

# **Metro**

*Los Angeles County Metropolitan Transportation Authority  
One Gateway Plaza  
3rd Floor Board Room*



## **Agenda - Final**

**Thursday, April 14, 2016**

**9:00 AM**

**One Gateway Plaza, Los Angeles, CA 90012,  
3rd Floor, Metro Board Room**

### **Construction Committee**

*Don Knabe, Chair*

*Jacquelyn Dupont-Walker, Vice Chair*

*Mike Bonin*

*Diane DuBois*

*Ara Najarian*

*Carrie Bowen, non-voting member*

*Phillip A. Washington, Chief Executive Officer*

## METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES (ALSO APPLIES TO BOARD COMMITTEES)

### PUBLIC INPUT

A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board should be submitted in person at the meeting to the Board Secretary. Individuals requesting to speak on more than three (3) agenda items will be allowed to speak up to a maximum of three (3) minutes per meeting. For individuals requiring translation service, time allowed will be doubled.

The public may also address the Board on non-agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for up to three (3) minutes per meeting and may speak no more than once during the Public Comment period. Speakers will be called according to the order in which the speaker request forms are received. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

**CONDUCT IN THE BOARD ROOM** - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

**REMOVAL FROM THE BOARD ROOM** The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

- Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
- A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- Any other unlawful interference with the due and orderly course of said meeting.

### INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD

Agendas for the Regular MTA Board meetings are prepared by the Board Secretary and are available prior to the meeting in the MTA Records Management Department and on the Internet. Every meeting of the MTA Board of Directors is recorded on CD's and as MP3's and can be made available for a nominal charge.

### DISCLOSURE OF CONTRIBUTIONS

The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars (\$10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

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General Information/Rules of the Board - (213) 922-4600

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TDD line (800) 252-9040

**NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA**

**CALL TO ORDER****ROLL CALL****17. APPROVE Consent Calendar Items: 18 and 19**

Consent Calendar items are approved by one motion unless held by a Director for discussion and/or separate action.

CONSENT CALENDAR

18. RECEIVE AND FILE the **quarterly report on Crenshaw/LAX safety.** [2016-0131](#)

Attachments: [Safety Report on CrenshawLAX Project](#)

19. RECEIVE AND FILE report on **Capital Project Construction Management Best Practices Study.** [2016-0279](#)

Attachments: [ATTACHMENT A - Capital Project Best Practice Study](#)

NON-CONSENT

20. RECEIVE **Oral Report by the Program Management Executive Director.** [2016-0251](#)

Attachments: [Attachment A - Program Management Executive Directors Report - April 2016](#)

21. RECEIVE **Oral Report by the Caltrans District Director on Delivery of Projects on I-5.** [2016-0295](#)

Attachments: [April 2016Cal Trans Update](#)

22. CONSIDER: [2016-0235](#)

- A. ESTABLISHING a total budget of \$3.5 million for the **design phase of the Portal Widening and preliminary design of the Turnback Facility at Division 20** to accommodate system capacity need; and

- B. AMENDING the FY16 budget to include \$0.8M for start of design efforts.

**Attachments:**

[Attachment A - Interoffice Memo Re Design-Bid-Build](#)

[Attachment B - Preliminary Draft Schedule - April 2016](#)

[Attachment C - Portal Design Cashflow FY16 and FY17](#)

## **Adjournment**

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.



Metro

## Board Report

Los Angeles County  
Metropolitan Transportation  
Authority  
One Gateway Plaza  
3rd Floor Board Room  
Los Angeles, CA

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**File #:** 2016-0131, **File Type:** Informational Report

**Agenda Number:** 18

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**CONSTRUCTION COMMITTEE  
APRIL 14, 2016**

**SUBJECT: SAFETY REPORT ON CRENSHAW/LAX PROJECT**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE the **quarterly report on Crenshaw/LAX safety.**

**ISSUE**

The Metro Board of Directors at its April 30, 2015 meeting directed Metro Staff to report monthly on safety-related matters on the Crenshaw/LAX project. Due to significant improvements in regards to Safety on the Crenshaw/LAX project, the board has asked that the Crenshaw/LAX safety report be given quarterly beginning in January 2016.

**DISCUSSION**

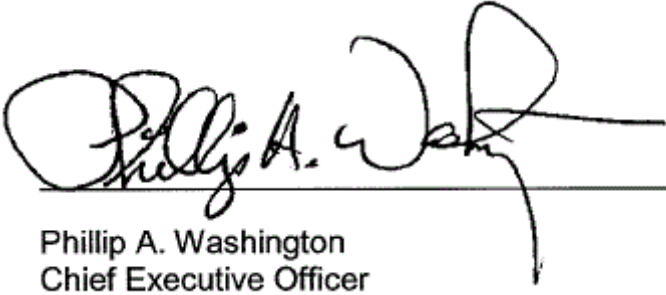
This quarterly report provides an update on safety related issues and activities on the Crenshaw/LAX project for the months of December 2015 and January and February 2016. The details of these issues and activities can be found in Attachment A.

**ATTACHMENTS**

Attachment A - Safety Report on Crenshaw/LAX Project - April 2016

Prepared by: James Brown, Director, Construction Safety, (213) 922-4223

Reviewed by: Greg Kildare, Executive Director, Risk, Safety and Asset Management, (213) 922-4971



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Phillip A. Washington  
Chief Executive Officer

# WSCC's Safety Update on Crenshaw/LAX Project

Construction Committee Meeting  
April 14, 2016

Greg Kildare, Executive Director  
Risk, Safety and Asset Management



**Metro**

# Injury Incidents – Dec 2015, Jan and Feb 2016

- Project-to-Date Total Recordables as of February 29<sup>th</sup> = 19.
- Ten (10) of the nineteen (19) recordable injuries were restricted/modified duty and Days-Away from work.
- WSCC reported one (1) first-aid injury incident in December 2015.
- WSCC reported two (2) recordable injuries in January 2016 (severe contusion to left foot and fractured ring finger).
- WSCC reported two (2) Days-Away injuries in February 2016 (fractured ankle and fractured pelvis).

