



# **EASTSIDE LRT PROJECT**

## **MONTHLY PROJECT STATUS REPORT**

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH A GRANT FROM THE U. S. DEPARTMENT OF TRANSPORTATION, FEDERAL TRANSIT ADMINISTRATION (FTA), UNDER THE FEDERAL TRANSIT ACT OF 1964, AS AMENDED, AND FUNDS FROM THE STATE OF CALIFORNIA.

**JULY 2002**

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## PROJECT OVERVIEW

*The Eastside Light Rail Transit (Eastside LRT) Project is a six-mile, dual track light rail system with eight new stations and one station modification. The system originates at Union Station in downtown Los Angeles, where it connects with the Pasadena Gold Line, traveling generally east to Pomona and Atlantic Boulevards. The system will bridge State Route 101 Freeway and traverse the existing 1<sup>st</sup> Street Bridge over the Los Angeles River. The system will travel south on Alameda Street and then east on 1<sup>st</sup> Street with two stations at Alameda and Utah Streets. East of the Los Angeles River and 1<sup>st</sup> and Utah Streets, the alignment transitions to tunnel for approximately 1.8 miles, and continues beneath 1<sup>st</sup> Street to underground stations at 1<sup>st</sup> Street and Boyle Avenue and 1<sup>st</sup> Street and Soto Street. The alignment returns to the surface near the intersection of 1<sup>st</sup> Street and Lorena Streets, then jogs to the south, transitioning to follow 3<sup>rd</sup> Street with stations at Indiana Street, Ford Boulevard, Mednik Avenue and Pomona and Atlantic Boulevards.*

The project was scheduled to conclude with Part III of the Preliminary Engineering Design phase and commence with final design by mid-July upon receipt of FTA's approval to enter into final design. To date, the FTA has not granted its approval to begin final design.

Since there have been some recent design modifications, Part III of Preliminary Engineering has been extended to allow the redesign to be incorporated into the drawings and contractual documents. The redesign of the modifications to the east and west portals and the reconfiguration of the 1<sup>st</sup>/Soto Station will continue for the critical path contract, C0800 Tunnel and Underground Station Excavations. Also, the work towards the Caltrans Project Study Reports/Project Reports (PSR/PR) and California Public Utility Commission (CPUC) applications will continue uninterrupted. The recent design modifications to Commercial Street are also being made. Commercial Street redesign affects both Contracts C0801-Stations, Trackwork and Systems and C0802-101 Freeway Bridge Overcrossing. But the design for the remaining non-critical elements for Contract C0801 has ceased due to the limited design budget remaining, except for the County Traffic Analysis along Third Street Corridor.

The remaining budget for preliminary engineering is being closely monitored to allow the designer to continue work only on critical design modifications until approval to begin final design is granted by the FTA.

## MANAGEMENT ISSUES

### **Ongoing Item (Date Initiated: March 2002)**

FEDERAL TRANSIT ADMINISTRATION (FTA) GRANTING MTA PERMISSION TO ENTER INTO FINAL DESIGN

### **Concern/Impact**

It was anticipated that final design for two contracts, C0800 and C0802, would have begun by mid-July 2002 upon FTA granting permission to enter into final design. To date, the FTA has not given the approval to begin. Since Contract C0800 is on the project critical path, the projected Revenue Operations Date of October 2008 is at risk.

### **Status/Action**

Part III of Preliminary Engineering has been extended so that recent design modifications can be incorporated into both Contracts C0800 and C0802. Both the MTA and the designer have identified those critical design modifications and will address them so to reduce any potential impacts to the projected Revenue Operations Date. The encroachment permits for Contract C0800 are not at risk. The permits will be available prior to advertising the contract. The Contractor for Contract C0801 is responsible for obtaining the encroachment permits. The schedule for obtaining the permits do not create a risk to the project.

## MANAGEMENT ISSUES

### **Resolved Item (Date Initiated: March 2002)**

CALTRANS DESIGN REVIEW OF PROJECT STUDY REPORTS/PROJECT REPORTS (PSR/PR) AND TYPE SELECTION REPORTS LEADING TO ISSUANCE OF ENCROACHMENT PERMITS

#### **Concern/Impact**

The concern has been that the PSR/PRs would not be available prior to the issuance of the last design review submittals for the construction contract packages. But in addition to the PSR/PRs, Caltrans requires several additional reports to be submitted for their review and acceptance prior to issuance of Caltrans encroachment permits for the SR 60, I-5 and the I-710 Freeways.

#### **Status/Action**

The design/builder will get their own encroachment permit.

### **Resolved Item (Date Initiated: March 2002)**

CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC) APPROVAL OF STREET CROSSING APPLICATIONS

#### **Concern/Impact**

Forty-four grade crossings require CPUC approval. It is the project team's anticipation that CPUC approval will be obtained prior to awarding the design/build contract package. To date, no applications have been filed with the CPUC.

#### **Status/Action**

A field diagnostic team meeting at one of the critical crossings (1<sup>st</sup> and Alameda) was conducted in May 2002. Comments received from CPUC representatives and the local jurisdiction are being incorporated into a sample at-grade crossing application. The submission of the sample application is scheduled for late August 2002. This sample application will set the basis for the remainder of the applications. If no protest is filed during public review, then the CPUC will issue their final decision within six months. MTA has consolidated all applications in 14 batches. The first application submittal will occur in late-August 2002, followed by the remaining batches. Remaining batches will be submitted about every two weeks. The CPUC application approvals meet MTA schedule requirements.

