



Board Report

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Agenda Number: 17.

**CONSTRUCTION COMMITTEE
NOVEMBER 17, 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 - November 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** - Richard Clarke, Chief Program Management Officer, (213)922-7557
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213)922-7592

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













November 2016

Construction Committee

Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Staff concluding 96 th Street Station accommodation time impact negotiations as well as other time extensions requests from contractor. Need to mitigate current delays to achieve planned October 2019 revenue service.
Regional Connector			Developing schedule options with contractor; correlating cost forecast accordingly.
Westside Purple Line Extension-Section 1			Overall construction progress is 13.3% complete versus 6.2% planned.
Westside Purple Line Extension-Section 2			FFGA expected in December 2016.
I-405 Sepulveda Pass improvements Project			Working through remaining items affecting Final Acceptance.
Patsaouras Plaza			Project scheduled to start major construction October 31, 2016. Forecasted completion date of 12/2017 may be affected due to late start.

November 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 53% complete. Need to mitigate current delays to achieve planned October 2019 revenue service.
- The southbound TBM holed through at Leimert Park Station on October 20, 2016. TBM was returned to Expo Station for commencement of second reach to Leimert Park Station.
- Decking at intersections for UG3 cut and cover section continues and excavation continues in the Crenshaw median.
- Park Mesa Heights street widening continues.
- Civil/Structural work on the partially covered trench section at LAX (UG1) is reaching 87% complete.
- Working on Green Line, Century, Manchester bridges, installing rebar and placing concrete.
- Falsework for I-405 bridge construction has commenced.
- Southwestern Yard continuing final design, structural excavation and foundation concrete work.



Concrete wall construction continues in UG1



Concrete placement for columns in Expo Station

November 2016



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 24.9%, Construction is 19.8% and Final Design is 94.5% complete.
- Completed cap beams and decking, continue excavation, installation of struts and walers at the Wye; re-opened 1st/Alameda intersection.
- Continue TBM shaft excavation; completed installation of top mat of rebar for station invert at 1st/Central. Implemented “Steady State” on September 25, 2016;
- Continue pile and deck beam installation at 2nd/Broadway intersection and water work at 2nd/Spring. Re-opened Broadway on October 15, 2016 as planned.
- Continue excavation at 2nd/Hope Station; installation of struts, walers, drilling and installation of tie-backs at Support Of Excavation (SOE).
- Decking started on Flower Street. Cap beam installation, lagging, waterline relocation, excavation and utility hanging at the Tie-Back Removal Pit.



Installation of top mat of rebar and conduits for station invert at 1st/Central



Excavation and utility hanging at Tie-back Removal Pit

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On target



Possible problem



Major issue

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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	Nov 2023
	FFGA	

Overall Project Progress is 13.3 % complete vs. 6.8% planned

Tunnels, Stations, Trackwork and Systems Design-Build Contract

- Final Design for the tunnels, three subway stations, trackwork and systems is 94% 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 installation of deck beams and concrete deck panels was completed six weeks ahead of schedule.
- Wilshire/La Brea Station excavation under the temporary street decking is underway.
- Wilshire/Fairfax Station installation of excavation support piles continues.
- Wilshire/La Cienega Station building demolition at staging/laydown sites is underway.



Pile installation activities at Wilshire/Fairfax Station



Excavation of north muck shaft Wilshire/La Brea Station

November 2016



On target



Possible problem



Major issue

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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	TBD*	August 2025
OPERATION	*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 were received on June 1, 2016.
- Advanced utility relocations by third parties started on September 6, 2016 at Century City Constellation Station.
- Contract C1120 award by the MTA Board is anticipated in January 2017.
- Full Funding Grant Agreement (FFGA) approval by the FTA is anticipated December 2016.



Telcom joint trench construction in Constellation Boulevard

November 2016



On target



Possible problem



Major issue

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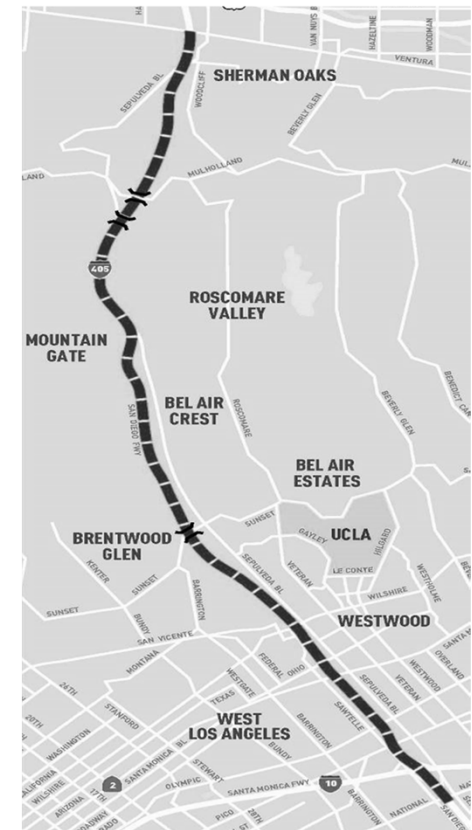
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I-405 SEPULVEDA PASS IMPROVEMENTS PROJECT

! 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 progressing.
- Forecast does not include Claim 86.



