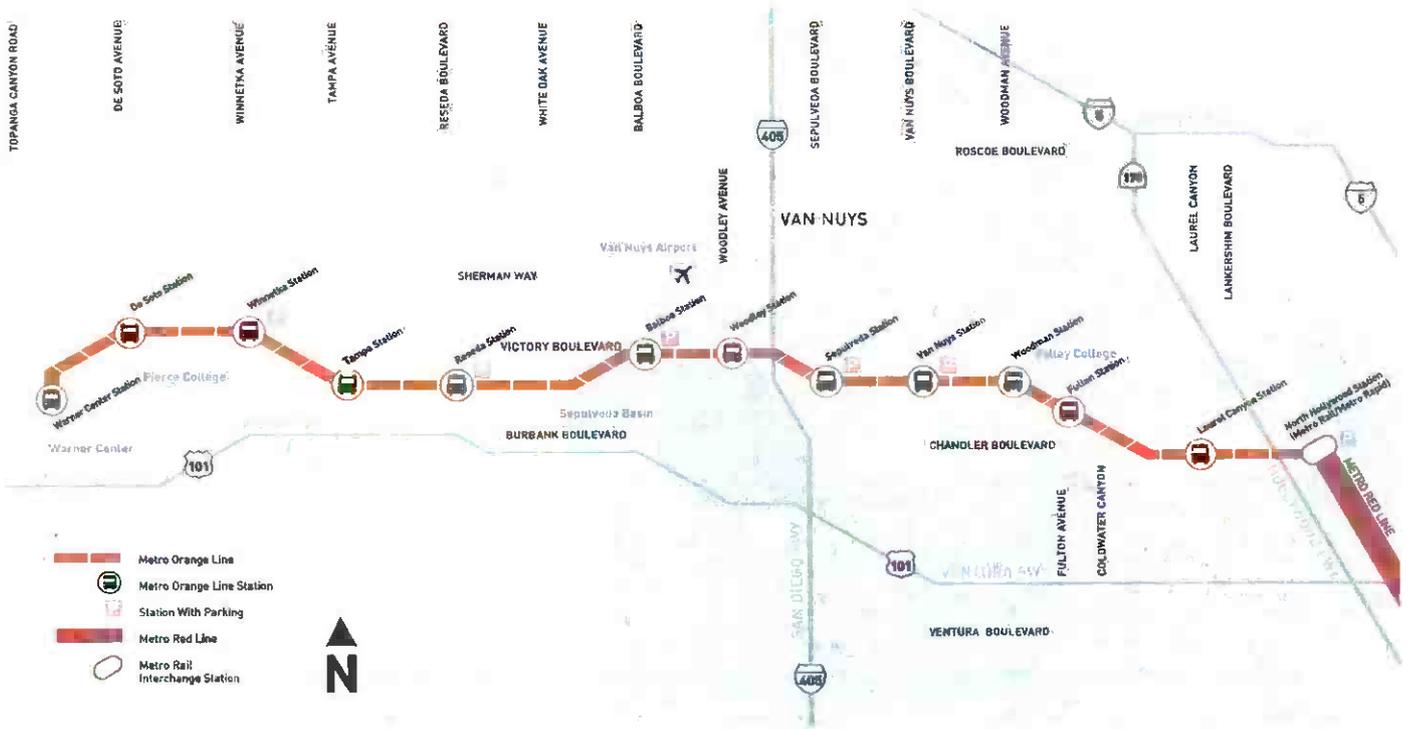


# Metro Orange Line

May 2004



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## PROJECT OVERVIEW

*The Metro Orange Line Project consists of buses operating in exclusive lanes within an approximate thirteen (13) mile stretch on LACMTA right-of-way (ROW) and one (1) mile of mixed flow operation within public streets. Terminal stations are located near the North Hollywood Metro Red Line Subway Station and the planned Warner Center Transit Hub. The Orange Line will have roughly one stop per mile located at major cross streets. Low floor CNG-powered articulated vehicles will be given signal priority at grade and at cross streets, which will reduce end to end travel times between the thirteen (13) stations. With the exception of the Warner Center Transit Hub, all stations will provide platforms for east bound and west bound travel. Warner Center Transit Hub is currently being planned by the City of Los Angeles and will include bus stops for loading/unloading of passengers and layover space on Owensmouth Avenue. Canopies will be provided at all stations. Station equipment and amenities will include ticket vending machines, stand alone validators, benches, bike racks, map case(s), signage, public telephones, closed circuit television cameras and a public address system. Variable message signs will provide real time information on bus arrival times at the respective station. In addition to the existing 915 spaces at the North Hollywood Metro Red Line Subway Station and the 150 parking spaces at the Balboa Park and Ride, the Orange Line will provide approximately 3,240 new parking spaces for the park and ride station locations. Other related project scope includes modifications to an existing Metro bus division, vehicle procurement and implementation of the Universal Fare System (UFS).*

The Metro Orange Line Project is behind schedule due to several factors: the delay in completing the early portions of the design by the C0675 Design/Build Contractor, which impacted the start of busway and intersection construction; impact of contaminated soils on busway construction; and changes to the pavement design, which impacted completion of busway design. MTA staff is working with the C0675 Design/Build Contractor to identify areas of work that could be accelerated to mitigate the forecast delay. The Contractor's design percent complete is 95.4 % and construction physical percent complete is 25.5%.

To date, the expenditures for the busway portion of the Orange Line are \$107 million or 32.5% of the \$329.5 million original budget. The expenditures for the bikeway portion are \$0.9 million or 11.1% of the \$8.1 million original budget.

One real estate new acquisition (seven of eight have been acquired) remains to be acquired by July 2004 to be turned over to the C0675 Design/Build Contractor. This parcel is on schedule and is required for construction of the Winnetka Park-and-Ride. The number of leases to be terminated for the project is 101 with 99 available to the Contract C0675 Design/Build Contractor. The remaining two leases have been permitted to remain at this time and are under review for final disposition. There is no impact to the Project.

Project staff is reviewing potential enhancements to the Orange Line, which may be constructed by the C0675 Design/Build Contractor. These enhancements include:

1. Expanded permanent irrigation system and upgrade to handle future recycled water.
2. Rubberized asphalt on portions of busway and selected intersections.
3. Storm drain improvement at Tyrone Avenue.
4. Bike path enhancements.

## PROJECT OVERVIEW

In association with the development of the Orange Line, the Los Angeles Department of Water and Power (LADWP) approached the MTA to incorporate the construction of a Recycled Water Pipeline into the construction program parallel to the Rapidway. However, on January 14, 2004 LADWP requested the MTA to stop work on the Pipeline due to the risks and costs involved with having the C0675 Design/Build Contractor construct the Pipeline by change order. Accordingly, existing authorized tasks will be wound down in an orderly fashion and future C0675 Design/Build Contractor work will be limited to the completion of short sections of the Pipeline at the Los Angeles River, Bull Creek and Tujunga Wash bridges.

Other Projects providing equipment for the Orange Line Project remain on schedule. Project staff continues to meet with appropriate MTA staff to discuss status of other related projects (managed by other MTA departments) to identify any schedule risks that may result in impact to the Contract C0675 Contract Milestones or to the Orange Line Project Revenue Operation Date. These projects being monitored are Articulated Vehicle Procurement, Advanced Traffic Management System (ATMS), and Universal Fare System (UFS).

## MANAGEMENT ISSUES

**Concern No. 1:** Citizens Organized for Smart Transit (COST) has filed a lawsuit contesting the validity of the Environmental Impact Report of the Metro Orange Line.

**Status/Action** The trial was held on December 20, 2002 and the judge ruled in favor of the MTA. The COST group appealed the ruling and requested an injunction to stop the MTA from awarding any construction work. The judge denied the injunction request, however, the appeal by COST will now progress through the normal court processes. The MTA sued to recover approximately \$32,000 in legal fees and won. The COST group appealed the fee decision. The judge has combined the two appeals. Both parties have filed Briefs with the Court of Appeals and are waiting for the Court to set a hearing date. It is expected that oral arguments will be heard in July 2004 and the written decision will be provided several months after the oral arguments.

**Concern No. 2:** Los Angeles Department of Water and Power (LADWP) Recycled Water Pipeline.

**Status/Action** On January 14, 2004, The LADWP advised MTA that the risks and costs involved in having the C0675 Design/Build Contractor build the Recycled Water Pipeline were too great to proceed. Accordingly, MTA is working with LADWP and the Contractor on concluding work obligations, which include completing the three bridge crossings: Bull Creek, Tujunga Wash and the Los Angeles River Bridge. This remaining effort, consisting of extending the pipeline at three bridges so that it terminates outside the busway, should be completed by July 2004. The work will be completed within the \$2,500,000 authorized by the MTA Board in September 2003.

**Concern No. 3:** Park-and-Ride site at Metro Orange Line's western terminus in Warner Center

**Status/Action** The western terminus at the Warner Center Transit Hub does not currently include parking for Orange Line Project patrons. In February 2004, the MTA Board approved proceeding with negotiations to purchase the Boeing site identified, as the MTA Board preferred option for a park-and-ride site. MTA staff is developing a procurement package for the park-and-ride scope of work. Staff is preparing an Addendum/Modified Initial Study for the development of a satellite surface park-and-ride lot on MTA-owned property just north of the Boeing property to augment parking to be provided at the Boeing site. MTA staff will request adoption by the MTA Board of the satellite EIR in July 2004. At least three change notices will be issued to the C0675 Design/Build Contractor for construction modifications at Variel Intersection and for increased systems equipment procurement.

## MANAGEMENT ISSUES

**Concern No. 4:** Traffic Index (TI) for the busway pavement design

**Status/Action** MTA technical staff determined that the pavement thickness proposed by the C0675 Contractor for Asphalt Concrete (AC) paved segments of the busway is not sufficient to ensure a twenty (20) year design service life under axle loads anticipated from the articulated buses proposed for use on the facility. To rectify this situation, the MTA has issued change orders to the C0675 Design/Build Contractor to modify the pavement design. These changes will ensure the desired design service life, enable MTA Operations staff to budget for maintenance activities and costs, and ensure satisfactory busway service quality. The MTA received a cost proposal from the Contractor this month. The MTA received a cost proposal from the Contractor this month. The cost of this change is in excess of \$1 million. Upon evaluation of the proposal, MTA staff will request the MTA Board to authorize the Chief Executive Officer to issue additional Change Orders and/or to negotiate and execute a Contract Modification for the negotiated amount at the July 2004 Board Meeting. In April 2004, the C0675 Design/Build Contractor has started busway grading operations on both the east and west end of the Project. To allow construction to continue, the Chief Executive Officer, under authority granted by the MTA Board, has issued Change Order 35.01 Revise Traffic Index, thereby reducing the final costs and potential delay associated with this change.

**Concern No. 5:** Upgrade C0675 Design/Build Contractor's base scope to include rubberized asphalt for busway and City intersections.

**Status/Action** MTA staff investigated the use of rubberized asphalt along the busway and at City intersections. Rubberized asphalt uses recycled rubber (vehicle tires) as part of the component of the asphalt helping the environment. In addition, rubberized asphalt characteristics tend to reduce vehicle noise and may help MTA meet noise requirements in the operational phase of this project. After further analysis and discussions, MTA has issued Change Order 12.03, with a not-to-exceed amount of \$90,000 to the C0675 Design/Build Contractor. This Change Order supersedes Change Notices 12.01 and 12.02, to commence design and initial construction of rubberized asphalt in six intersections and along approximately 19,000 feet of busway. Anticipate Contractor's revised cost proposal to be less than \$1.0 million which will not require MTA Board action.

