

Metro

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



Agenda - Final

Thursday, June 15, 2017

9:00 AM

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

Construction Committee

Sheila Kuehl, Chair

Robert Garcia, Vice Chair

Mike Bonin

Jacquelyn Dupont-Walker

Janice Hahn

Carrie Bowen, non-voting member

Phillip A. Washington, Chief Executive Officer

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(ALSO APPLIES TO BOARD COMMITTEES)

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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.

Notwithstanding the foregoing, and in accordance with the Brown Act, this agenda does not provide an opportunity for members of the public to address the Board on any Consent Calendar agenda item that has already been considered by a Committee, composed exclusively of members of the Board, at a public meeting wherein all interested members of the public were afforded the opportunity to address the Committee on the item, before or during the Committee's consideration of the item, and which has not been substantially changed since the Committee heard the item.

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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.

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- a. Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
- b. A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
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NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA

CALL TO ORDER**ROLL CALL**

20. **SUBJECT: WESTSIDE PURPLE LINE EXTENSION PROJECT - SECTION 3** [2017-0311](#)

AUTHORIZE the CEO to execute Contract Modification No. 62 to Contract No. PS43502000 with WSP USA Inc. (WSP), formerly Parsons Brinckerhoff (PB) Inc., to provide continued engineering support services during solicitation processes and design support services during construction for Section 3 of the Westside Purple Line Extension Project, from July 2017 through June 2019, in an amount not-to-exceed \$15,028,122, increasing the total contract value from \$199,649,637 to \$214,677,759.

Attachments: [Attachment A - Procurement Summary.pdf](#)
[Attachment B - Contract Modification -Change Order Log.pdf](#)
[Attachment C - DEOD Summary.pdf](#)

21. **SUBJECT: WESTSIDE PURPLE LINE EXTENSION PROJECT - SECTION 3** [2017-0317](#)

AUTHORIZE the Chief Executive Officer (CEO) to enter into a stipend agreement with each of the unsuccessful responsive proposers for **Section 3 of the Westside Purple Line Extension Project for the Stations Trackwork and Systems** design build contract, in an amount of \$1,250,000, to be paid to the unsuccessful responsive and responsible proposers.

22. **SUBJECT: GOLD LINE FOOTHILL EXTENSION PHASE 2A REDUCTION IN LIFE OF PROJECT BUDGET** [2017-0343](#)

CONSIDER:

- A. APPROVING a Life-of-Project (LOP) budget decrease in the amount of \$26,967,000 for the Gold Line Foothill Extension Phase 2A Project and update the LOP to \$714,033,000; and
- B. AUTHORIZE allocation of \$26,967,000 of available non-federal funds from Gold Line Foothill Extension Phase 2A to Gold Line Foothill Extension Phase 2B

Attachments: [Foothill Attachment A Cash Flow for Decrease LOP 051017](#)

23. **SUBJECT: ORAL REPORT OF THE PROGRAM MANAGEMENT CHIEF OFFICER** [2017-0381](#)

RECEIVE oral report by the Program Management Chief Officer.

Attachments: [Oral report by the Program Management Chief Officer - June 2017](#)

39. **SUBJECT: FOOTHILL GOLD LINE EXTENSION PHASE 2B** **2017-0338**

CONSIDER:

- A. APPROVING a Life of Project Budget for the Foothill Gold Line Extension Phase 2B Light Rail Project in the amount of \$1,406,870,758.
- B. AUTHORIZING the Chief Executive Officer to enter into a Project Funding Agreement (Attachment A) with the Foothill Gold Line Extension Construction Authority including provisions to apply for \$249.2 million in Transit and Intercity Rail Capital Program funds as a Metro priority.
- C. AUTHORIZING the Chief Executive Officer to enter into a Master Cooperative Agreement (Attachment B) with the Gold Line Foothill Extension Construction Authority.

Attachments: ATTACHMENT A_Foothill Phase 2B Final Draft Funding Agreement
ATTACHMENT B_Phase 2B Master Cooperative Agreement
ATTACHMENT C_Measure R Cost Management Process and Policy Analysis C
ATTACHMENT D - Expenditure Plan - Cash Flow budget

40. **SUBJECT: SUPPLEMENTAL ENGINEERING SERVICES (SES) CONSULTANT SERVICE CONTRACT** [2017-0262](#)

AUTHORIZE the Chief Executive Officer to EXECUTE:

- A. a three-year cost plus fixed fee type contract for AE36687 with Mott MacDonald Group for Supplemental Engineering Services for Engineering Design of Rail and Highway Transportation Projects on a task order basis, plus two one-year options. The amount for the three years base contract is \$15,000,000 and the amount for the two one-year options is \$5,000,000 for a total contract value not to exceed \$20,000,000; subject to resolution of protest(s), if any; and
- B. individual Task Orders and changes within the Board approved

contract amount.

Attachments: [Attachment A-Procurement Summary](#)
 [Attachment B-DEOD Summary](#)

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.



Board Report

File #: 2017-0311, File Type: Budget

Agenda Number: 20.

CONSTRUCTION COMMITTEE JUNE 15, 2017

SUBJECT: WESTSIDE PURPLE LINE EXTENSION PROJECT - SECTION 3

ACTION: AUTHORIZE THE CHIEF EXECUTIVE OFFICER (CEO) TO EXECUTE CONTRACT MODIFICATION

RECOMMENDATION

AUTHORIZE the CEO to execute Contract Modification No. 62 to Contract No. PS43502000 with WSP USA Inc. (WSP), formerly Parsons Brinckerhoff (PB) Inc., to provide continued engineering support services during solicitation processes and design support services during construction for Section 3 of the Westside Purple Line Extension Project, from July 2017 through June 2019, in an amount not-to-exceed \$15,028,122, increasing the total contract value from \$199,649,637 to \$214,677,759.

ISSUE

On February 24, 2016, the Metro Board of Directors approved to advance the project delivery of the Westside Purple Line Extension Project - Section 3 (Century City to Westwood/VA Hospital) as part of a larger package of the Shovel Ready Program of Projects which included the advancement of other Measure R Projects. The “shovel-ready” state allowed Metro to take advantage of opportunities to advance into the Project design and construction stage to expedite project delivery.

Advancement of the Section 3 Project allowed WSP to provide continued advanced preliminary engineering, design for advanced relocation of utilities, engineering support services during solicitation processes, and design support services during construction, as staff continued to pursue local, state and federal funding sources to move the Project forward. Included within the scope of services, was a commitment by WSP to meet or exceed Disadvantage Business Enterprise (DBE) goals and adopt a formal mentor protégé program as part of enhanced business participation. Current DBE participation on the contract value of \$199,649,637 is 25.57%, which exceeds the goal by 9.2%. WSP’s current commitment for Contract Modification No. 62, Section 3 Project scope of work is 32.90%.

DISCUSSION

The advancement of the Section 3 Project preliminary engineering and the design for advanced relocation of utilities, coupled with the passage of Measure M, have allowed staff to solicit the procurements of two construction contracts - (1) Advanced Utility Relocations and (2) Tunnels. Staff has also solicited the procurement of a Construction Management Support Services (CMSS) consultant, and plans to solicit the procurement of the Stations, Trackwork, and Systems design-build contract later this year.

On April 28, 2017, the CEO requested approval, from the Federal Transit Administration (FTA), to enter into the Engineering Phase, which is one of the initial steps towards receiving a Full Funding Grant Agreement (FFGA). Prior to receiving the FFGA, the CEO will be requesting approval, from the FTA, of a Letter of No Prejudice (LONP), which will allow advancing the award of the Tunnels Contract.

The recommended Board action will provide sufficient contract funding for WSP services through June 2019, when the Project is anticipated to be transitioning into the final design and construction stage of the Stations, Trackwork, and Systems design-build contract. Approval of the recommended action will enable the designs to be advanced to a sufficient level for procurement and to provide critical design support throughout the procurement process and start of design build work for the selected contractors. Retaining the services of this consultant will also provide continuity and consistency in design.

An important lesson learned on previous projects including section 1 of the Purple Line is that an upfront investment in design pays dividends in fewer change orders and issues with unknown utilities. It also enables Metro to address stakeholder concerns prior to award of a construction contract when it is more difficult to implement changes. The recommended action is consistent with that lesson learned.

Future work will be funded on a 12 to 24 month basis, depending on the phase of the project. This approach will result in more accurate budgeting in future years, while providing better control over the management of consultant services.

DETERMINATION OF SAFETY IMPACT

This Board action will not have an impact on established safety standards for Metro's construction projects.

FINANCIAL IMPACT

Funds are included in the FY18 budget under Project 865523 Westside Purple Line Extension Project - Section 3, in Cost Center 8510 (Construction Project Management), and Account No. 50316 (Professional and Technical Services). Since this is a multi-year project, the Chief Program Management Officer and the Project Manager will be responsible for budgeting costs in future years.

Impact to Budget

The sources of funds for the recommended action are Measure R 35% and Measure M 35%. The approved FY18 budget is designated for the Westside Purple Line Extension Project - Section 3 and does not have an impact to operations funding sources. These funds were assumed in the Long Range Transportation Plan for the Westside Purple Line Extension Project. This Project is not eligible for Propositions A and C funding due to the proposed tunneling element of the Project. No other funds were considered.

ALTERNATIVES CONSIDERED

The Board could decide to not approve the recommended Contract Modification. This is not recommended because the extension of WSP's services will provide the continuity of engineering services involving qualified and knowledgeable personnel that are part of the Westside Purple Line Extension Integrated Project Management Office.

NEXT STEPS

After Board approval and execution of the Contract Modification, staff will direct the consultant to continue providing engineering support services during solicitation processes and design support services during construction of the Westside Purple Line Extension Project - Section 3.

ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - Contract Modification/Change Order Log

Attachment C - DBE Participation

Prepared by:


Michael McKenna, Executive Officer, Program Management (213) 312-3132

Rick Wilson, Deputy Executive Officer, Program Control (213) 312-3108

Reviewed by:

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

Debra Avila, Chief Vendor/Contract Management Officer, (213) 418-3051



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

WESTSIDE PURPLE LINE EXTENSION PROJECT – SECTION 3
PS43502000

1.	Contract Number: PS43502000		
2.	Contractor: WSP USA Inc.		
3.	Mod. Work Description: Continue engineering support services during solicitation processes and final design, and design support services during construction for Section 3 of the Westside Purple Line Extension Project		
4.	Contract Work Description: Engineering support services during solicitation processes and final design, and design support services during construction		
5.	The following data is current as of: May 3, 2017		
6.	Contract Completion Status		Financial Status
	Contract Awarded:	6/8/07	Contract Award Amount: \$3,654,061
	Notice to Proceed (NTP):	7/16/07	Total of Modifications Approved: \$195,995,576
	Original Complete Date:	9/16/08	Pending Modifications (including this action): \$15,028,122
	Current Est. Complete Date:	6/30/19	Current Contract Value (with this action): \$214,677,759
7.	Contract Administrator: Zachary Munoz		Telephone Number: (213) 922-7301
8.	Project Manager: Michael McKenna		Telephone Number: (213) 312-3132

A. Procurement Background

This Board Action is to approve Contract Modification No. 62 to be issued in support of Westside Purple Line Extension Section 3 Project to provide continued engineering support services during solicitation processes, and design support services during construction.

This Contract Modification will be processed in accordance with Metro's Acquisition Policy and the contract type is a cost plus fixed fee.

The solicitation for Contract No. PS43502000 was an Architectural and Engineering (qualification-based) procurement process. This method requires that each of the responding firm's qualifications be evaluated, and the most qualified firm selected, followed by analysis of the selected firm's cost proposal and successful negotiations to enter in to the contract with the selected firm.

In June 2007, the Board authorized award of this Contract to Parsons Brinkerhoff WSP (recent name change to WSP USA Inc. (WSP)) for alternative analysis with three options for: Draft EIS/EIR/Advanced Conceptual Engineering, Final EIS/EIR, and Preliminary

Engineering in the amount of \$3,654,061 for the entire Westside Purple Line Project. In January 2009, the Board exercised the option for Draft EIS/EIR/Advanced Conceptual Engineering. In October 2010, the Board exercised options for Final EIS/EIR and Preliminary Engineering. In October 2011, the Board authorized WSP to enter the next phase of work, design support during construction. In April 2014, the Board authorized WSP to provide continued design support during construction for Section 1. In February 2015, the Board authorized WSP to provide continued advanced preliminary engineering, design for advanced relocation of utilities, engineering support service during the design-build solicitation process, and design support services during construction for Section 2. In December 2015, the Board authorized WSP to provide continued design support services during construction for Section 1. In February 2016, the Board authorized WSP to provide advanced preliminary engineering, design for advanced relocation of utility, engineering support services during solicitation processes, and design support services during construction for Section 3. In October 2016, the Board authorized WSP to provide continued design support services during construction for Section 2.

Refer to Attachment B for modifications issued to date and proposed modifications pending authorization.

B. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based upon fact-finding, clarifications of the scope of work, quantitative technical analysis, independent cost estimate, and cost/price analysis. This Contract Modification includes provisional indirect rates subject to adjustment upon completion of MASD’s final year-end incurred cost audit. The difference between the negotiated price and Metro’s ICE is the result of the required level of effort, and corresponding rates that were determined to be required after a technical evaluation of the Contractor’s proposal was performed approved by Metro’s Project Management.

Proposal Amount	Metro ICE	Negotiated Amount
\$16,930,000	\$15,647,000	\$15,028,122

CONTRACT MODIFICATION/CHANGE ORDER LOG
WESTSIDE PURPLE LINE EXTENSION PROJECT/
PS43502000

Mod. No.	Description	Status	Date Executed	Amount
1-8	Alternatives Analysis	Approved	9/1/09	\$27,515
9-20	Advanced Conceptual Engineering/Draft EIS/ EIR	Approved	9/16/10	\$18,590,710
21	Preliminary Engineering	Approved	11/1/10	\$43,632,826
22	Final EIS/EIR	Approved	11/1/10	\$4,761,377
23	Close-out Alternative Analysis	Approved	1/12/11	(\$31,300)
24	Additional Fault investigation – Transect 2	Approved	5/6/11	\$480,250
25	Risk Management Support	Approved	2/28/11	\$208,417
26	Additional Fault Investigation Transec 4	Approved	7/5/11	\$453,264
27	Century City Refined Ridership Forecast	Approved	4/13/11	\$22,985
28	Additional Rail Simulation Study	Approved	4/20/11	\$72,646
29	Revisions to Safety Security Manual	Approved	3/31/11	\$0
30	Oil Well Investigation Program	Approved	5/4/11	\$107,165
31	Additional Fault Investigation Transec 3	Approved	6/2/11	\$411,949
32	Additional Fault Investigation Transec 7	Approved	7/5/11	\$310,754
33	Historic Property Survey	Approved	5/13/11	\$46,442
34	Additional Fault Investigation Transec 6	Approved	8/9/11	\$102,054
35	Additional Station Entrance Report	Approved	8/9/11	\$119,074
36	Advance Preliminary Engineering	Approved	11/1/11	\$16,996,740
37	LADWP Utility Relocations	Approved	4/27/12	\$84,659
38	Title V1 Service Equity	Approved	4/17/12	\$51,185
39	Design Services for Exploratory Shaft	Approved	7/5/12	\$0
40	Period of Performance Extension	Approved	10/31/12	\$0
41	Bid Period Services	Approved	3/25/13	\$18,816,205
42	CANCELLED	Approved		
43	Advance Preliminary Engineering Section 2	Approved	4/22/13	\$8,836,296
44	Additional Borings	Approved	8/16/13	\$439,292
45	Additional Capacity Study	Approved	10/9/13	\$24,030
46	Ventilation Study	Approved	12/18/13	\$470,527
47	Additional AUR Work	Approved	2/11/14	\$493,563
48	Design Support Services During Construction FY 15	Approved	5/30/14	\$11,657,611
49	Period of Performance Extension	Approved	6/26/14	\$0
50	New Starts Support Section 2	Approved	8/11/14	\$357,054
51	Section 2 Station Area Planning	Approved	8/21/14	\$126,728
52	Continued Advanced Preliminary Engineering Section 2	Approved	3/30/15	\$20,820,226
53	Utility Engineer Support	Approved	12/23/14	\$358,798
54	Period of Performance Extension	Approved	12/23/14	\$0
55	Period of Performance Extension	Approved	12/23/14	\$0
56	Period of Performance Extension	Approved	12/24/14	\$0
57	Design Support Services During Construction Section 1	Approved	12/21/15	\$9,282,218

Mod. No.	Description	Status	Date	Amount
58	Advanced Preliminary Engineering, Design for Advanced Relocation of Utilities, Engineering Support Section 3	Approved	3/24/16	\$28,085,033
59	Period of Performance Extension	Approved	7/13/16	\$0
60	Design Support Services During Construction Section 2	Approved	11/29/16	\$9,551,411
61	Design Support Services During Construction Section 1	Negotiating		
62	Engineering Support Services During Solicitation and Design Support Services During Construction Section 3	Pending		\$15,028,122
63	Re-Applying Demand Model for WPLE	Approved	4/6/17	\$227,872
	Modification Total:			\$195,995,576
	Original Contract:			\$3,654,061
	Total:			\$214,677,759

DEOD SUMMARY

WESTSIDE PURPLE LINE EXTENSION PROJECT – SECTION 3
PS43502000**A. Small Business Participation**

Parsons Brinckerhoff (recent name change to WSP USA Inc. (WSP)) made a 23.41% Disadvantaged Business Enterprise Anticipated Level of Participation (DALP) commitment. The project is 86% complete and the current DBE participation is 25.57%. WSP is currently exceeding their DBE commitment.

Small Business Commitment	DBE 23.41%	Small Business Participation	DBE 25.57%
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	DBE Subcontractors	Ethnicity	% Committed	Current Participation¹
1.	Intueor Consulting	Subcontinent Asian American	2.28%	2.02%
2.	Kal Krishnan Consulting	Subcontinent Asian American	5.58%	0.99%
3.	LKG-CMC	Caucasian Female	7.27%	0.78%
4.	Terry A. Hayes	African American Female	2.99%	0.24%
5.	Wagner Engineering	Caucasian Female	5.29%	0.70%
6.	A Cone Zone (2nd Tier w/AMEC)	Caucasian Female	Added	0.83%
7.	Abadi–Abadi Consulting (ABCS)	Caucasian Female	Added	0.99%
8.	Advanced Technologies Lab. (2nd Tier w/AMEC)	Hispanic American	Added	0.16%
9.	Advantec Consulting Engineering	Asian Pacific American	Added	1.49%
10.	AP Engineering (2nd Tier w/AMEC)	Asian Pacific American	Added	0.16%

11.	Atlas Teknology Group	Asian Pacific American Female	Added	0.06%
12.	Atwell Consulting	Caucasian Female	Added	0.26%
13.	Barrio Planners	Hispanic American	Added	1.34%
14.	Capitol Government Contract Specialists	Hispanic American	Added	0.06%
15.	C&L Drilling (2nd Tier w/AMEC)	Caucasian Female	Added	0.65%
16.	Cogstone Resource	Caucasian Female	Added	0.17%
17.	Del Richardson	African American	Added	0.20%
18.	Diana Ho Consulting	Asian Pacific American	Added	0.01%
19.	Diaz Consultants	Hispanic American	Added	0.32%
20.	D'Leon Consulting	Hispanic American	Added	2.92%
21.	E.W. Moon	African American	Added	0.53%
22.	FPA Underground	Asian Pacific American Female	Added	0.64%
23.	Green Clean Water (2nd Tier w/AMEC)	Asian Pacific American	Added	0.48%
24.	IDC Consulting	Asian Pacific American Female	Added	0.44%
25.	J M Diaz, Inc.	Hispanic American	Added	0.09%
26.	JAD & Associates	Asian Pacific American	Added	0.82%
27.	Jet Drilling (2nd Tier w/AMEC)	Hispanic American	Added	0.19%
28.	Lenax Construction	Caucasian Female	Added	0.83%
29.	Martini Drilling (2nd Tier w/AMEC)	Hispanic American	Added	0.92%

30.	Melendrez (RELM)	Caucasian Female	Added	0.01%
31.	Parikh Consultants (2nd Tier w/AMEC)	Asian Pacific American	Added	0.74%
32.	RAW International	African American	Added	2.41%
33.	Roy Willis	African American Female	Added	0.01%
34.	Safe Utility Exposure	Caucasian Female	Added	1.26%
35.	Safeprobe	Asian Pacific American	Added	0.63%
36.	Universal Reproductions Inc.	Caucasian Female	Added	0.40%
37.	V&A Inc.	Hispanic American	Added	0.38%
38.	W2 Design	Asian Pacific American	Added	0.44%
39.	Wiltec (2 nd Tier 2/Fehr & Peers)	African American	Added	0.00%
	Total		23.41%	25.57%

¹Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

B. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this contract.

C. Prevailing Wage Applicability

Prevailing Wage requirements are applicable to this project. DEOD will continue to monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Living Wage Service Contract Worker Retention Policy

The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.



Board Report

File #: 2017-0343, File Type: Project

Agenda Number: 22.

**CONSTRUCTION COMMITTEE
JUNE 15, 2017**

SUBJECT: GOLD LINE FOOTHILL EXTENSION PHASE 2A REDUCTION IN LIFE OF PROJECT BUDGET

ACTION: REDUCE LIFE OF PROJECT BUDGET

RECOMMENDATION

CONSIDER:

- A. APPROVING a Life-of-Project (LOP) budget decrease in the amount of \$26,967,000 for the Gold Line Foothill Extension Phase 2A Project and update the LOP to \$714,033,000; and
- B. AUTHORIZE allocation of \$26,967,000 of available non-federal funds from Gold Line Foothill Extension Phase 2A to Gold Line Foothill Extension Phase 2B

ISSUE

Decrease Life-of-Project Budget

The Foothill Extension Phase 2A Funding Agreement allowed for acceleration of the Gold Line Foothill Extension Phase 2A project relative to the schedule identified in the Long Range Transportation Plan (LRTP) and the charging of \$27.4 million of interest due to that acceleration. The \$27.4 million of interest was included in the Life of Project Budget, raising the total Foothill Extension Phase 2A Life of Project Budget to \$741million.

Subsequent to increasing the Foothill Extension Phase 2A LOP by \$27.4 million to pay for interest due to acceleration, construction of the project proceeded on a non-accelerated schedule relative to the Long Range Transportation Plan, and only minimal interest attributable to acceleration was required, leaving a substantial portion of the \$27.4 million interest budget in place.

This Board Action requests reducing the Foothill Extension Phase 2A LOP by the amount left over and unused for interest due to acceleration and allocating those funds to the next Phase (2B) of the Foothill Extension from Azusa to Claremont.

BACKGROUND

At the March, 2011 Los Angeles Metro Regular Board Meeting the Board approved allocation of \$27.4 million for the Gold Line Foothill Extension Phase 2A Project to cover the estimated interest cost to meet a forecasted accelerated schedule.

Construction of the project was completed in September 2015 and opened for service in March 2016 in line with the original schedule that was identified in the LRTP. Actual acceleration of the project was minimized, and therefore only a small portion of the estimated \$27.4M in interest cost was needed. The interest attributable to acceleration actually required amounted to \$433,000, leaving a balance in the Metro Holdback budget for such acceleration costs of \$26,967,000.

Given these funds are left over and not used for the Phase 2A project, staff is requesting a reduction in the LOP for the Gold Line Foothill Phase 2A Project in the amount of \$26,967,000. Further, staff is requesting authorization for these available non-federal funds to remain in the Gold Line Foothill Extension Corridor and be allocated for use on the Gold Line Foothill Extension Phase 2B from Azusa to Claremont. These actions are consistent with Metro's funding agreement with the Gold Line Foothill Authority for Phase 2A.

FINANCIAL IMPACT

The previous acceleration related interest to be charged to the project budget of \$27.4 million will be decreased by \$26.967 as the actual acceleration related interest to be charged to the project is \$0.433 million. The LOP and interest allocation reduction will be applied to cost center 8510, project 860200, Metro Gold Line Foothill Extension, account 51121 Interest Bond Interest Expense.

Upon Board Approval, the decrease in LOP and savings from Phase 2A will be designated as Measure R 35% and/or Proposition C or other available non-federal funding to be applied to the LOP of the Phase 2B Foothill Extension project from Azusa to Claremont.

ALTERNATIVES CONSIDERED

The Board may decide to leave the funds in the Gold Line Foothill Phase 2A project. This option is not recommended given that doing so would be inconsistent with Metro's funding agreement for Phase 2A and the savings from the interest allocation in Phase 2A can be applied to the funding needs of the Phase 2B Foothill Extension to Claremont.

NEXT STEPS

Upon Board approval, staff will modify the Agreement to reflect the changes set forth in this board report. Funds in the amount of \$26,967,000 will be reallocated from Gold Line Foothill Extension Phase 2A and applied to Gold Line Foothill Extension Phase 2B.

ATTACHMENTS


Attachment A - Cashflow Table

Prepared by:

Rick Meade, Executive Officer (213) 922-7917

Reviewed by:

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



Phillip A. Washington
Chief Executive Officer

ATTACHMENT A

**Metro Gold Line Foothill Extension
Expenditure Plan - Cost and Cash Flow Budget
(in millions of dollars escalated to the year of expenditure) Preliminary 05-10-17**

Uses of Funds	ACTUAL EXPENDED												
	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Subtotal Construction Authority costs		26.0060	81.1420	117.8470	168.4280	123.6392	44.2178	9.1920	0.0000	0.0000	0.0000	0.0000	570.4720
MTA Project Costs													
Subtotal MTA Project Costs	2.6280	18.7209	29.3248	-13.0050	6.5212	39.0059	42.7571	15.3821	1.8000	0.4330	0.0000	0.0000	143.5680
Total Project Cost	2.6280	44.7269	110.4668	104.8420	174.9492	162.6451	86.9749	24.5741	1.8000	0.4330	0.0000	0.0000	714.0400

*Cashflow subject to change after Fiscal Year '17 Expenditures are finalized



Board Report

File #: 2017-0381, File Type: Oral Report / Presentation

Agenda Number: 23.

CONSTRUCTION COMMITTEE JUNE 15, 2017

SUBJECT: ORAL REPORT OF THE PROGRAM MANAGEMENT CHIEF OFFICER

RECEIVE oral report by the Program Management Chief Officer.

DISCUSSION

- A. Update report covering the month of May 2017 by the Program Management Chief Officer; and
- B. At the January 2017 meeting, the Board authorized a one-year pilot program authorizing the CEO to negotiate and execute project-related agreements, including contract modification(s) up to the authorized Life of Project budget, to streamline project management of the four (4) major transit corridor projects (Crenshaw/LAX, Regional Connector, Westside Purple Line Extension Section 1 and 2 projects). In addition, staff was directed to provide monthly reports, that would include any pending project-related agreements, change orders/contract modifications and any significant changes to contingency.

Pursuant to the Board motion, staff has developed and begun reporting on cost contingency and contract change activity starting in the February 2017 Monthly Update to the Construction Committee. This new report includes a project cost contingency drawdown curve and allows the Board to see project-related and change activity. This report can be found in Attachment A.

At the conclusion of the one-year pilot program in January 2018, staff will report back to the Board on the time saved as result of this pilot program, and any lessons learned, and recommendations for the Board review and further direction.

ATTACHMENTS

Attachment A - Program Management Chief Officer's Report - JUNE 2017

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** - James Cohen, DEO Project Mgmt., (213) 922-7911

- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **Blue Line Projects** - Sam Mayman, EO Project Engr., (213) 922-7289
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213) 922-7592

Program Management Chief Officer's Report

Project Status Report

Presented By

Richard Clarke

Chief Program Management Officer











June 2017

Construction Committee

Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			The remaining cost contingency is below the 3% of total project budget reserve (\$47 million contingency remains). Contractor mitigating any potential schedule delays to maintain planned revenue service in October 2019.
Regional Connector			Project is proceeding consistent with schedule forecast and revised LOP budget as approved by the Board in January 2017.
Westside Purple Line Extension-Section 1			Project is 20% complete, no significant issues.
Westside Purple Line Extension-Section 2			Notice to Proceed for the Design/Build Contract issued on April 26, 2017.
Patsaouras Plaza			Schedule negotiations in progress regarding revised substantial completion date of November 2018.

June 2017



On target



Possible problem



Major issue



Metro 2

Construction Committee

Los Angeles County Metropolitan Transportation Authority

CRENSHAW/LAX TRANSIT PROJECT

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

◇ SCHEDULE	Current	Forecast
REVENUE OPERATION	Oct 2019	Oct 2019

- Overall project progress is 65% complete and contractor is mitigating any potential schedule delays.
- Project cost contingency has dropped below 3% budget reserve level and minimal schedule contingency.
- Continuing concrete placements for I-405 bridge structure.
- All six underground structures on schedule.
- Continuing street and utility work in Park Mesa Heights area.
- Southwestern Yard contractor continues main shop pits and foundation construction.



Preparing for a deck pour on the I-405 bridge structure.



Installation of form work for TC&C room at Hyde Park Station.

June 2017



On target



Possible problem



Major issue



Metro 3

Construction Committee

Los Angeles County Metropolitan Transportation Authority

REGIONAL CONNECTOR TRANSIT CORRIDOR

OK BUDGET

	Current	Forecast
TOTAL COST	\$1,810M	\$1,810M

* Includes Board approved LOP plus Finance costs.

OK SCHEDULE

	Current Dec 2021	Forecast Dec 2021
REVENUE		
OPERATION		

- Overall Project Progress is 35%.
- Tunnel Boring Machine(TBM) mining operations continue; over 60% of first tunnel drive complete.
- Successfully mined beneath existing Red Line Tunnels.
- Steady State Configuration and 2nd/Spring Restoration complete. Station excavation and utility hanging continues at Broadway Station.
- Waterline cut-overs on Flower Street are complete. Pile and deck beam installation are ongoing.
- Preparations to receive TBM at 2nd/Hope Station on June 1, 2017.
- 6th/Flower power asset relocation designs advancing through collaborative efforts.
- Planning and permitting for extended closure of 6th Street traffic flows near final.



Installing/Staging Reception Cradles in 2nd/Hope Station



Waterline 12" tie-in work on Flower Street

June 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 4

WESTSIDE PURPLE LINE EXTENSION – SECTION 1

BUDGET

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

* Includes Board approved LOP plus Finance costs.

SCHEDULE

	Current	Forecast
REVENUE OPERATION	Oct 2024 FFGA	Nov 2023

- Overall Project Progress is 20% complete.
- Excavation for the Wilshire/La Brea Station commenced on October 12, 2016 and continues beneath the deck panels. First level walers and struts continue to be installed and second level excavation has commenced. Station excavation is scheduled to complete by December 2017.
- The Wilshire/Fairfax pile installation operation completed on February 8, 2017. Street decking commenced on the weekend of February 11, 2017. There are 18 weekend closures planned for this operation. Ten weekend closures have been completed through May 15, 2017. The hanging of utilities with ventilation under the concrete deck panels has commenced.
- The Wilshire/La Cienega Station piling operation, which commenced on March 20, 2017, continues. Stage 1 piling along the south side of Wilshire Boulevard is scheduled to complete in June 2017.
- The jet grouting operation along Wilshire Boulevard at the cross passages continues. This work along the tunnel section from Wilshire/La Brea to Wilshire/Western is scheduled to continue through August 2017.
- Tunnel Boring Machines (TBMs) are being fabricated for delivery at the end of 2017. Tunneling is planned to start in 2018.



Under Deck Excavation at Wilshire/La Brea Station



Decking Operation at Wilshire/Fairfax Station

June 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 5

WESTSIDE PURPLE LINE EXTENSION – SECTION 2

OK BUDGET

	Current	Forecast
TOTAL COST*	\$2,530M	\$2,530M

* Includes Board approved LOP and Finance charges.

OK SCHEDULE

	Current	Forecast
REVENUE	Dec 2026	Aug 2025
OPERATION	FFGA	

- Notice to Proceed for the Design/Build contract was issued on April 26, 2017.
- Construction of the telecom joint trench is proceeding in Century City. Duct bank work will complete in June 2017 and subsequent cable pulling/splicing completion is anticipated in September 2017.
- Advanced utility relocations are anticipated to begin at the Wilshire/Rodeo Station in July 2017.
- Received COBH staff concurrence on final design plans. Beverly Hills City Council approval for the construction permit is anticipated in June 2017.
- Negotiations for a Memorandum of Agreement(MOA) governing utility work began in March 2017 and is continuing.



Telecom Joint Trench Construction along Constellation Boulevard

June 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 6

PATSAOURAS PLAZA BUSWAY STATION

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

◇ SCHEDULE		
	Current	Forecast
SUBSTANTIAL COMPLETION	Nov 2018	Nov 2018

- Vignes On/Off ramp closed January 3, 2017 to allow for utility relocation and foundation work to start.
- Bridge overhead demolition, utility relocation, and foundation construction is ongoing.
- Ramirez St/Center St closures have been approved by City, with Ramirez closure expected in May 2017.
- Drilling of wet piles started March 16, 2017 and is progressing as expected.
- Schedule negotiations in progress to determine revised substantial completion date due to delayed start.



