



Board Report

File #: 2023-0529, File Type: Budget

Agenda Number: 27.

CONSTRUCTION COMMITTEE SEPTEMBER 21, 2023

SUBJECT: CRENSHAW/LAX TRANSIT PROJECT

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AMEND the:

- A. Life-of-Project (LOP) Budget by \$299.9 million for the Crenshaw/LAX Transit Project (Project) from \$2,148 million to \$2,447.9 million, consistent with the provisions of the Board-adopted Measure R and Measure M Unified Cost Management Policy (Attachment A); and
- B. Fiscal Year 2024 budget by \$299.9 million from \$25.2 million to \$325.1 million for the Crenshaw/LAX Transit Project.

ISSUE

Metro is anticipating the issuance of final acceptance to Walsh/Shea Corridor Constructors (WSSC) in 2023. This action is to achieve the final close-out with the WSSC.

BACKGROUND

The Crenshaw/LAX Transit Project is a north/south light rail line that serves the cities of Los Angeles, Inglewood, Hawthorne, and El Segundo as well as portions of unincorporated Los Angeles County. The alignment extends 8.5 miles from the Metro E (Expo) line at Crenshaw and Exposition Boulevards to a connection with the Metro C (Green) Line south of the Aviation/LAX Station. The project provides major connections with Los Angeles International Airport (LAX) as well as links to the C Line (Green), the E Line (Expo), and the countywide bus network.

The alignment is comprised of a double-tracked rail line consisting of sections of at-grade in-street, at-grade within railroad right-of-way, aerial, and below-grade guideway sections, eight stations, park-and-ride facilities, utilities, landscaping, roadway improvements required by the project, and a maintenance & storage facility (Division 16 - Southwestern Yard).

On June 27, 2013, in conjunction of the award of the 57-month Design/Build contract to WSSC, the Board authorized a LOP budget of \$1,923,000,000 for the base Project, plus an additional \$135,000,000 for implementation of contract options to construct the Leimert Park Station and the Hindry Station (now called Westchester/Veterans Station); thus, increasing the LOP budget to

\$2,058,000,000 for the project. WSCC's Substantial Completion date per the original contract was September 2018, with a revenue service date of October 2019.

WSCC's progress was delayed due to rework, performance, resource challenges, and other issues, many of which led to contractual disputes. On May 21, 2020, the Board authorized an increase to the LOP budget in the amount of \$90,000,000, increasing the LOP budget to \$2,148,000,000 which funded Metro staff and the professional service contracts, allowing Metro to continue the management and oversight of the Project through the extended construction duration. WSCC achieved Substantial Completion in June 2022, and the Project was opened for Revenue Service in October 2022.

DISCUSSION

Over the course of the Project, numerous disputes arose between Metro and WSCC. WSCC aggregated these disputes within a "Request for Equitable Adjustment (REA)", which they certified and submitted to Metro in December 2021, where they claimed \$809M of damages. This REA included asserted costs related to their position on delay, disruption, extended overhead, interest, subcontractor pass-through claims, and other unresolved direct cost changes and other issues. The parties undertook to resolve the REA in parallel processes. Certain direct cost changes and other issues and merited items were reviewed and negotiated by the parties at the Project level. The parties also retained the services of a mutually agreed upon independent and neutral evaluator (Evaluator) to mediate and assist in steps to resolve the larger disputes, including delay, disruption, extended overhead, interest, and subcontractor pass-through claims.

Both processes were successful in reaching mutually agreeable resolutions that are included within the LOP increase being requested. The Project staff was able to finalize the outstanding direct cost, change order and other issues that were not presented to the Evaluator for an amount of \$19.7 million. In addition, the senior executives of the Parties were able to resolve the larger issues presented to the Evaluator for the negotiated settlement amount of \$280.2 million. These two resolutions completely resolve all issues presented in WSCC's REA.

Metro staff is requesting the Board's approval of an increase to the LOP, which will cover both the settlement of the issues presented to the Evaluator, and the negotiated changes resolved by the Project staff. If approved, the settlement will fully resolve WSCC's REA claim and also facilitate Final Acceptance and closeout of the Project.

Lessons Learned

There are several lessons learned from the Project experience which are currently in practice, or are in the process of being advanced within Program Management, most notably the items below:

- Metro is at risk for resulting delays and disruption when there is a lengthy dispute between the parties, as there was with Fire Rated Cable (FRC). The delay and

disruption impact costs can dwarf the direct costs of the changed work itself. Metro will implement time-based escalation requirements to prevent lengthy disputes.

