

**Metro**Los Angeles County
Metropolitan Transportation AuthorityOne Gateway Plaza
Los Angeles, CA 90012-2952213.922
metro.net**FINANCE AND BUDGET COMMITTEE
MARCH 16, 2011****SUBJECT: GOLD LINE FOOTHILL EXTENSION****ACTION: APPROVE AMENDMENTS TO FOOTHILL EXTENSION FUNDING
AGREEMENT****RECOMMENDATIONS**

Authorize the CEO to amend the Gold Line Foothill Extension Funding Agreement ("Agreement") to:

- A. Increase the Phase 2A budget by \$45 million from \$690 million to a total revised Life-of-Project ("LOP") budget of \$735 million.
- B. Allocate \$27.4 million of the revised LOP budget to MTA to cover the estimated cost of Measure R bond financing to meet Phase 2A's accelerated schedule, based on Attachment C.
- C. Make all necessary modifications to the Agreement consistent with the discussions outlined in this board report.

RATIONALE

The Gold Line Construction Authority ("Construction Authority") has requested an addition of \$45 million to their Phase 2A LOP budget based on more up-to-date analysis of project cost estimates as reflected in their revised Construction Authority Board adopted budget outlined in Attachments A and B.

Staff has been working with the Construction Authority to ensure they have met MTA's Unified Cost Management Process and Policy criteria, as amended through board motions. Attachment D outlines efforts undertaken by the Construction Authority to meet those requirements. The Construction Authority Board took action on February 9 to adopt their staff's recommendations regarding the cost increases.

The Agreement currently allows for \$10 million as a working capital advance (Section 3.2). The Construction Authority has requested a \$20 million increase to the working capital advance to a total project advance of \$30 million. Originally, the Construction Authority anticipated a design/build/finance contract enabling the contractor to withhold invoicing the project as construction expenses were incurred. However, since MTA is currently providing financing for the project on a reimbursement basis, the Construction Authority requires additional working capital to pay invoices as they are submitted by their contractors.

The Agreement would be further modified to allow LACMTA to provide Construction Authority with its grant funds without annual limitations and on a reimbursement basis, subject to the LOP budget amount. Annual amounts shown in the Agreement are for cash flow planning purposes only. As part of the Payment Schedule Annual Review in February of each year, MTA staff will determine the financing cost based on actual expenditures for the previous year.

The Agreement would also be modified with regard to the cost sharing of the O&M Facility. The MTA Board originally authorized MTA to pay 75% of an agreed-to budget amount for the O&M Facility. However, the parties have agreed that MTA will be responsible for 75% of actual costs for the O&M Facility with a cap of 75% of an agreed-to budget amount. Staff plans to return next month to obtain the Board's approval of the O&M Facility budget which will include land acquisition costs and design and construction costs for the O&M facility.

In order to assure transparency in project management, schedule and costs, new language will be added to the Agreement to require the Construction Authority's Project Management Information System (PMIS) to be compatible with MTA's PMIS. Moreover, MTA staff will have access to the Construction Authority's PMIS for review and oversight purposes.

BACKGROUND

Measure R allocates \$735 million (\$810.5 million escalated per the Long Range Transportation Plan (LRTP)) for the Gold Line Foothill Extension to Claremont. The Agreement only addresses Phase 2A (Pasadena to Azusa), therefore the grant amount is \$690 million, the anticipated project cost for Phase 2A at the time the Agreement was executed. The Agreement provides that if it appears that the Phase 2A budget may exceed \$690 million, either because the Construction Authority requires additional funds or MTA requires additional funds for MTA Project Costs a request for a budget increase shall be made to the MTA Board, along with proposals for cost recovery, including without limitation, a re-scope of the Project, or alternatively, the Construction Authority may request the approval of MTA Board to use funds allocated to the project in excess of \$690 million but not to exceed \$810.5 million. The requested \$45 million will come from the excess Gold Line Foothill Light Rail Transit Extension project funds, thereby reducing the funds available for Phase 2B. The Construction Authority has

indicated that they will be seeking non Federal New Starts funding to secure the estimated \$550 million needed for Phase 2B.

The Agreement recognized that the parties intended to facilitate project acceleration within the \$690 million grant amount. In November 2010, MTA raised over \$750 million by issuing Build America ("BABS") and tax exempt bonds to take advantage of historically low interest rates and, in the case of BABS the expiring 35% direct Federal interest subsidy. The final interest rate of the entire bond issuance was 3.52%, a substantially lower rate than that available from the private sector. The financing cost associated with the bonds for the amount requested by Construction Authority is estimated to be \$27.4 million. The financing cost will be added to the MTA Project Costs for a revised MTA Project Costs of \$173,580,000. The Construction Authority Board took action to approve the initially estimated \$21 million in financing cost as part of the revised LOP budget on February 9, 2011. The additional \$6.4 million in financing cost, due to the project cost increase, is included in the contingency portion of the Construction Authority Board approved LOP budget.

