# Program Management Chief Officer's Report

## **Project Status Report**

Presented By

## **Richard Clarke**

Chief Program Management Officer

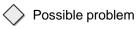


## PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX	$\Diamond$	$\Diamond$	Completed Claims Settlement Agreement. Commits design-builder to support Metro in achieving planned October 2019 Revenue Service Date. Metro received and approved design-builder's Completion Schedule, which includes no critical path schedule contingency. The remaining cost contingency is approaching the 3% Project Reserve level.
Regional Connector	<b>A</b>	A	Developing schedule options with contractor; correlating cost forecast accordingly.
Westside Purple Line Extension-Section 1	ОК	ОК	Overall construction progress is 14.2% complete versus 8.0% planned.
Westside Purple Line Extension-Section 2	ОК	ОК	FFGA obtained in December 2016.
I-405 Sepulveda Pass improvements Project	OK OK	ОК	Working through remaining items affecting Final Acceptance. Claim 86 was negotiated and Board approved the final LOP Budget.
Patsaouras Plaza	OK	$\Diamond$	Construction foundations begin in January 2017. Forecasted completion in December 2017.

January 2017









## **CRENSHAW/LAX TRANSIT PROJECT**

**♦** BUDGET

**TOTAL COST** 

Current Forecast \$2,058M

SCHEDULE

Current Forecast REVENUE Oct 2019 Oct 2019

**OPERATION** 

- Overall project progress is 55% complete.
- The northbound TBM continues toward MLK Jr Station with hole thru planned for February 2017.
- Concrete placements continues in the three underground stations.
- Street widening continues in Park Mesa Heights area.
- Civil/structural work continues on Aviation/Century, Manchester bridges, and La Brea bridges. Superstructure falsework erection continues on the I-405 bridge.
- Concrete placements is nearing completion for the covered trench section in front of LAX runways.
- Southwestern Yard design-builder continues excavation and foundation concrete work.



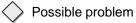
Greenline underpass deck concrete placement in progress



**Excavation continues for underground structure on Crenshaw Blvd** 

January 2017









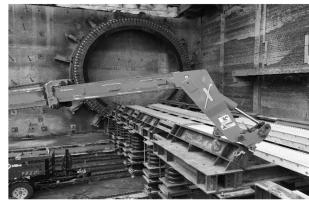
## REGIONAL CONNECTOR TRANSIT CORRIDOR

### **▲** BUDGET

Current Forecast TOTAL COST \$1,599M TBD

\* Includes Board approved LOP plus Planning and Finance costs.

- Current Forecast
  REVENUE May 2021 TBD
- Overall Project Progress is 29.2%, Construction is 24.8% and Final Design is 95.6% complete.
- TBM assembly, grout and foam plant installation and utility line connections are underway in preparation for TBM launch, scheduled for January 2017.
- Successfully completed traffic switch to Broadway Phase 2 Mid-Block Closure to continue pile installation and decking.
- Continue installation of tie-backs, struts and walers at 2nd/Hope Support of Excavation (SOE). Station excavation expected to reach bottom by January 2017 to begin invert pour and prepare station for the TBM walk-though.
- Continue deck beam installation at 4<sup>th</sup>/Flower on weekends and water line relocation at night.
- Adit construction continues at the Tie-back Removal Shaft.
   Backfill will begin mid-December to restore site and roadway to steady state.



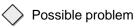
Thrust frame assembly and eye seal



Utility hanging within 2<sup>nd</sup>/Broadway excavation

January 2017







Major issue

**OPERATION** 



## **WESTSIDE PURPLE LINE EXTENSION – SECTION 1**

**BUDGET** 

Current Forecast \$3,154M \$3,154M

\* Includes Board approved LOP plus Planning and Finance costs.

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

Current Forecast
REVENUE Oct 2024 Nov 2023
OPERATION FFGA

Overall Project Progress is 14.2 % complete vs. 8.0% planned

#### Tunnels, Stations, Trackwork and Systems Design-Build Contract

- Hanging of existing utilities from under the installed deck panels continues at the Wilshire/La Brea Station site.
- Excavation for the Wilshire/La Brea Station that commenced on October 12, 2016 continues beneath the concrete deck.
- The Wilshire/Fairfax pile installation operation, which started on August 18, 2016, has moved to the south side of Wilshire Boulevard on the weekend of November 19, 2016.
- The demolition of the existing buildings at the Wilshire/La Cienega staging areas is complete. Potholing for noise barrier installation is scheduled to start in January 2017.
- The jet grouting operation along Wilshire Boulevard at the cross passages moves forward. This work along the reach 1 tunnel section is scheduled to continue through July 2017.
- Tunnel Boring Machines (TBMs) are being fabricated for delivery at the end of 2017. Tunneling is planned to begin in 2018.