- The relationship between Metro and the City of Los Angeles (COLA) is critical for projects requiring COLA approvals and affecting COLA streets and utilities. Contractors contend there are impacts related to interfacing activities with COLA that result in changes, delays, and disruption to Metro projects. Where applicable and appropriate, Metro and COLA have advanced an update of the Master Cooperative Agreement to address some of the previous challenges.
- Metro's internal departments need to coordinate activities early and throughout construction to ensure that desired changes are addressed at the earliest stages of planning and design.

Final Project Budget & Budget Amendment

The final cost of the Project aligns with the Federal Transit Administration's (FTA) average cost increase standard (Attachment B). Based on the FTA 2020 Predicted Versus Actual (PvA) % Impacts of Capital Investment Grants Projects study of 17 light rail transit projects that opened to revenue service between 2007 and 2015 the average project cost increase was 17.2%. Metro's light rail transit projects track an average of 8.35% cost increase which is lower than the FTA's average. The requested LOP amendment of \$299.9 M (14%) results in a total Project cost increase of \$389.9 M (18.9%), relative to the Board authorized LOP at the time of contract award to WSCC.

Additionally, this budget amendment will fully settle all outstanding disputes with WSCC and enable achievement of the final close-out with WSCC.

Determination_Of_Safety_Impact

DETERMINATION OF SAFETY IMPACT

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

FINANCIAL IMPACT

Upon Board approval of Recommendation B, \$299.9 million will be added to fiscal year 2024 Crenshaw/LAX project budget to cover the settlement and negotiated changes. The Project Manager and Chief Program Management Officer are responsible for ensuring all punch list items are delivered and the terms of the contract are fulfilled. Future budgeting and proper closeout of the Crenshaw/LAX project is the responsibility of the Project Manager.

Impact to Budget

The sources of funds for the Recommendations may be a combination of Proposition A

35%, Proposition C 25% , Proposition C 40%, and funds from the South Bay and Central City subregions as directed by Board approved Motion # 38.1 by Directors Garcetti, Butts, Garcia and Hahn (Attachment C). Proposition A 35% is eligible for the rail operating and capital improvements. Other eligible local funds available at the time of expenditure may also be utilized to fund the claim. These funds may include operating eligible funding sources.

Other local funds were considered to address the claim but were determined to be unavailable. The analysis of these funds is included in the attached Uniform Cost Management Policy. Previously, in May 2020, Metro staff conditionally recommended use of the Measure M Subregional Equity Program for funding of a \$90 million LOP increase for the Project. The recommended use of approximately \$22 million each was subject to approval by both the Central City Area and South Bay Cities subregions and this approval is still in progress.

EQUITY PLATFORM

The Crenshaw/LAX Project serves the cities of Los Angeles, Inglewood, Hawthorne, and El Segundo as well as portions of unincorporated Los Angeles County. All eight stations (100%) are within or adjacent to Equity-Focused Communities. Project equity benefits and impacts include:

1. Providing better transit connectivity and increasing light rail transportation service from the Metro Expo Line to the Metro Green Line south of the Aviation/LAX Station.
2. Increasing service frequency, reliability, and access for communities that use the Metro transit system along the Century/Aviation, Westchester/Veteran, Downtown Inglewood, Fairview Heights, Hyde Park, Leimert Park, Martin Luther King, and Exposition Stations for housing, jobs, educational, medical and entertainment needs.

Staff will continue to propose mitigations that address any potential adverse equity impacts related to the availability of funds for future projects and operations-eligible local funds.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Project is consistent with the following Metro Vision 2028 Goals and Objectives:

Goal 1: Providing high-quality mobility options and improve transit efficiency.

In September 2023, the Project was selected for the American Society of Civil Engineers Los Angeles Section Construction Project of the Year Award in recognition of the project's unique technical achievements, complexity, scope, and engineering features.

ALTERNATIVES CONSIDERED

The Board may choose not to move forward with amending the LOP Budget. This is not recommended as Metro will be unable to close out the Project and will be limited in its ability to minimize additional cost exposure and/or avoid potential litigation with this Contractor.

NEXT STEPS

Upon approval by the Board, the LOP Budget will be amended accordingly, and Metro staff will execute Contract Modifications with WSCC per the Recommendation and will continue the process of closing out the Project including issuing Final Acceptance.