## PROJECT SCOPE

### Contract C0802 – 101 Freeway Bridge

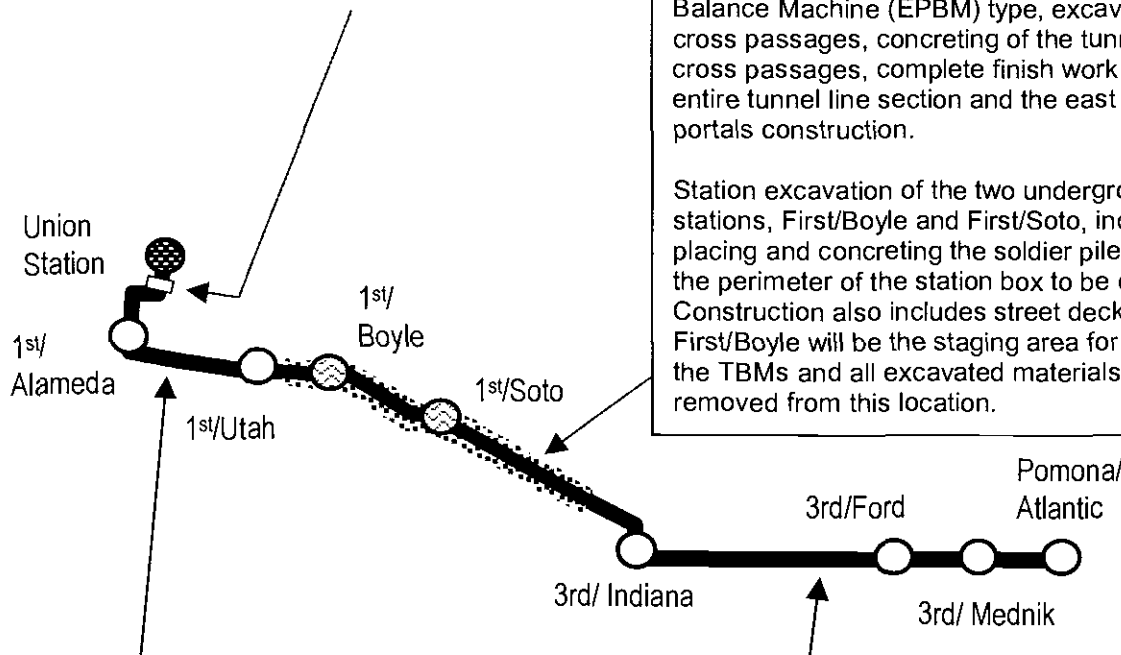
**Overcrossing:** Under a contract by Caltrans, 101 Freeway construction will occur in the same location as the 101 Freeway Bridge Overcrossing. Currently, the MTA will remain responsible for the design and construction costs of the bridge overcrossing.

### Contract C0800 - Tunnel and Station

**Excavation:** This contract will be design/bid/build. The contractor will be selected utilizing a sealed bid, where the award will be based on the lowest priced technically qualified bid.

The start of tunnel construction is based upon the completion of final design, successful construction award and acquisition of full take real estate parcels. Construction of the 1.8 mile tunnel segment includes tunnel excavation using two tunnel boring machines (TBM) of Earth Pressure Balance Machine (EPBM) type, excavation of cross passages, concreting of the tunnels and cross passages, complete finish work for the entire tunnel line section and the east and west portals construction.

Station excavation of the two underground stations, First/Boyle and First/Soto, include drilling, placing and concreting the soldier piles that line the perimeter of the station box to be excavated. Construction also includes street decking. First/Boyle will be the staging area for assembling the TBMs and all excavated materials will be removed from this location.



**Contract C0801 - Stations, Trackwork, and Systems:** This contract will be design/build. The contractor will be selected utilizing the two-step low bid procurement, following the guidelines set forth in the Federal Acquisition Regulations (FAR) Part 15 and requirements of California Public Utilities Code (CPUC) Section 130242 to select the contractor whose technical offer and price is the most advantageous to the MTA.

The construction of each underground station will occur at the successful completion of the critical tunnel boring work under contract C0800. Construction of the two underground stations includes structural walls, station platforms, mezzanines, station entrances, and plazas, architectural finishes and all related mechanical and electrical work.

All six of the at-grade stations along the six-mile alignment will be constructed under this contract. This contract includes all the trackwork installation and testing for the entire alignment.

Systems installation and testing is inclusive of power systems, automatic train control, fire and emergency management, TRACS and communications systems. The contractor will be responsible for systems integration testing for the entire line segment prior to pre-revenue operations.

### KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD

|  | Milestone Date | Jul-02 | Aug-02 | Sep-02 | Oct-02 | Nov-02 | Dec-02 |
|--|----------------|--------|--------|--------|--------|--------|--------|
| MTA Procure Real Estate Relocation Consultant                                  | 7/9/02         | ◆      |        |        |        |        |        |
| Resubmit PSR/PRs to Caltrans for Tunnels Under I-5 Freeway                     | 7/22/02*       | ○      |        |        |        |        |        |
| Submit PSR/PR to Caltrans for 101 Frwy Overcrossing                            | 8/2/02*        |        | ○      |        |        |        |        |
| Resubmit PSR/PRs to Caltrans for Tunnels Under 101 Freeway                     | 8/9/02*        |        | ○      |        |        |        |        |
| FTA Approval to Begin Final Design   | 8/15/02*       |        | FTA    |        |        |        |        |
| Commence Tunnel Final Design (Contract C0800)                                  | 8/15/02*       |        | ○      |        |        |        |        |
| Commence 101 Frwy Overcrossing Final Design (Contract C0802)                   | 8/15/02*       |        | ○      |        |        |        |        |
| Submit PSR/PRs to Caltrans for 60 Frwy Undercrossing                           | 8/16/02*       |        | ○      |        |        |        |        |
| Submit Sample At-Grade Crossing Application to CPUC for Review                 | 8/22/02*       |        | ◆      |        |        |        |        |
| Submit Applications to CPUC for Approval - 1st Batch of At-Grade Crossings     | 8/30/02*       |        | ○      |        |        |        |        |
| Submit PSR/PR to Caltrans for 710 Frwy Overcrossing                            | 9/6/02*        |        |        | ○      |        |        |        |
| Complete Design/Build Contract Specs and Selection Criteria (Contract C0801)   | 9/23/02        |        |        | ◆      |        |        |        |
| Complete Ramona HS Site Selection and Agreement with LAUSD                     | 9/30/02        |        |        | ◆      |        |        |        |
| Letter of No Prejudice (LONP) Request & Approval                               | 10/31/02       |        |        |        | ◆      |        |        |
| Complete Tunnel Final Design (C0800)   | 10/31/02       |        |        |        | ○      |        |        |
| Complete Design/Bid/Build Documents & Issue Invitation for Bid (IFB) (C0800)   | 11/7/02        |        |        |        |        | ◆      |        |
| Complete 101 Fwy Overcrossing Final Design (Contract C0802)                    | 11/8/02*       |        |        |        |        | ○      |        |
| Submit Applications to CPUC for Approval - Batches 2 - 9 of At-Grade Crossings | 12/11/02*      |        |        |        |        |        | ○      |



