



**Metro**

Los Angeles County  
Metropolitan Transportation Authority

One Gateway Plaza  
Los Angeles, CA 90012-2952

213.922.2000 T  
metro.net

**PLANNING AND PROGRAMMING COMMITTEE  
SEPTEMBER 17, 2014**

**SUBJECT: WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT FROM  
WILSHIRE/LA CIENEGA TO CENTURY CITY CONSTELLATION**

**ACTION: APPROVE PURSUIT OF FEDERAL NEW STARTS FUNDS AND A  
TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION  
ACT LOAN FOR THE WESTSIDE PURPLE LINE EXTENSION  
SECTION 2 PROJECT**

**RECOMMENDATION**

- A. Authorize the Chief Executive Officer (CEO) to pursue a long-term Full Funding Grant Agreement (FFGA) through the Federal Transit Administration (FTA) for Federal New Starts funds in the amount of \$1.146 billion for the Westside Purple Line Extension Section 2 Project;
- B. Approve the submittal of a Letter of Interest to the United States Department of Transportation (USDOT) for a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan in the amount of \$307.0 million for the Westside Purple Line Extension Section 2 Project and pay related fees and expenses; and,
- C. Approve the finance plan for meeting the Measure R Fiscal Responsibility Policy and the Measure R Cost Management Process and Policy for an anticipated cost increase in the amount of \$374.3 million for the project.

**ISSUE**

The Westside Purple Line Extension Section 2 Project (WPLE2) is the next project in line to be constructed and is planned in the Long Range Transportation Plan (LRTP) in fiscal years 2016 through 2026. A Federal New Starts FFGA and loans repayable with Measure R 35% funds are consistent with this project's funding in the LRTP. The first step to obtaining an FFGA is submittal of a comprehensive financial plan. The first step to obtaining a contingent commitment of TIFIA credit assistance is submittal of a Letter of Interest (LOI) with the USDOT. The TIFIA loan will require additional actions of the Measure R Independent Taxpayers Oversight Committee and Board of Directors prior to final execution. Prompt approval of these agreements can accelerate the project revenue operations date by approximately one year, from 2026 to 2025.

## DISCUSSION

### New Starts Request

In 2014, Metro received a Federal New Starts FFGA of \$1.25 billion for the Westside Purple Line Extension Section 1 Project. To also secure a New Starts FFGA for WPLE2, the process begins with submittal of a comprehensive financial plan to the FTA. The WPLE2 will operate in some of the most densely populated and commercially significant areas of Los Angeles County and will provide critically needed subway linkages for the existing transit system. The WPLE2 is expected to dramatically increase overall system ridership and user benefits, and help bring to realization the full transportation and economic benefits of the significant local and federal investments we have made to date in our transit system. The WPLE2 is expected to score highly in the New Starts rankings and will be an excellent candidate for an FFGA.

### TIFIA Request

The TIFIA program provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. TIFIA credit assistance provides flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments.

The Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) establishes a process for applying for TIFIA credit assistance that begins with the submission of a Letter of Interest and determination of eligibility. Project sponsors must submit a Letter of Interest that: (i) describes the project and the location, purpose, and cost of the project, (ii) outlines the proposed financial plan, including the requested credit assistance and the proposed obligor, (iii) provides a status of environmental review, and (iv) provides information regarding satisfaction of the eligibility requirements of the TIFIA Program.

For this project, the amount of Federal TIFIA credit assistance may not exceed 33 percent of total reasonably anticipated eligible project costs. The exact terms for the loan are negotiated between the USDOT and the borrower, based on the project economics, the cost and revenue profile of the project, and any other relevant factors. When USDOT approves the loan application and the indicative terms are known, we will return to the Measure R Taxpayers Oversight Committee and the Metro Board of Directors for final approval to execute the loan.

### Measure R Policies: Fiscal (Attachment A) and Cost Management (Attachment B)

Attachment A discusses planned Measure R borrowing with regard to the Measure R Fiscal Responsibility Policy established by the Metro Board of Directors which states that Measure R debt service (excluding principal) may not exceed levels in the 2009 LRTP, as adjusted for the worldwide economic recession in April of 2010. We find here that the new finance plan remains in compliance with the Measure R Fiscal Responsibility Policy.