FINANCIAL IMPACT

No financial impact is anticipated from the LOP budget increase because the \$45 million request is within the total project cost in the Long Range Transportation Plan. However, the additional funds requested will bring the project budget closer to the cap within Measure R, limiting the amount of available funding for future modifications to Phase 2A or development of the Phase 2B extension of the project from Azusa to Claremont.

The \$20 million advance is within the project's FY12 budget amount.

Impact on Bus and Rail Operating and Capital Budget

The recommended actions have no impact on MTA's bus and rail operating budgets as Measure R 35% cannot be used for transit operations.

ALTERNATIVES CONSIDERED

The Board could decide to deny the Construction Authority's request for additional funding. This option is not recommended since the LRTP allocated \$810.5 million for the Foothill Extension to Claremont and the revised LOP amount is within this cap.

NEXT STEPS

Upon Board approval, staff will modify the Agreement to reflect the changes set forth in this board report.

ATTACHMENTS

- A. Gold Line Construction Authority Letter
- B. Approval of Foothill Extension Financial Plan Revision 5
- C. Expenditure Plan – Cost and Cash Flow Budget
- D. Cost Management Process

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Arthur T. Leahy
Chief Executive Officer



ATTACHMENT A

Metro Gold Line Foothill Extension
Construction Authority

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February 17, 2011

BLCA-MTA-120

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City of
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Executive Officer:

Habib F. Balian
Chief Executive Officer

Mr. Paul Taylor
Deputy Chief Executive Officer
Los Angeles County Metropolitan
Transportation Authority
One Gateway Plaza, MS 99-25-1
Los Angeles, California 90012

SUBJECT: Funding Transfer Agreement Amendment

Dear Paul:

We have agreed with you to request two separate approvals from LACMTA's Board of Directors in one LACMTA Board Report. The first approval is for LACMTA to charge the Construction Authority interest of \$21 million associated with the LACMTA financing. The second approval is a request to increase contingency levels and the amounts allocated to certain budget items to more conservative levels as approved by the Construction Authority Board in the amount of \$45 million. At the end of the transaction, the project budget would be \$735 million presently allocated for Phase 2A.

On February 9, 2011, the Construction Authority Board approved a revised Foothill Extension Financial Plan Revision 5 which includes the \$735 million for Phase 2A noted above. Attachment C (Expenditure Plan) for the Funding Agreement has also been revised accordingly. While Metro's project costs remain the same at \$146.8 million, the total Metro cost should be adjusted to \$167.18 million to reflect the \$21 million in financing cost. The Measure R 35% revenues were adjusted to account for any deficit in the original Attachment C.

The changes from the previous Attachment C include decreases for the IFS Bridge from \$24.0 million to \$18.6 million, Professional Services from \$94.0 to \$65.0 and Project Contingency from \$47.65 million to \$44.0 million. Increases include Guideways from \$99.0 million to \$113.0 million, Parking Lots from \$10.0 million to \$20.0 million, Parking Structures from \$20.0 million to \$31.0 million, MCA's from \$7.0 million to \$12.0 million, Right-of-Way from \$15.0 million to \$30.0 million, and Project Reserve / Financing from \$0.0 to \$21.0 million. All of these changes are based upon our engineer's and independent reviewer's best estimate at this time. The net effect of these decreases and increases projects a budget of \$735 million. The proposed budget increase of \$45 million will result in less funding available for the

Azusa to Claremont segment which is unfunded (approximately \$550 million) during this planning phase. The Metro Gold Line Foothill Extension Construction Authority has met the required 3% local funds match amount of \$23 million as noted in Metro's July 24, 2008 Expenditure Plan Attachment A.

According to our schedule for the Azusa to Montclair segment, planning & engineering and the environmental work necessary to secure funding and begin construction would be late 2014. However, the Authority at this time has not secured funding commitment for construction, but will over the course of the next year work with our congressional delegation on identifying funding other than federal New Starts to fund the approximately \$550 million project.

Attached is the Authority's Cost Manager Plan report on the proposed Unified Cost Management Process and Policy as presented to the MTA board in June 2010. The Authority addresses Value Engineering and/or Scope Reductions, Shorter Segmentation, New Local Agency Funding Resources, Other Cost Reductions within the Same Transit Corridor, Other Cost Reductions within the Same Sub-Region and Countywide Transit Cost Reductions and/or Other funds will be Sought using Pre-Established Priorities.