## MANAGEMENT ISSUES

**Concern No. 6:** Upgrade C0675 Design/Build Contractor's base scope for temporary landscaping irrigation to permanent landscaping irrigation designed to utilize recycled water.

**Status/Action** In December 2003, a community landscape advisory committee unanimously recommended a permanent irrigation system to assure landscape sustainability. The proposed upgrade replaces the current temporary irrigation system in the busway with a permanent rotor/spray/bubbler system. Additionally, the system allows for future connection to recycled water. The MTA has issued necessary change orders and has received a cost proposal from the C0675 Design/Build Contractor for this work. MTA received the cost proposal in May, which was in excess of \$1 million. Upon evaluation of this proposal, MTA staff will request the MTA Board to authorize the Chief Executive Officer to execute a Contract Modification for the negotiated amount in the July 2004 Board Meeting. To maintain the Contractor's schedule, MTA has authorized only the design and schedule critical (under the street) work to begin. The adopted budget for the Orange Line Project includes an allowance of \$1,000,000 for community landscape enhancement. In June 2004, MTA will issue Change Order 38.03, Convert Temporary Irrigation to Permanent, in the not-to-exceed amount of \$590,000 to allow construction to proceed so that it can be installed during the landscaping construction work thereby not impacting the Contractor's schedule. This Change Order draws down against the \$1,000,000 enhancement allowance.

**Concern No. 7:** C0675 Design/Build Contractor Schedule Performance

**Status/Action** The C0675 Design/Build Contractor this month submitted a schedule update that indicated a schedule recovery of ten days. This schedule is under review by the MTA. The Contractor has mitigated a total of 32 calendar days over the last two months. The Contractor is now three months behind schedule. The Contractor has been requested to submit a recovery and acceleration plan by early June 2004, which will identify the means and methods to complete the job as originally scheduled. To help mitigate the current delay, the MTA and City of Los Angeles have added additional resources and have accelerated review and approval of Contractor's remaining design submittals. Staff prepared and implemented a change order to direct the Contractor to accelerate (in lieu of time extension) the work to mitigate delays associated with contaminated soils (See Concern No. 8 below). Additional change orders will be issued once merit is determined for any owner caused delay. MTA's assessment of the overall schedule is that there are mitigation opportunities that can be implemented by the C0675 Contractor during the construction phase of the Project.

## MANAGEMENT ISSUES

**Concern No. 8:** Contract No. C0675 Design/Build contaminated soils removal

**Status/Action** Removal of soils containing arsenic concentrations located in the middle portion of the right-of-way (ROW) was completed in May 2004. Soils currently being exported from the site include soils calculated using the worst-case scenario estimate developed by project and construction management staff. Soils being exported include excess due to changes to pavement section design as well as net export as calculated from cut and fill analysis. Contaminated/non-hazardous soil removal activities will remain an integral part of this Project until all grading and landscaping operations are completed.

**Concern No. 9:** Soil Contamination and Potential Impact on Landscape Construction

**Status/Action** The MTA and DTSC met in April 2004 to discuss MTA's mitigation plan regarding arsenic contaminated soil. The approved mitigation for the Orange Line ROW includes MTA growing plants within the ROW for use as cover for any remaining contaminated/non-hazardous soil not paved over with either the bike path or busway pavement sections. This month Valley Crest (SOJV's landscaping contractor), in cooperation with MTA, installed 10 test plots along the right-of-way to test the effectiveness of various soil amendments and planting techniques. Results of the test plots analyses are currently being evaluated and will be reported in next month's update.

**Concern No. 10:** Warner Center Transit Hub

**Status/Action** The City of Los Angeles started construction of the Warner Center Transit Hub in May 2004 and this area may not be available in time to meet Orange Line Project needs. An October 1, 2004 access date for the C0675 Design/Build Contractor, SOJV, to perform work related to the busway terminal area was included in the bid documents based on original input from the City of Los Angeles. At this time, full access may not be available to SOJV as the City of Los Angeles contractor(s) may still be working in the area. However, MTA and SOJV are meeting with the City's contractor so that the work that needs to be performed in the City street can be performed prior to the City contractor repaving the area. MTA, SOJV and the City of Los Angeles will work together to assure that the Warner Center Transit Hub can be constructed to support the Project's Revenue Operation date of August 2005.

**Concern No. 11:** Additional Federal Funding for Orange Line Landscaping

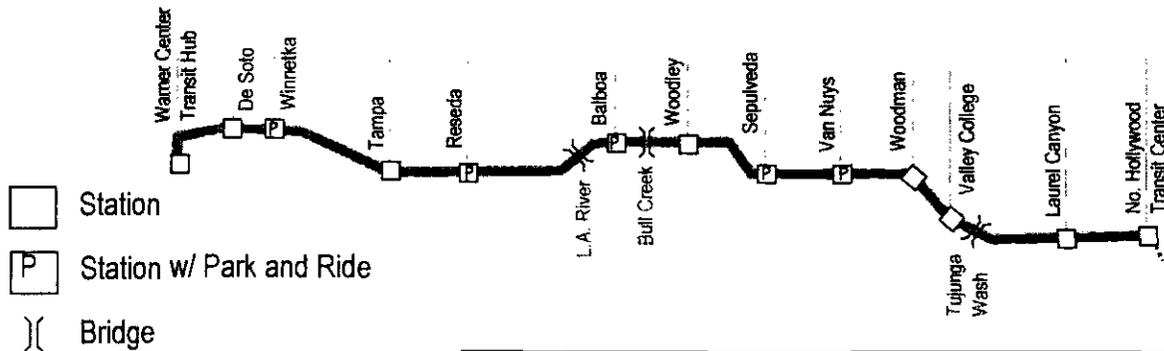
**Status/Action** MTA is pursuing additional Federal Funding for Project landscaping enhancements. A letter of No Prejudice is being prepared.

## PROJECT SCOPE

The **Metro Orange Line** includes a busway, which will be 26 feet wide in most locations consisting of one 13-foot travel lane in each direction. The 26 foot wide busway will be located within the LACMTA Right Of Way (ROW), which is generally 100 feet wide in most locations. Within the ROW, landscaping, fencing, and soundwalls, will be provided in accordance with the Final EIR requirements. Concurrent with busway and stations a Bikeway will be constructed. The Bikeway will include a pedestrian path.

Along the ROW, there are approximately 32 street crossings and three pedestrian crossings, which will require some modifications. Traffic signals will be required where the busway crosses streets and at designated pedestrian crossings.

Systems included in the project are variable message signs, Closed Circuit TV, Public Address, Passenger Assistance Telephones, Public Phones, Fiber Optic Cable Transmission and a Universal Fare System. Other related project scope includes Bus Division No. 8 modifications and procurement of twenty-two 60-foot long articulated buses. Lastly, all the systems will be managed from the Bus Operations Control Center, which will be located on the 6<sup>th</sup> floor of the LACMTA Gateway Plaza Headquarters.



**Warner Center Transit Hub**, an LADOT project, is located at the western terminus of the Orange Line. The D/B contractor (*Contract C0675*) will only install all underground utilities and system equipment at the station.

**Three bridges** will be replaced for the Orange Line as follows: 1) Bull Creek Bridge, 2) Tujunga Wash Bridge and the 3) Los Angeles River Bridge.

The largest of these bridges is the Los Angeles River Bridge located in the north end of the Sepulveda Basin. To reduce schedule exposure, MTA designed this bridge to 100%. The new Los Angeles River Bridge was completed in December 2003.

**Recycled Water Pipeline**, the Los Angeles Department of Water and Power has requested the LACMTA to not proceed with the Recycled Water Pipeline. Only short sections of the Pipeline will be completed at Bull Creek and Tujunga Wash Bridges in addition to the Pipeline already completed at the Los Angeles River Bridge.

**Thirteen Stations** will be completed for the Orange Line with locations from east to west identified as follows: 1) No. Hollywood Transit Center, 2) Laurel Canyon, 3) Valley College, 4) Woodman, 5) **Van Nuys**, 6) **Sepulveda**, 7) Woodley, 8) **Balboa Blvd**, 9) **Reseda Blvd**, 10) Tampa Ave, 11) **Winnetka** 12) De Soto and 13) Warner Center Transit Hub. The stations enumerated in bold text above indicate the locations for the Park and Ride facilities. Park and ride facilities will be included in 5 stations and will total approximately 4,305 parking spaces for the anticipated customers, which includes the 915 existing spaces at the NH MRL subway station and the 150 spaces at the Balboa park and ride. The D/B contractor (*Contract C0675*) will build all the stations except for the Warner Center Transit Hub.

**KEY MILESTONE SCHEDULE SIX-MONTH LOOK AHEAD**

	Milestone Date	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04
(Forecast) C0675: Station (Facilities) Design 100% - Issue for Construction	5/14/04A	<input type="checkbox"/>					
(Forecast) C0675: Soundwall Segment 1 & 2 100% Design - Issue for Construction	5/20/04A	<input type="checkbox"/>					
(Forecast) C0675: Intersection Group 4 100% Design Issue for Construction	5/21/04A	<input type="checkbox"/>					
(Forecast) C0675: Vesper Avenue: Open Intersection to Traffic	5/28/04A	<input type="checkbox"/>					
(Forecast) C0675: Busway Segment 3 100% Design - Issue for Construction	6/1/04*		<input type="checkbox"/>				
(Forecast) C0675: Soundwall Segment 3 & 4 100% Design - Issue for Construction	6/1/04*		<input type="checkbox"/>				
(Forecast) C0675: Bus & Maint Yard - Training Room/Striping 100% Design - IFC	6/1/04*		<input type="checkbox"/>				
(Forecast) C0675: Landscape and Irrigation 100% Design - Issue for Construction	6/1/04*		<input type="checkbox"/>				
(Forecast) C0675: Park & Ride 100% Design - Issue for Construction	6/18/04*		<input type="checkbox"/>				
(Forecast) C0675: Systems Communications Design 100% - Issue for Construction	6/12/04*		<input type="checkbox"/>				
(Forecast) C0675: Intersection Group 5 100% Design Issue for Construction	7/1/04*			<input type="checkbox"/>			
(Forecast) C0675 - Station (Canopy) Design 100% - Issue for Construction (W.C. Station)	7/2/04*			<input type="checkbox"/>			
(Forecast) C0675: Victory Blvd: Open Intersection to Traffic	7/2/04*			<input type="checkbox"/>			
(Forecast) C0675: Lindley Avenue: Open Intersection to Traffic	7/6/04*			<input type="checkbox"/>			
(Forecast) C0675: Woodman Avenue: Open Intersection to Traffic	8/17/04*				<input type="checkbox"/>		
(Forecast) C0675: Bus & Maint. Yard - Crane/Catwalk Design 100% - Issue for Construction	8/20/04*				<input type="checkbox"/>		
(Forecast) C0675: Oxnard Street: Open Intersection to Traffic	8/24/04*				<input type="checkbox"/>		
(Forecast) C0675: Intersection Group 6 100% Design Issue for Construction	8/31/04*				<input type="checkbox"/>		
(Forecast) C0675: Variel Avenue: Open Intersection to Traffic	9/1/04*					<input type="checkbox"/>	
(Forecast) C0675: De Soto Avenue: Open Intersection to Traffic	9/2/04*					<input type="checkbox"/>	
(Forecast) C0675: Tampa Avenue: Open Intersection to Traffic	10/7/04*						<input type="checkbox"/>

 MTA Staff	 P.E. Design Consultants	 Metro	 MTA Board Action
 Other Agencies	 Contractor	 *	New Date

