

December 2009

Interstate 405 Sepulveda Pass Widening Project



Metro



**INTERSTATE 405
SEPULVEDA PASS WIDENING
PROJECT**

QUARTERLY PROJECT STATUS REPORT

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH GRANTS FROM THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) AND THE AMERICAN RECOVERY AND REINVESTMENT ACT (AARA) AND FUNDS FROM THE STATE OF CALIFORNIA.

DECEMBER 2009

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PROJECT OVERVIEW & STATUS

The I-405 Sepulveda Pass Widening Project will add a 10-mile HOV lane and improve supporting infrastructure such as ramps, bridges and sound walls on the San Diego Freeway (I-405); while widening lanes from the Santa Monica Freeway (I-10) to Ventura Freeway (U.S. 101). This project will reduce existing and forecasted traffic congestion on the I-405 and enhance traffic operations by adding freeway capacity in an area that experiences heavy congestion. In addition to these modifications, the project will improve both existing and future mobility and enhance safety throughout the corridor. Project benefits include a decrease in commuter time, reduce air pollution, and promote ridesharing. The I-405 Sepulveda Pass Widening Project features include:

- *Add a 10-mile HOV lane on the northbound I-405 between the I-10 and US-101 freeways*
- *Remove and replace the Skirball Center, Sunset Blvd. and Mulholland Dr. Bridges*
- *Realign 20 on and off ramps*
- *Widen 20 existing overpasses and structures*
- *Construct approximately 18 miles of retaining walls and sound walls*

Interstate 405 (I-405), also known as the San Diego Freeway, is a north/south route classified as an interstate/interregional loop freeway. It is part of the National Highway System (NHS), originating at the I-5 in Orange County in the City of Irvine and terminating at the I-5 in Los Angeles County, in the City of Los Angeles near the community of Mission Hills. The high-occupancy vehicle (HOV) lanes on I-405 are currently operating in both northbound and southbound directions from the county line of Orange County to north of I-105; from north of Burbank Boulevard to Route 118; and in the southbound direction from Waterford Street to north of Burbank Boulevard.

The design-build contract Notice to Proceed (NTP) was given on 6/2/2009, with commencement of contract time (1550 calendar days) on August 31, 2009. Substantial completion is currently expected to occur in May 2013, with final acceptance of the project required by November 27, 2013.

Kiewit Pacific Co. (KPC) continues to be focused on design related support activities such as: geotechnical borings, surveying, and video taping of storm drains, potholing of utilities, tracking utility conflicts and preparing design documents. In addition to direct project activities, KPC has been establishing construction yards on both sides of the Mulholland Bridge and at Cotner. The Caltrans property on the corner of Wilshire and Sepulveda plus Metro's Expo property appears to be contaminated with hydrocarbons. Kiewit is evaluating options at both these sites. The other construction site still under consideration is the County Dump on Mission Road which is still in planning phase.

Key project activities for December 2009 include:

- **Quality Assurance/Quality Control (QA/QC)** The Quality Management System was approved on 12/14/09.
- **Sound Mitigation** for 23 homeowners, between Montana Avenue and Sunset Blvd. on the east side of the I-405, has been the focus of the project since the beginning of the environmental process. KPC and Metro have agreed to utilize the pile supported Tie Back System assuming the residents would agree on the permanent tie back easement and the COLA requested location of Sepulveda. Metro and Kiewit are working to obtain approval from residents on these issues.

PROJECT OVERVIEW & STATUS

- Widening of Sepulveda between Montana and Church to accommodate the COLA requests for standard lanes and shoulders.
- Visual Aesthetics Plan for the project is nearly complete and ready for public review and final concurrence from CAC, Visual Quality Assessment Team, and the Public.
- Metro and City Executive staff met to discuss the critical project issues and the resolution of schlep concerns of COLA reviewers.
- Kiewit continues with the design of the existing 12' x 12' Reinforced Concrete Box. This matter will be referred to the Disputes Review Board (DRB) for informal discussions, prior to any final resolution. Kiewit has proceeded with various alternatives to mitigate the impacts such as avoiding the structure. At this time, it appears some relief will be possible from the County in terms of allowable fill height but some challenges remain south of Church Lane. Overall, this will still be a significant cost impact and to a lesser extent schedule.

MANAGEMENT ISSUES

Concern No. 1: Community Outreach Program

Status/Action Community Outreach program established by Metro continues. Recent work with CAC on Corridor Aesthetics is a good example of the positive impact of this effort.

Concern No. 2: Value Engineering (VE) 96" MWD Waterline

Status/Action The Value Engineering Plan was submitted to Metro on December 11, 2009. Caltrans reviewed this Value Engineering proposal in 5 days and determined that it was not acceptable from a geometric perspective, but it does appear to have merit. Kiewit is currently reviewing Caltrans' comments.

Concern No. 3: Provisional Sums

Status/Action The Provisional Sums continues to make progress but some areas of concern have not been resolved, specifically MOT work. It appears that additional effort from both sides are required to resolve these issues.