November 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

◇ SCHEDULE		
	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2017	Dec 2017

- Caltrans environmental reports have been approved. OHL Health and Safety Plan pending approval.
- Final encroachment permit will be approved in October 2016.
- Contractor planning to start major bridge construction activities October 31, 2016.
- Final traffic handling plans for four-months Vignes closure submitted to DOT October 11, 2016.
- Water treatment and storage system installation will be complete November 7, 2016.



November 2016



On target



Possible problem




Major issue


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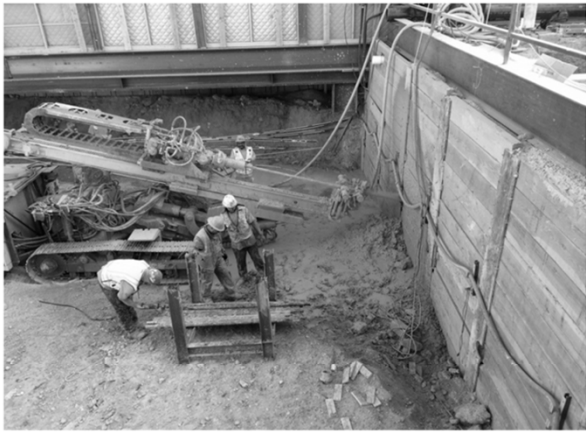
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CRENSHAW/LAX TRANSIT PROJECT DESIGN/CONSULTANT: Hatch Mott				CONSTRUCTION MANAGEMENT CONSULTANT: Stantec CONTRACTORS: Walsh-Shea Corridor Constructors (Alignment) and Hensel Phelps / Herzog (Southwestern Yard)			
PROJECT PHOTO: Deck formwork starts for the Downtown Inglewood Station				WORK COMPLETED PAST MONTH:			
				<ul style="list-style-type: none"> o Continued tunnel segment production. o Commenced TBM mining of SB tunnel from MLK to Leimert Park. o Completed concrete placement of available lower walls at Expo Station and commenced lower level column construction. o Completed concrete placement of available lower walls at MLK Station. o Completed concrete placement of the invert slab at Vernon Station. o Continued street work at Park Mesa area. o Continued construction of Green Line superstructure. o Completed installation of all support of excavation bracing at UG#3. o Commenced falsework construction for I-405 bridge. o Completed footing and wall concrete placement for La Brea Station. o Completed northbound platform footing placement for Hindry Station. 			
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	\$ 123.1	90.0%	Environmental			
				FEIS/FEIR	Sep-11	Sep-11	Complete
				Record of Decision	Dec-11	Dec-11	Complete
RIGHT-OF-WAY	\$ 127.4	\$ 120.6	94.6%	Design			
				Preliminary Engineering	Nov-11	Nov-11	Complete
				Final Design	Sep-15	Oct-16	13.3 months behind
CONSTRUCTION	\$ 1,353.1	\$ 644.6	47.6%	Right-of-Way			
				Full-take parcels availab	Jan-15	Jan-15	Complete
				Part-take and TCE parce	Sep-15	Apr-16	Complete (base scope)
OTHER	\$ 440.8	\$ 159.9	36.3%	Construction			
				D-B Notice to Proceed	Sep-13	Sep-13	Complete
				D-B Substantial Comple	Oct-18	May-19	7.4 months behind
				Revenue Service Date	Oct-19	Oct-19	On schedule*
TOTAL	\$ 2,058.0	\$ 1,048.1	50.9%	The D-B Substantial Complete prior plan was modified by a 35-day concurrent delay contract modification in March 2015.			
Note: Cost expended as of Sept. 30, 2016.				*Note: Revenue Service Date includes a significant reduction in contingency.			
AREAS OF CONCE				CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD			
<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 accomodations cost/schedule impacts. o Ability of TBM to meet production rate forecasted on schedule. 				<ul style="list-style-type: none"> o Complete TBM mining SB tunnel from MLK to Leimert Station. o Commence TBM mining NB tunnel from Expo to MLK Station. o Complete Green Line superstructure. o Complete Manchester Bridge superstructure. o Complete invert slab at Underground Structure #4. o Complete the structural concrete work for Century Station. o Commence trackwork in Segment B1. 			
ROW ACQUISITION	PLAN	ACQUIRED	REMAINING				
FULL TAKES	37	35	2				
PARTIAL TAKES	27	25	2				
TEMPORARY EASEMENT	15	13	2				
TOTAL PARCELS	79	73	6				

