



Board Report

File #: 2016-0780, **File Type:** Oral Report / Presentation

Agenda Number: 15.

**CONSTRUCTION COMMITTEE
OCTOBER 20, 2016**

RECEIVE oral report by the Program Management Chief Officer.

DISCUSSION

Oral Report by the Program Management Chief Officer.

ATTACHMENTS

Attachment A - Program Management Chief Officer's Report - October 2016

Prepared by:

- **Crenshaw/LAX** - Charles Beauvoir, Deputy Executive Officer, Project Mgmt., (213)299-3095
- **Regional Connector** - Gary Baker, Deputy Executive Officer, Project Mgmt., (213)893-7191
- **Westside Purple Line Ext 1 and 2-** Dennis Mori, EO Project Mgmt., (213)922-7238
- **I-405** - Nazem Moussa, Deputy Executive Officer, Project Mgmt. (213)922-7221
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213)418-3031

Reviewed by:

Richard Clarke, Chief Program Management Officer, (213)922-7557

Program Management Chief Officer's Report

Project Status Report

Presented By

Richard Clarke

Chief Program Management Officer













October 2016

Construction Committee

Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Need to conclude 96 th Street Station accommodation time impact as well as other time extensions requests from contractor.
Regional Connector			Developing schedule options with contractor; correlating cost forecast accordingly.
Westside Purple Line Extension-Section 1			Overall construction progress is 12.9% complete versus 6.2% planned.
Westside Purple Line Extension-Section 2			Bids received and being evaluated. FFGA expected in late November 2016.
I-405 Sepulveda Pass improvements Project			Working through remaining items affecting Final Acceptance.
Patsaouras Plaza			Project has received Caltrans encroachment permit, Right-of-Way Certification and approval of foundation design package. LADWP relocation completed September 17, 2016.

October 2016



On target



Possible problem



Major issue



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CRENSHAW/LAX TRANSIT PROJECT

OK BUDGET		
	Current	Forecast
TOTAL COST	\$2,058M	\$2,058M

◇ SCHEDULE		
	Current	Forecast
REVENUE OPERATION	Oct 2019	Oct 2019

- Overall project progress is 52% complete.
- TBM completed first reach from Expo to MLK Station Box. Relaunching for second reach to Leimert Park Station.
- Preparing falsework for I-405 bridge construction.
- Southwestern Yard continuing final design and excavation/grading for building foundations.



TBM ready for relaunch to Leimert Park Station Box



Aviation Station/Century Bridge – removing forms

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On target



Possible problem



Major issue

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REGIONAL CONNECTOR TRANSIT CORRIDOR

⚠ BUDGET		
	Current	Forecast
TOTAL COST	\$1,599M	TBD
* Includes Board approved LOP plus Planning and Finance costs.		

⚠ SCHEDULE		
	Current	Forecast
REVENUE OPERATION	May 2021	July 2021

- Overall Project Progress is 23.9%, Design Build (DB) Construction is 18.8% and DB Final Design is 94.2% complete.
- Completed installation of cap beams and deck beams within the 1st/Alameda closure. Continue installation of Level 2 struts in the Wye; laying conduits on the protection slab; and installation of bottom mat of rebar in station invert. Scheduled to implement Steady State and re-open the 1st/Alameda intersection on September 26th.
- Continue pile and deck beam installation in the 2nd/Broadway intersection and water work at 2nd/Spring.
- Continue 2nd/Hope Station excavation and lagging; installation of Level 2 struts (South) and Level 3 walers (North) and drilling and installation of tiebacks on Level 3 (West).
- Continue piling on west side of Flower Street; cap beam installation; and waterline relocation.



Installation of bottom mat of rebar in 1st/Central station invert



Decking at 2nd/Broadway intersection

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On target



Possible problem



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WESTSIDE PURPLE LINE – SECTION 1

OK BUDGET

	Current	Forecast
TOTAL COST*	\$3,154M	\$3,154M

* Includes Board approved LOP plus Planning and Finance costs.

OK SCHEDULE

	Current	Forecast
REVENUE OPERATION	Oct 2024 FFGA	Nov 2023

Overall Project Progress is 12.9% complete.

Advanced Utility Relocations (AUR)

- Metro has issued the Certificate of Substantial Completion to the Wilshire/La Cienega AUR contractor. This completes all AUR work for the Project. The contractor completed the work four months ahead of schedule and within budget.