MTA Staff Milestone



Other Agencies



Eastside LRT Partners Deliverables

\*

New Date

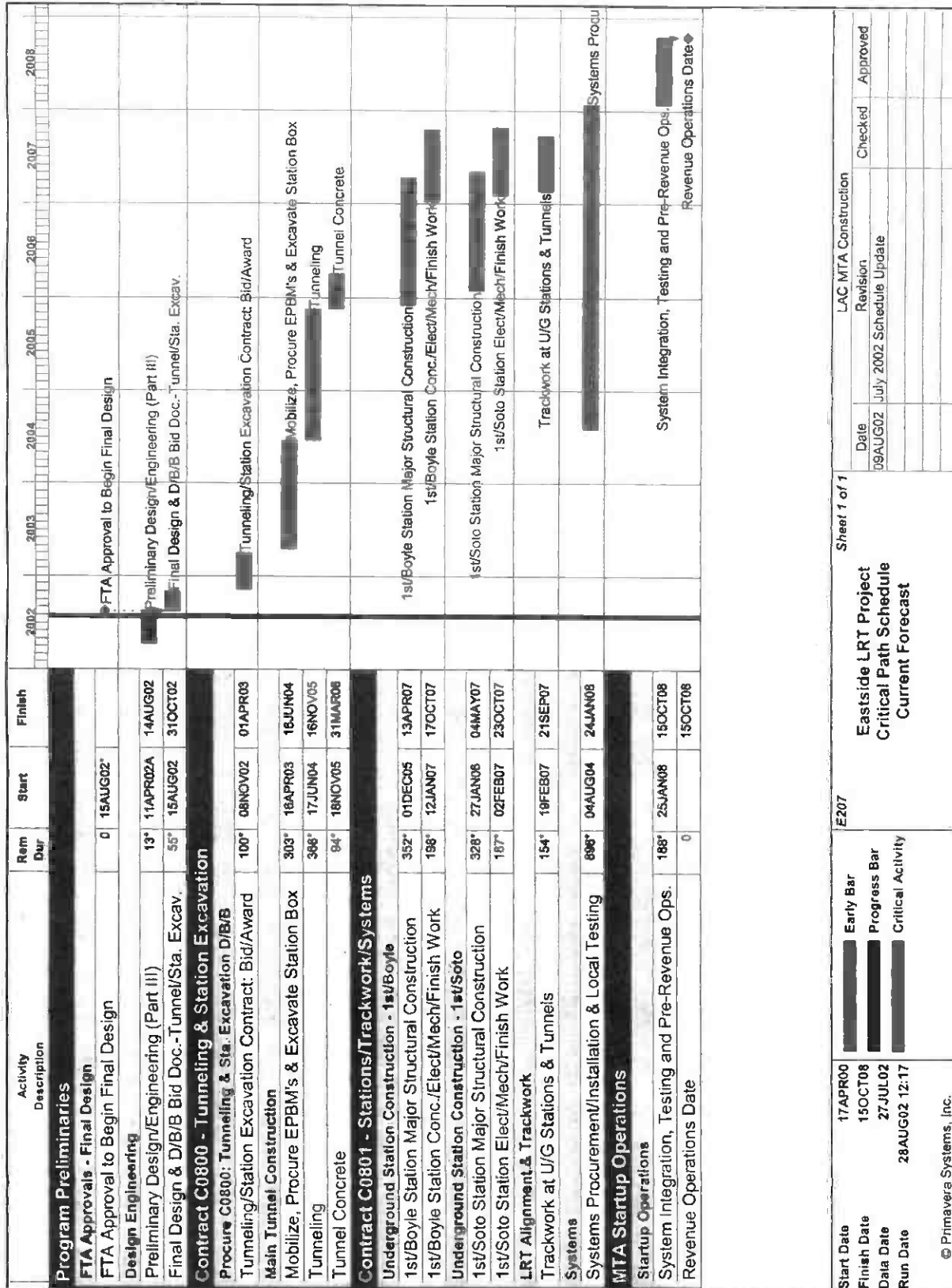


FTA Approval

MTA Board Approval



## PROJECT MASTER SCHEDULE CRITICAL PATH



## CRITICAL PATH NARRATIVE

After completion of preliminary engineering design, the critical path becomes approval to begin final design. Approval to begin final design of the tunnel, station excavation, and the 101 Freeway overcrossing, was originally anticipated to occur in July 2002 but now is expected to occur in August 2002.

After completion of final design, the critical path becomes the bid and award period of the tunneling contract (Contract C0800). Prior to awarding Contract C0800, it is anticipated that the FTA will accept MTA's letter of no prejudice to begin certain key critical procurement and construction activities prior to receiving a Full Funding Grant Agreement (FFGA). Upon the issuance of Notice To Proceed from MTA, there will be a 14-month lead time for the procurement of two Earth Pressure Balance Machines (EPBMs). Concurrent with the EPBM procurement period, the project will proceed with mobilization, pile driving, and station box excavations. The station box excavations are scheduled to complete prior to the EPBM delivery.

The critical path continues with EPBMs assemblies, excavation of both tunnels, excavation of crosspassages, and tunnel invert and walkway construction. The critical path is immediately followed by underground stations construction (Contract C0801) and continues with trackwork installation at the underground stations and tunnels.

The systems equipment installation and local testing is the last stage of the critical path prior to entering the final test stage where systems integration testing and pre-revenue operations are conducted. Based on the updated schedule, the Revenue Operations Date (ROD) is anticipated in late 2008.

## PROJECT COST STATUS

### COST SUMMARY

*In \$ Million*

| Description           | Previous<br>Estimated<br>Project Cost | Current<br>Estimated<br>Project Cost | Variance    | Commitments | Expenditures |
|-----------------------|---------------------------------------|--------------------------------------|-------------|-------------|--------------|
| Guideways             | 209.4                                 | 209.4                                | 0.0         | 0.0         | 0.0          |
| Yards & Shops         | 6.3                                   | 6.3                                  | 0.0         | 0.0         | 0.0          |
| Systems/Equipment     | 67.5                                  | 67.5                                 | 0.0         | 0.0         | 0.0          |
| Stations              | 106.5                                 | 106.5                                | 0.0         | 0.0         | 0.0          |
| Vehicles              | 115.2                                 | 115.2                                | 0.0         | 0.0         | 0.0          |
| Special Conditions    | 89.9                                  | 89.9                                 | 0.0         | 3.5         | 0.5          |
| Right-of-Way          | 42.2                                  | 42.2                                 | 0.0         | 28.0        | 0.1          |
| Professional Services | 172.9                                 | 172.9                                | 0.0         | 44.7        | 24.2         |
| Contingency           | 92.7                                  | 102.8                                | 10.1        | 0.0         | 0.0          |
| <b>TOTAL</b>          | <b>902.6</b>                          | <b>912.7</b>                         | <b>10.1</b> | <b>76.2</b> | <b>24.8</b>  |

The July 2002 Estimated Project Cost reflects an increase to the Contingency Line Item for projected interest cost of \$10.1 million.

### CHANGE CONTROL STATUS

|                                       | A            | B                |            | C           |       | D=A+B+C               | E         |           | F=D+E                 |
|---------------------------------------|--------------|------------------|------------|-------------|-------|-----------------------|-----------|-----------|-----------------------|
|                                       | Approved     |                  |            |             |       | Obligated             | Potential |           |                       |
| Description                           | Award Amount | Executed Changes |            | LNTPs (NTE) |       | Total Approved Amount | Pending   |           | Total Potential Value |
|                                       |              | #                | \$         | #           | \$    |                       | #         | \$        |                       |
| Engineering Design Services           | 18,929,502   | 6                | 9,166,443  | 0           | 0     | 28,095,945            | 1         | 800,000   | 28,895,945            |
| Environmental Services                | 448,635      | 4                | 183,517    | 1           | 2,000 | 634,152               | 0         | 48,000    | 682,152               |
| Project Management Assistance Support | 166,366      | 5                | 1,129,590  | 0           | 0     | 1,295,956             | 2         | 2,131,562 | 3,427,518             |
| TOTAL                                 | 19,544,503   | 15               | 10,479,550 | 1           | 2,000 | 30,026,053            | 3         | 2,979,562 | 33,005,615            |