Attachment B details the Measure R Cost Management Process and Policy analysis to inform the Board regarding cost increases to Measure R-funded projects and the strategies available to close any funding gaps. The WPLE2 project warrants such an analysis due to the current year-of-expenditure cost estimate of \$2,218.2 million, which is \$374.3 million more than the project's \$1,843.9 million year-of-expenditure cost estimate in the LRTP. (The reasons for the updated cost estimate are described in detail below.) We find here that by increasing the percentage and timing assumptions of the New Starts funds from one third to one half of the project cost and from \$100 million per year beginning in Fiscal Year (FY) 2019 up to \$145 million per year beginning in FY 2017, we can cover the entire \$374.3 million cost increase without impacting any other projects or services.

## **FINANCIAL IMPACT**

### **Cost Increase**

Recent studies and analyses have shown that the major reason for the variance between budget estimates and bids was the significant size and complexity of Metro's transportation projects. These two factors (size and complexity) alone appear to have created a unique market in which only a relatively small number of design-build construction contractors can effectively participate. The limitation of the number of contractors is due to many factors, but appears to be the result of construction services supply and demand issues. These issues appear to stem from improving economic conditions throughout the country, which has resulted in more demand for construction services, and a shortage of qualified design-build contractors who have the resources to finance and build Metro's projects. The few qualified design-build contractors who are left after the impact of the Great Recession now may have the opportunity to cover all of their costs and include greater allowances in their price proposals while remaining competitive.

In May 2013, Metro's Program Management Office hired Leland Saylor Associates to study and analyze current construction market conditions in the Los Angeles area. In September 2013, Saylor completed its report. The results of this report were used by Metro to prepare the Engineer's Estimate for the Westside Purple Line Extension Section 1 Project, which price proposals were received in January 2014. The current cost estimate for the Westside Purple Line Extension Section 2 Project reflects the findings within the Leland Saylor Associates Report, plus lessons learned from the recent price proposals received from the Westside Purple Line Extension Section 1 Project, and the Regional Connector and Crenshaw/LAX Projects.

The estimate also reflects the recent upward swing in the real estate market and changes to the project's original assumptions for construction staging areas due to recent property development plans by property owners. The estimate also reflects the recent cost increases as seen in the advanced utility relocation contracts on the three projects currently in construction.

Unfortunately, Metro could not have predicted the impact of the unique market conditions that it was creating for itself when it was developing the original budget

estimates in 2010 and 2011 for the three sections of the Westside Purple Line Extension Project. Due to federal funding requirements under the New Starts and TIFIA programs, it should also be noted that Metro usually has to develop and “lock in” budget estimates for major rail transit projects well over a year before awarding construction contracts. This has prevented Metro from capturing rapidly evolving market conditions in the earlier cost estimates.

### TIFIA Letter of Interest

The TIFIA Letter of Interest is the first step towards securing a federal loan authorized by MAP-21. Since 2012, Metro has closed three TIFIA loans repayable with Measure R 35% funds: \$545.9 million for the Crenshaw/LAX Transit Corridor project, \$160.0 million for the Regional Connector project, and \$856.0 million for the Westside Purple Line Extension Section 1 Project. Loans under the TIFIA program remain attractive relative to tax-exempt municipal bonds due to current market conditions. TIFIA loans bear an interest rate which tracks long-term U.S. Treasury rates. For the TIFIA loan for Westside Purple Line Extension Section 1 Project which closed on May 21, 2014, the TIFIA rate was 3.23% for bonds maturing in 2037 while comparable tax-exempt rates for bonds with the same maturity were higher at 3.89%. Moreover, we expect this loan to have a subordinate position, consistent with our other TIFIA borrowings, for repayment of the loans relative to our planned senior borrowing, making the TIFIA loan rate even more attractive. TIFIA loans also provide more flexibility than Metro’s traditional tax-exempt bonds. TIFIA loans can be structured with a capitalized interest period during construction, an interest-only early payment period, and deferred principal repayment.

By submitting the Letter of Interest, Metro will be obligated to pay the actual costs of USDOT’s external financial and legal advisors related to determining a project’s eligibility, credit analysis and loan negotiations. Funding of the \$100,000 preliminary fee is included in the Fiscal Year 2015 budget in cost center #0521, Treasury Non-Departmental under project #660303, task 02, Measure R Debt Service.

### ALTERNATIVES CONSIDERED

In the adopted LRTP and subsequent financial updates, Westside Purple Line Extension Section 2 was the next project in line and was scheduled to open in FY 2026. The West Santa Ana Branch and Airport Metro Connector projects were scheduled to open in FY 2027 and FY 2028, respectively. Staff will include in the FFGA request the intention to deliver the Westside Purple Line Extension Section 2 Project in calendar year 2025. Pursuing the FFGA now represents an opportunity to secure commitment of up to \$1.146 billion of Federal New Starts funds.