Installing Strut at Wilshire/La Brea Station



**Drilling Piles at Ogden Yard** 

January 2017







Major issue



Los Angeles County Metropolitan Transportation Authority



## WESTSIDE PURPLE LINE EXTENSION – SECTION 2

**OK** BUDGET

**Current** Forecast

TOTAL COST TBD \$2,499M

Life-of-Project Budget is yet to be adopted. Forecast includes finance costs

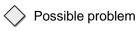
Current Forecast
REVENUE Dec 2026 Aug 2025
OPERATION

- 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 scheduled for January 2017 and subsequent NTP in April 2017.
- Full Funding Grant Agreement (FFGA) was executed by the FTA on December 15, 2016.



Telecom joint trench construction at Constellation Boulevard







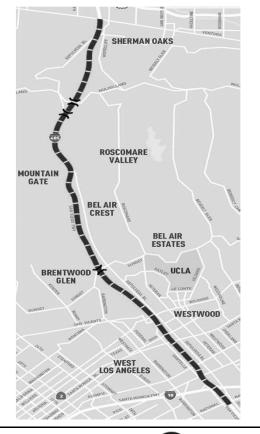
### I-405 SEPULVEDA PASS IMPROVEMENTS PROJECT

**OK** BUDGET

Current Forecast TOTAL COST \$1,606M \$1,606M

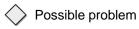
Current Forecast
SUBSTANTIAL Sept 2015
COMPLETION

- Contractor is working toward Final Completion.
- Working through remaining items affecting Final Acceptance.
- Claim 86 was negotiated and presented to the Board.
- The Board approved the final LOP budget of \$1,606M.



January 2017









## PATSAOURAS PLAZA BUSWAY STATION

**OK** BUDGET

Current TOTAL COST \$39.7M

Forecast \$39.7M  $\Diamond$ 

**SCHEDULE** 

SUBSTANTIAL COMPLETION

Current Dec 2017 Forecast Dec 2017

- OHL Health and Safety Plan was approved and OHL Encroachment Permit has been issued.
- Demolished roadway median.
- Completed installation and permitting of the industrial waste-water treatment and storage system.
- 4-month Closure of Vignes Street begins in January.
- Mobilizing drilling equipment in January.



Temp Median Barrier

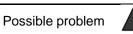


Reconfigured Lanes



Dewatering Equipment

On target





REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT CONSTRUCTION MANAGEMENT CONSULTANT: ARCADIS DESIGN CONSULTANT: Connector Partnership JV CONTRACTOR: Regional Connector Constructors, Joint Venture Decking Installation on Flower Street WORK/ACTIVITY DURING PAST MONTH Completed concrete pour for invert at 1st/Central Station Completed compensation grouting under Central Ave Completed TBM shaft excavation and SOE at Mangrove Yard Completed excavation and installation of walers and struts at the Wye Completed relocation of communication utilities in 2nd/Spring Intersection Completed traffic switch to Broadway Phase 2 mid-block closure Completed Alimak installation and certification at 2nd/Hope Station Resumed pile installation at 1st Street Leg Pile installation at 2nd/Broadway continued Installation of deck beams at 2nd/Broadway intersection continued Installation of tie-backs, struts and walers at 2nd/Hope SOE continued Water relocations along Flower Street continued Deck beams and deck panels installation at 4th/Flower Sts. continued Excavation and installation of steel liner plates and grouting at the Tie-back Removal Pit continued Preparation activities for TBM Launch continued Shotcrete and removal of tie-backs at Removal Shaft continued Geotechnical monitoring equipment installation across the project alignment continued