## FINANCIAL/GRANT STATUS

JULY 2002

### STATUS OF FUNDS BY SOURCE

in \$ millions

| SOURCE                            | (B)<br>TOTAL<br>FUNDS<br>ANTICIPATED | (C)<br>TOTAL<br>FUNDS<br>AVAILABLE | (D)<br>COMMITMENTS<br>\$ | (D/B)<br>% | (E)<br>EXPENDITURES<br>\$ | (E/B)<br>% | (F)<br>BILLED to FUNDING<br>SOURCE<br>\$ | (F/B)<br>% |
|-----------------------------------|--------------------------------------|------------------------------------|--------------------------|------------|---------------------------|------------|--|------------|
|                                   |                                      |                                    |                          |            |                           |            |  |            |
| FEDERAL - SECTION 5309 NEW START  | 547.2                                | 5.9                                | 5.9                      | 1%         | 5.9                       | 1%         | 5.9                                      | 1%         |
| FED - SECTION 5309 FIXED GUIDEWAY | 38.9                                 |                                    |                          |            |                           |            |  |            |
| FEDERAL - CMAQ                    | 3.1                                  |                                    |                          | 0%         |                           | 0%         |  | 0%         |
| STATE TCRP                        | 236.0                                | 19.5                               | 65.1                     | 28%        | 11.5                      | 5%         | 11.5                                     | 5%         |
| STATE STIP (STP)                  | 4.6                                  | 4.6                                | 4.6                      | 100%       | 4.6                       | 100%       | 4.6                                      | 100%       |
| STATE STIP (SHA)                  | 0.6                                  | 0.6                                | 0.6                      | 100%       | 0.6                       | 95%        | 0.6                                      | 95%        |
| PROPOSITION A 35% RAIL CAPITAL    | 72.2                                 |                                    |                          |            |                           |            |  |            |
| LEASE REVENUES                    | 10.1                                 |                                    |                          |            |                           |            |  |            |
| UNBILLED ACCRUALS                 |                                      | 2.2                                |                          |            | 2.2                       |            |  |            |
| TOTAL                             | 912.7                                | 32.8                               | 76.2                     | 8%         | 24.8                      | 3%         | 22.6                                     | 2%         |

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JUNE 2002.

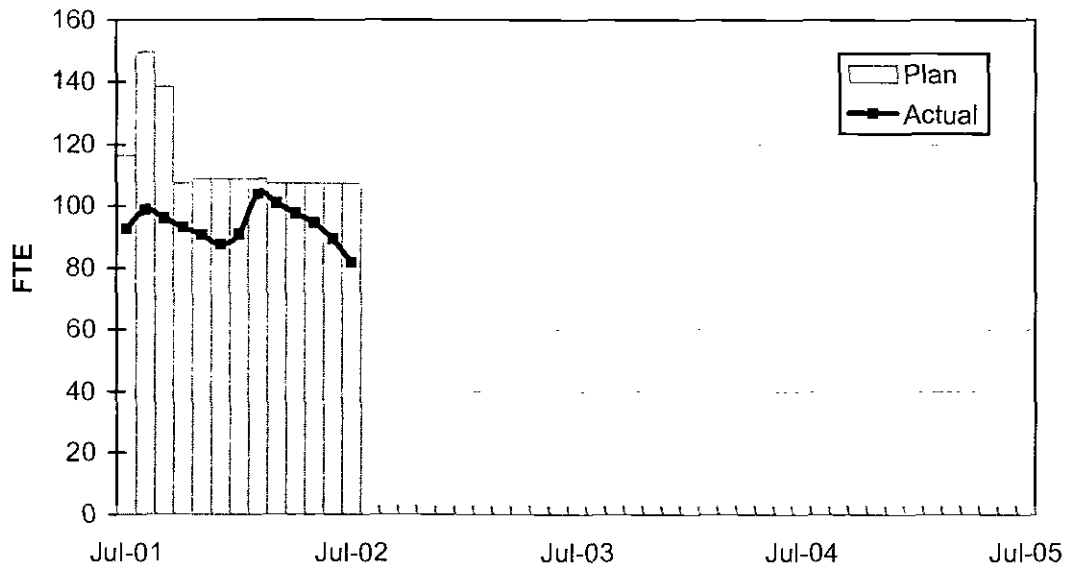
## STATUS OF FUNDS ANTICIPATED

**FEDERAL SECTION 5309:** MTA submitted a grant amendment for \$7,425,098 in March 2002. Grant amendment approval is expected September 2002.

**STATE TCRP:** In April 2002, the CTC approved an MTA application and allocation request for \$25.5M of State TCRP funds for final design, right-of-way, and construction activities. Funds are expected to be available for draw down by August 2002.