MANAGEMENT ISSUES

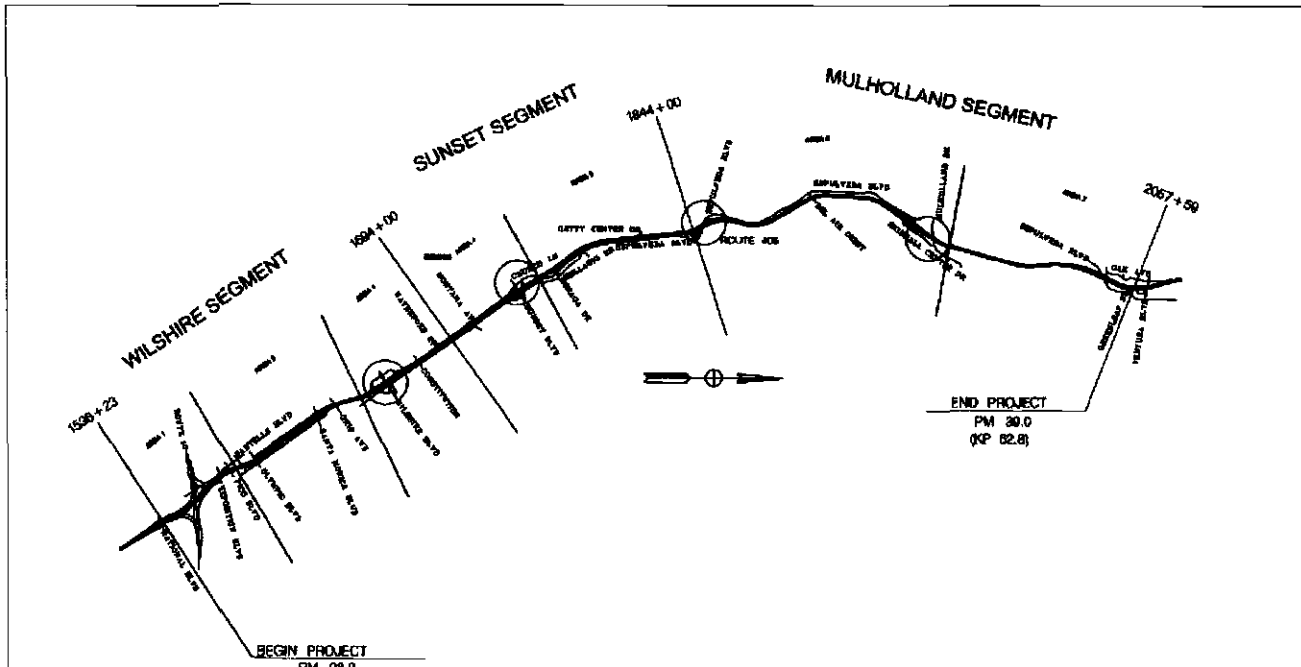
Concern No. 4: One Team with Caltrans and Metro

Status/Action The concept of one team approach to partnering with Caltrans and Metro continues to improve. Caltrans continues to step up with their support of, not only Kiewit's submittal review process, but also of Metro staff. Metro Staff are working more closely with Caltrans staff.

Concern No.5: Reversible Lane project on Sepulveda

Status/Action The COLA has requested Kiewit to take over this project, assuming we can come to an agreement on costs. This project overlaps work on I-405 and appears to have merit to take this work on. Currently Kiewit is pricing the project prior to meeting with COLA.

PROJECT SCOPE



The I-405 Sepulveda Pass Widening Project is a Design-Build contract to add a 10-mile High Occupancy Vehicle (HOV) lane on the northbound San Diego Freeway (I-405) between the Santa Monica (I-10) and Ventura (US 101) Freeways. The purpose of the project is to reduce congestion by adding the HOV lane and closing the HOV gap, which will provide a continuous HOV lane from the Orange County Line to the I-405/US-101 interchange. The scope would entail an 11-foot half median, one 12-foot HOV lane, a 1-foot HOV buffer, five 12-foot mixed-flow lanes, and a 10-foot outside shoulder.

Most of the freeway widening required for this project would occur along the east side of I-405 along Sepulveda Blvd. between Montana Ave. and Moraga Dr. and between Getty Center Drive and the northbound Getty Center off-ramp. Sepulveda Blvd. would be slightly realigned at the relocated southbound I-405 Skirball Center Drive on/off-ramps in order to add a left-turn lane to the on-ramp.

Some freeway widening would also occur along the west side of the freeway within the following segments: between Olympic Blvd. and Waterford Street and between Bel Air Crest to just north of Ventura Blvd.

Several interchanges would also be improved in order to reduce accidents associated with traffic on the ramps.

PROJECT SCOPE

- The Wilshire Blvd. interchange would be improved in both directions. The northbound on-ramp from eastbound Wilshire Blvd. would be grade-separated from the northbound off-ramp to westbound Wilshire Blvd. and from Sepulveda Blvd. The southbound off-ramp to eastbound Wilshire Blvd. would be grade-separated from the southbound off-ramp to westbound Wilshire Blvd.
- The northbound I-405 Sunset Blvd. interchange would also be improved. The northbound I-405 off-ramp to eastbound Sunset Blvd. would be widened to include one more lane. The northbound I-405 on-ramp from eastbound Sunset Blvd. would have two exclusive 12-foot lanes on the reconstructed Sunset Blvd. overcrossing and two 12-foot lanes on the on-ramp. In the eastbound direction, three 12-foot lanes and three 11-foot lanes in the westbound direction would be provided, which would solve the existing reduction from three lanes to two lanes in the eastbound direction. In both directions, 4-foot shoulders and 5-foot sidewalks as well as a 13-foot median would be provided on the Sunset Blvd. overcrossing.
- The irregular northbound I-405 on/off-hook ramps at the Getty Center interchange would be reconfigured to a standard diamond interchange to increase stopping sight distances in order to improve safety.
- The southbound I-405 Skirball Center Drive interchange would be relocated to form a "T" intersection with Sepulveda Blvd. This would eliminate the existing intersection at the end of the southbound I-405 Skirball Center Drive off-ramp.
- The southbound Valley Vista/Sepulveda Blvd. off-ramp would be reconstructed due to freeway widening.