Aerial view of site



Bent 2 and 3 Completed Piles



Setting and Pouring Bent 4

June 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 7

METRO BLUE LINE PROJECTS

<u>Project Name</u>	Budget	Percent Completed	Forecast Completion	Status
• Station Refurbishment	\$30.4M	100%	Completed	OK
• Pedestrian Gates	\$30.2M	75%	Oct 2017	OK
• City of Long Beach Fare Gates Design (PE)	\$7M*	85%(PE)	July 2017	OK
• Blue Line Rehabilitation (OCS, Signals, Div. 11)	\$119M*		Aug 2020	
Total: \$186.6M				



*Budget Estimate

June 2017



On target



Possible problem



Major issue



Metro

Construction Committee

Los Angeles County Metropolitan Transportation Authority

Crenshaw/LAX Transit Project

Change Activity

April 2017

Change Notice #	Description	Number of Mod/Change Orders	Cost Value
-----------------	-------------	-----------------------------	------------

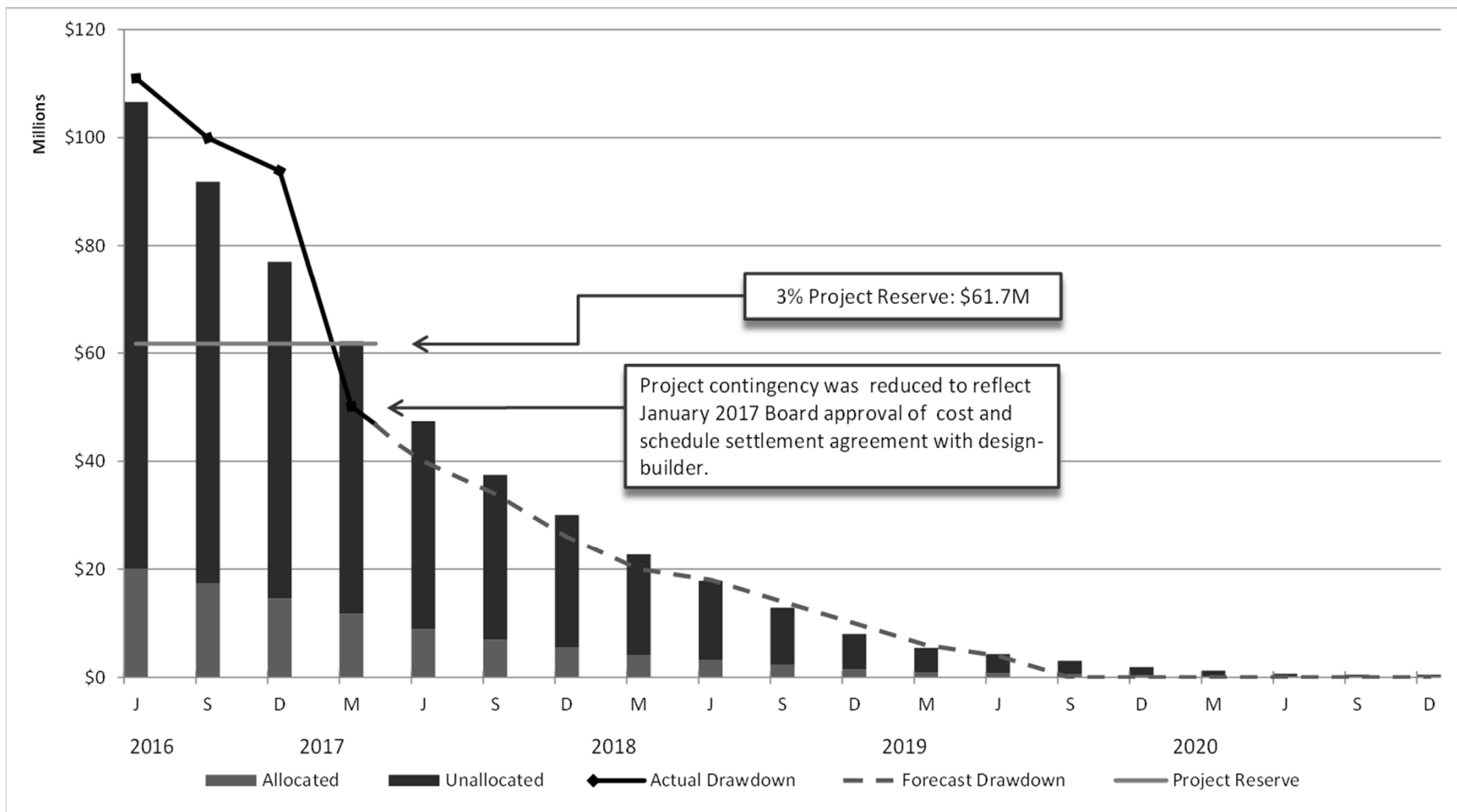
DESIGN BUILD CONTRACT			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS		279	\$ 68,543,273
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST		16	\$ 257,109
CONTRACT C0988			
MOD 00202.1	Turnback and Speed Restrictions		Less than \$1 million
MOD 00250	Clarify Rail Welding Inspection Req.		Less than \$1 million
MOD 00256	Black Diamond Vault 5436 Crenshaw Bl		Less than \$1 million
MOD 00260	Support SCGC- Abandon 2" Gas at Brynh		Less than \$1 million
MOD 00266	Cable Transmission System Update		Less than \$1 million
MOD 00271	Clarify Integration with MGL-Design		Less than \$1 million
MOD 00272	Expo Park and Ride Lot Deletion-Dsgn		Less than \$1 million
MOD 00273	AG-1 Hinge 18 Joint Seal Blockout		Less than \$1 million
MOD 00234	LADOT Fiber Optic Cable Betterment		Less than \$1 million
MOD 00269	Remove Trees over MWD Easement		Less than \$1 million
MOD 00270	Unit Rates for Incidental Const Work		Less than \$1 million
CO 00129	Elimination Crosver Sta 56+57.50		Less than \$1 million
CO 00136	Relocate Qwest Pullbox at Hindry Ave		Less than \$1 million
CO 00140	Disp Remove Contam. Soil STA 182+25		Less than \$1 million
CO 00159	MRDC - Full Height Platform End Gate		Less than \$1 million
CO 00163	Added Crsovr N. Arbor Vitae-Spcl Tra		Less than \$1 million
TOTAL MODIFICATIONS AND CHANGE ORDERS		295	\$ 68,800,383

PROFESSIONAL SERVICES CONTRACTS			
Design Support Services During Construction (CONTRACT E0117)			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		42	\$ 59,217,720
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST		0	\$ 0
TOTAL MODIFICATIONS		42	\$ 59,217,720
Construction Management Support Services (CONTRACT MC069)			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		16	\$ 53,350,394
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST		0	\$ 0
TOTAL MODIFICATIONS		16	\$ 53,350,394

Crenshaw/LAX Transit Project

Project Cost Contingency Drawdown

April 2017



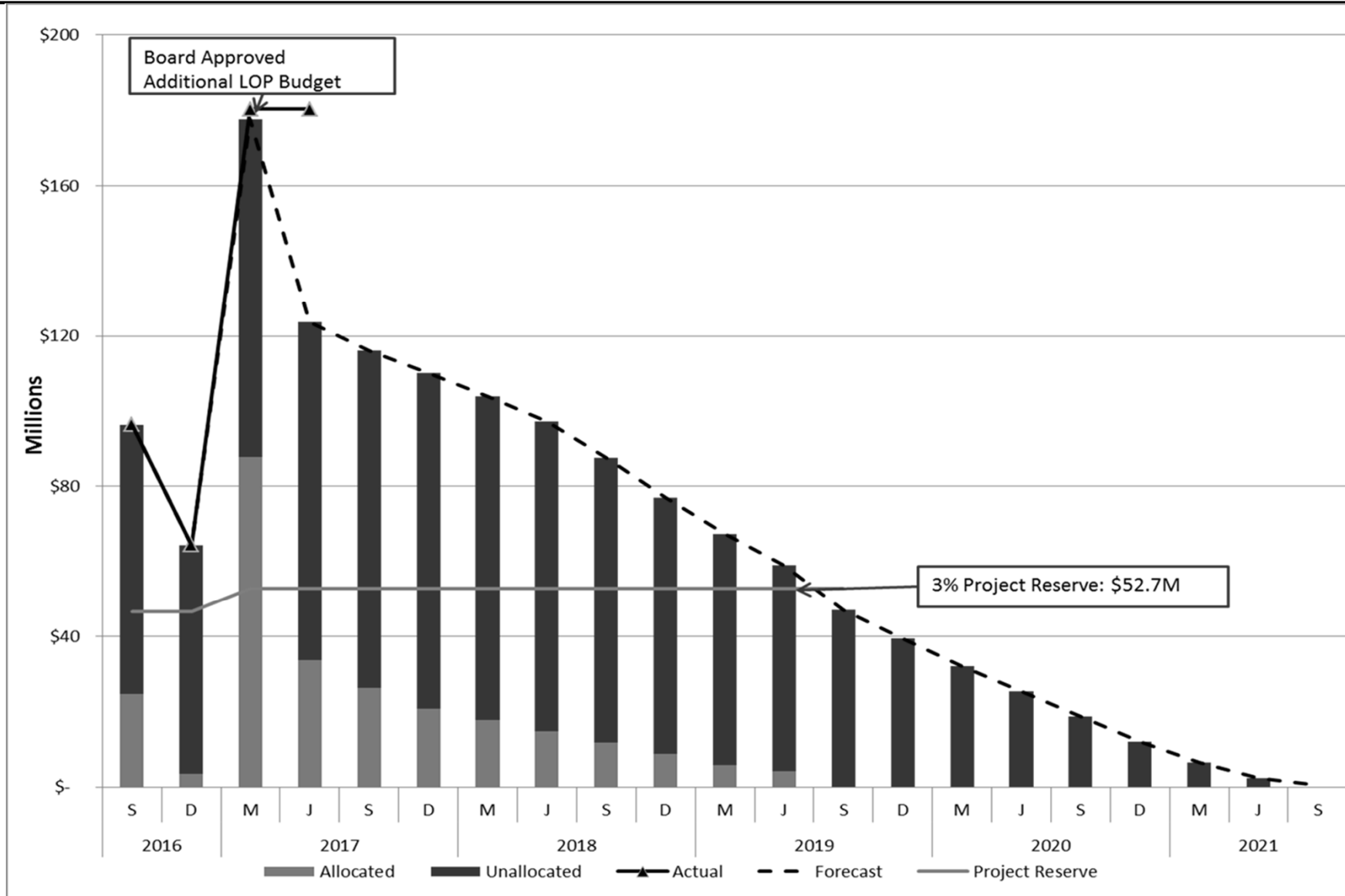
Regional Connector Change Activity

April 2017

Change Notice #	Description	Number of Mod/Change Orders	Cost Value
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:		80	\$ 127,780,039
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		31	\$ 83,608,626
	1st/Alameda Bumpout (Construction)		Less Than \$1 Million
	Flower Street Modification: future 2-way Traffic /Bumpout/Ped Lighting (Construction Only)		Between \$1 and \$5 Million
	Revise Metro Rail Station Signage and Incorporate Metro Underground Station Signage (Construction)		Less Than \$1 Million
	Add Wye Junction Fan Plant - Construction		Between \$10 and \$15 Million
	Fully Coupled Dynamic Analysis for SEM Cavern		Less Than \$1 Million
	Revisions to TPIS Requirements -Construction		Less Than \$1 Million
50.0	Commonwealth Agreement Provisions		Less Than \$1 Million
66.0	Flower Street Zanja Additional Potholing		Less Than \$1 Million
68.0	ATT Ductbank Relocation @ Hewitt		Less Than \$1 Million
78.0	Deputy Grading Inspector 2nd/Broadway Station SOE		Less Than \$1 Million
79.0	Flower Maintenance of Traffic (MOT) West Piles		Less Than \$1 Million
86.0	Support Veolia 24" Chilled Water Pipes at 2nd/Hope Station		Less Than \$1 Million
87.0	Option 3 Pedestrian Bridge Revisions / Broad Coordination (Construction)		Between \$1 and \$5 Million
99.0	1st/Central Station HMI Units for Escalator Controllers		Less Than \$1 Million
103.0	Add One Add 'I' VHF Radio Operational Channel - Construction		Less Than \$1 Million
105.0	Revise Flower SOE to Construct TBM Retrieval Pit (Construction)		Between \$1 and \$5 Million
106.0	Revisions to Metro Optical Network Switch		Less Than \$1 Million
	Revise Communication Radio System SOW (Construction)		Less Than \$1 Million
	Infrastructure for Insite Wireless in Tunnels		Less Than \$1 Million
	Add Perforated Metal Dropped Ceiling at 2nd/Hope Station Plaza - Construction		Less Than \$1 Million
107.0	Delays and schedule mitigation measures, electrical and water utility relocation costs, add 'I' fire life safety engineering and other design and construction changes		More than \$15 Million
111.0	Spray-on Acoustical Finishes Additional Quantities		Between \$1 and \$5 Million
113.00	Waterline Alignment Modifications on Flower		Less Than \$1 Million
	DSC - Miscellaneous buried object in tie-back removal		Less Than \$1 Million
	Revised Emergency Walkways at Curves (30" to 35") - Construction		Less Than \$1 Million
115.00	Wayfind Signage @ 2nd/Hope Ped Bridge - Design Only		Less Than \$1 Million
118.00	Extended Performance for Design		Between \$5 and \$10 Million
119.00	Metro Board Adopted Station Names		Less Than \$1 Million
121.00	Utility Conflicts during Decking at 4th & Flower St.		Less Than \$1 Million
	2nd & Spring Waterline DSC		Less Than \$1 Million
	Blue Light Stations		Less Than \$1 Million
TOTAL MODIFICATIONS/CHANGE ORDERS		111	\$ 211,388,665
PROFESSIONAL SERVICES CONTRACT			
Design Support Services During Construction			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		11	\$ 44,629,810
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST		1	\$ 0
28.0	No Cost - Period of Performance Extension thru 06/30/2018		\$ 0
TOTAL MODIFICATIONS		12	\$ 44,629,810
Construction Management Support Services			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		4	\$ 35,630,672
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST		1	\$ 0
11.0	No Cost - Period of Performance Extension of CMSS thru 06/30/2018		\$ 0
TOTAL MODIFICATIONS		5	\$ 35,630,672



Regional Connector Project Cost Contingency Drawdown



Westside Purple Line Extension – Section 1 Change Activity

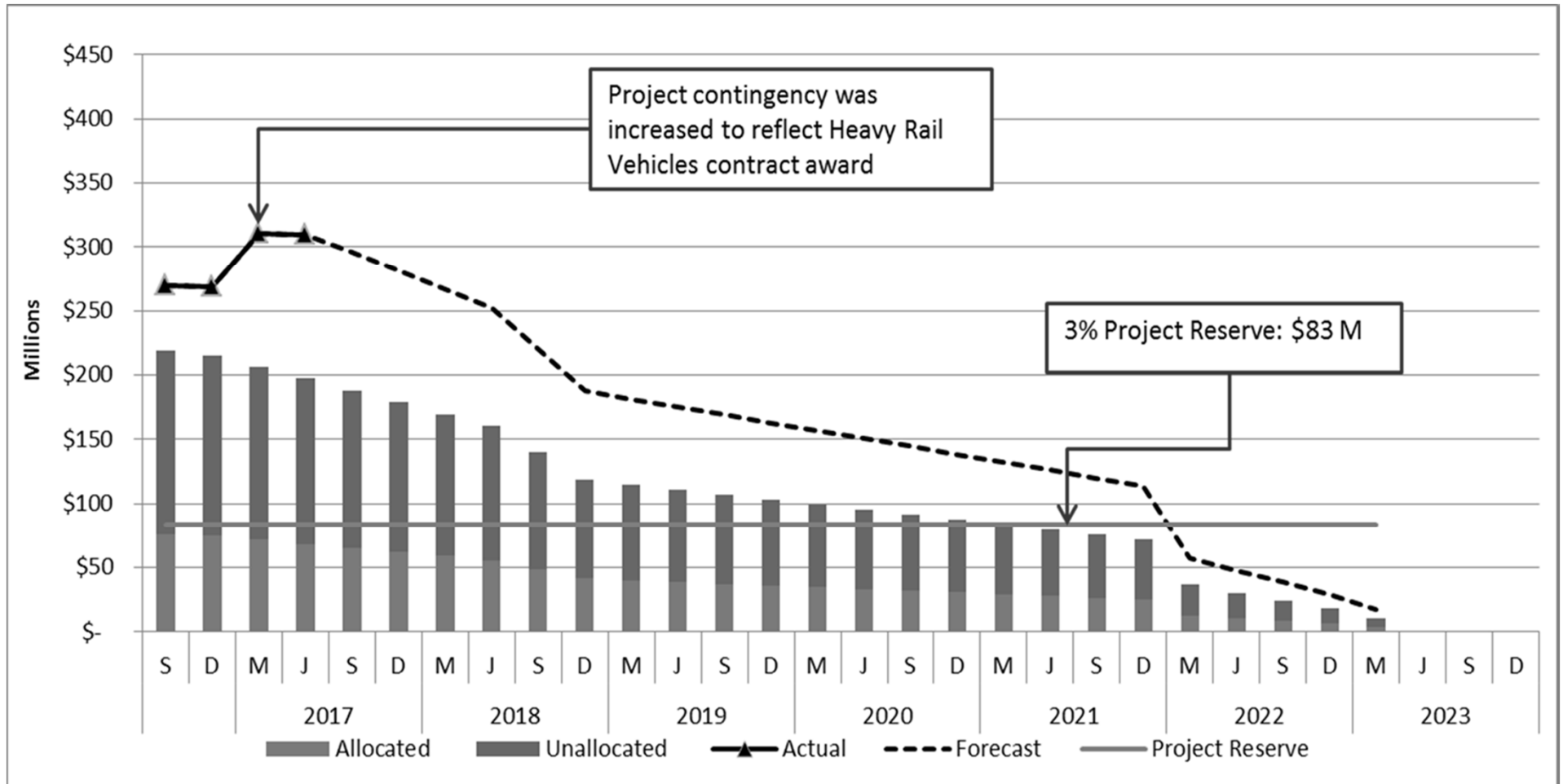
April 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:		135	\$ 11,884,246
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		30	More than \$15M
DESIGN/BUILD CONTRACT C1045			
		20	
CN-25.2	Revisions to Transit Passenger Information System (TPIS) Requirements		Less Than \$1 Million
CN-26	Betterment City of Beverly Hills - Median Reconstruction at San Vicente Blvd		Less Than \$1 Million
CN-32	Pin Station (Identifier) Changes		Less Than \$1 Million
CN-37.2	Revisions to Metro Optical Network		Less Than \$1 Million
CN-39.1	Revision to Metro Station Signage		Less Than \$1 Million
CN-42.3	Radio Subsystem Redundancy		Less Than \$1 Million
CN-43.2	Isolate Track Circuits at Wilshire/Western		Less Than \$1 Million
CN-47.1	Stainless Steel Enclosure for TVM and PTEL		Less Than \$1 Million
CN-56	Implement City of Beverly Hills Memorandum of Agreement (MOA)		Between \$10M - \$15M
CN-57	Additional Geotech Monitoring at La Cienega (Support of Deviation Request)		Less Than \$1 Million
CN-63	La Brea- Additional Instrumentation Requested by BOE		Less Than \$1 Million
CN-64	Additional SOE Design Work - La Brea Station		Less Than \$1 Million
CN-65	Additional SOE Design Work - Fairfax Station		Less Than \$1 Million
CN-66	La Brea - Dewatering Changes		Less Than \$1 Million
CN-67	Tactile Guidance - Construction Effort and Material Change		Less Than \$1 Million
CN-68	Increased Ventilation of Station Ancillary Rooms		Less Than \$1 Million
CN-72	Stations - Art Related Changes		Less Than \$1 Million
TBD	Fairfax - DWP Ductbank Conflict with Deck Beams in Stages 2 and 3		Less Than \$1 Million
TBD	Fairfax - Piling Obstructions, Conflicts, Delays		Less Than \$1 Million
TBD	Western- Additional Extensometers supporting Deviation Request		Less Than \$1 Million
DESIGN/BUILD CONTRACT C1078			
		10	
CN-11	Schedule Impacts Due to Third Party		Less Than \$1 Million
CN-12	Betterment - Motorized Sliding Gate for the City of LA		Less Than \$1 Million
TBD	Betterment City of LA - Install Street Lights, Trees and Drip Irrigation		Less Than \$1 Million
TBD	Support of Building Art Work		Less Than \$1 Million
TBD	Betterment City of LA - 6th Street Viaduct - Site RE-gragind, Ornamental Fence, etc.		Less Than \$1 Million
TBD	Hazardous Materials - Chalmers Pan Handle		Less Than \$1 Million
TBD	Storm Drain - Differing Site Conditions		Less Than \$1 Million
TBD	Above Ground Storage Tank - Leak Detection System		Less Than \$1 Million
TBD	Remote Lubricant Filling & Extraction System		Less Than \$1 Million
TBD	Building Improvements - Increased Foot Print, Larger Rooms		Less Than \$1 Million
TOTAL MODIFICATIONS AND CHANGE ORDERS		165	
PROFESSIONAL SERVICES CONTRACTS			
Design Support Services During Construction - CONTRACT PS43502000			
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:		21	\$ 80,391,662
TOTAL PENDING MODIFICATIONS		1	
CN-61	Continuation of Design Support During Construction		Between \$10M - \$15M
TOTAL MODIFICATIONS AND CHANGE ORDERS		22	
Construction Management Support Services - CONTRACT MC071			
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:		3	\$ 39,731,796
TOTAL PENDING MODIFICATIONS		1	
CN-5	Continuation of Construction Management Support Services		More Than \$15 Million
TOTAL MODIFICATIONS AND CHANGE ORDERS		4	

Westside Purple Line Extension – Section 1

Project Cost Contingency Drawdown

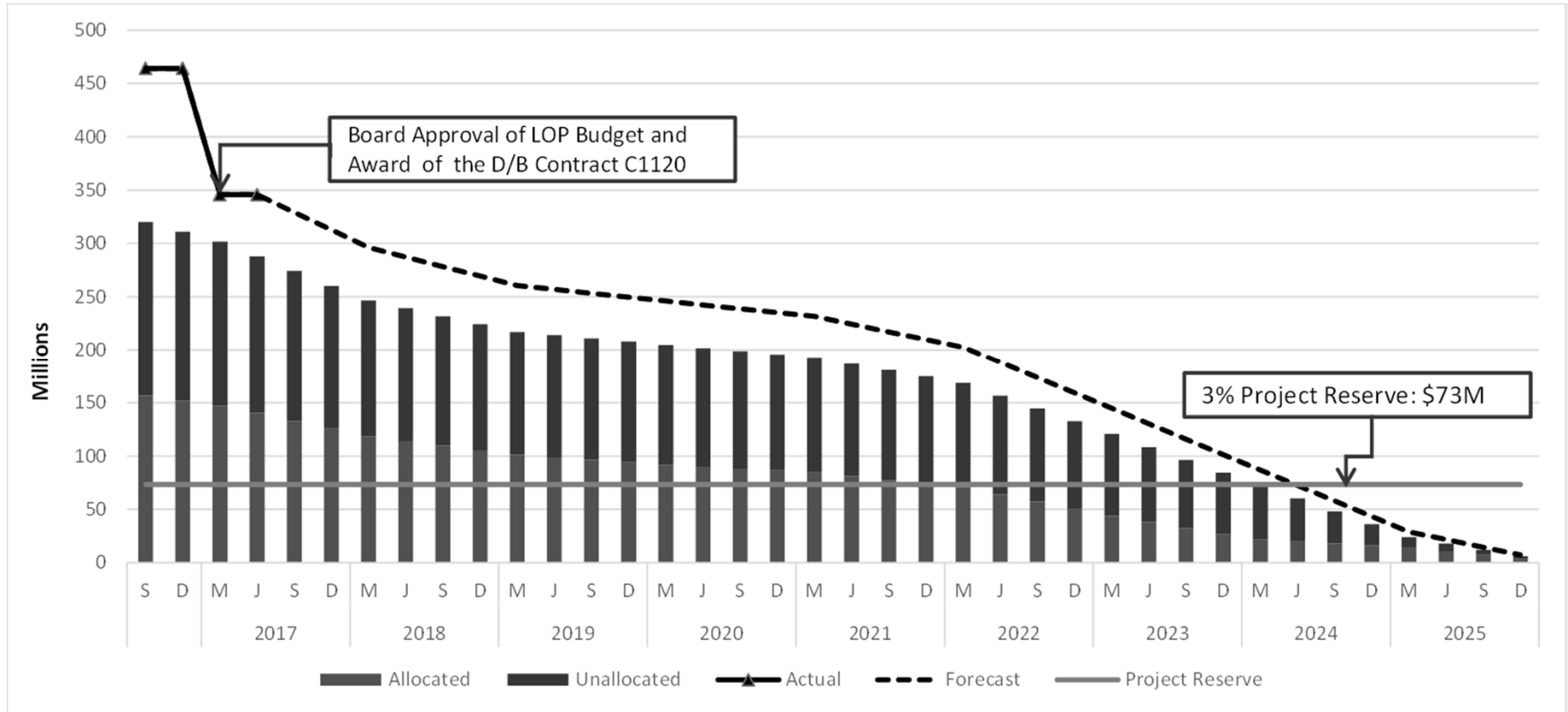
April 2017



Westside Purple Line Extension – Section 2

Project Cost Contingency Drawdown

April 2017





Board Report

File #: 2017-0338, **File Type:** Informational Report

Agenda Number: 39.

REVISED
CONSTRUCTION COMMITTEE
JUNE 15, 2017

SUBJECT: Foothill Gold Line Extension Phase 2B

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

CONSIDER:

- A. APPROVING a Life of Project Budget for the Foothill Gold Line Extension Phase 2B Light Rail Project in the amount of \$1,406,870,758.
- B. AUTHORIZING the Chief Executive Officer to enter into a Project Funding Agreement (Attachment A) with the Foothill Gold Line Extension Construction Authority including provisions to apply for \$249.2 million in Transit and Intercity Rail Capital Program funds as a Metro priority.
- C. AUTHORIZING the Chief Executive Officer to enter into a Master Cooperative Agreement (Attachment B) with the Gold Line Foothill Extension Construction Authority.

ISSUE

Foothill Gold Line Extension Phase 2B has advanced Preliminary Engineering based on their Certified Final Environmental Impact Report for the 12.3 mile alignment from Glendora to Claremont. The Project includes stations and parking facilities in each of the six cities along the alignment and shares right of way with Southern California Regional Rail Authority (Metrolink) and the Burlington Northern Santa Fe (BNSF) freight line.

The original cost estimates identified in the Measure M expenditure plan for this project were completed based on the environmental document and preliminary planning concepts. As preliminary engineering has advanced, the project alignment, station and parking facilities, grade crossing improvements as well as adjusting track alignments associated with the freight and Metrolink lines have added scope and schedule to the project.

Award of the first of two Design-Build Contracts for advanced utility relocation for the Project is scheduled to be released in October - November 2017 with the primary Mainline Design-Build Contract for the Project scheduled to be released about a year later in December 2018. In order for the Design-Build Contracts to be awarded and the Project to proceed, establishment and authorization of a Life of Project Budget, a Funding Agreement and a Master Cooperative Agreement are critical.

A detailed Funding Agreement and a Master Cooperative Agreement define the roles, responsibilities and processes that are needed for Metro to fund the project and work productively with the Construction Authority. These Agreements set the foundation for identifying and implementing a detailed budget and means of disbursement, tracking and management of the funds, safety and quality throughout the course of the design-build project.

Construction Authority desires that the Project extend into San Bernardino and terminate at the proposed Montclair station (the "Montclair Extension"). However, the attached Funding Agreement and the Master Cooperative Agreement do not fund and do not recognize the Montclair Extension as part of the Project. We will return to this Board for authority before any portion of the funds provided under the Funding Agreement can be used on the Montclair Extension.

BACKGROUND

Funding Agreement

In March 2016 the Board approved the release of the Draft Potential Ballot Measure Expenditure Plan that defines funding from the Measure M Ordinance to be allocated to the Foothill Gold Line Phase 2B Project (the Project) in the amount of \$1,019,000,000. In addition, funding of \$78,000,000 from Local, State, Federal and Other sources was shown for reference purposes. These amounts combined total \$1,097,000,000 which comprised the working budget identified in the Metro Expenditure Plan for the Project. The Board adopted the Ordinance, including the Expenditure Plan on June 23, 2016.

Funds remaining from the Gold Line Foothill Extension Phase 2A Project completed in March 2016 in the amount of \$69,500,000 were allocated to the Foothill Extension Phase 2B Project via Board Actions in accordance with the Funding Agreement for that project. Further, additional funds remaining from Phase 2A in the amount of \$26,967,000 are being requested via Board action this month as a Life of Project (LOP) Budget reduction from Phase 2A for approval for these funds to be applied to Foothill Extension Phase 2B.

For Gold Line Foothill Extension Phase 2B, advancement of preliminary engineering including station and facility design, needed alignment adjustments and railroad safety enhancements related to the shared corridor with Metrolink and BNSF, as well as Metro Holdback costs over the original estimate have generated a total estimated project increase, net of project revenues and credits, in the amount of \$249,197,635. Metro Staff have estimated Metro support costs for labor, non-labor and rail

vehicles and have reviewed the Authority's estimates and concur that additional funding will be necessary to off-set the increased scope and schedule requirements generated by shared corridor interface and improvements.

In order to achieve the total required project budget of \$1,406,870,758, staff have analyzed funding sources and recommend the following:

- Measure M contribution of \$1,019,000,000 as identified in the Metro Expenditure Plan remains unchanged.
- Combined estimated Measure R and/or Proposition C or other available non-federal funds in the amount of \$96,467,000 (comprised of \$69,500,000 and \$26,967,000 as defined in the Background Section of this Report) cost savings from Foothill Gold Line 2A.
- 3% local contribution to project funding required by Measure M \$42,206,123.
- Net project cost increase of \$249,197,635 will be requested through a State Cap and Trade program as a Metro priority to complete funding of the Life of Project Budget.
- If Cap and Trade funds are not made available, the parties will review their project budgets for any cost savings, and if there is still a shortfall, additional resources may be sought including subregional funding and any MTA requested betterments will be funded outside the Project budget. Note: MTA and the Authority will work together and jointly approach the subregion to try and resolve the funding issue. If there is still a shortfall, the Construction Authority will comply with the LACMTA Final Unified Cost Management Process and Policy.

The Measure R Unified Cost Management Process and Policy adopted by the Metro Board of Directors in March 2011 applies to the cost change at this project milestone. Attachment D includes the staff analysis required by the policy. In order to achieve the required funding to complete the Project, a funding shortfall relative to the Measure M Expenditure Plan of \$249,197,635 must be filled. As discussed in Attachment C, the Measure R Cost Management Process and Policy Analysis, and in the Funding Agreement in Attachment A, the additional funds will be requested as a priority through the Transit and Intercity Rail Capital Program (a subset of the "Cap and Trade" trade funds from the State of California). If Cap and Trade funds are not made available, additional resources may be sought using a combination of Metro and sub-regional funding or other project changes as described in Attachment D. The Metro Board's Measure R Cost Management Process and Policy from which subregional funding requirement flows includes all subregional funding, not only Measure M.

Establishment of a Life of Project Budget in the amount of \$1,406,870,758 provides the basis of the Funding Agreement for Gold Line Foothill Extension Phase 2B. The Agreement attached herein as ATTACHMENT A identifies the roles and responsibilities for Metro and the Authority regarding funding and allocation of funds for the project and defines specific procedures that must be followed to disburse payments. Metro staff coordinated extensively with Metro County Counsel, Construction Authority staff and Authority Counsel to develop the final Funding Agreement being presented for execution.

Staff recommendation is to establish a Life of Project Budget in the amount of \$1,406,870,758 and authorize the Chief Executive Officer to enter into the Funding Agreement as shown in Attachment A.

Master Cooperative Agreement

Metro and Construction Authority staff have coordinated extensively to develop the Draft Final Master Cooperative Agreement (ATTACHMENT B). This agreement sets guidelines for cooperation and efficient coordination between the parties that will define how the two agencies interact and manage such items as real estate, right-of-way, design, construction, communications, reporting, achieving substantial completion, safety, quality, progress through systems testing and pre-revenue phases. The agreement also addresses turnback from the Authority to Metro and responsibilities for each party through the closeout process, dispute resolution, warranty items, revenue operations, and final acceptance.

Staff recommendation is to adopt the final Master Cooperative Agreement and authorize the Chief Executive Officer to execute the agreement as shown in ATTACHMENT B.

First Mile/Last Mile

As a supplement to the local contribution for this project, the Los Angeles Metro First Mile/Last Mile program is being evaluated for additional improvements. Planning for additional infrastructure to be funded by First Mile/Last Mile sources and placed in local jurisdictions will be provided by the Foothill Construction Authority and based on guidelines provided by Los Angeles Metro. The local jurisdictions will implement the actual infrastructure improvements and track expenditures.

Additional On-going Studies

Metro is currently working with the Construction Authority on a parking study that may result in a

reduction in the number of parking spaces required for the light rail line. Depending on the results of that study and potential resulting impacts to the environmental document and feedback from local jurisdictions, a parking capacity reduction and related cost savings to the project may be implemented.

Further, Metro Regional Rail is currently conducting an independent study reviewing the possibility of future grade separations for Metrolink and Freight rail lines throughout the county and specifically within the shared Gold Line Extension Light Rail Corridor. Grade crossings analyzed for the Gold Line Foothill Extension Phase 2B Project are for the Light Rail Project only in compliance with the Metro Design Criteria and Grade Separation policy. The requested LOP authorization for this Board Report is for the Gold Line Foothill Extension Phase 2B Light Rail only and does not consider potential additional grade separations for the Metrolink and/or BNSF systems. Grade separations for the SCRRA and freight systems have not been budgeted as part of the Gold Line Foothill Extension Project.

DETERMINATION OF SAFETY IMPACT

Approval of this item will have no impact on safety.

FINANCIAL IMPACT

There is no change to the FY17 or FY18 budget as a result of this action. Future funds of \$249,197,635 will be sought through a State Cap and Trade program. Since this is a multiple year project, the project manager and the Chief Program Management Officer will be accountable for budgeting the required costs in future years.

Impact to Budget

The source of funding is Measure M Transit Construction 35% which is not eligible for bus and rail operating expenditures. Other sources of funding, as discussed, are the carry-forward of Measure R 35% and/or Proposition C or other available non-federal funds from Phase 2A, 3% Local Agency Contribution, and the state Transit and Intercity Rail Capital Program (TIRCP), see ATTACHMENT C.

Cap and Trade Funds (TIRCP)

Future funds of \$249,197,635 will be sought through the State Cap and Trade Transit and Intercity Rail Capital program as a priority. The commitment of Cap and Trade Transit and Intercity Rail Capital funds as a priority stems from the Metro Board of Director's action to approve the 2009 Long Range Transportation Plan, which states, in part: "As a first priority, pursue other potential funding sources, excluding Federal New Starts, which are not currently included in the 2009 Long Range Transportation Plan, to be programmed to close the funding gaps on the Gold Line Foothill Extension and Crenshaw/LAX Transit Corridor."

ALTERNATIVES CONSIDERED

The Board may consider delaying establishment of Project LOP until the funding gap of \$249,197,635 is secured. However, this approach could result in a delay in the project start, lead to cost increases and discourage private sector participation. Further, the parties have planned for alternative approaches to handle the funding gap to further reduce the risk that there will be a funding gap.

NEXT STEPS

Upon Board approval, staff will file an application for Cap and Trade Grant funding in early calendar year 2018. The Life of Project Budget will be established, and the Construction Authority will pursue Design Build Contracts for the Utility Relocation and Primary Light Rail Mainline. The Funding Agreement and Master Cooperative Agreements will be circulated for execution by the Metro Chief Executive Officer and the Foothill Gold Line Construction Authority Chief Executive Officer.

ATTACHMENTS

ATTACHMENT A - Funding Agreement

ATTACHMENT B - Master Cooperative Agreement

ATTACHMENT C - Measure R Cost Management Process and Policy Analysis

ATTACHMENT D - Expenditure Plan - Cost and Cashflow Budget

Prepared by:

Rick Meade, Executive Officer (213) 922-7917

Reviewed by:

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

Therese McMillan, Chief Planning Officer (213) 922-7077



Phillip A. Washington
Chief Executive Officer

**FOOTHILL EXTENSION PHASE 2B FUNDING AGREEMENT
GLENORA TO CLAREMONT**

This Foothill Extension Phase 2B Funding Agreement (“**Agreement**”) is dated for reference purposes only [_____], 2017 and is by and between the Los Angeles County Metropolitan Transportation Authority (“**LACMTA**”) and the Metro Gold Line Foothill Extension Construction Authority (“**Recipient**”) for the Metro Gold Line Foothill Extension Phase 2B (Glendora to Claremont) (referred to herein as “**Phase 2B**” or the “**Project**”); LACMTA Measure M ID#[_____] and FTIP# [_____].

WHEREAS, the parties entered into that certain Amended and Restated Foothill Extension Funding Agreement dated for reference purposes June 15, 2011, which was amended by (i) that certain First Amendment to Amended and Restated Foothill Extension Funding Agreement dated for reference purposes November 2, 2011, (ii) that certain Second Amendment to Amended and Restated Foothill Extension Funding Agreement dated for reference purposes July 11, 2012, (iii) that certain Third Amendment to Amended and Restated Foothill Extension Funding Agreement dated for reference purposes August 3, 2012, (iv) that certain Fourth Amendment to Amended and Restated Foothill Extension Funding Agreement dated for reference purposes only October 28, 2013, and (v) that certain Fifth Amendment to Amended and Restated Foothill Extension Funding Agreement dated for reference purposes only September 1, 2015 (as amended, the “**Foothill Extension Phase 2A Funding Agreement**”);

WHEREAS, LACMTA adopted Ordinance #16-01, the Los Angeles County Traffic Improvement Plan, on June 16, 2016 (the “**Ordinance**”), which Ordinance was approved by the voters of Los Angeles County on November 8, 2016 as “Measure M” and became effective on January 1, 2017. The Ordinance imposed a transaction and use tax to be collected within the County of Los Angeles and to be used for public transit projects, including, without limitation, the Project.

WHEREAS, pursuant to the Ordinance, LACMTA shall expend \$1,019,000,000 in Measure M funds on Phase 2B commencing no earlier than July 1, 2018 except for expenditures for preconstruction costs which may commence earlier.

WHEREAS, the Ordinance also identifies \$78,000,000 for the Project from 2016-2067 Local, State, Federal, Other Funding. LACMTA intends to apply for Cap and Trade funds from the State to cover this amount. LACMTA expects to know whether Cap and Trade funds will be made available for the Project in June 2018 and this Agreement will be amended accordingly.

WHEREAS, the Ordinance also includes a 3% local match requirement which is estimated to be \$42,206,122 (the “**Recipient Funding Commitment**”). Recipient intends to fulfill this commitment as set forth in **Section B8.1** of this Agreement.

WHEREAS, there is estimated \$96,467,000 budget remaining from Measure R funds provided under the Foothill Extension Phase 2A Funding Agreement which were approved to be used on Phase 2B. The Measure R Ordinance, Ordinance 08-01, and the Ordinance are collectively referred to as the “**Ordinances**.” LACMTA desires to close out the Foothill Extension Phase 2A Funding Agreement and therefore once the work on Phase 2A is complete,

LACMTA will move the actual remaining budget to this Agreement along with any amounts already expended against that remaining budget. Therefore, even though the Phase 2B costs may have been incurred under the Foothill Extension Phase 2A Funding Agreement, they will be deemed to have been incurred under this Agreement.