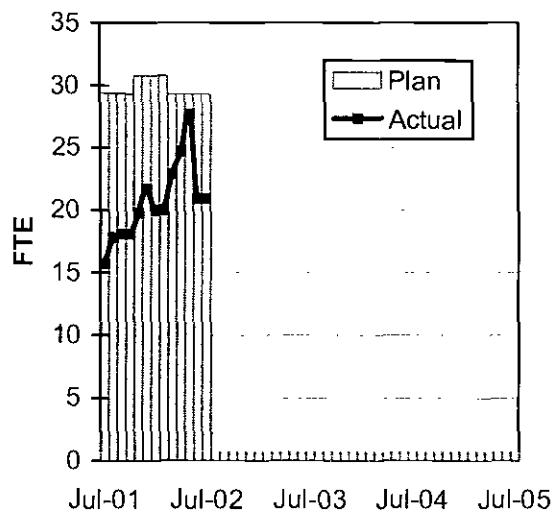
## STAFFING STATUS

### TOTAL PROJECT STAFFING



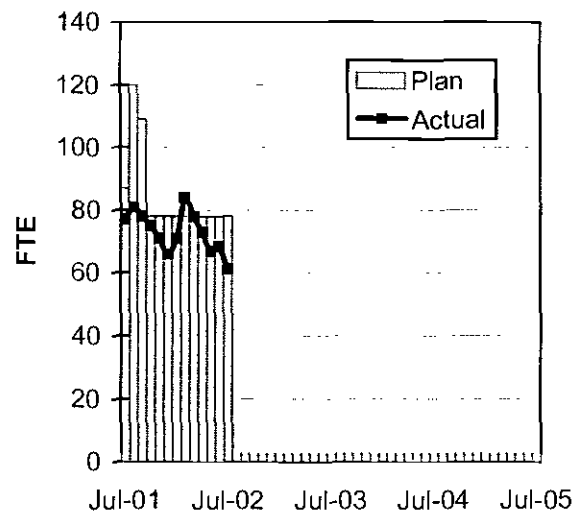
Current staffing levels are adequate. Total planned staffing levels for future years will be included upon approval of the PMP.

### AGENCY STAFFING



Current staffing levels are adequate.

### ESLRT PARTNERS



Current staffing levels are adequate.

## REAL ESTATE STATUS

### REAL ESTATE ANALYSIS

- For C0800, the tunnel portion of the alignment, 29 parcels are required for acquisition (10 full takes, 18 sub-surface easements and one permit from Caltrans which will be coordinated through the MTA Third Party Coordinator).
- For C0801, the at-grade portion of the alignment, 27 parcels are required for acquisition (18 full takes, 7 partial takes, and two permits required from Caltrans which will be coordinated through the MTA Third Party Coordinator).
- For C0802, there are two surface easements.

Twenty-two parcels have been certified, ten for C0800 and twelve for C0801. Real Estate is in the process of obtaining appraisals and pre-acquisition environmental survey on the certified parcels.

### REAL ESTATE ACQUISITION SCHEDULE SUMMARY \*

| Number of<br>Parcels | Required | Acquired | On<br>Schedule | Behind Schedule |                       |
|----------------------|----------|----------|----------------|-----------------|-----------------------|
|                      |          |          |                | Number          | Avg. Calendar<br>Days |
| This Period          | 0        | 0        | 0              | 0               | 0                     |
| Last Period          | 0        | 0        | 0              | 0               | 0                     |

\* To be developed after authorization to enter into final design.

### REAL ESTATE STATUS TO DATE BY CONTRACT

#### Actual Parcels

| Contract             | No. of<br>Parcels | Certified | Just Comp<br>Approved | Offers Made | Agreements<br>Signed | Condemnation | Parcels<br>Available | Parcels<br>projected to be<br>unavailable by<br>need date |
|----------------------|-------------------|-----------|-----------------------|-------------|----------------------|--------------|----------------------|---|
| C0800                | 29                | 10        | 0                     | 0           | 0                    | 0            | 0                    | 0   |
| C0801                | 27                | 12        | 0                     | 0           | 0                    | 0            | 0                    | 0   |
| C0802                | 2                 | 0         | 0                     | 0           | 0                    | 0            | 0                    | 0   |
| <b>TOTAL</b>         | <b>58</b>         | <b>22</b> | <b>0</b>              | <b>0</b>    | <b>0</b>             | <b>0</b>     | <b>0</b>             | <b>0</b>  |
| Last Period<br>Total | 57                | 22        | 0                     | 0           | 0                    | 0            | 0                    | 0   |

## **ENVIRONMENTAL STATUS**

- Held initial site assessment coordination meetings with Caltrans and Eastside LRT Partners.
- Environmental consultants began working on obtaining National Pollution Discharge Elimination System (NPDES) and Southern California Air Quality Management District (SCAQMD) Rule 1166 permits.
- MTA Environmental Compliance and Services is preparing an addendum to the SEIS/SEIR for minor enhancements to the Eastside LRT Project.

## **COMMUNITY RELATIONS STATUS**

- Presented community relations issues to the monthly Review Advisory Committee Meeting (RAC) with local residents, business owners, elected representatives, and community organizations.
- Continued community survey of businesses and residents along the alignment.
- Coordinated notification of property owners for pre-construction surveys and real estate activities.
- Coordinated public outreach events with community representatives to facilitate public interest in the Eastside LRT Project.

## **QUALITY ASSURANCE STATUS**

- Conducted a Quality Management surveillance to verify design compliance to MTA design criteria for Contract C0800 in preparation for the October 8, 2002 submittal.