Also attached is Attachment C (Expenditure Plan) to the Funding Agreement.

Again, my thanks for your help and cooperation.

Sincerely,



Habib F. Balian
Chief Executive Officer

- Attachments: (1) Adopted Foothill Extension Financial Plan Revision 5 with Authority Board Changes
(2) Attachment C "Expenditure Plan"
(3) White Paper - Unified Cost Management Process and Policy

Revised Per Board - Changes Highlighted

Agenda Item: 7.b.

Board Members:

Doug Tessitor
Chair
Council Member,
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City of
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Appointee, City of
South Pasadena

Executive Officer:

Habib F. Balian
Chief Executive Officer

TO: Chair and Members of the Board of Directors
FROM: Habib F. Balian, CEO
DATE: February 9, 2011
SUBJECT: Approval of Foothill Extension Financial Plan Revision 5

RECOMMENDATION:

The Board of Directors approval of the attached Foothill Extension Financial Plan Revision 5 of \$1,167.0 million.

SUMMARY:

The Board of Directors adopted the original Foothill Extension Financial Plan on March 24, 2004 and was last revised on October 27, 2010 for a total project budget of \$1,167.0 million.

The attached proposed Financial Plan Revision 5 incorporates the current assessment of changes to project revenues and expenditures that accurately reflect the most recent project outlook. Overall, the total proposed financial plan revision 5 does not change from \$1,167.0 million.

On the revenue side, Financial Plan Revision 5 remains at \$1,167.0 million. To date, the Authority has secured \$775.0 million in revenue commitments of which approximately \$31.0 million has been received through December 31.

Changes in the major budget categories between the Financial Plan Revision 4 and Financial Plan Revision 5 as illustrated in the table below. Measure R – 2A has increased and Federal / Other has decreased.

On the expenditure side, Financial Plan Revision 5 remains at \$1,167.0 million. Changes in the major budget categories between the Financial Plan Revision 4 and Financial Plan Revision 5 are illustrated in the table below. Construction – 2B has decreased while Project Reserve / Financing have increased.

As stated previously in Financial Plan Revision 4, Metro plans to issue bonds to pay for the first three years of expenditures for this project. The Authority would receive adequate funds to cover project, design and construction costs

up to the previously approved \$690M directly from Metro however as a result of recent discussions with Senior Metro staff, all Metro Measure R projects will now be charged interest on bond funding. Based on this assumption, this budget revision has been adjusted accordingly. Based on this bond funding plan, the escalated \$735 million revenue expected is difficult to estimate however it will be less than anticipated.

Foothill Extension Financial Plan Project Summary

FOOTHILL EXTENSION FINANCIAL PLAN					
(in millions of \$)	Adopted Rev 4	Proposed Rev 5	Proposed Variance	Adopted Rev 5	Proposed Variance
REVENUES					
SCAG	1.0	1.0	0.0	1.0	0.0
Interest Income	2.0	2.0	0.0	2.0	0.0
Bridge Replacement	13.9	13.9	0.0	13.9	0.0
Phase 1 Carryover	4.0	4.0	0.0	4.0	0.0
Maintenance and Operation Facility	0.0	0.0	0.0	0.0	0.0
Cities	11.0	11.0	0.0	11.0	0.0
Real Estate - Phase 2	0.0	0.0	0.0	0.0	0.0
State SHA	0.0	0.0	0.0	0.0	0.0
Measure R - 2A	690.0	711.0	21.0	735.0	45.0
Measure R - 2B	45.0	45.0	0.0	45.0	0.0
SANBAG	55.2	55.2	0.0	55.2	0.0
Federal TCSP	2.9	2.9	0.0	2.9	0.0
Federal Bus Intermodal Plan	9.0	9.0	0.0	9.0	0.0
Federal New Starts 2004 MTA Passthrough	4.0	4.0	0.0	4.0	0.0
Federal New Starts 2005 MTA Passthrough	0.5	0.5	0.0	0.5	0.0
Federal New Starts 2006 Corridor Study	2.5	2.5	0.0	2.5	0.0
Federal / Other	326.0	305.0	(21.0)	281.0	(45.0)
Total Foothill Extension Revenues	1,167.0	1,167.0	0.0	1,167.0	0.0
EXPENDITURES					
Program Management and Admin	91.7	91.7	0.0	91.7	0.0
Master Cooperative Agreement	12.0	12.0	0.0	12.0	0.0
Real Estate Including Row Acq^	25.0	25.0	0.0	30.0	5.0
Utility Relocation	0.0	0.0	0.0	0.0	0.0
Hazardous Material / Environmental Serv	0.0	0.0	0.0	0.0	0.0
Special Programs	0.3	0.3	0.0	0.3	0.0
Procurement / Vehicles	60.0	60.0	0.0	60.0	0.0
Construction - IFS	18.6	18.6	0.0	18.6	0.0
Construction - 2A / M&O ^^	360.4	360.4	0.0	367.4	7.0
Construction - 2B	450.0	429.0	(21.0)	405.0	(45.0)
Construction - Parking Structures^	28.0	28.0	0.0	31.0	3.0
Maintenance and Operation Facility Land	20.0	20.0	0.0	20.0	0.0
MTA Project Costs	66.0	66.0	0.0	66.0	0.0
Contingency^	35.0	35.0	0.0	44.0	9.0
Project Reserve / Financing^	0.0	21.0	21.0	21.0	21.0
Total Foothill Extension Expenditures	1,167.0	1,167.0	0.0	1,167.0	0.0

