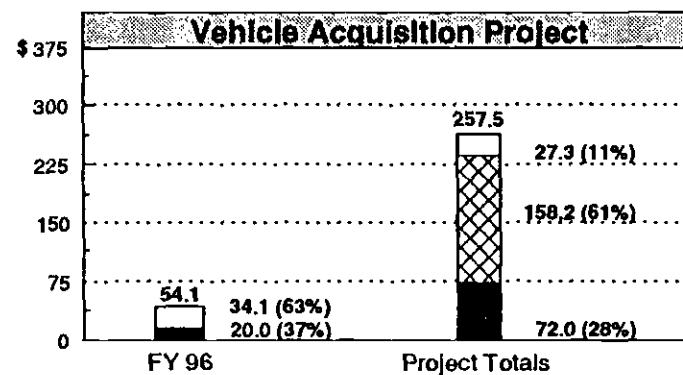
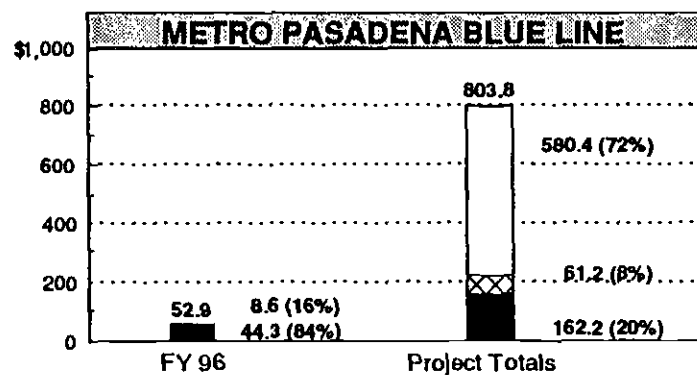
NEW REQUIREMENTS DESCRIPTION	BUDGET		COMMITMENTS		INCURRED COST		EXPENDITURES		CURRENT FORECAST (9)	VARIANCE (9-2) (10)
	ORIGINAL (1)	CURRENT (2)	PERIOD (3)	TO DATE (4)	PERIOD (5)	TO DATE (6)	PERIOD (7)	TO DATE (8)		
T CONSTRUCTION	0	49,393	(2,979)	44,677	0	0	977	22,226	59,933	10,540
S PROFESSIONAL SERVICES	0	17,495	(643)	16,474	0	0	(13)	9,443	17,665	170
R REAL ESTATE	0	0	0	0	0	0	0	37	0	0
F UTILITY/AGENCY FORCE ACCOUNTS	0	0	0	0	0	0	0	0	0	0
D SPECIAL PROGRAMS	0	20	0	20	0	0	0	20	20	0
C CONTINGENCY	0	1,348	0	0	0	0	0	0	732	(615)
A PROJECT REVENUE	0	0	0	0	0	0	0	0	(11,462)	(11,462)
NEW REQ. SUBTOTAL	0	68,256	(3,622)	61,171	0	0	964	31,726	66,888	(1,367)
PROJECT GRAND TOTAL	8,018,367	8,531,450	57,647	5,866,008	0	0	130,187	4,630,657	7,991,650	(49,135)

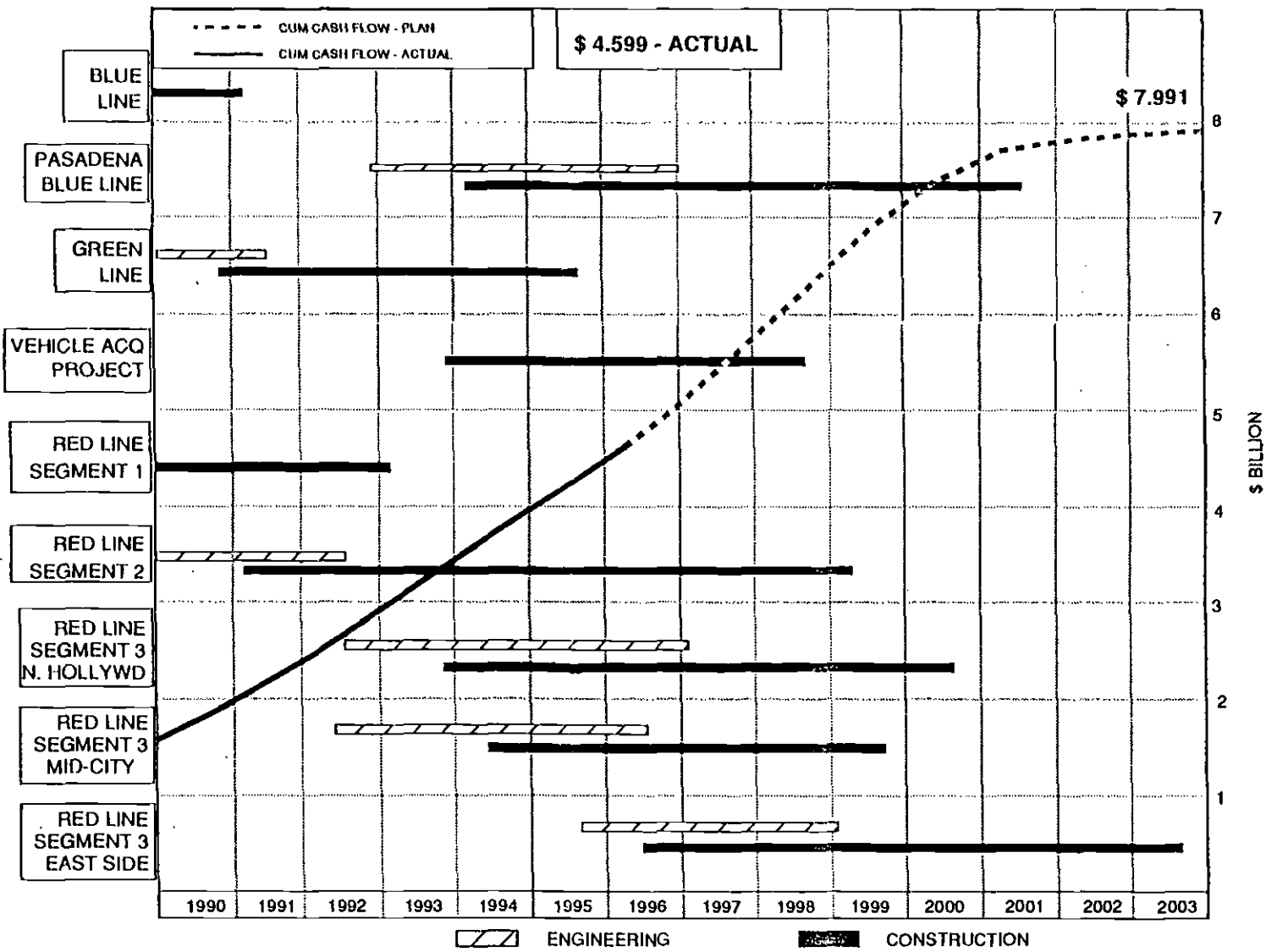
BUDGET STATUS - June 28, 1996
(In \$ Millions)



Actual Spent
 Encumbered
 Remaining Budget

BUDGET STATUS - June 28, 1996
(in \$ Millions)



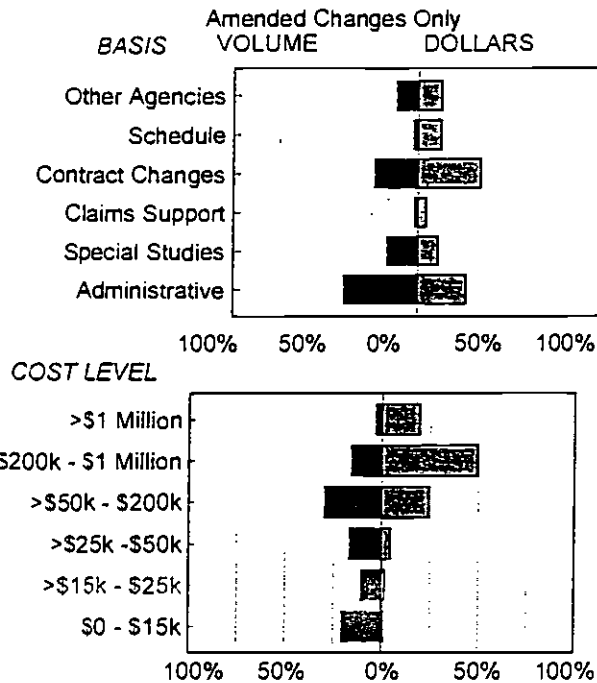


**METROPOLITAN TRANSPORTATION AUTHORITY
FUNDING SOURCES (IN MILLIONS)**

	METRO BLUE LINE*		PASADENA BLUE LINE		METRO GREEN LINE		METRO RED SEGMENT 1**		METRO RED SEGMENT 2		METRO RED LINE SEQ 3 - NH		METRO RED LINE SEQ 3 - MC		METRO RED LINE SEQ 3 - ES		VEHICLE ACQUISITION PROJECT		JUNE 1996 TOTAL PROGRAM	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
ORIGINAL SCOPE:																				
FTA-SECTION 3							605.3	42	667.0	40	681.0	52	242.5	49	492.9	50			2688.7	32
FTA - OTHER																	11.9	4	11.9	0
ISTEA - FED SURFACE TRANSIT PROG									52.1	3	50.0	4			25.0	2	84.0	32	211.1	3
FED-ISTEA RSTP/CMAQ											39.9	3	40.4	8	86.1	9	6.1	3	172.5	2
FTA-SECTION 9							90.6	6											90.6	1
STATE			387.8	48	106.4	15	210.3	15	133.0	8	65.0	5	40.0	8	65.0	7	33.5	13	1041.0	12
STATE TSM MATCH											3.2	0	7.2	2	11.1	1			21.5	0
SB 1995 TRUST FUND											75.0	6							75.0	1
PROPOSITION A	877.2	100	202.6	25	205.1	28	179.5	12	501.9	31									1966.3	23
PROPOSITION C			213.5	27	400.3	56					192.8	15	151.6	32	299.1	31	122.0	48	1379.3	16
PROP C (AMERICAN DISABILITY ACT)					6.0	1													6.0	0
CITY OF LOS ANGELES							34.0	2	157.5	10	190.7	14	9.0	1	0.3	0			391.5	5
BENEFIT ASSESSMENT							130.3	9	58.0	4	13.5	1							201.8	2
COST OVERRUN ACCOUNT							200.1	14											200.1	2
TOTAL	877.2	100	803.9	100	717.8	100	1450.1	100	1569.5	96	1311.1	100	490.7	100	979.5	100	257.5	100	8457.3	99
OTHER LOCALLY FUNDED ACTIVITIES:																				
PROP C (TRANSIT ENHANCEMENTS)									68.7	4	2.7	0							71.4	1
FED ISTEA RSTP/CMAQ									2.5	0									2.5	0
TOTAL									71.2	4	2.7	0							73.9	1

Note: Data reflects Current Budget

Professional Service Contracts Changes by Basis and Cost Level



CHANGE BASIS ANALYSIS

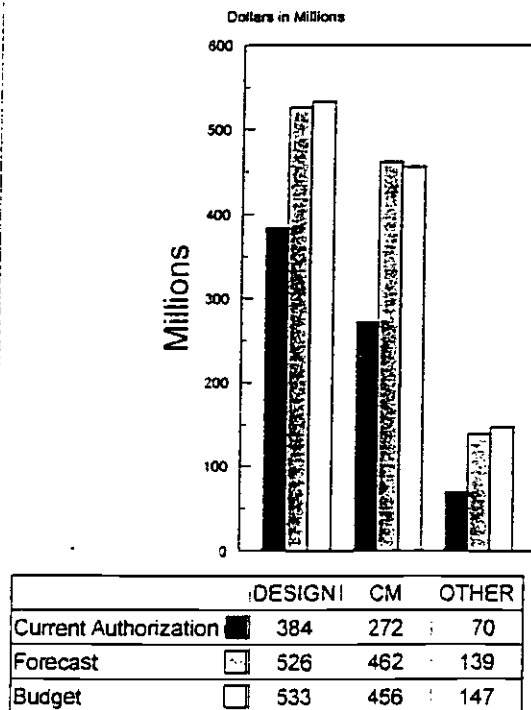
Administrative changes account for approximately 41% or 291 of the 712 Consultant Change Notices overall. This equals 26% of the overall change cost of amended changes.

CHANGE COST LEVEL ANALYSIS

As shown on the Cost Level Analysis chart opposite, the MTA Board approves 68.7% of all change costs associated with the Rail Project or \$65M of a total change cost of \$95M. This equals 21% of the total change volume or 147 of 712 total changes.

Note: Data for Basis and Cost charts includes only MTA Board amended changes. Prior months reports also included staff approved changes not amended by the MTA Board.

Professional Services Contracts Consultant Cost Status



PROFESSIONAL SERVICES COST ANALYSIS

Categories represent all professional services contracts, not individual contracts (i.e. "design" includes all line 11 contracts not just EMC).

The forecast cost for design and other consultant contracts is below the current budget. While the forecast for construction management professional services continues to exceed the budget amount, due to delays in project activities on the Metro Red Line Eastside and Pasadena Blue Line.

Data Source:

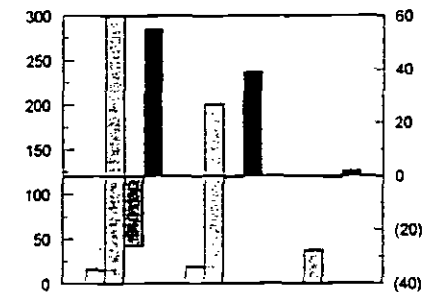
CMS: Consultant Contract Authorization, Forecast and Budget Values.

CHNGSAMP/06/96

Professional Service Contracts Amendment History

Period to Total Comparison
Volume

\$ In Millions

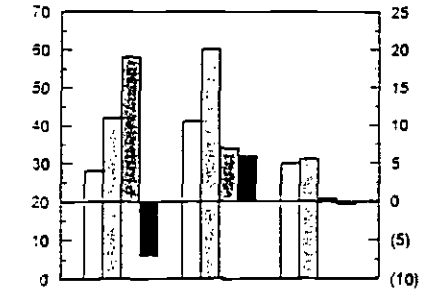


	EMC	CM	OTHER
# This Period <input type="checkbox"/>	16.0	19.0	1.0
# Previous <input checked="" type="checkbox"/>	325.0	201.0	37.0
\$ This Period <input checked="" type="checkbox"/>	(26.0)	(0.7)	(0.8)
\$ Previous <input checked="" type="checkbox"/>	55.0	39.0	2.0

All - Professional Service Contracts Pending Consultant Changes

Period to Period Comparison
Volume

\$ In Millions



	EMC	CM	OTHER
# This Period <input type="checkbox"/>	28.0	41.0	30.0
# Previous <input checked="" type="checkbox"/>	42.0	60.0	31.0
\$ This Period <input checked="" type="checkbox"/>	19.0	7.0	0.4
\$ Previous <input checked="" type="checkbox"/>	(7.0)	6.0	(0.4)

CONSULTANT CHANGE NOTICE ANALYSIS

Ten new Requests for Change (RFC) were received during the period with a total estimated value of \$1.9million.