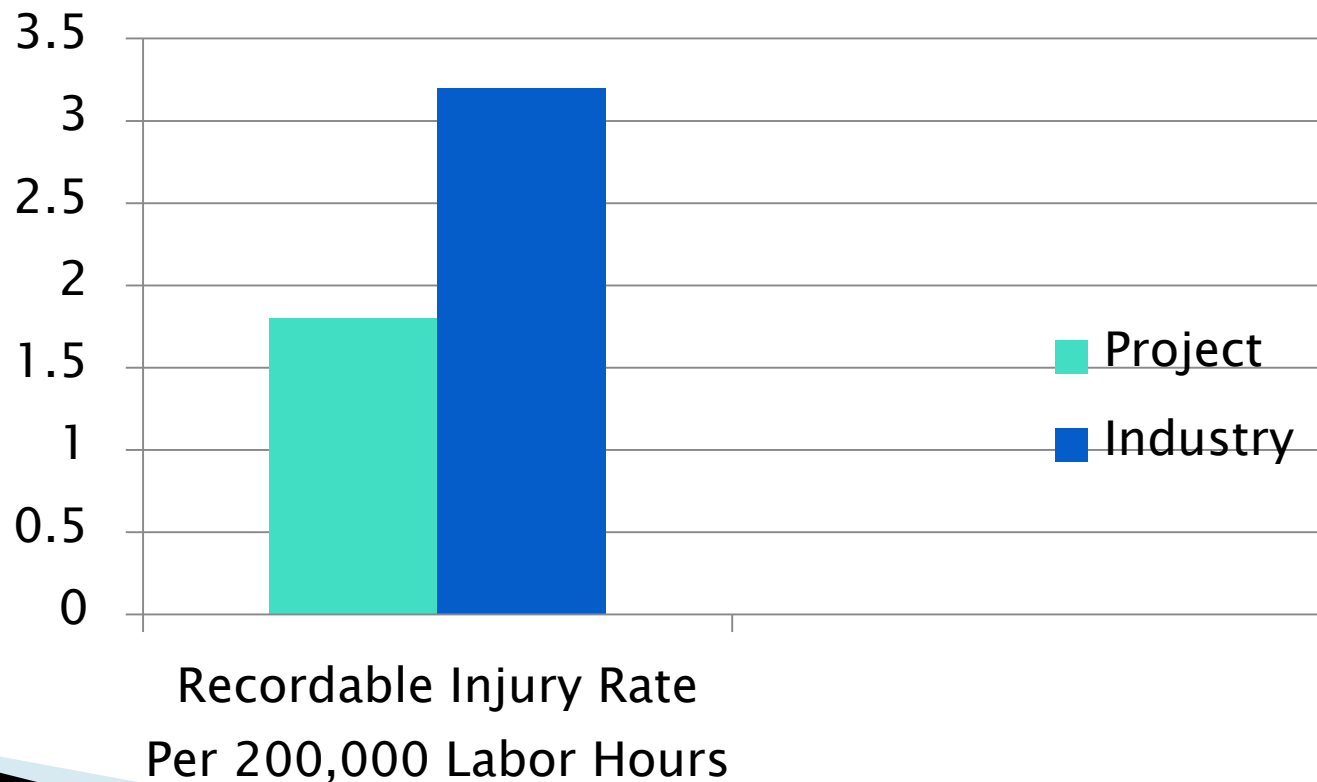


# Metro/WSCC Joint Safety Activities

- Metro participated in WSCC's Tool-Box Safety meetings on December 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup>, 28<sup>th</sup>, January 4<sup>th</sup>, 11<sup>th</sup>, 18<sup>th</sup>, 25<sup>th</sup> and on February 1<sup>st</sup>, 8<sup>th</sup>, 15<sup>th</sup>, 22<sup>nd</sup> and 29<sup>th</sup>.
- Metro participated in WSCC's Executive Safety meetings on December 2<sup>nd</sup>, January 6<sup>th</sup> and February 18<sup>th</sup>.
- Metro participated in WSCC's Executive Safety Walks on January 12<sup>th</sup> and February 12<sup>th</sup>.
- Metro Safety staff conducted a field inspection on December 21<sup>st</sup>.
- WSCC's Executive Management participated in Metro's All Hands Safety meetings on December 17<sup>th</sup> and January 28<sup>th</sup>.


# Project To Date Recordable Injury Rate – February 2016

- ▶ Project-to-Date Work Hours as of February 29<sup>th</sup> (2,111,204)
- ▶ Rate per 200,000 Labor Hours: 1.8
- ▶ National Heavy Construction Rate (2013): 3.2



# Other Safety Efforts

- WSCC implemented mitigation safety measures such as an internal monitoring program (Review Employee's Actions & Performance–REAP) where supervisors plan, observe, discuss and document safe/risk work activities; disciplinary action and safety training.
- WSCC's supervisors are required to complete one REAP report on a weekly basis.
- WSCC's supervisors completed 320 REAPS in December 2015, 380 REAPS in January 2016 and 408 REAPS in February 2016.
- WSCC shared employee and subcontractor discipline data. Two (2) employees were disciplined in January and (4) employees were disciplined in February for violating safety procedures.
- WSCC safety staff now number 19, including Gas Testers and EMTs.



**R** → Review  
**E** → Employee's  
**A** → Actions &  
**P** → Performance

Focus on the process; we will REAP what we Sow!

**OBSERVABLE ACTIONS GUIDE**

**Line of Fire**

Struck by or against an object  
 Working around/over Equipment or Traffic  
 Pinch Points/ Caught Inbetween  
 Working with Electricity / Lock Out Tagout  
 Working with Chemicals

Safe ☐ At Risk ☐

**Eyes On Path / Slip, Trips & Falls**

3 Point Contact / Ladders, Ramps, Stairs  
 Use of Walkways / Pathways  
 Maintaining Housekeeping

Safe ☐ At Risk ☐

**Overextension / Overexertions**

Lifting including team lifts  
 Carrying Material  
 Reaching or Leaning to do Task

Safe ☐ At Risk ☐

**Use of Tools and Equipment**

Selection of tools for task  
 Use of Tool/Equipment including set up  
 PPE selection for Tool/Equipment  
 Selection and Use of Rigging

Safe ☐ At Risk ☐

**Fall Exposures**

Use of Harness, Lanyards, Lifelines  
 Proper Anchorage, selection and use  
 Ladder/Scaffold set up and use  
 Aerial Lift usage  
 Working near Unprotected Sides and Edges

Safe ☐ At Risk ☐

**REAP**  
 Review Employee's Actions & Performance

1) PLAN 2) OBSERVE 3) DISCUSS 4) DOCUMENT

Safe? or At Risk? ☐ S ☐ A

Circle category noted during observation.