SUMMARY SCHEDULE

Metro Orange Line  
Level 0 Project Schedule

Project Milestones	FY 2002			FY 2003			FY 2004			FY 2005			FY 2006					
	J	A	S	J	A	S	J	A	S	J	A	S	J	A	S	J	A	S
<p><b>Project Milestones</b></p> <p>◇ MTA Board Adopts EIR</p> <p>◇ Invitation for Bids - C0675 D/B Contractor</p> <p>◇ Notice To Proceed Issued to C0678 Contractor</p> <p>◇ Begin Construction C0678 L.A. River Bridge</p> <p>◇ Complete Construction at L.A. River Bridge</p> <p>◇ California Transportation Commission Funding Resolution</p> <p>◇ Award C0675 D/B Contract</p> <p>◇ Notice to Proceed C0675 D/B Contractor</p> <p>Forecast C0675 MS# 4 Substantial Completion</p> <p>◇ UFS Equipment Delivery</p> <p>◇ Substantial Completion</p> <p>◇ Planned R/O</p> <p>Contractor's Milestone No. 4 - Substantial Completion forecast is later than what is shown below. MTA's assessment is that mitigation opportunities are still available and this date can be achieved.</p>																		
<p><b>Procurement</b></p> <p><b>Design / Build Contract - C0675</b></p> <p>Contract C0675 D/B Bid Process</p> <p>◇ Recommendation to MTA CEO for Contract C0675 Award</p> <p>◇ Calif Transportation Commission - Notice of Funding Suspension C0675 Award Delay</p> <p>◇ C0675 D/B Contract Bid Validity date</p>																		
<p><b>Third Party / Vehicles / Systems / I-405</b></p> <p>Master Cooperative Agreements (MCA) Approvals</p> <p>Articulated Vehicle Procurement/Fabrication Process</p> <p>Board Adoption of MCA with City of Los Angeles</p> <p>Delivery Articulated Bus #1: Initial Testing</p> <p>UFS Equipment Option</p> <p>UFS Equipment</p> <p>ATMS Equipment</p> <p>Cal Trans I-405 Construction</p>																		
<p><b>Real Estate</b></p> <p>Lease Terminations</p> <p>Property Acquisition</p> <p>Lease Extensions</p> <p>Pierce College Parcel Acq Due Date</p>																		
<p><b>Preliminary Engineering</b></p> <p>STV/405 Design</p>																		
<p><b>Design / Build Contract - C0675</b></p> <p>Mobilization / Final Design / Submittals</p> <p>Demolition / Hazmat Removal</p> <p>Design Support During Construction</p> <p>Buway, Earthwork / Contaminated Soils / Storm Drains / Paving / Landscaping / Fencing Intersections</p> <p>Park and Ride Lots</p> <p>Bridges</p> <p>Station Construction</p> <p>Systems Installation</p> <p>Systems Integration Testing</p> <p>MTA Comm Testing</p> <p>Punchlist/Pre Rev Ops</p>																		
<p><b>Los Angeles River Bridge - C0676</b></p> <p>Migratory Birds - L.A. River Bridge Site Investigation &amp; Monitoring</p> <p>L.A. River Bridge Design</p> <p>L.A. River Bridge Demolition</p> <p>Wet Season Restriction</p> <p>Mobilization</p> <p>In Channel Construction</p> <p>Closeout / Completion</p> <p>Wet Season Restriction</p> <p>Wet Season Restriction</p> <p>Closeout / Completion</p>																		

## SCHEDULE NARRATIVE

The C0675 Design/Build Contractor submitted a Current Schedule update this period that reflects an improvement of 10 calendar days to their Substantial Completion Milestone No. 4. (now at 92 days negative float). MTA's assessment of the delay for Milestone No. 4 is that a portion of the delay is due to removal of contaminated soil from busway sections and changes in the pavement design. The MTA has issued Change Orders to mitigate 28 calendar days for the contaminated soil delay. These Change Orders directed the Contractor to accelerate construction of underground and rough grading work along the busway. The MTA is also in the process of preparing an additional change to mitigate a still to be determined number of days for the pavement design delay. Change to the pavement design impacted the start of rough grading for the busway.

The Current Schedule update is showing the busway construction along the west end of the Project as the most critical path for the Project. The completion of intersection design and construction is the secondary critical path. The Contractor made extensive schedule logic changes this month for intersection, busway and station construction to comply with MTA request that the monthly update conform to current planning and production rate performance.

The C0675 Design/Build Contractor is continuing construction efforts with completion of Busway Segment 2 duct bank and completion of storm drainage west of the Los Angeles River Channel. Other work completed this period included: Intersection Phase 1 at Tujunga, Woodman, Vesper and DeSoto Avenues and Intersection Phase 2 at Whitsett Avenue and Victory Boulevard at Topham Street. The Contractor's construction efforts this month continued with decking work at Bull Creek and Tujunga Wash Bridges, rough grading between Variel and Reseda Avenues and storm drainage along Busway Segment 2 east. Also this period, the Contractor started bikeway rough grading along segment 1B west and curb/gutter and paving between Ethel Avenue and Oxnard Street. Contaminated soil removal work continued this period along Busway Segment 2 and will continue in advance of the critical busway rough grading work during June 2004.

Next month, paving is forecast to be completed along Chandler Boulevard and east of Hazeltine Avenue. Installation of storm drain pipe on busway segment 2 is also forecast to be completed next period. The intersections at Laurel Canyon Boulevard and Whitsett Avenue are forecast to be completed and re-opened next month. Also, the C0675 scope of work on two bridges will advance towards completion. The C0675 Contractor continues to submit design packages for City of Los Angeles and MTA review.

## SCHEDULE NARRATIVE

The C0675 Contractor Submittals planned for the June 2004 period are: Intersection Group 4 – Approved for Construction, Warner Center Canopy – 100% Design, Busway Segment 3 – Approved for Construction, Bikeway Segment 3 - 85% Design and Intersection Group 6 – 85% Design. The following design packages are under review by MTA and/or the City of Los Angeles: Intersection Group 5 – 100%, Intersection Group 6 – 60% and Park and Ride - 100% Design.

The MTA is maintaining the forecast for Orange Line Revenue Operations as August 2005. To maintain this date, MTA modified the work activity logic in the Project Schedule to show integration testing and pre-revenue operations activities overlapping with activities that lead to the Contractor's Substantial Completion Milestone No. 4. Although the C0675 Contractor is behind schedule, the Contractor has not reduced construction schedule contingency incorporated in the Contractor's Current Schedule nor has the Contractor exhausted the potential design and construction mitigation opportunities that may be available.

## PROJECT COST STATUS

### PROJECT 800112 - METRO ORANGE LINE (BUSWAY)

\$ in Millions

#### COST SUMMARY

Description	Original Budget	Previous Forecast	Current Forecast	Forecast Variance	Commitments	Expenditures
Guideways	124.2	123.7	124.3	0.6	112.3	49.5
Yards & Shops	1.2	1.5	1.3	(0.2)	1.1	0.0
Systems/Equipment	12.7	12.3	12.0	(0.3)	8.2	1.4
Stations	30.4	30.4	30.3	(0.1)	30.4	1.3
Vehicles & Buses	17.5	15.7	15.7	0.0	0.0	0.0
Special Conditions	24.2	31.6	33.5	1.9	14.4	6.2
Right-of-Way	24.9	19.3	19.3	0.0	17.2	17.2
Professional Services	45.7	46.5	44.6	(1.9)	27.2	23.1
Proposed Park-and-Ride Facility	16.5	16.5	16.5	0.0	8.4	8.3
Contingency	32.2	32.0	32.0	0.0	0.0	0.0
Project Revenue	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>329.5</b>	<b>329.5</b>	<b>329.5</b>	<b>0.0</b>	<b>219.2</b>	<b>107.0</b>

Expenditures are cumulative through April 2004.

## PROJECT COST ANALYSIS

The Original Budget of the Metro Orange Line, which includes an allowance of \$16.5 million for a proposed park-and-ride facility at the Western Terminus of the Orange Line, was adopted in February 2003 for a value of \$329.5 million.

### Current Forecast

The Total Project forecast remained the same at \$329.5 million for the May period with no drawdown from Project Contingency. However, there were changes to the respective elements comprised of the following: increase of \$0.6 million to the guideways which was directly offset by forecast decreases in yards and shops, systems equipment and stations. These forecast changes were largely due to the identification of change orders and change notices to the Design/Build Contract C0675. In other areas of the project, a \$5.0 million increase to waste handling services was identified but was offset by corresponding reductions to the environmental mitigation, geotechnical services and legal services elements for (\$0.6 million), (\$2.5 million) and (\$1.9 million) respectively. Project Contingency remains at \$32.0 million which represents the available unallocated funds to cover unknown but anticipated changes.

### Commitments

The commitments increased \$2.6 million this period primarily due to the following: Increase of \$0.8 million to the Design/Build Contract C0675, \$1.3 million increase for environmental consultants, \$0.3 million for master cooperative agreements, \$0.8 million for professional services and agency related costs, \$0.1 million increase related to the Warner Center Park and Ride facility. These increase were offset by a decrease of (\$0.6 million) to the right-of-way element. The \$219.2 million in commitments to date represents 66.5% of the Original Budget.

### Expenditures

Expenditures are cumulative through period ending April 2004. The expenditures increased \$6.6 million this period primarily due to the following: \$4.7 million for Design/Build Contract C0675; \$0.6 million for environmental consultants; \$0.2 million for master cooperative agreements; \$1.1 million for professional services and agency costs. The \$107.0 million in expenditures to date represents 32.5% of the Original Budget.

## PROJECT COST STATUS

PROJECT 800114 - METRO ORANGE LINE (BIKEWAY)  
COST SUMMARY

*\$ in Millions*

Description	Original Budget	Previous Forecast	Current Forecast	Forecast Variance	Commitments	Expenditures
Guideways	5.8	6.3	6.3	0.0	5.1	0.5
Yards & Shops	0.0	0.0	0.0	0.0	0.0	0.0
Systems/Equipment	0.0	0.0	0.0	0.0	0.0	0.0
Stations	0.0	0.0	0.0	0.0	0.0	0.0
Vehicles & Buses	0.0	0.0	0.0	0.0	0.0	0.0
Special Conditions	0.2	0.5	0.5	0.0	0.4	0.2
Right-of-Way	0.0	0.0	0.0	0.0	0.0	0.0
Professional Services	1.3	1.3	1.3	0.0	0.4	0.2
Contingency	0.8	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>8.1</b>	<b>8.1</b>	<b>8.1</b>	<b>0.0</b>	<b>5.9</b>	<b>0.9</b>

Expenditures are cumulative through April 2004.

## PROJECT COST ANALYSIS

The Original Budget of the Metro Orange Line Bikeway Project was adopted in February 2003 for a value of \$8.1 million.

The same C0675 Design/Build Contractor as the Metro Orange Line Busway will construct the Metro Orange Line Bikeway Project. Construction activities for the Orange Line Bikeway are expected to occur concurrent with the construction effort of the Orange Line. The Orange Line Bikeway Project is segregated from the base scope of the Orange Line Project due to differences in funding sources.

### Current Forecast

Cost Forecast remained the same this period.

### Commitments

The commitments increased \$0.4 million primarily due to the processing of a change notice associated with Contract C0675 and Agency related costs. The \$5.9 million in commitments to date represents 72.8% of the Original Budget.

### Expenditures

Expenditures are cumulative through period ending April 2004. The expenditures increased \$0.2 million this period due to Design/Build Contract C0675. The \$0.9 million in expenditures to date represents 11.1% of the Original Budget.

