ATTACHMENT D

MEASURE R COST MANAGEMENT PROCESS AND POLICY ANALYSIS

WESTSIDE PURPLE LINE EXTENSION SECTION 3 PROJECT

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. A comparable process and policy for Measure M projects is part of the Boardadopted Measure M Final Guidelines.

The Westside Purple Line Extension Section 3 Project warrants such an analysis due to a \$300 million cost increase. The Measure R funds assumed for the Westside Purple Line Extension Section 3 Project to date amount to \$667 million (out of a total Measure R commitment of \$4,074 million for all three sections). At this time, we estimate that \$132 million of Measure R 35% would remain at the completion of the three sections. We propose using \$132 million to address the cost increase as shown in the "Other Cost Reductions within the Same Transit Corridor" step.

The balance of funding needed for the cost increase would come from additional local agency contributions, and state Regional Improvement Program and federal Surface Transportation Block Grant Program (STBGP) and Congestion Mitigation Air Quality (CMAQ) grant funds. The grant funds are allocated to Metro by formula and are eligible for use on the project. The grant funds could be made available within the financial constraints of the Long Range Transportation Plan Financial Forecast using debt financing for other projects.

Measure R Cost Management Policy Summary

The adopted Policy stipulates the following:

If a project cost 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.

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 subregion; and finally,
- 6) Countywide transit or 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 Westside Purple Line Extension Section 3 Project does not fall within a Regional Facility Area.

Value Engineering and/or Scope Reductions

Major operational benefits have been achieved in combination with a reduction in the length of cut and cover sections, west of the Westwood/UCLA Station. The design now places the two crossovers required for a terminal station adjacent to the Westwood/VA Station platform, improving Metro's operational ability to reverse trains quickly. Previously, the eastern crossover was separated from the station and placed on the General Services Administration property, requiring a large open cut construction excavation and staging area and a longer combined station and crossover excavation. Crossover lengths have been further reduced through a design unique to Section 3 in which the special trackwork of the crossovers is partially located within the larger diameter tunnels, thereby reducing the amount of open cut excavation. The combined result is a reduction in the open cut construction length from 1,454 feet to 904 feet.

Cost and schedule benefits have been achieved through the standardization of construction methods of the Westwood/VA Station western crossover and adoption of Metro standard module components. The western crossover was planned to be constructed using the Sequential Excavation Method (SEM). This method requires specialized construction techniques and monitoring to ensure a safe excavation and allows for only a single level of use, at track level, compared to the stacked double levels of open cut construction, allowing ancillary equipment to be placed above the trackwork. Progress would be slow for SEM construction, due to a large cavern span and multiple headings, and carries some additional construction safety risks. The current design has been revised to include the use of open cut excavation, using Metro standard modules elements, with full restoration of landscaped areas at completion.

Through frequent coordination with Southern California Edison (SCE), the Project has provided significant cost, schedule and construction benefits by removing the need for large scale, temporary alternative power supplies for construction and avoided the need for a permanent major substation. Instead, SCE will upgrade their existing local substation as part of their regular upgrade service which will serve Metro for both temporary and permanent power. Metro will be required only to provide the conduits from the substation to the construction sites.

The special seismic section for the tunnel crossing of the Santa Monica Fault incudes steel tunnel lining segments to support the tunnel in the event of an earthquake along the fault in this area. Extensive geotechnical investigations have resulted in better definition of the fault zone and estimated fault offset. This has allowed a reduction in the length of the special seismic section by approximately 40 percent from previous estimates.

Further reductions in scope would likely substantially delay the Project or result in a project not consistent with the approved Environmental Impact Statement/Environmental Impact Report (EIS/EIR). As a result, we recommend moving to the next step.

New Local Agency Funding Resources

While the passage of Measure M brings new revenue to the agency, the Westside Purple Line Extension Section 3 Project plans to use all \$994.3 million of Measure M funds allocated to the project in the Expenditure Plan (excluding finance charges).

The local agency contribution for the project is 3% of the total cost, and 3% of the \$300 million cost increase, or \$9 million is assumed paid from this source. Measure M includes additional city local return and Multi-Year Subregional Program (MSP) funding for the Westside Subregion, and these sources could be used to fund the increase to the local agency contribution. MSP funds could be used in addition to the local agency contribution, but this is not currently assumed given the procedural and time requirements of programming these funds by Metro and the subregion.

Shorter Segmentation

While shorter segmentation is possible for the Westside Purple Line Extension, we recommend against this step for several reasons. The only Section which could be shortened is Section 3. This would require eliminating the Westwood/VA Station and moving the terminus to the Westwood/UCLA Station. Eliminating the Westwood/VA Station would require a supplemental EIS/EIR due to significant project changes. As a result, there would be significant impacts to the project schedule and possibly increased costs to the Project. We do not recommend shorter segmentation.

Other Cost Reductions within the Same Transit Corridor

The Westside Purple Line Extension will be constructed in three sections. Sections 1 and 2 are already under construction and there are no reductions that can be

moved from either section to Section 3. Value engineering studies may be undertaken by the future two Design/Builders, but the results of those studies will not be available in the timeframe necessary for this action.

Other Cost Reductions within the Same Subregion

This cost increase does not require any subregional cost reductions or other funds.

Countywide Transit Cost Reductions and/or Other Funds

This cost increase does not require any countywide cost reductions but requires other funds.

The current financial model update has identified up to \$132 million in Measure R 35% assigned to the Westside Purple Line Extension in the Measure R Expenditure Plan as potentially available. Allocating \$132 million from this source now to Section 3 to meet the cost overrun will result in no Measure R funding remaining for the project.

The balance of funding for the \$300 million cost increase, or \$167 million, is comprised of local agency contributions, state Regional Improvement Program and federal Surface Transportation Block Grant Program (STBGP) and Congestion Mitigation Air Quality (CMAQ) grant funds. Metro currently expects these formula grant funds to be available in the future, and would allocate a portion of the future apportionments to the project. These grant funds are allocated to other uses in the Long Range Transportation Plan Financial Forecast (as of June 2018), but can be made available for Section 3 using additional debt financing.