* Total DB2 contract value estimated at \$440 million includes additional Metro shared capital costs.

^ High-risk items.

BUDGET IMPLICATIONS:

The total Foothill Extension Project Financial Plan remains at \$1,167.0 million.

DISCUSSION:

Below is an explanation of changes to the Financial Plan by major category.

Revenues - \$1,167.0 Million (\$0.0 million increase)

SCAG -\$1.0 Million (no variance)

To date, the Authority has received \$0.93 million from SCAG related to the Alternatives Analysis work.

Interest Income - \$2.0 Million (no variance)

The interest income budget has no change. This amount reflects the estimated interest income through the project.

Bridge Replacement - \$13.9 Million (no variance)

To date, the Authority has received \$13.9 million for bridge replacement.

Phase I Carryover -\$4.0 Million (no variance)

To date, the Authority has transferred \$4.0 million from Phase I to the Foothill Extension.

Maintenance and Operation Facility -\$0 Million (no variance)

Maintenance and Operation Facility has no change.

Cities - \$11.0 Million (no variance)

To date, the Authority has not received any cash contribution from the Cities however the Cities may contribute like kind services in the future in the amount of \$1.0 million from each of the cities along the Foothill Extension.

Real Estate - \$0.00 Million (no variance)

The Real Estate budget reflects the expected phase II real estate contribution from the MTA or other sources. The MTA previously paid and purchased the existing Foothill Extension ROW in the 1990's and subsequently transferred to the Authority. The Authority does not expect additional real estate revenue.

State SHA - \$0 Million (no variance)

The State SHA has no change.

Measure R – 2A - ~~\$711.0 Million (\$21.0 Million increase)~~
Revised Per Board \$735.0 Million (\$45.0 Million increase)

The Measure R – 2A budget increases from \$690 million to \$711 million, which is the latest estimated project cost to extend the line from Pasadena to Azusa.

Measure R – 2B - \$45.0 Million (no variance)

The Measure R – 2B budget remains the same at \$45.0 million.

SANBAG - \$55.2 Million (no variance)

The SANBAG budget remains the same at \$55.2 million, which is the estimated cost to extend the light rail line from a proposed Claremont station to a proposed Montclair station in addition to their share of the MTA Maintenance Facility. SANBAG has agreed to pay their share to extend the line from Claremont to Montclair.

Federal TCSP – \$2.9 Million (no variance)

The Federal TCSP budget remains unchanged, which reflects the appropriated and committed amount to date.

Federal Bus Intermodal Plan - \$9.0 Million (no variance)

The Federal Bus Intermodal Plan budget remains the same at \$9.0 million, which reflects the amount in the recent Transportation bill for Bus and Bus Facilities of three years at three million per year.

Federal New Starts 2004 - \$4.0 Million (no variance)

The Federal New Starts 2004 budget remains unchanged, which reflects the appropriated and committed amount to date.

Federal New Starts 2005 - \$0.5 Million (no variance)

The Federal New Starts 2005 budget remains unchanged, which reflects the appropriated and committed amount to date.

Federal New Starts 2006 Corridor Study - \$2.5 Million (no variance)

The Federal New Starts 2006 budget remains the same at \$2.5 million which includes the second year corridor study.

Federal Other - \$305.0 Million (~~\$21.0 Million decrease~~)

Revised Per Board \$281.0 Million (\$45.0 Million decrease)

The Federal Other budget decreases \$21.0 million from \$326.0 million to \$305.0 million which is the current additional estimate of Federal dollars necessary per the Authority's engineer estimate to complete phase 2B at this time.