EXPENDITURE STATUS (\$ In Mill		SCHEDULE ASSESSMENT						
CURRENT EXPEN		EXPENDED	PERCENT	MAJOR SCHEDULE	PRIOR	CURRENT	VARIANCE WEEKS	
ACTIVITIES	BUDGET	AMOUNT	EXPENDED	ACTIVITIES	PERIOD	PLAN	FROM PRIOR PERIOD	
				Environmental				
DESIGN	\$134.2	\$119.3	88.9%	FEIS / FEIR	N/A	04/26/12	Complete	
				SEIS Flower St.	N/A	12/18/15	Complete	
RIGHT-OF-WAY	\$110.5	\$68.9	62.4%	Design				
				PE Notice to Proceed	N/A	01/04/11	Complete	
CONSTRUCTION	\$1,091.6	\$388.5	35.6%	Final Design complete	05/31/17	07/31/17	9	
				Note: No adverse impac	t to the overa	l schedule is a	anticipated from current design delays.	
OTHER	\$262.7	\$102.6	39.0%					
				Right-of-Way				
TOTAL	\$1.598.9	\$679.4	42.5%	All parcels available	08/15/18	08/15/18	0	

Current Budget reflects Board approved Life-of-Project Budgets for Project 860228 (including finance charges) and 861228.

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 10/31/2016.

#### AREAS OF CONCERN

- Studies continue to re-cast the project schedule which was impacted by differing site conditions along the alignment. These studies indicate delays to the Revenue Service Date will occur. The re-cast schedule will reflect a comprehensive assessment of all operations focused on delivering the project expeditiously while retaining flexibility needed over the next few years.
- Detailed design is underway to relocate the 6th/Flower DWP power assets. This
  work requires collaboration with COLA relative to TCPs, BOE approvals, DWP
  efforts, etc. to minimize schedule and cost impacts. Stakeholder challenges are
  also anticipated; engagement by Metro Outreach resources are being planned
  accordingly.

ROW ACQUISITION	PLAN	CERTIFIED	A CQUIRED	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.

#### Construction - Design / Build Contract

Notice to Proceed	07/07/14	07/07/14	Complete
Construction complete	05/02/16	05/15/21	2
Revenue Service Date	07/15/16	07/28/21	2

Note: Delay to the Revenue Service Date is under review.

#### CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD

- 100% design packages for all three stations, bored tunnel, SEM cavern and systems; review of the related AFCs
- Complete assembly and Launch TBM
- Begin tunnel monitoring
- Complete pile installation at 2nd/Broadway
- Finish 2nd Street decking by April 2017
- Complete excavation to station box and SEM Cavern at 2nd/Broadway
- Complete excavation and begin invert pour at 2nd/Hope Station
- Resume cap beam installation on Flower St.
- Reconcile path-forward for schedule and costs

#### LOCATION: Crenshaw Blvd at Exposition to Green Line

DESIGNICONSULTANT: Hatch Mott

CONSTRUCTION MANAGEMENT CONSULTANT: Stantec CONTRACTORS: Walsh-Shea Corridor Constructors (Alignment) and Hensel Phelps I Herzog (Southwestern

PROJECT PHOTO: Crews removing struts at underground No. 1 in front of LAX Airport runways.

#### WORK COMPLETED PAST MONTH:

- o Commence mining of NB tunnel to MLK Jr.Station
- o Continued interior walls at Expo Structure. o Continued street work at Park Mesa area.
- o Continued decking intersections at Underground structure #3.
- o Continued construction of Green Line superstructure.
- o Continued erection of falsework for construction of I-405 bridge.
- o Continued construction of Manchester bridge superstructure.
- o Completed erection of falsework and started walls for Century Station.
- o Completed invert construction at underground structure #1.

#### **EXPENDITURE STATUS** (\$ In Millions)

#### SCHEDULE ASSESSMENT

(\$ 1111-111110113)									
ACTIVITIES		JRRENT UDGET		PENDED 10UNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS
						Environmental			
DESIGN	\$	136.7	\$	126.5	92.6%	FEIS/FEIR	Sep-11	Sep-11	Complete
						Record of Decision	Dec-11	Dec-11	Complete
RIGHT-OF-WAY	\$	127.4	\$	120.8	94.8%				
	١.					Design			
CONSTRUCTION	\$	1,353.1	\$	686.2	50.7%	Preliminary Engineering	Nov-11	Nov-11	Complete
						Final Design	Sep-15	May-17	20.5 months behind
OTHER	\$	440.8	\$	168.0	38.1%				
						Right-of-Way			
TOTAL	\$	2,058.0	\$	1,101.5	53.5%	Full-take parcels availab	Jan-15	Jan-15	Complete (base scope)
Note: Cost expended a	Note: Cost expended as of Dec. 02, 2016					Part-take and TCE parce	Sep-15	Apr-16	Complete (base scope)

Note: Lost expended as of Dec. 02, 2016.