WHEREAS, Recipient desires an additional \$138,000,000 for the Project and an additional \$33,197,635 is needed to cover LACMTA Project Costs in excess of what was needed in Phase 2A. LACMTA intends to apply for Cap and Trade funds from the State to cover this amount. LACMTA expects to know whether Cap and Trade funds will be made available for the Project in June 2018 and this Agreement will be amended accordingly.

WHEREAS, Recipient desires that the Project extend into San Bernardino and terminate at the proposed Montclair station (the “**Montclair Extension**”). However, the Montclair Extension has not been approved by the LACMTA Board, has not been fully funded and requires agreement by the applicable cities and agencies in San Bernardino County. At this time, Recipient is preparing plans that include the Montclair Extension and that portion of the plans is being paid by the City of Montclair. LACMTA and Recipient intend that the Funds provided under this Agreement will not be used for any portion of the Montclair Extension and a written amendment to this Agreement will be required that specifically authorizes Recipient to use Funds on the Montclair Extension before any portion of the Funds can be used on the Montclair Extension.

WHEREAS, Recipient and LACMTA desire to enter into this Agreement for LACMTA to grant the Funds, as defined herein, to Recipient for the Project, subject to the terms and conditions contained in this Agreement.

NOW, THEREFORE, the parties hereby agree as follows:

The terms and conditions of this Agreement consist of the following and each is incorporated by reference herein as if fully set forth herein:

1. Specific Terms of the Agreement
2. General Terms of the Agreement
3. Attachment A – Final Unified Cost Management Process and Policy
4. Attachment B - Project Funding
5. Attachment C – Expenditure Plan – Cost & Cash Flow Budget
6. Attachment D - Scope of Work
7. Attachment E – Bond Requirements
8. Attachment F - Federal Transportation Improvement Program (FTIP) Sheet
9. Attachment G - Reporting and Expenditure Guidelines

10. Attachment G1 - Monthly Progress/Expenditure Report
11. Attachment G-2 – LACMTA Monthly Progress/Expenditure Report
12. Attachment H – Extra Allowable Costs List
13. Attachment I – Metro’s First/Last Mile Policy for Major Transit Corridors
14. Any other attachments or documents referenced in the above documents

In the event of a conflict, the Specific Terms of the Agreement shall prevail over the General Terms of the Agreement.

[signature page follows]

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives as of the dates indicated below:

LACMTA:

RECIPIENT:

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION
AUTHORITY

METRO GOLD LINE FOOTHILL
EXTENSION CONSTRUCTION
AUTHORITY

By: _____
Phillip A. Washington
Chief Executive Officer

By: _____
Habib F. Balian
Chief Executive Officer

Date: _____

Date: _____

APPROVED AS TO FORM:

APPROVED AS TO FORM:

MARY C. WICKHAM
County Counsel

Nossaman LLP

By: _____
Deputy

By: _____
Alfred E. Smith, II
General Counsel

SPECIFIC TERMS OF THE AGREEMENT

A1. Title of the Project (the "**Project**"): Metro Gold Line Foothill Extension Phase 2B (Glendora to Claremont). The Project has been assigned LACMTA Measure M ID# [_____] and FTIP# LA[_____].

A2. Project Funding.

A2.1 Pursuant to LACMTA Board Action on [INSERT DATE], 2017, LACMTA has made to Recipient a one-time grant in the amount of \$1,364,664,635 for the Project less LACMTA Project Costs, as defined in **Section B7**, and subject to the provision of Sections A2.2 and its subsections below. The Measure M Funds and the Measure R Funds, as defined below, are referred to herein collectively as the "**Funds**". The amount of the Funds less the LACMTA Project Costs are referred to as the "**Gold Line Fund Amount**".

A2.2 The \$1,364,664,635 shall be paid from the following fund sources:

A2.2.1 \$1,019,000,000 from Measure M funds (the "**Measure M Funds**"). Recipient may expend the Measure M Funds commencing no earlier than July 1, 2018, except Recipient may expend Measure M Funds for preconstruction costs beginning July 1, 2017 with the understanding that such costs cannot be reimbursed until the State Board of Equalization makes the first Measure M distribution to LACMTA in the fall of 2017.

A2.2.2 \$249,197,635 from proposed Cap and Trade Funds from the State of California ("**Cap and Trade Funds**"). This amount includes \$78,000,000 referenced in the Ordinance as 2016-2067 Local, State, Federal, Other Funding, \$33,197,635 needed to cover LACMTA Project Costs in excess of what was needed in Phase 2A and \$138,000,000 additional funding ("**Additional Funding**") requested by Recipient. Recipient understands LACMTA needs to apply for the Cap and Trade Funds from the State of California first and LACMTA does not expect to know until after July 2018 whether the Cap and Trade Funds will be made available for the Project. LACMTA will make such application a first priority for Cap and Trade Funds.

If the Cap and Trade Funds are not sufficient to cover the entire \$249,197,635, then LACMTA and Recipient shall both use good faith efforts to review their respective Project budgets and determine whether any cost savings are achievable through elimination of any project scope or services agreed to be unnecessary or not as much as originally anticipated. If after any reduction in the Project LOP, there is still a shortfall in the Cap and Trade Funds and LACMTA continues to include budget in the LACMTA Project Costs for LACMTA Requested Betterments, then LACMTA shall be responsible for funding the budget for all the LACMTA Requested Betterments in the LACMTA Project Costs from sources other than the Funds. If after any reduction in the Project LOP and subtracting the amount for any LACMTA Requested Betterments included as LACMTA Project Costs there is still a shortfall of Cap and Trade Funds, then LACMTA will determine whether any other eligible surplus funds are then available to fund the remaining balance. If after any reduction in the Project LOP and subtracting the amount for

any LACMTA Requested Betterments included as LACMTA Project Costs and subtracting any other funds then available, and there is still a shortfall, then LACMTA shall seek to fund one-third of the remaining balance and LACMTA and Recipient shall work together and jointly approach the San Gabriel Valley subregion for funding two-thirds of the remaining balance from any eligible Measure M Subregional Program listed in the Multi-Year Subregional Programs section of the Measure M Expenditure Plan and coded “sg”fund in the “Subregion: column of that section (“**Subregional Funds**”) or from the San Gabriel Valley share of the “Subregional Equity Program on Line 68 and as noted in footnote “s” of that Expenditure Plan; and then if after following the process described in this section, there are still insufficient funds to cover the remaining balance, then Recipient shall comply with the LACMTA Final Unified Cost Management Process and Policy.

Once it is determined how all or a portion of the \$249,197,635 is to be funded, including, any reduction in the Project LOP and any reduction in the LACMTA Requested Betterments and/or the Estimated Amount, LACMTA and Recipient shall amend this Agreement accordingly which amendment will be limited in scope to (i) redefine the term “Funds” to include the portion of the \$249,197,635 which is fully funded, (ii) make necessary revisions to the provisions expressly mentioning the \$249,197,635, (iii) revising any amounts that may have been modified with the reduction process, including, the amount of the Cap and Trade Funds, the Project LOP, LACMTA Requested Betterments and the Estimated Amount, and (iv) include any additional terms and conditions required by the funding source. Once this Agreement is so amended, Recipient shall then be authorized to spend the portion of the \$249,197,635 which is fully funded.

A2.2.3 The estimated \$96,467,000 budget remaining from Measure R funds (the “**Measure R Funds**”) provided under the Foothill Extension Phase 2A Funding Agreement which were approved to be used on Phase 2B. LACMTA has moved this remaining budget to this Agreement along with any amounts already expended against that estimated \$96,467,000 budget. Therefore, even though the costs may have been incurred under the Foothill Extension Phase 2A Funding Agreement, they will be deemed to have been incurred under this Agreement.

A3. Disbursement of Funds.

A3.1 Subject to the terms and conditions contained herein, the Funds shall be paid monthly to Recipient on a reimbursement basis not to exceed in the aggregate the Gold Line Fund Amount. Recipient must provide the appropriate supporting documentation with the Monthly Progress/Expenditure Report. Recipient shall submit the Monthly Progress/Expenditure Report and, notwithstanding the approval process in **Section B5.1**, will be reimbursed by LACMTA within thirty (30) days after LACMTA’s receipt of each Monthly Progress/Expenditure Report submittal. In the event that LACMTA questions the content of the Monthly Progress/Expenditure Report, or the adequacy of the report or of any supporting documentation, notwithstanding the approval process in **Section B5.1**, LACMTA shall timely pay the disputed amount, together with any undisputed amount. Concurrently with payment of the disputed amount, and notwithstanding payment of the disputed amount, LACMTA shall notify Recipient of the dispute, together with its assessment of what documentation is required in order to resolve the dispute. If Recipient is unable or otherwise fails to provide documentation reasonably acceptable to LACMTA within thirty (30) days after receipt of notice of the dispute

from LACMTA, the dispute shall be resolved in accordance with the dispute resolution process set forth in **Section B12.2**. If the final outcome of that dispute resolution process is adverse to Recipient, LACMTA may reduce the disallowed amount from the next disbursement to Recipient first occurring after final resolution of the dispute.

A3.2 Notwithstanding the foregoing, the first Twenty Million Dollars (\$20,000,000) (the “**Phase 2B Working Capital Advance**”) of Funds payable to Recipient shall not be provided on a reimbursement basis but shall be distributed to Recipient at no interest upon receipt by LACMTA of an invoice requesting the disbursement. Any such disbursement must be for eligible Project expenses. The intent of the parties is that Recipient utilize the Phase 2B Working Capital Advance as a working capital advance to pay valid invoices it receives within 30 days after receiving such invoices and in advance of receiving from LACMTA the corresponding reimbursement of the amounts included on such invoices. Recipient shall provide appropriate documentation regarding eligibility of expenditures from the Phase 2B Working Capital Advance when the Project is complete, in a similar format and detail as that provided in the Monthly Progress/Expenditure Report. Recipient shall keep the Phase 2B Working Capital Advance in an interest bearing account. Any interest earned by Recipient on the Phase 2B Working Capital Advance shall be subject to the same use restrictions that apply to the Funds under **Section B3** and such interest amounts shall be counted toward the \$96,467,000 grant of Measure R Funds. Pursuant to **Section B5**, Recipient shall include in the Monthly Progress/Expenditure Report any interest earned on the Phase 2B Working Capital Advance and credit such interest earned for the month against the requested invoiced amount payable by LACMTA. Recipient shall return to LACMTA any Phase 2B Working Capital Advance plus interest remaining in its possession at “Completion of Phase II of the Project” as that term is defined in that certain Los Angeles-Pasadena Metro Blue Line Governmental Purpose Property Trust Agreement dated entered into as of August 19, 1999 (the “**Trust Agreement**”).

A4. The “Project Funding” documents all sources of funds programmed for the Project as approved by LACMTA and is attached as **Attachment B** to this Agreement. The Project Funding includes the total budget for the Project, including the Funds granted by LACMTA and the Recipient Funding Commitment, as more particularly described in **Section B8.1**. Recipient shall submit updates to the Project Funding if there is any change. Recipient cannot make any change to the Project Funding that would require an increase or acceleration in the Funds without LACMTA’s written approval, including any changes to the Recipient Funding Commitment.

A5. **Attachment C** is the “Expenditure Plan - Cost & Cash Flow Budget” (the “**Expenditure Plan**”) which documents the proposed cash flow and budget for the Funds; as well as the fiscal year the Funds are expected to be expended. Recipient shall submit annually to LACMTA, no later than February 1 of each year (the “**Annual Review**”), a current and up to date **Attachment C** for LACMTA’s budget and programming purposes. This Annual Review is important for the Parties to timely and properly plan for the Funds anticipated to be needed by both LACMTA and Recipient for their respective Project costs in the upcoming fiscal year. During the Annual Review, the parties shall identify any changes, if necessary, to the Expenditure Plan. At all times during the term of this Agreement, Recipient and LACMTA shall comply with the Ordinances.

A5.1 Recipient cannot make any change to the Expenditure Plan that would require an increase or acceleration in the Funds or LACMTA Project Costs without LACMTA’s written

approval. With regard to the Gold Line Fund Amount, Recipient may transfer funds between Project budget line items within a fiscal year or make changes across fiscal years which are cost neutral without LACMTA approval. With regard to the LACMTA Project Costs, LACMTA may transfer funds between Project budget line items within a fiscal year or make changes across fiscal years which are cost neutral without Recipient approval.

A6. Recipient shall complete the Project as generally described in the “Scope of Work” and in accordance with the Master Cooperative Agreement for Phase 2B (“MCA”), dated [INSERT DATE]. The Scope of Work for the Project is attached to this Agreement as **Attachment D**. The Scope of Work includes a description of the Project, Project milestones, and a Project schedule with an estimated completion date. Work shall be delivered in accordance with that Project schedule unless otherwise agreed to by the Parties in writing. Concurrently with this Agreement, LACMTA and Recipient are entering into that certain MCA, which describes the guidelines and mechanism by which LACMTA will participate in the Project. The MCA sets forth a description of the Project, and a process for LACMTA review of the design and construction of the Project. In the event of any conflict between the Scope of Work attached to this Agreement as **Attachment D** and the description of the Project in the MCA, as the Project now exists or evolves pursuant to the processes set forth in the MCA, the description of the Project in the MCA shall control. Any changes to the Project or the Scope of Work resulting from the process and procedures set forth in the MCA do not require an amendment of this Agreement and the Scope of Work attached hereto shall be deemed automatically amended in accordance with those changes.

A7. LACMTA anticipates it may need to avail itself of lower cost bonds or other debt, the interest on which is tax exempt for federal tax purposes and/or Build America Bonds as defined in the American Reinvestment and Recovery Act of 2009 or similar types of bonds (collectively, the “**Bonds**”) to provide at least a portion of its funding commitments under this Agreement to Recipient. Recipient shall ensure that the expenditure of the Funds disbursed to Recipient does not jeopardize the tax-exemption of the interest, the Federal subsidy payment or the tax credit, as applicable, as specified in the Bond Requirements attached as **Attachment E** to this Agreement. Recipient agrees to provide LACMTA with progress reports, expenditure documentation, and any other documentation as reasonably requested by LACMTA and necessary for LACMTA to fulfill its responsibilities as the grantee or administrator or bond issuer of the Funds. With regard to LACMTA debt financing to provide any portion of the Funds, Recipient shall take all reasonable actions as may be requested of it by LACMTA’s Project Manager for the Project, to assist LACMTA in demonstrating and maintaining over time, compliance with the relevant sections of the Federal Tax Code to maintain such bonds tax status.

A8. Nothing in the Agreement shall be construed as requiring the Board of Directors of Recipient to commence eminent domain proceedings or seek an order for possession as to any parcel of land, and Recipient may, in its sole discretion, determine not to commence eminent domain proceedings or to seek an order for possession as to any parcel of land.

A9. Six (6) months before the Phase 2B Revenue Operation Date, as defined in the MCA, the parties shall meet to initiate transfer of the property subject to the Trust Agreement for the Project.

A10. All approvals and determination of either party required hereunder shall not be unreasonably withheld.

A11. The "FTIP PROJECT SHEET (PDF)" is attached as **Attachment F** and is required to ensure that the Project is programmed correctly in the most up-to-date Federal Transportation Improvement Program ("FTIP") document. The FTIP PROJECT SHEET (PDF) can be found in LACMTA's federal TIP amendment Request No. 17-10, which is intended to be submitted to SCAG in early July 2017. All projects that receive Measure M funding must be programmed into the FTIP, which includes locally funded regionally significant projects for information and air quality modeling purposes. Recipient shall review the Project in Program Metro each year and update or correct the Project as necessary during a scheduled FTIP amendment or adoption. Recipient will be notified of amendments and adoptions to the FTIP via e-mail. Changes to the FTIP through Program Metro should be made as soon as possible after Recipient is aware of any changes to the Project.

A12. **Attachment G** is the Reporting & Expenditure Guidelines for the Project, which together with the Scope of Work defines the Project expenses eligible for reimbursement under this Agreement. The Monthly Progress/Expenditure Report is attached to this Agreement as **Attachment G-1** and the LACMTA Monthly Progress/Expenditure Report is attached to this Agreement as **Attachment G-2**.

A13. No changes to the (i) grant amount, (ii) Project Funding (except as set forth in **Section A4**), (iii) Expenditure Plan (except as set forth in **Section A5**), (iv) the Scope of Work (except as set forth in **Section A6**), or (v) FTIP Project Sheet, shall be allowed without a written amendment to this Agreement, approved and signed by the LACMTA Chief Executive Officer or his/her designee and Recipient. Modifications that do not materially affect the terms of this Agreement do not require LACMTA approval. Non-material changes are those changes that do not affect the grant amount, the amount of the Funds, the Scope of Work, including schedule (except as set forth in **Section A6**), or the FTIP Project Sheet.

A14. **Parties' Addresses**

A14.1. LACMTA's Address:

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop 99-16-6
Los Angeles, CA 90012
Attention: Mr. Rick Meade
Executive Officers, Projects Engineering
MeadeR@metro.net

A14.2. Recipient's Address:

Metro Gold Line Foothill Extension Construction Authority
406 E. Huntington Drive, Suite 202
Monrovia, California 91016
Attn: Mr. Habib F. Balian

Chief Executive Officer
hbalian@foothillgoldline.org

A15. Recipient shall provide reasonable visibility into the cost, schedule and change status of the Project. Recipient shall allow the LACMTA Project Management Information System (“PMIS”) Designee (upon designation by LACMTA and approval by Recipient’s CEO) reasonable access to Recipient’s PMIS, as needed. LACMTA will formally designate a member of its Project Administration staff as the person authorized to access Recipient’s PMIS on behalf of LACMTA pursuant to this Agreement (the “**LACMTA PMIS Designee**”), and inform Recipient’s CEO upon making the designation. Recipient’s CEO shall not unreasonably withhold approval of the LACMTA PMIS Designee. LACMTA shall not change the LACMTA PMIS Designee more frequently than annually, without prior written approval from Recipient’s CEO. Nothing in this **Section A14** shall be interpreted to (a) grant LACMTA any audit rights or rights to information not authorized by other provisions of this Agreement; (b) require Recipient to include in its PMIS any information that Recipient would not otherwise include; or (c) provide access to Recipient’s internal accounting system.

A16. LACMTA has adopted LACMTA Final Unified Cost Management Process and Policy for projects funded under Measure R and which is attached as **Attachment A**. LACMTA intends to prepare a similar policy for Measure M projects or a replacement policy that will apply to both Measure R and Measure M projects. As both Measure R Funds and Measure M Funds are being used for Phase 2B, Recipient shall comply with the existing Measure R policy, as may be amended by the LACMTA Board, and the Measure M policy as adopted by the LACMTA Board. LACMTA and Recipient shall amend this Agreement accordingly to incorporate any LACMTA Board adopted revised Measure R cost management policy and/or Measure M cost management policy.

A17. LACMTA acknowledges that Recipient is preparing plans that include the Claremont Station as the terminus and the Montclair Extension and that the Montclair Extension portion of the plans is being paid by the City of Montclair. Recipient acknowledges and agrees that the Funds provided under this Agreement will not be used for any portion of the Montclair Extension and a written amendment to this Agreement will be required that specifically authorizes Recipient to use Funds on the Montclair Extension before any portion of the Funds can be used on the Montclair Extension.

GENERAL TERMS OF THE AGREEMENT

B1. TERM: The term of this Agreement shall commence on the date this Agreement is fully executed and, shall terminate upon the occurrence of all of the following, unless terminated earlier as provided herein: (i) the agreed upon Scope of Work has been completed; (ii) all LACMTA audit and reporting requirements have been satisfied; and (iii) the final disbursement of the Funds has been made to Recipient.

B2. INVOICE BY RECIPIENT: The Monthly Progress/Expenditure Report, with supporting documentation of expenses and Project progress as described in **Section B5.1** of this Agreement, and other documents as required by this Agreement, shall satisfy LACMTA invoicing requirements. Recipient shall send the Monthly Progress/Expenditure Reports with supporting documentation to:

Los Angeles County Metropolitan Transportation Authority
Accounts Payable
P. O. Box 512296
Los Angeles, CA 90051-0296

Alternatively, Recipient may submit the Monthly Progress/Expenditure Report and other documents required by this Agreement electronically (in an electronic format acceptable to LACMTA's Accounts Payable Department) to:

ACCOUNTS PAYABLE
accountspayable@metro.net

with a copy to:
Alex Lampros
lamprosa@metro.net

B3. USE OF FUNDS:

B3.1. Recipient shall utilize the Funds to complete the Project as described in the Scope of Work and in accordance with the Reporting and Expenditure Guidelines and the specifications for use for the transportation purposes described in the Ordinances. Recipient shall make good faith efforts to cause the total expenditure of Funds to not exceed the applicable amounts set forth in **Section A2**.

B3.2. The Funds allocated under this Agreement can only be used towards Project costs consistent with the Modified OMB A-87 (defined in **Section B6.1**). Any activity or expense charged above and beyond the Scope of Work is considered ineligible and will not be reimbursed by the LACMTA unless prior written authorization has been provided by the LACMTA Chief Executive Officer or his designee.

B3.3. Recipient shall not use the Funds to substitute for any other funds or projects not specified in this Agreement. Further, Recipient shall not use the Funds for any lobbying or, to

the extent LACMTA provides Recipient with bond or commercial paper proceeds (as set forth in **Section A7**), Funds may not be used to reimburse for any costs that jeopardize the tax-exempt nature of such financings as reasonably determined by LACMTA and its bond counsel, or any expenses or activities above and beyond the approved Scope of Work (**Attachment D**) without an amendment to this Agreement approved and signed by the LACMTA Chief Executive Officer or his designee.

B3.4. If Recipient intends to use a consultant or contractor to implement all or part of the Project, such activities shall be procured in accordance with Recipient's contracting procedures and consistent with applicable State law. Recipient staff or consultant with project oversight roles cannot award work to companies in which they have a financial or personal interest. Recipient shall not award a contract to a consultant or contractor who has an organizational conflict of interest. For purposes of the preceding sentence, "organizational conflict of interest" shall have the meaning ascribed in the rules and regulations of the Federal Transit Administration ("FTA").

B3.5. If a facility, equipment (such as computer hardware or software), vehicle or property purchased or leased using the Funds, ceases to be used for a purpose other than as permitted by Recipient's enabling legislation, any Funds expended for that purpose must be returned to LACMTA as follows: Recipient will be required to repay the Funds used to purchase or lease the facility, equipment, vehicle or property in proportion to the useful life remaining, in an equal proportion of the allocation amount to Recipient Funding Commitment ratio.

B3.6. When business travel associated with the Project requires use of a vehicle, the mileage incurred shall be reimbursed at the mileage rates set by the Internal Revenue Service, as indicated in the United States General Services Administration Federal Travel Regulation, Privately Owned Vehicle Reimbursement Rates.

B3.7. Recipient's employees, officers, board members, agents, and consultants (each, a "**Recipient Party**") are prohibited from participating in the selection, award, or administration of a third-party contract or sub-agreement supported by the Funds if doing so would violate applicable state laws, including but not limited to the Political Reform Act (Government Code Section 81000, *et seq*), Government Code Section 1090 *et seq*, and the common law doctrine against conflicts of interest.

B4. **DISBURSEMENT OF FUNDS:** Disbursements shall be made on a reimbursement basis in accordance with **Section A3**, except as set forth in **Section A3.2**. LACMTA will make all disbursements electronically unless an exception is requested in writing. Disbursements via Automated Clearing House (ACH) will be made at no cost to Recipient. Recipient must complete the ACH form and submit such form to LACMTA before payments hereunder can be made. ACH Request Forms can be found at www.metro.net/projects_studies/call_projects/ref_docs.htm.

B5. **REPORTING REQUIREMENTS:**

B5.1 Recipient shall submit the Monthly Progress/Expenditure Report (**Attachment G-1**) within 15 days after the close of each month. Should Recipient fail to submit

such reports within 10 days of the due date and/or submit incomplete reports, LACMTA will not reimburse Recipient until the completed required reports are received, reviewed, and approved. The Monthly Progress/Expenditure Report shall include all appropriate documentation (such as contractor invoices, timesheets, receipts, etc.). All supporting documents must include a clear justification and explanation of their relevance to the Project. If no activity has occurred during a particular month, Recipient shall submit the Monthly Progress/Expenditure Report indicating no dollars were expended that month. The Monthly Progress/Expenditure Report shall include any interest earned on the Phase 2B Working Capital Advance for the same period and the total amount requested shall include a credit for such interest earned.

B5.2 Monthly Reports.

B5.2.1 Recipient shall provide to the LACMTA Board monthly Project progress reports informing the LACMTA Board of the Project progress, use of funds during the previous month, the milestone progress vs. costs, expenditures to date, funds committed and forecast at completion, updated Project schedule and identifying any major problems (such as cost impacts of \$10 million or more, a schedule impact of 90 days or more, a quality issue which materially deviates from the Metro Design Criteria or Standard Drawings or a previously LACMTA approved submittal, any safety issue which deviates from the Metro Design Criteria or Standard Drawings or a previously LACMTA approved submittal, as such terms are defined in the MCA), and proposed solutions.

B5.2.2 Such monthly report shall describe any and all areas of concern, including problems causing delays, proposed solutions and next steps including actions requiring approval of Recipient and LACMTA Boards.

B5.2.3 If a potential cost overrun is identified, the monthly report will include a recovery proposal, which may include, without limitation, a re-scope of the Project or a request for the LACMTA Board to amend the Project's life of project budget and if amended, request additional funds.

B5.3 Quarterly Reports.

B5.3.1 If requested by LACMTA, Recipient shall also provide quarterly reports in person to the LACMTA Board on the state of the Project consistent with the information contained in the Monthly Reports along with additional information describing schedule and cost variances from the last quarter, including impacts of the performance towards key milestones or increases to the LOP budget.

B5.3.2 Such quarterly report shall also describe any and all major problems, as described above, areas of concern, proposed solutions and next steps including actions requiring approval of the Boards of Directors of Recipient and of LACMTA.

B5.3.3 If a potential cost overrun is identified, the quarterly report will include a recovery proposal, which may include, without limitation, a re-scope of the Project or a request for the LACMTA Board to amend the Project's life of project budget and if amended, request additional funds.

5.4 LACMTA shall be responsible for submitting a request for an increase in the LACMTA Project Costs beyond the Estimated Amount set forth in **Section B7.4** in accordance with that Section, and shall not require a request from Recipient for any such increase.

B6. AUDIT REQUIREMENTS:

B6.1 LACMTA, and/or its designee, shall have the right to conduct annual audits and a final audit of Recipient as it concerns the Project. In addition to the foregoing, LACMTA, and/or its designee, shall have the right to conduct an audit of Recipient in the event of a change (or requested change) in the amount of the Funds, or if the LACMTA Board of Directors determines that an expenditure of funds in violation of this Agreement is likely to have occurred and directs LACMTA to conduct such audit. LACMTA will commence a final audit within nine months of receipt of an acceptable final invoice, provided the Project is ready for final audit (meaning all costs and charges have been paid by Recipient and invoiced to LACMTA, and such costs, charges and invoices are properly documented and summarized in the accounting records to enable an audit without further explanation or summarization including actual indirect rates for the period covered by the Agreement period under review). Recipient agrees to establish and maintain proper accounting procedures and cash management records and documents in accordance with Generally Accepted Accounting Principles (GAAP). Recipient shall reimburse LACMTA for any expenditure made in violation of this Agreement; such reimbursement shall be made by LACMTA deducting the amount of the disallowed expenditure from the remaining balance of the Funds. The allowability of costs for Recipient's own expenditures submitted to LACMTA for this Project shall be in compliance with Office of Management and Budget ("OMB") Circular A-87 except that the costs described in OMB Circular A-87 and listed on **Attachment H** (the "Extra Allowable Cost List") shall also be allowable costs. Costs that are not specifically identified as an unallowable cost in OMB Circular A-87 plus those costs on the Extra Allowable Cost List shall be permissible expenditures under this Agreement if such costs are not otherwise prohibited by this Agreement. OMB Circular A-87, as modified by allowing costs set forth in the Extra Allowable Cost List shall be hereinafter referred to as "**Modified OMB A-87**". The allowability of costs for Recipient's contractors, consultants and suppliers expenditures submitted to LACMTA through Recipient's Monthly Progress Reports/Expenditures shall be in compliance with Modified OMB A-87 or Federal Acquisition Regulations Subpart 31 (whichever is applicable).

B6.2 Recipient's records, including without limitation, accounting records, written policies and procedures, contract files, original estimates, correspondence, change order files (including documentation covering negotiated settlements), invoices, and any other supporting evidence reasonably necessary for LACMTA to substantiate charges related to the Project (all collectively referred to as "**records**") shall be open to inspection and subject to audit and reproduction by LACMTA auditors or authorized representatives to the extent necessary for LACMTA to adequately permit evaluation of expended costs. Such records subject to audit shall also include, without limitation, those records necessary for LACMTA to evaluate and verify, direct and indirect costs (including overhead allocations) as they may apply to costs associated with the Project. These records must be retained by Recipient for three years following final payment under this Agreement. Recipient shall include language in its contracts with contractors, consultants, and suppliers requiring them to comply and cooperate with the requirements of this **Section B6.2**.

B6.3 LACMTA and its duly authorized representatives, upon reasonable written notice shall be afforded reasonable access to all of the records of Recipient regarding all activities in completing the Scope of Work and all costs incurred therefor, to the extent reasonably practicable. Recipient shall include language in its contracts with contractors, consultants, and suppliers requiring them to allow LACMTA reasonable access to all of the records of the contractor, consultant, or supplier regarding all activities in completing the Scope of Work and all costs incurred therefor to the extent reasonably practicable.

B6.4 In connection with the exercise of its audit rights in accordance with this **Section B6**, LACMTA and its duly authorized representatives, upon reasonable written notice, shall have access to the offices of Recipient, and its contractors, consultants, and suppliers shall have access to all reasonably necessary records, including reproduction (at no charge to LACMTA), and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the terms and conditions of this Agreement.

B6.5 LACMTA or their representative shall, upon completion of the audit, present the preliminary audit findings and recommendations to Recipient. A draft audit report shall be provided to Recipient for review and comments. Recipient shall provide LACMTA written comments as to acceptance or rejection of audit findings within 45 days after Recipient's receipt of the draft audit report.

B6.6 All LACMTA audit findings are subject to dispute resolution in accordance with **Section B12.2**. When LACMTA final audit findings require Recipient to return any Funds to LACMTA, and to the extent Recipient does not dispute such findings, LACMTA shall withhold the amount equivalent to the disallowed expenditures from the amount available for disbursement to Recipient in the next fiscal year after the final audit findings are sent to Recipient. To the extent Recipient disputes such final audit findings, and such dispute is resolved in LACMTA's favor, LACMTA shall withhold the amount equivalent to the disallowed expenditures from the amount available for disbursement to Recipient in the next fiscal year after such resolution.

B6.7 Recipient and /or its designee shall be responsible for performing costs audits of contractors, consultants, and suppliers regarding activities in completing the Scope of Work with contracts exceeding \$650,000, or the Federal audit threshold, whichever is greater. Such audits will be conducted by a CPA firm and done in compliance with Government Auditing Standards. The audits will audit the costs to verify compliance to Modified OMB A-87 or FAR Subpart 31 (whichever is applicable) and this Agreement. To avoid duplication of efforts, LACMTA shall have access to Recipient's auditors' work.

B6.8 Notwithstanding anything in this Agreement to the contrary, the provisions of this **Section B6** shall not apply to any contractor, consultant, or supplier performing work pursuant to (i) a fixed-rate or time and materials contract (except for any cost reimbursement portion of the contract) or (ii) a fixed price contract that has been procured competitively; provided, however, that **Section B6** shall apply to the costs and records of any contractor, consultant, and supplier to the extent that such costs and records directly relate to a change order, claim, or formal dispute.

B6.9 In addition to LACMTA's other remedies as provided in this Agreement, LACMTA shall withhold the Funds from future disbursement if the LACMTA audit has determined that Recipient failed to comply with the Scope of Work (such as misusing Funds or failure to return Funds owed to LACMTA in accordance with LACMTA audit findings) and/or is severely out of compliance with other terms and conditions of this Agreement, including the access to Recipient records provisions of **Section B6**. LACMTA may withhold the funds only if the decision of the LACMTA is upheld upon completion of the dispute resolution process set forth in **Section B12.2**.

B6.10 Recipient shall certify monthly invoices by reviewing all contractor and subcontractor costs and maintaining internal control to ensure that all expenditures are allocable, allowable and reasonable and in accordance with Modified OMB A-87 or FAR Subpart 31 (whichever is applicable) and the terms and conditions of this Agreement.

B6.11 Recipient shall also certify final costs of the Project to ensure all costs are in compliance with Modified OMB A-87 or FAR Subpart 31 (whichever is applicable) and the terms and conditions of this Agreement.

B6.12 Whenever possible, in exercising its audit rights under this Agreement, LACMTA shall rely on Recipient's own records and audit work, and minimize direct audit of contractors, consultants, and suppliers.

B7. LACMTA PROJECT COSTS:

B7.1 LACMTA shall incur costs and expenses for the Project as more particularly described in Section B7.3 below (the "**LACMTA Project Costs**"). However, as of the date of the execution of this Agreement, due to the long term of this Agreement, LACMTA cannot reasonably predict the actual amount of LACMTA Project Costs that will be incurred by LACMTA and have therefore provided an Estimated Amount set forth in Section B7.4, which amount may increase from time to time as set forth in Section B7.4.

B7.2 LACMTA will hold back a portion of the Project funds to pay for LACMTA Project Costs. LACMTA shall pay itself from the Funds for the LACMTA Project Costs as such costs are incurred. In no event will LACMTA pay itself more than the amount set forth in **Section B7.4**, plus any increases in that amount that may be authorized pursuant to **Section B7.4**.

B7.3 Funds allocated to pay for the LACMTA Project Costs are to be used by LACMTA for:

B7.3.1 LACMTA staff time and other direct costs involved in design and construction review, and construction inspection, project management oversight, training, security prior to ROD (to the degree not provided by Recipient), regional communications (outreach, signage, marketing, media, graphic design, and printing), real estate, finance, audit, safety, legal, planning and rail operations, pre-revenue testing, rail activation and start up activities and any post-ROD services and support necessary for close-out, to the extent such activities are consistent with the MCA and this Agreement. LACMTA commits to designating a point of contact for each category of activities, minimizing redundant activities, review and comments, and ensuring the

timely delivery of comments to Recipient. All such costs must be reasonable and appropriate to the activities related to the Project.

B7.3.2 To ensure uniformity of major equipment and to ensure compatibility with the existing rail system, LACMTA will hold back funds to purchase LACMTA Furnished/Required Equipment, as defined in the MCA which includes, without limitation, light rail vehicles and other major equipment needed for system operation.

B7.3.3 Recipient's share of the cost to expand LACMTA's Rail Operations Center ("ROC") that is attributable to the Project which will be an amount based on the proportionate share of the ROC devoted to operation of Phase 2B and in any event shall not exceed \$7,205,760.

B7.3.4 Recipient's allocated share of the cost of the Operation and Maintenance Facility ("O&M Facility") which is agreed by the Recipient and LACMTA to be \$26,663,217. Per LACMTA Board policy, to the extent Phase 2A over paid for its share of the cost of the O&M Facility, such overage has already been credited towards Phase 2B's share of the O&M Facility costs and the \$26,663,217 is the amount due after such credit was applied.

B7.3.5 LACMTA Requested Betterments in an amount not to exceed \$10,000,000.

B7.4 The amount of LACMTA Project Costs, including amounts set forth in Section B7.3, is estimated to be \$221,164,635 (the "Estimated Amount"). LACMTA shall make good faith efforts to cause actual LACMTA Project Costs to be less than the Estimated Amount. The Estimated Amount shall be reviewed annually during the Annual Review. If LACMTA Project Costs exceed the Estimated Amount plus any increases that may be authorized pursuant to this Agreement, then LACMTA, subject to Recipient approval, which approval shall not be unreasonably withheld, shall request authority for additional funds (in excess of the amount set forth in Section A2 of this Agreement) from the LACMTA Board; provided, however, if any portion of the Estimated Amount used for LACMTA Requested Betterments exceeds the amount set forth in Section 7.3.5, then LACMTA shall pay for the portion of such LACMTA Requested Betterments that exceeds the amount set forth in Section 7.3.5 from sources other than the Funds. If upon the "Completion of Phase II of the Project" as that term is defined in the Trust Agreement, LACMTA Project Costs are less than the Estimated Amount, the amount of any LACMTA Project Costs savings shall be made available to Recipient, for any permissible expenses that remain unpaid. Once the Project has been completed, Recipient shall return any all unused Funds, including any remaining Phase 2B Working Capital Advance, to LACMTA and LACMTA shall be free to reprogram any unused Funds.