A total of 12 soundwalls and 54 retaining walls within the project limits would be constructed at embankments where right-of-way is constrained.

A total of 12 undercrossings within the project limits would be widened. Three overcrossings at Sunset Boulevard, Skirball Center Drive, and Mulholland Drive would need to be replaced.

KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD

	Milestone Date	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10
Construction Signs Approval	12/8/09A	CT					
Area 4A - Review of 60% Design Package	12/8/09A	CT					
Area 6A - 100% Design Package	12/9/09A	○					
Area 3B - 60% Design Package	12/14/09A	○					
Construction Signage Installation Commencement	12/14/09A	○					
Area 7A - 100% Design Package	12/15/09A	○					
Area 2 - 60% Design Package	12/22/09A	○					
Area 7 - 60% Design Package	12/29/09A	○					
AWIS Traffic Sensor Deployment	1/4/10*		○				
Area 6B - 60% Design Package	1/4/10*		○				
Re-Stripe Roadway Commencement	1/14/10*		○				
Area 3A - 100% Design Package	1/14/10		○				
Area 7A - MTA/CT Review of 100% Design Package	1/14/10		CT				
Area 5 - 60% Design Package	1/15/10		○				
Area 2 - Review 60% Design Package	1/22/10		CT				
Area 7 - Review of 60% Design Package	1/29/10		CT				
Area 7A - RFC Package (AFC)	2/2/10			○			
Area 3B - Review of 60% Design Package	2/3/10			CT			
Area 6B - Review of 60% Design Package	2/3/10			CT			
K-Rail Placement Commencement	2/8/10*			○			
Area 3A - Review of 100% Design Package	2/12/10			CT			
Area 5 - Review of 60% Design Package	2/15/10			CT			
Area 6A - MTA/CT Review of 100% Design Package	2/15/10*			CT			
Area 4 - 60% Design Package	2/18/10			○			
Area 1 - 60% Design Package	2/19/10			○			
Area 4A - 100% Design Package	2/26/10*			○			
Area 3A - RFC Package (AFC)	3/3/10				○		
Area 4 - Review of 60% Design Package	3/19/10				CT		
Area 1 - Review of 60% Design Package	3/21/10				CT		
Area 3B - 100% Design Package	3/24/10				○		
Area 4A - Review of 100% Design Package	3/29/10*				CT		
Area 2 - 100% Design Package	4/2/10					○	
Area 6B - 100% Design Package	4/5/10					○	
Area 7 - 100% Design Package	4/9/10					○	