Eleven new Consultant Change Notices (CCN's) were assigned during the period with an estimated value of \$1 million.

Four CCN's were rejected / cancelled during the period.

Thirty-six CCN's were approved by the MTA Board during the period with a negative value of \$27.6 million. The negative value resulted from CCN's processed to deobligate funds from Metro Red Line Mid-City Extension contracts during the supplemental alignment study.

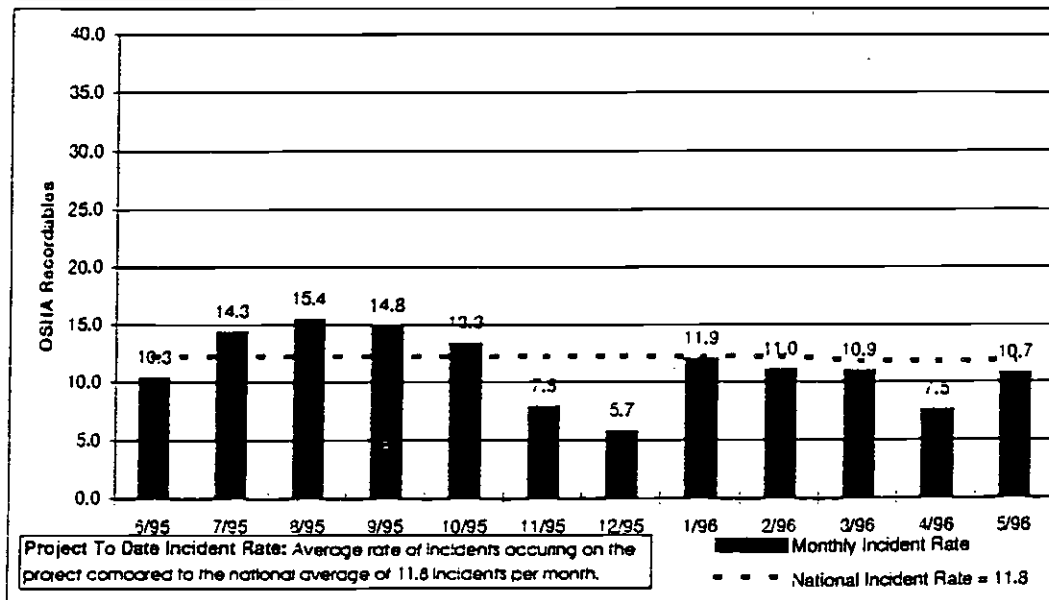
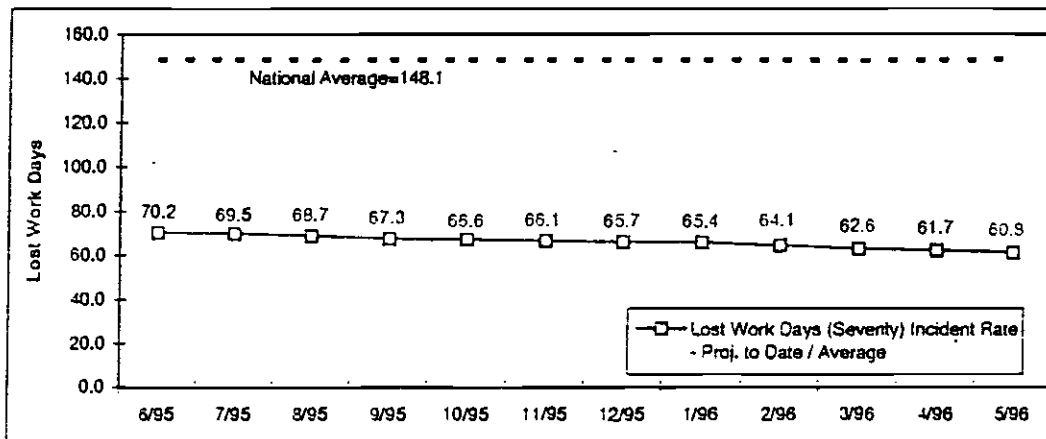
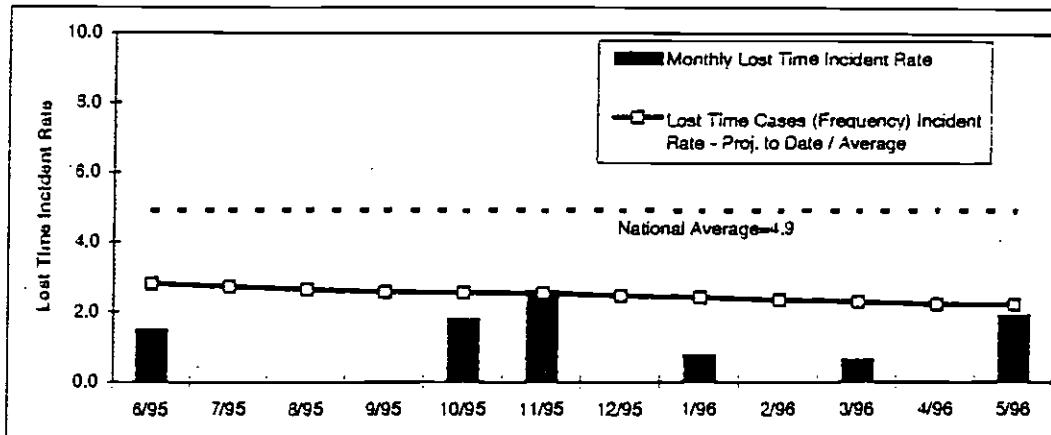
Cost Performance Relative to Corporate Goals
(IN THOUSANDS)

JUNE 1996

	METRO BLUE LINE		METRO PASADENA BLUE LINE		METRO GREEN LINE		METRO RED LINE SEGMENT 1		METRO RED LINE SEGMENT 2		METRO RED LINE SEGMENT 3 MH		METRO RED LINE SEGMENT 3 MC		METRO RED LINE SEGMENT 3 ES		VEHICLE ACQUISITION PROJECT		TOTAL PROGRAM		CORP GOAL
	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT	
CONSTRUCTION	657,487	74.95%	447,728	55.63%	477,236	66.49%	812,270	56.02%	1,144,663	69.76%	828,503	63.17%	0	0	844,383	65.22%	180,644	89.72%	5,182,915	64.98%	
REAL ESTATE	55,582	8.34%	59,918	7.45%	26,047	3.63%	140,000	9.66%	87,773	5.35%	89,076	8.79%	0	0	27,459	2.78%	0	0.00%	485,863	6.08%	
PROFESSIONAL SERVICES:																					
ENGINEERING/DES	69,567	7.93%	119,401	14.84%	83,296	11.60%	221,659	15.29%	165,514	10.09%	90,711	6.92%	0	0	103,892	10.51%	1,700	0.84%	855,760	10.71%	
CONSTR MGMT.	91,642	10.45%	66,654	8.31%	78,213	10.90%	116,429	8.03%	164,563	10.03%	115,919	8.84%	0	0	84,983	8.60%	0	0.00%	718,603	8.99%	
STAFF	17,655	2.01%	46,820	5.82%	24,179	3.37%	85,558	6.59%	55,749	3.40%	59,500	4.51%	0	0	37,565	3.80%	3,810	1.91%	340,951	4.27%	4%
OTHER	14,222	1.62%	22,075	2.74%	17,337	2.42%	32,671	2.25%	22,032	1.34%	39,318	3.00%	0	0	17,358	1.76%	8,237	4.59%	174,250	2.18%	
SUBTOTAL	183,106	22.01%	255,150	31.70%	203,025	28.28%	466,317	32.16%	407,858	24.86%	305,536	23.30%	0	0	243,798	24.67%	14,777	7.34%	2,089,567	26.15%	20%
CONTINGENCY	963	0.11%	43,187	5.37%	12,757	1.78%	31,432	2.17%	1,297	0.08%	99,924	7.62%	0	0	72,439	7.33%	5,830	2.95%	267,929	3.35%	
PROJECT REVENUE	(29,877)	-3.41%	(1,211)	-0.15%	(1,263)	-0.18%	0	0.00%	(810)	-0.05%	(11,462)	-0.87%	0	0	0	0.00%	0	0.00%	(44,623)	-0.56%	
GRAND TOTAL	877,271	100.00%	804,768	100.00%	717,802	100.00%	1,450,018	100.00%	1,640,781	100.00%	1,311,580	100.00%	0	0	988,079	100.00%	201,351	100.00%	7,991,651	100.00%	

*METRO RED LINE SEGMENT 3 MID-CITY FORECAST NOT AVAILABLE.
NOTE: Data reflects Current Forecast.

May 1996

Total Metro
Safety SummaryPrepared by:
LACMTA Construction Safety

METRO PASADENA BLUE LINE

EXECUTIVE SUMMARY

METRO PASADENA BLUE LINE

Summary Status Report

Period Ending - June 28, 1996

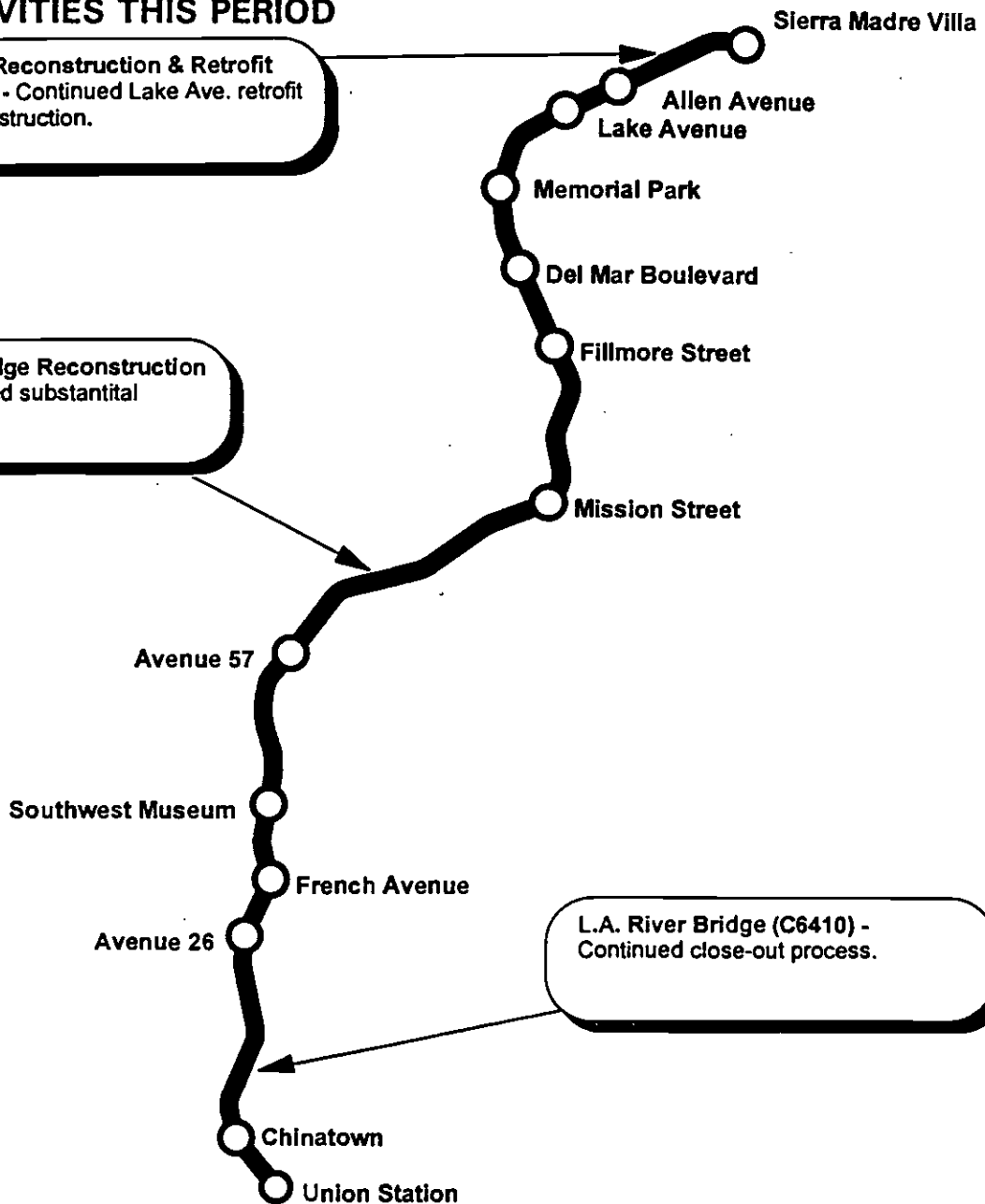


MAJOR ACTIVITIES THIS PERIOD

Bridge Reconstruction & Retrofit (C6435) - Continued Lake Ave. retrofit & reconstruction.

Arroyo Seco Bridge Reconstruction (C6430) - Achieved substantial completion.

L.A. River Bridge (C6410) - Continued close-out process.



SYSTEMWIDE ACTIVITIES

- MTA continued to work with EMC to develop a detailed Project Implementation Plan (PIP) for CWO 037 for \$3.0M which defines the work scope, design requirements and path-forward for final engineering.
- MTA submitted a report to the MTA Board which assesses the Project cost and schedule for reasonableness, based on current scope definition and design status.
- Urban Planning consultants and the MTA continued to work with community representatives regarding work scope changes.
- MTA Environmental staff continued evaluation of the potential for additional or Supplemental Environmental Impact Reports (SEIR's) due to work scope changes.