B7.4.1 If LACMTA intends to use a consultant or contractor to implement all or part of its obligations pursuant to this Agreement, LACMTA shall procure such activities in accordance with LACMTA's contracting procedures and consistent with applicable State law.

B7.4.2 When business travel is charged as an LACMTA Project Cost and requires use of a vehicle, the mileage incurred shall be reimbursed at the mileage rates set by the Internal Revenue Service, as indicated in the United States General Services Administration Federal Travel Regulation, Privately Owned Vehicle Reimbursement Rates.

B7.5 LACMTA shall submit to Recipient the LACMTA Monthly Progress/Expenditure Report (**Attachment G-2**) within 30 days after the close of each month. The LACMTA Monthly Progress/Expenditure Report shall document all expenditures of the LACMTA Project Costs. Should LACMTA fail to submit such reports within 10 days of the due date and/or submit incomplete reports, LACMTA shall not be permitted to use any portion of the Funds for purposes of funding the LACMTA Project Costs, until the completed required reports are received. The LACMTA Monthly Progress/Expenditure Report shall include all appropriate documentation (such as contractor invoices, timesheets, LIMS reports, receipts, etc.). All supporting documents must include a clear justification and explanation of their relevance to the Project. If no activity has occurred during a particular month, Recipient shall submit the LACMTA Monthly Progress/Expenditure Report indicating no dollars were expended that month. The allowability of costs for LACMTA's own expenditures submitted to Recipient as LACMTA Project Costs shall be in compliance with Modified OMB A-87. The allowability of costs for LACMTA's contractors, consultants and suppliers submitted to Recipient through the LACMTA Monthly Progress/Expenditure Report shall be in compliance with Modified OMB A-87 or Federal Acquisition Regulations Subpart 31, whichever is applicable.

B7.6 Recipient, and/or its designee, shall have the right to conduct annual and a final audit of the LACMTA Project Costs. Alternatively, Recipient may rely on the annual and final Measure M audit completed by LACMTA. Recipient will commence a final audit (if any) within six months of receipt of an acceptable final LACMTA Monthly Progress/Expenditure Report, provided the LACMTA Project Costs are ready for final audit (meaning all costs and charges have been paid by LACMTA, and such costs, charges and invoices are properly documented and summarized in the accounting records to enable an audit without further explanation or summarization including actual indirect rates for the period covered by the Agreement period under review). LACMTA agrees to establish and maintain proper accounting procedures and cash management records and documents in accordance with Generally Accepted Accounting Principles (GAAP). LACMTA shall not use the Funds for any expenditure not in compliance with **Section B7.3** and/or not in compliance with other terms and conditions of this Agreement.

B7.7 LACMTA's records shall include, without limitation, LIMS reports, accounting records, written policies and procedures, contract files, original estimates, correspondence, change order files (including documentation covering negotiated settlements), invoices, and any other supporting evidence reasonably necessary for Recipient to substantiate charges related to the LACMTA Project Costs (all collectively referred to as "**records**") shall be open to inspection and subject to audit and reproduction by Recipient auditors or authorized representatives to the extent necessary for Recipient to adequately permit evaluation of expended costs. Such records subject to audit shall also include, without limitation, those records necessary for Recipient to evaluate and verify, direct and indirect costs, (including overhead allocations) as they may apply to costs associated with the LACMTA Project Costs. These records must be retained by LACMTA for three years following final payment for LACMTA Project Costs. LACMTA shall include language in its contracts with contractors, consultants, and suppliers requiring them to comply and cooperate with the requirements of this **Section B7.7**.

B7.8 Recipient and its duly authorized representatives, upon reasonable written notice shall be afforded reasonable access to all of the records of LACMTA related to the LACMTA Project Costs to the extent reasonably practicable. LACMTA shall include language in its

contracts with contractors, consultants, and suppliers requiring them to allow Recipient reasonable access to all of the records of the contractor, consultant, or supplier related to the LACMTA Project Costs to the extent reasonably practicable.

B7.9 Recipient and its duly authorized representatives, upon reasonable written notice, shall have access to the offices of LACMTA, shall have access to all necessary records, including reproduction (at no charge to Recipient), and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the terms and conditions of this Agreement as they relate to audits of LACMTA Project Costs.

B7.10 Recipient or their representative shall, upon completion of the audit, present the preliminary audit findings and recommendations to the LACMTA. A draft audit report shall be provided to LACMTA for review and comments. LACMTA shall provide Recipient written comments as to acceptance or rejection of audit findings within 90 days after LACMTA's receipt of draft audit report.

B7.11 All Recipient audit findings are subject to dispute resolution in accordance with the dispute resolution process set forth in **Section B12.2**. When Recipient's final audit findings require LACMTA to return any Funds to Recipient, and to the extent LACMTA does not dispute such findings, LACMTA shall return the undisputed monies within thirty (30) days after that final audit is sent to LACMTA. To the extent LACMTA disputes such final audit findings, and such dispute is resolved in Recipient's favor, LACMTA shall return such disputed Funds to Recipient within thirty (30) days after such resolution. For purposes of this section, LACMTA return of the disputed Funds does not entail actually providing the disputed Funds to Recipient. LACMTA return of the disputed Funds shall mean the disputed funds are not eligible as LACMTA Project Costs and therefore LACMTA shall not reimburse such disputed expenses with the Funds.

B7.12 LACMTA and /or its designee shall be responsible for performing costs audits of contractors, consultants, and suppliers regarding expenditures charged as LACMTA Project Costs with contracts exceeding \$650,000, or the Federal audit threshold, whichever is greater. Such audits will be conducted by a CPA firm or LACMTA audit department and done in compliance with Government Auditing Standards. The audits will audit the costs to verify compliance to Modified OMB A-87 or FAR Subpart 31 (whichever is applicable) and this Agreement. To avoid duplication of efforts, Recipient shall have access to LACMTA's auditors' work.

B7.13 Notwithstanding anything in this Agreement to the contrary, the provisions of this **Section B7** shall not apply to any contractor, consultant, or supplier performing work pursuant to (i) a fixed-rate or time and materials contract (except for any cost reimbursement portion of the contract) or (ii) a fixed price contract that has been procured competitively; provided, however, that **Section B7** shall apply to the costs and records of any contractor, consultant, and supplier to the extent that such costs and records directly relate to a change order, claim, or formal dispute.

B7.14 LACMTA shall certify monthly invoices by reviewing all contractor and subcontractor costs and maintaining internal control to ensure that all expenditures are allocable,

allowable and reasonable and in accordance with Modified OMB A-87 or FAR Subpart 31 (whichever is applicable) and the terms and conditions of the Agreement.

B7.15 LACMTA shall also certify final costs of the LACMTA Project Costs to ensure all costs are in compliance with Modified OMB A-87 or FAR Subpart 31 (whichever is applicable) and the terms and conditions of the Agreement.

B7.16 Whenever possible, in exercising its audit rights under this Agreement, Recipient shall rely on LACMTA's own records and audit work, and minimize direct audit of contractors, consultants, and suppliers.

B8. SOURCES AND DISPOSITION OF FUNDS:

B8.1 Recipient shall fully fund and contribute the Recipient Funding Commitment, as identified in the Project Funding, towards the cost of the Project. Once Recipient demonstrates it has met its estimated Recipient Funding Commitment of \$42,206,122 LACMTA will acknowledge that Recipient has satisfied its Recipient Funding Commitment contemplated in the Ordinance. For accounting purposes only, adding the \$42,206,122 to the one-time grant in the amount of \$1,364,664,635, makes the total project cost equal to \$1,406,870,757

To date, LACMTA acknowledges that Recipient has provided estimates showing how it intends to satisfy the first \$33,000,000 of the total Recipient Funding Commitment. The estimates include lump sum estimates of the amounts each city along the Project has contributed and will contribute as in-kind services toward the Project. These services are included in the master cooperative agreements with each city which will be reviewed by LACMTA to ensure services are related to the delivery of the Project. To support the estimates, Recipient shall provide LACMTA with documentation between each city and Recipient (the "City Documentation") evidencing (i) for services performed from the beginning of the environmental phase and prior to the date of this Agreement, the city's agreement that it has provided the designated services at a value meeting or exceeding the value indicated in the estimate, and (ii) for services yet to be performed, the city's agreement that it will provide the designated services at a value anticipated to meet or exceed the value indicated in the estimate. Once LACMTA has concurred that the lump sum amount indicated in the City Documentation is a reasonable cost for the services provided, then such lump sum amount will be applied to the Recipient Funding Commitment. At the end of the Project, Recipient shall obtain a letter from each city certifying that it provided the services set forth in its respective City Documentation.

In order to secure the balance of the Recipient Funding Commitment, Recipient intends to use any authorized eligible sources, including additional in-kind services consistent with Measure M guidelines approved by LACMTA or possibly entering into agreements for local first/last mile investments which, if used, shall be consistent with the First/Last Mile Policy attached as **Attachment I** and any station area First and Last Mile plans approved by LACMTA. LACMTA is currently developing the criteria and procedures for local first/last mile investments within transit capital projects. Recipient shall comply with the LACMTA criteria and procedures in implementing the first/last mile investments if such investments are used. Further, Measure M allows LACMTA to withhold Measure M local return funds for up to 15 years if a local jurisdiction fails to meet its 3% contribution to the Project. If requested by Recipient, LACMTA

is willing to make available this Measure M enforcement right to ensure Recipient meets its Recipient Funding Commitment.

For purposes of this Agreement, “**Recipient Funding Commitment**” shall include cash under the sole control of Recipient, eligible in-kind contributions from any of the jurisdictions adjacent to the right of way (such as waiver of permitting fees, and city staff time from the beginning of the environmental phase through the end of the warranty period) consistent with the terms stipulated in this Section B8.1, local return funds, local funding contributions for active transportation capital improvements and first/last mile investments, as provided under the terms in this Section B8.1, and the appraised value of land; provided, however, land provided by LACMTA under the Trust Agreement does not count toward the Recipient Funding Commitment.

B8.2 Subject to **Section B7.4**, if the Funds identified in Project Funding (**Attachment B**) are insufficient to complete the Project, Recipient agrees to secure and provide the additional non-LACMTA programmed funds necessary to complete the Project. Recipient shall be responsible for any and all cost overruns for the Project, except to the extent such cost overruns are part of LACMTA Project Costs.

B8.3 Recipient shall be eligible for the Funds up to the allocation amount specified in **Section A2** of this Agreement, and up to any increase that may be authorized by the LACMTA Board pursuant to this Agreement. Any expenditure by Recipient prior to the execution of this Agreement shall not be reimbursed from the Funds, without the prior written consent of LACMTA.

B8.4 If Recipient receives outside funding for the Project in addition to the Funds identified in the Project Funding as of the date of this Agreement, **Attachment B** of this Agreement shall be revised to show such additional funding. Recipient cannot make any change to the Project Funding that would require an increase in the amount of the Funds without LACMTA’s written approval, including any changes to the Recipient Funding Commitment.

B8.5 If at the time of final invoice or voucher funding for the Project (including the Funds, Recipient Funding Commitment, and any additional funding), the aggregate amount of Project Funding exceeds the actual Project costs, then the cost savings shall be applied in the same proportion as the sources of funds from each party to this Agreement as specified in the Project Funding and both the Funds and Recipient Funding Commitment required for the Project shall be reduced accordingly. The application of cost savings as described in this **Section B8.5** shall not occur until the “Completion of Phase II of the Project” as that term is defined in the Trust Agreement.

B8.6 This is a onetime only grant, subject to the terms and conditions agreed to herein.

B9. **DEFAULT:** Recipient’s material failure to comply with the terms and conditions contained herein and/or in the Ordinances shall constitute a Default.

B10. **REMEDIES:**

B10.1 In the event of a Default by Recipient, LACMTA shall provide written notice of such Default to Recipient with a 60-day period to cure the Default. In the event Recipient or its designee fails to cure the Default within the 60-day period, or if the nature of the Default is such that more than 60-days are reasonably required for its cure, Recipient or its designee has not commenced a cure within the 60-day period and thereafter diligently prosecuted such cure to completion, LACMTA shall have the following remedies: (i) LACMTA may terminate this Agreement with LACMTA Board approval; (ii) LACMTA may make no further disbursements of Funds to Recipient; and/or (iii) LACMTA may recover from Recipient any Funds disbursed to Recipient and used in material breach of this Agreement, as allowed by law or in equity. Any disputes over the existence of a Default or the cure of the Default shall be resolved pursuant to the dispute resolution process set forth in **Section B12.2**.

10.2 Effective upon receipt of written notice of termination from LACMTA, Recipient shall not undertake any new work or obligation with respect to this Agreement unless so directed by LACMTA in writing. Any Funds expended after termination shall be the sole responsibility of Recipient.

B11. COMMUNICATIONS AND RECOGNITION OF METRO AND MEASURE M FUNDING:

B11.1 Recipient shall ensure that all Communication Materials contain recognition of LACMTA's contribution to the Project. For purposes of this Agreement, "Communications Materials" include news releases and advisories, op-ed pieces when appropriate, Power Point presentations made to the general public, newsletters, fact sheets, websites, signage on Project construction sites and any other material public facing documents.

B11.2 Recipient shall ensure that at a minimum, all Communications Materials shall include (i) the phrase "A Measure M project funded by Metro"; or (ii) the Metro logo. Further guidance on acknowledging LACMTA contribution and key messaging is provided in the Communications Materials guidelines available from the LACMTA Communications Department.

B11.3 Recipient shall notify Metro's Public Relations Department with 30-day advance notice (whenever possible) of planned press events (such as press conferences, media availability and photo opportunities, and any milestone events, i.e., groundbreakings and openings) that relate to shared issues. The Recipient and the LACMTA Communications staff shall coordinate to include Metro executives and board members in such public relations activities as appropriate.

B11.4 Recipient shall meet with the LACMTA Communications Department on a regular basis to discuss and collaborate on high-level messaging related to shared issues.

B11.5 When either Recipient or LACMTA receives public comments or communications from elected officials, key stakeholders or the public that relate to the other partner organization, the staff will share those communications with the other entity's communications staff.

B11.3 The Metro logo is a trademarked item that shall be reproduced and displayed in accordance with specific graphic guidelines available from the LACMTA Communications Division.

B11.4 Recipient shall ensure that any subcontractor, including, without limitation, public relations, public affairs, and/or marketing firms hired to produce Project Communications Materials will comply with the requirements contained in this **Section B11**.

B12. OTHER TERMS AND CONDITIONS:

B12.1 This Agreement, along with its Attachments, and the MCA, constitute the entire understanding between the parties with respect to the subject matter herein. The Agreement shall not be amended, nor any provisions or breach hereof waived, except in writing signed by the Chief Executive Officers of the parties, or their designees.

B12.2 All disputes under this Agreement shall be resolved by the Chief Executive Officers of LACMTA and Recipient. If the Chief Executive Officers are unable to resolve the matter, either Party may institute legal action to recover damages for any default, or to obtain specific performance or to pursue any other rights or remedy available to it at law or in equity. Such legal actions must be instituted in the Superior Court of the County of Los Angeles, State of California.

B12.3 In the event that there is any court proceeding between the parties to enforce or interpret this Agreement, or to protect or establish any rights or remedies hereunder, the prevailing party shall be entitled to its costs and expenses, including reasonable attorney's fees.

B12.4 Neither party hereto shall be considered in default in the performance of its obligations hereunder to the extent that the performance of any such obligation is prevented or delayed by unforeseen causes including acts of God, acts of a public enemy, lawsuit seeking to restrain, enjoin, challenge or delay construction of the Project and government acts beyond the reasonable control and without fault or negligence of the affected party. Each party hereto shall give notice promptly to the other of the nature and extent of any such circumstances claimed to delay, hinder, or prevent performance of any obligations under this Agreement. Notwithstanding anything to the contrary in this Agreement, an extension of time for any such cause shall be for the period of time reasonable in light of the enforced delay.

B12.5 The schedule included in **Attachment D** hereto shall be extended by the period of time commensurate with any extension of time under the Design/Build Contract(s) (as that term is defined in the MCA) resulting from Force Majeure (as that term is defined in the Design/Build Contract(s)).

B12.6 Recipient shall comply with and insure that work performed under this Agreement is done and accounted for in compliance with Generally Accepted Accounting Principles (GAAP), and all applicable provisions of federal, state, and local laws, statutes, ordinances, rules, regulations, and Modified OMB A-87 or Federal Acquisition Regulations Subpart 31 (whichever is applicable), and the applicable requirements in the MCA. Recipient acknowledges responsibility for obtaining copies of and complying with the terms of the most recent federal, state, or local laws and regulations.

B12.7 The Parties acknowledge that the insurance and indemnification obligations of Recipient relating to the Project are set forth in the MCA.

B12.8 Recipient agrees that the applicable requirements of this Agreement shall be included in every contract entered into by Recipient or its contractors relating to work performed under this Agreement. For purposes of this **Section B12.8**, the applicable requirements are **Sections B3.3, B3.6, Section B6** (to the extent applicable), **Section B11**, and **Section B12.6** (exclusive of the reference to Modified OMB A-87).

B12.9 Recipient shall not assign this Agreement, or any part thereof, without prior approval of the LACMTA Chief Executive Officer or his designee, and any assignment without that consent shall be void and unenforceable.

B12.10 This Agreement shall be governed by California law.

B12.11 If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.

B12.12 The covenants and agreements of this Agreement shall inure to the benefit of, and shall be binding upon, each of the parties and their respective successors and assigns.

B12.13 If any software is developed with the Funds and if Recipient ceases to use the software/ for public purposes or Recipient sells, conveys, licenses or otherwise transfers the software, LACMTA shall be entitled to a refund or credit, at LACMTA's sole option, equivalent to the amount of the Funds spent developing the software. Such refund or credit shall not be required if Recipient reinvests the proceeds of such sale, conveyance, license or transfer into the Project.

B12.14 Parking facilities are part of the Project and will be designed and/or constructed using the Funds. Recipient shall coordinate with LACMTA parking program staff (see METRO.net for staff listing) in the planning, design and management requirements of the facility and shall ensure that its implementation is consistent with the LACMTA adopted parking policy in effect as of the date that the RFP for the Alignment Design/Build Contract (as that term is defined in the MCA) is released. For the parking policy, see www.metro.net/projects_studies/call_projects/other_resources.htm. Any proposed joint use parking arrangements shall be subject to prior LACMTA written approval.

B12.15 Notice will be given to the parties at the address specified in **Section A13** unless otherwise notified in writing of change of address.

B12.16 Recipient in the performance of the work described in this Agreement is not a contractor nor an agent or employee of LACMTA. Recipient attests to no organizational or personal conflicts of interest and agrees to notify LACMTA immediately in the event that a conflict, or the appearance thereof, arises. Recipient shall not represent itself as an agent or employee of LACMTA and shall have no powers to bind LACMTA in contract or otherwise.

B12.17 Time is of the essence in connection with each and every provision of this Agreement. Both parties agree to diligently and expeditiously: (i) process all requests from the other party made pursuant to the provisions of this Agreement, and (ii) take all actions required by this Agreement.

B12.18 This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which shall constitute one agreement. Photocopies of this Agreement may be used as originals.

B12.19 Facsimile copies of signatures on this Agreement shall be deemed valid and original.

Vista Avenue, San Dimas Avenue, Walnut Avenue, San Dimas Canyon Road, Wheeler Avenue, A Street, D Street, E Street, and multiple channel crossings, as well as the undercrossing at SR-57. This segment contains an existing freight track that will be relocated and remain active during the entire Project.

This segment of the Project has one center platform passenger station in San Dimas (east of San Dimas Avenue) and one center platform passenger station in La Verne (east of E Street). The San Dimas parking structure will contain a minimum of 450 stalls with a vehicular connection to Arrow Highway. The La Verne parking structure will contain a minimum of 600 stalls with a vehicular connection to Arrow Highway. Both the San Dimas station and the La Verne station will have a pedestrian connection from the parking facility to the platform via a pedestrian undercrossing.

White Avenue to Freight/MetroLink Tie-in Segment

This segment of the alignment is approximately 1.9 miles, runs mainly at-grade, and includes two at-grade crossings at White Avenue and Fulton Avenue, two grade separations at Garey Avenue and Towne Avenue, as well as a channel crossing. This segment of the alignment contains an existing single track freight alignment and existing sidings that will be relocated and remain active during the entire Project. The MetroLink commuter rail tracks are immediately to the south of the LRT tracks in this segment and will not be disturbed with the exception of improvements to the grade crossing warning systems.

This segment of the Project has one center platform station in Pomona (west of Garey Avenue). The Pomona parking structure will include a minimum of 850 spaces with a vehicular connection to a new access road located north of the parking structure. The parking structure shall be connected to the LRT station via a pedestrian overcrossing.

Freight/MetroLink Tie-in to Claremont

This segment of the alignment is approximately 1.5 miles, runs mainly at-grade, and includes four at-grade crossings at Cambridge Avenue, Indian Hill Boulevard, College Avenue, and Claremont Boulevard, as well as a channel crossing. This segment of the alignment contains an existing dual track freight/MetroLink commuter rail alignment that will be relocated and remain active during the entire construction of the Project.

This segment of the Project has one center platform LRT station in Claremont (west of College Avenue). The Claremont station will have an at-grade pedestrian connection from both ends of the platform. The Claremont parking facility will consist of a structure located east of College Avenue and north of the LRT tracks as well as a parking lot, and will include a minimum of 1260 spaces. In addition, a new MetroLink platform will be constructed approximately 800 feet west of College Avenue with a pedestrian undercrossing that connects to the Claremont parking structure to the north and the recreational area to the south.

PROJECT MILESTONES/SCHEDULE

Following are the agreed upon Project milestones, and a schedule for achieving those milestones.

MILESTONES

TARGET DATES

Phase 2B Alignment Ground Breaking	October 2017
Alignment Design/Build Contract	
Award Contract	December 2018
Substantial Completion	January 2026
Final Acceptance	January 2027
CPUC Approval of Safety Certification	May 2027
ROD	June 2027

provision then in effect and applicable, as determined by LACMTA in consultation with its bond counsel.

Recipient will designate one or more persons that will be responsible for compliance with the obligations described in this Attachment E and notify LACMTA of such designations.

REVISED

Unified Cost Management Process and Policy for Measure R Projects (amended January 22, 2015)

(Note: Underlines and strike-outs that were from original Board-adopted Policy document were inadvertently included in this Attachment. These have been removed. Only the language in Section 11 is new and remains underlined).

Introduction

The MTA will follow a unified cost management process and policy for the control and minimization of project costs for the Measure R transit and highway projects. At the core of the unified cost control management process and policy is a commitment to follow a new step-by-step evaluation of project costs against possible resources to address project shortfalls. Shortfalls that cannot be addressed at the project level by value engineering or other measures, such as changes in the scope of the project, will be subject to a new stepwise evaluation process.

The new step-by-step cost management process will require the MTA Board to review and consider approval of project cost estimates against funding resources at key milestone points throughout the environmental, design, and construction phases of the Measure R transit and highway projects. At each milestone, MTA staff is directed to: (1) submit a project that is consistent with the budget; (2) identify any issues when a project is not consistent with the budget; and (3) propose corrective actions before the project advances further, if it is not consistent with the budget. For Measure R funds, the planned funding resources (including any prior Measure R expenditures) shall not exceed the amount shown in the "New Sales Tax Total" column of the Measure R expenditure plan. At each milestone, the planned funding resources shall not exceed the amounts shown. These key milestones include the following decision points:

- 1) Selection of conceptual design alternatives to be studied in the environmental phase;
- 2) Selection of the Locally Preferred Alternative and entrance into the Preliminary Engineering phase;
- 3) Approval of the final environmental document and entrance into the final design phase;
- 4) Establishment of a life-of-project budget prior to construction; and,
- 5) Any amendment to the life-of-project budget.

If increases in cost estimates occur, the MTA Board must approve a plan of action to address the issue prior to taking any action necessary to permit the project to move to the next milestone. Increases in cost estimates will be measured against the 2009 Long Range Transportation Plan as adjusted by subsequent actions on cost

estimates taken by the MTA Board. Shortfalls will first be addressed at the project level prior to evaluation for any additional resources using these methods in this order:

- 1) Value Engineering and or scope reductions;
- 2) New local agency funding resources;
- 3) Shorter segmentation;
- 4) Other cost reductions within the same transit or highway corridor;
- 5) Other cost reductions within the same sub-region; and finally,
- 6) Countywide transit cost reductions or other funds will be sought using pre-established priorities.

The objective of the cost management process and policy is to insure the prompt development and consideration of project cost alternatives that genuinely address the cost controls necessary to successfully deliver all Measure R transit and highway corridor projects.

Process and Policy Detail

The unified cost management processes and policies that are proposed controls are as follows:

- 1) A regional long-range transportation plan (covering at least 20 years) for Los Angeles County shall be adopted at least once every five years. For interim years, staff will report on changes affecting the major financial assumptions of the plan and progress toward the implementation of new projects and programs. The plan update report shall also highlight Board approved actions taken during the interim period that affect the plan outcomes or schedules (*from Financial Stability Policy*);
- 2) MTA shall complete projects accelerated through the 30/10 Initiative in the same sequence as the adopted 2009 Long Range Transportation Plan (LRTP) (*from 30/10 Initiative Position Statement*);
- 3) MTA shall only utilize pledged federal assistance from the 30/10 Initiative if the construction and financing costs are less than the available funds (adjusted for inflation) planned in the adopted 2009 LRTP, unless those costs are being adjusted by the minimum necessary to accomplish an operable segment for the corridor (*from 30/10 Initiative Position Statement*);
- 4) Measure R transit corridor and highway projects shall be presented separately for approval by the Board in a step-by-step cost control process that will evaluate project cost estimates against funding resources at key milestones points throughout the environmental, design, and construction phases of the 30/10 transit projects. For Measure R funds, the planned funding resources (including any prior Measure R expenditures) shall not exceed the amount shown in the "New Sales Tax Total" column of the Measure R expenditure plan. These key milestones include the following decision points:
 - a. Selection of conceptual design alternatives to be studied in the environmental phase;

- b. Selection of the Locally Preferred Alternative and entrance into the Preliminary Engineering phase;
 - c. Approval of the final environmental document and entrance into the Final Design phase;
 - d. Establishment of a life-of-project budget prior to construction; and,
 - e. Any amendment to the life-of-project budget.
- 5) At any of the milestones above, the MTA will seek to control and minimize Measure R transit and highway project costs prior to taking any action necessary to permit the project to move to the next milestone. Cost minimization efforts will be measured against the 2009 Long Range Transportation Plan as adjusted by subsequent actions on cost estimates taken by the MTA Board. Shortfalls will first be addressed at the project level prior to evaluation for any additional resources using these methods in this order:
- a. Value engineering and/or scope reductions;
 - b. New local agency funding resources;
 - c. Shorter segmentation;
 - d. Other cost reductions within the same transit or highway corridor (see Attachment B);
 - e. Other cost reductions within the same sub-region (See Attachment B); and,
 - f. Countywide transit and highway cost reductions and/or other funds will be sought using pre-established priorities, as follows:
 - i. Where applicable, Measure R Transit Capital Subfund Contingency-Escalation Allowance funds (Measure R Expenditure Plan, Page 2 of 4, Line 18);
 - ii. Where applicable, Measure R Highway Capital Subfund Contingency-Escalation Allowance funds (Measure R Expenditure Plan, Page 3 of 4, Line 39); and,
 - iii. Where Line 18 is not applicable, the LRTP Near-Term Strategies and Priority Setting Criteria will be followed (Item 9, as Adopted by the Board of Directors in March 2010).

Each Measure R transit or highway project will be considered on a case-by-case basis at each milestone and a rationale developed if resources from the prior step above are insufficient or not recommended for good reason. The MTA Board will be presented with all viable options and will have the sole authority to make any final funding and project delay decisions.

- 6) Prior to inclusion in the annual budget, Measure R transit corridor and highway projects shall be presented separately for approval by the Board for a life-of-project budget. Subsequently, capital projects with life-of-project budget changes that cause the project to exceed \$1 million or if the change exceeds \$1 million shall be presented to the Board for approval (*from Financial Stability Policy*);
- a. Prior to life-of-project budget approval, the MTA shall compare the sum of the cost of the Measure R transit and highway projects to date and the

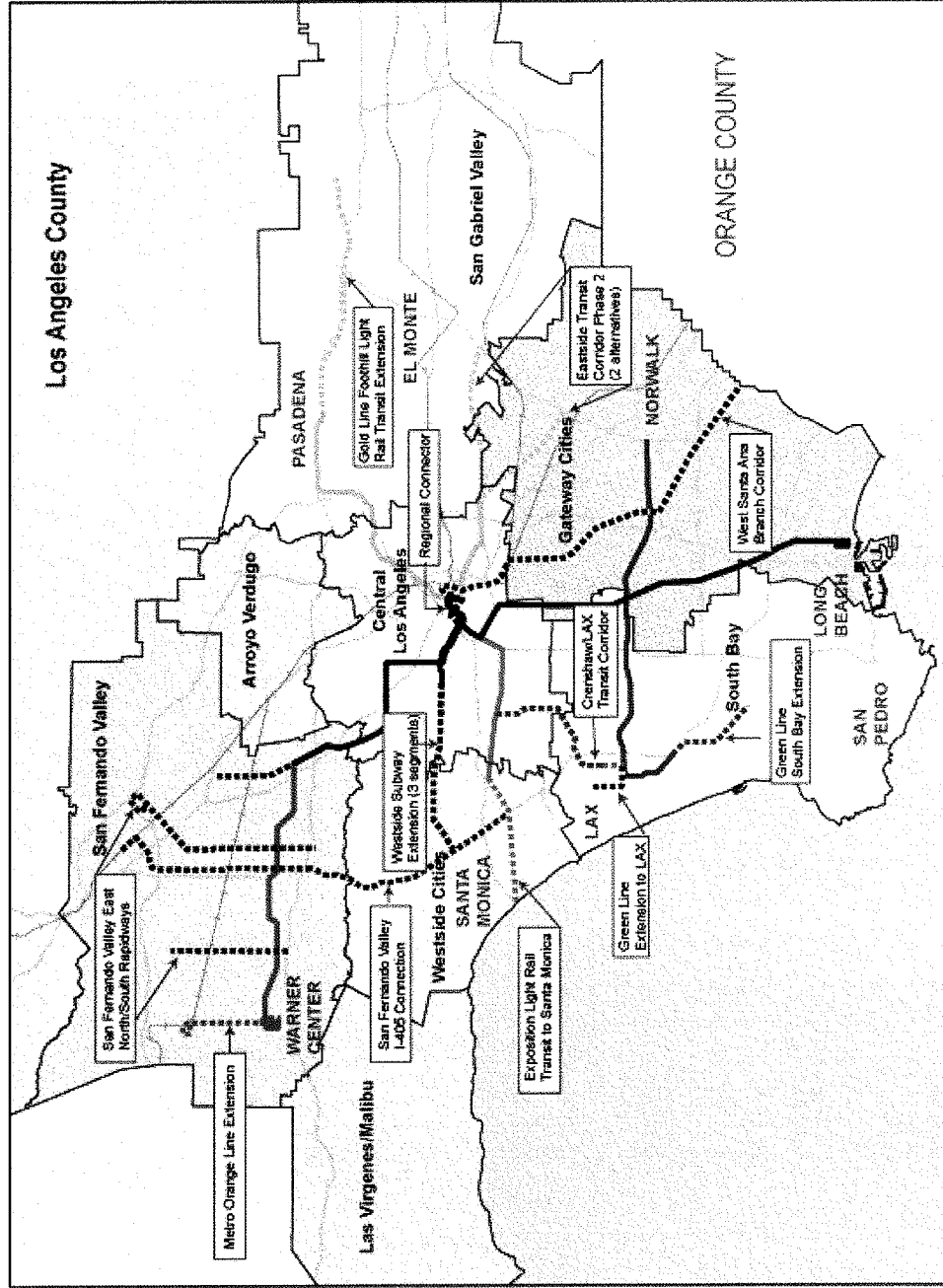
proposed life of project budget (as de-escalated) to the most up-to-date LRTP funding forecast for Measure R transit and highway projects. If the life-of-project budget is less than the anticipated funds available as compared to the up-to-date LRTP funding forecast, then MTA can approve the life of project budget. If the life-of-project budget are more than the available funds, then MTA would not execute a construction contract unless the MTA Board approved cost reductions, project delays or other funding to make up the difference (*modifies and would supersede language from the body of 30/10 Initiative Position Statement*);

- 7) Prior to approval of a life-of-project budget that exceeds currently committed revenues and prior to approval of a life-of-project budget cost increase, MTA staff will evaluate the possibility of securing the necessary cost savings or revenues for the project. Within the parameters of the MTA Board's policy not to seek transit funds from highway resources, or vice-versa, staff will first seek to identify cost and/or additional funds in a step-by-step manner from:
 - a. Value engineering and/or scope reductions;
 - b. New local agency funding resources;
 - c. Shorter segmentation;
 - d. Other cost reductions within the same transit or highway corridor;
 - e. Other cost reductions within the same sub-region; and,
 - f. Countywide transit cost reductions and/or other funds will be sought using pre-established priorities, as follows:
 - i. Where applicable, Measure R Transit Capital Subfund Contingency-Escalation Allowance funds (Measure R Expenditure Plan, Page 2 of 4, Line 18);
 - ii. Where applicable, Measure R Highway Capital Subfund Contingency-Escalation Allowance funds (Measure R Expenditure Plan, Page 3 of 4, Line 39); and,
 - iii. Where Line 18 is not applicable, the LRTP Near-Term Strategies and Priority Setting Criteria will be followed (Item 9, as Adopted by the Board of Directors in March 2010).
- 8) A specific MTA Board action is required to re-program highway capital project funding for use on transit or highway capital projects as a result of 30/10, unless such re-programming does not result in a net decrease to the highway capital project funding (*from 30/10 Initiative Position Statement*);
- 9) Likewise, a specific MTA Board action is required to re-program transit capital project funding for use on highway capital projects as result of 30/10, unless such re-programming does not result in a net decrease to the transit capital project funding (*from 30/10 Initiative Position Statement*); and,
- 10) Any capital project savings above \$200,000 must return to the Board for approval prior to the reprogramming or transfer of funds to other projects or programs (from Financial Stability Policy).

