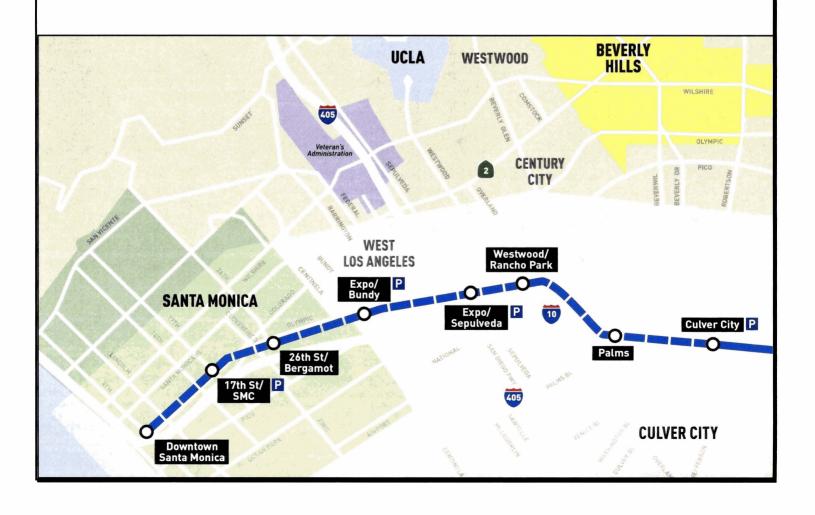
# Phase 2 Exposition Metro Line Project

### Monthly Project Status Report

May 2015



### EXPOSITION METRO LINE CONSTRUCTION AUTHORITY Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



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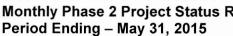
### Phase 2 Exposition Metro Line Construction Authority Project Description

The Expo Phase 2 Project is located in the Westside of Los Angeles, extending approximately seven miles from the Expo Phase 1 terminus at Culver City Station to Santa Monica. The Phase 2 alignment begins at the terminus of Expo Phase 1 and utilizes the existing Exposition Right-of-Way (ROW), then diverges from the Exposition ROW and enters onto Colorado Avenue east of 17<sup>th</sup> Street. The alignment follows the center of Colorado Avenue to the proposed terminus in downtown Santa Monica in the vicinity of the intersection of 4<sup>th</sup> Street and Colorado Avenue.



Figure 1: Exposition Metro Line Construction Authority Phase 2 Alignment

Monthly Phase 2 Project Status Report





### Phase 2 Exposition Metro Line Construction Authority Culver City to Santa Monica Segment

### **Project Management Issues**

### **Mainline Schedule**

The latest Skanska/Rados Joint Venture (SRJV) progress schedule shows Substantial Completion at the beginning of December, which is approximately four (4) months beyond the contractual Substantial Completion date. The latest progress schedule includes a conservative 30 day review cycle for final approval of test results and a 20 day rain allowance. The delay is due to several factors, which include delayed site turnover to the track installation subcontractor, delayed ductbank installation, and vibration mitigation design and construction. The contractor and the Authority are working on a mitigation plan to minimize these delays. This latest schedule is still within the schedule contingency allocation, and should therefore not impact the overall revenue operations date. The Authority anticipates having the system substantially complete for turnover to Metro to begin Phase 2 testing and Pre-Revenue operations in October 2015.

### **Utility Relocations**

The Authority worked closely with the Los Angeles Department of Water and Power (LADWP) and Southern California Edison (SCE) to complete the remaining new power service designs. Ongoing critical work includes energizing the remaining two TPSS, installing meters, pulling cable and installation of new power services by the contractor's need date for testing purposes.

### City of Los Angeles

In the City of Los Angeles (COLA), scheduled critical activities include temporary traffic handling to support roadway work and timely processing of field changes and requests for information (RFIs).

#### City of Santa Monica

Terminus property condemnation has been filed with the court. A legal issues trial date has been set for November 2015.

### Operations and Maintenance Facility (OMF)

The current project schedule shows Substantial Completion of the OMF in November 2015, which is over five (5) months later than the current Substantial Completion date of May 2015. The project's latest slip is due to damage to the train control laterals as well as delays to the procurement of long-lead electrical equipment. The OMF contractor is looking at recovery options. The Authority anticipates having the facility available to accept LRT vehicles in October / November 2015 and the overall facility available to Metro November 2015.