Expenditures \$1,167.0 Million (\$0.0 million increase)

Program Management and Administration- \$91.7 Million (no variance)

Program Management and Administration budget remains the same at \$91.7 million which includes a combination of Authority Administration, Program Management, and Non Measure R work to reflect the current status of the project and the Authority's best estimate at this time.

Master Cooperative Agreements - \$12.0 Million (no variance)

The Master Cooperative Agreements budget remains the same at \$12.0 million which includes Board Represented Agencies, County and State Agencies and Other Agencies based upon our engineer's current estimates at this time which include the Foothill Extension Cities, Caltrans, Metrolink and the Sanitation District.

Real Estate - \$25.0 Million (no variance)

Revised Per Board \$30.0 Million (\$5.0 Million increase)

The Real Estate budget remains the same at \$25.0 million. This amount is the current estimated cost to purchase additional properties necessary to complete the line based on our engineers estimate including legal fees and environmental evaluations. Property acquisitions have been defined. Based on recent purchases, real estate may be higher than the original per square foot estimate.

Utility Relocation - \$0.0 Million (no variance)

The Utility Relocation budget remains the same at zero as that amount is included in the Contractors construction costs listed below in Construction – 2A/M&O.

Hazardous Material and Environmental Services - \$0.0 Million (no variance)

The Hazardous Material and Environmental Services budget remains the same at zero as that amount is included in the Contractors construction costs listed below in Construction – 2A/M&O.

Procurement / Vehicles -\$60.0 Million (no variance)

The Procurement budget remains the same at \$60.0 million, which is the expected cost of purchasing fifteen light rails vehicles for the Foothill Extension at \$4.0 million each.

Construction IFS - \$18.6 Million (no variance)

The Construction IFS budget remains the same at \$18.6 million which is the current expectation of the project by the Authority. Construction IFS was previously included in Construction 2A.

Construction 2A/M&O - \$360.4 Million (no variance)

Revised Per Board \$367.4 Million (\$7.0 Million increase)

The Construction 2A/M&O budget remains the same at \$360.4 million, which is the current expectation of the project by the Authority. Construction IFS and Construction Parking Structures previously were reclassified from Construction 2A while Construction M&O was previously reclassified from Maintenance and Operations Facility. The MTA 75% share and the Authority's 25% share of potential mitigations in the amount of \$15.75 million for work to be performed by others is included as well as the costs of construction for 2A, 2A provisional sums, Authority's M&O 25% Construction

share. Metro's 75% M&O construction share will come from a different revenue source directly from MTA. Until the Authority receives bids from Contractors, the actual cost is unknown.

Construction 2B - ~~\$429.0 Million (\$21.0 Million decrease)~~

Revised Per Board \$405.0 Million (\$45.0 Million decrease)

The Construction budget decreases \$21.0 million from \$450.0 million to \$429.0 million which is the current expectation of the project by the Authority.

Construction Parking Structures - ~~\$28.0 Million (no variance)~~

Revised Per Board \$31.0 Million (\$3.0 Million increase)

The Construction Parking Structures budget remains the same at \$28.0 million which is the current expectation of the project by the Authority. Construction parking structures was previously included in Construction 2A. Until the Authority receives bids from Contractors, the actual cost is unknown.

Maintenance and Operation Facility Land - \$20.0 Million (no variance)

The Maintenance and Operation Facility budget remains the same at \$20.0 million to properly reflect the current status based on our engineers current estimates. Maintenance and Operation Facility Construction previously had been reclassified to Construction 2A/M&O. This amount is the Authority's 25% share of the M&O land costs. Metro's 75% share will come from a different revenue source directly from MTA.

MTA Project Costs - \$66.0 Million (no variance)

The MTA Project Costs budget remains the same at \$66.0 million to properly reflect the part of the amount per the proposed Measure R Funding agreement between the Construction Authority and the LACMTA.

Contingency - ~~\$35.0 Million (no variance)~~

Revised Per Board \$44.0 Million (\$9.0 Million increase)

The Contingency budget remains the same at \$35.0 million based on our engineer's current estimate. The \$35.0 million the Authority is carrying as contingency represents an approximate 8% contingency of Construction 2A/M&O, Construction IFS and Construction Parking Structure which also is in our allowable contingency range of construction costs. As the project progresses, the Authority will adjust this line to reflect the status at that time. Contingency for this type of project typically would be a minimum of 10% of project costs. Other local projects in the region carry in excess of 10% contingency.

Project Reserve / Financing -\$21.0 Million (\$21.0 million increase)

The Project Reserve / Financing budget increases \$21.0 million from \$0.00 to \$21.0 million.