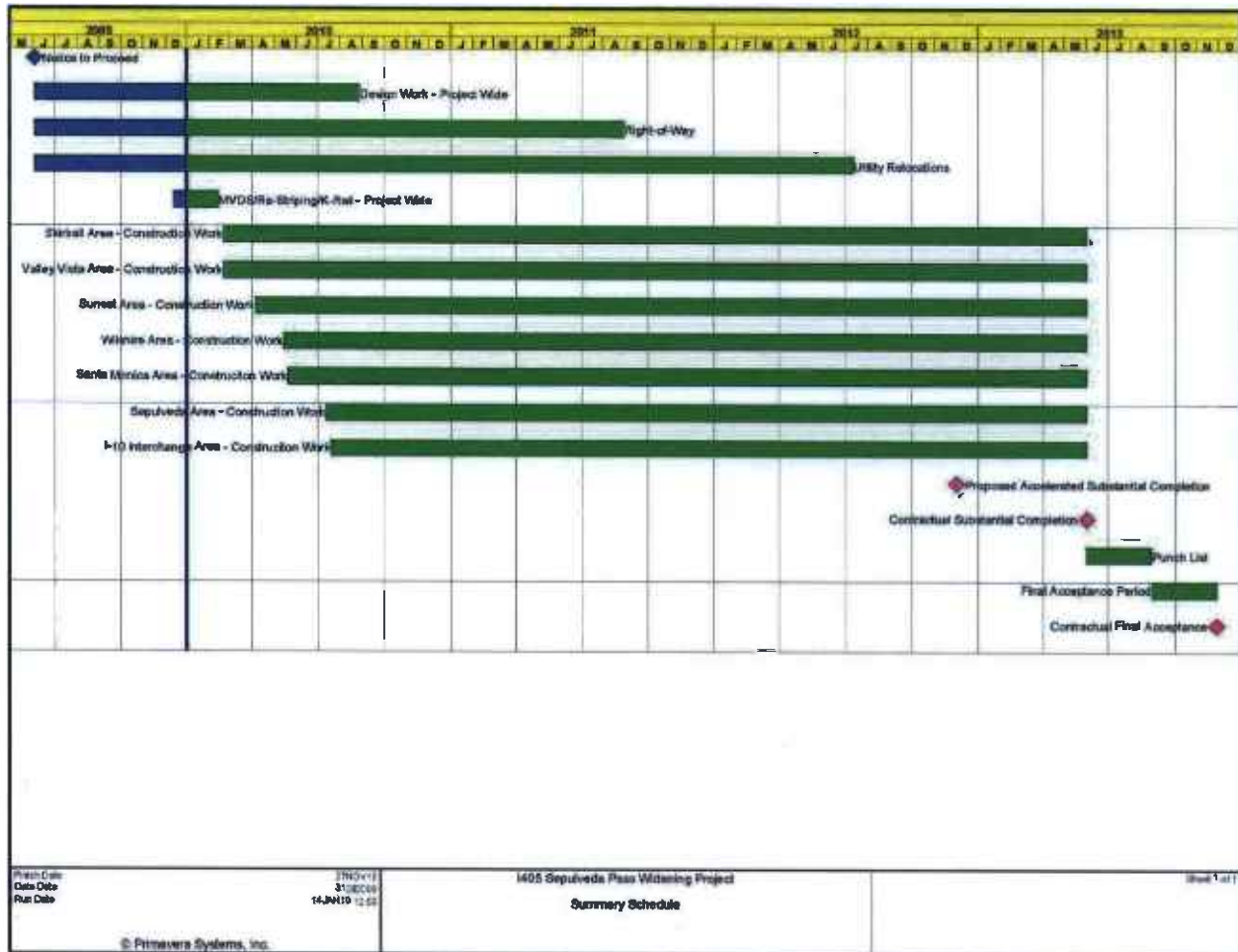
M Metro Milestone ○ Design/Build ▲ Third Parties Approval
 CT Caltrans Milestone * New Date FHWA FHWA Federal Highway Administration Approval

KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD

	Milestone Date	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10
Area 3B - Review of 100% Design Package	4/22/10					CT	
Area 2 - Review of 100% Design Package	5/2/10						CT
Area 6B - Review of 100% Design Package	5/5/10						CT
Area 3B - 60% Design Package	5/9/10						CT
Construction Signage Installation Commencement	5/21/10						○
Area 7A - 100% Design Package	5/26/10						○
Area 2 - 60% Design Package	5/28/10						○
Area 7 - 60% Design Package	5/31/20						○

M Metro	Metro Milestone	○	Design/Build	▲	Third Parties Approval
CT	Caltrans Milestone	*	New Date	FHWA	FHWA Federal Highway Administration Approval

PROJECT SUMMARY SCHEDULE



CRITICAL PATH NARRATIVE

The project has several critical paths which may potentially change as the work progresses. Currently, the primary critical path runs through the COLA 30% plans and Sunset Area 4A Walls 1720/1730 design.

It then heads to the construction of Walls 1720/1730, continues on with fine grade/place and finish AB on Sepulveda Blvd, and completes with paving and realignment of traffic on Sepulveda Blvd.

The critical path then runs through construction of the Sunset Off-Ramp Bridge #14, demolition of existing and constructing the Sunset on-ramp, constructing MSE Wall #1740B, finishing sub-grade for the Sunset on-ramp, and finally paving the Sunset on-ramp.

The critical path continues on to switching to Phase 2 MOT at Area 4, Median work at Sunset Area, and finally Median Work at Wilshire Area to achieve Area 3 Substantial Completion and Relief of Maintenance.

PROJECT COST STATUS

I-405 SEPULVEDA PASS WIDENING PROJECT
METRO CONSTRUCTION MANAGEMENT DIVISION / CALTRANS
COMBINED COST REPORT BY PHASE (DOLLARS IN THOUSANDS)
PERIOD ENDING: DECEMBER 2009

PHASE #	PHASE CODE	DESCRIPTION	ORIGINAL BUDGET	APPROVED BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET / FORECAST VARIANCE
				PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
0	PA&E	PROJECT APPROVAL & ENVIRO DOCS	22,000	-	22,000	-	21,457	-	21,457	-	22,000	-
1	PSE	PLANS, SPECS. & ENGINEERING	63,100	-	113,944	648	25,059	634	18,652	-	113,944	-
2	RS	RIGHT-OF-WAY SUPPORT	14,000	-	1,563	74	1,515	74	1,615	-	1,563	-
3	CS	CONSTRUCTION SUPPORT	28,000	-	-	16	18	16	16	-	-	-
4	C	CONSTRUCTION	823,900	-	800,074	-	720,922	11,250	44,551	-	800,074	-
9	RC	RIGHT-OF-WAY CAPITAL	83,000	-	96,419	-	8,126	26	7,926	-	96,419	-
TOTAL PROJECT			1,034,000	-	1,034,000	738	777,193	12,991	52,218	-	1,034,000	-

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 2009

PROJECT COST ANALYSIS

Approved Budget

The Approved Budget reflects the Metro Board adopted Life-of-Project (LOP) Budget which was approved in April 2009 in the amount of \$1,034.0 million.