## **SAFETY STATUS**

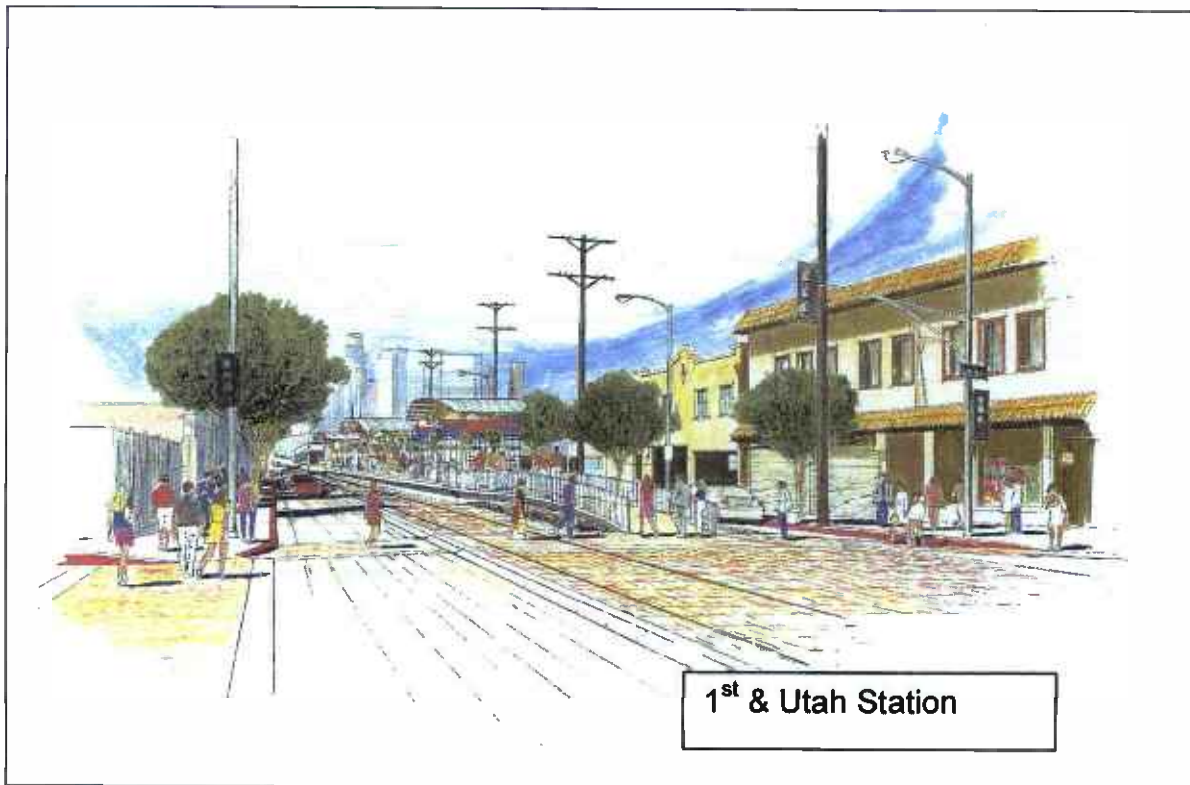
- Met with CAL/OSHA Mining and Tunnel Unit regarding Underground Classification and the use of back-up alarms for the Eastside LRT Project.

## CURRENT PROJECT RENDERINGS



Computerized Rendering of Proposed  
Eastside LRT Guideway Bridge at the  
101 Freeway

## CURRENT PROJECT RENDERINGS



## CURRENT PROJECT RENDERINGS



### Document Development Status To Support Entry Into Final Design

| DOCUMENT                                | STATUS   | ESTIMATED/ACTUAL<br>COMPLETION DATE |
|---|--|-------------------------------------|
| Value Engineering Report                | Report is complete. Incorporation of Value Engineering will continue throughout design development.        | August 2001                         |
| Quality Assurance/Quality Control Plan  | Quality Program Policies and Procedures submitted to PMOC and FTA.   | September 2001                      |
| Objectivity Analysis for PE/FD Contract | Analysis is complete.  | January 2002                        |
| Capital and Operating Financial Plans   | Submitted proposed plans to the FTA in August 2001. Revised capital plan will be submitted to the FTA.     | March 2002                          |
| NEPA Process                            | MTA Board approved the Final SEIS/SEIR in February 2002.   | March 2002                          |
| Project Management Plan (PMP)           | Conditional approval received by the PMOC.   | June 2002                           |
| Rail and Bus Fleet Management Plans     | Draft Rail and Bus Fleet Management Plans have been submitted to the FTA and are currently under revision. | August 2002                         |

## **APPENDIX**

### **COST AND BUDGET TERMINOLOGY**

**ESTIMATED PROJECT COSTS:** Estimated project costs are based upon the current project cost estimates that are produced during the engineering design phase.

**COMMITMENTS:** The total of actual contract awards, executed change orders or amendments, approved work orders of Master Cooperative Agreements, offers accepted for purchase of real estate, and other LACMTA actions that will result in specific expenditures at a future time.

**INCURRED COST:** The total value of work performed to date of services received, and acquired materials or properties.

**EXPENDITURES:** The total dollar amount of checks written by LACMTA's Accounting department for contractor or consultant invoices, third party invoices, staff salaries, and closing payments for escrow accounts that is reported in LACMTA's Financial Information System (FIS).

**CONSTRUCTION:** Includes guideways, yards and shops, systems equipment, stations, and vehicles.

**PROFESSIONAL SERVICES:** Includes general engineering, construction management services, consultant design support services during construction, legal counsel, and agency (MTA staff) costs.

**RIGHT-OF-WAY:** Includes real estate appraisals, purchase cost of parcels, easements, right-of-entry permits, escrow fees, and tenant relocation.

**UTILITY/AGENCY FORCE ACCOUNT:** Includes work by outside agencies and utilities in design coordination and review.

**CONTINGENCY:** A fund established at the beginning of a project to provide for anticipated but unknown additional costs that may arise during the course of the project.

**SPECIAL CONDITIONS:** Includes utilities relocation, environmental compliance and mitigation, master cooperative agreements, insurance program, artwork, systems integration testing and pre-revenue operations.