What actions were observed?

What was communicated?

OBSERVER'S NAME \_\_\_\_\_

OBSERVER'S SIGNATURE \_\_\_\_\_

PROJECT NAME \_\_\_\_\_ PROJECT NUMBER \_\_\_\_\_

DATE \_\_\_\_\_

REV. 8/13

# Metro Safety Efforts

- Metro is currently working to fill additional Metro Safety staff positions approved in the FY16 budget.
- In the interim, consultant safety staff are being used to augment contract compliance activities.
- Consultant safety staff will be released as each vacancy is filled via the on-going recruitment process.



## Board Report

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**File #:** 2016-0279, **File Type:** Informational Report

**Agenda Number:** 19

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**CONSTRUCTION COMMITTEE  
APRIL 14, 2016**

**SUBJECT: OFFICE OF THE INSPECTOR GENERAL REPORT ON CAPITAL PROJECT CONSTRUCTION MANAGEMENT BEST PRACTICES STUDY**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE report on **Capital Project Construction Management Best Practices Study**.

**ISSUE**

Currently, Metro is simultaneously overseeing an unprecedented number of projects. These include multiple rail lines and other major projects under construction or about to start construction. Many more capital projects are in the planning phase. To ensure that these projects are effectively and efficiently managed, the Office of the Inspector General initiated a study to identify best practices for improving the planning, processes, management, oversight, innovation, and accountability of major construction projects.

**DISCUSSION**

**A. Scope of the Review**

The OIG prepared a comprehensive scope of work for a Request for Proposal to obtain an expert consultant team to assist us performed the study on construction management best practices. Intueor Consulting was hired to perform this study which put together a team of construction and engineering experts who have experience in both construction and public transportation.

The objectives of the review were to:

- Determine major capital construction project management best practices.
- Determine how Metro might improve its practices to maximize completion of projects on schedule and within assigned budget.
- Determine how Metro might be more effective, efficient, safe and proactive in managing staff, schedules, costs and relationships.
- Maximize accountability, innovation, and state of the art technology through best practices.

The review covered the following areas:

- Utility relocation
- Project delivery
- Project management and claims management
- Project planning and scope definition
- Staffing
- Change management
- Community involvement
- Partnering
- Procurement
- Oversight

## B. Report Summary

The consultant team conducted an extensive data and document review, sent surveys to Metro personnel, interviewed dozens of Metro personnel, conducted several workshop discussion group sessions with Metro personnel, and contacted comparable agencies to determine best practices. The consultant team completed the study and prepared a comprehensive report on construction management best practices. The report was circulated to construction management in late January for comment before issuing it to the Board in February (see Attached Report). The report identified a number of areas for potential advancement such as:

1. Formally adopt the Project Management Institute (PMI) and its Project Management Body of Knowledge (PMBOK) as the organizational standard for project management.
2. Develop an organization-wide Project Management Initiative, including a training and development program.
3. Establish a formal, organization-wide Lessons Learned Program, managed by the Strategic Program Management Office.
4. Establish a strategic, executive level partnering process.
5. Develop and execute a new Master Cooperative Agreement with the City of Los Angeles, and any other cities which Metro intends to construct a major project.
6. Dedicate staffing and resources for the Third Party Coordination Unit to effectively perform its functions.
7. Create an initiative to “Re-engineer the Utility Relocation Process,” developing and incorporating innovative strategies.
8. Establish a Utility Relocation Technology Assessment Team to search, evaluate and implement state of the art technologies for subsurface utility identification.
9. Establish a Utility Relocation Process Improvement Team to develop and implement a streamlined, creative utility relocation process.
10. Consistently apply and proactively enforce the change control process, and adopt best practice models.
11. Develop a strategic plan for the use of consultants within the key departments of this study, incorporating the proposed pilot project mix of 70% Metro staff to 30% Consultant staff ratio.

### C. Management Response to Report

The report was circulated to Metro management in late January. Management has only had a brief opportunity to review the report but provided a preliminary response stating: “Overall, the report provides a comprehensive set of recommendations that we plan to use as a catalyst for positive changes in the program management process and approaches in the future.” Management is in the process of reviewing and responding to each of the findings and recommendations. The determination of agreement to or implementation of any particular suggestion will be an ongoing assessment.

### **NEXT STEPS**

Metro management should:

- Attend a debriefing session with the consultant team being offered by the Office of the Inspector General to management.
- Assign an individual responsible for championing the Agency review and analysis of the findings and recommendations in the report, and accountable to take appropriate actions.
- Complete the Schedule for Tracking Metro’s Proposed Actions in response to the recommendations provided in Appendix B of the Report as it makes determinations about the suggestions.
- Periodically report to the Metro Board during the coming year on the progress of reviewing, analyzing, and making a determination on each recommendation.
- Periodically report to the Metro Board during the coming year on the implementation of any actions Metro determines to take on the recommendations.

### **ATTACHMENTS**

Attachment A - Report on Capital Project Construction Management Best Practices Study

Prepared by: Yvonne Zheng, Audit Manager, (213) 244-7301

Reviewed by: Karen Gorman, Inspector General, (213) 922-2975

**ATTACHMENT A**

**Report on  
Capital Project Construction Management  
Best Practices Study**

**Document Available Online at:**

**[http://libraryarchives.metro.net/DB\\_Attachments/160303\\_LACMTA\\_Best\\_Practices\\_Study\\_Report.pdf](http://libraryarchives.metro.net/DB_Attachments/160303_LACMTA_Best_Practices_Study_Report.pdf)**



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Los Angeles County  
Metropolitan Transportation  
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3rd Floor Board Room  
Los Angeles, CA

## Board Report

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**File #:** 2016-0251, **File Type:** Oral Report / Presentation

**Agenda Number:** 20.

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### CONSTRUCTION COMMITTEE APRIL 14, 2016

RECEIVE Oral Report by the Program Management Executive Director.

#### DISCUSSION

RECEIVE Oral Report by the Program Management Executive Director.