METRO PASADENA BLUE LINE

Summary Status Report

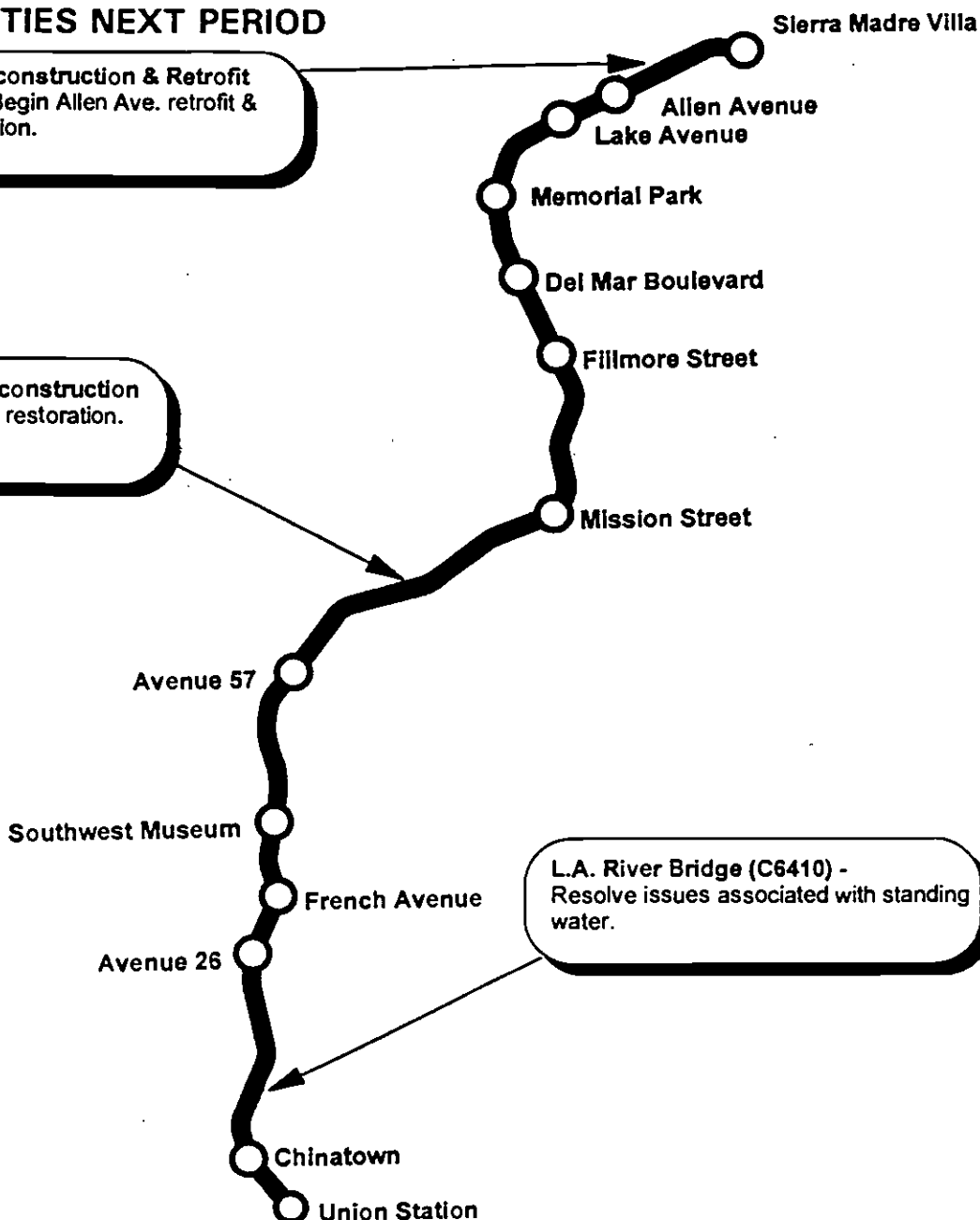
Period Ending - June 28, 1996



MAJOR ACTIVITIES NEXT PERIOD

Bridge Reconstruction & Retrofit (C6435) - Begin Allen Ave. retrofit & reconstruction.

Arroyo Seco Bridge Reconstruction (C6430) - Complete park restoration.



SYSTEMWIDE ACTIVITIES

- MTA will continue to work with EMC to develop detailed Project Implementation Plan (PIP) to facilitate the final design effort.
- MTA will work with EMC to identify a phased approval process, whereby packages will be submitted to the MTA Board based on criticality.
- MTA Project Control will prepare a package for submittal to Capital Planning to facilitate application and approval of the California Transportation Commission (CTC) grant.

METRO PASADENA BLUE LINE

Summary Status Report

Period Ending - June 28, 1996



BUDGET

	Amount (\$ in mil)	Change from Last Month (\$ in mil)
Original Budget	841	None
Approved Budget	804	None
Current Forecast	804	None
Commitments	223	None
Expenditures	162	+2.0

OTHER LOCALLY FUNDED ACTIVITIES

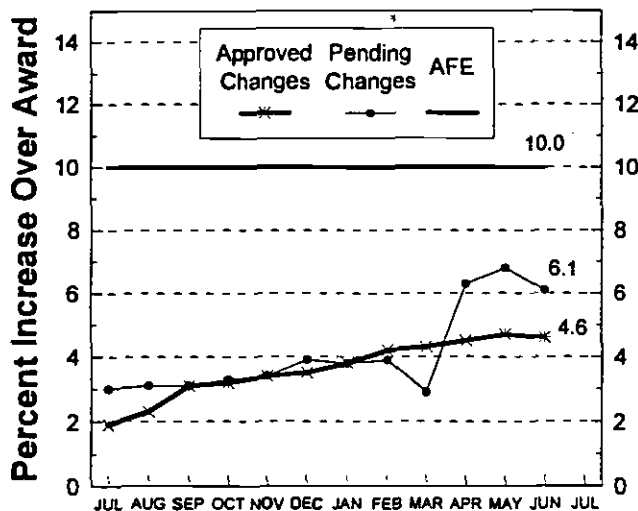
	Amount (\$ in mil)	Change from Last Month (\$ in mil)
Original Budget	0	None
Approved Budget	0	None
Current Forecast	0.9	None
Commitments	0	None
Expenditures	0	None

BUDGET ANALYSIS

- The Original Budget of \$841.0M was formally adopted in January 1993 and was based on a November 1997 ROD.
- The Approved Budget and Current Forecast are based on Value Engineering/Cost Containment scope changes and a May 2001 ROD adopted in February 1996, as amended in the report submitted to the Board in June.
- There is no change to the overall budget or forecast during the period.
- The increase in expenditures for June is for construction and professional services contracts.

CONTRACT CHANGES

Construction/Procurement Contracts
as % of Original Contract Award



CONTRACT CHANGE ANALYSIS

- Approved and pending changes processed to date are less than the AFE values.
- Pending Changes decreased slightly during the period for a credit change notice associated with an adjustment of bid quantities at Contract C6430, Arroyo Seco Bridge Reconstruction; and for a reduction associated with Contract B611, Running Rail Procurement.

METRO PASADENA BLUE LINE

Summary Status Report

Period Ending - June 28, 1996



SCHEDULE

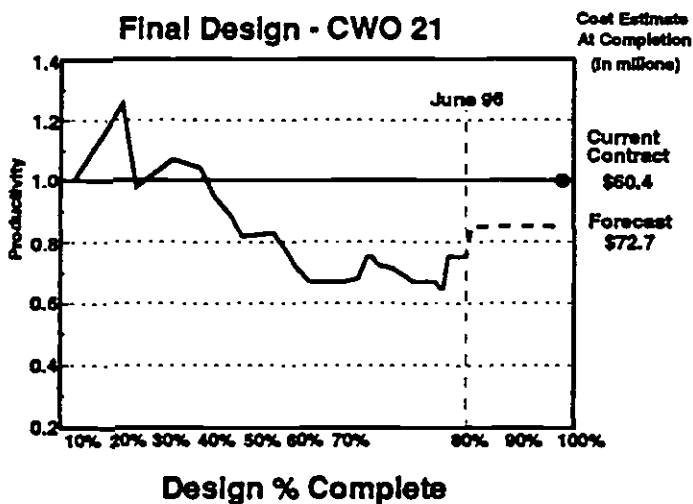
		Change from Last Month
Current ROD	May 2001	None
Design Progress *	80.3%	None
Constr. Progress	7.2%	+0.1
Critical Path Float (Calendar Days)	-91 days	-28 days

*Based on original design work scope; design will be rebaselined pending an evaluation of design status, detailed definition of new work scope & preparation of an execution plan.

SCHEDULE ANALYSIS

- The schedule update for June shows continued delays to the July 1, 1996 target date for start of final design and a potential three-month slip to the May 2001 Project ROD.
- A phased approval process, whereby packages will be submitted to the Board based on criticality, will be implemented and is expected to mitigate one month of the potential three month delay.
- The Project team is working to mitigate the effect of this delay by identifying activities in the design and construction durations that can be realistically compressed or resequenced.
- Staff submitted a report this period to the Board which verifies the May 2001 ROD; this report is predicated on the ability to mitigate the negative float in the schedule.
- The schedule may be further impacted if a Supplemental Environmental Impact Statement (SEIR) for scope changes is required.

EMC COST PERFORMANCE



EMC COST PERFORMANCE ANALYSIS

- The original final design was performed under CWO 021, which is currently being closed out. The new CWO 037 was approved for development of the PIP and definition of the new scope to incorporate approved cost containment items.

METRO PASADENA BLUE LINE

Summary Status Report

Period Ending - June 28, 1996



CONSTRUCTION SAFETY STATISTICS

		Change from Last Month
Recordable Injury Rate		
1994 National Average	11.8	
Project Rate (Cum.)	3.2	-0.1
Lost Time Rate (Frequency)		
1994 National Average	4.9	
Project Rate (Cum.)	0.0	None
Lost Work Days (Severity)		
1991 National Average	148.1	
Project Rate (Cum.)	0.0	None

NOTE: Statistics are based on May data.

CONSTRUCTION SAFETY SUMMARY

- Project is producing over 20,000 construction work hours per month and has continued with zero Lost Time cases and no lost work days.
- Completed over 500,000 total workhours to-date without Lost Time Injury.
- Continued with eight (8) OSHA-200 recordable cases to date, resulting in a further reduction of the cumulative project rate.

AREAS OF CONCERN

ONGOING

Item (Date Initiated: May 1996)

Reconciliation of Design Criteria

Concern/Impact

The May 2001 ROD may be impacted by the length of time required to reconcile design criteria revisions resulting from Value Engineering, Cost Containment and community initiated scope changes. The criteria must be reconciled by August 8, 1996 in order to avoid impacting the ROD.

Status/Action

The Project team is working with EMC to define the final work scope, which is required before the design criteria can be reconciled. In the interim, the Project team is taking steps to request a waiver or exemption to the procedure to be granted by the Engineering Department within the Construction Division so design can resume. The EMC is expected to submit a draft reconciliation of the criteria by June 30, 1996 for review by the Engineering Dept.

METRO PASADENA BLUE LINE

Summary Status Report

Period Ending - June 28, 1996



AREAS OF CONCERN (Con't)

ONGOING (Con't)

Item (Date Initiated: March 1996)

Start of Final Design

Concern/Impact

Final design for Contract C6450 and other near critical contracts must begin by July 1, 1996 or the May 2001 ROD may be impacted. Engineering cannot resume until work scope definition is completed and included in a Project Implementation Plan (PIP). It is unlikely this PIP will be completed and approved in sufficient time to allow section designers to be on-board and available to start work by July 1, 1996. If the ROD slips, there will be a ROM cost impact of \$2.0M to \$3.0M per month due to escalation and additional administration costs.

Status/Action

The July 1, 1996 target date for start of final design will not be met. The June schedule update shows negative float of -91 calendar days. Although an interim PIP was executed on June 5, 1996, the final PIP has not been completed due in part to the length of time required to reconcile community issues in order to define scope. A meeting was held on June 26, 1996 to develop a plan to complete the final PIP. Detail will be included to identify a phased approval process, whereby packages will be submitted to the Board based on criticality. The plan will also identify section designers responsible for completing the work. The Project team is working to identify mitigation measures required to offset the delay incurred to date.

RESOLVED

Item (Date Initiated: April 1996)

Community Concurrence With Project Scope

Concern/Impact

Timely community concurrence with design of the stations and line segments is critical to finalizing design, re-starting engineering, validating the Project cost/schedule and minimizing the potential of engineering cost overruns. Consensus must be obtained for station design changes resulting from Value Engineering and Cost Containment reductions as well as other issues raised by various communities. For example, issues relating to the transportation center proposed by the City of Pasadena may impact the final station and line segment design at Del Mar Station; selection of a Chinatown pedestrian linkage alternative may impact the final Chinatown Aerial Structure and station design; etc.

Status/Action

MTA Public Affairs and Construction staff worked closely with community representatives and have obtained consensus on all issues other than the Chinatown Station design.

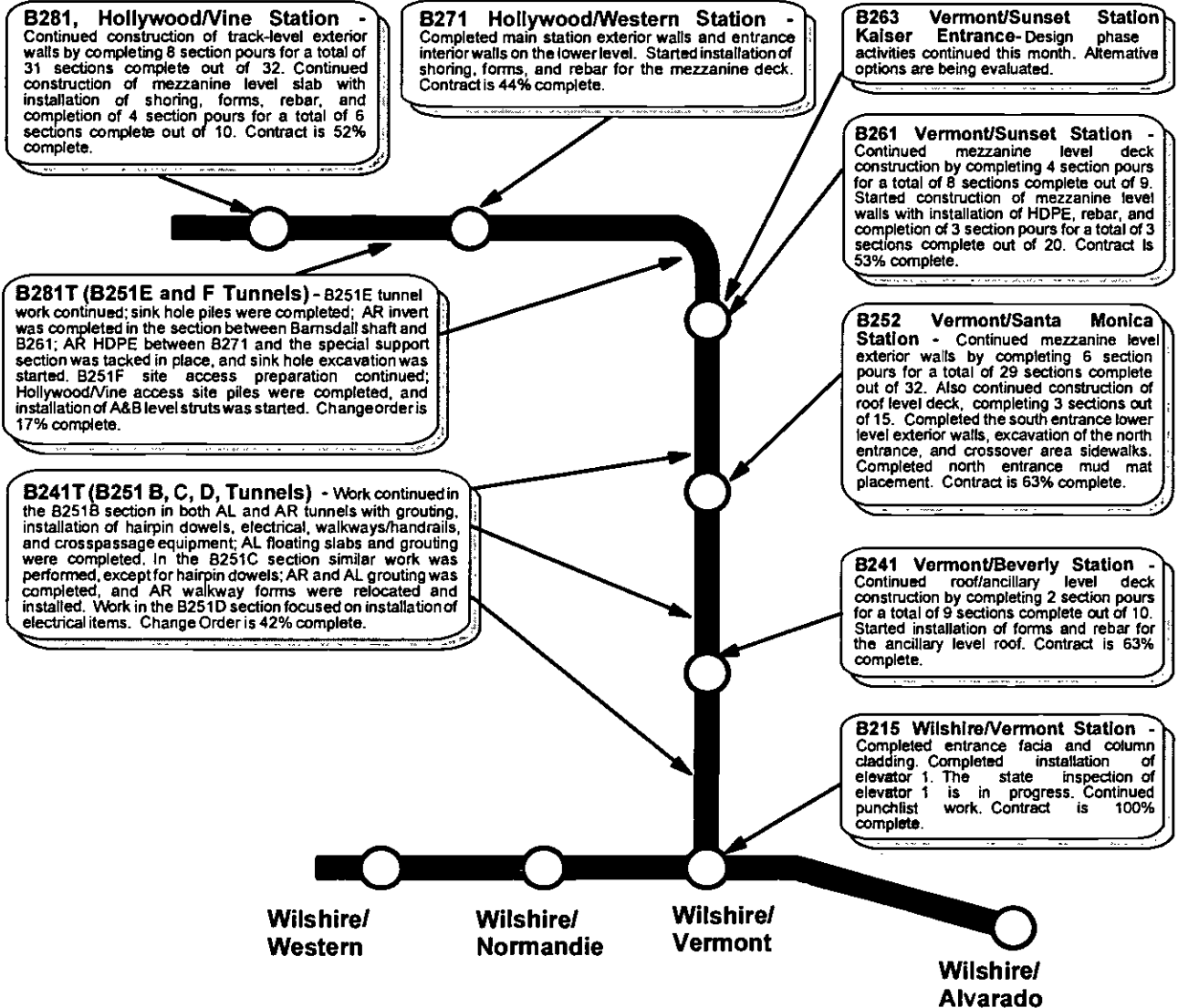
METRO RED LINE SEGMENT 2

EXECUTIVE SUMMARY

METRO RED LINE Segment 2 Summary Status Report Period ending - June 28, 1996



Major Activities - This Period



SYSTEMWIDE ACTIVITIES

Continued system integration testing at all stations and Westlake/MacArthur Park pocket track. Continued pre-revenue operations. Continued system certification process.