Monthly Phase 2 Project Status Report

Period Ending - May 31, 2015



### **Key Activities Completed This Period**

### Phase 2 Design-Build contractor, Skanska/Rados (SRJV)

- SRJV advanced remaining design elements. Staff worked with SRJV to resolve open issues.
- SRJV continued construction activities:
  - advanced OCS poles and wire;
  - advanced station platforms and C/S rooms;
  - advanced support poles for canopies/artwork and pavers at stations;
  - o advanced soundwalls:
  - advanced TPSS site work (TPSS6 and TPSS7);
  - o advanced street improvements including street lighting and traffic signal installation; and
  - o continued train control installation.
- · SRJV advanced construction submittals and requests for information; Authority staff reviewed and collaborated to resolve previously rejected submittals.
- SCE, DWP, and communications providers continued to relocate facilities and provide new service.
- Continued Local Field Acceptance Testing (LFATs) for systems and train control.

### Venice Boulevard Underpass Design-Build contractor

The Expo Phase 2 Contractor (SRJV) completed the remaining roadway construction work and began final inspection walk thru with AHJ's.

### Operations and Maintenance Facility, Kiewit Building Group (KBG)

- Track and Site Work:
  - o continued coordination and installation of dry and wet utilities;
  - o installed special trackwork east yard, set ties and rail in north yard, top ballast and tamper east vard:
  - set SCE switchgear.
- Main and Secondary Building:
  - continued main building roofing and interior drywall;
  - continued wall framing;
  - o continued MEP rough-in;
  - continued installation of glazing.
- Wash Building & Cleaning Platform:
  - install roof decking at wash building;
  - erect structural steel at cleaning platform;

### **Bikeway**

- Bikeway design is complete. Right of Way / Lease modifications and utility relocations nearing completion.
- Soil mitigation completed, final confirmation sampling and report pending DTSC approval.
- Grading, drainage, electrical conduit installation and paving in process.

Monthly Phase 2 Project Status Report

Period Ending – May 31, 2015



### **Key Future Activities**

### Phase 2 Design-Build contractor, Skanska/Rados (SRJV)

- SRJV advance remaining design elements. Metro, Authority, and third party staff will continue to work with SRJV to resolve comments and open issues.
- SRJV will continue the following construction activities:
  - o advance stations:
  - advance OCS wire installation;
  - install guideway lighting;
  - advance canopy poles and station paver installation;
  - complete ballasted special trackwork and embedded trackwork (Colorado);
  - advance street improvements;
  - o SCE, DWP, and communication providers to finalize relocations and continue providing service to the remaining low voltage meters and TPSS;
  - continue LFATs for systems and train control.

### Venice Boulevard Underpass

- Finalize roadway and Culver City Plaza design and obtain third party approval.
- Expo Phase 2 Contractor (SRJV) will work on the roadway construction work punch list items.

### Operations and Maintenance Facility contractor, Kiewit Building Group

- Continue Construction Safety Certification.
- Set interior equipment.
- Continue track installation.
- Continue start-up and activation meetings.
- Commence OCS pole erection and systems installation

#### **Bikeway**

Complete construction.

#### General

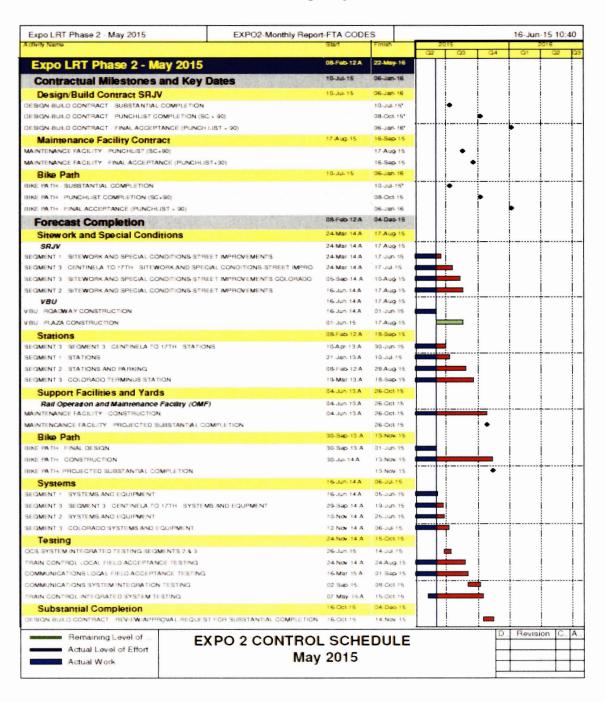
- Continue coordination with the COLA, CSM, Metro, and Caltrans.
- · Facilitate Fire Life Safety Committee meetings.
- Continue FEIR mitigation measures.