#### ATTACHMENTS

Attachment A - Program Management Executive Director's Report - April 2016

Prepared by:

- **Crenshaw/LAX** - Charles Beauvoir, Deputy Executive Officer, Project Mgmt., (213)299-3095
- **Regional Connector** - Girish Roy, Deputy Executive Officer, Project Mgmt., (213)893-7119
- **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
- **Division 13** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **MRL - MOL North Hollywood Station** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **Universal Pedestrian Bridge** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **Presentation** - Shannon Hanley, Senior Administrative Analyst, (213)922-1350

Reviewed by: Richard Clarke, Executive Director, Program Management, (213) 922-7557

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# **Program Management Executive Director's Report**

## **Project Status Report**

















Presented By  
**Richard Clarke**  
Executive Director,  
Program Management

**April 2016**

**Construction Committee**  
Los Angeles County Metropolitan Transportation Authority



# Project Budget & Schedule Status Summary Chart

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			The contractor is currently reporting that they are behind schedule. New 96 <sup>th</sup> street station accommodations effort may impact forecast revenue operation date of 2019.
Westside Purple Line Extension-Section 1			
Westside Purple Line Extension-Section 2			
Regional Connector			LOP budget adjustment of \$132 million was approved by Metro Board in December. Project team is working with the DB contractor to develop a detailed recovery schedule to maintain FFCA RSD of May 29, 2021. The interface with city departments are critical to the success of the mitigation measures.
1-405 Sepulveda Pass improvements Project			Working through remaining items for Final Acceptance. Preparation for Claim 86 arbitration is ongoing.
Patsaouras Plaza			Budget revision approved by Board in March 2016. Utility relocations are scheduled to start April 2016 and foundation work will start in Summer 2016.
Universal City Pedestrian Bridge			Construction is 88% complete and is scheduled to complete in early April 2016.
MOL to MRL North Hollywood Connector			Construction is 67% complete. There are no significant issues on this project at this time.



On target



Possible problem



Major issue

# CRENSHAW/LAX TRANSIT PROJECT



## BUDGET

	Current	Forecast
TOTAL COST* (\$ mil)	2,058	2,058



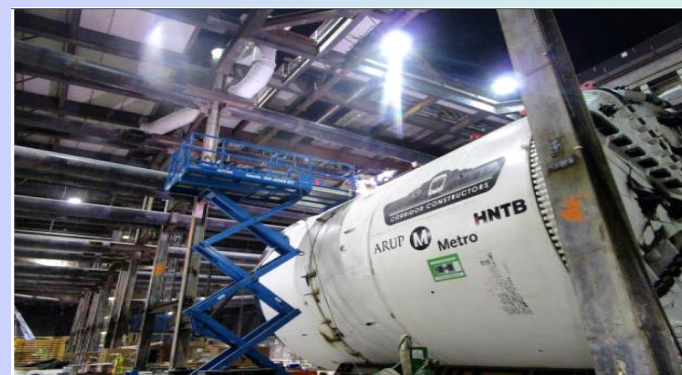
## SCHEDULE

	Current Oct 2019	Forecast Oct 2019
REV. OPERATION		

- Overall construction progress is 35.9% complete (excludes contractor mobilization costs). Design-builder is behind schedule but discussions continue regarding mitigation efforts.
- Tunneling toward Leimert Park Station to commence in April.
- Continued invert concrete placement at UG#1 in front of LAX runways.
- Continued bridge falsework construction for Crenshaw Project tie-in with operating Green Line
- Southwestern Yard construction to start in May.
- Park Mesa Heights construction to start in early April.
- Need to conclude 96<sup>th</sup> Street Station cost and schedule negotiation



Crenshaw tie-in with Green line falsework construction



Start of TBM assembly in Expo/Crenshaw Station

April 2016

## Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro

# WESTSIDE PURPLE LINE – SECTION 1



## BUDGET

	Current	Forecast
<b>TOTAL COST*</b> (\$ mil)	3,149	3,149

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



## SCHEDULE

	Current	Forecast
<b>REV. OPERATION</b>	Nov 2023	Nov 2023

The Advanced Utility Relocations (AUR) work involving three contracts is 86% complete overall.

- Two of the three Advanced Utility Relocations Contracts have been completed on schedule.
- The Wilshire/La Cienega Advanced Utility Relocations Contractor continues with the Southern California Edison (SCE) power relocation work and the City of Beverly Hills sanitary sewer, water and storm drain relocations. This is the last AUR contract and is on schedule to be completed in December 2016.

Tunnels, Stations, Trackwork and Systems Design-Build Contract

- Final Design for the Tunnels, three subway stations, trackwork, and systems is 80% complete overall.
- Pile installation at the Wilshire/La Brea Station is well underway for the support of excavation at the launch site for the Tunnel Boring Machines.



C1045 Contractor Installing Pile at Wilshire/La Brea Station

April 2016

## Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro

# WESTSIDE PURPLE LINE – SECTION 2

OK

## BUDGET

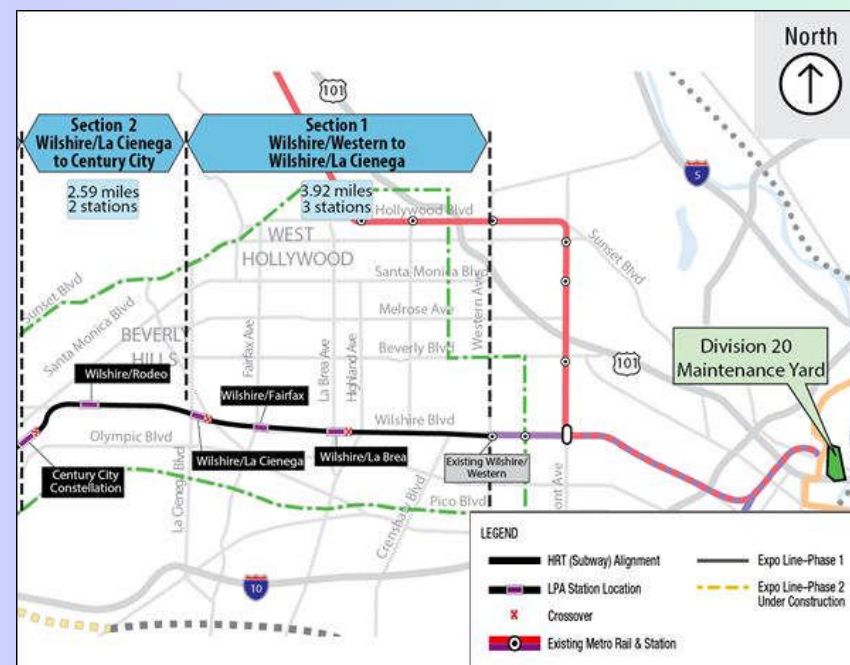
	Current	Forecast
TOTAL COST	TBD	2,467
(\$ mil)	Life-of-Project Budget is yet to be adopted	

OK

## SCHEDULE

	Current	Forecast
REV. OPERATION	TBD	August 2025

- 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 are due on May 16, 2016.
- FFGA anticipated approval August 2016.
- Contract award anticipated January 2017.