METRO RED LINE Segment 2

Summary Status Report

Period ending - June 28, 1996



Major Activities - Next Period

B281 Hollywood/Vine Station - Continue construction of mezzanine level deck. Start construction of mezzanine level walls. Complete construction of track level west bulkhead.

B271 Hollywood/Western Station - Complete installation of shoring, forms, and rebar in support of starting concrete placements for the mezzanine level deck. Start installation of shoring, forms, and rebar for the entrance mezzanine level deck and main station mezzanine level exterior walls.

B263 Vermont/Sunset Station Kaiser Entrance - Design phase activities continue. MTA to finalize entrance construction plan.

B261 Vermont/Sunset Station - Continue mezzanine level deck and mezzanine level wall construction.

B281T (B251E and F) - Continue B251E sink hole site excavation, and installation of AR, HDPE, rebar and arch concrete between B271 and Barnsdall shaft. Continue B251F tunnel work with Hollywood/Vine access site excavation.

B252 Vermont/Santa Monica Station - Complete mezzanine level exterior wall construction. Continue construction of roof-level deck, south entrance exterior walls, and form work for portions of the track-level platform. Complete north entrance invert slab concrete placement. Start installation of crossover area acoustical plaster.

B241T (B251B, C, and D Tunnel Work Packages) - Emphasis will continue with work in the B251B and B251C sections in both AL and AR tunnels with installation of hairpin dowels, electrical, walkways/handrails, crosspassage equipment, and floating slab. Start walkway concrete placement in the B251C AR tunnel.

B241 Vermont/Beverly Station - Ancillary level deck construction (south section) will resume after B241T tunnel work is complete. Complete installation of forms, rebar, and concrete for the ancillary level roof. Start entrance excavation.

Wilshire/
Western

Wilshire/
Normandie

Wilshire/
Vermont

Wilshire/
Alvarado

SYSTEMWIDE ACTIVITIES

Complete system integration testing at all stations and Westlake/MacArthur Park pocket track. Complete system certification process. Complete pre-revenue operations and begin Wilshire Corridor revenue operations on July 13, 1996.

METRO RED LINE Segment 2 Summary Status Report Period ending - June 28, 1996



BUDGET

	Amount (in \$ mil)	Change from Last Month (in \$ mil)
Original Budget	1,446	None
Approved Budget	1,576	None
Current Forecast	1,576	None
Expenditures	1,118	47

Additional Locally Funded Activities

	Amount (in \$ mil)	Change from Last Month (in \$ mil)
Original Budget	0	None
Approved Budget	65	None
Current Forecast	65	None
Expenditures	28	1

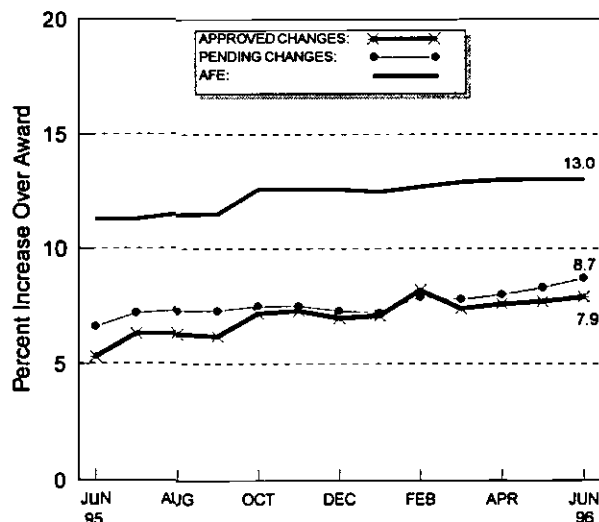
BUDGET ANALYSIS

The Budget section has been revised this period to separate costs for Additional Locally Funded Activities. In the original scope, the expenditures increased \$47.0 million*, and the expenditures to date are 70.9% of the current total forecast. In the Additional Locally Funded Activities, the expenditures increased \$1.0 million*, and the expenditures to date are 43.2% of the current total forecast. Overall, there are no changes to the total budget and forecast categories this period.

*Due to the implementation of the new Financial Information System (FIS), actual expenditure amounts were not available in March and April. This period reflects the cumulative expenditure amount from March through May.

CONTRACT CHANGES

Construction/Procurement Contracts
as % of Original Contract Award



CONTRACT CHANGE ANALYSIS

The percent of approved and pending change values shows a slight increase this period. The approved changes are attributable to the progress of work on the Wilshire Corridor and an increase in pending changes in the tunnel completion contracts (B241T and B281T).

The significant approved changes include:

- B215, Wilshire/Vermont Station Stage II, CN 23.02, architectural design changes; and CN 107.00, worksite cleaning.
- B241T, Tunnel Completion Portion of B241, CN 21.00, removal of one foot of floor slab; CN 23.00, repair drainage ditch in VAL tunnel; and CN 26.00, complete miscellaneous electrical work.
- B281T, Tunnel Repair/Completion of B281, CN 10.01, Walk of Fame repairs/leak prevention; CN 17.00, scheduling mitigation; CN 19.00, remove walkway forms from AL tunnel; and CN 20.00, correction of safety deficiencies.

The significant pending changes total \$2.5 million, including:

- B241T, Tunnel Completion Portion of B241, CN 25.00, leak repairs in the tunnels (B, C, & D sections); CN 7.01, install nitrile gaslet and ringplate; CN 15.00, floating slabs; and CN 32.00, repairs at 5th and New Hampshire intersection.
- B281T, Tunnel Repair/Completion of B281, - CN 15.00, increased estimated amount of demob of SKK equipment and materials; and CN 5.01, corrections of pre-existing deficiencies to owner-furnished equipment.
- B281, Hollywood/Vine Station & Crossover, CN 23.02, Architectural Design Changes.

METRO RED LINE Segment 2 Summary Status Report Period ending - June 28, 1996



SCHEDULE

Wilshire Corridor

Change from
Last Month

Current ROD July 13, 1996
Design Progress 100%
Critical Path +0 Days
Float

0 days
None
13 days

Vermont/Hollywood Corridor

Change from
Last Month

Current ROD Dec. 31, 1998
Design Progress 99%
Critical Path -145 Days
Float
Const. Progress 75.0%

None
None
-63 days
1.0%

SCHEDULE ANALYSIS

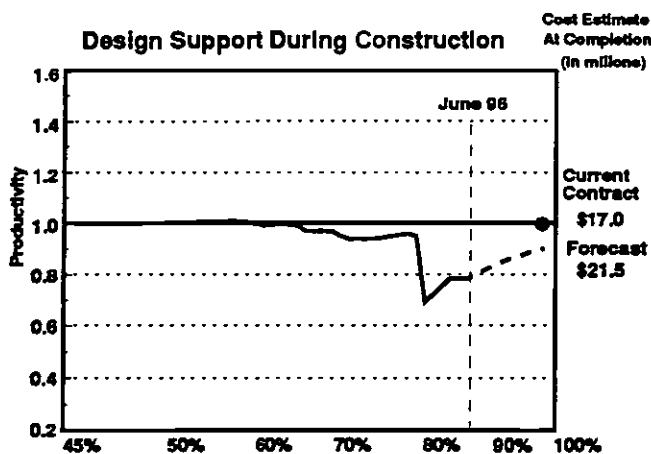
Wilshire Corridor

- The Grand Opening for Wilshire Corridor is scheduled for July 13, 1996. The positive float was reduced to zero to reflect pre-revenue operations continuing to the start of revenue operations. To date, 81 tests have been completed; 10 tests are 80% or greater completed; 2 tests are 30% or more completed; the 10 remaining tests have undergone some pre-test checking. System integration testing is 86% complete. Substantial completion of system integration testing is forecast for July 7, 1996. The critical path continues through pre-revenue operations completion, leading to revenue operations on July 13, 1996.

Vermont/Hollywood Corridor

- Vermont/Hollywood Corridor critical path changed from Contract B271 to Hollywood tunnel construction, excavation of the sinkhole shaft, and tunnel completion; B610 trackwork installation; B620, train control installation; and system integration testing and pre-revenue operations.
- Mitigation options under review include alternate excavation support systems, decreasing excavation activity durations, and weekend, shift, and/or overtime work on critical path activities to mitigate forecast delays. A plan for the necessary corrective actions is expected to be presented in July.

EMC COST PERFORMANCE



EMC COST PERFORMANCE ANALYSIS

- The EMC Cost Performance chart represents the cost performance for design support during construction (DSDC) on a cumulative to-date basis.
- The actual numbers of Requests for Information (RFIs) and other design services, submittals, and Change Notices for both the Wilshire and Vermont/Hollywood Corridors continue to significantly exceed the number budgeted. The need for an increase in budget to cover additional work scope has been jointly recognized, and with the development of CCN 500 the issue will be resolved.

Approval of CCN 500 is expected by the end of August.

- This chart compares the actuals versus the earned values in terms of work hours and reflects an estimated cumulative-to-date Cost Performance Index (CPI) through June 1996 of 0.78. A significant amount of time during this reporting period was spent modifying the EMC schedule in preparation of Consultant Change Notice (CCN) 500, EMC Fiscal Year 1997 Budget. The percent complete for this period is estimated; however, the EMC is in the process of evaluating its actual progress.

METRO RED LINE Segment 2

Summary Status Report

Period ending - June 28, 1996



CONSTRUCTION SAFETY STATISTICS

Project-to-Date Rates

Recordable Injury Rate

1994 National Average	11.8	
Project Rate	20.5	-0.1

Lost Time Rate (Frequency)

1994 National Average	4.9	
Project Rate	2.7	N/C

Lost Work Days (Severity)

1991 National Average	148.1	
Project Rate	73.6	-0.2

Segment 2 is incurring over 140,000 work hours per month.

(Based on May statistics)

CONSTRUCTION SAFETY SUMMARY

- Sixteen of 17 active contracts were completed in May without a Lost Time Injury.
- Year-to-date, Segment 2 has produced 10.3 recordable injuries per 200,000 hours of work. This is more than 10% below the National Average of 11.8.
- Lost Time Injuries (year-to-date) have occurred at a rate of 1.4 per 200,000 work hours. This is less than 30% of the National Average of 4.9.

NEW

Item (Initiated June 1996)

Hollywood Corridor Trackwork Access

Concern/Impact

As a result of the to-date delays in installation of piles and excavation of B251E Sink Hole Shaft and B251F Hollywood/Vine Access Shaft, current completion forecasts for B251E and F tunnel trackwork milestones have impacted the Project completion forecast by 63 calendar days.

Status/Action

Actions to remedy this situation are being evaluated and discussed with the MTA, PD, EMC, and the Contractor. Mitigation options under review include alternate excavation support systems to shorten excavation activity durations, and weekend, shift, and/or overtime work on critical path activities to mitigate forecast delays. In addition, meetings among MTA, EMC, and PD management are meeting with the Contractor to review necessary corrective actions.

METRO RED LINE Segment 2
Summary Status Report
Period ending - June 28, 1996



ONGOING

Item (Initiated May 1996)

Vermont/Sunset Station Kaiser Entrance Construction

Concern/Impact

The B261 street restoration milestone is forecasted to complete significantly later than the required completion date to allow the critical construction activities to proceed. The B263 contract consists of building an entrance into the Vermont/Sunset Station from Kaiser Hospital on the northwest corner of the Vermont and Sunset intersection. The coordination of the Notice to Proceed and site availability is contingent on completion of the B261 street restoration. To facilitate the Work Traffic Control Plan (WTCP) and allow B263 Kaiser Hospital Second Entrance work to proceed, the B261 contract must complete with the final phase of the WTCP. As part of several changes, critical portions of work (emergency exit and air shaft) were modified and deleted from Contract B261 and were added to Contract B263 construction. The emergency exit and air shaft in contract B263 are required for the Vermont/Hollywood Corridor ROD.

Status/Action

The CM has completed its analysis to evaluate several scenarios and recommendations for MTA review and approval:

1. Allow the B263 contract access when B261 has completed Street Restoration at its current date of March 12, 1998.
2. Same as scenario 1, but accelerate the B261 contractor on all work impacting Street Restoration and B263 contract work.
3. Prepare entire Kaiser Entrance work as Change Order to the B261 contract.
4. Prepare Kaiser Entrance excavation/concrete as a Change Order to the B261 contract and a new Contract B263 for entrance finish work, including elevators.
5. Prepare Kaiser Entrance excavation/concrete (including emergency exit and ventilation shaft) as a Change Order to the B261 contract. Prepare Kaiser Entrance elevator finishes as a Change Order to the B710 contract.
6. Same as scenario 1, but include a temporary/interim vent in time for ROD. Complete the emergency exit and permanent vent shortly after ROD.

ONGOING

Item (Initiated March 1996)

Vermont Corridor Trackwork Access

Concern/Impact

As a result of the delays in the B251B, C, and D work packages, access for B251B and C work through B241 Vermont/Beverly Station and access for B251D through B261 Vermont/Sunset Station have the potential for influencing the current B241 and B261 stations dates for the trackwork milestones.