## PROJECT COST STATUS

### PROJECT 800116 - METRO ORANGE LINE LADWP RECYCLED WATER PIPELINE

\$ in Millions

#### COST SUMMARY

Description	Current Estimate	Previous Forecast	Current Forecast	Forecast Variance	Commitments	Expenditures
Guideways	3.8	1.5	1.5	0.0	1.5	0.4
Special Conditions	0.0	0.0	0.0	0.0	0.0	0.0
Right-of-Way	0.0	0.0	0.0	0.0	0.0	0.0
Professional Services	1.2	1.8	1.8	0.0	1.0	0.9
Project Reimbursement	0.0	(3.3)	(3.3)	0.0	(0.2)	(0.2)
<b>TOTAL</b>	<b>5.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2.3</b>	<b>1.1</b>

(1) Expenditures are cumulative through April 2004.

(2) Current Estimate based on September 2003 MTA Board action. Initial \$5.0 million authorized to further develop scope of work and life of project costs.

## PROJECT COST ANALYSIS

On September 16, 2003, the Los Angeles Department of Water and Power (LADWP) Board of Commissioners approved a \$5.0 million budget under an existing Master Cooperative Agreement with MTA for partial funding for schedule-critical portions of the LADWP Recycled Water Pipeline. Subsequently, on September 25, 2003, the MTA Board approved a \$5.0 million initial budget for Project No. 800116 authorizing the issuance of Change Orders in the amount not to exceed \$2.5 million to the C0675 Design/Build Contractor for initial funding of design and construction of the LADWP Recycled Water Pipeline. Consequently, MTA and LADWP have determined that the LADWP Recycled Water Pipeline will not be incorporated into the Metro Orange Line Project and all work associated with the Recycled Water Pipeline should be terminated except for competing work related to incorporating a pipeline in the two bridges (Tujunga Wash and Bull Creek Bridges).

#### **Current Forecast**

The MTA Board adopted the project on the condition that LADWP reimburse MTA for all costs associated with design, construction and administration of the Recycled Water Pipeline Project. The MTA is proceeding with authorized scope and has billed for and received reimbursement from LADWP for the Pipeline scope of work. Cost Forecast remained the same this period.

#### **Commitments**

The commitments increased \$1.0 million due to the processing of change notices associated with Contract C0675. These change notices affected intersection and bridge work.

#### **Expenditures**

Expenditures are cumulative through period ending April 2004. The expenditures increased \$0.1 million due to Agency related costs.

## FINANCIAL/GRANT STATUS

### Project 800112 – Metro Orange Line (Busway Only)

APRIL 2004									
STATUS OF FUNDS BY SOURCE									
\$ in millions									
SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMITMENTS \$	(D/B) %	(E) EXPENDITURES \$	(E/B) %	(F) BILLED to \$	(F/B) FUNDING SOURCE %
FEDERAL RSTP	17.5	17.5							
STATE TCRP	47.0	47.0	47.0	47.0	100%	42.9	91%	42.9	91%
STATE STIP	0.3	0.3	0.3	0.3	100%	0.3	97%	0.3	97%
PROPOSITION C	264.7	264.7		172.1	65%	50.5	19%	50.5	19%
UNBILLED ACCRUALS			13.3			13.3			
<b>TOTAL</b>	<b>329.5</b>	<b>329.5</b>	<b>60.6</b>	<b>219.4</b>	<b>67%</b>	<b>107.0</b>	<b>32%</b>	<b>93.7</b>	<b>28%</b>

(1) Based on August 2003 Adopted Short Range Transportation Plan  
 NOTE: Expenditures are cumulative through April 2004.

## STATUS OF FUNDS ANTICIPATED

**STATE TCRP:** Cumulative to date, \$47 million of State TCRP funds are available for draw down. The California Transportation Commission (CTC) allocated \$12.3 million in January 2001 and \$34.7 million in June 2002. At the June 25, 2003 CTC Meeting, the CTC approved the transfer of TCRP funds remaining in preliminary engineering to be used for final design efforts. At the October 2003 CTC Meeting, the CTC approved MTA's request for an AB 1335 (Letter of No Prejudice) for \$98 million of TCRP funds should they become available.

**STATE STIP:** Due to the suspension of the TCRP program, MTA processed a STIP amendment to secure \$98 million of STIP substitute funding to replace TCRP funds previously committed to the project. On April 3, 2003, the CTC approved the MTA's request for the STIP amendment.

**FINANCIAL/GRANT STATUS**

**Project 800114 – Metro Orange Line Bikeway Project**

MAY 2004

STATUS OF FUNDS BY SOURCE

in \$ millions

SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED to SOURCE \$	FUNDING SOURCE %
TEA (FED)	6.0	6.0	6.0	4.2	69%	0.6	11%	0.6	11%
TEA-21 (FED)	1.1	1.1	1.1	0.7	69%		0%		0%
CITY OF LA	1.0	1.0	1.0	1.0	100%	0.1	8%	0.1	8%
UNBILLED ACTUALS			0.1			0.1			
<b>TOTAL</b>	<b>8.1</b>	<b>8.1</b>	<b>8.2</b>	<b>5.9</b>	<b>73%</b>	<b>0.9</b>	<b>11%</b>	<b>0.7</b>	<b>9%</b>

NOTE: Expenditures are cumulative through April 2004.  
The Metro Orange Line Bike Path funding agreement between the City of Los Angeles and the MTA stipulates a total funding amount of \$10,880,150.

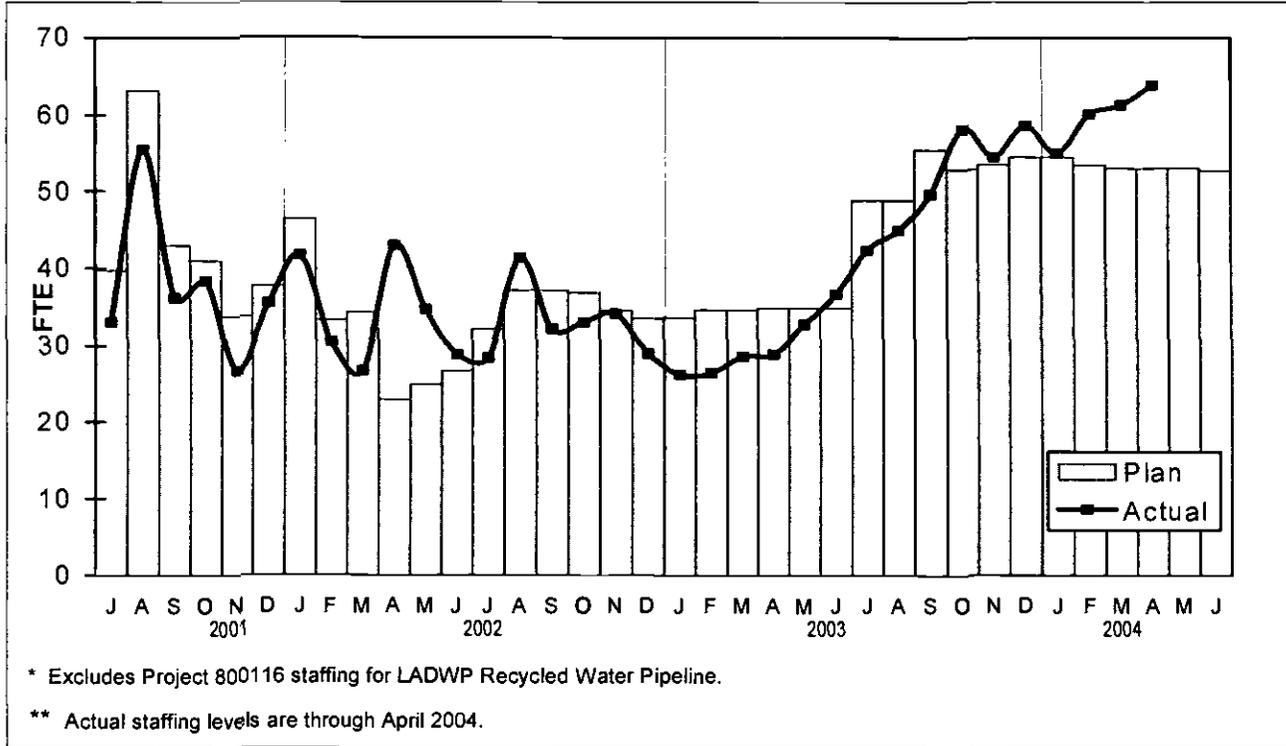
**STATUS OF FUNDS ANTICIPATED**

**FEDERAL FUNDS:** The transfer of Federal Funds from the Federal Highway Administration to the FTA has been completed. On May 29, 2003, MTA submitted grant application #CA-90-X970-03 to the FTA for a total amount of \$7,058,600. The FTA grant was executed on August 27, 2003 and is now available for drawdown.

**CITY OF LA:** The funding agreement for the local match between MTA and the City of Los Angeles was reviewed by the MTA and sent back to the City of Los Angeles for execution. The funding agreement was executed on April 24, 2003 and is now available for drawdown.

**STAFFING STATUS \***

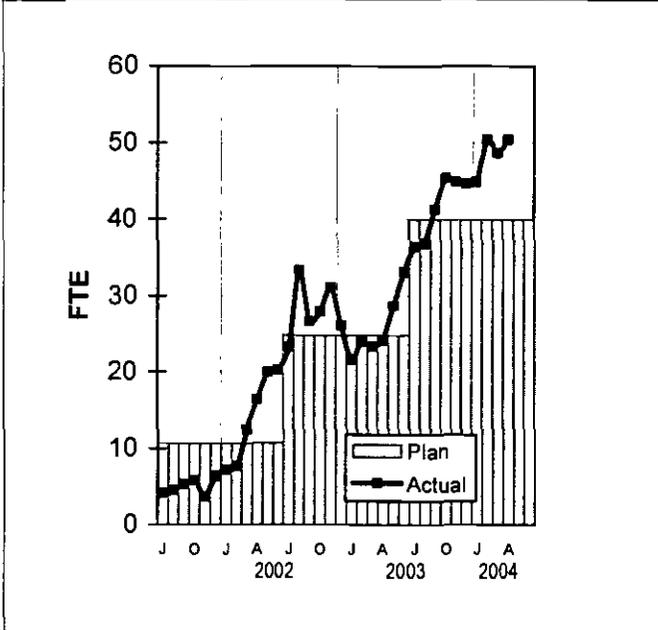
**TOTAL STAFFING STATUS**



A negative trend continues for actual staffing compared to what was originally planned. Although staffing for Construction Management Support Services Consultant is underrunning, MTA staffing is averaging, over the last seven months, approximately seven full time equivalents (FTE's) greater than what was planned. This increase is due to higher than anticipated plan need for Engineering and Procurement Department staff associated with design submittal review and potential changes.

**STAFFING STATUS**

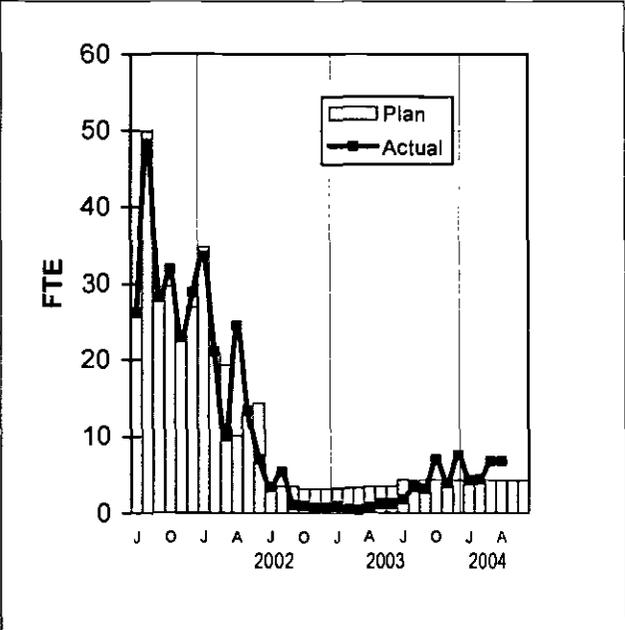
**AGENCY STAFFING**



Project staffing was higher than plan the last seven months due to increased work load for Engineering and Procurement Departments associated with design submittal review and potential changes.