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT					CONSTRUCTION MANAGEMENT CONSULTANT: ARCADIS			
DESIGN CONSULTANT: Connector Partnership JV					CONTRACTOR: Regional Connector Constructors, Joint Venture			
Utility Hanging in Tie-back Removal Pit					WORK/ACTIVITY DURING PAST MONTH			
					<ul style="list-style-type: none"> Completed cap beams and decking at Wye, re-opened 1st/Alameda intersection and implemented "Steady State" Completed Installation of top mat of rebar for station invert at 1st/Central Compensation grouting preparations along 2nd St. continued TBM shaft excavation and SOE at Mangrove Yard continued Excavation and installation of walers and struts 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 Installation of tie-backs, struts and walers at 2nd/Hope SOE continued Water relocations along Flower Street continued Pile installation on west side of Flower St. continued Cap beam installation on Flower St. continued Excavation and utility hanging at the Tie-back Removal Pit began 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	\$117.5	88.4%	Environmental				
				FEIS / FEIR	N/A	04/26/12	Complete	
				SEIS Flower St.	N/A	12/18/15	Complete	
RIGHT-OF-WAY	\$110.5	\$68.9	62.3%	Design				
				PE Notice to Proceed	N/A	01/04/11	Complete	
CONSTRUCTION	\$1,079.6	\$340.6	31.5%	Final Design complete	05/31/17	05/31/17	0	
				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.				
OTHER	\$276.0	\$98.7	35.8%	Right-of-Way				
TOTAL	\$1,598.9	\$625.7	39.1%	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 08/31/2016.				Construction - Design / Build Contract				
				Notice to Proceed	07/07/14	07/07/14	Complete	
				Construction complete	05/15/21	05/02/21	-2	
				Revenue Service Date	07/28/21	07/15/21	-2	
				Note: *The project is reflecting an approximate seven-month delay to the RSD due to differing site conditions related to underground utilities.				
AREAS OF CONCERN					CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD			
<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, and Alameda 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. Studies continue regarding the design solution(s) for accommodating higher than anticipated DWP power assets at 6th/Flower. Minimizing impacts to area stakeholders, traffic flows and project schedule are driving considerations. 					<ul style="list-style-type: none"> 100% design packages for all three stations, bored tunnel, SEM cavern and systems; review of the related AFCs Pour concrete for invert at 1st/Central Station Begin station excavation at 2nd/Broadway Station Begin "Steady State" implementation on Flower St. 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	31	16	15	3*				
TOTAL PARCELS	36	21	19	4**				
* Remaining parcels are scheduled in-advance of need dates.								
** Broad SSE, DucoYard, 2nd & Hope Pedestrian Bridge and Wye Fan Plant.								

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/La Brea Tie-Back Installation North Shaft				WORK COMPLETED PAST MONTH			
				<ul style="list-style-type: none"> - C1045 Wilshire/La Brea Station decking complete - C1045 Wilshire/La Brea Station excavation began - C1045 Wilshire/La Brea Station jet grouting complete at east/west end breakout - C1045 Wilshire/La Brea tie-back installation began - C1045 Wilshire/La Brea water treatment system installation commenced - C1045 Wilshire/Fairfax Station north side pile installation continues - C1045 Wilshire/Fairfax Station Ogden yard work continues 			
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	\$135.4	85.0%	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	\$446.9	25.7%	Final Design complete	03/22/17	03/22/17	0
OTHER	\$1,079.3	\$115.9	10.7%	Right-of-Way			
TOTAL	\$3,154.4	\$856.8	27.2%	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	<ul style="list-style-type: none"> - C1045 DU 2 Wilshire/La Brea Station – AFC complete - C1045 DU 5 Tunnels – AFC complete - C1045 DU 6 Systems – 100% complete 			
TEMPORARY PARCELS	4	4	0	<ul style="list-style-type: none"> - C1045 Temporary tunnel ventilation design submittals - C1045 Wilshire/La Brea Station excavation continues - C1045 Wilshire/Fairfax pile installation continues 			
TOTAL PARCELS	19	18	1	<ul style="list-style-type: none"> - 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 - C1045 Wilshire/Fairfax pile installation switch to south side - C1045 Wilshire/La Brea underdeck utility suspension continues 			