Current Budget and Current Forecast

The Current Budget and Forecast remain the same at \$1,034.0 million. Certain items budgeted and forecast under the PSE phase will be re-allocated to the RS and CS phases in next months report once the necessary approvals are obtained.

Commitments

The Commitments increased by \$739K this period primarily for miscellaneous consulting service contracts and Metro/Caltrans staff charges.

Expenditures

Expenditures are cumulative through November 2009. The expenditures increased by a total of \$12.001M this period. Expenditures for the period consisted of \$11.250M for Kiewit, engineering phase charges, Metro project staff, consultant contract services, and cooperative agreement charges. Metro costs in the right-of-way support category were for 3rd party Metro staff costs. Caltrans expenditures for the period included staff charges for engineering, right-of-way and construction support costs. The \$92.2 million in Project Expenditures to date represents 8.9% of the Original Budget.

FINANCIAL/GRANT STATUS – ORIGINAL SCOPE ACTIVITIES

DECEMBER 2009		STATUS OF FUNDS BY SOURCE							
SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	APPROVED BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED TO FUNDING SOURCE \$	%
FEDERAL SAFETEA-LU	\$117,000	\$117,000	\$117,000	\$117,000	100%	\$83,887	55%	\$15,827	13%
FEDERAL ARRA	\$189,900	\$189,900	\$189,900	\$189,900	100%	\$0,017	0%	\$0,017	0%
STATE CMIA	\$614,000	\$614,000	\$0,000	\$418,557	68%	\$0,000	0%	\$0,000	0%
STATE TCRP	\$90,000	\$90,000	\$42,000	\$42,000	47%	\$26,676	30%	\$26,676	30%
STATE RSTP	\$10,100	\$10,100	\$10,100	\$10,100	100%	\$0,000	0%	\$0,000	0%
PROPOSITION C 25%	\$13,000	\$13,000	\$13,000	\$1,638	13%	\$1,638	13%	\$1,638	13%
TOTAL FUNDS	\$1,034,000	\$1,034,000	\$372,000	\$777,195	75%	\$92,218	9%	\$43,958	4%

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 2009

STATUS OF FUNDS ANTICIPATED

FEDERAL SAFETEA-LU: \$117M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro.

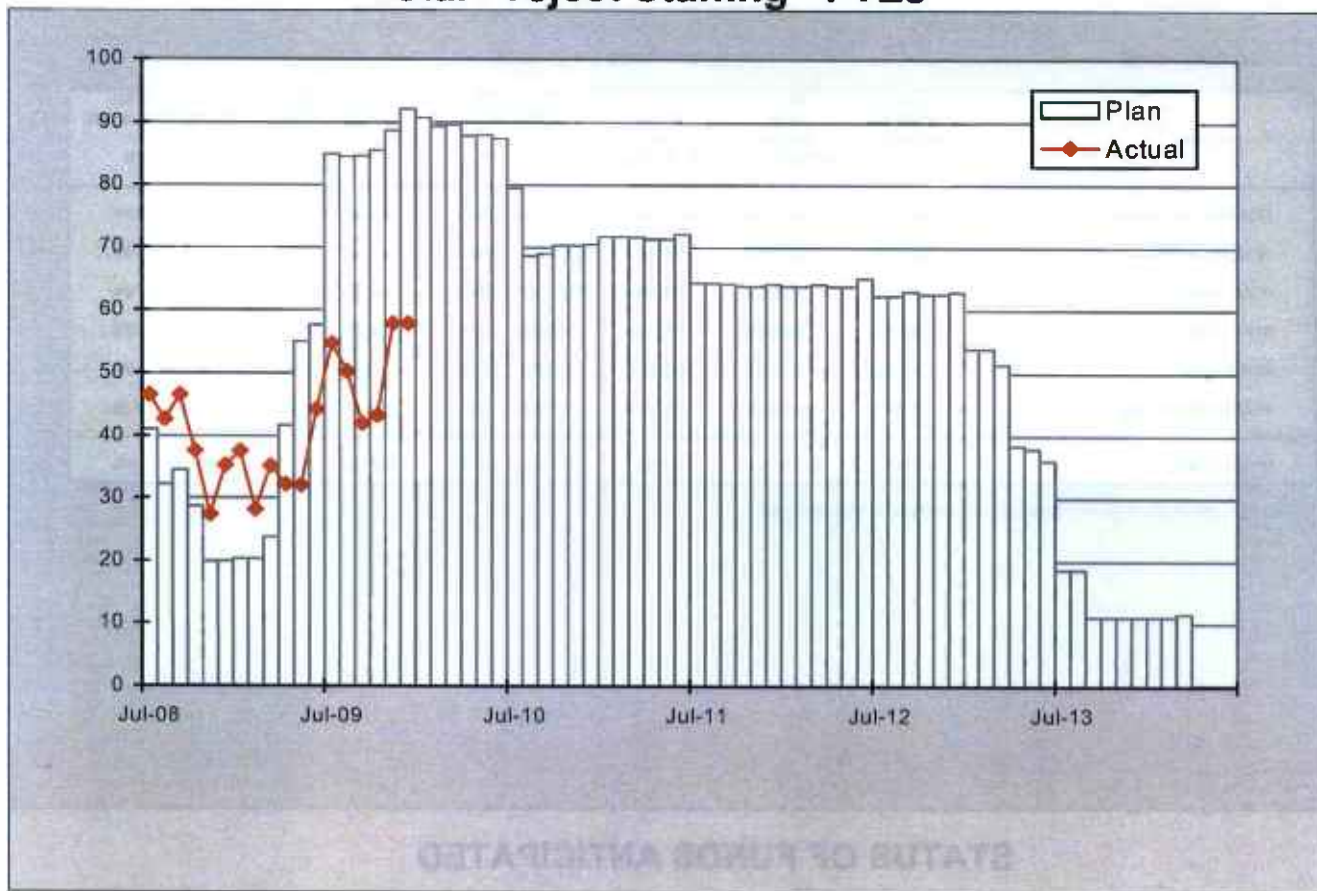
FEDERAL ARRA: \$189.9M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro with consultation with FHWA.