\* Actual staffing levels are through April 2004.

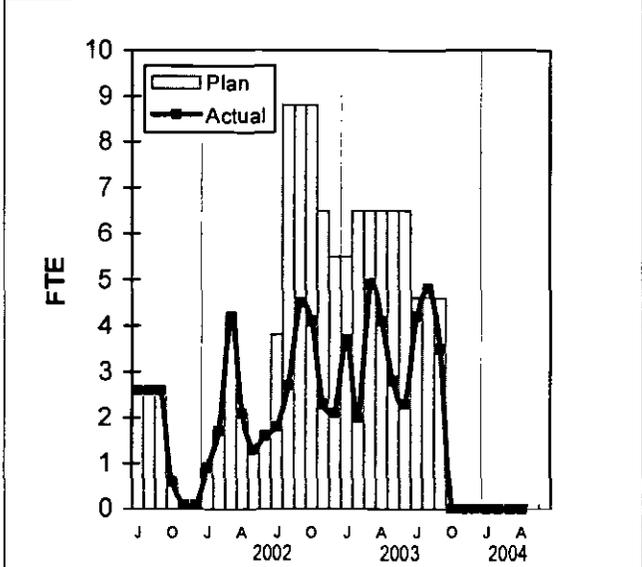
**DESIGN CONSULTANT**



July 2002 through December 2002 represents Bid Support Phase only. January 2003 through July 2004 represents Design Support During Construction.

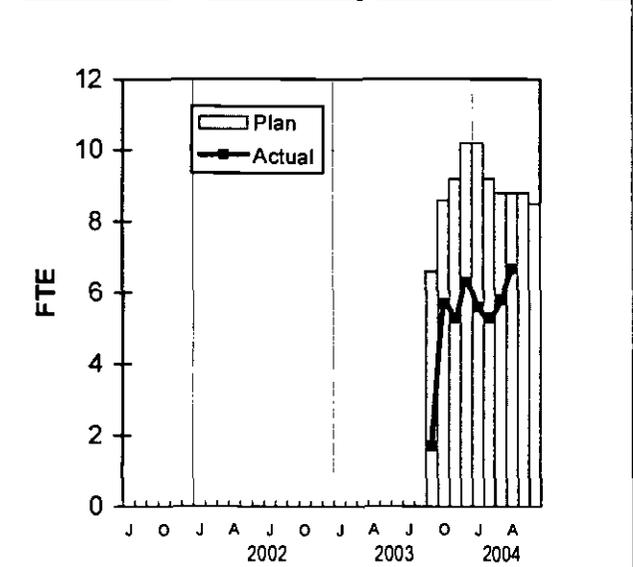
\* Actual staffing levels are through April 2004.

**PROJECT MANAGEMENT ASSISTANCE**



No additional actuals are planned after September 30, 2003 due to contract completion.

**CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT**



\* Contract NTP was issued September 15, 2003. Actual staffing levels are through April 2004. Consultant staffing is lower than plan due to Contract C0675 Design/Build design delays which impact the start of peak construction requiring management support services.

## REAL ESTATE STATUS

- The number of leases to be terminated for the project is 101 with 99 available to the C0675 Design/Build Contractor. The following two parcels were scheduled to be available to the C0675 Contractor on July 1, 2003 and have been permitted to remain either partially or completely as noted below without impacting the Project (Parcels 1502 and 1503 still require a design review while Parcels 2207 and 2601 have been approved as noted).
  1. Parcel 1502 Allegheny Properties (required for construction of Sepulveda Park-and-Ride). The lease on a portion of this parcel is being extended on a month-to-month basis pending design review at the tenant's request to retain a portion of the lease area.
  2. Parcel 1503 Chesapeake Properties (required for construction of Sepulveda Park-and-Ride). A small portion of the lease on the western edge of this parcel is being extended on a month-to-month basis pending review at the tenant's request to retain a portion of the lease area.
  
- Under New Acquisitions, nine parcels were originally required and certified as full takes. However, one parcel (Parcel 1813) was decertified as not required for the Project. Seven of the eight parcels have been acquired. An agreement has been reached for Parcel 301 with Pierce College (required for construction of Winnetka Park-and-Ride) to acquire the property by July 2004 for the C0675 Design/Build Contractor's use.

## REAL ESTATE STATUS

### REAL ESTATE STATUS – LEASES

	Total Number	Received Courtesy Letters	Received Relocation Plan Letter	Recvd 90 Day Termination Notice	Unlawful Detainer Action	Relocation Completed	Available for Demolition	Available for Construction
Leases	101	101	101	101	25	58	97	99

### REAL ESTATE STATUS – NEW ACQUISITIONS

Contract	No. of Parcels	Certified		Just Comp Approved		Offers Made*		Agreements Signed		Condemnation		Parcels Available		Parcels projected to be unavailable by need date
		Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	
<b>TOTAL</b>	8	8	8	8	8	8	8	8	8	2	2	7	7	0

The parcels will be purchased by MTA Real Estate.  
 \* Offers made contingent to MTA Board approval.

- Encroachment of a portion of a residential structure near the Interstate 405 Freeway Overhead into the Project right-of-way was resolved with the filing of a lawsuit against the homeowner by outside counsel. On March 2, 2004, a settlement was reached between the parties and entered into the court record that required MTA to increase the amount of financial assistance to the homeowner in exchange for his removal of the encroachment not later than May 3, 2004 (60 days after the settlement). The homeowner removed the encroachment effective April 8, 2004 and this portion of the ROW was turned over to the MOL contractor at that time.

## ENVIRONMENTAL STATUS

- Met with Boeing to discuss remaining environmental concerns regarding the sale of Boeing property to MTA.
- Completed monthly stormwater audits to verify compliance with best management practices implementation.
- Completed removal of additional heavy metals impacted soils at various locations along the right-of-way.
- Held meeting with California Department of Toxic Substances Control regarding disposition of arsenic contaminated soils along right-of-way.
- Continued daily air monitoring and weekly air sampling.
- Met with citizen leaders of Victory Park to address dust migration from the Sepulveda Yard blowing into neighborhood backyards.
- Continued additional soils loading, transport, and disposal of soils with arsenic concentrations detrimental to plant growth.

## COMMUNITY RELATIONS STATUS

- Notified residents, elected officials and the media of intersection construction and closures.
- Held project briefings with Van Nuys and Valley Village residents, Los Department of Transportation Mobility Advisory Committee and deputies of elected officials.
- Addressed concerns and mitigated impacts to residents and businesses caused by intersection closures, grading and paving.

## QUALITY ASSURANCE STATUS

- Performed ongoing surveillance on the following construction activities:
  - DWP water line installation at the Tujunga Bridge.
  - Tujunga Blvd., Whitsett Blvd., Lindley Blvd. And Laurel Canyon Blvd. intersections opened to traffic.
  - Completion of underground cross culvert at Tampa Blvd.
  - Completion of sidewalk/cross culvert at Burbank and Fulton Blvd.
  - Completion of Ethel Ave. to Burbank Blvd. Busway curb and gutter base paving.
  - Grading and crushed base operations continuing from Tampa Blvd. to Variel Blvd.
  - Storm drain installation complete from Balboa Blvd. To the Los Angeles River Bridge.
- Reviewed additional SOJV Inspection Instructions.
- SOJV/WGI MTA Quality Action Requests responses are under review.
- Continue to log in SOJV Nonconformance Reports into MTA QIS Tracking System.
- Assisted Resident Engineer in responding to MTA Quality Management Audit Findings.

**QUALITY ACTION REQUEST STATUS**

QM Surveillance #	QAR #	Description	Due Date	Status	Comments
<b>C0675</b>					
S2003-412	001	Design review issues-- 100% Demolition Plan	8/14/03	<b>CLOSED</b>	
S2003-412	002	Constructability issues – 100% Demolition Plan	8/14/03	<b>CLOSED</b>	
S2003-416	001	Design review issues – 60% Group I Intersection Design Package	9/8/03	<b>CLOSED</b>	
S2003-418	001	Design review issues – 85% Segment 1 Busway Design Package	9/11/03	<b>CLOSED</b>	
S2003-451	001	Design review issues – 85% Group I Intersection Design Package	9/31/03 12/1/03	<b>CLOSED</b>	
S2003-455	001	Design review issues – 100% Busway Segment	11/3/03 12/8/03 1/16/04	<b>CLOSED</b>	
S2003-463	001	Design review issues – 100% Landscaping & Irrigation Design	11/21/03 12/1/03 12/8/03	<b>CLOSED</b>	
S2003-466	001	Design Change Control – 100% Bridge Specification	12/2/03 12/24/03	<b>CLOSED</b>	
S2003-468	001	Quality Assurance – Document Submittals	12/4/03 12/24/03	<b>CLOSED</b>	
S2003-470	001	Surveillance of SOJV Audit of Richard Chong	12/29/03 12/23/03	<b>CLOSED</b>	
A04-01	001	SOJV NCR Control Procedure	2/23/04	<b>CLOSED</b>	
S2004-022	001	QA/QC Personnel not Approved	3/12/04	<b>CLOSED</b>	
S2004-023	001	Nonconforming activities – Intersection Mason and Victory	3/12/04	<b>CLOSED</b>	
S2004-049	001	SOJV Concrete Records for Bull Creek and Tujunga Wash Bridges	5/7/04	<b>CLOSED</b>	
A2004-03	008 - 015	WGI Design Control Audit	5/19/04	5/25/04	Under review by MTA QM Auditor
A2004-03	016 - 027	SOJV Construction Activities	5/28/04 6/11/04		SOJV requested an extension.
<b>C0676</b>					
S2003-419	001	Brutoco As-Builts	9/31/03	<b>CLOSED</b>	
S2003-419	002	Brutoco QA Records &	9/31/03	<b>CLOSED</b>	

### SAFETY STATUS

- Participated in weekly progress meetings with Construction Management to discuss safety related issues and construction schedule for Contract C0675 Design/Build.
- Continued to increase safety monitoring due to Contractor's accelerated schedule and near miss incidents.
- Reviewed and accepted contractor Drug and Alcohol Prevention Program.
- Reviewed and accepted Confine Space Plan.
- Reviewed and accepted additional safety procedure checklist regarding the 230kv incident.
- Conducted site safety audit. Several deficiencies were noted and corrected. Overall housekeeping was adequate and the contractor passed the audit.
- SOJV reported one (1) lost time injury for the month of May.