ATTACHMENTS

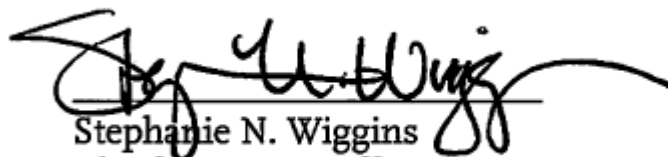
- Attachment A -Measure R and Measure M Unified Cost Management Policy Analysis
- Attachment B - FTA Predicted vs. Actual Impact Analysis
- Attachment C - Motion # 38.1 by Directors Garcetti, Butts, Garcia and Hahn

Prepared by:

- Stephanie Leslie, Executive Officer, Project Management, (213) 893-7131
- Mark Van Gessel, Executive Officer, Project Management, (213) 431-3354
- Brittany Zhuang, Director, Program Control, (213) 922-7354
- Craig Hoshijima, Executive Officer, Countywide Planning, (213) 418-3384
- Debra Avila, Deputy Chief Vendor/Contract Management Officer, (213) 418-3051

Reviewed by:

- Sameh Ghaly, Chief Program Management Officer (Interim), (213) 418-3369
- James de la Loza, Chief Planning Officer, (213) 922-2920



Stephanie N. Wiggins
Chief Executive Officer

Crenshaw/LAX Close Out Project

Measure R and Measure M Unified Cost Management Policy Analysis

Introduction

The Measure R and Measure M Unified Cost Management Policy (the Policy) was adopted by the Metro Board of Directors in July 2018. The precursor Measure R cost management policy was adopted in March 2011. The intent of the Policy is to inform the Metro Board of Directors regarding cost increases to Measure R- and Measure M-funded projects and the strategies available to close a funding gap. The Crenshaw/LAX Close Out Project (the Project) is subject to this policy analysis.

The life-of-project (LOP) budget for the Project was last approved by the Board in June 2020 at \$2,148,000,000. The Project is subject to the Policy analysis now due to a proposed \$299.9 million increase to the LOP budget. Funding for the cost increase is needed through FY 2024. This analysis recommends trade-offs required by the Policy to identify the funds necessary to meet the cost increase.

The LOP budget requires an increase of \$299.9 million to settle all outstanding issues with Design/Build contractor Walsh/Shea Corridor Constructors (WSCC) and provide the additional necessary funding to close out the remaining 2 follow-on construction contracts, staff overhead associated with the project, all utilities issues and real estate issues with the project budget closed out in 2025.

Measure R and Measure M Unified Cost Management Policy Summary

The adopted Policy stipulates the following:

If a project cost increase occurs, the Metro 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 subsequent actions on cost estimates taken by the Metro Board of Directors, including the determination of the budget. Shortfalls will first be addressed at the project level prior to evaluation for any additional resources using these methods in this order as appropriate:

- 1) Scope reductions;
- 2) New local agency funding resources;
- 3) Value Engineering;
- 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 or highway cost reductions or other funds will be sought using pre-established priorities.

Scope Reductions

The project has already been completed. Therefore, scope reductions are no longer an option. Because of this, we recommend moving to the next step.

New Local Agency Funding Resources

Local funding resources (i.e., specific to the affected corridor or subregion) are considered in the next step as opposed to countywide or regional sources so as not to impact the funding of other Metro Board-approved projects and programs or subregions in the County. The Project is eligible for Measure R funding, but the allocated amount has already been fully expended.

The Project is located in the South Bay and Central City Area subregions (as defined in the Policy, as amended), with station locations in the cities of Los Angeles and Inglewood. Local funding resources from both the subregions and cities could be considered for the cost increase.

Subregional Programs and Local Agency Contributions

Measure R, as amended, includes funding for a "South Bay Transit Investments" program and the South Bay subregion (represented by its Council of Governments) could allocate a portion of the funding for the Project. Metro staff will contact the subregion to determine if it would allocate any funding. However, due to the time constraints of the settlement and this Board item, this funding is not considered available for the Project cost increase.

Measure M includes funding for a transit-eligible multi-year subregional program (MSP) for the South Bay and Central City Area subregions. The MSP is eligible beginning FY 2018 and entitled the Subregional Equity Program (SEP). However, Motion #2021-0435 amends the Policy to "eliminate the Subregional Equity Program from consideration to address project funding shortfalls during construction" and is not considered available for the Project cost increase.