- 11) **A Regional Facility Area has been established, separate from subregional planning areas, which include Los Angeles International Airport (LAX), Burkank Bob Hope Airport, Long Beach Airport, Palmdale Regional Airport; the Ports of Long Beach and Los Angeles; and Los Angeles Union Station. Any capital project cost increases to Measure R funded projects within the boundaries of these facilities are exempt from the corridor and subregional cost reduction requirements of 7(d) and 7(e) above. Cost increases regarding these projects will be addressed from the regional programs share.**

ATTACHMENT B

Measure R Transit Corridor Map With Sub-regional Boundaries



ATTACHMENT B

PROJECT FUNDING

**Metro Gold Line Foothill Extension Phase 2B Glendora to Claremont
(in millions of dollars escalated to the year of the expenditure) Initial Draft 05-18-17**

Capital Project 865202 Sources of Funds	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Total
Measure R 35%	4.1	3.2	9.0	20.5	35.3	24.4								96.5
Measure M					78.3	99.9	153.6	166.2	129.1	132.9	150.1	82.3	26.6	1,019.0
Transit and Intercity Rail Capital Program (TIRCP)						36.2	36.1	54.2	54.2	36.1	18.1	9.0	5.4	249.2
Local Contributions					6.1	6.1	9.2	9.2	6.1	3.1	1.5	0.9		42.2
Total Project Funding	4.1	3.2	9.0	20.5	119.7	166.6	198.9	229.5	189.4	172.1	169.7	92.2	32.1	1,406.9

ATTACHMENT C

Expenditure Plan - Cost and Cashflow Budget

Metro Gold Line Foothill Extension Phase 2B Glendora to Claremont

(in millions of dollars escalated to the year of the expenditure) Initial Draft 05-18-17

Capital Project 865202 Uses of Funds	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Total
Pre-Construction	3.5	3.0	2.3	1.4	21.0	7.3								38.5
Construction					26.3	77.6	137.8	168.9	128.6	96.7	84.8	11.6		732.3
Right of Way					30.0	36.0	3.0							69.0
Professional Services	0.6	0.2	6.6	16.6	19.4	19.7	19.4	19.6	19.8	20.4	20.8	17.9		181.0
Project Contingency					19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	13.0	165.0
Vehicles										10.0	30.0	29.0	15.0	84.0
Metro Costs			0.1	2.5	3.0	5.0	17.4	18.0	18.0	21.0	10.1	10.3	3.0	108.3
Metro Contingency					1.0	2.0	2.3	4.0	4.0	5.0	5.0	4.4	1.1	28.8
Total Project Costs	4.1	3.2	9.0	20.5	119.7	166.6	198.9	229.5	189.4	172.1	169.7	92.2	32.1	1,406.9

ATTACHMENT D

SCOPE OF WORK

The Phase 2B project will provide a light rail transit (LRT) system linking the cities of Azusa, Glendora, San Dimas, La Verne, Pomona, and Claremont, and will involve relocation and reconfiguration of existing freight and Metrolink commuter rail track. The Project includes approximately 11.7 miles of double light rail main track; tail tracks beyond the Claremont platform; new bridges; improvements to existing culverts; retaining walls and sound walls; embankment improvements; drainage and storm water improvements; five at-grade passenger stations; five parking structures; intermodal interfaces; traction electrification system comprised of traction power supply substations (TPSS) and overhead contact system (OCS); grade crossings and adjacent roadway/traffic signal improvements; station equipment; wayside equipment; communications systems; approximately 10.4 miles of freight rail track and associated siding relocations and improvements; light rail train control/signaling system; freight track signaling system; approximately 1.3 miles of Metrolink track relocation and signaling, including Positive Train Control (PTC); a new Claremont Metrolink platform on the Metrolink Corridor; landscaping; and all related appurtenances, accessories, subsystems, documentation, procedures, spare parts, manuals, and special tools.

Light rail vehicles (LRV), universal fare system (UFS) equipment, the radio system for the LRT system, the rail operations control (ROC) facility, and the light rail supervisory control and data acquisition (SCADA) system will be provided by Metro.

A general overview of the Project alignment is provided below:

Foothill Gold Line Pasadena to Azusa Tail Track to Gladstone Avenue Segment

This segment of the alignment is approximately 4.4 miles, runs mainly at-grade, and includes eight at-grade crossings at Barranca Avenue, Foothill Boulevard/Grand Avenue (freight only), Vermont Avenue, Glendora Avenue, Pasadena Avenue, Glenwood Avenue, Elwood Avenue, Loraine Avenue, grade separations at Foothill Boulevard/Grand Avenue (LRT only), SR66, Lone Hill Avenue, and multiple channel crossings. This segment of the alignment contains an existing freight track which will be relocated and remain active during the entire construction of the Project.

This segment of the Project has one center platform station in Glendora between Vermont Avenue and Glendora Avenue. The Glendora parking structure will contain a minimum of 420 stalls with a vehicular connection to Vermont Avenue, as well as pedestrian connections to Vermont Avenue, Glendora Avenue, and the LRT Platform. The Glendora station will have a pedestrian connection from the parking facility to the platform via a pedestrian undercrossing.

Gladstone Avenue to White Avenue Segment

This segment of the alignment is approximately 3.9 miles, runs mainly at-grade, and includes 11 at-grade crossings at Gladstone Avenue, Eucla Avenue, Bonita Avenue/Cataract Avenue, Monte

ATTACHMENT E

BOND REQUIREMENTS

The provisions of this Attachment E apply only if and to the extent some or all of the Funds are derived from LACMTA issued Bonds or other debt, the interest on which is tax exempt for federal tax purposes and/or Build America Bonds as defined in the American Reinvestment and Recovery Act of 2009 or similar types of bonds (collectively, the “**Bonds**”) as set forth in **Section A7**.

Recipient acknowledges that some or all of the Funds may be derived from Bonds, the interest on which is tax-exempt for federal tax purposes or with respect to which LACMTA receives a Federal subsidy for a portion of the interest cost or the investor receives a tax credit. Recipient further acknowledges its understanding that the proceeds of the Bonds are subject to certain ongoing limitations relating to the use of the assets financed or provided with such proceeds (“Project Costs” or “Project Components”) in the trade or business of any person or entity other than a governmental organization (any such use by a person or entity other than a governmental organization is referred to as “Private Use”). Private Use will include any sale, lease or other arrangement pursuant to which a nongovernmental person or entity receives a legal entitlement of a Project Component and also includes certain agreements pursuant to which a nongovernmental person will operate or manage a Project Component. Each monthly invoice submitted by Recipient to reimburse prior expenditures (or to be received as an advance) shall provide information regarding the specific Project Costs or Project Components to which the Funds which pay that invoice will be allocated and whether there is or might be any Private Use associated with such Project Costs or Project Components. Recipient will, for the entire time over which LACMTA’s Bonds or other debt remains outstanding, (1) notify and receive LACMTA’s approval prior to entering into any arrangement which will or might result in Private Use and (2) maintain records, including obtaining records from contractors and subcontractors as necessary, of all allocations of Funds to Project Costs or Project Components and any Private Use of such Project Costs or Project Components in sufficient detail to comply and establish compliance with Section 141 of the Internal Revenue Code of 1986, as amended (the “Code”), or similar code provision then in effect and applicable, as determined by the LACMTA in consultation with its bond counsel.

With respect to the investment of any Funds advanced to Recipient pursuant to **Section A3.2** hereof or otherwise, and any earnings derived from the investment of such Funds, Recipient will record and maintain the following information such that LACMTA can comply and establish compliance with Section 148 of the Code, or similar code provision then in effect and applicable, as determined by LACMTA in consultation with its bond counsel: (i) the purchase date of each investment, (ii) the purchase price, (iii) information establishing that the purchase price is the fair market value as of such date (for example, the published quoted bid by a dealer in such investment on the date of purchase), (iv) any accrued interest paid, (v) the face amount of, (vi) the coupon rate, (vii) the periodicity of interest payments, (viii) the disposition price, (ix) any accrued interest received upon disposition, and (x) the disposition date. Recipient will make such information available to the LACMTA promptly after request. Recipient will also adhere to any investment instructions or limitations, as directed by LACMTA, which are necessary to comply and establish compliance with Section 148 of the Code or similar code

ATTACHMENT F
FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM (FTIP) SHEET

Los Angeles Metropolitan Transportation Authority
2017 Federal Transportation Improvement Program (\$000)

TIP ID		Implementing Agency									
LA29212XY		Metro Gold Line Foothill Extension									
Project Description: METRO RAIL GOLD LINE FOOTHILL EXTENSION - AZUSA TO CLAREMONT (LA County Line) 12 MILE, 5 STATION LRT EXTENSION. SAFETEA-LU # 285 LEAD AGENCY WILL CHANGE TO METRO GOLD LINE. PS&E only.										SCAG RTP Project #: 1120008 Study: YES Is Model: YES Model #: T275 PM: Crandal Jue - (826) 305-7010 Email: cjue@foothillextension.org LS: N LS GROUP#: Conformity Category: TCM	
System : Transit	Route :	Postmile:	Phase: Environmental Document/Pre-Design Phase (PAED)					Completion Date 12/31/2035			
Transit Rt: n/a	Transit Mode: Bus	Fare: 1.50	Trans Fee: 0.00	Prk Ride Loc:	Air Basin: SCAB	Envir Doc: CATEGORICALLY EXEMPT - 12/31/2001					
Headway Peak: N/A Headway OP: N/A Stop Time :0.00 Parking \$: Stop Dist:					Uza: Los Angeles-Long Beach-Santa Ana	Sub-Area:	Sub-Region:				
Program Code: LRN92 - LIGHT RAIL EXTENSION Stop Loc: Glendora					CTIPS ID: 20920002603	EA #:	PPNO:				
	PHASE	PRIOR	16/17	17/18	18/19	19/20	20/21	21/22	BEYOND	PROG TOTAL	
	PE										
	RW										
	CON										
	SUBTOTAL										
CITY - City Funds	PE							\$0		\$0	
	RW							\$0		\$0	
	CON							\$42,206		\$42,206	
	SUBTOTAL							\$42,206		\$42,206	
Cap And Trade Program	PE					\$0	\$0	\$0	\$0	\$0	
	RW					\$0	\$0	\$0	\$0	\$0	
	CON				\$42,700	\$51,624	\$51,624	\$103,250		\$249,198	
	SUBTOTAL				\$42,700	\$51,624	\$51,624	\$103,250		\$249,198	
MM35 - Measure M 35% Transit Construction	PE				\$0	\$0	\$0	\$0	\$0	\$0	
	RW				\$0	\$20,377	\$20,000	\$11,000	\$0	\$51,377	
	CON			\$55,479	\$94,759	\$139,976	\$164,960	\$512,449		\$967,623	
	SUBTOTAL			\$55,479	\$115,136	\$159,976	\$175,960	\$512,449		\$1,019,000	
MR35 - Measure R 35% New Rail or Bus Transit Capital	PE	\$0	\$0	\$0	\$0	\$0				\$0	
	RW	\$0	\$0	\$0	\$10,000	\$9,623				\$19,623	
	CON	\$7,243	\$8,000	\$24,989	\$36,612	\$0				\$76,844	
	SUBTOTAL	\$7,243	\$8,000	\$24,989	\$46,612	\$9,623				\$96,487	
	TOTAL	\$7,243	\$8,000	\$24,989	\$102,091	\$167,459	\$211,600	\$269,790	\$615,699	\$1,406,871	
	TOTAL PE: \$0										
					TOTAL RW: \$71,000						
									TOTAL CON: \$1,335,871		

Los Angeles Metropolitan Transportation Authority

2017 Federal Transportation Improvement Program (\$000)

TIP ID **LA29212XY**

Implementing Agency **Metro Gold Line Foothill Extensio**

- **General Comment:** Latest LOP will be approved in the June 2017 Board meeting
- **Mdeling Comment:** Latest LOP will be approved in the June 2017 Board meeting
- **TCM Comment:** Latest LOP will be approved in the June 2017 Board meeting
- **Narrative:** Project cost increased by \$1,371,341 and by 3,859.67%

Increase Funding

TCSPPP:

— Delete funds in 06/07 in ENG for \$2,900

5309b:

— Delete funds in 15/16 in ENG for \$12,983

5309c:

— Delete funds in 15/16 in ENG for \$12,541

AGENCY:

— Delete funds in 06/07 in ENG for \$3,944

AGENCY:

— Delete funds in 07/08 in ENG for \$1,565

AGENCY:

— Delete funds in 10/11 in ENG for \$1,597

CAPTRAD:

▶ Add funds in 19/20 in CON for \$42,700

CAPTRAD:

▶ Add funds in 20/21 in CON for \$51,624

CITY:

▶ Add funds in 21/22 in CON for \$42,206

CAPTRAD:

▶ Add funds in 21/22 in CON for \$51,624

CAPTRAD:

▶ Add funds in 22/23 in CON for \$51,625

CAPTRAD:

▶ Add funds in 23/24 in CON for \$51,625

MR35:

▶ Add funds in 14/15 in CON for \$4,249

MR35:

▶ Add funds in 15/16 in CON for \$2,994

MR35:

▶ Add funds in 16/17 in CON for \$8,000

MR35:

▶ Add funds in 17/18 in CON for \$24,989

MM35:

▶ Add funds in 18/19 in CON for \$55,479

MR35:

▶ Add funds in 18/19 in ROW for \$10,000, CON for \$36,612

MR35:

▶ Add funds in 19/20 in ROW for \$9,623

MM35:

▶ Add funds in 19/20 in ROW for \$20,377, CON for \$94,759

MM35:

▶ Add funds in 20/21 in ROW for \$20,000, CON for \$139,976

MM35:

▶ Add funds in 21/22 in ROW for \$11,000, CON for \$164,960

MM35:

▶ Add funds in 22/23 in CON for \$136,933

MM35:

▶ Add funds in 23/24 in CON for \$98,860

MM35:

▶ Add funds in 24/25 in CON for \$137,856

MM35:

▶ Add funds in 25/26 in CON for \$63,826

MM35:

▶ Add funds in 26/27 in CON for \$52,208

MM35:

▶ Add funds in 27/28 in CON for \$14,738

MM35:

▶ Add funds in 28/29 in CON for \$8,028

MM35:

Total project cost increased from \$35,530 to \$1,406,871

Last Revised Amendment 17-11 - In Progress

Change reason: COST INCREASE

Total Cost **\$1,406,871**

ATTACHMENT G-2

LACMTA MONTHLY PROGRESS/EXPENDITURE REPORT

**METRO GOLD LINE
FOOTHILL EXTENSION PHASE 2B
MONTHLY EXPENDITURE REPORT FOR
LACMTA PROJECT COSTS**

Grantee To Complete
Invoice #
Invoice Date
MOU#
Purchase Order #
Monthly Report #

Month Year Report

SECTION 1: MONTHLY EXPENSE REPORT FOR PROJECT EXPENDITURES

Please itemize grant-related charges for this Month on Page 2 of this report and **include totals in this Section.**

	Measure M + R \$	Other funding sources (please specify) \$	Total \$
Project Monthly Expenditure			
This Month Expenditure	0.00	0	0.00
Project-to-Date Expenditure			
Funds Expended to Date (Include this Month)	0.00	0	0.00
Task Number	0.00	0	0.00
% of Project Budget Expended to Date	0.00%	0	0.00%
Balance Remaining	0.00	0	0.00

ATTACHMENT G-2

LACMTA MONTHLY PROGRESS/EXPENDITURE REPORT

SECTION 2: ITEMIZED LISTING OF EXPENSES AND CHARGES THIS MONTH FOR PROJECT EXPENDITURES

All expenses and charges, including grant and local match, must be itemized and listed below. Each item listed must be verifiable by an invoice and/or other proper documentation. The total amounts shown here must be equal to this month's expenditures listed on the previous page. All expenses and charges must be reflective of the approved budget per the Foothill Extension Funding Agreement. Use additional pages if needed.

ITEM	INVOICE #	TOTAL EXPENSES / CHARGES	\$ CHARGED TO LACMTA
1 Metro Staff Costs	N/A	\$0.00	\$0.00
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
TOTAL		\$0.00	\$0.00

Note:

All receipts, invoices, and time sheets, attached and included with this Expense Report must be listed and shown under the Invoice Number column of the Itemized Listing (above).

Invoice Payment Information:

LACMTA will make all disbursements electronically unless an exception is requested in writing.

ACH Payments require that you complete an ACH Request Form and fax it to Accounts Payable at 213-922-6107.

ACH Request Forms can be found at www.metro.net/callforprojects.

Written exception requests for Check Payments should be completed and faxed to Accounts Payable at 213-922-6107.

I certify that I am the responsible Project Manager or fiscal officer and representative of _____ and that to the best of my knowledge and belief the information stated in this report is true and correct and recipient's own expenditures comply with OMB A-87.

Signature

Date

Name

Title

ATTACHMENT H

EXTRA ALLOWABLE COST LIST

Costs relating to the following list of items, which are otherwise unallowable under OMB A-87, are considered allowable under this Agreement if the cost is otherwise not prohibited by this Agreement.

1. Advertising and Public Relations (Section 2)
 - a. Section 2.e.(2) (a) - Displays, demonstrations and exhibits.
 - b. Section 2.e.(2) (b) - Meeting rooms for business purposes.
 - c. Section 2.e.(2) (c) - Salaries and wages of employees engaged in setting up and displaying exhibits, making demonstrations and providing briefings.
 - d. Section 2.e.(3) - Promotional items and memorabilia, including models, gifts and souvenirs.

2. General Government Expenses (Section 23)
 - a. Section 23.a.(2) – Salaries and other expenses for similar local governmental bodies whether incurred for purposes of legislation or executive direction.

3. Idle Facilities and Idle Capacity (Section 24)
 - a. Section 24.b – Idle facilities cost for the one train depot.

4. Insurance (Section 25)
 - a. Section 25.h – Commercial insurance premium for Errors and Omissions insurance that protects against the cost of contractors for correction of the contractor’s own defects in material or workmanship.

5. Interest (Section 26)
 - a. Section 26.b - Finance cost related to advancement of money for Design Build financing expenses.

ATTACHMENT I

METRO'S FIRST/LAST MILE POLICY FOR MAJOR TRANSIT CORRIDORS

** ATTACHMENTS AVAILABLE UPON REQUEST*

BOARD REPORT INCLUDES FIRST/LAST MILE ELEMENTS



Board Report

File #:2016-0615, File Type:Motion / Motion
Response

Agenda Number:12.

REVISED
PLANNING AND PROGRAMMING COMMITTEE
NOVEMBER 16, 2016

SUBJECT: FIRST/LAST MILE MOTION RESPONSE

ACTION: RECEIVE AND FILE REPORT ON APPROACH AND RESOURCES NEEDED TO IMPLEMENT FIRST/LAST MILE MOTION AND AUTHORIZE CHIEF EXECUTIVE OFFICER TO TAKE ACTION TO IMPLEMENT FIRST/LAST MILE MOTION

RECOMMENDATION

CONSIDER:

- A. RECEIVING AND FILING status report on **work approach and resource needs to implement the Metro Board's First/Last Mile Motions 14.1 and 14.2**; and
- B. AUTHORIZING the Chief Executive Officer to take action to implement Board Motions 14.1 and 14.2.

ISSUE

On May 26, 2016, the Metro Board passed Motion 14.1 on first/last mile implementation. Motion 14.1 was subsequently amended by Motion 14.2 on June 23, 2016. The Board requested that staff report back on the Purple Line Section 2 in June 2016 and the balance of the motion at the October 2016 Board meeting. On June 15, 2016, staff reported to the Planning and Programming Committee on the Purple Line Section 2 and indicated that a full report back to the Board would occur in October 2016. As directed, this report comprehensively responds to Motions 14.1 and 14.2.

As outlined in detail in the financial impact section of this report, the total cost to implement the motions' multiple directives is estimated to be \$16.5 million for professional services and 6 additional full-time employees over a period of 4.5 years.

DISCUSSION

On May 26, 2016, the Metro Board passed Motion 14.1 on first/last mile implementation (Attachment E). The motion, subsequently amended by Motion 14.2 (allowing first/last mile active transportation improvements to be counted toward the 3% local contribution for rail projects) is expansive in scope and scale and has implications agency-wide and countywide. This comprehensive directive will

improve safety, livability and access to transit. Through Board Motion 14.1, staff is directed to:

- Conduct first/last mile planning for 254 station areas in the county;
- Implement first/last mile improvements to coincide with the completion of the Purple Line Section 2;
- Incorporate the newly-designated Countywide First/last Mile Priority Network into the Long-Range Transportation Plan;
- Facilitate first/last mile improvements initiated by local jurisdictions through technical and grant assistance; and
- Establish first/last mile improvements into the project delivery process for future transit capital projects.

Motion 14.2 (Attachment F) allows city-funded first/last mile projects to count toward the 3% local contribution for rail projects. It should be noted that under provisions in Measure R, funding assumptions for future transit capital rail projects typically already account for the 3% local contribution in the project cost, which does not include first/last mile improvements. The Board-mandated inclusion of first/last mile components will increase the total project cost. Further, the actual cost of implementing first/last mile improvements will be determined through planning for each station area, will vary by project, and may be greater or less than the 3% contribution. Notably, while the Measure M ballot measure going to the voters on November 8 includes important provisions regarding 3% local contributions, this Board report addresses provisions and circumstances as they exist today for projects under Measure R.

This Board report adds definition and describes the cost and resource implications of the specific activities set forth in the motion. It details an approach to conduct first/last mile planning and incorporate first/last mile elements into future transit capital projects. In summary, the motion necessitates five new projects/programs:

- Transit Capital Projects Guidelines to Integrate First/Last Mile
- Purple Line Sections 2 and 3 First/Last Mile Planning and Design
- Countywide First/Last Mile Planning
- Grant/Funding Technical Assistance
- Matching Grant Program

Implementing all the mandated work will require 6 full-time employees (FTEs), including 4.5 FTEs supporting various aspects of program development and project planning and up to 1.5 FTEs supporting grant and technical assistance. Without this additional staffing, only a small subset of the directed work (Purple Line Planning and Capital Project Guidelines) can be accomplished in the near term, and then only by substantially delaying the following other initiatives:

- Grant-writing Assistance (as directed by Motion 14.1)
- Countywide FLM Planning and Design (as directed by Motion 14.1)
- Parks Access Motion
- Urban Greening Implementation Action Plan and Demonstration Projects
- First/Last Mile Training

- Affordable Housing and Sustainable Communities Strategy
- Annual Sustainability Report/Sustainability Metrics Update
- Sustainability Demonstration San Gabriel Valley COG
- Sustainability Demonstration Gateway Cities COG

We have identified a need for \$12.5 million for professional services over four fiscal years assuming the recommended staffing, and an additional need of up to a total of \$20 million to directly fund matching grants over a similar time frame. As detailed in this report, this resource estimate is based on comparable prior work efforts, and as such, should be viewed as the most accurate appraisal of the work possible at this time.

The approach detailed herein calls for intensive efforts to implement Board direction over four fiscal years (FY17-FY20). Due to time sensitivity and commitments described in staff's June 15, 2016 report to the Planning and Programming Committee, our first priority will be to implement first/last mile components of the Purple Line and to prepare guidelines pertinent to all future capital projects. Attachment D details the prioritization of work described in this Board report, along with an alternative scenario for deferred work efforts in the absence of additional staffing.

This report does not identify capital costs for a build-out of the Countywide First/Last Mile Priority Network, including future transit capital projects. The addition of first/last mile improvements to future transit capital projects as mandated by the Board has implications for the scope and total cost of those projects which will be reported to the Board on an on-going basis as each individual project progresses.

Context and Prior Activities

Staff recognizes the far-reaching implications of Motions 14.1 and 14.2, and is well prepared to carry out the specified directives. Metro has played a vital role in advancing sustainability goals in the region and has focused on the concept of the first/last mile and sustainability in the county for many years, including planning and implementing a regional transportation system that increases mobility, fosters walkable and livable communities, and minimizes greenhouse gas emissions and environmental impacts. Metro took a leadership role on sustainability issues with the development of the 2012 Countywide Sustainability Planning Policy and Implementation Plan (CSPP). Through this policy, the agency defined long-term sustainability outcomes to facilitate greater coordination across modes, planning disciplines and government agencies. The concept of first/last mile fits squarely within the community and environmental dimensions of sustainability and was further developed in the First/Last Mile Strategic Plan (FLM Plan), which Metro adopted in April 2014. An outgrowth of the CSPP, the FLM Plan provides a path to systematically address the first/last mile challenge.

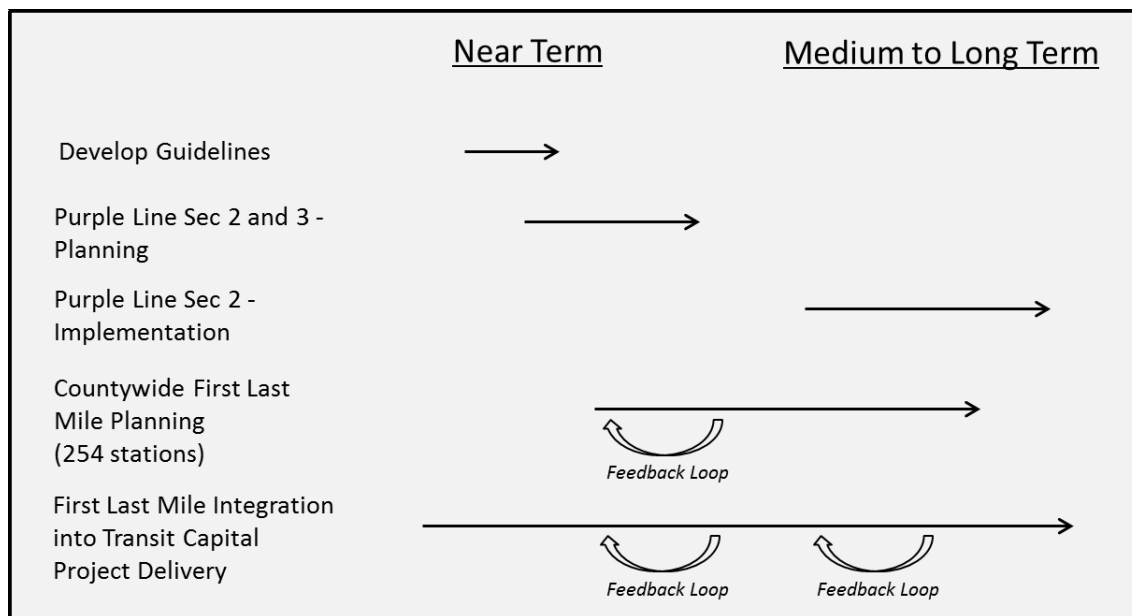
On May 26, 2016, the Metro Board of Directors adopted the Active Transportation Strategic Plan (ATSP) and designated the Countywide First/Last Mile Priority Network (Attachment A). Included in the ATSP is the Regional Active Transportation Network. By adopting the ATSP, Metro has adopted a comprehensive plan to increase access and mobility throughout the county that facilitates easier and safer walking and biking. By designating the Countywide First/Last Mile Priority Network, Metro is on the forefront of improving and enhancing the transit customer's experience accessing Metro

stations.

To continue improving access to Metro’s transit system, Motion 14.1 recognizes that first/last mile projects complement the transit system by providing mobility options, safety and choice. Further, by encouraging transit use and mode shift, Metro aims to achieve sustainability goals in the region that support the RTP/SCS and state goals for reduced greenhouse gas emissions.

The tasks directed by Board Motion 14.1 and 14.2 will play out over the course of several years taking into account approach, scope development, procurement, funding, and construction. In addition, feedback loops will be in place at key deliverables to ensure that the interrelated elements are continually being improved. See Figure 1 below.

*Anticipated Timeline for Motion Items Addressed in this Report
Figure 1*



As outlined in the ATSP, implementation of the Regional Active Transportation Network and first/last mile projects requires close collaboration among different disciplines, jurisdictions and community stakeholders. Staff will rely on the methods and strategies outlined in both the ATSP and the First/Last Mile Strategic Plan to engage Metro departments and the community, and to partner with cities and the County of Los Angeles for unincorporated areas in order to implement these station access projects.

As Metro works to accomplish the directives specified in the first/last mile motion over the next several years, staff will evaluate the effects of these improvements on access to transit, vehicle miles traveled and greenhouse gas emissions. The forthcoming guidelines on first/last mile project delivery will identify additional performance metrics to ascertain how these projects improve transit access and measures of sustainability. The results will enable Metro to be flexible and innovative with

respect to how first/last mile projects are delivered.

Work Approach

As described above, Motions 14.1 and 14.2 necessitate five distinct projects requiring FTEs and professional services, as well as direction impacting on-going Metro activities such as the Call for Projects and Long Range Transportation Plan. The intended approach for each of these activities is described below in prioritized order. Priority is based on both time sensitivity as well as cost-effectiveness. Activities to implement major capital projects are first priority in order to align first/last mile planning and implementation with the timelines for the larger transit capital projects. Other activities (Call for Projects, LRTP, and Grant Assistance) are high priorities due to their lower resource demands relative to anticipated benefits.

1. Transit Capital Projects - Purple Line Section 2 and Beyond

Integrating the First/Last Mile Priority Network into the planning, design and implementation of capital projects is an important piece of the Board's overall direction in Motion 14.1 and will require several layers of effort. The work consists of guidelines development and Purple Line Section 2 first/last mile planning.

For projects that follow Purple Line Section 2, Metro will develop a set of guidelines to direct this full integration and carry out the Board's objectives. Pursuant to Director Solis' amendment to Motion 14.1, this will include Foothill Gold Line Phase 2B Extension to Claremont. These guidelines will cover process, timing, and funding considerations for including first/last mile network improvements in future capital projects. Guidelines **will not** cover how to develop a first/last mile plan, as this is already sufficiently laid out in the First/Last Mile Strategic Plan and the Active Transportation Strategic Plan. The following elements are anticipated for the guidelines:

- *Appropriate phasing of first/last mile planning and implementation activities within the context of a larger capital project (see working draft Attachment C for reference).* All projects will have a consolidated construction process, with first/last mile components included in the project scope and carried out in tandem. Ideally, first/last mile efforts will also be included in the planning and environmental review stages, but projects that are further along will be assessed on a case-by-case basis. Some projects (e.g., those with completed environmental clearances) will necessitate standalone first/last mile planning processes in order to "catch up" prior to implementation. Attachment C provides a snapshot of project planning, design, and implementation phases, and notes the stage of development of all current capital projects.
- *Delineation of responsibility between Metro and municipalities for planning and project delivery.* It is anticipated that Metro will have the lead role in planning, with input and review from cities. Project delivery will likely vary on a case-by-case basis in consideration of the given city's capacity. Guidelines will lay out considerations and options for shared roles, such as Metro leading project delivery with a minimal local review role; a city leading project delivery based on planned improvements and Metro review; or hybrids. In all cases, this collaborative process will result in a project plan for first/last mile improvements containing

specific agreed-upon components to be implemented. Project plans will focus on access improvements within the ½ mile walk-shed of each station, with some components possible up to three miles based on the bicycle access distance as defined in both the First/Last Mile and Active Transportation strategic plans and local active transportation planning efforts.

- *Funding considerations including the application of the 3% local contribution toward first/last mile components.* First/last mile components will be part of the overall project costing and, as specified in Board direction, will be defined, integral parts of the overall project not subject to value-engineering. The municipality will be able to apply the 3% local contribution toward any eligible improvement included in the project plan as described above, and conversely, may not count other active transportation investments that are not included in the project definition. Guidelines will also establish exclusions (e.g. on-going sidewalk maintenance, mitigation obligations, etc.) that cannot be counted toward the 3% contribution.

Process, Approach, and Resources

The Financial Impact section in this report will describe the level of effort and resources needed to carry out this direction. Briefly summarized, the process will entail:

- Metro will procure a consultant to assist in the development of these guidelines.
- A technical working group will be formed in order to capture input and advice from affected Metro departments and local agencies.
- An approximately 12-month development timeline (including time for procurement).

In terms of level of effort, First/Last Mile Implementation Guidelines are comparable to the development of other guidance documents that coordinate and direct internal processes for construction projects and communicate expectations and roles for external partners. For example, the Active Transportation Design Criteria and Metro's Countywide Urban Greening Plan include tasks for internal and interagency research and coordination and provide cross-agency guidance for future projects. We have referenced and compared scope elements from these projects in order to estimate the cost to develop the FLM Implementation Guidelines. See Financial Impact section for details.

As reported in June 2016, Metro will engage an additional consultant under a separate contract to prepare an FLM project plan for the Purple Line Section 2 (Attachment G). For efficiency, we also anticipate including Purple Line Section 3 stations in this planning effort. This will involve collaboration with the cities of Los Angeles and Beverly Hills, analysis of existing conditions data, conducting walk audits, and engaging communities in the station area, resulting in conceptual designs to serve each station. Further, this effort will develop detailed costing and a financial plan for Section 2. The financing plan for the Section 3 project will need to include the FLM components which will inform future decision points on FLM implementation. Environmental review for the FLM components will also be included in this overall effort, as environmental review for the transit project itself has already been completed. The work to develop a plan for the Purple Line is comparable to the planning, design, and environmental work previously done for the Gold Line Eastside Access project. See Financial Impact section for details.

While this aspect of first/last mile implementation will have resource implications beyond the specific areas discussed here (guidelines and Purple Line planning), including increases to scope for

individual projects as well as the longer-term costs for project construction, we are not estimating the additional resource needs at this time. Rather, cost implications for individual projects will be reported to the Board as each project progresses through planning and implementation phases.

2. Existing Fund Sources / Capital Grant Prioritization / Long Range Transportation Plan

Review and Assessment of Existing Fund Sources

The Metro Board of Directors requested staff to develop a funding strategy to implement first/last mile improvements identified in the Countywide First/last Mile Priority Network. Specifically, the Board requested staff under Motion 14.1, B.4 to “dedicate funding for the Countywide First/last Mile Priority Network in the ongoing Long-Range Transportation Plan update, including a review of first/last mile project eligibility for all Prop A, Prop C, and Measure R capital funding categories.” This is our assessment.

The Board-adopted ATSP includes Chapter 3: Implementation, which contains a summary of all eligible funding sources for implementation of the Countywide First/Last Mile Priority Network. This summary includes not only Proposition A, Proposition C, and Measure R, but also the other local, state, and federal sources eligible for first/last mile improvements. Importantly, eligible fund sources are not necessarily available fund sources. A key part of the next long range plan will be the reconciliation and prioritization of multiple funding demands against these projected revenue streams.

Currently, the Long Range Transportation Plan funds first/last mile improvements through the Metro Call for Projects (Call). Under previous direction from the Board, staff prioritized first/last mile projects in the 2015 Call for Projects. The Board may elect to increase the share of funding dedicated to first/last mile projects in future Calls, based on the priority of this investment compared to others.

As noted above, Metro’s Grant Assistance Policy has been successful in securing funding for first/last mile projects, and will be expanded, per Board direction.

Capital Grant Prioritization

At the May 2016 Board meeting, the Metro Board directed staff to prioritize funding for the Countywide First/Last Mile Priority Network in Metro grant programs, including the creation of a dedicated first/last mile category in the Call for Projects.

In response to a June 25, 2015 Board motion (Item 16), staff is working with the Subregional Executive Directors Group on a restructured Call process to share Call decision-making with the subregional agencies while meeting federal and state requirements. Staff has briefed Metro’s Technical Advisory Committee, Streets and Freeways Subcommittee, Bus Operations Subcommittee, and the General Managers Group on this approach. As reported to the Planning and Programming Committee on August 18, 2016, the next Call funding cycle is on pause while this concept is further developed and the LRTP funding assessment referenced above is completed. Staff will report back to the Board as future Call funding availability is assessed through the upcoming Long Range Transportation Plan process. As the Call restructuring process evolves, first/last mile improvements may be prioritized beyond just its inclusion as an evaluation criterion in the 2015 Call

for Projects.

Long Range Transportation Plan - FLM Eligibility Review

The Metro Board also directed staff to support the ATSP by dedicating funding in the LRTP update for the First/Last Mile Priority Network, including a review of first/last mile project eligibility for all Propositions A and C and Measure R capital funding categories. As the LRTP is updated over the next year, funding for first/last mile improvements will be identified.

Activities described in this section relate to consideration of first/last mile in on-going efforts, and therefore do not involve additional resource needs.

3. Technical Assistance

Through Motion 14.1, the Board has directed Metro staff to provide technical and grant writing support to local jurisdictions wishing to deliver first/last mile projects. Staff recommends augmenting the existing Metro Grant Assistance Policy, which provides ongoing grant-writing technical assistance to projects applying to the state Active Transportation Program (ATP). This Board-adopted grant assistance program focuses on the implementation of Metro-adopted active transportation projects, programs, and policies such as the Active Transportation Strategic Plan (ATSP) and the First/Last Mile Strategic Plan and Planning Guidelines. Project selection, which is based on applications submitted voluntarily by local jurisdictions, prioritizes:

- Consistency with ATP and Metro goals
- Provision of local matching funds
- Funding needs greater than \$1 million

Under this existing policy, Metro is well-positioned to provide additional support for local jurisdictions seeking ATP funding to advance first/last mile projects around transit stations on the Countywide First/Last Mile Priority Network (Attachment A) identified in the ATSP and the first/last mile Board motion.

Schedule

Grant schedules vary by program. A typical grant-writing technical assistance schedule can take four to five months.

The Letters of Interest (LOI) solicitation process can easily be modified to accommodate projects of an appropriate dollar amount that have been developed and prioritized through a first/last mile planning process, are consistent with Metro's First/Last Mile Strategic Plan and Planning Guidelines and correspond with the availability and timing of funding for implementation. Additionally, the schedule could be augmented to allow for grant assistance in pursuing awards from other discretionary grant programs. The Affordable Housing and Sustainable Communities, Highway Safety Improvement Program, Transportation Investment Generating Economic Recovery program, and various Federal Transit Administration programs may also have funding eligible for first/last mile projects.