April 2016

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro

# REGIONAL CONNECTOR TRANSIT CORRIDOR



## BUDGET

	Current	Forecast
<b>TOTAL COST (\$ mil)</b>	<b>1,599</b>	<b>TBD</b>

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



## SCHEDULE

	Current	Forecast
<b>REV. OPERATION</b>	<b>May 2021</b>	<b>May 2021</b>

\* FFGA scheduled completion

- Overall Project Progress is 15.8%, Design Build (DB) Construction is 8.2% and DB Final Design is 89.9% complete.
- 1<sup>st</sup>/Alameda Shoofly work completed on schedule; revenue service through Little Tokyo Station resumed March 20.
- Piling, utility relocations, and station excavation efforts at 1<sup>st</sup>/Alameda – 1<sup>st</sup>/Central continue.
- 2<sup>nd</sup>/Hope Station decking completed. Grading, piling installation and station excavation underway.
- 2<sup>nd</sup>/Broadway full closure in effect. Utility relocations and pile trenching underway and on schedule.
- Utility rearrangements along Flower Street continue along with piling operations between 4<sup>th</sup> and 5<sup>th</sup> Sts. on eastside of Flower St.
- Obtaining approvals and permits remain critically important to schedule adherence and staff continue to work closely with City staff
- Need to conclude cost/schedule negotiations.



Shoofly installation at 1<sup>st</sup> Street

April 2016

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro

# I-405 SEPULVEDA PASS IMPROVEMENTS PROJECT



## BUDGET

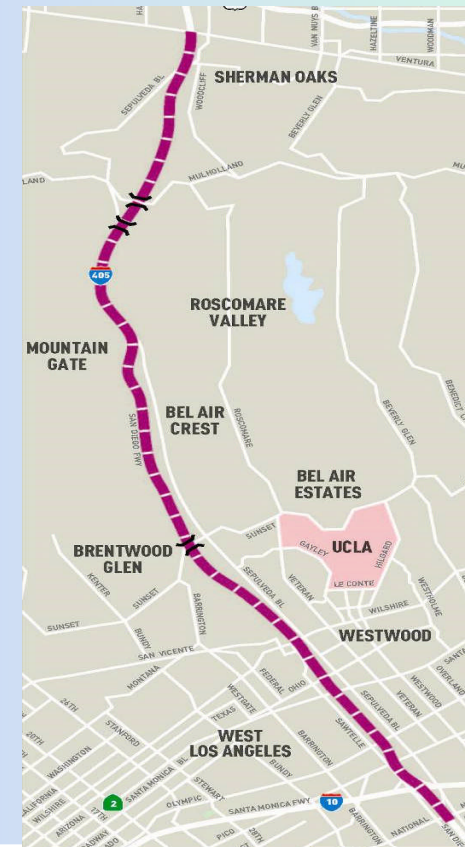
	Current	Forecast
TOTAL COST (\$ mil)	1,308	1,308



## SCHEDULE

	Current Sept 2015	Forecast Sept 2015
REV. OPERATION		

- Contractor is working toward Final Completion
- Working through remaining items for Final Acceptance
- Preparation for Claim 86 arbitration is ongoing
- Forecast does not include non-merited Claim 86 or any new claims yet to be brought forward by contractor



April 2016

## Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro

# PATSAOURAS PLAZA BUSWAY STATION



## BUDGET

	Current	Forecast
TOTAL COST (\$ mil)	39.7	39.7



## SCHEDULE

	Current Dec 2017	Forecast Dec 2017
REV. OPERATION		

- Utility start of construction scheduled for April 2016, foundations in August 2016. Utility relocation must be completed by August 2016 to avoid conflicts with foundation construction.
- Work in progress includes final approval of 100% design package with Caltrans, receipt of Caltrans permits, ROW certifications, utility clearances, resolution of environmental issues with Caltrans, and exemptions to start construction.
- Board approved revised LOP budget in March 2016.
- Project completion scheduled for Winter 2017.



April 2016

**Construction Committee**

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



**Metro**

# DIVISION 13 BUS O&M FACILITY



## BUDGET

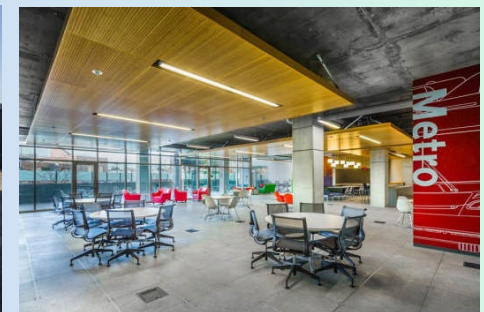
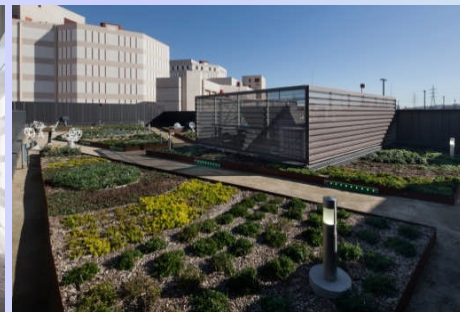
	Current	Forecast
TOTAL COST (\$ mil)	120	120



## SCHEDULE

	Current Feb 2016	Forecast Feb 2016
REV. OPERATION		

- Project is 100% complete and open as of February 1, 2016.
- Current activities include final punch list completion and close out of the contract with McCarthy.
- Project was awarded a Silver Award for Sustainable Project of the Year at the LABJ Commercial Real Estate Awards.