Local Agency Contributions

The cities with Project stations have agreed to contribute funding to the Project as part of the 3% local agency funding assumption included in the Measure R ordinance. Metro is front-funding the Los Angeles share of \$89.7 million with the city making payments to Metro through FY 2023. Inglewood has agreed to pay \$12 million, with \$6 million in-kind for future first-last-mile improvements, and \$6 million in payments made over 40 years (with no payments or interest accrued for ten years). The cities are generally not responsible for cost increases to the projects and this restriction is included in the local agency contribution agreements between Metro and the cities.

Measure M, as well as Measure R and Propositions A and C, provide "local return" funding to Los Angeles and Inglewood. The cities will receive an estimated \$3.9 billion of local return (Los Angeles \$3.8 billion, Inglewood \$100 million) over the ten-year period FY 2023 to FY 2032 that is eligible for transit use and could contribute a portion to the Project. However, prior Board actions relating to the Twenty-Eight by '28 Initiative and funding for the cost increase to Foothill Extension to Pomona, Crenshaw/LAX Transit, Westside Subway Section 1, and Eastside Access did not support use of local

return, and it is presumed these funds would not be available for the cost increase to the Project.

State and Federal Funding (Discretionary)

The State has previously granted the Crenshaw/LAX Transit project \$129.1 million through Prop 1B grants and the USDOT has provided funding through a \$13.9 million TIGER grant and \$545.9 million TIFIA loan. Additional State or federal discretionary funding (where Metro would compete for the funding) is not probable, given the Crenshaw/LAX Transit project and Crenshaw Close Out Project have experienced multiple cost increases and the project is in operation.

Value Engineering

The project has already been completed. Therefore, value engineering is no longer an option. As a result, we recommend moving to the next step.

Other Cost Reductions within the Same Transit or Highway Corridor, or within the Same Sub-region

The cities and subregions have existing funding programs that have funding amounts yet to be spent. The potential use of the MSP and SEP are discussed above in section "New Local Agency Funding Resources."

The cities also receive funding through the Call-For-Projects, the competitive grant program that is funded and managed by Metro for the benefit of LA County cities, transit operators, and State highway projects that was last held in 2015. At times the funding for certain projects in the Call-For-Projects is "de-obligated" if not spent within a reasonable timeframe and this can be a funding source for other uses. Currently, there is not a meaningful amount of de-obligated funds available, and all other projects are moving through their respective development process.

The Project is within the same corridor as the Airport Metro Connector, which is currently in construction with an LOP budget of \$898,581, approved by the Board in April 2021. This project is not yet completed and does not have cost reductions that could be used for the Project.

Countywide Other Funds

Given the nature of the Project cost increase, new funding sources are unlikely and regional or countywide funding will be necessary. These funds are programmed for other uses in Metro's financial forecast, during the timeframe when funds are needed for the Project cost increase. A reallocation of the funds to the cost increase would divert the funding from other Board-approved uses and or require additional debt financing. Eligible sources of countywide funding include Proposition C 25% (Transit-Related Streets and Highways), Proposition C 40% (Discretionary), and Proposition A 35% (Rail Development).

Through Fiscal Years 2024 and 2025, the Proposition C 25% funds are currently planned, from highest to lowest, for debt service on Metro bonds, Call For Projects,

Microtransit, Freeway Service Patrol, and the Crenshaw/LAX Locally Funded Activities Project. The Proposition C 40% is planned for Metro bus operations, ADA-paratransit operations, rail operations, the municipal and non-Metro operators, and debt service. The Proposition A 35% is planned for Heavy Rail Vehicles, rail operations, debt service on Metro bonds, vehicle midlife, and Light Rail Vehicles.

State and Federal Funding (Formula)

Metro receives quasi-formula funding from the State through the Regional Improvement Program (RIP) and Local Partnership Program (LPP). This is considered regional funding as it can be applied countywide to both transit and highway spending. There is currently no capacity in the RIP or LPP through FY 2027. The RIP has been allocated to projects submitted in Metro's 2022 RTIP and the next cycle of the LPP is planned to be used on the Division 20 project and NextGen.