Tunnels, Stations, Trackwork and Systems Design-Build Contract

- Final Design for the tunnels, three subway stations, trackwork and systems is 93% complete overall.
- The 22-weekend closures began on June 10, 2016 for the installation of deck beams and concrete deck panels prior to the Wilshire/La Brea Station excavation under the temporary street decking. The work is progressing ahead of the original November 2016 completion date.
- Wilshire/Fairfax Station pile installation is underway.
- Site preparation work and construction mobilization activities are continuing at the Wilshire/La Cienega Station.



Installing deck panels at Wilshire/La Brea Station



Contractor exposing utilities on Wilshire Blvd. & Orange Drive

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Possible problem



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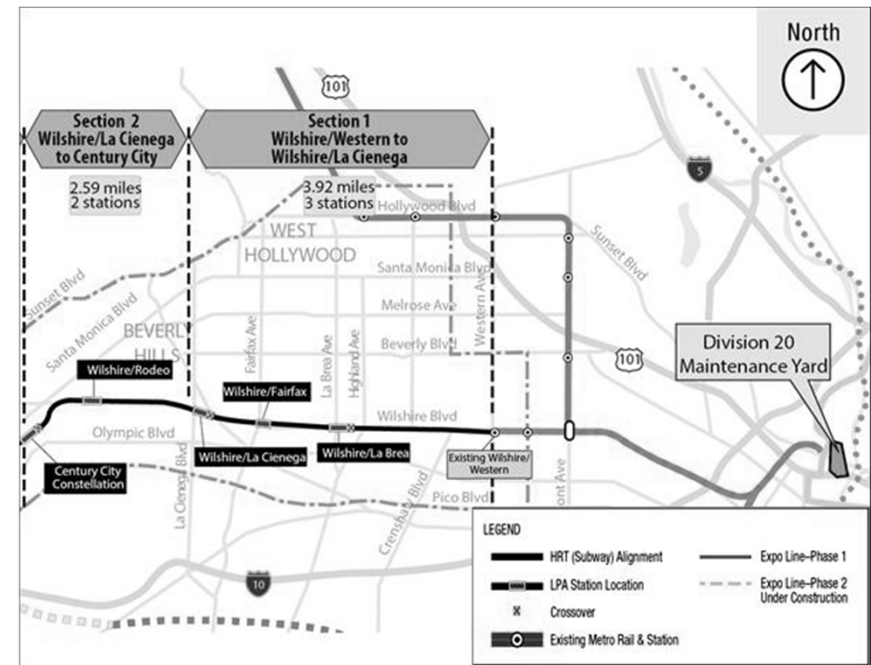
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WESTSIDE PURPLE LINE – SECTION 2

OK BUDGET		
	Current	Forecast
TOTAL COST	TBD	\$2,499M
Life-of-Project Budget is yet to be adopted. Forecast includes finance costs		

OK SCHEDULE		
	Current	Forecast
REVENUE OPERATION	TBD*	August 2025
*Subject to FTA Full Funding Grant Agreement Approval		

- Contract C1120 – Design/Build Request for Qualifications/Request for Proposal was released on September 14, 2015.
- The three teams meeting the minimum requirements as a result of the RFQ were announced on December 4, 2015.
- Price proposals received on June 1, 2016.
- Contract 1120 award anticipated January 2017.
- FFGA anticipated approval late November 2016.



October 2016



On target



Possible problem



Major issue



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I-405 SEPULVEDA PASS IMPROVEMENTS PROJECT

! BUDGET		
	Current	Forecast
TOTAL COST	\$1,308M	\$1,308M

OK SCHEDULE		
	Current	Forecast
SUBSTANTIAL COMPLETION	Sept 2015	Sept 2015

- Contractor is working toward Final Completion.
- Working through remaining items affecting Final Acceptance.
- Negotiation for Claim 86 is ongoing.
- Forecast does not include Claim 86.



October 2016



On target



Possible problem



Major issue

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PATSAOURAS PLAZA BUSWAY STATION

OK BUDGET		
	Current	Forecast
TOTAL COST	\$39.7M	\$39.7M

OK SCHEDULE		
	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2017	Dec 2017

- Caltrans has approved foundation design package, Right-of-Way Certification, Encroachment Permit, and Aerially-Deposited Lead (ADL) report.
- LADWP relocation work was completed September 17, 2016 on schedule.
- Metro expects all environmental approvals from Caltrans required for final encroachment permit by September 30, 2016.
- Contractor has been notified to begin utility, bridge, and foundation work in October 2016.