April 2016

## Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro

# UNIVERSAL PEDESTRIAN BRIDGE



## BUDGET

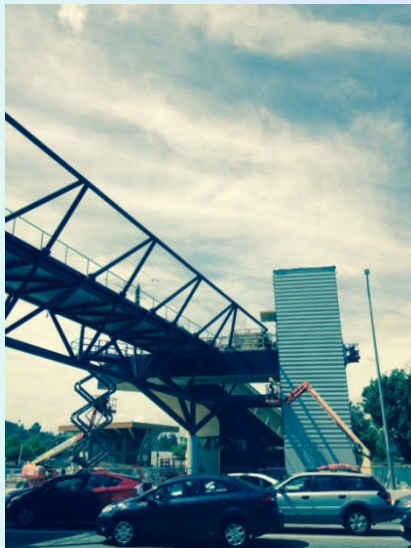
	Current	Forecast
TOTAL COST (\$ mil)	29.6	29.6



## SCHEDULE

	Current	Forecast
REV. OPERATION	April 2016	April 2016

- Construction of the project forecasted to be complete by April 6, 2016 to coincide with opening of Harry Potter attraction.
- LOP budget revision approved by Board in March 2016.
- Remaining items to complete include punch list and close out of the contract with Griffith.



April 2016

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Possible problem



Major issue



Metro

# MRL-MOL N. HOLLYWOOD STATION WEST ENTRANCE



## BUDGET

	Current	Forecast
TOTAL COST (\$ mil)	23	23



## SCHEDULE

	Current	Forecast
REV. OPERATION	Jul 2016	Jul 2016

- Construction 67% complete
- Targeted completion by June 2016
- Mural Installation started
- Ongoing installation of Elevators, Escalators, Waterproof Membrane, Electrical Conduits, and Fire Protection Piping
- TVM and Fare-gates installation to start



April 2016

## Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro



Metro

Los Angeles County  
Metropolitan Transportation  
Authority  
One Gateway Plaza  
3rd Floor Board Room  
Los Angeles, CA

## Board Report

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**File #:** 2016-0295, **File Type:** Oral Report / Presentation

**Agenda Number:** 21.

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**CONSTRUCTION COMMITTEE  
APRIL 14, 2016**

**RECEIVE Oral Report by the Caltrans District Director on Delivery of Projects on I-5.**

# Caltrans District 7 - Corridor Report for I-5 North Projects

April 2016 @ Metro Construction Committee by Shirley Choate, District 7 Chief Deputy



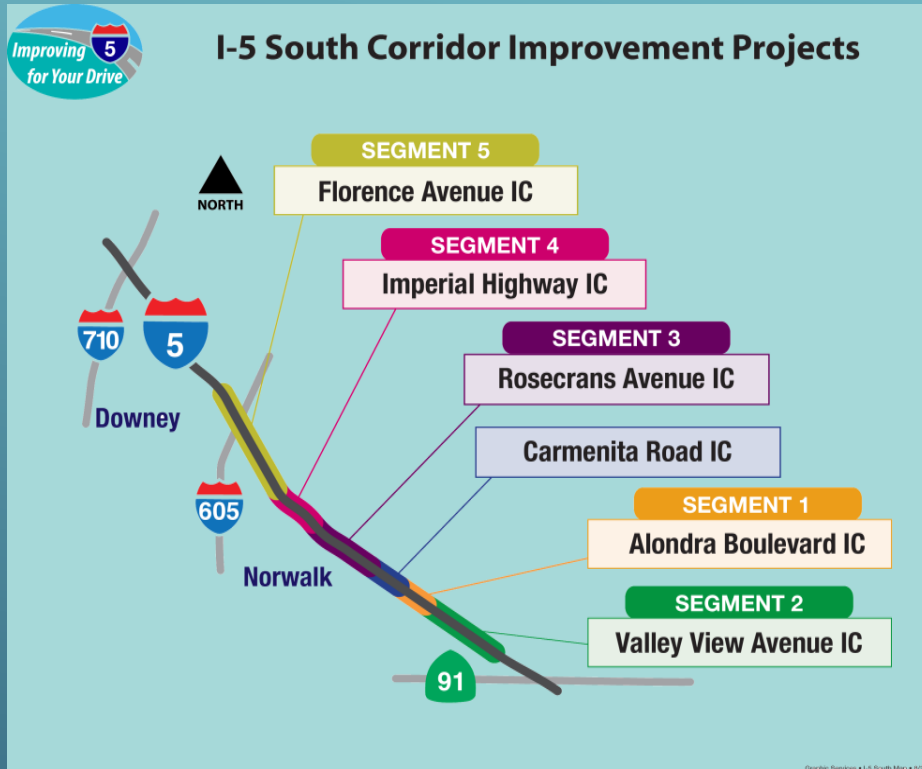
- Four projects, Segments 1-4, from SR 134 to SR 118, a total of ≈ 12 miles.
- Four lanes each direction. The freeway is being widened to add one HOV lane in each direction.
- Total I-5 North corridor budget is about \$886 million, \$501.6 million for Const Cap. Construction is within budget.
- All four segments are in the construction phase. **Segments 1 and 2 are substantially complete, the NB HOV lane opened March 2015 and the SB HOV lane opened May 27, 2015.**
- Empire IC Segment 3 and Southernmost Segment 4 HOV lane open-to-traffic target dates are for Winter 2018.
- Empire project has incentive provisions for the contractor to finish early.

## North I-5 Corridor

Segment	EA	Phase	Phase % Complete	Description	Project Length/ Miles	Construction Award Amount	Contract Start Date	Open to Traffic
1	1219U	Const	99%	Add HOV from Route 170 to Route 118	3.4mi	\$121 M	5/06/2010A	2015
2	1218V	Const	99%	Add HOV lanes from Buena Vista Street to Route 170	4.4mi	\$59 M	10/14/2010A	2015
3	1218W	Const	40%	Empire Interchange from south of Magnolia Blvd. to just north of Buena Vista Street	2.2mi	\$196 M	12/20/2012A	Winter 2018*
4	12184	Const	67%	Add HOV lane from Route 134 to south of Magnolia Blvd.	2.7mi	\$58 M	12/6/2010A	Winter 2018 *
*These will be opened jointly								

# Caltrans District 7 - Corridor Report for I-5 South Projects

April 2016 @ Metro Construction Committee by Shirley Choate, District 7 Chief Deputy