The Crenshaw/LAX Transit project has previously received federal Surface Transportation Block Grant Program (STBG) and Congestion Mitigation & Air Quality Program (CMAQ) funding, and these may be eligible for use on the Project to address the cost increase. However, the funding is currently programmed for other uses in the Long Range Transportation Plan Financial Forecast including Crenshaw/LAX Transit and other Metro rail operating expenses, Metro heavy rail projects, and Call For Projects, and any allocation to the Project would reduce the availability for competing uses.

Recommendation

We recommend that the \$299.9 million cost increase for the Project is funded with available and eligible local funds at time of expenditure (Countywide Other Funds) including debt financing. The Policy analysis has looked at potential cost reductions and these are not feasible given the status of the Project and timing of the funding need. The Policy analysis has also considered local funding from the subregions, including Measure R South Bay Transit Investments, local return, and the defunding of projects in the Call For Project and or cost savings from other projects and has determined that this funding is not available. State and federal formula funding were also evaluated but these are not available as they are programmed for other uses in Metro's financial forecast.

Introductory Slide

- The FTA 2020 Predicted versus Actual (PvA) study considered 29 transit projects (24 New Starts, three Small Starts, and two Very Small Starts) that opened to revenue service between 2007 and 2015.
- The 29 project Modes are broken down as follows;

Fixed-guideway Mode	FTA 2020 PvA
Heavy Rail	1
Light Rail	17
Commuter Rail	5
Streetcar	1
Bus Rapid Transit	5
All	29

- PMO have compared Metro's previous and current LRT and HRT projects against the FTA 2020 PvA.