October 2016



On target



Possible problem




Major issue


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CRENSHAW/LAX TRANSIT PROJECT				CONSTRUCTION MANAGEMENT CONSULTANT: Stantec			
DESIGN/CONSULTANT: Hatch Mott				CONTRACTORS: Walsh-Shea Corridor Constructors (Alignment) and Hensel Phelps / Herzog (Southwestern Yard)			
PROJECT PHOTO: Concrete placement for the cut and cover utilizing compression forms. Wooden block out to the right is for the fan niche.				WORK COMPLETED PAST MONTH:			
				<ul style="list-style-type: none"> o Continued tunnel segment production. o Commenced installation of Tier 2 and Tier 3 Bracing at UG #4 o Continued TBM Mining SB tunnel from Expo to MLK o Continued construction of the lower walls at Expo Station. o Continued installing plumbing and conduit in the lower walls at Expo Station. o Completed construction of the Protective slab at Vernon Station o Commenced construction of the Invert slab at Vernon Station. o Continued storm drain installation at Park Mesa o Continued Demolish & replace Curb, Gutter, Sidewalks and Driveways at Park Mesa o Commenced relocating Fire Hydrants at Park Mesa o Completed the installation of soldier piles along the east and west line of UG #3 o Completed construction of the SOE Cantilever at UG #3 o Continued OCS foundation construction in segment B1. o Completed backfilling at the Pedestrian Underpass o Completed construction of the TC&C room Walls at West Station. o Completed Station Walls at La Brea Station o Continued Excavation to subgrade in Segment A o Completed Bracing installation at UG#1. o Completed Construction of the 104th St Tunnel and 111th St Bridge o Continued construction of Green Line Superstructure 			
EXPENDITURE STATUS (\$ In Millions)				SCHEDULE ASSESSMENT			
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS
DESIGN	\$ 136.7	\$ 122.0	89.3%	Environmental			
RIGHT-OF-WAY	\$ 127.4	\$ 120.3	94.4%	FEIS/FEIR	Sep-11	Sep-11	Complete
CONSTRUCTION	\$ 1,353.1	\$ 620.1	45.8%	Record of Decision	Dec-11	Dec-11	Complete
OTHER	\$ 440.8	\$ 155.4	35.3%	Design			
TOTAL	\$ 2,058.0	\$ 1,017.9	49.5%	Preliminary Engineering	Nov-11	Nov-11	Complete
Note: Cost expended as of Sep. 2, 2016.				Final Design	Sep-15	Aug-16	11.3 months behind
				Right-of-Way			
AREAS OF CONCERN				Full-take parcels available	Jan-15	Jan-15	Complete
				Part-take and TCE parcels	Sep-15	Apr-16	Complete (base scope)
<ul style="list-style-type: none"> o Design-builder's ability to mitigate schedule delays. o Timely submittal of WSCC's design submittals and review by City of Los Angeles. o 96th street station accommodations cost/schedule impacts. 				Construction			
				D-B Notice to Proceed	Sep-13	Sep-13	Complete
				D-B Substantial Complete	Oct-18	Apr-19	6.2 months behind
				Revenue Service Date	Oct-19	Oct-19	On schedule*
				The D-B Substantial Complete prior plan was modified by a 35-day concurrent delay contract modification in March 2015.			
				*Note: Revenue Service Date includes a significant reduction in contingency.			
ROW ACQUISITION	PLAN	ACQUIRED	REMAINING	CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD			
FULL TAKES	37	35	2	<ul style="list-style-type: none"> o Completed TBM Mining SB tunnel from MLK to Leimert Station o Complete Tunnel segment production. o Complete construction of the lower walls at MLK station. o Complete decking intersections at UG #3 o Complete construction of the Platform Deck at West Station o Complete installing plumbing and conduit in the lower walls at Expo station. 			
PARTIAL TAKES	27	24	3				
TEMPORARY EASEMENTS	15	13	2				
TOTAL PARCELS	79	72	7				