## APPENDIX

### LIST OF ACRONYMS

|          |  |
|----------|--|
| AFE      | Authorization For Expenditure                            |
| CADD     | Computer Aided Drafting and Design                       |
| CALTRANS | California Department of Transportation                  |
| CD       | Calendar Day   |
| CM       | Construction Manager                                     |
| CMAC     | Congestion Mitigation Air Quality                        |
| CN       | Change Notice  |
| CO       | Change Order   |
| CPM      | Critical Path Method                                     |
| CPUC     | California Public Utilities Commission                   |
| CR       | Camera Ready   |
| CTC      | California Transportation Commission                     |
| CUD      | Contract Unit Description                                |
| DB       | Design/Build   |
| DBB      | Design/Bid/Build   |
| DD       | Design Development                                       |
| DOT      | Department of Transportation                             |
| DWP      | Department of Water and Power                            |
| EIR      | Environmental Impact Report                              |
| EIS      | Environmental Impact Statement                           |
| EPBM     | Earth Pressure Balance Machine                           |
| ESP      | Eastside LRT Partners                                    |
| FAR      | Federal Acquisition Regulation                           |
| FD       | Final Design   |
| FEIS     | Final Environmental Impact Statement                     |
| FEIR     | Final Environmental Impact Report                        |
| FFGA     | Full Funding Grant Agreement                             |
| FIS      | Financial Information System                             |
| FSEIR    | Final Supplemental Environmental Impact Report           |
| FSEIS    | Final Supplemental Environmental Impact Statement        |
| FTA      | Federal Transit Administration                           |
| FTE      | Full Time Equivalent                                     |
| GDSR     | Geotechnical Design Summary Report                       |
| IFB      | Invitation for Bid                                       |
| IPO      | Integrated Project Office                                |
| JV       | Joint Venture  |
| LA       | Los Angeles  |
| LABOE    | Los Angeles Bureau of Engineering                        |
| LACFCD   | Los Angeles County Flood Control District                |
| LACMTA   | Los Angeles County Metropolitan Transportation Authority |
| LADOT    | Los Angeles Department of Transportation                 |

## APPENDIX

### LIST OF ACRONYMS (Continued)

|       |  |
|-------|--|
| LADPW | Los Angeles Department of Public Works           |
| LADWP | Los Angeles Department of Water and Power        |
| LAUSD | Los Angeles Unified School District              |
| LNTP  | Limited Notice To Proceed                        |
| LONP  | Letter Of No Prejudice                           |
| LRT   | Light Rail Transit                               |
| LRTP  | Long Range Transportation Plan                   |
| LRV   | Light Rail Vehicle                               |
| MIS   | Major Investment Study                           |
| MPSR  | Monthly Project Status Report                    |
| MTA   | Metropolitan Transportation Authority            |
| N/A   | Not Applicable                                   |
| NEPA  | National Environmental Protection Act            |
| NPDES | National Pollution Discharge Elimination System  |
| NTE   | Not to Exceed                                    |
| NTP   | Notice To Proceed                                |
| OCIP  | Owner-Controlled Insurance Program               |
| P3    | Primavera Project Planner® (scheduling software) |
| PC    | Project Control                                  |
| PE    | Preliminary Engineering                          |
| PEER  | Permit Engineering Evaluation Report             |
| PGL   | Pasadena Gold Line                               |
| PIP   | Project Implementation Plan                      |
| PM    | Project Manager                                  |
| PMA   | Project Management Assistance                    |
| PMIP  | Project Management Implementation Plan           |
| PMOC  | Project Management Oversight Consultant          |
| PMP   | Project Management Plan (manual)                 |
| P&P   | Policies & Procedures                            |
| PR    | Project Report                                   |
| PSR   | Project Study Report                             |
| QA    | Quality Assurance                                |
| QAR   | Quality Assurance Report                         |
| QC    | Quality Control                                  |
| QPSR  | Quarterly Project Status Report                  |
| RAC   | Review Advisory Committee                        |
| RAG   | Rail Activation Group                            |
| RFC   | Request For Change                               |
| RFP   | Request For Proposal                             |
| ROD   | Record Of Decision                               |
| ROD   | Revenue Operations Date                          |
| ROM   | Rough Order of Magnitude                         |



## APPENDIX

### LIST OF ACRONYMS (Continued)

|        |   |
|--------|---|
| ROW    | Right-Of-Way  |
| SCAQMD | Southern California Air Quality Management District |
| SCE    | Southern California Edison                          |
| SCRRA  | Southern California Regional Rail Authority         |
| SHA    | State Highway Account                               |
| SHPO   | State Historic Preservation Office                  |
| SIT    | System Integration Testing                          |
| SOV    | Schedule Of Value                                   |
| SOW    | Statement Of Work                                   |
| SP     | Special Provision                                   |
| STIP   | State Transportation Improvement Program            |
| STP    | Surface Transportation Program                      |
| TBD    | To Be Determined                                    |
| TBM    | Tunnel Boring Machine                               |
| TCRP   | Traffic Congestion Relief Program                   |
| TRACS  | Transit Automatic Control System                    |
| UFS    | Universal Fare System                               |
| USDOT  | U.S. Department Of Transportation                   |
| VE     | Value Engineering                                   |
| WBS    | Work Breakdown Structure                            |
| WP     | Work Package  |