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

Uses of Funds	Prior	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
Construction Authority Costs														
Construction and Procurement														
IFS			5.0000	11.6000	2.0000	11.0000	6.0000							18.6000
Stations				3.0000	9.0000	40.0000	33.0000							29.0000
Guideways				10.0000	30.0000	4.0000	12.0000							113.0000
Parking Lots				1.0000	3.0000	8.0000	4.0000							20.0000
Crossings				2.0000	6.0000	24.0000	11.0000							20.0000
Earth/Track Work				6.0000	18.0000	16.0000	6.0000							59.0000
Power/Comm/Signalization/Controls				4.0000	12.0000	20.0000	8.0000							38.0000
Retaining/Sound Walls/Fencing				5.0000	15.0000	2.0000	1.0000							48.0000
Signalization				1.0000	2.0000	1.0000								6.0000
Pedestrian Crossings						1.0000								1.0000
Hazmat					4.0000	16.0000	11.0000							31.0000
Parking Structures				3.0000	3.0000	4.0000	2.0000							12.0000
MCA's			8.0000	12.0000	10.0000									30.0000
Right-of-Way														
Maintenance and Operation														
(Construction Authority share of construction costs)														
Subtotal Construction and Procurement			13.0000	58.6000	130.0000	163.0000	94.2200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	32.2200
Procurement			5.0000	12.0000	15.0000	15.0000	13.0000	3.0000	2.0000	0.0000	0.0000	0.0000	0.0000	458.8200
Professional Services				2.0000	3.0000	4.0000	4.0000	3.0000	2.0000	2.0000	1.0000			65.0000
Project Reserve / Financing														21.0000
Project Contingency														44.0000
Subtotal Construction Authority costs			18.0000	72.6000	148.0000	182.0000	111.2200	28.0000	26.0000	2.0000	1.0000	0.0000	0.0000	588.8200
MTA Project Costs														14.0000
Traction Power Substations (TPSS)			1.6211	4.2000	8.4000	1.4000								64.5000
Vehicles				6.7619	25.5700	30.5470								
MTA Project Costs (includes O&M facility costs, fare vending and SCADA equipment, Rail Operations Center, BNSF, repayment to Metro, and Metro staff costs)			37.1289	10.2881	9.1200	11.1430								67.6800
Subtotal MTA Project Costs			38.7500	21.2500	43.0900	43.0900								146.1800
Total Project Cost	0	0.0000	56.7500	93.8500	191.0900	225.0900	111.2200	28.0000	26.0000	2.0000	1.0000	0.0000	0.0000	735.0000
Sources of Funds*														
Prop A 35%														
Prop C 25%														
Measure R 35%														
Local Agency funds - City of		10.0000	67.1900	75.4900	111.4100	138.8500	111.6000	59.7200	51.2800	31.4800	15.9092	16.9092	44.1616	735.0000
Local Agency funds - City of				(18.3600)	(79.6800)	(86.2400)	0.3800							
Prop 1B Bonds - PTMISEA														
RIP (STIP)														
CMAQ														
Section 5309 Earmark 0.0000	0	10.0000	67.1900	75.4900	111.4100	138.8500	111.6000	59.7200	51.2800	31.4800	15.9092	16.9092	44.1616	735.0000
Total Sources	0	10.0000	10.4400	(18.3600)	(79.6800)	(86.2400)	0.3800							0.0000
Surplus/(Deficit)														
Cumulative Surplus/(Deficit)		10.0000	20.4400	2.0800	(77.6000)	(163.8400)	(163.4600)	(131.7400)	(106.4600)	(76.9800)	(61.0708)	(44.1616)	0.0000	

* Anticipated funding source as of the date of the funding agreement. LACMTA reserves the right to substitute other non-federal funds as needed.

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In accordance with the proposed Unified Cost Management Process and Policy as presented to the MTA Board in June 2010, the Metro Gold Line Foothill Extension Construction Authority evaluated the Pasadena to Azusa segment of the Foothill Extension project prior to submitting a request to increase the budget from \$690 to \$735 million (\$45 million increase). It should be noted that although an increase in budget for the Pasadena to Azusa segment is necessary, the proposed budget of \$735 million is well under the overall \$810 million budget for the Foothill Extension project.

The June 2010 version of the proposed Unified Cost Management Process and Policy states the following:

"If increases in cost estimates occur at any of the milestones above, the MTA will 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:

- a. Value engineering and/or scope reductions;*
- b. Shorter segmentation;*
- c. New local agency funding resources;*
- d. Other cost reductions within the same transit 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 stated in the policy, the Metro Gold Line Foothill Extension Construction Authority evaluated the identified \$45 million shortfall using the six methods (a-f) identified above. Each evaluation method is discussed in detail below.