STATE TCRP: \$42M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro.

STATE RSTP: \$10.1M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro.

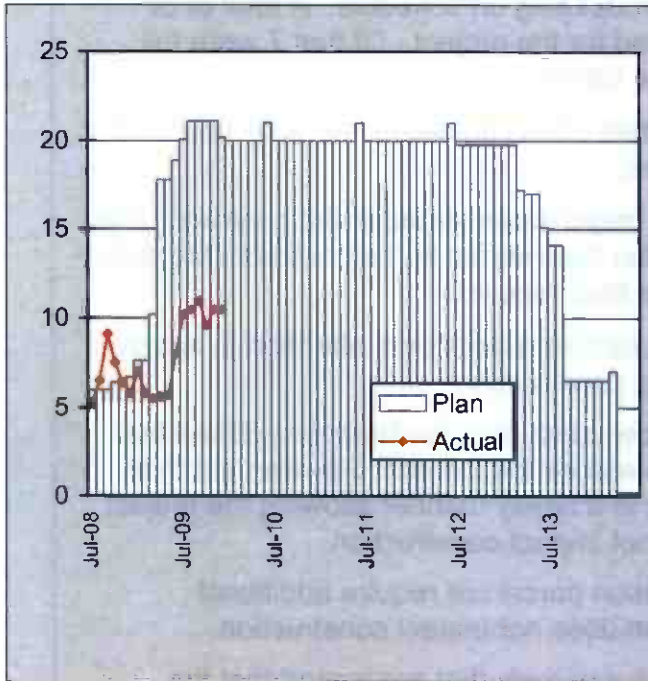
PROPOSITION C 25%: The Metro Board approved the allocation of \$13M to the Project.