Status/Action

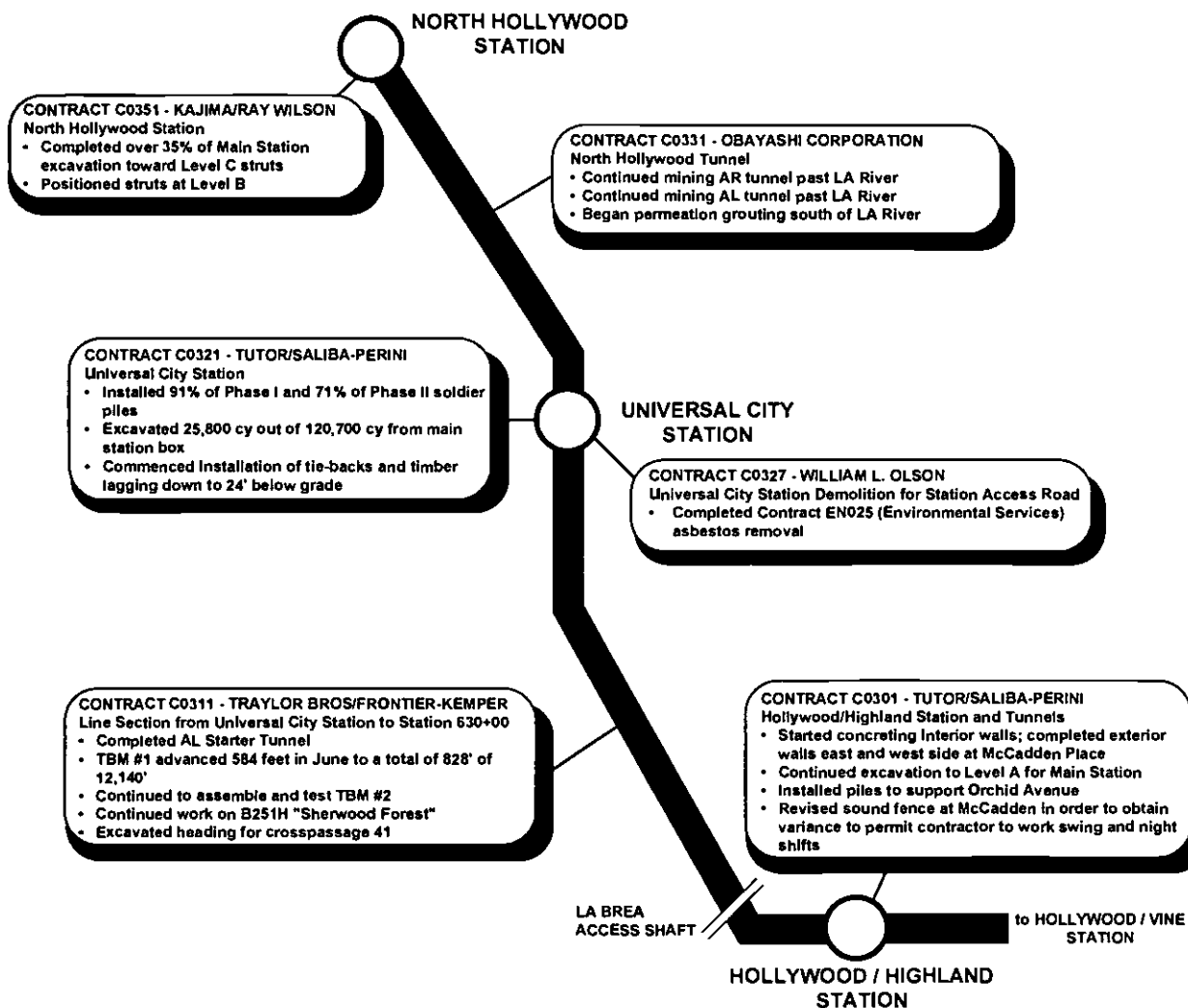
At the B241 Vermont/Beverly Station, initial schedule assessments indicate that the trackwork, ventilation, and air handling station milestones could be influenced. Also, the expected adjustments, although later than current dates, should provide follow-on systems contract access that maintains current project completion forecasts. Trackwork is scheduled to start October 1, 1996 in Vermont Line.

**METRO RED LINE SEGMENT 3
NORTH HOLLYWOOD EXTENSION
EXECUTIVE SUMMARY**

METRO RED LINE - Segment 3 North Hollywood Summary Status Report Period Ending - June 28, 1996



MAJOR ACTIVITIES THIS PERIOD



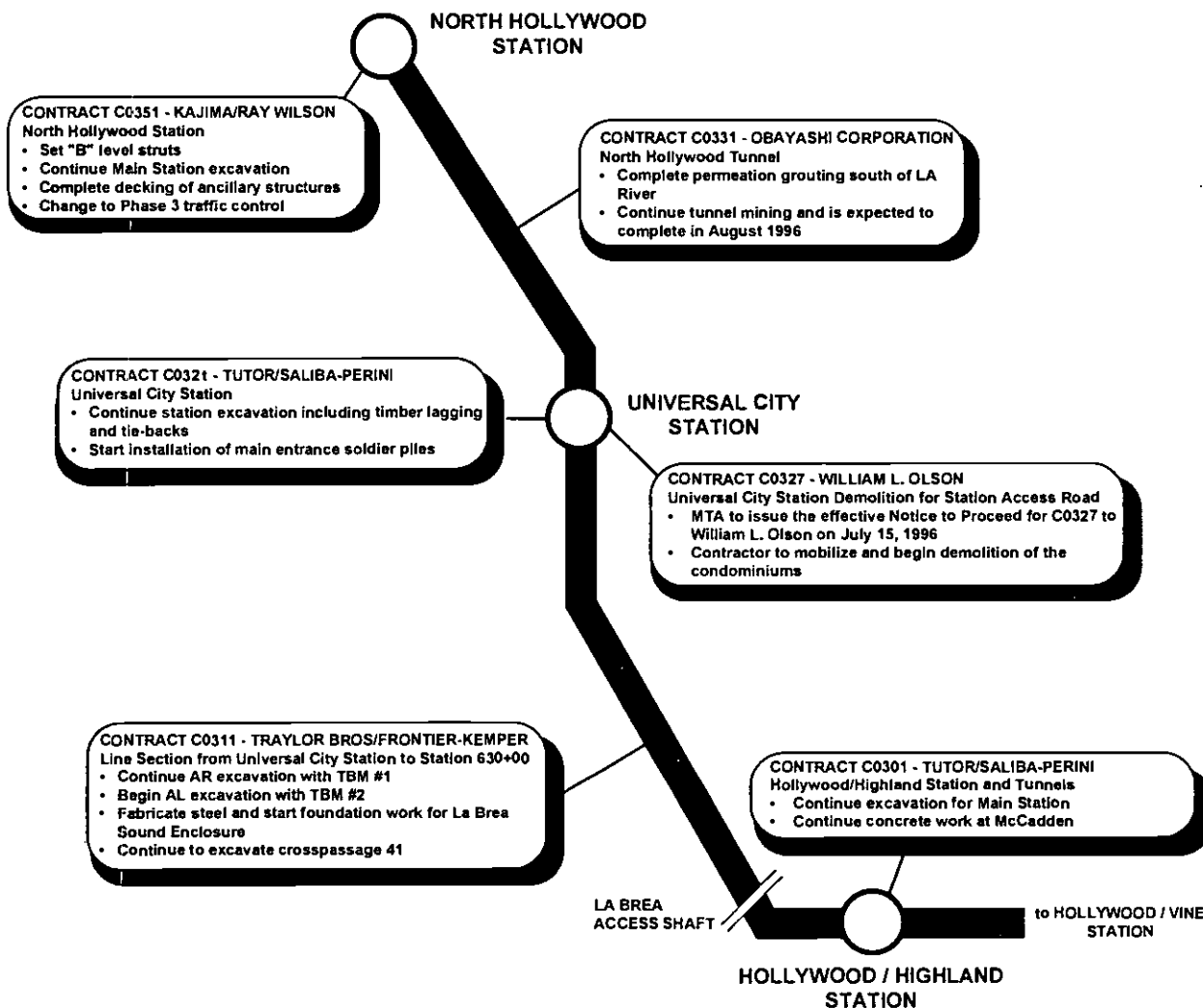
SYSTEMWIDE ACTIVITIES

- Continued work on finalizing a new Revised Baseline Schedule
- Contract B620 (Automatic Train Control) responded to modification for relocation of crossover in Contract C0311
- Contract B641 (Radio Communication) continued with design revision of radio antenna systems for tunnel section
- Contract B642 (Public Address) investigated deferral plans for vent shaft equipment
- Contract B644 (Cable Transmission Equipment) investigated deferral plans for vent shaft equipment

METRO RED LINE - Segment 3 North Hollywood Summary Status Report Period Ending - June 28, 1996



MAJOR ACTIVITIES NEXT PERIOD



SYSTEMWIDE ACTIVITIES

Finalize a new Revised Baseline Schedule

Contract B620 (Automatic Train Control) continue to review and update drawings and specs for final package submittal

Contract H0631 (Traction Power System Installation) continue design toward pre-final design

METRO RED LINE - Segment 3 North Hollywood

Summary Status Report

Period Ending - June 28, 1996



BUDGET

ORIGINAL SCOPE ACTIVITIES

	Amount (in \$ mil)	Change from Last Month (in \$ mil)
Original Budget	1310.8	None
Approved Budget	1310.8	None
Current Forecast	1310.8	None
Expenditures*	386.2	47.4

OTHER LOCALLY FUNDED ACTIVITIES (OLFA)

	Amount (in \$ mil)	Change from Last Month (in \$ mil)
Original Budget	0.0	None
Approved Budget	3.0	None
Current Forecast	0.8	None
Expenditures*	3.5	None

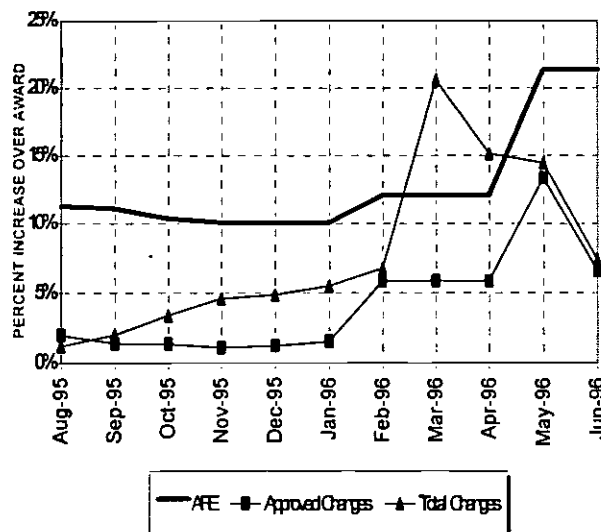
*Note: Does not include all financial transactions to be posted in FIS.

BUDGET ANALYSIS

- The Original Budget of \$1,310.8M was established by MTA Board action on March 25, 1993 with the approval of the Full Funding Grant Agreement (FFGA) by the FTA. The budget has been modified on three occasions for a net increase of \$3.02M to provide for Other Locally Funded Activities (OLFA) for Non Revenue Connector and Artwork in Stations.
- The Current Forecast remains unchanged for the period at \$1,311.6M or \$0.8M over the Original Budget. This increase over the Original Budget is due to OLFA.
- The Expenditures for Original Scope and OLFA through June 1996 are \$389.7M which represents 29.7% of the Current Project Forecast.
- Expenditures have been accumulating over the past three months during the implementation of the Financial Information System (FIS). This has resulted in a period increase of \$47.4M for June 1996. However, the actual June expenditures represent \$21.0M of the \$47.4M reported this period.
- OLFA expenditures exceed the forecast by \$2.7M. This is due to charges associated with the Tunnel Settlement of Contract B251 (Vermont/Hollywood Tunnel). These OLFA charges are anticipated to be offset at a later date with revenues from insurance and claims settlement, in which case, the expenditures would be adjusted downward in line with the \$0.8M forecast.

CONTRACT CHANGES

Construction/Procurement Contracts
Contract Changes
as % of Original Contract Award



CONTRACT CHANGE ANALYSIS

The AFE remained unchanged for this reporting period at 21%, but the total pending and approved changes reduced to a combined 7.4%. The significant approved changes include:

- Approved changes values decreased to 6.6%, as a result of a correction of the Contract A650 (Passenger Vehicles Procurement) amount, being slightly offset by minor various increases as well as \$1.0M for Contract C0331 (North Hollywood Tunnel) and \$2.5M for Contract C0311 (Line Section from Universal City Station to Station 630+00).

The significant pending changes include:

- Pending changes also dropped to a total of \$3.79M, a \$1.8M reduction resulting from reductions of \$707K for Contract B611 (Running Rail Procurement), \$3.8M for C0311 (Line Section from Universal City Station to Station 630+00) and \$560K for Contract C0331 (North Hollywood Tunnel), with some offset increases due to various minor changes and \$3.0M for Contract C0301 (Hollywood/Highland Station and Tunnels).

METRO RED LINE - Segment 3 North Hollywood

Summary Status Report

Period Ending - June 28, 1996



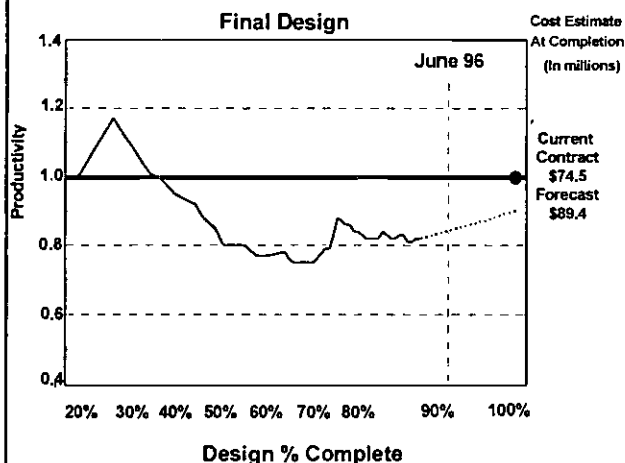
SCHEDULE

		Change from Last Month
Current ROD	October 2000	-25
Design Progress	91%	+0.8%
Construct. Progress	25.6%	+1.7%
Critical Path Float	-160 Cal. Days	-25

SCHEDULE ANALYSIS

- Project critical path changed during this period from -135 to -160 calendar days. Forecast project completion date is October 24, 2000, compared to the official ROD date of May 17, 2000. The forecast is within the Full Funding Grant Agreement schedule obligation date of December 2000.
- Critical path continues to run through Contract C0311 C1610 (Trackwork Installation), B620 (Automatic Train Control), B645 (SCADA) and Testing/Pre-Revenue Operations.
- The additional delay for this period is due to a forecasted later assembly of TBM #2 on Contract C0311 (Line Section from Universal City Station to Station 630+00).
- Systems and pre-revenue operation schedules are being reviewed with the expectation of modifying these activities, in part, to recover from the currently forecasted delays. Changes will be incorporated in the July schedule update.
- Impacts to schedule, due to seasonal springs protections, are currently being assessed.
- Enclosure of the La Brea Shaft and changes in the Special Seismic Section excavation methodology will impact the schedule and possibly switch the critical path from TBM excavation to Seismic Section excavation. Complete assessment will be reported as more information becomes available.

EMC COST PERFORMANCE



EMC COST PERFORMANCE ANALYSIS

- Final Design is approximately 91% complete, with all of the Major Facilities (Stations and Tunnels) at 100% complete. The Cost Performance Index is expected to improve to 90% over the next 12-18 months as the final design of site restoration and systems is completed.
- The MTA has calculated a Forecast at Completion of \$82.3M, not including the cost of work to be transferred from Segment 2 to Segment 3 for B251-related design activities. This represents staff's efforts to contain costs which are lower than EMC's forecast.
- The MTA is working with the EMC to reduce the overall cost forecast by as much as 15% as the project moves fully into construction and requires only limited design services during construction. The MTA has identified areas such as Design Change Notice (DCN) tasks that may be modified to lower cost of DCN preparation.

METRO RED LINE - Segment 3 North Hollywood

Summary Status Report

Period Ending - June 28, 1996



CONSTRUCTION SAFETY STATISTICS

Project-to-Date Rates

		Change from <u>Last Month</u>
Recordable Injury Rate		
1994 National Average	11.8	
Project Rate	12.2	-0.3
Lost Time Rate (Frequency)		
1994 National Average	4.9	
Project Rate	0.3	N/C
Lost Work Days (Severity)		
1991 National Average	148.1	
Project Rate	14.9	-1.3

- Segment 3 North Hollywood is incurring over 140,000 work hours per month.