Value Engineering and/or Scope Reductions

An extensive and continuous value engineering and scope reduction effort has been performed on the Foothill Extension project throughout its development. However, specific value engineering and scope reduction measures were taken in 2010 on the

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Pasadena to Azusa segment to maintain the project's budget. These measures are identified in Attachment A of this document and are summarized as follows:

Value Engineering/Scope Reduction Item	ROM Savings
Eliminated Service Road	\$21 Million
Reduced Retaining Wall Heights	\$10 Million
Relocated Irwindale Parking	\$8 Million
Re-profiled Streets Crossing Tracks	\$5 Million
Modified Sierra Madre Villa Pocket Track	\$1.5 Million
Tire Derived Aggregate in lieu of Ballast Mat	\$1 Million
Miscellaneous Items	\$20 Million
Total	\$66.5 Million

Shorter Segmentation

The Foothill Extension project described in Measure R is a 24-mile extension of the Pasadena Gold Line from the existing Sierra Madre Villa station to Claremont. The Foothill Extension project has been segmented to Azusa, which is approximately 11.5 miles.

New Local Agency Funding Resources

Each of the five Pasadena to Azusa corridor cities have agreed to contribute \$1 million each to the project for a total of \$5 million local contribution. In addition, the City of Arcadia has agreed to project \$12 million in funding for a grade separation of Santa Anita Boulevard. The City of Arcadia has further agreed to fund an extension of the new Colorado Bridge and other Arcadia Station improvements in the amount of \$400,000.

The Metro Gold Line Foothill Extension Construction Authority has executed agreements with all major project stakeholders. Each of these agreements requires the project stakeholder to fund improvements beyond the baseline project scope.

Other Cost Reductions within the Same Transit Corridor

A total of \$810 million has been allocated to the 24-mile Foothill Extension Project. All funds not used on the Pasadena to Azusa segment will be used for the Azusa to Claremont segment. The proposed budget increase of \$45 million results in less funding available for the Azusa to Claremont segment.

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Other Cost Reductions within the Same Sub-Region

As stated in the previous evaluation method, all funds not used on the Pasadena to Azusa segment will be used for the Azusa to Claremont segment. The proposed budget increase of \$45 million results in less funding available for the Azusa to Claremont segment.

Countywide Transit Cost Reductions and/or Other funds will be Sought using Pre-Established Priorities

The proposed budget increase of \$45 million will result in less funding available for the Azusa to Claremont segment.

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ATTACHMENT A

Project Category	Value Engineering Item(s)	ROM Savings
Utilities	<ul style="list-style-type: none"> • Agreements have been executed that require utility to pay for certain relocations within existing right-of-way 	\$3,000,000
	<ul style="list-style-type: none"> • Utility relocation risk has been carefully allocated to avoid excessive risk money in bid 	\$2,000,000
Earthwork/Retaining Walls	<ul style="list-style-type: none"> • Profile has been lowered to minimize retaining wall heights 	\$8,000,000
	<ul style="list-style-type: none"> • Allowed use of ballast curbs in lieu of short retaining walls 	\$500,000
	<ul style="list-style-type: none"> • Cut slopes on public property in lieu of retaining walls from the I-605 to San Gabriel Bridge 	\$300,000
	<ul style="list-style-type: none"> • Performed additional survey to better define project to reduce risk money 	\$1,550,000
	<ul style="list-style-type: none"> • Obtained deviation to move retaining walls closer to property line to minimize retaining wall height 	\$2,000,000
Sound Walls	<ul style="list-style-type: none"> • The locations and heights of sound walls are specified in a mitigation measure in the Environmental Impact Report (EIR) and cannot be modified 	N/A
Vibration Mitigation	<ul style="list-style-type: none"> • The locations of vibration dampening measures are specified in a mitigation measure in the EIR and cannot be modified 	N/A
	<ul style="list-style-type: none"> • Specified tire derived aggregate in lieu of ballast mat 	\$1,080,000
	<ul style="list-style-type: none"> • Avoided floating slab by use of vibration easement 	\$500,000
Intersection Improvements	<ul style="list-style-type: none"> • Intersection that require improvements are specified in the EIR 	N/A
	<ul style="list-style-type: none"> • Streets crossing the track have been re-profiled at five grade crossings to reduce intersection construction 	\$5,000,000