- Six projects including Carmenita Interchange and Segments 1 through 5, from OC County line to Interstate 605 and makes a total of approximately 7 miles.
- Three lanes in each direction. The freeway is being widened to add one general purpose lane and one HOV lane in each direction.
- The total I-5 South corridor budget is about \$1.88 billion with construction capital budget at \$674 million.
- 5 of 6 projects are in the construction phase, including Carmenita Interchange and Segments 1, 3, 4 and 5.
- **Segment 2 was advertised on March 7, 2016, bid opening on April 27, 2016.**
- **Ribbon-cutting for the entire Carmenita bridge, including all ramps, will be scheduled for Fall 2016.**

## South I-5 Corridor

Segment	EA	Phase	Phase % Complete	Description	Project Length/Miles	Construction Award Amount	Contract Start Date	Open to Traffic
1	21591	Const	99%	Add HOV and mix flow lanes, Alondra Blvd. Interchange	0.9mi	\$45 M	12/21/2011A	Winter 2019
2	2159U	Const	0%	Add HOV and mix flow lanes, Valley View Ave. Interchange	1.4mi	N/A	Summer 2016	Winter 2019
3	21593	Const	71%	Widen and Realign Freeway, Rosecrans Ave. Interchange	1.3mi	89 M	9/18/2012A	Winter 2019
4	21594	Const	62%	Add HOV and mix flow lanes, Imperial Highway Interchange	1.8mi	\$142 M	9/18/2012A	Winter 2019
5	21595	Const	21%	Add HOV and mix flow lanes, Florence Ave. Interchange	1.7mi	\$96 M	5/13/2014A	Winter 2019
Carmenita	2159C	Const	84%	Carmenita Interchange	1.2mi	\$102 M	9/13/2011A	Winter 2019



## Board Report

File #: 2016-0235, File Type: Project

Agenda Number: 22

### CONSTRUCTION COMMITTEE APRIL 14, 2016

**SUBJECT: DIVISION 20 PORTAL WIDENING AND TURNBACK FACILITY**

**ACTION: APPROVE FUNDING FOR THE DESIGN PHASE**

#### **RECOMMENDATION**

CONSIDER:

- A. ESTABLISHING a total budget of \$3.5 million for the **design phase of the Portal Widening and preliminary design of the Turnback Facility at Division 20** to accommodate system capacity need; and
- B. AMENDING the FY16 budget to include \$0.8M for start of design efforts.

#### **ISSUE**

As part of the Full Funding Grant Agreement for the Purple Line Section 1, the Federal Transit Administration (FTA) has required that Metro undertake certain core-capacity infrastructure improvements to the existing Purple and Red Line systems to operate at improved train frequencies (headways).

To achieve the required headway improvements for both the Metro Red and Purple Lines the subway Portal where trains enter and leave the rail storage and maintenance yard at Division 20 must be widened and track must be modified. In addition to the Portal Widening, a Turnback Facility must be constructed to improve turnaround times for subway trains entering and leaving service at Union Station. Staff is requesting Board authorization of \$3.5 million to establish a project for this work and to amend the FY 16 budget by \$0.8 million to initiate work.

#### **DISCUSSION**

The Full Funding Grant Agreement requires that core capacity upgrades to the combined Red/Purple Line system that include improved headway capability be achieved by the time that the Metro Purple Line Section 1 Project is opened for service in 2024. Several factors will influence Metro's ability to

design and construct infrastructure needed to achieve the required headway by 2024:

- Funding for the Environmental work, Real Estate, Design and Construction of the Portal and Turnback must be identified and allocated to the project.
- The Project must be environmentally cleared.
- Real estate requirements to temporarily relocate a business in order to construct the portal widening. A temporary location must be identified and brought to appropriate safety and security standards so that the business can proceed with their daily operations.
- Construction of the Portal Widening and Turnback Facility must be performed while the Red and Purple lines are under operation. Protection of existing track, train control and communication systems will be required during the construction process. Limited work windows may also be required to allow for safe operations.
- A track welding area identified in the Purple Line Section 1 contract must be accommodated to prevent delays to the Purple Line Section 1 contract.

In order to meet all of these requirements, staff recommends use of a design-bid-build delivery method (Attachment A). Staff also recommends a phased approach (Attachment B - Preliminary Schedule) for the design, construction and funding of the project as follows:

**Phase 1 - Design of the Portal Widening and Preliminary Design of the Turnback Facility:**

Secure funding of \$3.5M for design of the Portal Widening and preliminary design of the Turnback Facility. Phase 1 will include procurement of a design consultant for 100% design of the Portal Widening and preparation of bid documents for the Portal Widening. Environmental services and construction cost estimate development will also be included as part of the design scope of work. A full Life of Project budget will be established prior to award of a construction contract in phases 2 and 3.

**Phase 2 - Construction of the Portal Widening and 100% Design of the Turnback Facility:**

Secure funding (based on Phase 1 final design) for construction of the Portal Widening, as well as funding for 100% design of the Turnback Facility. Proceed with acquisition of real estate, procurement of a construction management consultant, and construction of the Portal Widening. Complete final design of the Turnback Facility.

**Phase 3 - Construction of the Turnback Facility:** Secure funding (based on Phase 2 final design) for construction of the Turnback Facility. Procure a consultant for construction management of the Turnback Facility and proceed with bid, award and construction of the Turnback Facility.

## **DETERMINATION OF SAFETY IMPACT**

There are no safety impacts as a result of this authorization.

## **FINANCIAL IMPACT**

Upon approval of the recommendations, a project number and Life of Project Budget will be established to execute the design and procurement efforts. The design services budget will be programmed to the FY16 and FY17 budgets under Cost Center 8510 - Construction Procurement, Account number 50316 - Professional and Technical Services and task number 2.2.01 - Preliminary Engineering and Final Design.

Since this is a multi-year project, the cost center manager, project manager, and the Executive Director, Program Management would be responsible for budgeting project costs in future fiscal years. The project expenditure and funding plan for the Design Phase is included in Attachment C.

### **Impact to Bus and Rail Operating and Capital Budget**

The FY16 budget amendment funding for this action will come from Measure R (MR) Admin 1.5%, Proposition A (PA), Proposition C (PC) and TDA Planning sources. The funding sources are required as a result of this effort related to the FFGA Application associated with the Westside Purple Line Extensions (WSE PLE) project. Staff will continue to pursue resolution of this item as it relates to the FFGA requirements. The MR/PA/PC/TDA Planning funds are eligible for planning and preliminary engineering through design. They are not eligible for bus and rail capital and operating expense. They do not affect other Operations or Capital funding sources. No other funding sources were considered.