#### Part-take and TCE parce Sep-15 Apr-16 Complete (base scope)

#### AREAS OF CONCE

- 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.

#### Construction

- D-B Notice to Proceed Sep-13 Complete Sep-13 May-19 7.2 months behind D-B Substantial Complete Oct-18 Oct-19 Oct-19 On schedule\* Revenue Service Date
- The D-B Substantial Complete prior plan has been modified by a 35-day concurrent delay contract modification in March 2015 and a six-day

\*Note: Revenue Service Date includes a significant reduction in contingency.

ROW ACQUISITION	PLAN	ACQUIRED	REMAINING	CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD
FULL TAKES	37	36	1	o Commence concrete placement for SB tunnel invert. o Complete Green Line superstructure. o Complete Manchester Bridge superstructure.
PARTIAL TAKES	27	26	1	o Complete invert slab at Underground Structure #4. o Commence trackwork in Segment B1.
TEMPORARY EASEMENT	15	14	1	
TOTAL PARCELS	79	76	3	

- nce concrete placement for SB tunnel invert.
- te Green Line superstructure.
- te Manchester Bridge superstructure.
- te invert slab at Underground Structure #4.
- nce trackwork in Segment B1.

WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT DESIGN CONSULTANT: Parsons / Brinckerhoff				CONSTRUCTION MANAGEMENT CONSULTANT: WEST, a Joint Venture				
	1 6	CONTRACTOR: Skanska, Traylor and Shea, a Joint Venture						
Wilshire/La Brea	a Tie-Back Insta	llation North	Shaft	WORK COMPLETED PA	ST MONTH			
				- C1045 Wilshire/La Brea - C1045 Wilshire/Fairfax S	ng at cross pas tie-back instal water treatmer Station north si Station Ogden Geotech Instra install dewater Station Stage 1 ega SCE to be	sage 9, starte lation continu nt system ins de pile install yard work cor umentation - c ring discharge I inclinometer gin cable pulli	ed cross passage 10 es tallation underway ation continues ntinues complete installation east of La Brea line at south muck shaft	
EXPENDITURE STATUS (\$ In Millions)				SCHEDULE ASSESSME	NT			
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS	
DEGLON	2450.0	0407.0	00.00	Environmental	1 1//1	05104140	Complete:	
DESIGN	\$159.2	\$137.0	86.0%	FEIS / FEIR	N/A	05/31/12	Complete	
RIGHT-OF-WAY	\$175.6	\$158.8	90.4%	Design				
CONSTRUCTION	\$1,740.3	\$459.5	26.4%	PE Notice to Proceed	N/A	01/12/11	Complete	
	WARRAN TO THE REAL PROPERTY OF	20000000000		Final Design complete	03/22/17	03/22/17	0	
OTHER	\$1,079.3	\$118.6	11.0%	2200 200				
TOTAL	62.454.4	¢072.0	27.7%	Right-of-Way	12/31/15	12/31/15	0	
Current Budget includes Envir	\$3,154.4	\$873.9		All parcels available*	12/31/15	12/31/15	0	
ouron buogot molodos Emi	ommortum rumm	ig and i manoc	Gosts.					
				Construction - Main Des	sign / Build Co	ontract		
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/6	B Contract C10	045		
ROW ACQUISITION	PLAN	AVAILABLE	REMAINING	CRITICAL ACTIVITIES /				
PERMANENT PARCELS	15	14	1	- C1045 DU 2 Wilshire/La	Brea Station -	- AFC comple	ite	
TEMPORARY SARSES	100.50			- C1045 DU 5 Tunnels - A				
TEMPORARY PARCELS	4	4	0	- C1045 DU 3 Wilshire/Fa				
				- C1045 Wilshire/La Brea			S	
TOTAL PARCELS	19	18	1	<ul> <li>C1045 Wilshire/Fairfax p</li> <li>C1045 Wilshire/Fairfax p</li> </ul>			th side of Wilshire Blut	
a nasawawa tengan kacamatan da sa	100		~ 1					
				- C1078 Complete site utilities and building foundation 100% design     - C1045 Wilshire/Fairfax LADWP Power to complete relocations at Wilshire/Fairfax Station				
				- C1045 Wilshire/La Brea				
				- C1045 Wilshire/La Ciene	ega demolition	of buildings a	t staging areas complete	
				- LADWP Power relocation				
	1	ı I		<ul> <li>AT&amp;T Relocations to cor</li> </ul>	mplete at Wilsi	hire/La Ciene	ga	