**STAFFING STATUS
Total Project Staffing - FTEs**

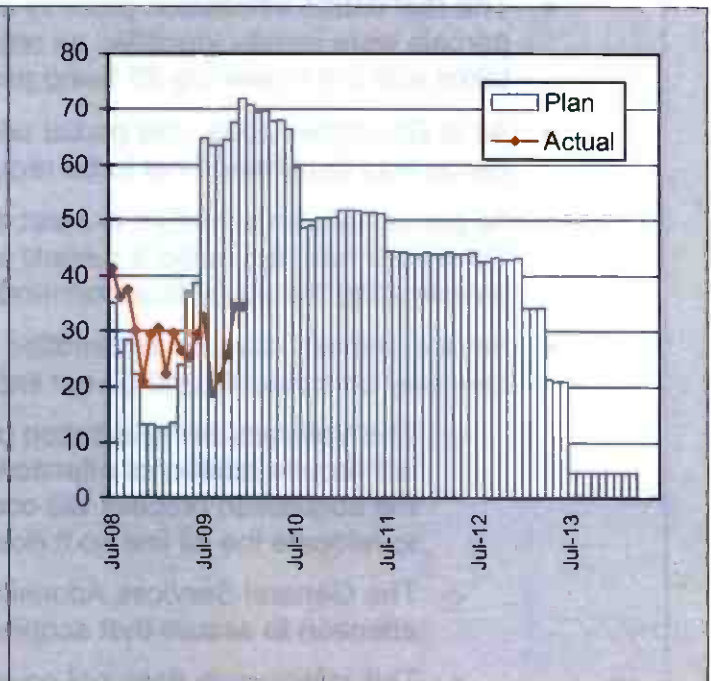


STAFFING STATUS

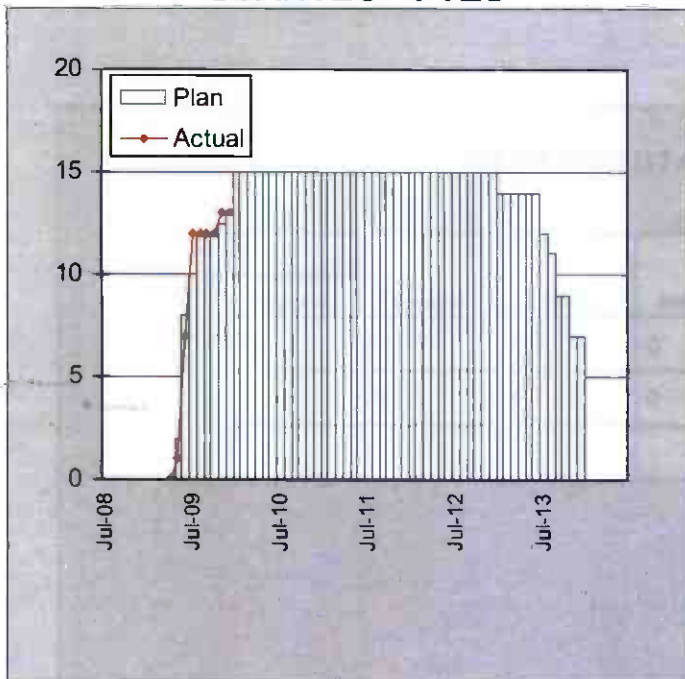
MTA - FTEs



CALTRANS - FTEs



STANTEC - FTEs



REAL ESTATE STATUS

- The real estate acquisition process is proceeding on schedule. A total of 32 parcels were initially identified as required for the project. Of that 7 were full takes with the remaining 25 being partial takes.
- As of December 2009, one partial take has been converted into a full take and 1 parcel was determined not to be required.
- All parcels are on schedule to meet the target dates stated in the contract. The Contractor has requested 3 parcels earlier than stated in the contract. Metro is investigating the ability to accommodate their request.
- Several parcels have been identified as requiring additional attention to assure they stay on schedule and do not impact construction:—
 - The Veterans Administration parcel containing the Breitburn oil line that will require additional attention to assure the Federal Government that the acquisition process will occur in a timely manner allowing the project to relocate the oil line so it does not impact construction.
 - The General Services Administration parcel will require additional attention to assure that acquisition does not impact construction.
 - This information does not cover any parcels that are leased that the contractor may need.

REAL ESTATE STATUS TO DATE

Number of Parcels	Required	In Appraisal Process	Appraisal Process Complete	Offer Made	Closing	Acquired	Turned Over to Contractor
This Period	31	9	0	0	0	2	2
Last Period	31	25	14	0	3	6	5

ENVIRONMENTAL STATUS

- Prepared Environmental Addendum for the proposed design modification developed through value engineering for the shift in the centerline along the north side of the Getty Center.

COMMUNITY RELATIONS STATUS

- Distributed two construction notices regarding potholing at the Sepulveda/Ovada intersection and signs installation.
- Held meetings with twenty-three homeowners in Westwood Hills on Sepulveda retaining wall.
- Procured print advertisement and video display ads for upcoming freeway closures.
- Coordinated preconstruction meetings with three residents and Veterans Hospital.

QUALITY ASSURANCE STATUS

- Metro Quality began performing field surveillance of construction activities and surveillance of Design activities.
- The Quality Management System (QMS) was approved during December which will allow the start of field construction work.
- QMS Revision 1 is in process for administrative corrections.

SAFETY AND SECURITY STATUS

- The IPO Staff and the Contractor continue to partner to complete Over the Shoulder Reviews of each Safety related submittal to insure the officially submitted document is returned and approved in a timely manner. December focus shifted from program plans to Master Construction Workplans and Job Hazard Analysis.
- The Contractor completed over 57,000 hours (Design and Construction) in December with no injuries.
- Yard plans and actual field improvements are being reviewed for contract and Security Program Compliance.
- The Contractor completed over 323,000 work hours (Design and Construction). Total project-to-date hours (Contractor and IPO) are over 378,000 with two first aid cases.

THIRD PARTY AGREEMENT STATUS

Third Party	Type of Agreement	Forecast Execution Date	Required Need Date	Status/ Comments
City of Los Angeles	MCA	4/10	6/09	In City's court. Unresolved City requested improvements at Wilshire/Sepulveda.
Los Angeles County Department of Public Works/Los Angeles Flood Control District	MCA	5/10	6/09	County will not move forward with MCA until Mission Dump Road issues are resolved.
Utility Owners	Utility Agreements	Various	Various	Caltrans style Utility Agreements (similar to MTA Work Order Authorizations) will be completed as relocation plans are approved for each location.

CHRONOLOGY OF EVENTS

May 18, 2007	The Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) is issued.
February 29, 2008	The Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) is issued.
March 10, 2008	The Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) errata with U. S. General Services Administration (GSA) comments is issued.
October 10, 2008	LACMTA issued Invitation For Bid (IFB) for the project.
February 20, 2009	Project bids opened.
April 23, 2009	LACMTA Board authorized the Chief Executive Officer to award Design-Build Contract C0882 to Kiewit Pacific Co.
April 23, 2009	LACMTA Board approved establishing a budget of \$1.034 billion for project 405523.
April 23, 2009	LACMTA awarded Contract C0882 to Kiewit Pacific in the amount \$694,156,000 to include Schedules A, C, and H (Option 4).
April 29, 2009	LACMTA issued a revised NOA to Kiewit Pacific in the amount \$720,922,000 to include Schedules A, C, E (Option 1), F (Option 2), G (Option 3), and H (Option 4).
June 2, 2009	LACMTA issued Notice to Proceed to Kiewit Pacific for the Design-Build Contract C0882.
August 31, 2009	Contract Commencement Date.
September 24, 2009	Kiewit Pacific submitted the Project Baseline Schedule.
October 14, 2009	Project Design Quality Management Plan approved.
October 31, 2009	Project surpassed the 200,000 work hour milestone with no recordable cases.
December 14, 2009	Project Quality Management System approved.