There could be opportunities to combine a match funding program with the grant assistance program,

so that promising first/last mile projects receive both matching funds and grant assistance from Metro to assist in efforts to obtain discretionary grant funds.

The Financial Impact section of this report details the resource needs associated with technical assistance. Staff's estimation in this area is based solely on an expansion of the existing grant assistance program to support a larger pool of applications.

4. Countywide First/Last Mile Planning

Motion 14.1 directed staff to conduct first/last mile planning for all existing and under construction Metro rail stations, Orange and Silver Line stations, 100 top ridership bus stops and all regional rail stations. In total, we identified 254 stations that fall under the definition in Motion 14.1 for first/last mile planning. See Attachment B for the list of stations and methodology utilized to determine them.

Per the motion, staff will apply the first/last mile planning methodology detailed in the First/Last Mile Strategic Plan (currently underway for all 22 Blue Line stations) to 254 locations. We anticipate 42 months to develop and complete first/last mile plans for these 254 locations (inclusive of start-up time for hiring and procurement). We will develop a more detailed schedule to describe the sequencing of planning work and include this in a status report to the Planning and Programming Committee within six months. The comprehensive countywide planning approach will entail innovative community engagement and in-the-field walking audits, and will result in funding-ready conceptual plans.

Through a grant from the state's Active Transportation Program (ATP), Metro is currently conducting the first/last mile planning work for the 22 Blue Line stations. This is the first time comprehensive first/last mile improvements have been planned for an entire rail line in the county. Part of the planning process includes innovative community engagement strategies tailored to the areas along the Blue Line. Successes and lessons learned from the Blue Line first/last mile effort will be applied to countywide first/last mile planning. In addition to other sources, the Blue Line First Last Mile Plan was used to approximate costs for first/last mile planning countywide.

The resource requirements for countywide first/last mile planning, including full-time employees (FTEs) and professional services needs, are covered in the Financial Impact section.

5. Countywide First/Last Mile Priority Network Funding Match Program

The ability to create and identify funding for a new Countywide First/Last Mile Priority Network funding match program, separate from existing Metro funding and grant programs, is highly dependent on the passage of the ballot measure in November 2016. If the ballot measure passes, an array of new funding sources will be available that could directly fund such a program or be used to free up other revenues from existing Metro projects/programs that will be directly funded through the ballot measure. Absent the passage of the ballot measure, the funding of a new match program will require that the Metro Board make tradeoffs with existing Metro projects/programs, including the redirection of funds that would otherwise be made available through programs such as the Call for Projects.

The intent of a Countywide First/last Mile Priority Network funding match program would be to support local agencies in securing funds from state and federal discretionary programs such as the state Active Transportation Program (ATP), as the availability of matching funds is often a criteria for award. It is proposed that Metro's funding match program focus on first/last mile improvements to existing transit stations within the Countywide First/Last Mile Priority Network consistent with the improvement plans developed for each station as discussed above (new transit stations will already incorporate such elements into their project scope and funding plans). Local jurisdictions may be able to utilize as a local match the total transit corridor/station project funding on grant applications for first/last mile elements of new stations and those jurisdictions would not be precluded from pursuing state and federal discretionary program funds.

Staff will develop a specific proposal for the matching grant program that will maximize the leveraging capacity of Metro funds, including but not limited to, the discretionary state Active Transportation Program. The Financial Impact section of this report preliminarily identifies a need of \$20 million per bi-annual grant cycle on this basis.

Role of On-Going Related Efforts

Motions 14.1 and 14.2 create a new slate of efforts within the existing Countywide Active Transportation and Sustainability Program that will have synergies with closely related on-going active transportation work. This section describes areas of potential overlap and coordination opportunities for selected initiatives. It should be noted that staff will revisit project timelines for the Active Transportation and Sustainability Program as a whole, in light of the added workload, and will provide on-going updates to the Ad Hoc Sustainability Committee on progress. As described above and in Attachment D, the absence of additional resources will necessitate substantial delay of work.

- **ATSP Implementation:** Multiple actions in the first/last mile motion overlap with implementation items in the Active Transportation Strategic Plan and will be coordinated by staff.
- **Urban Greening:** Metro completed an Urban Greening Plan and toolkit in October 2015. In January 2016, the Board subsequently approved an Implementation Action Plan to direct additional activities related to urban greening, including creating a set of demonstration projects. As Metro develops plans for first/last mile access improvements, we will also consider opportunities for urban greening interventions including storm water capture and infiltration, urban heat island reduction, and sustainable landscaping. Metro will use the newly completed toolkit for guidance in this effort and will seek to develop best practices going forward. Proceeding in this way will reinforce the role of green infrastructure in place-making and improving the physical environment and transit, help position projects to compete for funding sources that emphasize multiple benefits (especially cap-and-trade), and reduce the likelihood of non-coordinated multiple projects impacting local rights-of-way.
- **First/Last Mile Training:** As part of the previously committed set of first/last mile implementation activities, Metro has initiated a training program geared toward local staff and elected officials. The training instructs participants on how to plan, fund, and implement

first/last mile projects, and was intended originally to prompt cities to take a lead role in delivering projects. At this time, Metro is working with our selected consultant to adjust the curriculum for trainings in order to describe a more collaborative approach wherein cities will be working closely with Metro to plan and deliver projects.

- Parks Access Motion:** On June 23, 2016, the Metro Board approved a motion directing a planning effort to better link transit to parks and open space. A separate report on this agenda responds to that motion describing a planning process to identify specific opportunities for connectivity projects and demonstrations and an assessment of access issues countywide. Pertinent to the first/last mile motion, all planning work for station areas will consider nearby open space and parks as key destinations for transit riders, and will identify project components that will improve connectivity where appropriate.

FINANCIAL IMPACT

Adoption of the recommendations would have impacts to the agency as described below.

Motions 14.1 and 14.2 direct several new areas of activity for Metro as described in this report. These new efforts will necessitate resources in terms of both new professional services contracts and full time employees (FTEs) if implemented in the near future. Within this section, staff is providing an estimate of resource needs to carry out this work. This estimate was developed by reviewing comparable past and on-going work efforts. See Attachment D for details on comparable projects and estimating methodology.

The chart below (Figure 2) summarizes our resource needs to carry out the Board’s direction as described above. It should be clearly noted that costs estimated here cover the specific near term activities included in the motions including planning and design, a process to integrate first/last mile in future capital projects, and enhanced technical assistance and granting capacity. Notably, incremental cost increases to future transit capital projects due to the inclusion of first/last mile improvements are not included in this review. Rather, those costs will be detailed and reported to the Board as project plans are completed.

*Professional Services and FTE Needs Overview
Figure 2*

Activity	Estimated Schedule and Duration	Unit	Estimated Professional Services	Estimated # FTEs and Cost of FTEs
Capital Projects Guidelines Development	Start - Oct Dec. 2016 Duration - 12 months (including procurement)	Countywide	\$138,000	.75
Purple Line Sec 2 and 3 Planning and Design	Start - Oct Dec.2016, Duration - 30 months (including procurement)	5 Stations	\$1.625 million	.625

Countywide Planning and Design	Start - Oct Dec.2016, Duration - 42 months (including procurement)	254 Station Areas and Stops	\$10 million	3
Grant Assistance	Start - Oct Dec.2016, Duration - 18 months (including procurement)	30 Project Applications	\$700,000	1.5
TOTAL:	4.5 Years		\$12.5 million in Professional Services	5.875 FTEs <i>Estimated Annual Cost of FTEs: \$900,000 to \$1 million</i>
GRAND TOTAL:	\$16.5 million in Prof. Services and FTEs over 4.5 years (approx. \$3.66 million per year)			
Matching Grant Program	Pending budget action, and timed to applicable grant cycles, especially ATP	30 Projects	\$20 million biennially (approximately)	0

Not including the matching grant program, the total estimated third party cost to carry out work as described in this report is \$12.5 million, which is detailed in Attachment D. FY17 will mostly involve start-up activities such as procurement and \$125,000 in professional services is anticipated to be incurred. The FY17 budget includes the current fiscal year needs in Cost Center 4340, Sustainability Policy and Programs, under Project Number 450009, Sustainability Demonstration Projects.

For FY17, three new FTEs are needed to support the work program outlined in this report. Upon approval of this work plan by the Board, the three FTEs will be considered among other agency priorities to be drawn from the mid-year "reassignment pool" of available FTEs across the agency. However, should other agency needs determine first assignment of those available FTEs, staff will return to the Board for consideration of a budget amendment to FY17 that would underwrite these positions. The additional three program staff positions identified in this report will be requested from either the "reassignment pool" or through the FY18 budget cycle.

Since this is a multi-year project, the cost center manager and the Chief Planning Officer will be accountable for budgeting the cost in future years, including any option exercised.

As noted above, absent the passage of the potential ballot measure, the funding of a new match program will require that the Metro Board make tradeoffs with existing Metro projects/programs. Approval of this report provides direction to the Chief Executive Officer to identify and budget resources as outlined here.

Impact to Budget

The funding sources are Propositions A, C, and Transportation Development Act Administration, which is not eligible for bus and rail operating or capital expenses.

ALTERNATIVES CONSIDERED

The Board may decide not to approve the work approach and resource needs in this report. Alternatively, the Board could modify elements of Board Motions 14.1 and 14.2 and staff would develop corresponding recommendations on scope and resource requirements.

NEXT STEPS

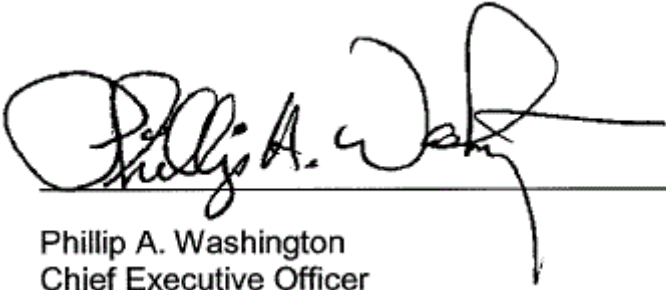
If approved, staff would initiate steps to determine the availability of staff through the RIPA or pursue needed budget actions, and proceed with hiring and consultant contracts within the parameters described above. Staff will report back to committee twice a year on the status of implementing Motions 14.1 and 14.2.

ATTACHMENTS

- Attachment A - Countywide Priority First/Last Mile Network
- Attachment B - Stations and Stops for First/Last Mile Planning
- Attachment C - Capital Projects Implementation Steps
- Attachment D - FTE and Professional Services Needs
- Attachment E - Motion 14.1
- Attachment F - Motion 14.2
- Attachment G - June 15, 2016 Board Report: First/Last Mile Purple Line Section 2; 3% Local Contribution Provision

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Phillip A. Washington
Chief Executive Officer

MASTER COOPERATIVE AGREEMENT
FOR THE
METRO GOLD LINE – GLENDORA TO CLAREMONT (PHASE 2B)

BY AND BETWEEN

THE LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

AND

THE METRO GOLD LINE
FOOTHILL EXTENSION CONSTRUCTION AUTHORITY

Effective Date: [_____, 2017]

Master Cooperative Agreement for the Metro Gold Line
Glendora to Claremont (Phase 2B)

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COOPERATIVE AGREEMENT
FOR THE
METRO GOLD LINE – GLENDORA TO CLAREMONT (PHASE 2B)

BY AND BETWEEN

THE LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

AND

THE METRO GOLD LINE
FOOTHILL EXTENSION CONSTRUCTION AUTHORITY

THIS MASTER COOPERATIVE AGREEMENT FOR THE METRO GOLD LINE – GLENDORA TO CLAREMONT, dated effective as of [____], 2017 (the “MCA” or “Agreement”) is made by and between the Metro Gold Line Foothill Extension Construction Authority, a public entity of the State of California (“Construction Authority”), and the Los Angeles County Metropolitan Transportation Authority, a public entity of the State of California (“LACMTA”). Construction Authority and LACMTA will be at times be collectively referred to herein as “Parties”.

RECITALS

WHEREAS, Construction Authority is a public entity created by the California State Legislature pursuant to Section 132400 *et seq* of the Public Utilities Code (“PUC”) for the purpose of completing the design and construction of the Los Angeles - Pasadena Foothill Extension Gold Line light rail project, extending from Union Station in the City of Los Angeles to Sierra Madre Villa Boulevard in the City of Pasadena and any mass transit guideway that may be planned east of Sierra Madre Villa Boulevard along the rail right-of-way extending to the City of Montclair;

WHEREAS, the Metro Gold Line from Union Station to Pasadena has been in operation since July, 2003 and the Metro Gold Line from Pasadena to Azusa has been in operation since March, 2016;

WHEREAS, Construction Authority is planning to design and build an extension of the Metro Gold Line from Glendora to Claremont (“Project” or “Phase 2B”);

WHEREAS, this Agreement may be amended to include an extension of the Metro Gold Line to the City of Montclair;

WHEREAS, Construction Authority desires that the Project extend into San Bernardino and terminate at the proposed Montclair station (the "Montclair Extension"). However, the Montclair Extension has not been approved by the LACMTA Board, has not been fully funded, and requires agreement by the applicable cities and agencies in San Bernardino County. At this time, Construction Authority is preparing plans that include the Claremont Station as the terminus as well as the Montclair Extension, which is being paid for by the City of Montclair. All issues concerning the funding for Phase 2B are covered in the Funding Agreement, as defined herein. The Parties expressly agree and acknowledge if the Montclair Extension is included as part of the Project, this MCA will be amended accordingly to include the Montclair Extension.

WHEREAS, LACMTA is a public entity created by the California Legislature pursuant to PUC Section 130050.2 *et seq.* for, among other things, the design, construction and operation of rail and bus transit systems and facilities in Los Angeles County;

WHEREAS, PUC Section 132450 *et. seq.* requires that LACMTA, upon completion of the Project by Construction Authority, operate the Project;

WHEREAS, PUC Section 132435 requires Construction Authority to enter into a memorandum of understanding with LACMTA that shall specifically address the ability of LACMTA to review any Significant Changes in the scope of the design or construction or both design and construction of the Project;

WHEREAS, Construction Authority and LACMTA desire to cooperate to the end that the Project design and construction activities are undertaken and completed in ways that meet the objectives and goals of the Parties.

NOW THEREFORE, the Parties agree as follows:

ARTICLE 1 - SCOPE AND DEFINITIONS

1.0 Scope of Agreement

The foregoing recitals are incorporated into this Agreement by this reference. This Agreement specifies the procedures that Construction Authority and LACMTA will follow in implementing their respective roles and responsibilities in the Design, Construction, testing and Turnback of the Project. Both Construction Authority and LACMTA agree that each will cooperate and coordinate with the other in all activities covered by this Agreement.

1.1 Definitions

For the purpose of this Agreement, the following terms shall have the meanings set forth below:

Advanced Conceptual Engineering (ACE) means conceptual engineering to support the Final EIR, in which the Design of the general track configurations and geometry, station and parking facility locations, traction power substation locations, property requirements, existing utility locations, and other associated Construction is defined to approximately 30% of Final Design.

Alignment Design/Build Contract means, in the case of multiple Design/Build Contracts for Phase 2B, the Design/Build Contract for the entire Phase, exclusive of any components that are the subject of other construction contracts. By way of example, for Phase 2B, the Alignment Design/Build Contract would cover all of Phase 2B, except for certain utility work.

Alignment Design/Build Contractor means the Design/Build Contractor awarded the Alignment Design/Build Contract.

Annual Work Plan has the meaning ascribed in Section 3.1.

Approval means written approval by the LACMTA Representative. Approval shall not, unless specifically indicated in writing by the LACMTA Representative, constitute a waiver of any LACMTA standard, code, or other requirement in this Agreement.

Baseline Documents shall mean the Conformed Contract Documents, and any Change Orders to the Conformed Contract Documents.

Betterment means, except as set forth in Section 6.1, a change requested by LACMTA or any third party that will improve the level of service and/or capacity, capability, appearance, efficiency or function over that which is provided by the Baseline Documents.

Certificate of Occupancy means the final project approval granted by the Phase 2B Fire, Life, Safety and Security Committee

Construction Authority - Has the meaning set forth in the Recitals to this Agreement.

Construction Authority Representative means the Chief Executive Officer of Construction Authority, or his/her authorized representative (as designated in a writing executed by the Chief Executive Officer). Construction Authority Representative has the power to conduct meetings and reviews, and approve actions as required by this Agreement.

Conformed Contract Documents means the final executed contract documents for Construction and/or Design, which includes, without limitation, all of the following documents: the adopted Final Environmental Impact Report, as amended or supplemented from time to time, the Advanced Conceptual Engineering, the performance specifications, LACMTA Design Criteria and Standards in effect prior to the date that proposals for the Alignment Design/Build Contract are due, and the Design/Build Contractor's proposal as amended by the Design/Build Contractor's best and final offer.

Construction means the work of removal, demolition, replacement, alteration, realignment, building, and fabrication of all new fixed facilities, and procurement and installation of systems and equipment, that are necessary to operate and maintain the Project in accordance with approved plans and specifications.

Costs means all allowable Direct Costs and Indirect Costs for work performed by LACMTA pursuant to Section 3.2 Performance of LACMTA Work, or work performed by Construction Authority pursuant to Section 6.0 Betterments Generally.

Current Scope of the Project means the Project as described in the Final Environmental Impact Report (EIR). A brief summary of the Project is provided in Exhibit A.

Days means calendar days, including Saturdays, Sundays, and legal holidays. See also definition of Working Days.

Design means that engineering, architectural and other design work and the resulting maps, plans, specifications, special provisions, drawings, calculations, computer software, and estimates which are needed to construct the Project.

Design/Build Contract means the documents that are used by Construction Authority to contract with a contractor to Design, build, fabricate, install, and prepare for operations all or any portion of the Project (less the rail cars and other equipment provided by LACMTA), and to demonstrate the operability of

each Phase through a period of Pre-Revenue Operations. In the case of multiple construction contracts for the same Phase (as is currently contemplated for Phase 2B), only the Alignment Design/Build Contract will include requirements regarding demonstrating the operability of the Phase through a period of Pre-Revenue Operations. See Section 1.2 regarding the contemplated construction contracts.

Design/Build Contractor (DB Contractor) means the Design/Build Contractor(s) and/or team(s) of consultants and contractors that are awarded the Design/Build Contract(s) by Construction Authority.

Design/Build Procurement Documents means the entire package of documents to be sent to potential proposers that may be interested in submitting a proposal or award of a Design/Build Contract, including but not limited to: requests for qualifications; cooperative agreements with the cities, utilities and LACMTA; SBE/DVBE program; bonding requirements; change order & payment provisions; bidding and proposal requirements; environmental mitigation and requirements; scope of work; technical drawings and specifications; Design and Construction document reviews, procedures & approvals; quality control; safety program; and Construction procedures.

Design Review means the process of critical evaluation by Construction Authority and others as specified in this Agreement, and any additional review specified by Construction Authority, of plans and specifications that are developed by consultants and/or the Design/Build Contractor which are necessary for the Construction of the Project.

Detailed Schedule - Has the meaning set forth in Section 7.1.1.

Direct Costs means labor costs and costs of purchasing equipment and/or materials, without markup or overhead of any kind.

Dispute - Has the meaning set forth in Article 5.0.

Effective Date - shall mean the date set forth in the preamble to this Agreement.

Facility means real or personal property now or in the future to be located within the Right-of-Way as part of the Project, including but not limited to roadways, stations, parking, pipes, mains, services, meters, regulators, and structures, and any equipment, apparatus and/or structure appurtenant thereto or associated therewith.

Final Design means the technical engineering work required of the Design/Build Contractor to complete the engineering necessary to sign and seal drawings and specifications.

Final Environmental Impact Report (FEIR) means the Final Environmental Impact Report/Statement that analyzes and evaluates the environmental impacts of the Project and recommends measures to mitigate the potential adverse impacts, and includes any addendum, supplement, or subsequent EIR. Construction Authority certified the FEIR for Phase 2B in March 2013 and adopted a First Addendum in May 2014, a Second Addendum in December 2014, and a Third Addendum in March 2016.

Fire, Life, Safety and Security Committee (FLSSC) means the committee that oversees fire/life safety and security issues for compliance with fire/life safety design criteria, local fire codes and NFPA 130 standards, and oversight of security and policing issues. The Fire/Life Safety and Security Committee is comprised of representatives from the Authority, LACMTA, Fire and Police jurisdictions, and other affected agencies.

Funding Agreement means that certain Foothill Extension Phase 2B Funding Agreement Glendora to Claremont of substantially even date herewith, pursuant to which the Parties have agreed on the distribution by LACMTA to Construction Authority of that portion of the proceeds of the Transaction and Use Tax adopted by LACMTA on or about June 16, 2016 by Ordinance #16-01, which was then approved by the voters of Los Angeles County on November 8, 2016 as “Measure M” that has been allocated to the Project, along with other funds as set forth therein.

Governmental Authority means any government or political subdivision, whether Federal, State, or local, or any agency or instrument of any such government or political subdivision, or any Federal, State, or local court or arbitrator, other than LACMTA and Construction Authority.

Indirect Costs means all costs that are not Direct Costs, including but not limited to Construction Authority’s administration (such as overhead, salaries and benefits), legal, community outreach, insurance, program management, ROW acquisition and management, utilities, environmental, special programs, Construction, procurement, and financing.

Industry Review means the period of review by construction and engineering firms of final draft documents before they are released as part of the Design/Build Procurement Documents.

Laws means any law, rule, regulation, ordinance, statute, code or other requirement of any Governmental Authority.

LACMTA - has the meaning set forth in the Preamble to this Agreement.

LACMTA Design Criteria and Standards - means that set of design criteria and standards that LACMTA has developed and relies upon to create a uniform basis

of design for all LACMTA transit projects. These criteria are intended as express requirements to direct designers and engineers, in the various disciplines, when working on LACMTA transit projects. LACMTA may provide written variance to these criteria to further enhance operational flexibility or for reasons based on good and sound engineering principles and judgments.

LACMTA Project Costs - has the meaning set forth in the Funding Agreement.

LACMTA Representative means its Chief Executive Officer, or his/her designated representative (as designated in a writing executed by the Chief Executive Officer). LACMTA Representative has the power to conduct reviews, assign LACMTA staff, and make Approvals as required by this Agreement.

Mainline means track designated for rail operations.

Party means LACMTA and/or Construction Authority, individually.

Phase II means Phase 2A and Phase 2B.

Phase 2A means the portion of Phase II from the interface with Phase 1 in Pasadena to the end of the tail tracks for the Azusa Citrus station.

Phase 2B means the portion of Phase II from the interface with Phase 2A in Azusa to the end of the tail tracks for the Claremont station.

Pre-Revenue Operations means a period of time described in Section 7.2.1 beginning at a point in time determined by LACMTA following Substantial Completion and Turnover, ending at ROD, allowing LACMTA staff to commission, test, and verify it can operate trains as designed and familiarize its staff with the Project.

Project – means Phase 2B.

Property Trust Agreement means that certain Los Angeles – Pasadena Metro Blue Line Governmental Purpose Property Trust Agreement between Construction Authority and LACMTA dated August 19, 1999.

Revenue Operations Date (ROD) means the date on which LACMTA commences operation of the Project.

Right-of-Way (ROW) means the real property required to construct, operate, and maintain the Facilities and systems that comprise the Project.

Safety and Security Certification means the set of collective programs and processes intended to verify the safety and security readiness of the project to open to the public, as described in Section 7.3.

Significant Change means any change of mode or technology from the Baseline Documents, or any other substantive change that affects the connectivity and operation of the Project as part of the overall transit system operated by LACMTA, or any combination of those things. Design and Construction of the Project that is consistent with the Baseline Documents shall not be deemed to be a Significant Change and shall not require concurrence by LACMTA.

Solution Committee means a committee consisting of three LACMTA Board members, at least one of whom shall be from the San Gabriel Valley subregion, and two Construction Authority Board Members. The members shall be appointed in accordance with the procedures of their respective Boards. The Chief Executive Officers (CEOs) of both Parties are non-voting members of the Solution Committee.

Solution Process means the Dispute resolution process describe in Section 5.1.

Substantial Completion means the work is substantially complete in accordance with the Design/Build Contract.

Systems Integrated Testing (SIT-1) means the testing process prior to Substantial Completion, conducted by the Construction Authority and its Contractor, focusing on proper systems functionality.

Systems Integrated Testing – Phase 2 (SIT-2) means the testing process conducted by Metro that verifies the remote monitoring and control capability of the field equipment and the Metro head-end equipment at the Rail Operations Control facility.

Turnback means the process by which Construction Authority turns over the Project to the LACMTA, as more particularly described in Section 7.5.

Turnover means when the Construction Authority provides initial written documentation of Project readiness with Metro concurrence and turns over the operational control of the Project and the rail line to LACMTA to initiate the pre-revenue operations period in accordance with Section 7.2.1.

Trust means the Trust established pursuant to the Property Trust Agreement.

Working Day means Days, excluding Saturdays, Sundays, and the following thirteen (13) legal holidays: New Years Day, Martin Luther King Jr. Day, President's Day, Cesar Chavez Day, Memorial Day, Fourth of July, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve Day, and Christmas Day.

1.2 General Approach to Construction of Project

Construction Authority contemplates entering into two separate construction contracts for Phase 2B. The first construction contract is for certain utility work. The second construction contract is the Alignment Design/Build Contract. The DB Contractors shall Design and construct the Project per the Baseline Documents.

Construction Authority will design and construct the Project so that the Claremont Station can operate adequately and properly as the terminus and in full compliance with LACMTA's Design Criteria; provided, however, if the Construction Authority and LACMTA's Board includes the Montclair Extension as part of the Project, then Construction Authority will design and construct the Project so that the Montclair Station can operate adequately and properly as the terminus and in full compliance with LACMTA's Design Criteria.

1.3 LACMTA Participation Generally

LACMTA shall participate in the Project, and Construction Authority will provide the opportunity for LACMTA to participate, in the areas set forth below and as more particularly described in this Agreement. The purpose of such LACMTA participation shall be to ensure the Project will be compatible, functionally connected and operative with LACMTA's existing metro rail system. Subject to the procedures set forth in this Agreement, LACMTA's participation in the Project includes:

- inspection rights
- coordination meetings
- receipt of status reports
- Construction Authority reporting at LACMTA construction committee
- receipt of finance reports per the Funding Agreement
- participation in testing
- Design Review and comment
- review and Approval of Significant Changes
- review and Approval of certain third party agreements as set forth in Section 2.6.10
- participation in the Substantial Completion walk through, Safety and Security Certification and final acceptance process for the Project

ARTICLE 2 - DESIGN AND CONSTRUCTION OF THE PROJECT AND REVIEW AND APPROVAL OF SIGNIFICANT CHANGES BY LACMTA

2.0 Engineering and Construction Coordination

The review process described below in Sections 2.1 through 2.6 will constitute the Design Review process for LACMTA and Construction Authority. Notwithstanding the foregoing, LACMTA shall have the right to review and approve any Significant Change in any Design or Construction documents for the Project in accordance with, and subject to the provisions of, Section 2.5.

2.1 Review of Design/Build Procurement Documents

LACMTA to review and comment on the Industry Review drafts of the Design/Build Procurement Documents during Industry Review. LACMTA may review and comment on Significant Changes to the Industry Review drafts that are included in the Design/Build Procurement Documents that are issued, within 10 business days after the Design/Build Procurement Documents are issued, and within 7 Days after any addenda thereto are issued.

2.2 Selection Committees

LACMTA to actively participate as a voting member(s) on selection committees for all Design/Build Contractors for the Project.

2.3 Design Criteria and Standards

To insure that the final Project meets the requirements of the current Project scope and the expectations of Construction Authority and LACMTA, Construction Authority and its consultants and contractors will comply with LACMTA Design Criteria and Standards in effect prior to the date that proposals for the Alignment Design/Build Contract are due, except as waived in writing by LACMTA. LACMTA shall have the sole and exclusive right to grant waivers to LACMTA Design Criteria and Standards and no decision by LACMTA to waive or not waive LACMTA Design Criteria and Standards shall constitute a Betterment or change order that will result in a cost to LACMTA. LACMTA's Design Criteria and Standards in effect prior to the date that proposals for the Design/Build Contract are due will be contained in the mandatory requirements of the Design/Build Procurement Documents.

All artwork and Project aesthetics (visual design elements) at Stations and along the Right-of-Way will remain the decision of Construction Authority, which will include the recommendation of each of the five cities along the Project, but shall not conflict with the LACMTA Design Criteria and Standards or applicable regulatory requirements. Beginning with the Advanced Conceptual Engineering review, LACMTA will be requested to provide comments on maintainability, security, and safety as it pertains to these items.

2.4 Review of the Design/Build Contractor Submittals

- A. LACMTA shall have 21 Days to review and comment on any Project Design submittal at each level, up to and including 100% Design submittals, as Design moves forward, including without limitation, structures, the alignment, stations, systems, art and aesthetics (but only to the extent that any such art and aesthetic Design issues may result in a material adverse financial impact to the permanent maintainability of the Project), communications, signage and parking facilities.
- B. The Construction Authority may deem LACMTA to have no comment on the Project Design submittal to have occurred only after LACMTA's review period has expired with no response and the Construction Authority provides (or has included in the transmittal of the document at issue) a written warning notice that clearly states that unless LACMTA responds within the original 21 Days, LACMTA will be deemed to have no comment.
- C. LACMTA's comments on any document are limited to ensuring consistency with the Baseline Documents, and that the Design complies with the Baseline Documents.
- D. If during the Design Review process LACMTA requests changes to the submittals and such changes result in a change order to the Baseline Documents, Construction Authority will not be obligated to make such change unless LACMTA agrees it shall be responsible for paying the cost of such change and any delay claim associated with the LACMTA requested change.
- E. In addition to LACMTA's right to approve Significant Changes pursuant to Section 2.5, Construction Authority shall not implement any alternative technical concepts or value engineering changes that are not a Significant Change without LACMTA's ability to comment on such change.
- F. The Construction Authority will provide electronic copies to LACMTA of all of the Design/Build Contractor's deliverables, and/or include LACMTA as an assigned user if Construction Authority uses a Project Management collaborative Internet access program for document review.
- G. LACTMA shall have 14 days to review and provide information in response to a formal "Request for Information" (RFI) from the Construction Authority.

2.5 Review and Approval of Significant Changes

Notwithstanding anything to the contrary in this Agreement, Construction Authority shall not make any Significant Change to the Project without the prior written Approval of

LACMTA, subject to the provisions of this Section and Section 5.1. LACMTA shall have the right to review and approve or reject any and all Significant Changes. In the event that LACMTA does not grant Approval of a Significant Change, LACMTA will give Construction Authority written notice of its disapproval, which shall result in a cessation of all Construction activity related to the Significant Change.

2.6 Work to be Performed by LACMTA

LACMTA will work cooperatively with Construction Authority in advancing the Design/Build method of project delivery for the Project. LACMTA will have the following major responsibilities in relation to the Design/Build program, in addition to LACMTA's rights under Section 2.5 to review and approve Significant Changes. These responsibilities are:

2.6.1 Participation in the Organizations and Process

LACMTA will formally designate a member of its senior staff as LACMTA's Representative, and inform the Construction Authority Representative upon making the designation. LACMTA's Representative will be the focal point of coordination and communication with Construction Authority's Representative. In addition, when requested by Construction Authority, LACMTA will designate individuals to participate in the working groups and technical subcommittees formed by Construction Authority to address the issues and subjects which arise as part of the Design Review process described in Sections 2.1 through 2.6 above.

2.6.2 Cooperatively Implement the Design Review Process

LACMTA will provide comments in a timely manner, and will work with Construction Authority to suggest ways to resolve various issues that arise. LACMTA's Representative will work closely with Construction Authority's Representative in the Design Review process as it relates to operations issues, systems compatibility, connectivity, and compliance with LACMTA Design Criteria and Standards as set forth herein.

2.6.3 Provide Technical Support

As requested, LACMTA will provide technical support to Construction Authority throughout the Design and Construction period of the Project. The support may take many forms. For example, LACMTA will work with Construction Authority to review and, where required by the Property Trust Agreement or the California Public Utilities Commission, approve applications prior to submission of applications to the California Public Utilities Commission. LACMTA will assist Construction Authority with obtaining permits where LACMTA is the only Party with standing to obtain such licenses or permits.

In addition, Construction Authority and LACMTA may mutually agree that LACMTA will perform the Design and/or Construction of one or more specific portions of the Project. Under such circumstances, Construction Authority shall develop the specific Scope of Work and authorize LACMTA to perform the activities according to the specified cost and schedule, as mutually agreed. LACMTA's schedule for completion, coordination requirements, review procedures, and related provisions all shall be included as attachments to the work authorization, which shall also include the estimated cost of completing the Design and/or Construction of the specific portion of the Project. LACMTA is under no obligation to proceed with any Work until LACMTA has received a Construction Authority approved Work Authorization.

2.6.4 Assist with Construction Inspection and Supervision

Upon request of the Construction Authority Representative, LACMTA will provide as-needed assistance to Construction Authority for the supervision and/or inspection of Construction by the Design/Build Contractor. Specifically, LACMTA will provide supervision of work performed on the Phase 2A system, including upgrades to LACMTA's Rail Operations Control. The Construction Authority and its Design/Build Contractor shall not perform any work on any portion of the existing operating Gold Line Right-of-Way without LACMTA's prior written Approval which will require authorized track allocation (if applicable) and LACMTA supplied supervision and/or inspection services, which shall be reimbursed as LACMTA Project Costs to extent permitted by the Funding Agreement.

In addition, LACMTA will conduct an inspection of the entire Project prior to commencing SIT-1 and/or SIT-2 and/or Pre-Revenue Operations. LACMTA will conduct a final inspection immediately prior to Revenue Operations. LACMTA will generate a punch list of all outstanding items in accordance with Section 7.4.

2.6.5 Support of Systems Integrated Testing and Start-Up

LACMTA will provide rail vehicles, operators, dispatchers, and other personnel and equipment necessary to support integrated testing and start-up of the Project as described in Article 7, and as mutually agreed upon by LACMTA and Construction Authority.

Construction Authority will provide Employees-in-charge (EIC), watchpersons and flaggers as set forth in all regulatory and / or LACMTA requirements to support SIT-1 and start-up of the Project as described in Article 7, and as mutually agreed upon by LACMTA and the Construction Authority.

During SIT-1 tests that involve the movement of light rail vehicles and at the commencement of Pre-Revenue Operations, LACMTA shall assume the duties of controlling train movements on, and access to, the Right-of-Way.

2.6.6 Meetings

- a. Construction Authority Project management team or their designees shall hold monthly meetings with LACMTA representatives.
- b. Construction Authority CEO or designee will report quarterly at LACMTA's monthly Construction Committee meeting.

2.6.7 Reports

The Parties acknowledge that the Funding Agreement sets forth Construction Authority's obligations regarding progress reports.

2.6.8 LACMTA inspection rights

LACMTA shall have rights to inspect the Project at any time, in accordance with this Section 2.6.8. LACMTA shall address all concerns and issues directly with the Construction Authority field staff and not with the Design/Build Contractor.

- a. LACMTA may participate in the Construction Authority's inspection program for all Project elements with proper coordination with the appropriate Construction Authority field staff.
- b. LACMTA may, at its election, reasonably participate in pre-Construction activities, including review of Construction Work Plans.
- c. Construction Authority shall notify LACMTA of all systems factory testing, local field tests, and integration tests. Construction Authority does not need to notify LACMTA of daily, ongoing material testing.

2.6.9 Integrated Project Office

- a. If requested by LACMTA, Construction Authority will provide LACMTA with one office with two desks, two lockable filing cabinets, a phone and a computer in Construction Authority's main office, and in the field office.
- b. Construction Authority has the right to remove any LACMTA person or persons assigned to work at the Integrated Project Office. Such right shall not be exercised unreasonably.

2.6.10 Third Party Agreements

LACMTA to review and approve any agreements with Caltrans, CPUC, SCRRA, BNSF, utility companies, or any other third parties, to the extent such Approval is required by Section 4.2.4 of the Property Trust Agreement. Additionally, unless

Construction Authority obtains LACMTA's prior written consent, Construction Authority shall not enter into any real estate agreement(s) that survive termination of the Property Trust Agreement which directly imposes any obligation or limitation upon LACMTA, as successor to Construction Authority, which has a material effect on LACMTA's operation of the Project. Nothing in this Section is intended to amend or modify PUC Section 132445.