## **ALTERNATIVES CONSIDERED**

The Board could defer the design and construction of the Portal Widening and Turnback Facility until completion of Sections 2 or 3 of the Purple Line. This approach is not recommended as it has the potential for increased conflicts between operations and construction as more Red and Purple Line trains are introduced into the tunnel by the more frequent headways.

## **NEXT STEPS**

With Board approval, the budget will be amended and staff will initiate the procurement process and design of the Portal Widening. Upon completion of design, staff will identify the necessary funding for construction of the project and return to the Board with a recommended funding plan and schedule

for construction .

**ATTACHMENTS**

Attachment A - Analysis of Design-Bid-Build delivery method

Attachment B - Portal Widening and Turnback Facility Preliminary Phased Schedule


Attachment C - Portal Design Cashflow FY16 and FY107

Prepared by:

Rick Meade, Executive Officer (213) 922-7917

Reviewed by:

Richard Clarke, Executive Director, Program Management (213) 922-7557



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Phillip A. Washington  
Chief Executive Officer



**Metro**

## Attachment A

# Interoffice Memo

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**Date** February 9, 2016

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**To** Richard Clarke

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**From** Rick Meade

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**Subject** Portal/Turnback Facility - Analysis of Delivery Method

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Rick,

Design-Build and Design-Bid-Build delivery methods were considered for Portal Widening and Turnback Facility.

The advantages of design-build delivery are time savings gained by starting construction before the design is complete and transfer of risk to the contractor. Disadvantage of this delivery method for this project are highlighted by three primary challenges:

1. Phasing and access to the work due to the requirement to build this project while Red and Purple lines are under operation.
2. Real Estate is in conflict with the project boundaries and will need to be acquired on a temporary basis.
3. Access is constrained to the work area due to requirements of the Purple Line Section 1 Contract.

Design-Bid-Build delivery approach addresses these challenges.

1. Construction of the Portal and Turnback will be conducted while the Red Line is operating. Phasing of the construction will be critical to prevent impacts to operations. A completed design will provide greater understanding of phasing and necessary protection of existing facilities for utility conflicts, demolition, excavation and building of infrastructure directly adjacent to working rail lines. A fully designed project will provide a complete picture of physical coordination with Operations through each construction activity.
2. The tunnel portion of the project is located below an existing towing company. In order to construct the Portal Widening, the towing company will have to be relocated temporarily. A design-bid-build approach will allow the design of shoring, excavation and construction of the tunnel structure to more clearly define temporary property, schedule and phasing requirements.

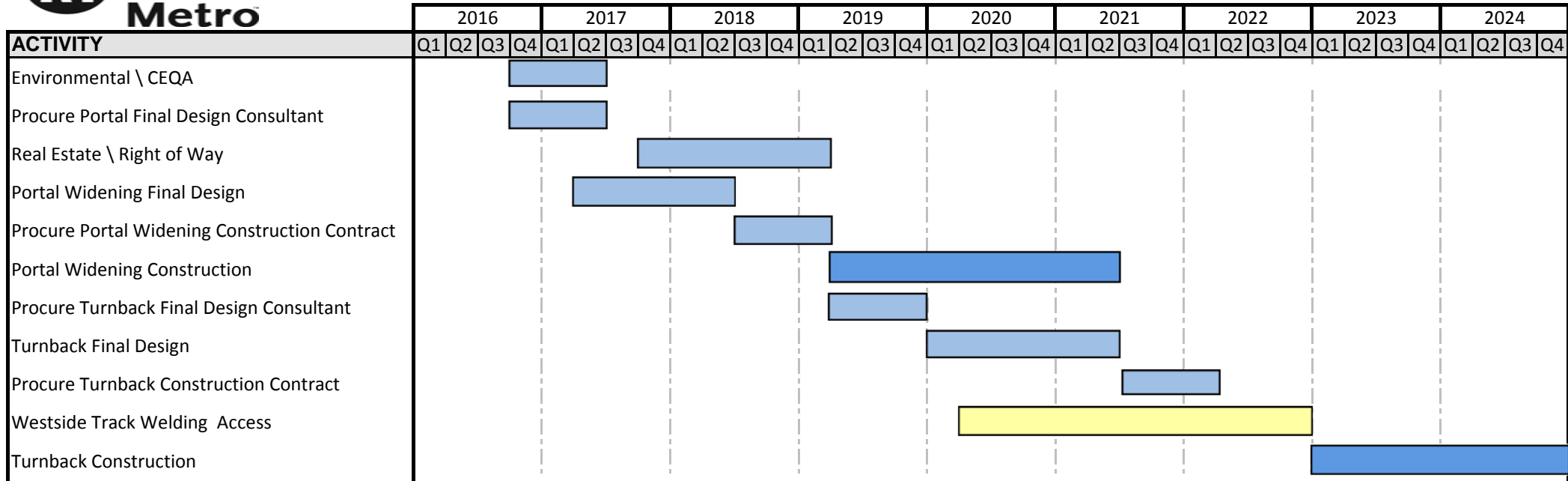
In addition, the towing company must be moved temporarily to another property as a temporary facility. A Design-Bid-Build approach will allow time during the design phase for Metro to secure another facility.

3. Purple Line Section 1 has committed to providing a laydown and rail welding area in a location that conflicts with construction of the Turnback Facility. This commitment adds time to the Portal/Turnback schedule that negates any time gained by a Design-Build strategy and provides very adequate time to develop a complete design for the project.

Staff recommends a Design-Bid-Build delivery approach.



## Portal Widening & Turnback Facilities



Schedule calendar is fiscal year based

**Preliminary Draft - schedule subject to change**

March/16/2016

# Attachment C

## Division 20 Portal Widening and Preliminary Engineering for Turnback

Cash Flow FY16 and FY17

Item							FY 16	FY 17
	SCC	Task Number	Cost Center	Account Number	Element of Work	Division 20 Portal Widening		
1	80	2.2.01	8510	50316	Design & PE (Portal)	\$ 2,500,000	\$ 500,000	\$ 2,000,000
2	80	3.1.01	8510	Various	Metro Staff Labor (Ops, Wayside, IT, Engr, Comm)	\$ 1,000,000	\$ 300,000	\$ 700,000
					<b>FY Totals</b>	<b>\$3,500,000</b>	<b>\$ 800,000</b>	<b>\$ 2,700,000</b>