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015

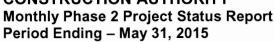


### Phase 2 Exposition Metro Line Construction Authority Schedule Status

### Critical Path Schedule, Period Ending May 31, 2015



# EXPOSITION METRO LINE CONSTRUCTION AUTHORITY Monthly Phase 2 Project Status Ren





### **Critical Path Schedule Continued** Expo LRT Phase 2 - May 2015 EXPO2-Monthly Report-FTA CODES 16-Jun-15 10:40 DEBIGN-BUILD CONTRACT PROJECTED SUBSTANTIAL COMPLETION 04-Dec-15 ESIGN-BUILD CONTRACT - 2015 RAIN ALLOWANCE 15 NOV 15 04-Dec-15 Start-Up 16-Oct-15 22-May-16 Phase 2 Testing (Metro) Pre-Revenue Operations (Metro) 14-1340-15 12-Mar-16 RE-REVENUE OPERATIONS (90) 13-Mar. 16 Revenue Operations Date (Metro) 22 May 16 13-Mar-16\* REVENUE OPERATIONS DATE (ROD) WITH SCHEDULE CONTINGENCY 22-May-16 D. Revision C Remaining Level of . **EXPO 2 CONTROL SCHEDULE** Actual Level of Effort May 2015 Actual Work

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



### **Schedule Narrative**

### **Critical and Near-Critical Path Analysis**

The Critical Path runs through the completion of the dynamic train control System Integration Tests (LFATs) from Venice to Military. It continues through the dynamic train control testing from Military to the Terminus. The train control LFATs from Military to the Terminus are near critical. The completion of the installation of the communications systems followed by testing is also near critical

The coordination with third party utility owners is ongoing in order to provide power service to the project and support the systems testing phase which started in November 2014.

### **Project Float/ Schedule Contingency**

On January 5, 2012, the Board of Directors authorized the Authority to include schedule contingency in accordance with Metro's Project Contingency procedure which resulted in a Revenue Operations Date of November 5, 2016. At the January 9, 2014 Board Meeting half of the contingency was released. If all the remaining Schedule Contingency were needed, the projected Revenue Operation Date would be May 22, 2016.

	Original Duration	Days	Current
	(days)	Released	Duration (days)
Schedule Contingency	334	167	167

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



### Phase 2 Exposition Metro Line Construction Authority Financial Status

# Project Cost Status and Analysis Expo/Metro Baseline

#### COST REPORT BY ELEMENT

UNITS IN MILLIONS

							Forecast Variance
Element	Description	Original Budget	Current Budget	Commitments	Expenditures	Current Forecast	Over/ <under></under>
С	CONSTRUCTION	766.3	759.8	684.0	587.4	759.8	-
R	RIGHT-OF-WAY	265.0	257.6	115.3	113.7	257.6	2
V	VEHICLES	202.1	202.1	202.1	77.7	202.1	
Р	PROFESSIONAL SERVICES	148.2	149.7	118.2	102.9	149.7	
SC	SPECIAL CONDITIONS	63.6	81.9	66.4	58.1	81.9	
PR	PROJECT RESERVE	66.0	60.1	4	-	60.1	
	TOTAL	1,511.2	1,511.2	1,186.1	939.8	1,511.2	

NOTE: Expenditures are Paid-to-Date through 4/30/15

### **Original Budget and Current Budget:**

The Life of Project Budget for the Phase 2 Exposition Metro Line Project was adopted in March 2011 for a value of \$1.511 billion.

#### **Current Forecast:**

The total project forecast at completion remains the same as the current budget of \$1.511 billion.

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



### **Project Operating Budget Summary in Millions of Dollars**



Sources & Uses of Funds - Phase 2 Status as of May 31, 2015

### Metro / Expo Baseline Activities

Sources of Funds (millions)

Α

В

C = A - B

	Funding								
Source		Budget		Committed	Uncommitted				
Prop A 35%	\$	224.0	\$	170.3	\$	53.7			
Prop C 25%	\$	5.8	\$	2.6	\$	3.2			
Measure R	\$	908.9	\$	631.3	\$	277.6			
Prop 1B Bonds - PTMISEA	\$	48.9	\$	15.2	\$	33.7			
Prop 1B Bonds - SLPP	\$	28.3	\$	28.3	\$	-			
Regional Improvement Program (State)	\$	47.8	\$	47.8	\$	0.0			
Local Agency Contribution	\$	45.3	\$	45.3	\$	0.0			
	\$	1,309.1	\$	940.8	\$	368.3			
Total Sources	: \$	1,309.1	\$	940.8	\$	368.3			

Uses of Funds by Bement (millions)