2.7 Construction Safety and Security Documents / Quality Control Documents

All Project Design and Construction documents that relate to the security of the operation of the Project as a part of the system shall be treated as security sensitive documents to protect LACMTA's and Construction Authority's interests. Construction Authority, the Design/Build Contractors, and any subcontractor, consultant, and subconsultants with access to such documents shall sign confidentiality/non-disclosure agreements. LACMTA shall provide Construction Authority with the written policy for incorporation into the Design/Build Contract.

2.8 Outreach/Communications

In order to ensure consistency of information, Construction Authority will provide Project and Construction related outreach and communication while LACMTA will provide outreach and communication regarding operational aspects, including ridership projections, opening/service start updates, bus/rail interface, safety, system maps, how to ride, Measure R/regional/system-wide information, Measure M/regional/system-wide information, related press releases, etc. The Parties will comply with the additional provisions set forth in the Funding Agreement..

LACMTA shall provide Construction Authority with its written Metro System Signage Standards and Design Criteria for incorporation into the Design/Build Contract prior to the release of the Request for Proposals in connection therewith. Signage will conform to such Metro System Signage Standards and Metro Rail Design Criteria.

2.9 Project Management Plan ("PMP")

Construction Authority shall provide LACMTA with copies of the PMP and any amendments thereto.

2.10 Buy America Provisions

The Project shall incorporate Buy American provisions, to the extent legally permissible.

ARTICLE 3 - LACMTA WORK AUTHORIZATION AND BILLINGS

3.0 Work Performed by LACMTA

Work to be performed by LACMTA under this Agreement will coincide, as closely as possible, with Construction Authority's Project schedule. LACMTA agrees to commit sufficient resources necessary to provide the level of service required to meet those schedules.

3.1 Annual Work Plan for LACMTA Staffing

LACMTA shall develop an annual work plan ("**Annual Work Plan**") for LACMTA's performance of its obligations pursuant to this Agreement. LACMTA shall develop, and LACMTA and Construction Authority shall determine mutually, LACMTA staffing level needs during LACMTA's annual budget cycle to ensure that there is a sufficient level of LACMTA assistance to meet the Construction Authority's Project needs for the upcoming fiscal year, while also ensuring that LACMTA staff are assigned to a particular task or tasks in a cost-effective manner. Staff need estimates will be tied to LACMTA's budget process. LACMTA shall deliver the proposed Annual Work Plan to Construction Authority on or before January 27 of each year. Construction Authority shall review and provide comments on the Annual Work Plan within thirty (30) Days after receipt of the draft Annual Work Plan from LACMTA. If Construction Authority believes its comments are not adequately addressed, the resulting Dispute shall be resolved in accordance with the Dispute resolution process in Section 5.2. However, in the event of a Dispute regarding the Annual Work Plan that is not resolved prior to LACMTA Board adoption of the LACMTA budget for the next fiscal year, LACMTA shall continue to perform work during the new fiscal year at a staffing and support level that does not exceed the amounts set forth in the Annual Work Plan for the prior fiscal year.

If LACMTA determines that it requires consultants and/or contractors to perform any of its obligations pursuant to this Agreement, it shall include engagement of such consultants and/or contractors, and the tasks they are anticipated to perform, in its proposed Annual Work Plan. If the Construction Authority requests LACMTA to provide additional services to the Project beyond what is contemplated in the Annual Work Plan and the LACMTA Project Costs, if necessary, Parties may mutually agree to amend the Annual Work Plan to incorporate the additional cost of the additional services.

Funding for the Annual Work Plan will be included as part of LACMTA Project Costs, in accordance with and as that term is defined in the Funding Agreement.

LACMTA shall provide Construction Authority its Labor Information Management System ("LIMS") report on a monthly basis.

3.2 Performance of LACMTA Work

LACMTA staff and its consultants and contractors may perform any work included in the approved Annual Work Plan. Consultants and contractors engaged by LACMTA to perform work covered by this Agreement shall comply with all applicable labor and other Laws, grants, and agreements. Consultant fees and profits shall be charged in accordance with LACMTA practice or existing contract limits.

ARTICLE 4 - INTENTIONALLY OMITTED

ARTICLE 5 - PARTNERING / DISPUTE RESOLUTION

5.0 Partnering / Disputes

The Parties shall engage in a partnering process as described in Section 5.3.

All Disputes that concern the Approval/disapproval of a Significant Change shall be resolved in accordance with the Solution Process set forth in Section 5.1. All Disputes between the Parties that do not concern the Approval/disapproval of a Significant Change shall be resolved by the process described in Section 5.2.

5.1 Solution Process

The following process, referred to in this Agreement as the Solution Process, shall be used for the review and Approval/disapproval of Significant Changes, and to resolve Disputes between the Parties regarding a Significant Change:

- a. Within 5 Working Days after Construction Authority determines there has been or will be a Significant Change, Construction Authority shall inform LACMTA by written notice and request Approval therefor. Within 5 Days after LACMTA has received such notice and request, LACMTA shall convey in writing to the Construction Authority its Approval/disapproval of the Significant Change, or indicate that LACMTA does not consider the change to be a Significant Change.
- b. At any time, subject to the limitations set forth in this Section 2.5, LACMTA may determine independently that there has been or will be a Significant Change. Within the 21-day review period for Design submittals pursuant to Section 2.4.A, or for changes not included in a Design submittal under review pursuant to Section 2.4.A, within 5 Working Days after discovering what LACMTA believes to be a Significant Change, LACMTA shall convey its determination in writing to Construction Authority, together with its Approval/disapproval of the Significant Change. Any change from the Baseline Documents that would otherwise be a Significant Change shall be deemed not to be a Significant Change for all purposes under this Agreement if the LACMTA Representative fails to identify the change as a Significant Change within the applicable time period specified in this paragraph "b".
- c. In the case of disagreement between LACMTA and Construction Authority as to whether a given change is a Significant Change, or in the case of an LACMTA disapproval of a Significant Change, Construction Authority may convey in writing to LACMTA within 3 Working Days of the receipt of LACMTA's written disapproval or of written notice that LACMTA has independently determined that a given change is a Significant Change, that it wishes to conduct resolution meetings. The date of Construction Authority's Notice shall be the "Construction Authority Notice Date." In that event, the parties shall conduct resolution

meetings, which will start no later than 3 Working Days from the Construction Authority Notice Date and continue until the first to occur of (i) Construction Authority is reasonably satisfied with the resolution, or (ii) 10 Days after Construction Authority receives LACMTA's written disapproval or written notice that LACMTA determines a given change to be a Significant Change.

d. If the Parties fail to reach a mutual solution, the matter shall be raised automatically to the CEO of each agency for resolution. If the Parties fail to reach a mutual solution within five Working Days after the matter is raised to the CEOs, Construction Authority shall be deemed to have accepted LACMTA's disapproval or determination that a given change is a Significant Change unless either CEO refers the matter to the Solution Committee within 3 Working Days thereafter.

e. The Solution Committee shall render a decision within 10 Days after a matter is forwarded to it for consideration.

f. If the Solution Committee finds that any portion of the work is a Significant Change and LACMTA's disapproval is upheld, then the Construction Authority shall be solely responsible for all costs necessary to remove, replace or correct any disapproved work that has been performed.

5.2 Resolution of Disputes not Covered by the Solution Process

Consistent with the partnering process set forth in Section 5.3, all Disputes, controversies, or claims arising between the Parties in connection with or relating to this Agreement that do not concern the Approval/disapproval of Significant Change, or are otherwise not subject to the Solution Process described in Section 5.1, shall be resolved amongst Construction Authority and LACMTA staff, if possible, and by the CEOs of both Parties if the staffs are unable to resolve the Dispute.

5.3 Partnering Process

This Section 5.3 sets forth a framework for voluntary partnering between the Parties in connection with the Project. The Parties are committed to a partnering process between them. The partnering process is intended to draw on the strengths of each organization to help identify and achieve reciprocal goals, including achieving completion of the Project on time, within budget and in accordance with its intended purpose. A primary consideration of partnering is the prompt and equitable resolution of issues affecting the conduct of the work on the Project and the rights and responsibilities of the respective parties. It is the intent of the Parties to engage in informal efforts to resolve all disputes related to the Project.

Any costs associated with this partnering will be agreed to by both Parties and will be shared equally, except that each Party will be responsible for the salaries, travel and other costs of its own attendees.

Within 30 days following issuance of a notice to proceed under the Design/Build Contract, the Parties will meet together to create a charter of shared values and goals and agree on an initial schedule for quarterly partnering meetings and/or, if the Parties desire to conduct workshops, on a schedule for one or more partnering workshops. The establishment of a partnering charter will not change the legal relationship of the Parties nor relieve either party from any of the terms of written agreements between them.

ARTICLE 6 - PAYMENTS FOR BETTERMENTS

6.0 Betterments Generally

6.0.1 If during the Design Review process LACMTA requests changes to the submittals and such changes result in a Betterment, Construction Authority will not be obligated to make such change unless LACMTA agrees it shall be responsible for paying with non-Project funds the cost of such change and any delay claim attributable to the LACMTA Betterment.

6.0.2 If at any time during the term of the Project, Non-LACMTA third-parties request the inclusion of Betterments into the Project, the Construction Authority shall forward such request to LACMTA, which shall have the right to review and comment on the proposed Betterments to ensure it conforms to the LACMTA's Design Criteria and Standards and will not interfere with the safe operation of the completed Project. The Construction Authority shall be responsible for negotiating the cost and method of payment for any approved third-party Betterments.

6.1 Non-Betterment Items

However, the following shall not be considered as Betterments:

- An upgrade which the Parties agree should be completed at no cost to LACMTA;
- Construction in accordance with LACMTA Design Criteria and Standards in effect prior to the date that proposals for the Design/Build Contract are due, State and Federal Regulations or CPUC requirements; or
- Measures to mitigate environmental impacts identified in the Current Scope of the Project and Final Environmental Impact Report and any supplements thereto.

6.2 Payments for Betterments

Construction Authority shall be paid by LACMTA for work performed under this Agreement for any Betterments requested by LACMTA as set forth in the Funding Agreement. The amount of the payments for Betterments, if any, shall be estimated by Construction Authority based on LACMTA's request(s).

After LACMTA has reviewed the estimated cost of a LACMTA requested Betterment, LACMTA's Representative shall inform Construction Authority's Representative of any of the proposed LACMTA Betterments LACMTA wants included in the Project. LACMTA shall provide non-Project funds to pay for Betterments under the circumstances set forth in the Funding Agreement. Construction Authority agrees to incorporate any Betterments requested and paid for by LACMTA, including payment by LACMTA of the costs of any delay. Should LACMTA request inclusion of a Betterment during the time period between 85% drawings and Final Design, Construction Authority shall cause the Design/Build Contractor to provide Construction Authority and LACMTA

with an analysis of all anticipated impacts to the Project Schedule associated with such a change.

LACMTA shall pay one half of the cost of each Betterment to Construction Authority in advance, prior to commencement of Construction of the Betterment. The remainder shall be paid to Construction Authority within thirty (30) Days after completion of the Betterment.

Construction Authority shall earn no profit or overhead fee, based on the cost of the Betterments requested by LACMTA. LACMTA shall fully compensate Construction Authority for the Direct Costs and Indirect Costs of the Betterments. However, given the administrative effort required to track, compile, and audit the Costs for Construction Authority personnel and the Construction Authority's consultants, the LACMTA and Construction Authority have the option to agree, in advance, on a flat compensation of 10% of the Cost of all Betterments, in lieu of payment of the actual administrative costs incurred in completing the Betterment(s).

ARTICLE 7 - TESTING AND START-UP

7.0 General

For purposes of this Article 7, the terms Design/Build Contractor and Design/Build Contract shall refer to the Alignment Design/Build Contractor and the Alignment Design/Build Contract, respectively, if there is more than one Design/Build Contractor and Design/Build Contract for the Project.

7.1 Contractual Testing

The roles and responsibilities for testing are as follows:

7.1.1 Design/Build Contractor

Construction Authority shall require in the Design/Build Contract that the Design/Build Contractor be responsible for successfully completing four types of Tests as follows:

- Factory Tests
- Construction Tests
- Systems Integration Tests (SIT-1 and SIT-2)
- System Performance Tests

Design/Build Contractor's tests will be based on LACMTA test standards and procedures (to the extent they are reasonable as determined by standard industry practice), to be provided by LACMTA for incorporation into the Design/Build Contract, and requires coordination with LACMTA.

Construction Authority will require the Design/Build Contractor to provide a proposed, detailed schedule for the SIT-1 testing ("**Detailed Schedule**") no later than 24 months before Substantial Completion. The Detailed Schedule will also include projected LACMTA light rail vehicle requirements, as necessary.

The Design/Build Contractor will be responsible for providing training to LACMTA staff in the areas of system familiarization and configuration, equipment operation and equipment maintenance and be available for meetings during testing and Start Up as required and deemed necessary by LACMTA. A proposed schedule for training, along with content, will be provided to the Construction Authority and LACMTA no later than 15 months prior to Substantial Completion .

The Design/Build Contractor establishes and maintains all track allocation and safety requirements and regulations in accordance with LACMTA standards and applicable CPUC regulations beginning with initial activation of the traction power system and vehicle movement, continuing until Turnover. The Design/Build Contractor shall provide support personnel as needed for SIT-2.

7.1.2 Construction Authority

Construction Authority is responsible for overseeing the Design/Build Contractor throughout Design, Construction and testing, and for ensuring adherence to LACMTA test standards. Construction Authority shall monitor testing performed by the Design/Build Contractor, and shall make available to LACMTA all testing schedules, procedures, and results.

7.1.3 LACMTA

LACMTA shall be provided the opportunity to monitor any testing of components and systems related to train operations and maintenance of trains and property.

LACMTA shall make available up to six (6) light rail vehicles in the consists/configurations required by the Design/Build Contractor for Project testing purposes. A written request to the LACMTA Rail Start-up Manager shall be made by the Construction Authority at least four (4) weeks in advance of the initial vehicle commitment date. In addition, the Construction Authority shall make detailed vehicle requests at least one (1) week in advance of the intended test date. LACMTA will be responsible for testing of all LACMTA Furnished/Required Equipment and systems within the Rail Operations Control. LACMTA will also be responsible for emergency drills and Pre-Revenue Operations.

Control of the track allocation and safety requirements/regulations are transitioned from the Design/Build Contractor to LACMTA at Turnover.

7.2 Turnover

7.2.1 Turnover will be the date after all of the following has occurred:

- a. LACMTA identified critical signage has been accepted/signed-off by LACMTA;
- b. Construction Authority has submitted the draft Safety and Security Certification Report;
- c. LACMTA has determined that no items affecting train movement remain on the punch list;
- d. Completion of SIT-1;
- e. LACMTA has accepted/signed-off on all test reports;
- f. Construction Authority has completed all vendor systems training;
- g. Construction Authority has delivered the special tools necessary for Pre-Revenue Operations;
- h. Construction Authority has delivered the spare parts necessary for Pre-Revenue Operations;
- i. Construction Authority has delivered the O&M manuals (other than parking facilities);
- j. CPUC has provided preliminary approval of all crossings; and
- k. Construction Authority has placed current books of plans for traction electrification, signals and communications in the appropriate bungalows, cases and rooms.

7.3 Schedule of Submittals for LACMTA Approval

7.3.1 At least forty (40) days prior to ROD, in addition to all the Turnover items set forth in Section 7.2.1, Construction Authority shall submit to LACMTA the following items which will require acceptance/sign-off by LACMTA:

- a. Elevator state certification
- b. Certificate of Occupancy (CofO)
- c. Safety and Security Certification final report
- d. Parking facilities training
- e. Delivery of parking facilities O&M manuals

7.3.2 No later than ten (10) days prior to ROD, in addition to all the Turnover items set forth in Section 7.2.1 and all the items required in Section 7.3.1 above, Construction Authority shall submit to LACMTA the following items which will require acceptance/sign-off by LACMTA:

- a. CPUC approval of Safety and Security Certification final report
- b. Delivery of all spare parts
- c. ADA compliance

7.4 Pre-Revenue Operations

7.4.1 Pre-Revenue Operations Period

LACMTA is responsible for Pre-Revenue Operations which shall begin at Turnover. The stress testing and Pre-Revenue Operations period provides LACMTA the opportunity to test operating systems for revenue services, operate trains and familiarize its operating staff with the Project for a period of three months, or as it mutually determined by the Parties.

7.4.2 Design/Build Contractor

During Pre-Revenue Operations, the Design/Build Contractor's activities include completing punch list items and performance of system and landscape maintenance. The Design/Build Contractor must comply with all applicable regulations and LACMTA's rail safety rules for access to ROW, as applicable. LACMTA must provide such rail safety rules for incorporation into the Design/Build Contract.

7.4.3 Construction Authority

Eight weeks prior to the expected date of Substantial Completion and prior to Turnover and commencement of Pre-Revenue Operations, Construction Authority will issue a letter to LACMTA requesting a "Pre-Revenue Readiness Meeting" to determine Project readiness for Turnover and to enter Pre-Revenue Operations. These meetings shall occur a minimum of six weeks prior to the scheduled pre-revenue date and occur as frequently as deemed necessary by all parties. The Design/Build Contractor shall actively participate in this meeting and implement any identified tasks required for Turnover and Pre-Revenue Operations.

7.4.4 LACMTA

After Turnover and during the Pre-Revenue Operations period, LACMTA shall be responsible for all train operations and activity on and immediately adjacent to the Mainline. The Design/Build Contractor, Construction Authority, or third party access to the Mainline must comply with LACMTA's track access and Wayside Worker Protection requirements including training, procedures, and operating rules. LACMTA shall provide the Design/Build Contractor reasonable access to the Mainline to perform maintenance. Should the Design/Build Contractor require access to the Mainline to complete punchlist items or perform other work, LACMTA shall provide reasonable access during periods that minimize disruption to pre-revenue train movements, such as weekends and overnight periods.

7.4.5 Revenue Readiness Meetings

Construction Authority, the Alignment Contractor, and LACMTA shall hold weekly revenue readiness meetings after Turnover and during the Pre-Revenue Operations period.

7.4.6 Fire, Life, Safety and Security Committee (FLSSC)

LACMTA shall participate in the activities of the FLSSC. Construction Authority is responsible to complete construction and testing activities to support emergency drills to be commenced by LACMTA before Turnover and the start of Pre-revenue Operations. The objective of the Parties is that the emergency drills be completed before Turnover and the start of Pre-Revenue Operations if possible, but if that is not possible, the drills may continue after Turnover into the Pre-Revenue Operations Period.

7.5 Safety and Security Certification

7.5.1 General

The Safety and Security Certification shall be completed in accordance with this Section 7.3 and the requirements of the CPUC.

7.5.2 Design/Build Contractor

The Design/Build Contractor, with LACMTA's cooperation, shall be responsible for implementation of the CPUC approved safety and security certification plan (SSCP) during the Design and Construction of the Project. As defined in the SSCP, the Design/Build Contractor shall implement a comprehensive safety certification program.

At the end of the SSCP process and as a condition to Substantial Completion, a Safety Certification report (SCR) shall be prepared by the Design/Build Contractor and submitted to the Construction Authority for review and approval. The SCR shall describe the process, responsibilities, documentation, and procedures used for certification and provide the supporting documentation.

7.5.3 Construction Authority

Once the Design/Build Contractor has successfully implemented the SSCP and completed the Safety Certification of the Project, Construction Authority shall transmit a letter to LACMTA stating that, based upon CPUC's Safety Certification of the Project, Construction Authority has determined that the Facility and system elements of the Project are safe. This letter shall be transmitted at least 21 days prior to Revenue Operations Date.

7.5.4 LACMTA

LACMTA shall participate in the oversight of the safety and security certification process. LACMTA shall have the right to review certification activities including testing, inspections, document reviews, individual certification, etc. leading to safety certification of the Project.

7.6 LACMTA Addition of Punch List Items

For the Alignment Design/Build Contract, LACMTA may add punch list items in accordance with the terms of the Contract up until Substantial Completion, at which point no punch list items can be added. This is contingent upon Contractor having no Design or Construction work remaining, other than punch list work.

7.7 Turnback of the Project

7.7.1 Turnback Process

Turnback is the process through which the Construction Authority and its Design/Build Contractor complete various activities and turn over the Project to LACMTA. The Construction Authority shall complete the following activities in order to complete its obligations for Turnback:

- a. Construction Authority has reviewed the actions of the Design/Build Contractor(s) to determine that the construction is complete in accordance with its own Project requirements.
- b. Construction Authority has participated in the CPUC certification and approval process.
- c. Construction Authority has verified to the LACMTA that all non-permitted liens have been cleared as required under the Property Trust Agreement.
- d. Construction Authority has determined that the Project is ready for Turnback and will certify that to LACMTA.

Upon the completion of items “a”, “b”, “c”, and “d” above, Construction Authority shall issue to LACMTA its Certification of Turnback, in the form attached hereto as Exhibit C. Upon issuance of the Certification of Turnback, LACMTA will initiate its review of the status of the “System Performance Demonstration” (SPD) and Certificates of Occupancy and upon a determination that all of these matters (“a”, “b”, “c”, and “d”, the SPD, and the Certificates of Occupancy) have been successfully completed, shall issue its acknowledgement of Turnback in the form

attached hereto as Exhibit E. Following receipt of such acknowledgement from the LACMTA, which will not be unreasonably withheld, Construction Authority shall have no further responsibilities or liability for Phase 2B, except as set forth in the Property Trust Agreement or at law. The Parties agree that, regardless of LACMTA acknowledgement of Turnback per this Agreement, "Completion of Phase II of the Project" (as applicable to Phase 2B to Claremont), as that term is defined in the Property Trust Agreement, does not occur until the applicable requirements of the Property Trust Agreement have been satisfied and does not apply to the portion of ROW east of the Claremont station that may be needed for a future extension to the City of Montclair.

7.7.2 Design/Build Contractor System Performance Demonstration

Following the ROD, the Design/Build Contractor shall be responsible for successfully completing the "System Performance Demonstration" (SPD), which shall be developed in conjunction with LACMTA's Rail Operations staff. The SPD must verify that the Project supports 30 consecutive Days of dispatch reliability and dependability during revenue service as defined below. Per the Design/Build Contract, SPD shall commence seven Days after the ROD.

Dispatch Reliability is defined for the Project as the probability that a train will run within 3 minutes of arrival schedule at terminal stations. 99.95% on time performance is required under these criteria.

Dependability is defined for the Project as the probability that a train will run within 20 minutes of arrival schedule at terminal stations. 99.99% on time performance is required under these criteria.

Delays incurred from incidents not related to the Project Systems performance, such as some law enforcement activities or a vehicle mechanical issue, will not count against System Performance percentage requirements.

7.7.3 Construction Authority Transfer of Project Assets

Per the process described in the Property Trust Agreement, Construction Authority shall transfer those Phase II Project Assets directly relating to Phase 2B and not needed for further Construction Authority activities within 150 Days after ROD for Phase 2B.

Per the process described in the Property Trust Agreement, LACMTA shall accept the transfer of Phase II Project Assets directly relating to Phase 2B and not needed for further Construction Authority activities within 180 Days after ROD for Phase 2B.

7.7.4 LACMTA Support of Design/Build Contractor SPD Program

LACMTA shall assist in the oversight of the SPD (as described above) that occurs during revenue operations and under the direction of LACMTA's Operations staff, as well as providing input regarding the other conditions to final acceptance under the Design/Build Contract. As a result, LACMTA will compile the daily operational statistics to verify the Design/Build Contractor's "on time performance" for SPD and will coordinate its review of the SPD with the Construction Authority who will have the right to review and monitor the daily computations to verify their accurateness. On time performance will be measured as defined above for SPD. Additionally, only late or annulled trains attributable to the Design/Build Contractor's facility and system elements shall be used in the calculation for on time performance.

LACMTA shall provide, subject to the terms of the Annual Work Plan, its fullest support to the Design/Build Contractor allowing and assisting the Design/Build Contractor to conduct the SPD and any other activities leading to final acceptance under the Design/Build Contract.

ARTICLE 8 - WARRANTIES, INDEMNIFICATION, AND INSURANCE

8.0 Generally

8.1 Warranties

8.1.1 Warranties to Benefit LACMTA

All warranties, whether derived from the Design/Build Contracts or from major equipment purchased by Construction Authority outside of the Design/Build Contracts (if any), whether express or implied in those contracts, shall run to the benefit of LACMTA.

8.1.2 Warranty Period

The warranty period commences at ROD and continues for one (1) year after ROD, provided, however, for major equipment, if the factory warranty (which should conform to industry standards) is longer than the warranty term set forth above, the factory warranty shall be provided and will control for such major equipment. The factory warranties shall be a proposal and contract requirement clearly identifying the equipment warranties that shall extend beyond the period stated above. The Construction Authority shall solicit a proposal for an additional year of warranty. Landscaping shall have an establishment period of the later of one year after Substantial Completion or when planted. The Authority shall cause any plants that do not survive the establishment period to be replaced.

8.1.3 Warranty Process

At the end of each year the warranty is in effect, the Parties shall walk through and create punch list of warranty items. LACMTA shall manage the warranty process. The Construction Authority and Design/Build Contractor shall reasonably cooperate with LACMTA in the warranty resolution process.

8.2 Insurance

8.2.1 Insurance Requirements

The Design/Build Contracts shall comply with Section 4.2.3(e) and Schedule "F" of the Property Trust Agreement regarding insurance, except that LACMTA hereby approves implementation of a Contractor Controlled Insurance Program ("CCIP") for Phase 2B. The insurance language for the CCIP shall be reviewed by LACMTA's Risk Management Department. Any suggested changes shall be submitted to the Construction Authority.

8.2.2 Insurance Documents

Construction Authority shall deliver, or cause to be delivered, to LACMTA copies of all insurance certificates and bond documents from Construction Authority, Contractors and Consultants, naming LACMTA as an additional named insured.

8.2.3 Trustee Insurance

Construction Authority shall provide LACMTA with copies of all updated Trustee insurance documents and policies required by Section 5.1.11 and Schedule G in the Property Trust Agreement.

8.3 Indemnification

8.3.1 Design/Build Contracts

The Design/Build Contracts shall comply with Section 4.2.3(a) of the Property Trust Agreement.

8.3.2 Construction Authority Indemnification of LACMTA

To the fullest extent permitted by law, Construction Authority shall indemnify, defend and hold LACMTA, and its officers, agents and employees harmless from and against any liability and expenses, including without limitation, defense costs, any costs or liability on account of bodily injury, death or personal injury of any person or for damage to or loss of property, any environmental obligation, any legal fees and any claims for damages of any nature whatsoever, arising out of Construction Authority's actions pursuant to this Agreement and attributable to the fault of Construction Authority, except to the extent caused by the sole active (but not passive) negligence or willful misconduct of LACMTA. Following a determination of the percentage of fault and or liability by agreement between the Parties or a court of competent jurisdiction, Construction Authority will indemnify LACMTA for the percentage of liability determined.

8.3.3 LACMTA Indemnification of Construction Authority

To the fullest extent permitted by law, LACMTA shall indemnify, defend and hold Construction Authority and its officers, agents and employees harmless from and against any liability and expenses, including without limitation, defense costs, any costs or liability on account of bodily injury, death or personal injury of any person or for damage to or loss of property, any environmental obligation, any legal fees and any claims for damages of any nature whatsoever, arising out of LACMTA's actions pursuant to this Agreement and attributable to the fault of LACMTA, except to the extent caused by the sole active (but not passive) negligence or willful misconduct of Construction Authority. Following a determination of the percentage of fault and or liability by agreement between the Parties or a court of competent jurisdiction, LACMTA will indemnify Construction Authority for the percentage of liability determined.

ARTICLE 9 - LACMTA Furnished/Required Equipment

9.0 LACMTA Furnished/Required Equipment

9.1 Equipment

To ensure uniformity of major equipment and to ensure compatibility with the existing rail system, LACMTA requires Construction Authority to use LACMTA Furnished/Required Equipment, which includes without limitation:

The purchase of 21 vehicles for use on Phase 2B including a portion of LACMTA oversight and consultant costs, spare parts, tools & special equipment, and carbuilder non-recurring costs.

Ticket Vending Machines/Stand Alone Validators/Fare Gates

Mobile & Portable radios

Other equipment as determined during the course of Design and Construction as mutually agreed to by the Parties.

9.2 NOT USED

9.3 NOT USED

9.4 Procurement Staffing

LACMTA staff time directed to procure LACMTA Furnished/Required Equipment shall be included as part of the Annual Work Plan.

ARTICLE 10 - MISCELLANEOUS PROVISIONS

10.0 Counterparts

This Agreement may be executed in several counterparts, and all counterparts so executed shall constitute one Agreement, binding all of the Parties hereto, notwithstanding that all of the Parties are not signatory to the original or the same counterpart. Facsimiles of executed signature pages shall be deemed valid and original.

10.1 Survival Rights

Neither Party shall have the right to assign any of its rights, interests or obligations under this Agreement, without the consent of the other Party. This Agreement shall be binding upon, and, as to permitted successors or permitted assigns, inure to the benefit of, LACMTA and Construction Authority and their respective successors in all cases whether by merger, operations of law or otherwise.

10.2 Severability

In the event any Section, or any sentence, clause or phrase within any Section, is declared by a court of competent jurisdiction to be void or unenforceable, such sentence, clause, phrase or Section shall be deemed severed from the remainder of this Agreement and the balance of this Agreement shall remain in full force and effort.

10.3 Force Majeure

Neither Party hereto shall be considered in default in the performance of its obligations hereunder to the extent that the performance of any such obligation is prevented or delayed by unforeseen causes including acts of God, acts of a public enemy, lawsuit seeking to restrain, enjoin, challenge or delay Construction of the Project and government acts beyond the reasonable control and without fault or negligence of the affected Party. Each Party hereto shall give notice promptly to the other of the nature and extent of any such circumstances claimed to delay, hinder, or prevent performance of any obligations under this Agreement. Notwithstanding anything to the contrary in this Agreement, an extension of time for any such cause shall be for the period of time reasonable in light of the enforced delay.

10.4 Notification or Notices

Any notice or other communication required or permitted hereunder shall be in writing and shall be deemed to have been given if personally delivered, transmitted by facsimile (with mechanical confirmation of transmission), or deposited in the United States mail, registered or certified, postage prepaid, addressed to the Parties' addresses set forth below. Notices given in the manner provided in this Section 10.4 shall be deemed effective on the third Day following deposit in the mail or on the day of transmission or

delivery if given by facsimile or by hand. Notices must be addressed to the Parties hereto at the following addresses, unless the same shall have been changed by notice in accordance herewith:

If to LACMTA:

Los Angeles County Metropolitan Transportation Construction Authority
One Gateway Plaza
Los Angeles, California 90012
Attn: Phillip A. Washington, Chief Executive Officer
Fax: (213) 922-7447

With a Copy to:

Los Angeles County Metropolitan Transportation Construction Authority
Office of the County Counsel
One Gateway Plaza, 24th Floor
Los Angeles, California 90012
Attn: Teddy Low, Deputy County Counsel
Fax: (213) 922-2531

If to Construction Authority:

Metro Gold Line Foothill Extension Construction Authority
406 E. Huntington Drive, Suite 202
Monrovia, California 91016
Attn: Mr. Habib F. Balian, Chief Executive Officer
Fax: (626) 471-9049

With a Copy to:

Nossaman LLP
777 S. Figueroa St.
Los Angeles, CA 90017
Attn: Alfred E. Smith, II, General Counsel
Fax: (213) 612-7801

10.5 Statutory References

All statutory references in this Agreement shall be construed to refer to that statutory section mentioned, related successor sections, and corresponding provisions of subsequent law, including all amendments.

10.6 Construction

The language in all parts of this Agreement shall be in all cases construed simply according to its fair meaning and not strictly for or against any of the Parties.

10.7 Section Headings

The captions of the Articles or Sections in this Agreement are for convenience only and in no way define, limit, extend or describe the scope or intent of any of the provisions hereof, shall not be deemed part of this Agreement and shall not be used in construing or interpreting this Agreement.

10.8 Governing Law

This Agreement has been executed by Construction Authority and LACMTA in the State of California and this Agreement shall be governed by and construed according to the laws of the State of California, without giving effect to the principles of conflicts of law thereof.

10.9 Pronouns and Plurals

Whenever the context may require, any pronoun used in this Agreement shall include the corresponding masculine, feminine and neuter forms, and the singular form of nouns, pronouns and verbs shall include the plural and vice versa.

10.10 Time of the Essence

Except as otherwise provided herein, time is of the essence in connection with each and every provision of this Agreement.

10.11 Further Actions

LACMTA and Construction Authority hereby agree to execute, acknowledge and deliver such additional documents, and take such further actions, as may reasonably be required from time to time to carry out each of the provisions, and the intent, of this Agreement.

10.12 Third-Party Beneficiaries

There are no third-party beneficiaries of this Agreement. This Agreement is made and entered into for the sole protection and benefit of the Parties hereto, and no other person or entity shall be a direct or indirect beneficiary of, or shall have any direct or indirect cause of action or claim in connection with this Agreement.

10.13 Exhibits

The Exhibits attached to this Agreement are incorporated herein and shall be part of this Agreement for all purposes.

10.14 Approvals

All approvals required by either Party pursuant to this Agreement shall not unreasonable be withheld.

10.15 Entire Agreement

This Agreement constitutes the entire agreement of the Parties with respect to, and supersedes all prior written and oral agreements, understandings, and negotiations with respect to the subject matter hereof. Notwithstanding the preceding sentence, this Agreement does not supersede the Property Trust Agreement or the Funding Agreement.

10.16 Authority of Parties

Each of the Parties hereby represents and warrants that it has full legal Construction Authority and is duly empowered to enter into this Agreement, and has taken all actions necessary to authorize the execution and delivery of this Agreement. Each Party further agrees that this Agreement complies with PUC Section 132400 et seq. and represents and warrants that the execution, delivery and performance by it of this Agreement does not and will not:

- (a) require any consent or approval not heretofore obtained of any person or judicial or administrative body;
- (b) violate any order, writ, judgment, injunction, decree, determination or award having applicability to such Party: or
- (c) result in a breach of or constitute a default under, cause or permit the acceleration of any obligation owed under, or require any consent under, any indenture or any agreement, contract, lease, or instrument to which such Party is bound or affected.

Further, the Parties represent and warrant that, to their actual knowledge, there are no orders, judgments, injunctions, awards, decrees, rulings, charges or writs of any Governmental Construction Authority in effect preventing the consummation of, nor any pleadings filed in connection with any actions seeking an injunction against, any of the transactions contemplated by this Agreement.

10.17 Binding Obligation

This Agreement, when executed and delivered, is the legal, valid and binding obligation of the Parties hereto.

IN WITNESS WHEREOF, the Parties have cause this Agreement to be executed as of the Effective Date.

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION CONSTRUCTION AUTHORITY

By: _____ Date: _____
Phillip A. Washington
Chief Executive Officer

APPROVED AS TO FORM:
Mary C. Wickham
County Counsel

By: _____
Deputy

METRO GOLD LINE FOOTHILL EXTENSION
CONSTRUCTION AUTHORITY

By: _____ Date: _____
Habib F. Balian
Chief Executive Officer

APPROVED AS TO FORM:
Nossaman LLP

By: _____
Alfred E. Smith, II
General Counsel

Exhibit A

DESCRIPTION OF THE PROJECT

The Phase 2B project will provide a light rail transit (LRT) system linking the cities of Azusa, Glendora, San Dimas, La Verne, Pomona, and Claremont, and will involve relocation and reconfiguration of existing freight and Metrolink commuter rail track. The Project includes approximately 11.7 miles of double light rail main track; tail tracks beyond the Claremont platform; new bridges; improvements to existing culverts; retaining walls and sound walls; embankment improvements; drainage and storm water improvements; five at-grade passenger stations; five parking structures; intermodal interfaces; traction electrification system comprised of traction power supply substations (TPSS) and overhead contact system (OCS); grade crossings and adjacent roadway/traffic signal improvements; station equipment; wayside equipment; communications systems; approximately 10.4 miles of freight rail track and associated siding relocations and improvements; light rail train control/signaling system; freight track signaling system; approximately 1.3 miles of Metrolink track relocation and signaling, including Positive Train Control (PTC); a new Claremont Metrolink platform on the Metrolink Corridor; landscaping; and all related appurtenances, accessories, subsystems, documentation, procedures, spare parts, manuals, and special tools.