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Project Category	Value Engineering Item(s)	ROM Savings
	<ul style="list-style-type: none"> Construction limits have been clearly identified on contract drawings to reduce risk money in bid 	\$925,000
Grade Crossing Warning System	<ul style="list-style-type: none"> Safety requirements dictate scope of work for this category, which reduces the opportunities for value engineering in this category 	N/A
	<ul style="list-style-type: none"> The grade crossing warning system is regulated by the California Public Utilities Commission (CPUC), which reduces the opportunities for value engineering in this category 	N/A
	<ul style="list-style-type: none"> The shared corridor portion of the project requires compliance with SCRRRA standards 	N/A
Bridges	<ul style="list-style-type: none"> Colorado Bridge realignment eliminated required property acquisition 	\$110,000
	<ul style="list-style-type: none"> Reduced length of Santa Anita Wash Bridge 	\$2,000,000
	<ul style="list-style-type: none"> Re-profiled Foothill Boulevard in lieu of jacking up existing bridge to address clearance issue 	\$150,000
	<ul style="list-style-type: none"> Eliminated blue light stations for all bridges other than four (approximately 17 bridges) 	\$510,000
Stations	<ul style="list-style-type: none"> The number and locations of the project's stations are specified in the EIR 	N/A
	<ul style="list-style-type: none"> All of the stations are at-grade 	N/A
	<ul style="list-style-type: none"> The project's stations are basic and standardized with only color palette, art, landscaping, and pavers differing from one station to the other 	N/A
	<ul style="list-style-type: none"> No station is close enough to another station to warrant elimination, and elimination of a station would result in a relatively small savings (\$3M) 	N/A
	<ul style="list-style-type: none"> The stations' canopy lengths are the minimum required by the Metro design criteria 	N/A
	<ul style="list-style-type: none"> Arcadia station changed from side to center platform 	\$1,000,000

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Project Category	Value Engineering Item(s)	ROM Savings
	<ul style="list-style-type: none"> Eliminated seismic detection devices from at-grade stations 	\$150,000
Trackwork	<ul style="list-style-type: none"> Reuse of existing freight rail for M&O Facility track 	\$750,000
	<ul style="list-style-type: none"> Received approval from SCRRRA to reuse existing 115LB freight rail in lieu of SCRRRA required (new) 136LB rail 	\$620,000
	<ul style="list-style-type: none"> Reuse of ballast for sub-ballast 	\$1,400,000
	<ul style="list-style-type: none"> Reduced pocket track turnouts 	\$1,200,000
	<ul style="list-style-type: none"> Simplified remaining pocket track turnouts 	\$400,000
	<ul style="list-style-type: none"> Eliminated two turnouts in M&O Facility 	\$800,000
Freight Reconstruction	<ul style="list-style-type: none"> Reduction in separation between freight and light rail in shared corridor would reduce cost but current separation is required to obtain Federal Railroad Administration suggested safety standards 	N/A
Landscaping	<ul style="list-style-type: none"> Unlike the Orange and Expo lines, the project has minimal landscaping 	N/A
Communications System	Due to stringent requirements in Metro design criteria and Metro's required standardized equipment, there are few opportunities for value engineering in this category; however, items implemented are as follows:	N/A
	<ul style="list-style-type: none"> Eliminated fire suppression system in unmanned communications bungalows 	\$600,000
	<ul style="list-style-type: none"> Eliminated manual pull stations in unmanned buildings/bungalows 	\$120,000
Train Control System	Due to stringent requirements in Metro design criteria and Metro's required performance specification language, there are few opportunities for value engineering in this category; however, items implemented are as follows:	N/A

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Project Category	Value Engineering Item(s)	ROM Savings
Traction Electrification System	Due to stringent requirements in Metro design criteria and Metro’s requirement to provide traction power substations, there are few opportunities for value engineering in this category; however, items implemented are as follows:	N/A
	• Eliminated manual pull stations in TPSSs	\$80,000
	• Avoided additional property acquisition by locating two substations adjacent to parking facilities	\$220,000
	• Eliminated Overhead Contact System (OCS) double messenger wire in two sections of the alignment	\$1,000,000
	• Eliminated all OCS poles on existing I-210 bridge (in Azusa)	\$100,000
Parking Facilities	• The project’s parking requirements are specified in the EIR	N/A
	• Each parking structure is a basic design with minimal architectural features	N/A
	• Irwindale parking was modified to reduce property acquisition, eliminate vehicular tunnel, and eliminate extensive backfill (approximately 130,000 cubic yards)	\$8,000,000
Insurance	• Insurance requirements are based on Metro’s Risk Management Department’s recommendations	N/A
Miscellaneous	• Eliminated reliability demonstration test (retained system performance demonstration test)	\$1,000,000
	• Eliminated key card system	\$400,000
	• Eliminated service road	\$21,120,000
	• Significant coordination with project stakeholders to fully develop project scope and reduce project risk	N/A

\$66,590,000

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