Metro could delay preparation of the New Starts FFGA request and TIFIA LOI. This is not recommended as the New Starts FFGA process requires twelve months or more and the advantageous TIFIA loans are provided on a first come-first served basis. The Board could decide not to approve submitting the TIFIA LOI. This is not recommended because, in the current market environment, access to the TIFIA Loan gives Metro a

lower cost alternative to traditional tax-exempt municipal bonds. Should this market condition change, the Metro Board of Directors can change course later in the TIFIA loan approval process.

### **NEXT STEPS**

Staff will prepare and submit to USDOT a financial plan and New Starts FFGA request and a TIFIA Letter of Interest for the WPLE2. As the lengthy Federal process evolves, Metro's capital and operating financial plans must be updated to reflect increasing levels of specificity and degree of commitment.

On August 11, 2014, Metro issued a letter to the FTA requesting approval to enter into the Engineering Phase for Section 2 of the Westside Purple Line Extension Project. Staff will return to the Board requesting funding of Project work to be completed during the Engineering Phase and to fund key activities, such as advanced utility relocations and real estate acquisitions prior to the start of major construction. During the Engineering Phase, staff will continue to address possible project cost reductions through value engineering and/or scope reductions, while maintaining the operational requirements of the Purple Line Extension.

### **Attachments**

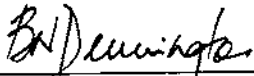
- A. Measure R Fiscal Responsibility Policy Analysis
- B. Measure R Cost Management Process and Policy Analysis

Prepared by: Gloria Anderson, Director, Countywide Planning & Development  
(213) 922-2457  
Rick Wilson, Director, Project Control  
(213) 922-3627  
David Yale, Managing Executive Officer, Planning, Programming, &  
Grants  
(213) 922-2469



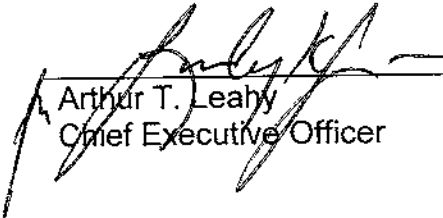
---

Martha Welborne, FAIA  
Chief Planning Officer



---

Bryan Pennington, Executive Director  
Engineering & Construction



---

Arthur T. Leahy  
Chief Executive Officer

**Measure R Fiscal Responsibility Policy Debt Service Cap Analysis**

Excerpt from Policy adopted in May 2011 and amended in April 2012:

**“Cap Measure R Debt Service (Excluding Principal) to LRTP Levels**

*Measure R debt service (excluding principal) to be repaid from the contingency funds may not exceed the levels forecasted to be necessary in the Long Range Transportation Plan, except to allow for 30/10, America Fast Forward, and similar financing which may involve issuing debt and/or taking out loans greater than contemplated in the 2009 LRTP. 30/10, America Fast Forward, and other similar financing must not adversely impact second and third decade Measure R projects. The Long Range Transportation Plan itself was adopted using an overly optimistic sales tax forecast prior to our understanding of the impact of the worldwide economic recession. For this reason, the Measure R debt service policy cap will be measured against the LRTP financial model published in April 2010.*

*This policy applies to net bond interest costs after adding Measure R interest earnings and exempting interest costs for the 2010 Build America Bond(BABs)/tax exempt bond package.”*

Table 1 shows the debt service cap resulting from TIFIA borrowing for WPLE2.

<b>Table 1: Summary of Measure R 35% Transit Debt Service Cap WPLE2 (Excluding Principal)</b>					
<b>Bond Interest</b>	<b>Amended Policy Cap (April 2012)</b>	<b>Forecasted Interest SRTP</b>	<b>SRTP Above/(Below) Policy Cap</b>	<b>Forecasted Interest (Sep 2014)</b>	<b>Sep Above/(Below) Policy Cap</b>
Interest Expense	\$ 1,355.8	\$ 878.7	\$ (477.1)	\$ 865.1	\$ (490.7)

**Notes:**

The policy applies to Measure R debt service, excluding principal (i.e. interest costs). Interest earnings are credited and 2010 Build America Bond debt service, excluding principal, is exempted. Debt service excluding principal may not exceed levels in 2009 LRTP, as adjusted for the worldwide economic recession in April of 2010.