Light rail vehicles (LRV), universal fare system (UFS) equipment, the radio system for the LRT system, the rail operations control (ROC) facility, and the light rail supervisory control and data acquisition (SCADA) system will be provided by Metro.

A general overview of the Project alignment is provided below:

Foothill Gold Line Pasadena to Azusa Tail Track to Gladstone Avenue Segment

This segment of the alignment is approximately 4.4 miles, runs mainly at-grade, and includes eight at-grade crossings at Barranca Avenue, Foothill Boulevard/Grand Avenue (freight only), Vermont Avenue, Glendora Avenue, Pasadena Avenue, Glenwood Avenue, Elwood Avenue, Loraine Avenue, grade separations at Foothill Boulevard/Grand Avenue (LRT only), SR66, Lone Hill Avenue, and multiple channel crossings. This segment of the alignment contains an existing freight track which will be relocated and remain active during the entire construction of the Project.

This segment of the Project has one center platform station in Glendora between Vermont Avenue and Glendora Avenue. The Glendora parking structure will contain a minimum of 420 stalls with a vehicular connection to Vermont Avenue, as well as pedestrian connections to Vermont Avenue, Glendora Avenue, and the LRT Platform. The Glendora station will have a pedestrian connection from the parking facility to the platform via a pedestrian undercrossing.

Gladstone Avenue to White Avenue Segment

This segment of the alignment is approximately 3.9 miles, runs mainly at-grade, and includes 11 at-grade crossings at Gladstone Avenue, Eucla Avenue, Bonita Avenue/Cataract Avenue, Monte Vista Avenue, San Dimas Avenue, Walnut Avenue, San Dimas Canyon Road, Wheeler Avenue, A Street, D Street, E Street, and multiple channel crossings, as well as the undercrossing at SR-57.

This segment contains an existing freight track that will be relocated and remain active during the entire Project.

This segment of the Project has one center platform passenger station in San Dimas (east of San Dimas Avenue) and one center platform passenger station in La Verne (east of E Street). The San Dimas parking structure will contain a minimum of 450 stalls with a vehicular connection to Arrow Highway. The La Verne parking structure will contain a minimum of 600 stalls with a vehicular connection to Arrow Highway. Both the San Dimas station and the La Verne station will have a pedestrian connection from the parking facility to the platform via a pedestrian undercrossing.

White Avenue to Freight/Metrolink Tie-in Segment

This segment of the alignment is approximately 1.9 miles, runs mainly at-grade, and includes two at-grade crossings at White Avenue and Fulton Avenue, two grade separations at Garey Avenue and Towne Avenue, as well as a channel crossing. This segment of the alignment contains an existing single track freight alignment and existing sidings that will be relocated and remain active during the entire Project. The Metrolink commuter rail tracks are immediately to the south of the LRT tracks in this segment and will not be disturbed with the exception of improvements to the grade crossing warning systems.

This segment of the Project has one center platform station in Pomona (west of Garey Avenue). The Pomona parking structure will include a minimum of 850 spaces with a vehicular connection to a new access road located north of the parking structure. The parking structure shall be connected to the LRT station via a pedestrian overcrossing.

Freight/Metrolink Tie-in to Claremont

This segment of the alignment is approximately 1.5 miles, runs mainly at-grade, and includes four at-grade crossings at Cambridge Avenue, Indian Hill Boulevard, College Avenue, and Claremont Boulevard, as well as a channel crossing. This segment of the alignment contains an existing dual track freight/Metrolink commuter rail alignment that will be relocated and remain active during the entire construction of the Project.

This segment of the Project has one center platform LRT station in Claremont (west of College Avenue). The Claremont station will have an at-grade pedestrian connection from both ends of the platform. The Claremont parking facility will consist of a structure located east of College Avenue and north of the LRT tracks as well as a parking lot, and

will include a minimum of 1260 spaces. In addition, a new Metrolink platform will be constructed approximately 800 feet west of College Avenue with a pedestrian undercrossing that connects to the Claremont parking structure to the north and the recreational area to the south.

Exhibit B

[INTENTIONALLY OMITTED]

Exhibit C

**CERTIFICATION OF TURNBACK
FOR PHASE 2B OF THE FOOTHILL EXTENSION PROJECT**

This Certification of Turnback ("Certificate") is issued by the Metro Gold Line Foothill Extension Construction Authority ("Construction Authority") to the Los Angeles County Transportation Authority ("LACMTA") for the purpose of completing Phase 2B of the Foothill Extension Project ("Project").

RECITALS:

1. WHEREAS, pursuant to Section 7.5.1 of the Master Cooperative Agreement for the Metro Gold Line - Glendora to Claremont, executed between the parties on or about [____], 2017 ("MCA"), Construction Authority has agreed to certify that the Project is completed and ready for Turnback to the LACMTA; and
2. WHEREAS, Construction Authority has determined that the Project has been completed and is ready for Turnback to the LACMTA;

CERTIFICATION OF TURNBACK

NOW, THEREFORE, incorporating, and in consideration of, the foregoing Recitals, Construction Authority hereby issues the following Certification of Turnback to the LAMCTA, as follows:

1. **Effective Date of Certification.**

This Certificate shall have an effective date of _____, 20__.

2. **Construction Authority's Determination of Project Completion**

The Construction Authority hereby certifies to LACMTA that all requirements of Section 7.5.1 of the MCA have been satisfied, and the Project is ready for Turnback to LACMTA.

IN WITNESS WHEREOF, the Board of Directors of the Construction Authority has caused this Certification to be duly executed and delivered as of the above date.

**METRO GOLD LINE FOOTHILL EXTENSION
CONSTRUCTION AUTHORITY**

Approved as to Form:
Nossaman LLP

By: _____
Habib F. Balian
Chief Executive Officer

By: _____
Alfred E. Smith, II
General Counsel

Exhibit D

ACKNOWLEDGEMENT OF TURNBACK OF PHASE IIA OF THE GOLD LINE LIGHT RAIL PROJECT

This Certificate of Acknowledgement (“Certificate”) is issued by the Los Angeles County Metropolitan Transportation Authority (“LACMTA”) to the Metro Gold Line Foothill Extension Construction Authority (“Construction Authority”).

RECITALS:

1. WHEREAS, pursuant to the Master Cooperative Agreement for the Metro Gold Line - Glendora to Claremont executed between the parties on or about [____], 2017 (the “MCA”), LACMTA agreed to receive and acknowledge the Turnback of the Project so long as Construction Authority certified that the Project was ready for Turnback, in accordance with Section 7.5.1 of the MCA;
2. WHEREAS, Construction Authority has delivered to LACMTA its Certification of Turnback;

CERTIFICATE OF ACKNOWLEDGEMENT

NOW, THEREFORE, incorporating, and in consideration of, the foregoing Recitals, LACMTA hereby issues the following Certificate of Acknowledgement to the Construction Authority, as follows:

1. **Effective Date of Certificate.**

This Certificate shall have an effective date of _____, 20__.

2. **LACMTA Acknowledgement of Turnback of the Project**

The LACMTA has reviewed the status of the Project and hereby acknowledges:

- a. the receipt and transfer of the Project, subject to the requirements of the Property Trust Agreement;
- b. that Construction Authority has fulfilled all of its obligations under the MCA.

IN WITNESS WHEREOF, the LACMTA has caused this Certificate to be duly executed and delivered as of the above date.

**LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY**

By: _____
Phillip A. Washington
Chief Executive Officer

Approved as to Form:

[_____] _____
County Counsel

By: _____
Deputy

ATTACHMENT C

Foothill Gold Line Extension Phase 2B Light Rail Project Measure R Cost Management Process and Policy Analysis

Introduction

The Measure R Cost Management Process and Policy (the Policy) was adopted by the Metro Board of Directors in March 2011. The Policy caps Measure R project funding at the amounts in the Measure R Expenditure Plan. The intent of the Policy is to inform the Metro Board of Directors regarding potential cost increases to Measure R-funded projects and the strategies available to close any funding gaps. The Foothill Gold Line Extension Phase 2B Light Rail Project is subject to this policy analysis.

The establishment of the Foothill Gold Line Extension Phase 2B Light Rail Project Life-of-Project (LOP) budget of \$1,406.9 million requires an increase of \$309.9 million over the assumed total project cost of \$1,097.0 million established in Measure M. The Measure M Expenditure Plan identified \$1,019.0 million in Measure M revenues for the Project with an additional commitment of \$78.0 million in “Local, State, Federal, Other Funding”. The table below summarizes the funding need for the Project and the proposed source of funds:

Table 1 - Foothill Gold Line Extension Phase 2B Light Rail Project Funding Sources

Source/Use	Amount	Notes
Measure M	\$1,019.0 million	Line #5 Measure M Expenditure Plan
Measure R / Proposition C	\$ 96.5 million	Remainder from Phase 2A, see concurrent Board rpt.
Local Agency Contribution	\$ 42.2 million	Measure M 3% Local Agency Contribution
TIRCP ¹	\$ 249.2 million	Metro will submit grant on behalf of Authority
Total Revenue	\$1,406.9 million	
Construction/RW/Vehicles	\$1,406.9 million	Total Cost at LOP Budget approval step.
Total Costs	\$1,406.9 million	

The primary source of funds used to address the funding need for the Project will come from the Transit and Intercity Rail Capital Program (TIRCP). Metro intends to submit a

¹ Transit and Intercity Rail Capital Program. A competitive grant administered by the California State Transportation Agency (CalSTA) and funded through Greenhouse Gas Reduction Fund auction proceeds (AKA “Cap and Trade” Funds).

grant for TIRCP funds on behalf of the Authority in the next grant cycle which is anticipated to start in the Summer/Fall of 2017.

Measure R Cost Management Policy Summary

In summary, the adopted Policy stipulates that project costs will be evaluated at each of the following project milestones:

- 1) Selection of conceptual design alternatives to be studied in the environmental phase;
- 2) Selection of the Locally Preferred Alternative and entrance into the Preliminary Engineering phase;
- 3) Approval of the final environmental document and entrance into the final design phase;
- 4) Establishment of a life-of-project budget prior to construction; and,
- 5) Any amendment to the life-of-project budget.

If a project increase occurs, the LACMTA Board of Directors must approve a plan of action to address the issue prior to taking any action necessary to permit the project to move to the next milestone. Increases will be measured against the 2009 Long Range Transportation Plan (LRTP) as adjusted by subsequent actions on cost estimates taken by the LACMTA Board of Directors, in this instance, the Measure M Expenditure Plan. With certain exceptions, shortfalls will first be addressed at the project level prior to evaluation for any additional resources using these methods in this order:

- 1) Value engineering and/or scope reductions;
- 2) New local agency funding resources;
- 3) Shorter segmentation;
- 4) Other cost reductions within the same transit corridor or highway corridor;
- 5) Other cost reductions within the same sub-region; and finally,
- 6) Countywide transit and highway cost reductions and/or other funds will be sought using pre-established priorities.

The policy was amended in January 2015 to establish Regional Facility Areas at Ports, airports and Union Station; and states that any:

“...capital project cost increases to Measure R funded projects within the boundaries of these facilities are exempt from the corridor and subregional cost reductions. Cost increases regarding these projects will be addressed from the regional programs share.”

The Foothill Gold Line Extension Phase 2B Light Rail Project does not fall within a Regional Facility Area.

Value Engineering and/or Scope Reductions

There may be potential for value engineering and/or scope reductions as the Project moves closer to finalizing design work. One potential source of scope reductions could

come from reducing the quantity of proposed parking. Other project elements, including grade separations and First/Last Mile features, could counteract these reductions. We will return to the Metro Board with recommended reductions and the associated costs savings or changes once we know the outcome of the future competitive grant opportunities, which are discussed below.

New Local Agency Funding Resources

The Authority has agreed to include assumed funding from the three percent contribution required under Measure M ordinance for the Project. The \$42.2 million identified as “Local Agency Contribution” will satisfy this requirement as well as some portion of the Board-adopted First/Last Mile Policy (Motion 14.1, May 2016 and Motion 14.2, June 2016). In addition, the Metro Board of Directors has previously agreed to transfer funds remaining in Measure R 35% or Proposition C 25% from the Gold Line Foothill Extension Phase 2A to the Foothill Gold Line Extension Phase 2B Light Rail Project LOP. After this step, a funding gap of **\$249.2 million** remains.

Shorter Segmentation

While shorter segmentation would be possible, it would present several legal, policy, and technical challenges. First, both Measure R and Measure M indicate the full project extending to Claremont. Not constructing the full project would be inconsistent with the Measure M Ordinance. Secondly, the Foothill Gold Line Extension Phase 2B Light Rail Project is environmentally cleared through Montclair in San Bernardino County. The Project also has a supplemental environmental clearance to Claremont. As a result, the project at a minimum must at least reach Claremont. Any shorter segmentation would require an additional supplemental environmental analysis. Third, any shorter segmentation would likely require new land acquisitions for turnback facilities and a reconfiguration of the distribution of parking spaces. This could increase the overall costs of the Project.

Other Cost Reductions within the Same Transit Corridor

The only project that might be deferred in this corridor, other than the Regional Connector, discussed below, are yet to be determined sub-regional Measure M projects for the San Gabriel Valley as a whole. Since we do not know the other projects in this corridor with any specificity at this time, we discuss those projects in the sub-regional step below. The only project which may be considered within the corridor is the Regional Connector. However, since this project is well under construction, removing funds would jeopardize the construction schedule as well as the terms of the New Starts grant and TIFIA loan funding the Regional Connector. We therefore recommend moving to the next step.

Other Cost Reductions within the Same Sub-region

The Foothill Gold Line Extension Phase 2B Light Rail Project is located within the San Gabriel Valley Subregion. Table 2 shows the projects and programs located within the subregion and could be deferred at the Board’s discretion to address the funding need for the Project.

While some of these projects are potentially available for deferment, we do not recommend taking this step until new funding opportunities are first pursued. The majority of the projects shown in Table 2 have significant congestion, environmental, and safety benefits which would be adversely impacted by deferral. While the Subregional Equity Program funds are to be provided as soon as possible, the entire amount would not be potentially realized until 2057. Given the urgent need of the funding for the Project, we recommend moving to the next step now and returning to this step only if necessary later.

Table 2 – San Gabriel Valley Subregion Projects and Programs

Project	Amount Available (FY17-FY27)	Fund Source
I-710 North Extension	\$218.3 million	Measure R 20%
ACE Grade Separations	\$284.4 million	Measure R 20% Proposition C 25%
I-605 Hotspots	\$122.7 million	Measure R 20% Measure M Highway
I-605 Interchange Improvements	\$291.6 million	Measure R 20%
SR-57/SR-60 Interchange Improvements	\$338.6 million	STBGP RIP Measure M Highway
Subregional Equity Program	\$199.0 million	Measure M
2015 Call for Projects	\$ 14.8 million	Proposition C 25%

Countywide Cost Reductions and/or Other Funds

The 2009 LRTP included a policy that any new revenues not then included in the LRTP, would be made available to the Gold Line Foothill Extension and the Crenshaw/LAX Transit Corridor. To address the funding gap for the Foothill Gold Line Extension Phase 2B Light Rail Project, we recommend pursuing grant funding from the Transit and Intercity Rail Capital Program (TIRCP), which is funded from the State of California’s Greenhouse Gas Reduction Fund.

We have previously submitted the Foothill Gold Line Extension Phase 2B Light Rail Project for consideration in the last cycle. While the project scored well, it was ultimately not selected for funding due to the TIRCP funds being oversubscribed.

Subsequently, the California State Legislature approved SB 9, which requires CalSTA to approve, by July 1, 2018, a five-year program of projects, and would require the California Transportation Commission to allocate funding to eligible applicants pursuant to the program of projects, with subsequent programs on a two-year cycle every even-numbered year. This first extension of the TIRCP program is expected to make a substantial amount of funding available.

We are hopeful that resubmitting this project would likely result in a successful grant application within the context of SB 9. With approval of the Board, we can prioritize a TIRCP grant application request totaling \$249.2 million. Should the TIRCP grant award be less than requested, we will return to the Board with additional strategies for identifying additional revenues and/or cost reductions using the steps above.

ATTACHMENT D
Expenditure Plan - Cost and Cashflow Budget
Metro Gold Line Foothill Extension Phase 2B Glendora to Claremont
(in millions of dollars escalated to the year of the expenditure) Initial Draft 05-18-17

Capital Project 865202	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	Total
Uses of Funds	15	16	17	18	19	20	21	22	23	24	25	26	27	
Pre-Construction	3.5	3.0	2.3	1.4	21.0	7.3								38.5
Construction					26.3	77.6	137.8	168.9	128.6	96.7	84.8	11.6		732.3
Right of Way					30.0	36.0	3.0							69.0
Professional Services	0.6	0.2	6.6	16.6	19.4	19.7	19.4	19.6	19.8	20.4	20.8	17.9		181.0
Project Contingency					19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	13.0	165.0
Vehicles										10.0	30.0	29.0	15.0	84.0
Metro Costs			0.1	2.5	3.0	5.0	17.4	18.0	18.0	21.0	10.1	10.3	3.0	108.3
Metro Contingency					1.0	2.0	2.3	4.0	4.0	5.0	5.0	4.4	1.1	28.8
Total Project Costs	4.1	3.2	9.0	20.5	119.7	166.6	198.9	229.5	189.4	172.1	169.7	92.2	32.1	1,406.9



Board Report

File #: 2017-0262, File Type: Contract

Agenda Number: 40.

CONSTRUCTION COMMITTEE JUNE 15, 2017

SUBJECT: SUPPLEMENTAL ENGINEERING SERVICES (SES) CONSULTANT SERVICE CONTRACT

ACTION: AWARD PROFESSIONAL SERVICE CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to EXECUTE:

- A. a three-year cost plus fixed fee type contract for AE36687 with Mott MacDonald Group for Supplemental Engineering Services for Engineering Design of Rail and Highway Transportation Projects on a task order basis, plus two one-year options. The amount for the three years base contract is \$15,000,000 and the amount for the two one-year options is \$5,000,000 for a total contract value not to exceed \$20,000,000; subject to resolution of protest(s), if any; and
- B. individual Task Orders and changes within the Board approved contract amount.

ISSUE

Currently, Metro's staff engineers, architects and CADD designers in the Facilities Engineering Group are fully engaged in supporting our current Major Rail Transit Projects (Crenshaw, Regional connector and Purple Line sections 1, 2 and 3), Metro Capital Improvements projects (CIP) such as the Patsaouras Plaza project and the Willowbrook / Rosa Parks Station Improvement Project and the State of Good Repairs Projects (SOGR) such as the Metro Blue Line (MBL) Pedestrian Gates project, the MBL Signaling Rehabilitation and Operational Improvements project, the I-210 Barriers Replacement project and the Pershing Square Escalators Replacement project.

The passage of Measure M will add a considerable workload to the Facilities Engineering group with projects that are starting or that are completing design in the next five years such as the 96th Street Airport Metro Connector, the Goldline Foothill Extension to Claremont, the Orange Line BRT Improvements and the BRT Connector Orange / Red Line to the Gold Line, which all have groundbreakings within the next five years.

In addition, important motions by Board of Directors require considerable engineering work to evaluate the feasibility and develop conceptual alternative designs to validate engineering solutions for the projects called by the motions: This includes but is not limited to the MBL Wardlow Grade

Separation study, the MBL Washington/ Flower Wye Improvement or Grade Separation, and the Pico Station Grade Separation.

Our previous Supplemental Engineering Services (SES) contract has expired. This new SES will enable Metro the flexibility to supplement internal resources on an as-needed basis for the work detailed above, when we either do not have the sufficient capacity, or lack the particular expertise necessary to perform a particular specialty task in a timely manner. Metro Engineering staff does not possess the resources or technical skills to carry out certain specialized tasks such as Traffic Control Plans, Noise and Vibration Control or Corrosion Control. There is not currently a need for full-time resources for these specialties. Therefore, it is more efficient to use consultants on an as-needed basis.

DISCUSSION

Metro Engineering has developed this SES Contract to supplement Metro's engineering efforts. The SES consultant team shall be capable of supporting its engineering group's technical disciplines. This Contract will be issued for a term of three years with two one-year optional extensions for a maximum total duration of five years. The Procurement Summary for this Contract is included as Attachment A.

This Contract called for the proposers to demonstrate their capabilities and technical expertise listed in the Statement of Work for this RFP. The technical proficiencies required for this SES contract (PS8510-3002) are very comprehensive and include all engineering and specialties disciplines which Metro may require in support of its projects. These include the following:

General Services include:

1. Preliminary and Final Design of Transportation including Rail and Highway Projects.
2. Design Review Support & Coordination for CIP projects & other special projects.
3. Production of Project Status, Technical and Engineering Reports.
4. Design of Structures, Stations and Guideways.
5. Facilities/Systems Interface Coordination.
6. Surveying Services.
7. Cost Estimating.
8. Intra/Inter Disciplinary Coordination.
9. Scheduling and Cost Management for Task Orders.
10. Post Design Services including; Bid and Design Support during Construction.
11. Administrative Tasks associated with General Engineering Support Services.

Specific Rail Facilities and Third Party Utility Design Services include:

12. Engineering Services for Review and Approval of Metro Projects.
13. Development of Technical Specifications, Drawings and Reference Documents.
14. Engineering Services for support of Metro Rail Operations and Maintenance.
15. Land Surveying and Legal Description.
16. Potholing.
17. Geotechnical Services, Borings and Reports.
18. Civil & Utility Engineering.

19. Drainage Design and Hydraulic Calculations.
20. Structural Engineering.
21. Bridges and Aerial Structure Design.
22. Tunnels, Trenches and Underground Station Design.
23. Track Work Engineering, Plan and Profile.
24. CPUC Grade Crossing Application including attendance to field diagnostic meetings.
25. Yard and Shop Rail Maintenance Facility Design.
26. Architectural Design.
27. Station Site Development.
28. Urban Design Integration.
29. Landscape Architecture.
30. Traffic Control Plans including Striping Drawings and Signal Drawings.
31. CADD and MicroStation Drawings.
32. BIM Services and Training.
33. Project Presentation including Three Dimensional Rendering.
34. Corrosion Control Measures and Cathodic Protection.
35. Value Engineering and Cost Reduction.
36. Noise and Vibration Analysis including Site Visits, Measurement and Mitigation.
37. Any other engineering or technical discipline not listed above that is ancillary to the Statement of Work and consistent with the general requirements of an approved Task Order.
38. HVAC design including HVAC and emergency ventilation.
39. Electrical Design.
40. Plumbing Design.
41. Fire Protection Design.

DETERMINATION OF SAFETY IMPACT

This SES Contract is not directly related to a specified safety issue. However, the services provided via this SES Contract will reduce Metro's dependency on limited internal resources and, thus, is generally in support of safety initiatives.

FINANCIAL IMPACT

As specific engineering design or support needs arise, task orders will be issued and funded from the associated project budget, upon approval by the responsible Project Manager.

Since this is a multi-year project, the Chief Program Management Officer, Project Managers and respective Cost Center Managers will be responsible for budgeting for costs of future task orders related to this contract.

IMPACT TO BUDGET

The funding for the task orders are provided by the specific project requiring the services. The source for these funds are in line with the respective projects' funding plans and fund sources may consist of federal and/or state grants as well as local funds. Many of the state of good repair projects

are funded with local funding sources that are eligible for rail and bus operations.

ALTERNATIVES CONSIDERED

- 1) Solicit qualifications proposals for each individual task when the requirement arises: This alternative is not recommended as it would require extensive additional staff time to process each individual task and would result in project delays due to the lead time required to complete each procurement cycle. Additionally, procuring services on a per-assignment basis would impose significant additional burden on the Engineering and Vendor/Contract Management departments.
- 2) Utilize existing engineering staff to provide the required technical support: This alternative is also not feasible as Metro's current engineering capacity is fully utilized to support the existing major, CIP and SOGR projects. Due to these commitments, it is anticipated that the current staff would be challenged to provide the necessary additional technical support required for the up-coming capital projects which will be under concurrent development. If this alternative were exercised, Metro would need to hire additional staff with expertise in several currently underrepresented disciplines to perform this work. Such an action is not practical nor cost-effective.

NEXT STEPS

Upon Board approval, staff will complete the process to award the contract. Specific task orders will then be issued on an as needed basis.

ATTACHMENTS

Attachment A: Procurement Summary
Attachment B: DEOD Summary

Craig Remley, Sr. Structural Engineer (213) 922-3981
Sam Mayman, Sr. Executive Officer, Engineering (213) 922-7289

Reviewed by:
Debra Avila, Chief Vendor/Contract Management Officer (213) 418-3051
Richard F. Clarke, Chief Program Management Officer (213) 922-7557



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

SUPPLEMENTAL ENGINEERING SERVICES – RAIL FACILITIES AND 3RD PARTY SERVICES / CONTRACT NUMBER AE36687

1.	Contract Number: AE36687	
2.	Recommended Vendor: Mott MacDonald, LLC	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input checked="" type="checkbox"/> RFP–A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: December 19, 2016	
	B. Advertised/Publicized: December 26, 2016	
	C. Pre-proposal/Pre-Bid Conference: December 28, 2016	
	D. Proposals/Bids Due: January 25, 2017	
	E. Pre-Qualification Completed: May 30, 2017	
	F. Conflict of Interest Form Submitted to Ethics: May 24, 2017	
	G. Protest Period End Date: May 19, 2017	
5.	Solicitations Picked up/Downloaded: 101	Bids/Proposals Received: 5
6.	Contract Administrator: Rafael Vasquez	Telephone Number: (213) 418-3036
7.	Project Manager: Aspet Davidian	Telephone Number: (213) 922-5258

A. Procurement Background

This Board Action is to approve the award of Contract No. AE36687, issued in support of Supplemental Engineering Services – Rail Facilities and 3rd party Services (SES). The scope of the Contract is to provide Engineering and Design including Final Design of Transportation projects which include rail and highway projects. Board approval of contract awards are subject to resolution of all properly submitted protests.

The RFP was issued in accordance with Metro's Acquisition Policy and California Government Code §4525 - 4529.

The contract is an Indefinite Delivery Indefinite Quantity type contract using Task Orders to release unique scopes of work and compensating the Consultant, at lump sum prices to the maximum extent possible, or as necessary on a cost reimbursable fixed fee basis for costs. The Contract period of performance is three base years plus two one year options.

One amendment was issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on January 12, 2017, to modify RFP requirements including General Certification Forms, Contractor Debarment, Suspension, Ineligibility and voluntary Exclusion Instructions.

On December 28, 2016, a pre-proposal conference was held with thirty-two (32) firms in attendance. A total of 5 proposals from the following firms were received on January 25, 2017:

1. Mott MacDonald, LLC;
2. HDR;
3. AECOM;
4. STV, Inc.; and
5. CH2M

B. Evaluation of Proposals/Bids

A Proposal Evaluation Team (PET) consisting of staff from Engineering Management and from Major Capital Project Engineering was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- | | |
|--|-----|
| • Experience and Capabilities of the Firms on the Consultant's Team | 30% |
| • Key Personnel's Skills and Experience | 30% |
| • Effectiveness of Management Plan | 20% |
| • Understanding of Work and Appropriateness of Approach For Implementation | 20% |

This is an Architect and Engineering (A&E), qualifications based procurement. Price cannot be and was not used as an evaluation factor as governed by California Government Code §4525 – 4529.

The evaluation criteria were appropriate and consistent with criteria developed for other, similar A&E solicitations.

During the week of March 16, 2017, the evaluation committee conducted oral presentations with the firms. The firms' project managers and key team members had an opportunity to present each team's qualifications and respond to the evaluation committee's questions. In general, each team's presentation addressed the requirements of the RFP, the understanding of work approach, design experience and stressed each firm's commitment to the success of the project. Also highlighted were staffing plans, work plans, and perceived project issues. Each team was asked questions relative to each firm's qualifications and previous experience.

Qualifications Summary of Recommended Firm:

The evaluation performed by the PET, in accordance with evaluation criteria set forth in the RFP, determined Mott MacDonald, LLC as the most qualified firm to provide the required services.

Mott MacDonald, LLC has extensive experience with Metro “on call” contracts and have also done similar projects for other transit agencies. Their firm showed a good understanding of Metro’s processes and solutions to mitigate potential risks.

In addition to their project team, Mott MacDonald, LLC clearly demonstrated the integration of subcontractors and their Project Management Plan clearly defined communication and monitoring of subcontractors. This includes redundancy across roles to ensure availability and a high percentage of staff commitment. Mott MacDonald, LLC showed clear identification of opportunities to improve services through innovative approaches.

Mott MacDonald’s core personnel, consists of a highly qualified group of key staff and support personnel to address all tasks outlined in the Scope of Services with the ability to deploy staff to meet the needs of Metro’s Supplemental Engineering Services program. The proposal outlines how the consultant team will efficiently work collaboratively on Metro’s Supplemental Engineering Service related projects to ensure assigned tasks and projects are properly coordinated to meet the goals and objectives of Metro’s Supplemental Engineering Service program.

The PET ranked the proposals and assessed strengths, weaknesses and associated risks of each of the Proposers to determine the most qualified firm.

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	Mott MacDonald, LLC				
3	Experience and Capabilities of the Firms on the Consultant’s Team	89.33	30.00%	26.80	
4	Key Personnel’s Skills and Experience	90.33	30.00%	27.10	
5	Effectiveness of Management Plan	88.67	20.00%	17.73	
6	Understanding of Work and Appropriateness of Approach for Implementation	92.00	20.00%	18.40	
7	Total		100.00%	90.03	1

8	HDR				
9	Experience and Capabilities of the Firms on the Consultant's Team	91.67	30.00%	27.50	
10	Key Personnel's Skills and Experience	86.67	30.00%	26.00	
11	Effectiveness of Management Plan	87.00	20.00%	17.40	
12	Understanding of Work and Appropriateness of Approach for Implementation	90.67	20.00%	18.13	
13	Total		100.00%	89.03	2
14	AECOM				
15	Experience and Capabilities of the Firms on the Consultant's Team	85.33	30.00%	25.60	
16	Key Personnel's Skills and Experience	88.67	30.00%	26.60	
17	Effectiveness of Management Plan	84..33	20.00%	16.87	
18	Understanding of Work and Appropriateness of Approach for Implementation	92.00	20.00%	18.40	
19	Total		100.00%	87.47	3
20	STV				
21	Experience and Capabilities of the Firms on the Consultant's Team	83.67	30.00%	25.10	
22	Key Personnel's Skills and Experience	84.67	30.00%	25.40	
23	Effectiveness of Management Plan	85.33	20.00%	17.07	
24	Understanding of Work and Appropriateness of Approach for Implementation	87.67	20.00%	17.53	
25	Total		100.00%	85.10	4
26	CH2M				
27	Experience and Capabilities of the Firms on the Consultant's Team	84.67	30.00%	25.40	
28	Key Personnel's Skills and Experience	84.67	30.00%	25.40	
29	Effectiveness of Management Plan	85.33	20.00%	17.07	
30	Understanding of Work and Appropriateness of Approach for Implementation	84.33	20.00%	16.87	
31	Total		100.00%	84.74	5

C. Cost/Price Analysis

A cost analysis of labor rates, indirect rates and other costs was completed in accordance with Metro's Procurement Policies and Procedures to negotiate a fair and

reasonable price. The analysis includes among other things, (1) a comparison with similar firms offering the same services; (2) an analysis of audited rates and factors for labor, equipment and other prices that will comprise the rates upon which the Consultant will base its invoices, and (3) compliance with both the Federal Acquisition Regulation (FAR) guidelines and Generally Accepted Accounting Principles (GAAP). Metro negotiated and established direct labor rates plus provisional indirect rates and a fixed fee rate. The pricing for each task order will utilize the rates, plus the negotiated fixed fee factor, to establish a lump sum price or a not-to-exceed cost reimbursable amount plus a fixed fee.

An audit request has been submitted to the Metro Management Audit Services Department (MASD). In order to prevent any unnecessary delay in contract award, provisional rates will be established subject to retroactive adjustments upon completion of any necessary audits. In accordance with FTA Circular 4220.1.F, if an audit has been performed by any other cognizant agency within the last twelve month period, Metro will receive and accept that audit report for the above purposes rather than perform another audit.

D. Background on Recommended Contractor

The recommended firm, Mott MacDonald, was founded in 1902 as (Mott & Hay) and in 1996, Mott MacDonald and the Canadian company Hatch created a joint venture called Hatch Mott MacDonald in North America. In 2016, Hatch Mott MacDonald was divided into two separate businesses. Mott MacDonald pursues projects in the U.S., Canada and around the world. Mott MacDonald specializes in rail transit, tunnels, transportation and highways.

DEOD SUMMARY

SUPPLEMENTAL ENGINEERING SERVICES (SES) CONSULTANT SERVICES
CONTRACT / AE36687

A. Small Business Participation

The Diversity and Economic Opportunity Department established a 20% goal, inclusive of 17% Small Business Enterprise (SBE) and 3% Disabled Veteran Business Enterprise (DVBE) for this project. Mott MacDonald formed a team that included SBE and DVBE firms without schedules or specific dollar commitments prior to the establishment of this on-call contract and has committed to meeting the 17% SBE and 3% DVBE goals. Overall SBE/DVBE participation for the on-call Contract will be determined based on the aggregate of all Task Orders awarded.

Small Business Goal		17% SBE 3% DVBE	Small Business Commitment	17% SBE 3% DVBE
	SBE Subcontractors	Scope of Work	NAICS Codes	% Committed
1.	Anil Verma	Mechanical, Electrical, and Plumbing Engineering and Architecture Services	541330 - Engineering Services 541310 - Architecture Services	TBD
2.	Arellano Associates	Public Outreach, Communications, Stakeholder Engagement	541613 - Marketing Consulting Services 541820 - Public Relations Agencies	TBD
3.	BA Inc.	Utility Design Engineering	541330 - Engineering Services 541340 - Drafting Services 541690 - Other Scientific and Tech. Consulting	TBD
4.	Earth Mechanics	Geotechnical and Earthquake Engineering	541330 - Engineering Services 541380 - Testing Laboratories	TBD
5.	Engineering Solutions Services	Grant Writing, Structural Engineering	541330 - Engineering Services 541611 - Administrative Services	TBD
6.	Gibson Transportation	Transportation Engineering	541611 - Administrative Services 541618 - Other Management Consulting Services 561499 - All Other Business Support Services	TBD

7.	Lenax	Cost Estimating Services	541330 - Engineering Services 541310 - Architecture Services	TBD
8.	McLean & Shultz	Architectural, Structural, and Civil Engineering Design Services	237110 - Water and Sewer Line and Related Structures (Construction Management) 237310 - Highway, Street, and Bridge Const. (Construction Management) 541611 - Admin. Management and Gen. Consulting	TBD
9.	Morgner Construction Management	Construction Management Support Services, Pre-Construction Surveys	541330 - Engineering Services	TBD
10.	PacRim Engineering	Structural Design Support	541330 - Engineering Services 541370 - Surveying and Mapping Services	TBD
11.	Rail Surveyors Engineers	Rail Transit Engineering and Surveying	541620 - Environmental Consulting Services 541690 - Other Scientific and Tech. Consulting	TBD
12.	Terry Hayes and Associates	Environmental Services	541330 - Engineering Services 541618 - Other Management Consulting Services 541690 - Other Scientific and Tech. Consulting	TBD
13.	The Alliance Group	Utility Engineering Design, Coordination, Management, Third Party Coordination	541611 - Administrative Services	TBD
14.	The Solis Group	Project Controls: Scheduling and Document Control	541370 - Surveying and Mapping 541360 - Geophysical Surveying and Mapping 541330 - Engineering Services	TBD
15.	Wagner Engineering	Land Surveying, Mapping, and Right of Way Engineering	541370 - Surveying and Mapping 541360 - Geophysical Surveying and Mapping 541330 - Engineering Services	TBD
				17%

	DVBE Subcontractors	Scope of Work	NAICS Codes	% Committed
1.	MA Engineering	Civil Engineering Services	541330 - Engineering Services	TBD
Total DVBE Commitment				3%

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention is not applicable to this Contract.

C. Prevailing Wage Applicability

Prevailing Wage requirements are applicable to this project. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.