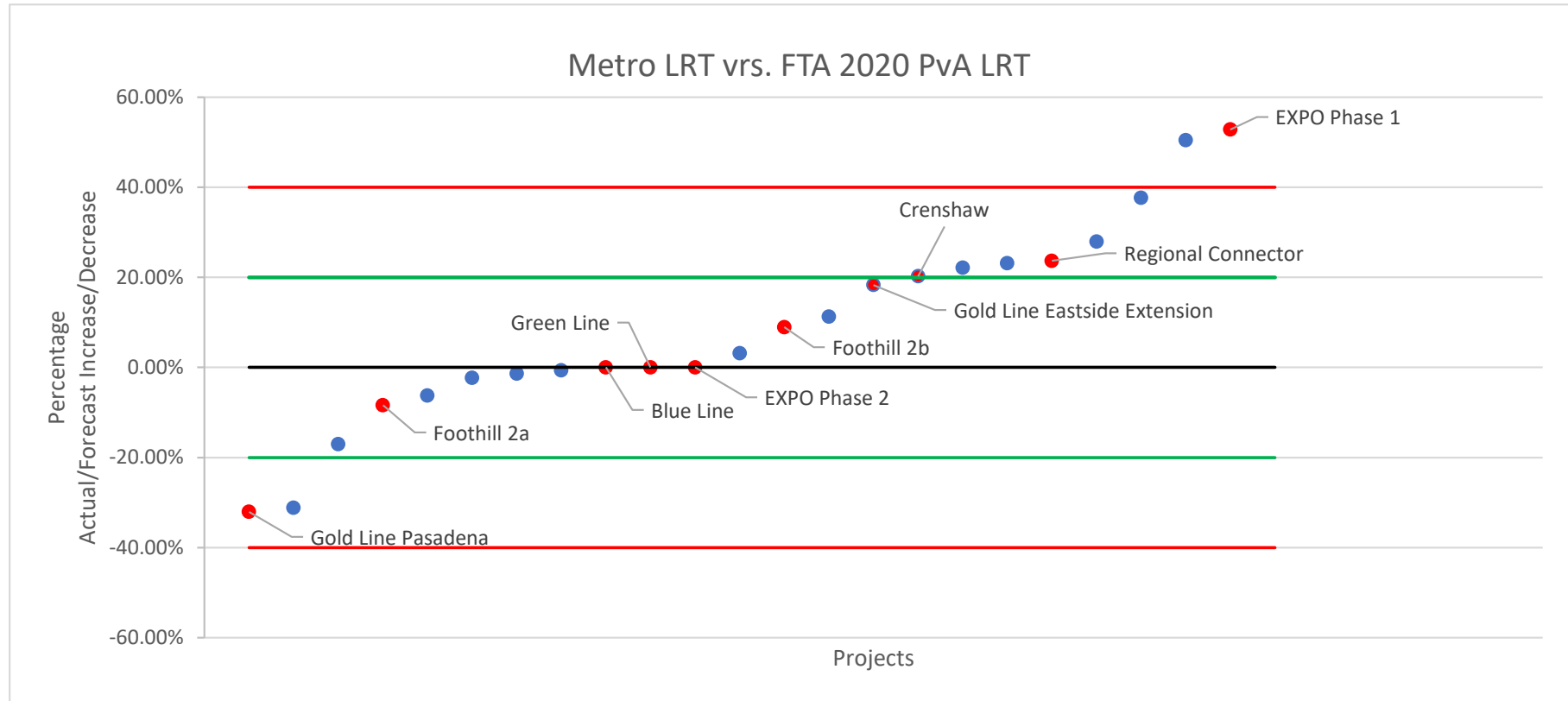


US Department of Transportation
Federal Transit Administration

PREDICTED VERSUS ACTUAL IMPACTS OF CAPITAL INVESTMENT GRANTS PROJECTS - 2020

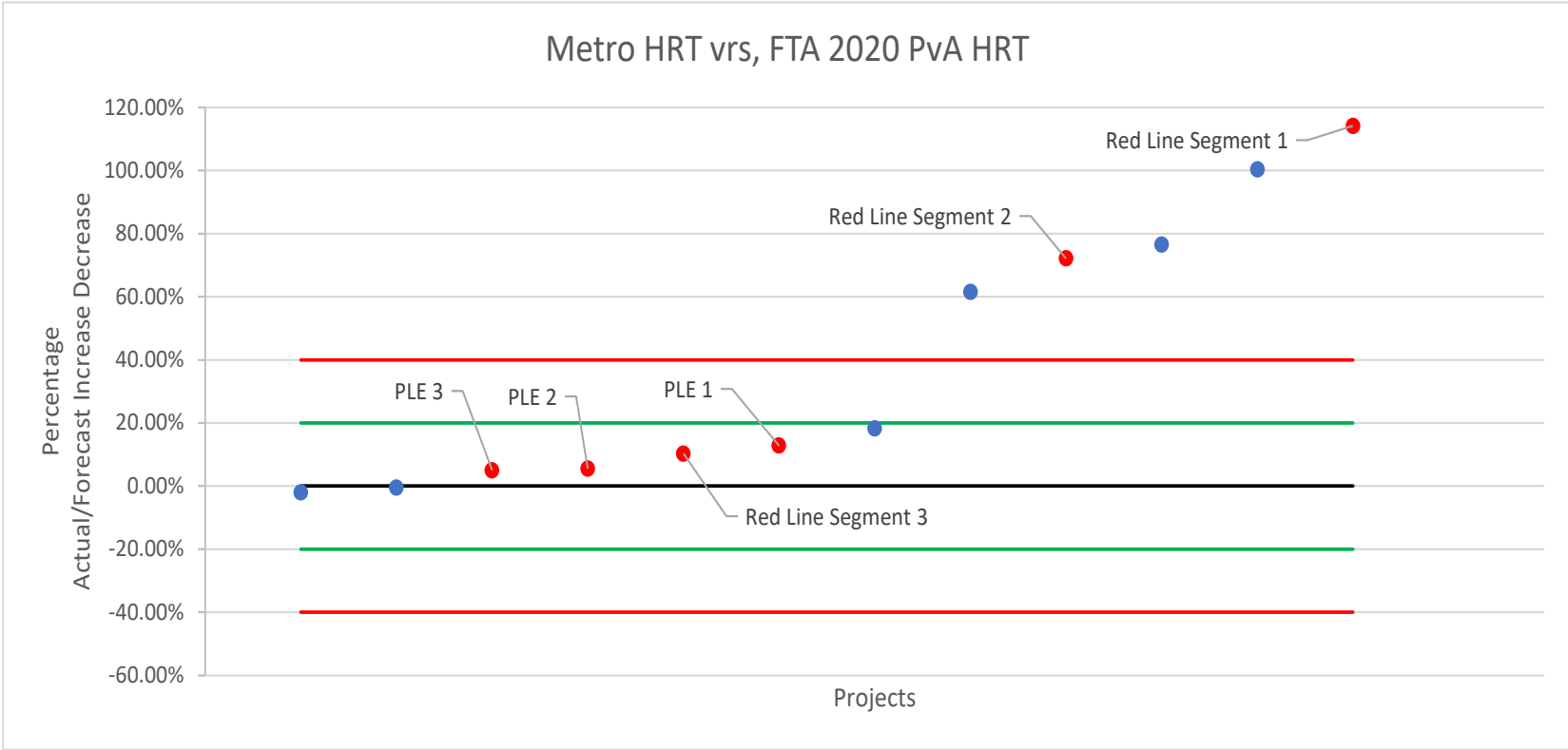
CAPITAL COST AND RIDERSHIP

Metro LRT vrs. FTA 2020 PvA LRT



Mode	Ave Project Cost Increase	
	FTA 2020 PvA	Metro
LRT	17.18%	8.35%

Metro HRT vrs. FTA 2020 PvA HRT



Mode	Ave Project Cost Increase	
	FTA 2020 PvA	Metro
HRT	42.36%	36.63%



Board Report

File #: 2020-0356, File Type: Motion / Motion Response

Agenda Number: 38.1.

CONSTRUCTION COMMITTEE
MAY 21, 2020

Motion by:

DIRECTORS GARCETTI, BUTTS, GARCIA AND HAHN

Related to Item 38: Crenshaw/LAX Transit Project

SUBJECT: CRENSHAW/LAX TRANSIT PROJECT

RECOMMENDATION

APPROVE Amending Motion by Directors Garcetti, Butts, Garcia and Hahn directing the CEO to:

- A. Allocate \$33.1 million of CMAQ, plus the revenue generated from LAWA acquisition of property and easements (at least \$1.7 million) to fund immediate LOP budget needs on the Crenshaw/LAX project.
- B. After taking CMAQ and LAWA-generated revenues off the top, approve the use of Subregional Equity Program (SEP) funding for the remainder of the \$90 million Crenshaw/LAX LOP budget increase, subject to formal approval from each subregion's governing body and according to the 2016 subregional borders designating the LAX area as a Regional Facility and conforming the South Bay subregion to the South Bay COG's boundaries:

Subregion	Miles	Percent
Central Los Angeles	3.40	41.4%
South Bay	3.32	40.4%
Regional Facility: LAX Area	1.50	18.2%
Total	8.22	100.0%

These SEP funds shall be escalated from 2015 dollars in accordance with Board file 2019-0598, which reaffirmed that each subregion's SEP allocation as listed in the Measure M Expenditure Plan (line item 68,note s.) is listed in 2015 dollars and escalated to year-of expenditure in accordance with the escalation policies in the Measure M expenditure plan;

- C. Defer any future recommendation or use of any unprogrammed SEP funding pending the development, in partnership with all Board offices, of a uniform process by which Subregions can elect to use SEP funding, including but not limited to:
1. Subregional governing body approval of any funding recommendation and use;
 - a. Hereby acknowledging that the South Bay COG has already committed the entire South Bay SEP for the Centinela Grade Separation Project.
 2. Written notice to the respective Subregional governing body and representative Board offices at least 120 days before Metro recommends the use of SEP funding to ensure adequate time for subregions to understand and approve any funding recommendations;
 3. Standard and explicit criteria for how and when a subregion's SEP allocation may be accelerated to meet their needs, consistent with Board file 2019-0598 (see above);
- D. Report back on all the above during the September 2020 Board cycle.

Metro Crenshaw | LAX Transit Project



Crenshaw/LAX (K Line) LOP Increase
Metro Board Meeting – September 2023

RECOMMENDATION

- Amend the Life-of-Project (LOP) Budget by \$299.9 million for the Crenshaw/LAX Transit Project (Project) from \$2,148 million to \$2,447.9 million, consistent with the provisions of the Board-adopted Measure R and Measure M Unified Cost Management Policy (Attachment A); and
- Amend the Fiscal Year 2024 budget by \$299.9 million from \$25.2 million to \$325.1 million for the Crenshaw/LAX Transit Project.

LOP HISTORY

- Award of Contract with an LOP Budget of \$2,058 million on June 27, 2013.
- LOP Increase in May 2020 of \$90 million to a new LOP total of \$2,148 million.

LESSONS LEARNED

- Metro is at risk for resulting delays and disruption when there is a lengthy dispute between the parties as there was with FRC.
- The delay and disruption impact costs can dwarf the direct costs of the changed work itself.
- Metro and COLA must re-engage to partner together to minimize delays and additional costs during the design and construction of Metro projects.
- Metro and COLA are establishing a new Master Cooperative Agreement.
- Metro's internal departments need to coordinate activities early and throughout construction to ensure that desired changes are addressed at the earliest stages of planning and design.
- Change orders must be issued in a timely manner in order to minimize delay, disruption, and resulting costs.