Contractor	Project To Date										
	Work-Hours	Cases			Lost Work Days			Incident Rates			
		Total	Lost Work Day	Restricted or Transfr	Current	Carry Over	Total	Total	Lost Workday Cases	Restricted or Transfr	Days Away
SOJV	302,061	6.0	4.0	1.0	66.0	18.0	61.0	4.0	2.6	0.7	43.7
Brutoco	15,247	1.0	0.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0	0.0
Subtotals	317,308	7.0	4.0	1.0	66.0	18.0	61.0	4.4	2.5	0.6	41.6
MTA Const. Mgmt	37,061	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Totals</b>	<b>354,369</b>	<b>7.0</b>	<b>4.0</b>	<b>1.0</b>	<b>66.0</b>	<b>18.0</b>	<b>61.0</b>	<b>4.0</b>	<b>2.3</b>	<b>0.6</b>	<b>37.2</b>

### ART DEVELOPMENT STATUS

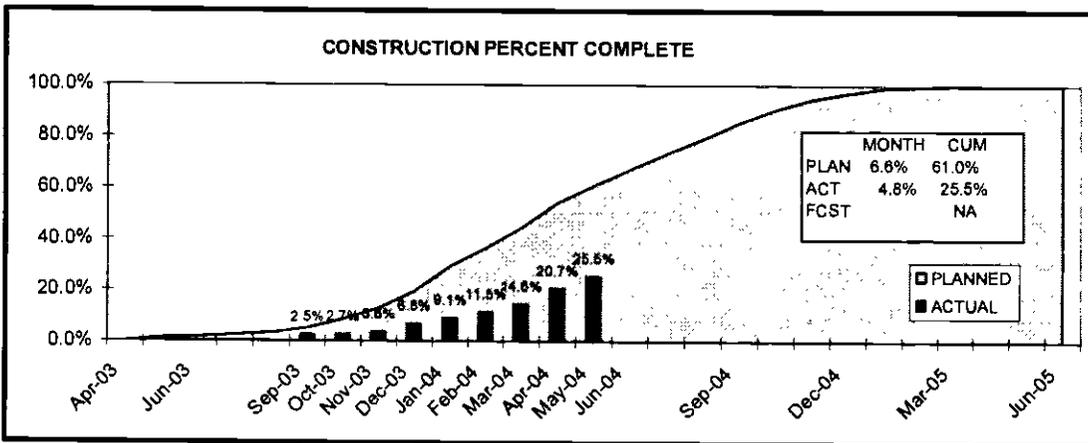
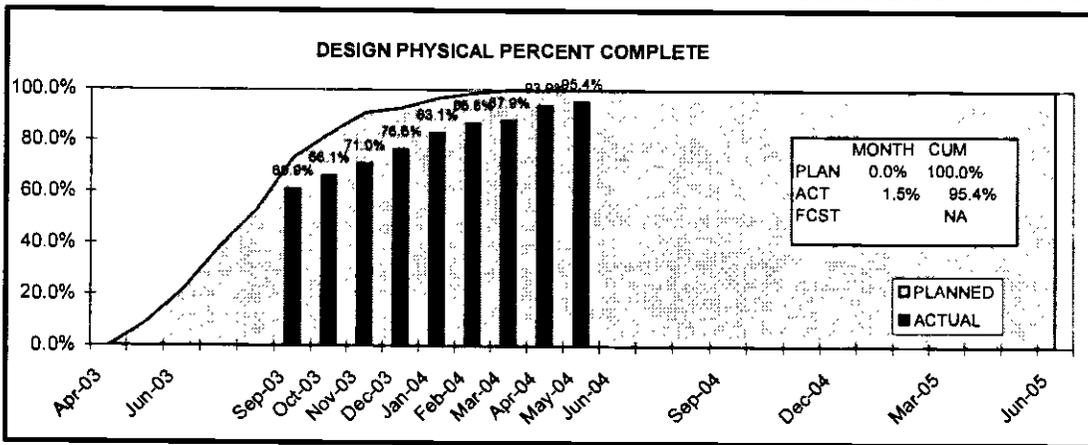
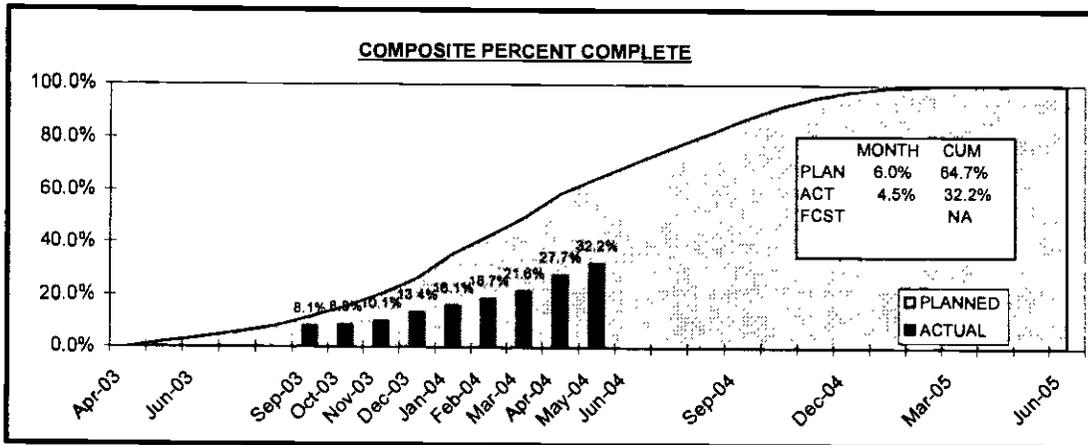
- Facilitated the third Metro Art Advisory Meeting for the Metro Orange Line.
- Nine artists presented completed project designs.
- Processed purchase order for the fabrication of the porcelain steel art panels.

## CONTRACT CONSTRUCTION STATUS

<p><b>Description: Design/Build</b>  <b>Contractor: Shimmick Construction Co., Inc./</b>  <b>Obayashi Corp, A Joint Venture</b></p>	<p><b>Contract No.: C0675</b></p> <p><b>Status as of: May 31, 2004</b></p>																																				
<p><b>Progress/Work Completed:</b></p> <ul style="list-style-type: none"> <li>- Submitted Stations design - AFC submittal.</li> <li>- Submitted Intersection Group 5 (design - 100% submittal.</li> <li>- Completed review Soundwalls design - 100% submittal</li> <li>- Completed review Stations design - 100% submittal.</li> <li>- Completed review Busway Segment 3 design - 100% submittal.</li> <li>- Submitted Park &amp; Ride (Partial) design - 100% submittal.</li> <li>- Completed Review Systems design (communications) - 100% submittal.</li> <li>- Completed review Intersection Group 4 design - 100% submittal.</li> <li>- Completed Busway Segment 2 duct bank installation.</li> <li>- Completed storm drain installation West of the L.A. River.</li> <li>- Completed intersection phase 2 work at Whitsett and at Victory.</li> <li>- Completed intersection demolition &amp; underground work at Lindzey and at Tampa.</li> <li>- Completed intersection phase 1 work at Tujunga, Woodman, Vesper and DeSoto.</li> </ul> <p><b>Areas of Concern:</b></p> <ul style="list-style-type: none"> <li>- City of Los Angeles Review of Design Submittals - MTA and SOJV are working with the City of Los Angeles to assure submittals are adequate, clear and complete and to maintain adequate staffing to support the submittal review schedule.</li> <li>- The Contractor's May 2004 schedule submittal shows all Milestones behind schedule. Incomplete Design Submittals delayed the start of intersections and busway construction. Pavement design changes delayed the start of rough grading on the west end of the alignment. Also, contaminated soil removal has impacted busway construction. MTA staff is working with SOJV to come up with a recovery plan to bring the Contract Milestones dates back to support August 2005 Revenue Operations Date.</li> <li>- Potential Enhancements may impact project cost and schedule. MTA Staff continues to analyze impacts.</li> <li>- The Right-of-Way is contaminated with heavy metals, pesticides and herbicides. Soil and air testing has been completed. The contaminated soil has been isolated and removed in advance of the Contractor's required construction need date. The MTA and speciality consultants are implementing a long term soil remediation plan.</li> </ul>	<p><b>Major Activities (In Progress):</b></p> <ul style="list-style-type: none"> <li>- Submittal Reviews are ongoing. Major submittals include: <ol style="list-style-type: none"> <li>1. Park &amp; Ride (partial) design - 100% submittal.</li> <li>2. Intersections group 6 design - 60% submittal.</li> <li>3. Intersection Group 5 design - 100% submittal.</li> </ol> </li> <li>- Continue rough grading Busway &amp; Bikeway along Segment 1B (West).</li> <li>- Continue curb/gutter and paving between Ethel and Hazeltine.</li> <li>- Continue storm drainage installation West of Hazeltine.</li> <li>- Continue intersection Groups 2&amp;3 construction.</li> <li>- Started Busway Segment 2 (West) rough grading.</li> <li>- Continue decking installation at Bull Creek and Tujunga Wash bridges.</li> <li>- Continue excavation and stockpiling of contaminated soil for testing and removal by CH2MHill Contractor..</li> <li>- Continue intersections Group 1 construction along Chandler Boulevard.</li> <li>- Started Irrigation installation along Chandler Blvd.</li> </ul> <p><b>Major Activities Next Period:</b></p> <ul style="list-style-type: none"> <li>- Complete installation of temporary CCTV cameras at intersections.</li> <li>- Complete Busway Segment 2 storm drain installation.</li> <li>- Start curb/gutter and paving at the west end of the alignment.</li> <li>- Complete curb/gutter and paving from Bellaire to Hazeltine.</li> <li>- Start Retaining Wall construction.</li> <li>- Complete decking installation at both Bridges.</li> <li>- Start Park &amp; Ride rough and fine grading work.</li> <li>- Submit Intersection Group 4 design - AFC submittal.</li> <li>- Submit Wamer Center Canopy design - 100% submittal.</li> <li>- Submit Busway Segment 3 design - AFC submittal.</li> <li>- Submit Intersection Group 6 design - 85% submittal.</li> <li>- Submit Bikeway Segment 3 design - 85% submittal.</li> </ul>																																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Original Contract Dates</th> <th style="text-align: center;">Time Extension</th> <th style="text-align: center;">Current Contract</th> <th style="text-align: center;">Forecast</th> <th style="text-align: center;">Variance CDs</th> </tr> </thead> <tbody> <tr> <td>Milestone 1 - Available for UFS Installation</td> <td style="text-align: center;">01/01/05</td> <td style="text-align: center;">0</td> <td style="text-align: center;">01/01/05</td> <td style="text-align: center;">03/04/05</td> <td style="text-align: center;">-62</td> </tr> <tr> <td>Milestone 2-MTA Division 8 Work Complete</td> <td style="text-align: center;">02/15/05</td> <td style="text-align: center;">0</td> <td style="text-align: center;">02/15/05</td> <td style="text-align: center;">08/17/05</td> <td style="text-align: center;">-183</td> </tr> <tr> <td>Milestone 3-Systems Infrastructure &amp; Equip Installed/Tested</td> <td style="text-align: center;">05/12/05</td> <td style="text-align: center;">0</td> <td style="text-align: center;">05/12/05</td> <td style="text-align: center;">08/10/05</td> <td style="text-align: center;">-90</td> </tr> <tr> <td>Milestone 4-Contract Substantially Complete</td> <td style="text-align: center;">06/16/05</td> <td style="text-align: center;">0</td> <td style="text-align: center;">06/16/05</td> <td style="text-align: center;">09/16/05</td> <td style="text-align: center;">-92</td> </tr> <tr> <td>Milestone 5-Reliability Demonstration Testing Period</td> <td style="text-align: center;">ROD + 365CD's</td> <td style="text-align: center;">0</td> <td style="text-align: center;">ROD + 365CD's</td> <td style="text-align: center;">ROD + 365CD's</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>			Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs	Milestone 1 - Available for UFS Installation	01/01/05	0	01/01/05	03/04/05	-62	Milestone 2-MTA Division 8 Work Complete	02/15/05	0	02/15/05	08/17/05	-183	Milestone 3-Systems Infrastructure & Equip Installed/Tested	05/12/05	0	05/12/05	08/10/05	-90	Milestone 4-Contract Substantially Complete	06/16/05	0	06/16/05	09/16/05	-92	Milestone 5-Reliability Demonstration Testing Period	ROD + 365CD's	0	ROD + 365CD's	ROD + 365CD's	0
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<p><b>Schedule Summary:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Date of Award:</td> <td style="text-align: right;">04/03/03</td> </tr> <tr> <td>Notice to Proceed:</td> <td style="text-align: right;">05/02/03</td> </tr> <tr> <td>Original Contract Duration:</td> <td style="text-align: right;">776</td> </tr> <tr> <td>Current Contract Duration:</td> <td style="text-align: right;">776</td> </tr> <tr> <td>Elapsed Time from NTP:</td> <td style="text-align: right;">395</td> </tr> </table>	Date of Award:	04/03/03	Notice to Proceed:	05/02/03	Original Contract Duration:	776	Current Contract Duration:	776	Elapsed Time from NTP:	395	<p><b>Cost Summary:</b> <span style="float: right;"><b>\$ In millions</b></span></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">1. Award Value: *</td> <td style="text-align: right;">150.72</td> </tr> <tr> <td>2. Executed Modifications:</td> <td style="text-align: right;">1.90</td> </tr> <tr> <td>3. Approved Change Orders:</td> <td style="text-align: right;">3.96</td> </tr> <tr> <td>4. Current Contract Value (1 + 2 + 3):</td> <td style="text-align: right;">156.58</td> </tr> <tr> <td>5. Pending Changes:</td> <td style="text-align: right;">6.96</td> </tr> <tr> <td>6. Incurred Cost:</td> <td style="text-align: right;">65.81</td> </tr> </table>	1. Award Value: *	150.72	2. Executed Modifications:	1.90	3. Approved Change Orders:	3.96	4. Current Contract Value (1 + 2 + 3):	156.58	5. Pending Changes:	6.96	6. Incurred Cost:	65.81														
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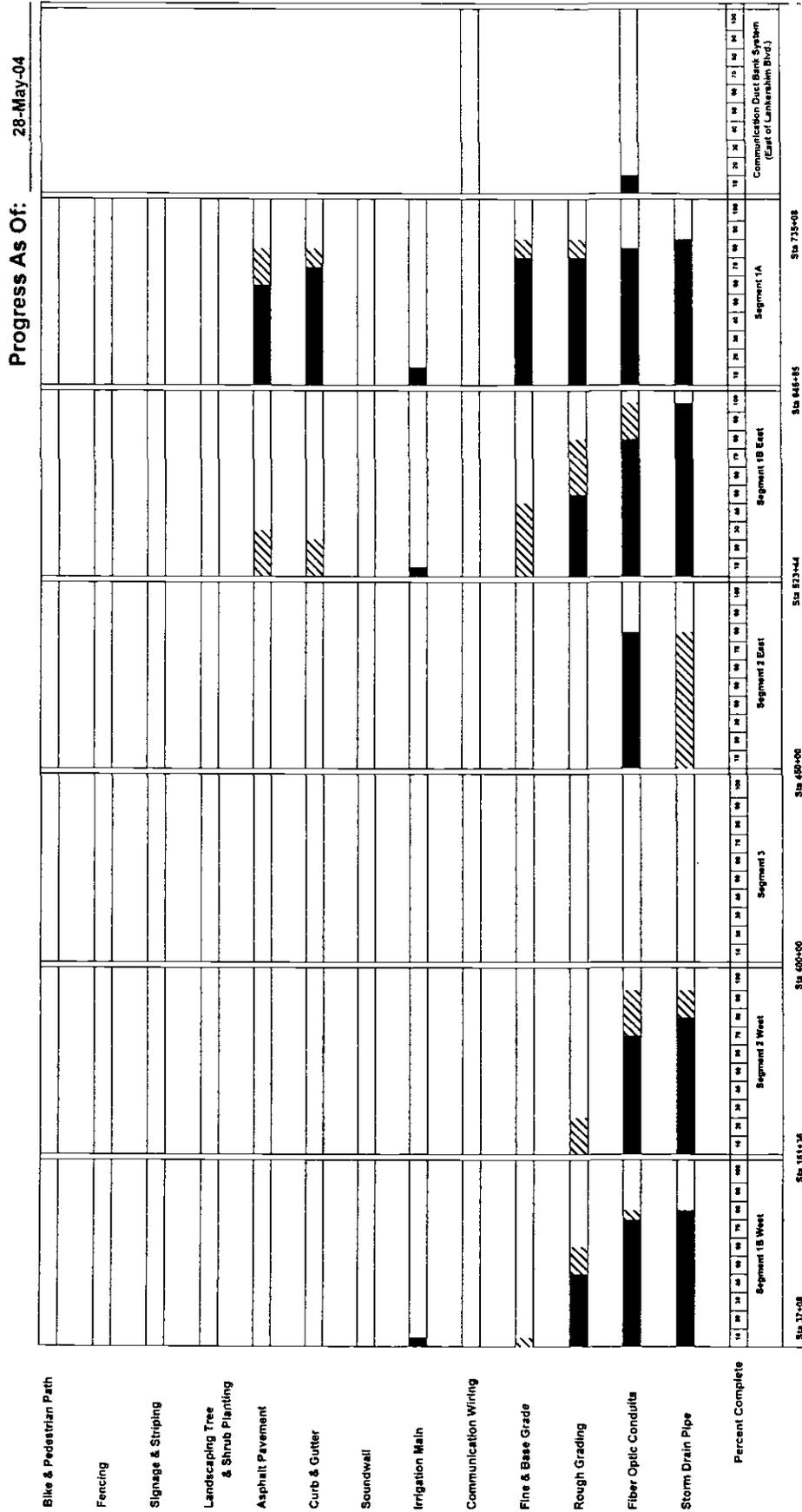
\* Includes Options E.2, E.3, E.4, E.5, E.6 (exercised after award) and E.8