(Based on May statistics)

CONSTRUCTION SAFETY SUMMARY

- No Lost Time Injuries reported for any construction activities during May.
- Since November 1995, Segment 3 North Hollywood has completed over 876,000 work hours without a Lost Time Injury.
- Contract C0331 (North Hollywood Tunnel) is approaching completion of tunnel excavation without a single Lost Time Injury.
- To date, the project has completed over 1,820,000 work hours with only two Lost Time Injuries.

AREAS OF CONCERN

ONGOING

Item (Date initiated: February 1996)

Contract C0311 (Line Section from Universal City Station to Station 630+00)

Project Impacts Due to Implementation of MTA Board Motion Dated January 24, 1996 Regarding Tunneling Under the Santa Monica Mountains

Concern/Impact

Implementation of MTA Board Motion to adopt mitigation measures will likely impact overall project schedule and budget. Measures instituted by the Board include reducing the amount and intensity of blasting, increasing tunnel grouting to prevent surface springs leaking into the tunnel, and monitoring tunneling effects on surrounding public and private property ecosystems.

Status/Action

MTA has directed its construction manager, JMA, and its designer, EMC, to conduct a comprehensive study considering safety, technical, logistical, cost and schedule impacts and issues as a result of implementing the MTA Board's Motion. The study has been completed and is under review. A number of near-term activities outlined in this study are being pursued through a series of change notices to Contract C0311, additional work orders to Parsons Engineering Services (PES), and increased insurance coverage. Longer-term activities to resolve this issue are being developed.

On June 26, 1996, the MTA Board approved the mitigation measures as part of a settlement of a lawsuit.

METRO RED LINE - Segment 3 North Hollywood
Summary Status Report
Period Ending - June 28, 1996

**AREAS OF CONCERN****ONGOING**

Item (Date initiated: February 1995)

Contract C0351 (North Hollywood Station with Crossover and Tailtrack)
Access to Crossover Area

Concern/Impact

The C0331 contractor must complete tunnel operations to allow C0351 access to the crossover area. The C0351 contractor has filed a claim for the crossover area delays with the final impact to be resolved.

Status/Action

Schedule impact to the station completion due to delays in the C0331 (North Hollywood Tunnel) completion is being addressed. The C0331 and C0351 contracts are currently implementing a mitigation plan that was developed by P-D during the month of June 1996. The plan achieves the interfaces without impact to the C0331 operations and provides useful staging area for the completion of C0351 work with minimum delays. The mitigation plan also preserves the project ROD.

AREAS OF CONCERN**RESOLVED**

Item (Date initiated: April 1996)

Contract C0331 (North Hollywood Tunnel)
Underground Easements

Concern/Impact

Outstanding real estate parcels at the southern end of the contract may delay mining operations.

Status/Action

Subsurface easements have been obtained for all but one parcel. For this remaining parcel, Right of Entry has been obtained and a permanent easement is being negotiated. Construction will not be impacted.

METRO RED LINE - Segment 3 North Hollywood
Summary Status Report
Period Ending - June 28, 1996



AREAS OF CONCERN

RESOLVED

Item (Date initiated: February 1995)

Contract C0331 (Line Section North Hollywood to Universal City)

Lack of Progress

Concern/Impact

There is a concern that continued delays will further erode schedule float for this contract and follow-on integrated contracts. In addition, the mining operation must be conducted to ensure against ground settlement.

Status/Action

The MTA and its consultants are taking all necessary steps to ensure that the mining operation progresses in a manner that ensures against ground settlement. This includes a grouting program which has been implemented allowing for resumption of excavation activities.

The contractor has approximately 800 feet of mining to complete in each of the tunnels. Mining is forecast to complete in late July or early August. P-D has prepared a plan of schedule mitigation measures that have been incorporated into the program schedule. These measures reduce the adverse cost and schedule impacts to the C0351 (North Hollywood Station) contract and support all follow-on trackwork and systems schedules.

METRO RED LINE SEGMENT 3

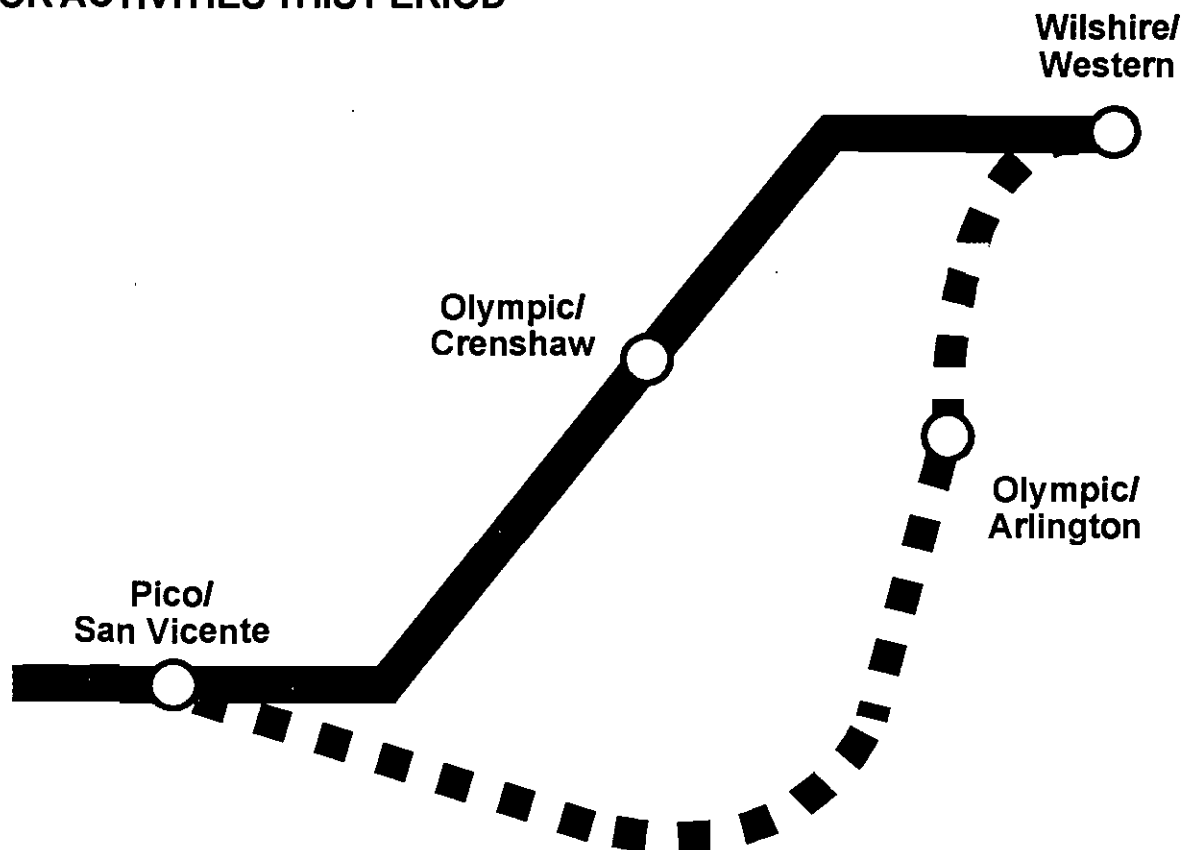
MID-CITY EXTENSION

EXECUTIVE SUMMARY

METRO RED LINE - Segment 3 / Mid-City Extension
Summary Status Report
Period Ending - June 28, 1996



MAJOR ACTIVITIES THIS PERIOD



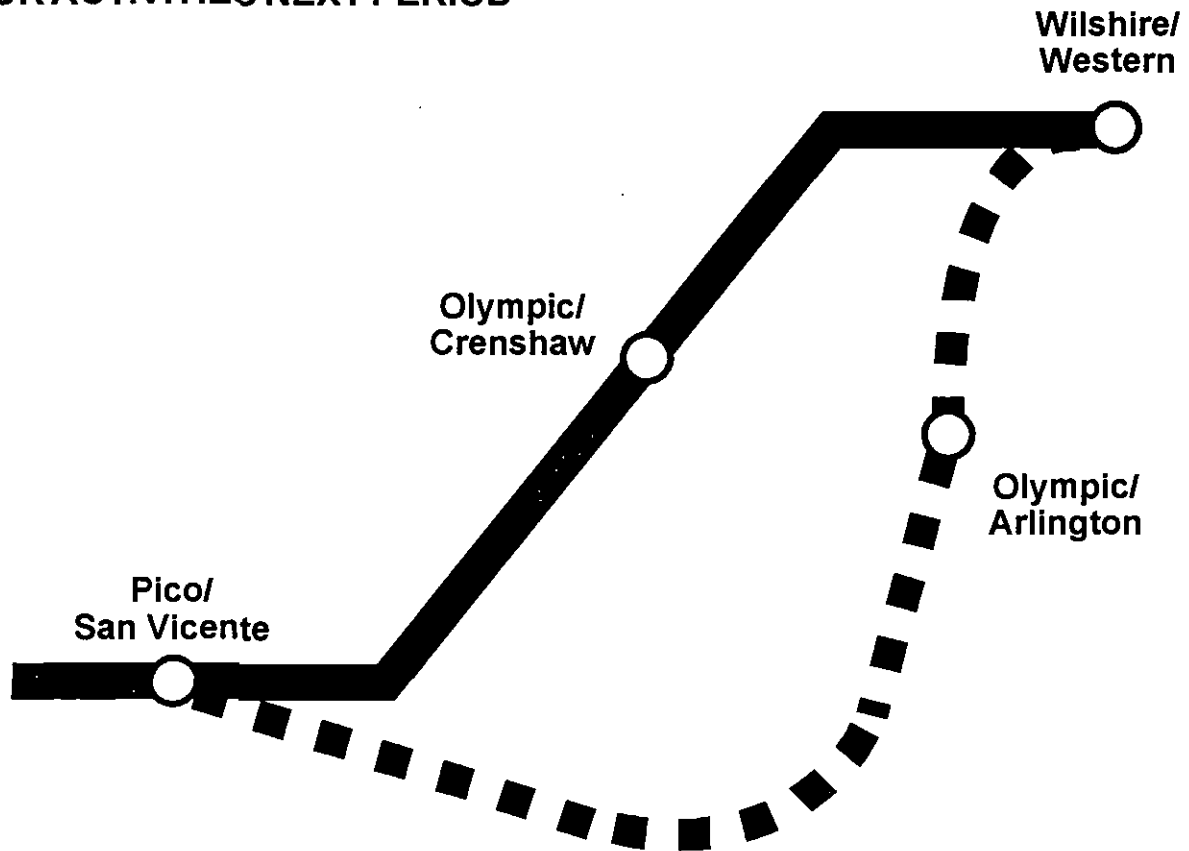
SYSTEMWIDE ACTIVITIES

- Enviro-Rail submitted preliminary cone penetrometer test logs and gas data.
- EMC continues to evaluate configuration and alignment alternatives, develop profile and plan drawings, and compile and map utility data.
- The Tunnel Review Board was convened June 17 and 18 to evaluate subsurface conditions along the new alignment.

METRO RED LINE - Segment 3 / Mid-City Extension
Summary Status Report
Period Ending - June 28, 1996



MAJOR ACTIVITIES NEXT PERIOD



SYSTEMWIDE ACTIVITIES

- EMC will complete preparation of plan and profile drawings, commence the right-of-way study and construction cost estimate, complete alignment maps, complete gas concentration and bored tunnel evaluations, and complete and submit the utility study.
- Enviro-Rail will complete and submit the gas wells report.
- MTA will initiate procurement of an environmental consultant to prepare an SEIS/SEIR for the new alignment.

METRO RED LINE - Segment 3 / Mid-City Extension
Summary Status Report
Period Ending - June 28, 1996



BUDGET

	<u>Amount</u> <u>(In \$ mil)</u>	<u>Change from</u> <u>Last Month</u> <u>(In \$ mil)</u>
Original Budget	490.7	None
Approved Budget	490.7	None
Current Forecast	TBD	TBD
Expenditures	12.1	0.1

OTHER LOCALLY FUNDED ACTIVITIES

	<u>Amount</u> <u>(In \$ mil)</u>	<u>Change from</u> <u>Last Month</u> <u>(In \$ mil)</u>
Original Budget	0.0	0.0
Approved Budget	0.0	0.0
Current Forecast	0.0	0.0
Expenditures	0.0	0.0

BUDGET ANALYSIS

- Budget and Forecast values are subject to outcome of alignment alternative selected.

- None at this time.

SCHEDULE

		<u>Change from</u> <u>Last Month</u>
Current ROD	7/16/99	None
Design Progress	0%	None
Construction Progress	0%	None
Critical Path Float	N/A	None

SCHEDULE ANALYSIS

- The engineering feasibility study for the Wilton/Arlington alignment began May 3 and is on schedule to complete by mid-August 1996.
- If the alignment and configuration prove feasible, a SEIS/SEIR will be prepared.
- This will lead to an FTA Record of Decision, scheduled for March 1998, and the subsequent resumption of final design.

CONSTRUCTION SAFETY

- No activity for this period.

METRO RED LINE - Segment 3 / Mid-City Extension
Summary Status Report
Period Ending - June 28, 1996



AREAS OF CONCERN

● **NEW**

None

● **ONGOING**

Item

Mid-City Master Schedule (initiated 8/95)

Concern/Impact

The Draft SEIS/SEIR when completed will define the project alternatives. The MTA Board will be able to make a decision on the preferred alternative for the Final SEIS/SEIR. The overall schedule for final design and construction is on hold pending the MTA Board determination of the preferred alternative. The impact to R.O.D. cannot be finalized until the preferred alternative is selected.

Status/Action

Draft SEIS/SEIR document preparation for two alternatives was completed. Both alternatives, however, were determined to be unacceptable. A third alternative has been authorized for study, and the SEIS/SEIR process is incurring further delays pending the outcome of that study. See SD-1 for discussion.

● **RESOLVED**

Item

Procurement Contracts (initiated 11/95)

Concern/Impact

Pending redefinition of the Mid-City configuration and alignment, MTA needs to review contract commitment values and deobligate/defer as appropriate.

Status/Action

The MTA Board, at its April 24, 1996 meeting, authorized transfer of \$17 million in Mid-City procurement commitments and appropriate expenditures to the East Side Extension. The deferral of \$56.3 million of Mid-City obligations for Hazardous Material Handling, Owner's Insurance, etc. was approved by the MTA Board in June 1996.