## WESTSIDE PURPLE LINE EXTENSION SECTION 2 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 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 Westside Purple Line Extension (Westside Subway Extension) Section 2 Project warrants such an analysis due to an estimated \$374.3 million cost increase. The Measure R funds previously targeted to all three Westside Subway sections amounted to \$3,574 million (out of a total Measure R commitment of \$4,074 million). The remaining \$500 million is available but not until FY 2039, far beyond the cash flow needs of the project. We are recommending additional New Starts funds be requested to solve the cost increase issue.

#### Measure R Cost Management Policy Summary

The adopted final Measure R Unified Cost Management Process and Policy stipulates the following:

"If increases in cost estimates occur, 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 in cost estimates will be measured against the 2009 Long Range Transportation Plan as adjusted by subsequent actions on cost estimates taken by the LACMTA Board of Directors. 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 cost reductions and/or other funds will be sought using pre-established priorities. "

We followed the six steps prescribed by the policy to address the funding gap and developed the following plan of action:



## **Value Engineering and/or Scope Reductions**

During the development of the Section 2 Project, staff conducted value engineering efforts to control costs. The value engineering items believed to have the potential of yielding the largest cost savings are incorporated into the project estimates already. These items included the reduction of underground station footprint sizes and station depths. Station room layouts and other architectural elements were standardized to reduce design, construction, operations and maintenance costs. The Project Team also analyzed constructability issues and various construction sequencing scenarios to reduce risks and the overall durations for tunneling and cut-and-cover underground construction.

More recently, operational infrastructure was evaluated to determine impacts if not constructed or purchased. An operational analysis was performed to verify that the train cross-over east of Wilshire/Rodeo station could be eliminated while still maintaining operational requirements for the Purple Line Segment 2 Extension. This elimination will result in significant shortening of the underground station length, thus reducing construction costs and impacts to traffic and disruption to the streets and businesses. Additionally, the Century City/Constellation Station is proposed to be reduced in length by eliminating the tail tracks at the temporary terminus, with Project benefits similar to the elimination of the cross-over by eliminating the tail-tracks at the temporary terminus. Finally, the Rail Fleet Management Plan was reviewed to determine if the number of heavy rail vehicles to be acquired could be reduced in quantity. The resulting operational impacts are as follows:

- Not constructing the Rodeo crossover, east of Wilshire/Rodeo Station, will increase passenger wait times between trains when one track is out of service between the Wilshire/La Cienega and Century City/Constellation stations.
- Not constructing tunnel/systems/track for the tail-track west of the Century City/Constellation Station will not provide for storage of trains for routine operations, special events or vehicle maintenance issues. However, the Station will still provide the minimum operational requirements for a temporary terminus station to be located at the Century City/Constellation Station.
- Reducing the heavy rail vehicles to be acquired for Segment 2 from 20 to 10 will require either: 1) increases in the passenger wait times or 2) operation of shorter trains.

The impact of the cross-over and tail-track elimination as well as the vehicle reduction has been determined to be reasonably acceptable for the operation of Segment 2.

## **New Local Agency Funding Resources**

We propose to cover Section 2's \$374.3 million cost increase by increasing the percentage and timing assumptions of the New Starts funds from one third to one half of the project cost and from \$100 million per year beginning in FY 2019 up to \$145 million

per year beginning in FY 2017. If we can secure a New Starts FFGA on these terms, we can cover the entire \$374.3 million cost increase without impacting any other projects or services.

### **Shorter Segmentation**

While shorter segmentation is possible for the Westside Subway Extension, we recommend against this step for several reasons. Section 1 was extended to Wilshire/La Cienega due to engineering constraints at the initial Section 1 terminus at Wilshire/Fairfax. Section 1 is currently under construction. Section 2 serves the City of Los Angeles and the City of Beverly Hills with one station in each city. Shortening Section 2 would serve no purpose. The only Section which could be shortened is Section 3. This would require eliminating the Veteran Affairs Station and moving the terminus to Westwood. In addition to higher real estate prices in Westwood, eliminating the Veteran Affairs station would require LACMTA to prepare a supplemental Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) due to significant project changes. As a result, there may be significant project delays and increased costs to the project. We do not recommend shorter segmentation.

### **Other Cost Reductions within the Same Transit Corridor**

The proposed financial plan for the Westside Subway Extension Section 2 Project does not require any cost reductions elsewhere in the corridor.

### **Other Cost Reductions within the Same Subregion**

The proposed financial plan for the Westside Subway Extension Section 2 Project does not require any cost reductions elsewhere in the subregion.

### **Countywide Transit Cost Reductions**

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