## CONTRACT C0675 PHYSICAL PERCENT COMPLETE



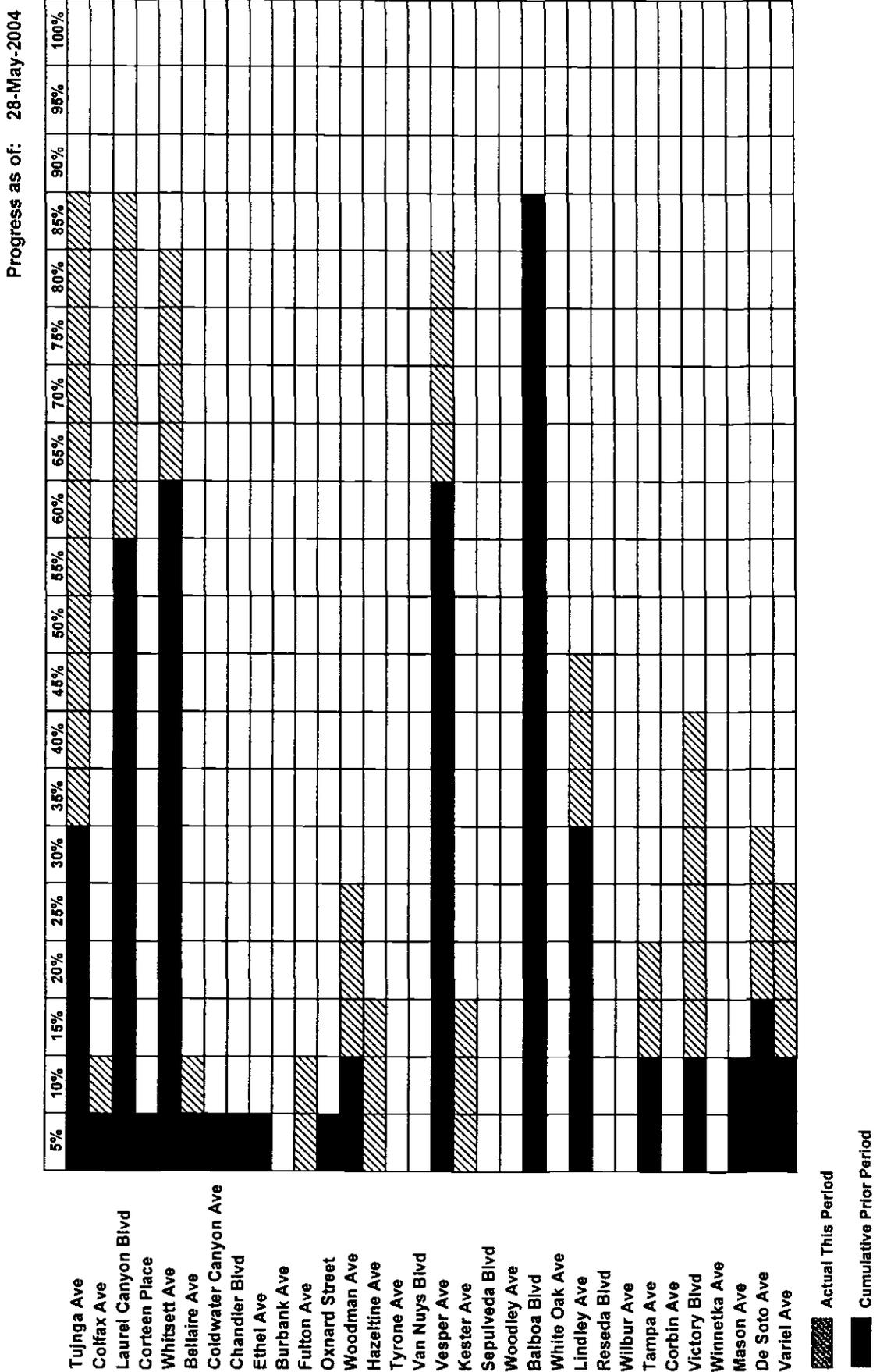
\* Plan is based on approved Contract C0675 Baseline Schedule

Metro Orange Line Project - Busway Segments  
Station 37+08 to Station 735+08/Communication Duct Bank System  
Summary - Busway Segment Percent Complete



Actual This Period  
 Cumulative Prior Period  
 NOTE: STATIONING NOT TO SCALE

Metro Orange Line Project - Intersections  
Summary - Percent Complete



## CHRONOLOGY OF EVENTS

May 15, 2001	The MTA released the draft environmental study of a proposed 14-mile Bus Rapid Transit (BRT).
July 26, 2001	The MTA Board of Directors adopted the 14-mile Bus Rapidway system, also called a "busway," as the locally preferred alternative for the San Fernando Valley Metro Rapidway Corridor.
February 14, 2002	The MTA issued the final environmental report for the 14-mile Bus Rapid Transit.
February 28, 2002	The MTA Board voted to certify the final environmental report for the Bus Rapid Transit system and approved a solicitation for a Design/Build delivery system for the Project. The action paved the way for the project's final design phase.
June 28, 2002	The MTA completed the Preliminary Engineering and Design Development efforts. The Design/Build Invitation for Bid package for Contract No. C0675 was assembled and advertised.
July 12, 2002	The MTA issued Addendum No. 1 for Contract No. C0675.
July 19-22, 2002	The MTA conducted job walks for potential bidders providing the opportunity to view current project conditions.
July 25, 2002	The MTA issued Addendum No. 2 for Contract No. C0675.
August 23, 2002	The MTA completed final design of the Los Angeles River Bridge. The final design was completed to mitigate possible construction and schedule risks associated with a limited dry season construction restriction within the river channel.
August 28, 2002	San Fernando Valley Metro Rapidway Project held its first Community Transit meeting. The meeting, held in a relatively informal style, included planners, schedule makers, and schedule checkers from the sector office. The meeting's format included plenty of time for attendees to speak to the planners and schedulers about specific issues with specific lines or stops.
August 29, 2002	The MTA issued Addendum No. 3 for Contract No. C0675. This included the option for constructing the Los Angeles River Bridge.
August 29, 2002	Contract No. EN069, CH2M Hill Constructors, Inc., started demolition of the Los Angeles River Bridge.
September 9, 2002	Two bidders submitted technical bids, first step of the two-step bid process for Contract C0675.
September 11, 2002	The MTA advertised Contract No. C0676 Los Angeles River Bridge.
September 19, 2002	Substantial completion of the Los Angeles River Bridge demolition.
October 31, 2002	The MTA issued Notice of Technical Acceptance to two Contract No. C0675 bidders, Shimmick-Obayashi, a Joint Venture and Granite-Brutoco, a Joint Venture.