METRO RED LINE SEGMENT 3

EAST SIDE EXTENSION

EXECUTIVE SUMMARY

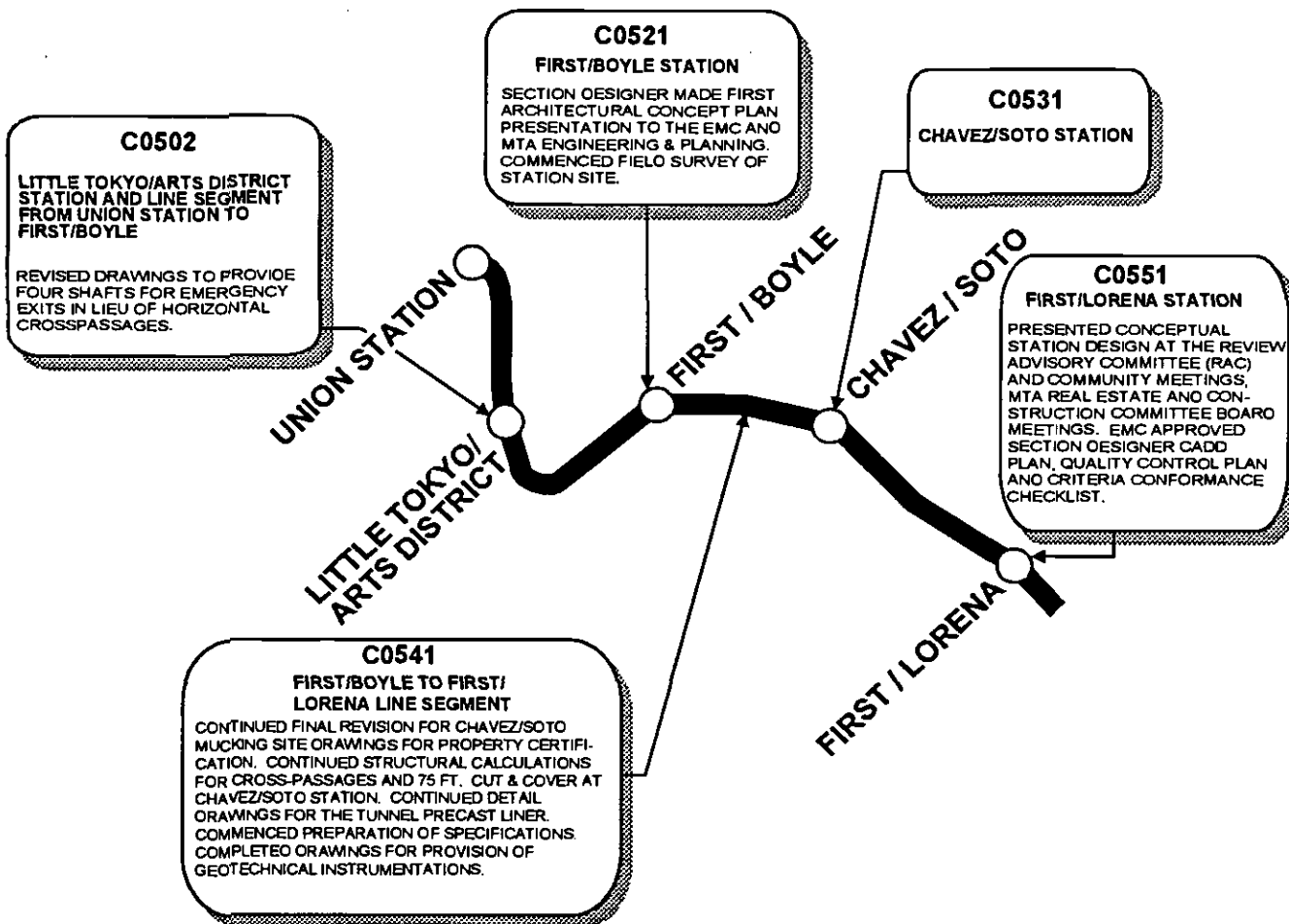
METRO RED LINE - Segment 3 East Side Extension

Summary Status Report

Period ending - June 28, 1996



MAJOR ACTIVITIES THIS PERIOD



SYSTEMWIDE ACTIVITIES

EMC/MTA BEGAN PIP NEGOTIATIONS OF THE FINAL DESIGN SCOPE OF SERVICES AND ASSOCIATED COSTS. EMC/MTA COMPLETED LIST OF PARCELS TO BE CERTIFIED. EMC BEGAN PROPOSAL FOR FINAL DESIGN SERVICES CONTINUATION UP TO OCTOBER 15, 1996. MTA DIRECTED EMC TO REPACKAGE THE THREE DEMOLITION CONTRACTS FROM STATION SITE SPECIFIC TO PROPERTY AVAILABILITY. CERTIFIED 13 FULL-TAKE PARCELS FOR CONTRACT C0551.

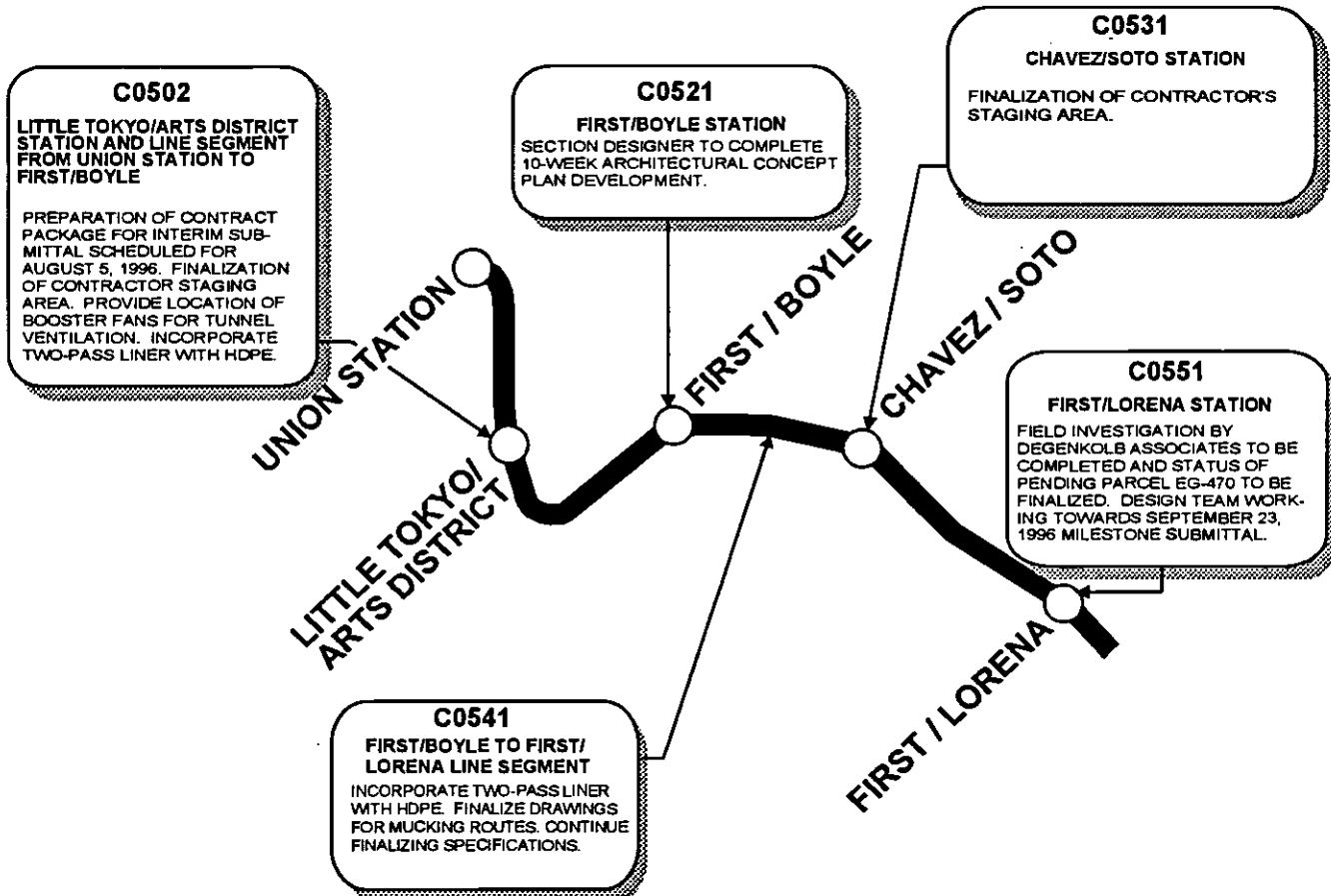
METRO RED LINE - Segment 3 East Side Extension

Summary Status Report

Period ending - June 28, 1996



ACTIVITIES PLANNED FOR NEXT PERIOD



SYSTEMWIDE ACTIVITIES

CONSTRUCTION MANAGEMENT PROCUREMENT CONTINUES WITH BIDS DUE JULY 8, 1996, FOLLOWED BY EVALUATION WITH STAFF RECOMMENDATION TO MTA PLANNED FOR AUGUST, 1996. MTA TO ISSUE CWO #28, AMENDMENT #5, TO EMC FOR CONTINUATION OF FINAL DESIGN SERVICES THROUGH OCTOBER 15, 1996. EMC TO CONDUCT QUALITY ASSURANCE REVIEWS IN PREPARATION OF THE FOLLOWING DESIGN SUBMITTAL: CONTRACT C0502 INTERIM, CONTRACT C0525 INTERIM AND CONTRACT C0541 PRE-FINAL. MTA/EMC TO CONCLUDE AND FINALIZE PIP NEGOTIATIONS. EMC ACCEPTANCE OF SECTION DESIGNER CADD PLAN AND QUALITY CONTROL PLAN FOR CONTRACT C0502. EMC TO CERTIFY 30 SUB-SURFACE EASEMENTS FOR CONTRACT C0541 WHICH IS ON THE CRITICAL PATH.

METRO RED LINE - Segment 3 East Side

Summary Status Report

Period Ending - June 28, 1996



BUDGET

	<u>Amount</u> <u>(In Millions)</u>	<u>Change from</u> <u>Last Month</u> <u>(In Millions)</u>
Original Budget	979.6	None
Approved Budget	979.6	None
Current Forecast	988.1	None

OTHER LOCALLY FUNDED ACTIVITIES

	<u>Amount</u> <u>(In Millions)</u>	<u>Change from</u> <u>Last Month</u> <u>(In Millions)</u>
Original Budget	0	None
Approved Budget	0	None
Current Forecast	0	None
Expenditures	0	None

BUDGET ANALYSIS

- During the reporting period, no changes were made to the forecast.
- The following cost mitigation measures under review have an estimated potential cost savings of \$2 to \$4 million dollars.
 - Revised Power Distribution System
 - Floating Slab reduction
 - Deletion of Under Platform Exhaust (UPE) fans
- Presently, MTA's Fire/Life/Safety division is reviewing the recommended deletion of Under Platform Exhaust (UPE) fans at each station. A decision is expected to be reached during July. EMC and MTA are continuing to identify, analyze and implement further corrective actions.

CONTRACT CHANGES

- No activity for this period.

CONTRACT CHANGE ANALYSIS

- No activity for this period.

METRO RED LINE - Segment 3 East Side

Summary Status Report

Period Ending - June 28, 1996



SCHEDULE

		Change from <u>Last Month</u>
Current R.O.D.	Nov 2002	None
Final Design progress	23.6%	3.9%
Construct. Progress	N/A	N/A
Critical Path Float	-319	0

SCHEDULE ANALYSIS

- The forecast R.O.D. is September 2003, or 319 calendar days (228 working days) behind the FFGA scheduled R.O.D. of November 2002 due to delay in full release of Final Design and the delay in the section designer's Notice to Proceed.
- Complete recovery of the full 319 days presently seems unlikely until the award of the Construction Management (CM) contract, at which time the CM will begin to incorporate substantially more detail into the schedule and more precisely define the critical activity relationship.
- Schedule mitigation measures being evaluated include:
 - Construction/design activity resequencing
 - Simplified contractor interfaces
 - Possible second tunnel concreting crew
 - Possible second fiber optics crew
- Complete review of Design and Project Schedules underway by MTA. Results are expected in July.

EMC

COST PERFORMANCE

The Cost Performance Chart is not applicable at this time, but will be provided at the time a baseline schedule and budget is approved.

EMC

COST PERFORMANCE ANALYSIS

The Cost Performance Index baseline is no longer consistent with the original \$48.5M budget due to authorized scope changes incorporated into the work in progress. The revised scope of work is documented in the Project Implementation Plan as submitted by the EMC on May 3, 1996. MTA is currently negotiating the PIP with EMC. Once the Final Design Project Implementation Plan is reviewed, negotiated, and approved, the revised baseline will be established and a Cost Performance Chart which accurately reflects the work scope will be included.

METRO RED LINE - Segment 3 East Side
Summary Status Report
Period Ending - June 28, 1996



AREAS OF CONCERN

NEW

Item [Initiated June 1996]

Repackaging demolition Contracts C0528, C0538 and C0558.

Concern/Impact

Repackaging of these contracts will be based upon property availability rather than station site. This repackaging effort has currently delayed two design submittals that were originally scheduled for June 1996. Further design submittals may also be delayed. It is foreseen that this will not impact the current forecasted R.O.D. of September 2003.

Status/Action

MTA/EMC is analyzing the potential schedule & cost impacts and, as these are identified, further action will be taken to remediate the impacts.

ONGOING

Item [Initiated February 1996]

Project escalation costs due to delayed starts.

Concern/Impact

Stemming directly from the delay in the full release of final design services and the Section Designers' Notice-To-Proceed, the project schedule has been increased 319 calendar days (228 working days) from the approved FFGA schedule, incurring a \$44 million escalation cost.

Status/Action

The \$44 million escalation cost has been partially mitigated by a previously identified \$15 million value engineering cost savings. The MTA Board's decision to delete the air conditioning system at the stations and to procure sixteen passenger vehicles instead of twenty-four has resulted in an additional cost savings of \$20.9 million. The MTA/EMC is continuing evaluating mitigation measures including revisions to the power distribution system and ground borne noise and vibration mitigation plans. MTA's Fire/Life/Safety division is reviewing the recommended deletion of Under Platform Exhaust (UPE) fans at each station. A decision is expected to be reached during July. EMC and MTA are continuing to identify, analyze and implement further corrective actions.

METRO RED LINE - Segment 3 East Side
Summary Status Report
Period Ending - June 28, 1996



AREAS OF CONCERN (Continued)

ONGOING

Item [Initiated April 1996]

Identification of 13 (full-take) additional property acquisitions for Contract C0551.

Concern/Impact

Assuming 14 months acquisition for each parcel, contract C0551 will be impacted by 71 working days. This impact results in the C0551 contract becoming part of the critical path.

Status/Action

MTA Real Estate is formalizing the property acquisition schedule and with their plan will determine if parcel acquisition can be shorter than the assumed 14 months.

ONGOING

Item [Initiated February 1996]

MTA requested EMC to study alternative methods of tunneling for the East Side Extension.

Concern/Impact

To minimize settlement along the East Side alignment to prevent disturbance to residents, excessive building repair costs, and schedule delays.

Status/Action

During the on-going discussions with the MTA and the Dr. Eisenstein panel, EMC has been directed to proceed with the design using closed positive-face tunnel boring machines for the East Side Extension project. EMC is proceeding with developing specifications for either Earth Pressure Balance (EPB) or Slurry Shield machine to meet this requirement.

METRO RED LINE - Segment 3 East Side
Summary Status Report
Period Ending - June 28, 1996



AREAS OF CONCERN (Continued)

ONGOING

Item [Initiated February 1996]

Revised Baseline documents including scope of services and schedule.