FTA 2020 PREDICTED vs. ACTUAL ANALYSIS

1. The FTA 2020 Predicted versus Actual (PvA) study considered 29 transit projects (24 New Starts, three Small Starts, and two Very Small Starts) that opened to revenue service between 2007 and 2015.
2. The 29 project Modes are broken down as follows:

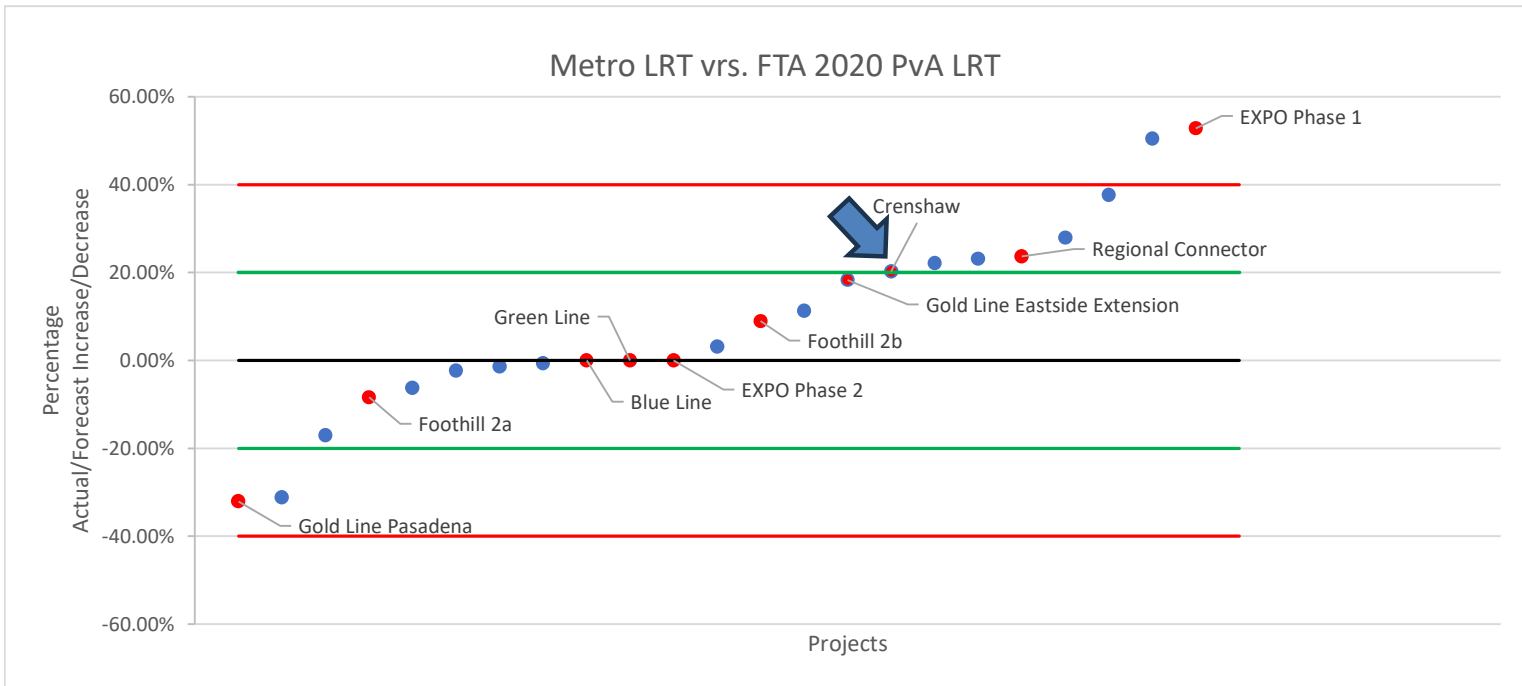
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**PREDICTED VERSUS ACTUAL IMPACTS
OF CAPITAL INVESTMENT GRANTS
PROJECTS - 2020**
CAPITAL COST AND RIDERSHIP

3. PMO have compared Metro's previous and current LRT and HRT projects against the FTA 2020 PvA.

METRO LRT vs. FTA 2020 PREDICTED vs. ACTUAL LRT



Mode	Ave Project Cost Increase	
	FTA 2020 PvA	Metro
LRT	17.18%	8.35%