Α

В

C

D = A - B

⊟ement		Budget	(	Committed	Paid	Ur	ncommitted
Design-Build Corridor	\$	594.5	\$	557.1	\$ 485.6	\$	37.5
Other Construction Hements	\$	165.4	\$	127.0	\$ 101.8	\$	38.4
Right-of-Way	\$	257.6	\$	115.3	\$ 113.7	\$	142.3
Professional Services	\$	149.7	\$	118.2	\$ 102.9	\$	31.5
Special Conditions	\$	81.9	\$	66.4	\$ 58.1	\$	15.4
Project Reserve	\$	60.1	\$	-	\$ -	\$	60.1
Total L	Jses: \$	1,309.1	\$	984.0	\$ 862.1	\$	325.1

Paid-to-Date through 4/30/15



### **Project Operating Budget Summary in Millions of Dollars**



Sources & Uses of Funds - Phase 2 Status as of May 31, 2015

### Metro / Expo Baseline Activities - Vehicles

Sources of Funds (millions)

Α

B C = A - B

				Funding		
Source		Budget	C	Committed	Un	committed
RSTP (Federal) for LRVs	\$	7.7	\$	7.7	\$	-
CMAQ (Federal) for LRVs	\$	41.3	\$	41.3	\$	-
Reg. Imp. Prog. (Federal) for LRVs	\$	153.1	\$	153.1	\$	
	\$	202.1	\$	202.1	\$	-
Total Sources:	\$	202.1	\$	202.1	\$	-

Uses of Funds by Element (millions)

D = A - B

⊟ement		Budget	С	committed	Paid	i	Uncommitted			
Vehicles	\$	202.1	\$	202.1	\$	77.7	\$	-		
Total Use	s: \$	202.1	\$	202.1	\$	77.7	\$	-		

Paid-to-Date through 4/30/15

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



### **Phase 2 Exposition Metro Line Construction Authority Contract Status**



Sources & Uses of Funds - Phase 2 Status as of May 31, 2015

### Non - Baseline Activities

Sources of Funds (millions)

C = A - B

				Funding		
Source		Budget	C	ommitted	Un	committed
Project Revenue: City of LA Betterment	\$	5.4	\$	5.4	\$	-
Project Revenue: Metro	\$	3.9	\$	3.9	\$	-
Project Revenue: City of Santa Monica Betterment	_\$	20.6	\$	20.6	\$	-
Total Sources:	: \$	29.9	\$	29.9	\$	_

Uses of Funds by Element (millions)

C

D = A - B

⊟ement		Budget	C	ommitted	Paid	Ur	ncommitted
Design-Build Betterments							
COLA - Sepulveda Blvd Bridge & Aerial Station (Diff.)		\$ 5.3	\$	5.3	\$ 4.1	\$	-
COLA - Greenway Project Culvert		\$ 0.1	\$	0.1	\$ 0.1	\$	-
Metro - Various Betterments (Metro Board Approved 4/17/14)		\$ 3.9	\$	1.8	\$ 1.5	\$	2.2
City of Santa Monica Water System Betterments		\$ 1.6	\$	1.6	\$ 1.5	\$	0.0
City of Santa Monica PCC Funding Agreement		\$ 0.5	\$	0.4	\$ -	\$	0.1
City of Santa Monica Storm Drain Laterals		\$ 0.3	\$	0.3	\$ 0.2	\$	
26th Street & 17th Street Station Betterments P.E.		\$ 0.4	\$	0.4	\$ 0.4	\$	
26th Street & 17th Street Station Betterments Construction		\$ 7.7	\$	5.5	\$ 5.5	\$	2.2
4th Street Terminus Station P.E.		\$ 0.5	\$	0.4	\$ 0.4	\$	0.1
4th Street Terminus Station Construction		\$ 8.0	\$	6.4	\$ 6.2	\$	1.6
CSM Cont. Release - Jacob Guard Rails, Pavers & Landscaping		\$ 1.8	\$	-	\$ -	\$	1.8
	Total Uses:	\$ 29.9	\$	22.0	\$ 19.8	\$	7.9