## CHRONOLOGY OF EVENTS

November 2002	Addendums No. 4, 5, and 6 were issued for Contract No. C0675 to clarify issues identified during the technical evaluation phase.
December 2, 2002	Received price bids from the two contractors for Contract No. C0675 Design/Build.
December 5, 2002	MTA received a single bid for Contract No. C0676 Los Angeles River Bridge.
December 5, 2002	MTA opened two price bids for Contract No. C0675 Design/Build for design and construction.
December 17, 2002	Notice of Intent to Award Contract No. C0675 sent to both contractors.
December 17, 2002	The California Transportation Commission (CTC) issued letter deferring "Traffic Congestion Relief Program" (TCRP) funds until its meeting on February 27, 2003. This resulted in the suspension of Contract No. C0675 contract award pending further notification of funding status from the CTC.
December 20, 2002	A trial was held to hear the lawsuit brought by the Citizens Organized for Smart Transit (COST) opposed to the Project. The judge ruled in favor of MTA.
December 23, 2002	Los Angeles Department of Water and Power (LADWP) agrees to reimburse MTA for actual costs incurred to review and update Los Angeles River Bridge design to incorporate a future reclaimed waterline.
December 27, 2002	A Notice to Award was issued to Brutoco Engineering and Construction Corporation for Contract No. C0676 Los Angeles River Bridge.
January 17, 2003	MTA held groundbreaking ceremony for Contract No. C0676.
January 17, 2003	CTC held workshop to discuss funding issues.
January 28, 2003	Notice to Proceed was issued to Brutoco Engineering and Construction Corporation for construction of the new Los Angeles River Bridge. The decision to award a separate contract instead of exercising option in Contract No. C0675 Design/Build allowed critical work to commence during the first dry construction period starting April 15, 2003.
February 27, 2003	CTC put the project funding issue on the April 3, 2003 CTC meeting.
February 27, 2003	The MTA Board adopted the Project Budget and Schedule. The Project Revenue Operations Date calculated as full Notice to Proceed for Contract No. C0675 Design/Build plus 27 months contingent upon resolution of CTC funding issues. A budget of \$329.5 million was adopted for the busway and \$8.1 million was adopted for the bikeway.
April 3, 2003	CTC approved funding plan for the San Fernando Valley Metro Rapidway Project.
April 3, 2003	MTA awarded Contract No. C0675 to Shimmick Construction Co./Obayashi Corporation, a Joint Venture for the design and construction of the San Fernando Valley Metro Rapidway. Total value of the Contract was \$150.4 million.

## CHRONOLOGY OF EVENTS

April 24, 2003	MTA Board adopted San Fernando Valley Metro Rapidway Project as the official name of the Project.
May 2, 2003	Notice to Proceed (NTP) was issued to Shimmick Construction Co., Inc./Obayashi Corporation, a Joint Venture for Contract No. C0675.
May 20, 2003	The LADWP Board of Commissioners certified the Mitigated Negative Declarations for the West Valley Water Recycling Project (known as the Recycled Water Pipeline Project).
July 9, 2003	MTA and Contractor staff complete move into an Integrated Project Management Office for Contract No. C0675.
September 15, 2003	NTP was issued to Carter & Burgess for Contract MC067 Construction Management Services.
September 16, 2003	The LADWP Board of Commissioners approved a \$5.0 million budget under an existing Master Cooperative Agreement with MTA for partial funding for schedule-critical portions of the LADWP Recycled Water Pipeline Project.
September 25, 2003	The MTA Board approved a \$5,000,000 initial budget and authorized the issuance of change orders in the amount not to exceed \$2,500,000 to the C0675 Contractor for initial funding of design and construction of the LADWP Recycled Water Pipeline.
October 15, 2003	C0676 Contractor completed on time all in-channel work required to meet contract milestone date planned for October 15, 2003.
November 6, 2003	C0675 Contractor began first excavation and installation of drainage pipe at the east end of the Rapidway on Chandler Boulevard between Laurel Canyon and Coldwater Canyon.
November 17, 2003/ November 20, 2003	Held two of four planned community meetings in the San Fernando Valley to collect feedback on proposed landscape plans for the Rapidway.
November 21, 2003	First temporary lane closure at Laurel Canyon Intersection for installation of drainage pipe across intersection.
December 1, 2003	Successful completion of Contract C0676 Los Angeles River Bridge, Brutoco Engineering and Construction Corporation, two weeks ahead of schedule and under budget.
December 3, 2003/ December 6, 2003	Held remaining two of four planned community meetings in the San Fernando Valley to collect feedback on proposed landscape plans for the Rapidway.
January 14, 2004	LADWP advised MTA to not proceed with the Recycled Water Pipeline Project and finish current authorized scope of work.
January 22, 2004	MTA Board of Directors approved changing name of project to Metro Orange Line.
January 22, 2004	Suspension of work issued to C0675 Design/Build Contractor at westside of busway between De Soto Avenue and Corbin Avenue due to presence of contaminated soil.

## CHRONOLOGY OF EVENTS

January 29, 2004	Suspension of work issued for C0675 Design/Build Contractor at east end of busway east of Colfax/Chandler intersection due to presence of contaminated soil.
February 4, 2004	Removed suspension of work issued to C0675 Design/Build Contractor at westside of busway between De Soto Avenue and Corbin Avenue due to presence of contaminated soil.
February 11, 2004	Removed suspension of work issued to C0675 Design/Build Contractor at east end of busway east of Colfax/Chandler intersection due to presence of contaminated soil.
February 11, 2004/ February 16, 2004	First weekend full street closure at Balboa Blvd./Victory Blvd. for construction of new intersection including demolition, paving, signage and striping.
March 24, 2004	First asphalt busway paving on Chandler Boulevard between Colfax and Laurel Canyon Boulevard (Segment 1A).
March 22, 2004	LADWP issued notice to cease and desist construction activities at west end of Project due to C0675 Design/Build Contractor striking and damaging an LADWP underground 230,000 volt line.
April 2, 2004	LADWP lifts cease and desist notice issued March 22, 2004 with conditions.
May 27, 2004	MTA Board approved property acquisitions for new Warner Center Park and Ride facility pending resolution of environmental issues.

## ALIGNMENT ILLUSTRATIONS



Concrete pour at Tujunga Crossing (photo of concrete truck).



Storm drain pipe installation at Kester Avenue intersection.

## ALIGNMENT ILLUSTRATIONS



Base course installation at Victory and Topham Intersection.



SOJV subcontractor Rainbow construction excavating for catch basin on Topham Street east of Tampa Ave.

## ALIGNMENT ILLUSTRATIONS



SOJV subcontractor Moore Electric trenching and working on installation of HDPE conduit on Bessemer St. near Tyrone Ave.



SOJV bridge deck concrete placement for Bull Creek Bridge.

## ALIGNMENT ILLUSTRATIONS



Orange Line low floor CNG-powered articulated vehicle manufactured by North American Bus Industries (NABI). The 60-foot pilot bus being prepared for shipment on March 12, 2004 to Anniston, Alabama for final assembly.

## ALIGNMENT ILLUSTRATIONS



Paving operation along Chandler Boulevard.

## ALIGNMENT ILLUSTRATIONS



Paving operation along Chandler Boulevard.

## ALIGNMENT ILLUSTRATIONS



Contract C0676 Los Angeles River Bridge Contractor completed bridge (December 2003).

## APPENDIX

### COST AND BUDGET TERMINOLOGY

#### Cost Descriptions

**ORIGINAL BUDGET** The Original Project Budget as established by Metropolitan Transportation Authority (MTA) Board of Directors at the time it authorizes Construction Project Management Division to commence full design and construction of the project (Project Adoption).

**CURRENT BUDGET** The Original Budget plus all budget amendments approved by formal MTA action. Also referred to as Approved Budget.

**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 MTA actions which have been spent or result in the obligation of 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 funds expended by MTA for contractor or consultant invoices, third party invoices, staff salaries, real estate and other expenses that is reported in MTA's Financial Information System (FIS).

**CURRENT FORECAST** The best estimate of the final cost of the project when all checks have been issued and the project is closed out. Current Forecast is composed of actual costs incurred to date, the best estimate of work remaining, and a current risk assessment for each budgeted cost item.

#### Cost Element Descriptions

**CONSTRUCTION** Includes construction and procurement contracts. Costs associated with Guideways, Yards and Shops, Systems/Equipment, Stations and Buses.

**SPECIAL CONDITIONS** Includes work by outside agencies and utilities in design coordination, review, and relocation of utilities through Master Cooperative Agreements, environmental mitigation and compliance, insurance programs, safety program, art program, testing, start-up, and pre-revenue operations.

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

**PROFESSIONAL SERVICES** Includes design engineering, project management assistance, construction management support services, legal counsel, agency staff costs, and other specialty consultants.

**PROPOSED PARK-AND-RIDE FACILITY** Proposed park-and-ride facility at the Western Terminus of the Orange Line.

**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.

**PROJECT REVENUE** Includes all revenue receivable to the MTA as a direct result of project activities. This includes cost sharing of construction items, insurance premium rebates, and the like.

## APPENDIX

### LIST OF ACRONYMS

AFE	Authorization For Expenditure
BRT	Bus Rapid Transit (No longer valid see MRT instead)
CADD	Computer Aided Drafting and Design
CALTRANS	California Department of Transportation
CD	Calendar Day
CDFG	California Department of Fish and Game
CM	Construction Manager
CMAC	Congestion Mitigation Air Quality
CN	Change Notice
CO	Change Order
COE	Corps of Engineers
CPM	Critical Path Method
CPUC	California Public Utilities Code
CR	Camera Ready
CTC	California Transportation Commission
CUD	Contract Unit Description
D/B	Design/Build
D/B/B	Design/Bid/Build
DD	Design Development
DOT	Department of Transportation
DTSC	Department of Toxic Substances Control
DWP	Department of Water and Power
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPBM	Earth Pressure Balance Machine
FAR	Federal Acquisition Regulation
FD	Final Design
FEIR	Final Environmental Impact Report
FIS	Financial Information System
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
LACFCO	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
LRTP	Long Range Transportation Plan
MIS	Major Investment Study
MPSR	Monthly Project Status Report
MR	Metro Rapidway
MRT	Metro Rapid Transitway (replaces BRT used prior to December 2002)
MTA	Metropolitan Transportation Authority
N/A	Not Applicable
NEPA	National Environmental Protection Act
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
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
PUC	Public Utilities Commission
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
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
SCRRA	Southern California Regional Rail Authority
SFV	San Fernando Valley
SHA	State Highway Account
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SOJV	Shimmick Obayashi Joint Venture
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
STV	STV Incorporated
TBD	To Be Determined
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
WGI	Washington Group, Incorporated
WP	Work Package