CONSTRUCTION PHOTOGRAPHS



I-405 pot-hole set-up on Sepulveda Blvd.



I-405 pot-holing on Sepulveda Blvd.

CONSTRUCTION PHOTOGRAPHS



I-405 pot-hole demolition on Sepulveda Blvd.



I-405 BMP installation at Mulholland Yard.

APPENDICES

COST AND BUDGET TERMINOLOGY

APPROVED BUDGET: The Approved Project Budget as established by Metro 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 Metro action. Also referred to as Approved Budget.

CURRENT FORECAST: Evaluation of costs to go combined with actual expenditures.

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 Metro actions which have been spent or result in the obligation of specific expenditures at a future time.

EXPENDITURES: The total dollar amount of funds expended by Metro for contractor or consultant invoices, third party invoices, staff salaries, real estate and other expenses that is reported in Metro's Financial Information System (FIS).

PROJECT APPROVAL & ENVIRONMENTAL DOCUMENTS: Costs for agency staff and consulting contracts leading to project approval and environmental clearances.

PLANS, SPECS. & ENGINEERING: Agency staff and consulting contract costs between the initial project approval and environmental clearances but prior to start of construction.

RIGHT-OF-WAY SUPPORT: Costs for agency staff involved in real estate appraisal and parcel purchase activities and agency staff costs involved in utility relocations and third party agreements. Includes real estate appraisal costs.

CONSTRUCTION SUPPORT: Agency staff and consulting contract costs occurring during the construction phase of the project.

CONSTRUCTION: Costs for highway construction, bridge and on/off ramp construction and modifications, retaining wall and sound wall construction. Includes final design costs by Design/Build Contractor.

RIGHT-OF-WAY CAPITAL: Costs for real estate parcel purchases and utility relocations costs after approval of utility company agreements. Includes costs for Master Cooperative Agreements after approval by agencies.

**APPENDIX
LIST OF ACRONYMS**

ARRA	American Recovery & Reinvestment Act
AWIS	Automated Work Zone Information Systems
CADD	Computer Aided Drafting and Design
CALTRANS	California Department of Transportation
CCTV	Closed Circuit Television
CD	Calendar Day
CDFG	California Department of Fish and Game
CM	Construction Manager
CMAC	Congestion Mitigation Air Quality
CMIA	Cash Management Improvement Act
CMS	Changeable Message Signs
CN	Change Notice
CO	Change Order
COE	Corps of Engineers
COLA	City Of Los Angeles
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CR	Camera Ready
CTC	California Transportation Commission
D-B	Design-Build
D-B-B	Design-Bid-Build
DD	Design Development
DEIR	Draft Environmental Impact Report
DWP	Department of Water and Power
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FD	Final Design
FEIR	Final Environmental Impact Report
FHWA	Federal Highway Administration
FIS	Financial Information System
FOCT	Fiber Optics Cable Transmission System
FTE	Full Time Equivalent
GDSR	Geotechnical Design Summary Report
GSA	General Services Administration
GSRD	Gross Solids Removal Devices
HAR	Highway Advisory Radio
HOV	High Occupancy Vehicle
IFB	Invitation for Bid
IPO	Integrated Project Office
ITS	Intelligent Transportation Systems

**APPENDIX
LIST OF ACRONYMS (Continued)**

LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LACFCD	Los Angeles County Flood Control District
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LARTMC	Los Angeles Regional Transportation Management Center
LFAT	Local Field Acceptance Test
LNTP	Limited Notice To Proceed
LONP	Letter Of No Prejudice
LOP	Life of Project
MCA	Master Cooperative Agreement
METRO	Los Angeles County Metropolitan Transportation Authority
MIS	Major Investment Study
MOT	Maintenance of Traffic
MPSR	Monthly Project Status Report
MVDS	Microwave Vehicle Detection System
MVP	Maintenance Vehicle Pullouts
MWD	Metropolitan Water District
N/A	Not Applicable
NHS	National Highway System
NOA	Notice of Award
NTE	Not to Exceed
NTP	Notice To Proceed
NTSC	National Television System Committee
P6	Primavera Project Planner® (scheduling software)
PC	Project Control
PE	Preliminary Engineering
PIP	Project Implementation Plan
PM	Project Manager
PMA	Project Management Assistance
PMP	Project Management Plan
P&P	Policies & Procedures
PR	Project Report
PS&E	Plans, Specs & Engineering
PSR	Project Study Report
QA	Quality Assurance
QAR	Quality Assurance Report
QC	Quality Control
QPSR	Quarterly Project Status Report
RFC	Request For Change or Released for Construction (based on context)
RFP	Request For Proposal

**APPENDIX
LIST OF ACRONYMS (Continued)**

RMS	Ramp Metering Systems
ROM	Rough Order of Magnitude
ROW	Right-Of-Way
SIT	System Integration Testing
RSTP	Regional Surface Transportation Program
RWQCB	Regional Water Quality Control Board
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SCE	Southern California Edison
SONET	Synchronous Optical Network
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
TBD	To Be Determined
TCRP	Traffic Congestion Relief Program
TMS/CS	Traffic Monitoring Stations/Count Stations
TPM	Transportation Management Plan
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package