Paid-to-Date through 4/30/15

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



### **Expo Phase 2 Design-Build Contract Status**

Expo Phase 2 Contractor: Skanska/Rados	Contract No.: Status as of:	Contract No.: XP8902-002  Status as of: 31-May-15										
Progress/Work Completed: See Page 6  Areas of Concern: See Pages 4 and 5	Major Activities (In Pro See Page 5 and 6 Major Activities Next Po See Page 6											
	Substantial Completion Contract Completion	Original Contract Dates 07/10/15	Time Extension 0	Current Contract 07/10/15 01/08/16	Forecast 07/10/15 01/08/16	Variance CDs 0						
Schedule Summary:	Cost Summary	V:			\$ In Baseline Project	000's Betterments Modifications						
Date of Award: 05/13/11 Limited Notice to Proceed: 05/19/11 Original Contract Duration: 1700 Current Contract Duration: 1700 Elapsed Time from NTP: 1,474	<ol> <li>Award Value</li> <li>Executed Mo</li> <li>Approved Ch</li> <li>Current Cont</li> <li>Pending Cha</li> <li>Incurred Cos</li> </ol>	odifications ange Orde ract Value nges:	ers:	- ):	541,651.27 4070.96 545,722.23 681.82 484,090.75	5,278.94 51,521.17 <b>56,800.10</b> 3,018.19 52,073.80						

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



### Expo Phase 2 VBU Design-Build Contract Status

Expo Phase 2 Contractor: Balfour Beatty Infrastructure, Inc.	Contract No.:  Status as of:		-828 ay-15				
Progress/Work Completed: See Page 6	Major Activities (In Progress): See Page 5 and 6						
Areas of Concern: See Pages 4 and 5	Major Activities Next Period: See Page 6						
		Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs	
	Substantial Completion	07/12/13	262	03/31/14	03/31/14	0	
Schedule Summary:	Cost Summary	<u>/-</u>			<b>\$ In</b> Baseline Project	000's Betterments/	
Date of Award: 08/04/11	Award Value	:			15,675.00		
	2. Executed Mo	2. Executed Modifications:				1,277.00	
Limited Notice to Proceed: 09/01/11	<ul><li>3. Approved Change Orders:</li><li>4. Current Contract Value (1 + 2 + 3):</li></ul>			1,184.57	-		
Original Contract Duration: 680  Current Contract Duration: 796				15,218.73	1,277.00		
	5. Pending Cha	5. Pending Changes:					
Elapsed Time from NTP: 1,369	6. Incurred Cos	t:			14,943.83	1,551.90	

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



### **Expo Phase 2 OMF Contract Status**

Exportase 2 Omi Contract Status								
Expo Phase 2	Contract No.: XP8902-016							
Contractor: Kiewitt Building Group O&M Facility	Status as of:	31-M	ay-15					
Progress/Work Completed: See Page 6	Major Activities (In Pro See Page 5 and 6	gress):						
Areas of Concern: See Pages 4 and 5	Major Activities Next Pe See Page 6	∍riod:						
		Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs		
	Substantial Completion	11/25/14	176	05/20/15	05/20/15	0		
	Completion							
Schedule Summary:	Cost Summary	<u>C</u>			<b>\$ In</b> Baseline Project	000's Betterments/ Modifications		
	1. Award Value	:			99,930.56			
Date of Award: 05/03/13	2. Executed Mo	<ul><li>2. Executed Modifications:</li><li>3. Approved Change Orders:</li><li>4. Current Contract Value (1 + 2 + 3):</li></ul>				(129.53)		
Limited Notice to Proceed: 06/03/13	3. Approved Ch					-		
Original Contract Duration: 540	4 Current Cont					(129.53)		
	T. Current Cont					1		
Current Contract Duration: 540  Elapsed Time from NTP: 728	1	nges:			189.07	98.62		

Monthly Phase 2 Project Status Report Period Ending – May 31, 2015



### **Expo Phase 2 Bikeway Contract Status**

Expo Phase 2 Contract No.: XP8903-01  Contractor: Skanska/Rados  Bikeway Project Status as of: 31-May-15						
Progress/Work Completed: See Page 6 Areas of Concern: See Pages 4 and 5	Major Activities (In Pro See Page 5 and 6  Major Activities Next P See Page 6	gress):				
	Substantial Completion	Original Contract Dates 07/10/15	Time Extension	Current Contract 07/10/15	Forecast 07/10/15	Variance CDs
Schedule Summary:	Cost Summar	Cost Summary:			\$ In Baseline Project	000's  Betterments/ Modifications
	1. Award Value	:			11,041.06	
Date of Award: 01/27	2. Executed M	<ol> <li>Executed Modifications:</li> <li>Approved Change Orders:</li> <li>Current Contract Value (1 + 2 + 3):</li> <li>Pending Changes:</li> <li>Incurred Cost:</li> </ol>			1,353.74	
Limited Notice to Proceed: 08/28	3. Approved Ch				121.12	-
Original Contract Duration: 6	4. Current Con				12,515.92	-
Current Contract Duration:					71.99	
Elapsed Time from NTP: 6-						