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT					CONSTRUCTION MANAGEMENT CONSULTANT: ARCADIS				
DESIGN CONSULTANT: Connector Partnership JV					CONTRACTOR: Regional Connector Constructors, Joint Venture				
Piling at 2nd/Broadway					WORK/ACTIVITY DURING PAST MONTH				
					<ul style="list-style-type: none"> • 36" water line replacement at 1st/Alameda completed • Pile installation at 1st/Alameda intersection completed • Compensation grouting preparations along 2nd St. continued • TBM shaft excavation and SOE at Mangrove Yard on the 2nd lift continued • Excavation and installation of walers, struts, cap beams and decking at the Wye continued • 2nd/Spring LADWP water relocation continued • Pile installation at 2nd/Broadway continued • Installation of deck beams at 2nd/Broadway intersection continued • Electrical and communication duct bank installation at 2nd/Broadway continued • Relocation/protection of power and communication assets in 2nd/Broadway Station area continued • Station box excavation and SOE continued at 2nd/Hope Station • Water relocations along Flower Street continued • Pile installation on west side of Flower St. continued • Cap beam installation on Flower St. continued • Geotechnical monitoring equipment installation across the project alignment continued 				
EXPENDITURE STATUS (\$ In Millions)					SCHEDULE ASSESSMENT				
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PERIOD	CURRENT PLAN	VARIANCE WEEKS		
DESIGN	\$132.9	\$116.7	87.8%	Environmental					
RIGHT-OF-WAY	\$110.5	\$68.8	62.3%	FEIS / FEIR	N/A	04/26/12	Complete		
CONSTRUCTION	\$1,079.6	\$328.9	30.5%	SEIS Flower St.	N/A	12/18/15	Complete		
OTHER	\$276.0	\$98.4	35.6%	Design					
TOTAL	\$1,598.9	\$612.8	38.3%	PE Notice to Proceed	N/A	01/04/11	Complete		
Current Budget reflects Board approved Life-of-Project Budget and includes Finance Charges.					Final Design complete	02/28/17	05/31/17	13	
Note: Expended amounts are through 07/31/2016.					Note: Completion of systems design is now projected for end of December 2016. No adverse impact to the overall schedule is anticipated from these design delays.				
AREAS OF CONCERN					Right-of-Way				
<ul style="list-style-type: none"> • Schedule mitigation measures are being implemented across the alignment to address continuing and new delays precipitated by utility relocations. Major street and intersection closures are being coordinated with LADOT, LABOE, and Council District 14 to facilitate construction plans and schedules. Additionally, Metro and RCC are coordinating with DWP and third party utility owners on utility design and relocation issues along Flower, Broadway, Alameda and 2nd Streets to advance construction fronts at these locations. • Schedule recovery measures notwithstanding, schedule float and flexibility is minimal; opportunities for improvement continue to be reviewed. • Delays and reduced productivity along Flower St. continue to be experienced; work hour and access constraints are driving causes. • Methods of supporting the existing DWP vaults and duct banks at 6th/Flower are being investigated to minimize relocation requirements and resulting schedule impacts. 					All parcels available	08/15/18	08/15/18	0	
Current Budget reflects Board approved Life-of-Project Budget and includes Finance Charges.					Note: ROW dates are adjusted to reflect the latest D/B Contractor's coordinated Need Dates. Duco Yard need date is in August 2018.				
Note: Expended amounts are through 07/31/2016.					Construction - Design / Build Contract				
AREAS OF CONCERN					Notice to Proceed	07/07/14	07/07/14	Complete	
<ul style="list-style-type: none"> • Schedule mitigation measures are being implemented across the alignment to address continuing and new delays precipitated by utility relocations. Major street and intersection closures are being coordinated with LADOT, LABOE, and Council District 14 to facilitate construction plans and schedules. Additionally, Metro and RCC are coordinating with DWP and third party utility owners on utility design and relocation issues along Flower, Broadway, Alameda and 2nd Streets to advance construction fronts at these locations. • Schedule recovery measures notwithstanding, schedule float and flexibility is minimal; opportunities for improvement continue to be reviewed. • Delays and reduced productivity along Flower St. continue to be experienced; work hour and access constraints are driving causes. • Methods of supporting the existing DWP vaults and duct banks at 6th/Flower are being investigated to minimize relocation requirements and resulting schedule impacts. 					Note: ROW dates are adjusted to reflect the latest D/B Contractor's coordinated Need Dates. Duco Yard need date is in August 2018.				
Current Budget reflects Board approved Life-of-Project Budget and includes Finance Charges.					Construction - Design / Build Contract				
Note: Expended amounts are through 07/31/2016.					Notice to Proceed	07/07/14	07/07/14	Complete	
AREAS OF CONCERN					Construction complete	05/03/21	05/15/21	2	
<ul style="list-style-type: none"> • Schedule mitigation measures are being implemented across the alignment to address continuing and new delays precipitated by utility relocations. Major street and intersection closures are being coordinated with LADOT, LABOE, and Council District 14 to facilitate construction plans and schedules. Additionally, Metro and RCC are coordinating with DWP and third party utility owners on utility design and relocation issues along Flower, Broadway, Alameda and 2nd Streets to advance construction fronts at these locations. • Schedule recovery measures notwithstanding, schedule float and flexibility is minimal; opportunities for improvement continue to be reviewed. • Delays and reduced productivity along Flower St. continue to be experienced; work hour and access constraints are driving causes. • Methods of supporting the existing DWP vaults and duct banks at 6th/Flower are being investigated to minimize relocation requirements and resulting schedule impacts. 					Revenue Service Date	07/16/21	07/28/21*	2	
Current Budget reflects Board approved Life-of-Project Budget and includes Finance Charges.					Note: *The project is reflecting an approximate seven-month delay to the RSD due to differing site conditions related to underground utilities.				
Note: Expended amounts are through 07/31/2016.					CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD				
<ul style="list-style-type: none"> • 100% design packages for all three stations, bored tunnel, SEM cavern and systems; review of the related AFCs • Begin Steady State implementation on Flower Street • Decking installation on Flower, north of 5th St. • Secure Sunday work variance for Flower St operations • Resolve Fire Life Safety (FLS) issues including emergency ventilation design and egress • Reconcile path-forward for schedule and costs 									
ROW ACQUISITION	PLAN	CERTIFIED	ACQUIRED	REMAINING					
PERMANENT PARCELS	5	5	4	1*					
TEMPORARY PARCELS	29	16	14	2*					
TOTAL PARCELS	34	21	18	3					
* Remaining parcels are scheduled in-advance of need dates.									

WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT				CONSTRUCTION MANAGEMENT CONSULTANT: WEST, a Joint Venture			
DESIGN CONSULTANT: Parsons / Brinckerhoff				CONTRACTOR: Skanska, Traylor and Shea, a Joint Venture			
Wilshire/Fairfax Station Pile Installation				WORK COMPLETED PAST MONTH			
				<ul style="list-style-type: none"> - C1045 Wilshire/La Brea Station pile installation complete - C1045 Wilshire/La Brea Station Stage 9 decking complete - C1045 Wilshire/La Brea Station North yard switchgear energized - C1045 Wilshire/Fairfax Station North side pile installation began - C1056 Wilshire/La Cienega AUR Contractor achieved substantial completion 			
EXPENDITURE STATUS (\$ In Millions)				SCHEDULE ASSESSMENT			
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS
DESIGN	\$159.2	\$133.3	83.7%	Environmental			
				FEIS / FEIR	N/A	05/31/12	Complete
RIGHT-OF-WAY	\$175.6	\$158.6	90.3%	Design			
				PE Notice to Proceed	N/A	01/12/11	Complete
CONSTRUCTION	\$1,740.3	\$436.4	25.1%	Final Design complete	03/22/17	03/22/17	0
OTHER	\$1,079.3	\$114.1	10.6%	Right-of-Way			
TOTAL	\$3,154.4	\$842.4	26.7%	All parcels available*	12/31/15	12/31/15	0
Current Budget includes Environmental/Planning and Finance Costs.				Construction - Main Design / Build Contract			
AREAS OF CONCERN				Notice to Proceed	01/12/15	01/12/15	Complete
				Construction complete	11/08/23	11/08/23	0
				* Parcels related to main D/B Contract C1045			
ROW ACQUISITION	PLAN	AVAILABLE	REMAINING	CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD			
PERMANENT PARCELS	15	14	1	- C1045 DU 2 Wilshire/La Brea Station – AFC complete			
TEMPORARY PARCELS	4	4	0	- C1045 DU 5 Tunnels – AFC complete			
				- C1045 DU 6 Systems – 100% complete			
TOTAL PARCELS	19	18	1	- C1045 Temporary tunnel ventilation design submittals			
				- C1045 Wilshire/La Brea Station decking installation complete			
				- C1045 Wilshire/La Brea Station excavation begins			
				- C1045 Wilshire/Fairfax pile installation continues			
				- C1056 Wilshire/La Cienega AUR contract closeout			
				- SCE to begin cable pulling and splicing work at Wilshire/La Cienega			
				- C1078 Complete site utilities and building foundation 85% design			
				- LADWP Power to complete relocations at Wilshire/Fairfax Station			