Concern/Impact

Due to changes in work scope that have been incorporated into the work in progress, the previous design status baseline is no longer valid. The baseline is used as the basis for measuring design progress and performance measurement and without one, accurate performance measurement is unable to be performed and reported.

Status/Action

Negotiations of the May 3, 1996 PIP scope of services and corresponding costs and schedule is expected to be finalized in July. All documents, including the Final Design schedule, will then be baselined.

ONGOING

Item [Initiated February 1996]

Coyote Pass Fault within East Side Extension alignment.

Concern/Impact

Study of the Coyote Pass Fault shows the East Side Extension alignment crosses the fault at three places. Study is needed to determine whether enhanced structural and tunnel design is required to mitigate the risk at fault crossings. Cost impacts range from zero to substantial (\$10 million).

Status/Action

Steel tunnel liners will be used at one, possibly two fault crossings to mitigate the Maximum Design Earthquake, per the recommendation of the Dr. Eisenstein panel. The steel liner installation will require more time than the concrete liner. Since the two fault crossings fall within the C0541 contract, this will have the potential of impacting the critical path. Cost impacts are awaiting review by EMC Estimating.

VEHICLE ACQUISITION PROJECT

EXECUTIVE SUMMARY

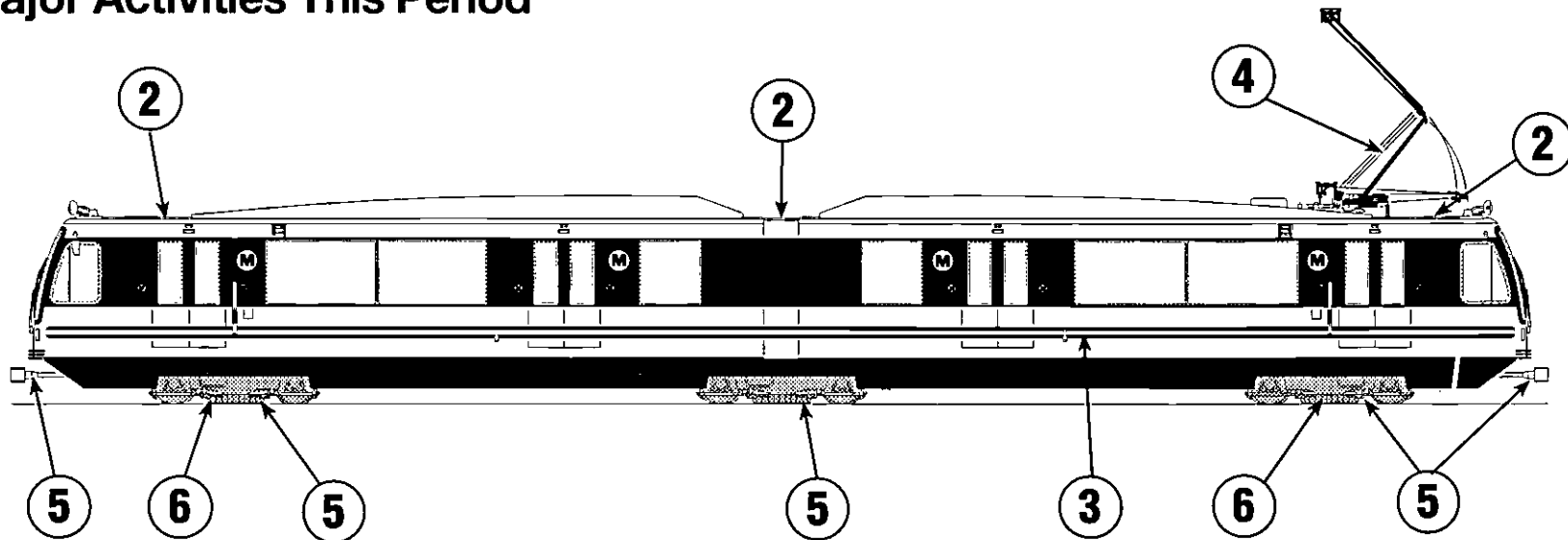
L.A. Light Rail Vehicle

Summary Status Report

Period Ending - June 28, 1996



Major Activities This Period



1. Conducted Blue Line Vehicle compatibility Tests.
2. Conducted First Article Inspection (FAI) of the First Carshell structure and all of its structural components, including secondary structure.
3. Inspected car body spackle and Paint Finishing at Carson Plant.
4. Conducted FAI on the pantograph.
5. Open items on FAI for Brake System, Coupler and Propulsion System were reviewed for close-out.
6. Life Cycle Test on Power Truck was halted due to cracks in the caliper arm at 790,000 cycle. The arms redesign is under investigation.
7. Met with STS/TRW/Aerojet regarding Product "C" Air Conditioning contract close-out.

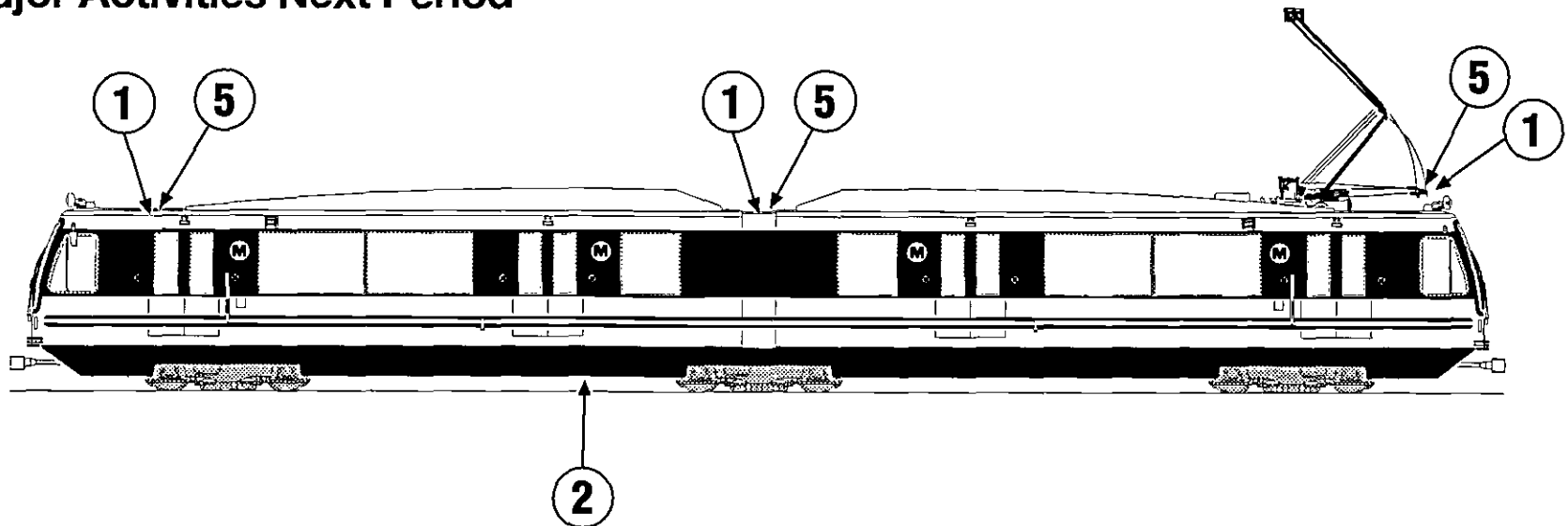
L.A. Light Rail Vehicle

Summary Status Report

Period Ending - June 28, 1996



Major Activities Next Period



1. The first Carshell from the Carson Plant is scheduled for completion July 10, 1996. A ceremony is planned by STS/Cerrell Associates.
2. Conduct Design Conformance Test on Batteries/Charger System and conduct FAI on the First Auxiliary Power Supply Unit built in the U.S.
3. Meet with STS to review Integrated Schematics, narratives and Maintenance Manuals.
4. MTA Management is reviewing STS's request for schedule relief.
5. Conduct inspections on Carshell number two and three.
6. Meet with STS Management to review areas of concern and project update.

ES-2

L.A. LIGHT RAIL VEHICLE

Summary Status Report

Period ending - June 28, 1996



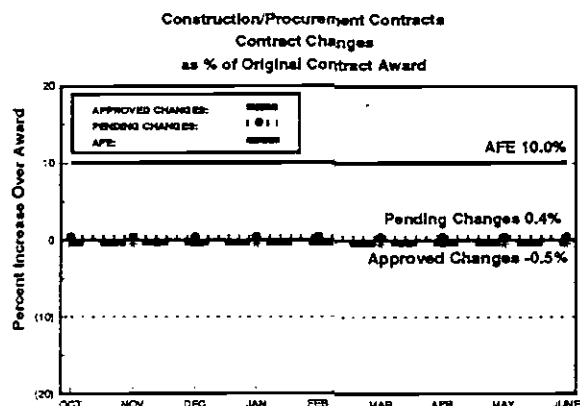
BUDGET

	Amount (in \$ mil)	Change from Last Month (in \$ mil)
Original Budget	257.6	-0-
Approved Budget	257.6	-0-
Current Forecast	201.4	-0-
Expenditures	72.0	-0-

BUDGET ANALYSIS

- Car reduction effected 9/08/95 which will reduce contract value from \$215 million to approximately \$170 million after termination liability is negotiated (2-4 months from now).
- The current forecast includes the reduction of both procurement contract value and other project costs.

CONTRACT CHANGES



CONTRACT CHANGE ANALYSIS

The figures for June 1996 are as follows:

Approved Changes (0.5%)
Pending Changes 0.04%
AFE 10%

SCHEDULE

		Change from Last Month
Schedule Car Delivery		
1st Car	July 1997	+2 Days
52nd Car	Nov. 1998	+11 Days
Design Progress	90-95% complete	N/C
Fabrication Progress	25-30% complete	N/C
Critical Path	Carshell delivery	N/C
Delay (1st Car)	-8 months	N/C
Data Date	June 1, 1996	

SCHEDULE ANALYSIS

The Contractor's last forecast schedule reflected a total of eight months delay in 1st car deliveries. Other subsystems with potential impact on delivery are air conditioning, doors and communications equipment. Carshell delivery is still on the critical path. Acceleration of the delivery schedule for the first several carshells is unlikely, however, the delivery schedule is projected to improve for later units.

In recent schedules, STS assumed that the MTA can accept cars at a higher rate than specified (2 cars per month).

**L.A. LIGHT RAIL VEHICLE
Summary Status Report
Period ending - June 28, 1996**



AREAS OF CONCERN

NEW

Item (Date Initiated June 1996)

Vehicle Weight

Concern/Impact

The MTA received Revision 10 of the Vehicle Weight Report, which forecasts a vehicle weight of 142,749 lbs., about 240 lbs. over the specified limit.

Status/Action

The MTA recommended that STS weigh the first carshell *before* assembly in Sacramento to assess the accuracy of their theoretical weight model. If Siemens waits until the entire car is assembled before weighing, it may be too late to take appropriate corrective measures. Results of this weighing will set the tone for the intensity of the balance of the weight reduction program, as required.

The MTA recommended that in addition to the carshell, the actual weights of all other apparatus (especially equipment which has passed FAI) be included in the weight estimate.

**L.A. LIGHT RAIL VEHICLE
Summary Status Report
Period ending - June 28, 1996**



AREAS OF CONCERN (CON'T)

ONGOING

Item (Date Initiated March 1996)

Failure of Power Truck Friction Support Brackets

Concern/Impact

The Duewag power truck failed fatigue testing for a second time. In late June, at about 790,000 cycles into the 2,000,000 cycle test, cracks developed in both of the friction brake support arms. Although not identical to the previous failures, these failures were in the same "general" location.

Status/Action

Duewag met with LTK and decided on the following course of action:

- Duewag will prepare a formal response to the event, indicating precisely the extent and location of all cracks, and an analysis consistent with test observations.
- The friction brake actuator support arm will be redesigned. In order to relieve the stress at the junction between the two upper plates, we can expect the following changes:
 - The entire upper plate will be 12 mm thick
 - The side backing plates will be welded intermittently, rather than continuously
 - The backing plate will be shortened
- A preliminary fatigue test of the support arm will be conducted at Duewag's test facility at Uerdingen.
- Following successful completion of the preliminary testing, a complete power truck frame and support bracket test will be conducted. One logistics problem is that the "window" for testing at the Berlin (IFS) Test Facility will only be available for the next three weeks. Following this period, the next window will not open up until sometime in September. Alternative test sites include Dortmund or in the Czech Republic.

The failed power truck frame was returned to Duewag's facility at Dusseldorf for further analysis. This issue remains an item of concern.

**L.A. LIGHT RAIL VEHICLE
Summary Status Report
Period ending - June 28, 1996**



AREAS OF CONCERN (CON'T)

Item (Date Initiated March 1996)

Failure to Press Disc Brake Hubs onto Axle at the Design Force

Concern/Impact

Siemens asked the MTA to extend the pressing force range for the center truck disc brake hub from the *design* value of 24-66 tons to the *observed* range of 53-94 tons. The reason for this increase is that the braking disc hub was designed for a different size axle seat. A problem arises in that pressing forces above a certain minimum (=90 tons) damage the axle seat, which damage was observed on the first pressing.

Status/Action

MTA requested STS/Penn Machine to modify their interference fit to lower the pressing force required.

Item (Date Initiated February 1996)

Schedule Slippage

Concern/Impact

The vehicle delivery schedule did not change based on STS's 01JUN96 schedule. Car deliveries are projected to be eight months late from the original schedule.

Status/Action

Awaiting STS's 01JUL96 Program Schedule.

Item (Date Initiated July 1995)

Cancellation of 22 Standard Cars

Concern/Impact

The MTA is continuing their review of the STS claim. The MTA audited STS's books and records in Sacramento and requested additional data.

Status/Action

The MTA is reviewing additional data from STS.

**L.A. LIGHT RAIL VEHICLE
Summary Status Report
Period ending - June 28, 1996**



AREAS OF CONCERN (CON'T)

Item (Date Initiated March 1995)

HVAC Design

Concern/Impact

In May, 1996, LTK traveled to Lamar, Colorado, to inspect Suttrak's prototype HVAC unit. The unit was satisfactory, with only minor changes required. Two potential problem areas remain, the volume of fresh air, which must be demonstrated to be adequate, and the distribution of the combined fresh and return air, which presently appears centered on the evaporator coil rather than distributed evenly across it.

Status/Action

Design Conformance Testing scheduled for mid-July has been postponed and is being re-scheduled. This issue will remain an item of concern until system validation.

Item (Date Initiated November 1995)

Carborne Signal Equipment for 16 Standard Cars

Concern/Impact

Upon review of MTA's requirements regarding the allocation of various vehicles to the three light rail lines, sixteen LA Standard Cars have been assigned to the Metro Blue Line environment. Consequently, the MTA must procure signal equipment compatible with Metro Blue Line signal system in order to operate LA Cars on the Metro Blue Line.

Status/Action

Awaiting response from STS regarding their willingness to supply sixteen carsets of Metro Blue Line signal equipment. STS has been requested to expedite their response.