



## Board Report

File #: 2015-1328, File Type: Program

Agenda Number: 25.

### ~~PLANNING AND PROGRAMMING COMMITTEE~~

~~OCTOBER 14, 2015~~

### CONSTRUCTION COMMITTEE

OCTOBER 15, 2015

**SUBJECT: I-5 SOUTH CORRIDOR IMPROVEMENTS**

**ACTION: APPROVE PROGRAMMING RECOMMENDATIONS**

#### RECOMMENDATION

CONSTRUCTION COMMITTEE RECOMMENDED (3-0) authorizing the Chief Executive Officer to:

- A. APPROVE programming \$50.111 million in supplemental funding for the **I-5 Carmenita Road Interchange project**, consistent with the attached Unified Cost Management Process and Policy for Measure R Projects analysis in Attachment A, and an increase in project funding from \$369.770 million to \$419.881 million; and
- B. ENTER into a Local Advance Construction (AC) agreement (Attachment B) with the California Department of Transportation (Caltrans) for the use of up to \$97 million in local funds to finance the construction of the I-5 South Segment 2 project until such time that federal funds already programmed to the project become available.

#### ISSUE

##### A. I-5 South/Carmenita Road Interchange Cost Increase

In a letter dated August 21, 2015, the California Department of Transportation (Caltrans) requested that the Los Angeles County Metropolitan Authority (LACMTA) program \$50.111 million in supplemental funding for the I-5 South/Carmenita Road Interchange project. The request for supplemental funding is attributed to the following:

The Carmenita Road Interchange project was originally programmed for \$379,730,000 per Funding Agreement Number MOU.P0006376A-02. However, due to the awarded bid being lower than the Engineering Estimate, construction capital funds were reduced by \$9,960,000 at the time of award to reflect the bid amount. The current budget for the project is \$ 369,770,000.

The project is in construction, and is 68 percent complete. The anticipated cost at completion for the project is \$ 419,881,000 based on a Caltrans cost estimate dated in September 2015. Please see Attachments C and D, the letters from Caltrans for the supplemental fund request and the project

cost estimate.

This is an increase of \$50,111,000 over the current budget. Please see Attachment A, the Unified Cost Management Process and Policy for Measure R Projects analysis, for more information about the funding strategy to be employed to meet this increased cost.

#### B. I-5 South Segment 2 Local Advanced Construction (AC)

Following the state funding allocation Caltrans proceeded to seek the required federal obligation of the \$97 million in CMAQ funds programmed to the project. However, due to the concurrent authorization of several other large federal projects in Los Angeles County there is insufficient federal obligation authority this year for Caltrans to immediately access the \$97 million in CMAQ funds. In the near term, Caltrans staff is recommending the use of Local Advance Construction (AC) to maintain the current project delivery schedule.

### **DISCUSSION**

#### A. I-5 South/Carmenita Road Interchange Cost Increase

The cost increases by components are as follows:

1. \$29,415,000 for right of way capital, and \$6,029,000 for right of way support.
2. \$667,000 for Project Approval and Environmental Document (PAED) and Plans, Specifications and Estimates (PS&E).
3. \$14,000,000 for construction support.

The increase in right of way capital is due to many parcels going through condemnation, resulting in full acquisitions for some parcels, which were originally budgeted for partial acquisition. Relocation of businesses was also extremely complicated and resulted in many months of delay in the relocation of utilities. Also, there were many complicated and difficult utility relocations on this project that required more time and coordination than anticipated.

The increases in right of way support and construction support were due to delays in acquiring properties and relocating businesses. These delays had a domino effect on the utility relocations and the construction of the project.

Also, additional geotechnical drilling had to be done during the construction phase because access to properties was not available during the design phase. The increases in the cost of the PAED and PS&E phases were due to underestimating the effort required to complete these phases, and inadequate contingencies to address delivery risks in these phases.

Caltrans recommends programming the project cost increase of \$35.444 million in Right of Way Capital and Right of Way Support with future Regional Improvement Program (RIP) County Shares, the project cost increase of \$14.667 million in Construction Support, PAED and PS&E with State

fund.

B. I-5 South Segment 2 Local Advanced Construction (AC)

Advanced Construction for federal highway projects is analogous to a Letter of No Prejudice (LONP) that Metro has employed for federal transit projects. Advanced Construction would commit the use of local funds in place of federal funds to finance the cost of work until such time that the programmed federal funds become available. In this specific situation it is highly unlikely that any local funds in addition to those already committed to the project would be needed prior to the availability of the federal funds. Nevertheless, the paperwork required by Caltrans stipulates that this is a possibility.

The construction and construction support of the I-5 South Segment 2 project is fully funded as follows:

- \* \$52 million in local Proposition C 25%;
- \* \$20 million in state Regional Transportation Improvement Program (RTIP);
- \* \$28 million in State Highway Operational and Protection Program (SHOPP); and,
- \* \$97 million in federal Congestion Mitigation and Air Quality (CMAQ) funds.

The AC arrangement is a temporary measure for the CMAQ funds. As of June 2015 all of the state STIP and SHOPP funds have been allocated by the California Transportation Commission to allow Caltrans, as the lead agency and construction manager for the project, to advertise and award the construction contract. Metro budgets the Proposition C 25% funds each year as necessary.

## **DETERMINATION OF SAFETY IMPACT**

There is no impact to safety by approving this action.

## **FINANCIAL IMPACT**

A. I-5 South/Carmenita Road Interchange Cost Increase

Of the \$50.111 million in supplemental funding recommended for programming, \$35.444 will be provided from the future Regional Improvement Program (RIP) County Shares and \$14.667 million will be from the State Highway Account (SHA).

B. I-5 South Segment 2 Local Advanced Construction (AC)

Fully obligating and expending available federal highway funds makes the Los Angeles County Metropolitan Transportation Authority eligible for a share of additional obligation authority awarded to regions that support Caltrans in accessing obligation authority unused by other states each year. Additionally, LA Metro receives new obligation authority every year that over the construction period of the I-5 South Segment 2 project is sufficient to meet the \$97 million CMAQ commitment and all other federal projects programmed in LA Metro's Transportation Improvement Program (TIP). Absent the use of Local AC, the construction of the I-5 South Segment 2 project could be delayed for up to 6 months, triggering escalation and support cost increases not now budgeted for the project.

### Impact to Budget

#### A. I-5 South/Carmenita Road Interchange Cost Increase

The funding of \$15,000,000 Measure "R" Highway Capital (20%) Fund for FY16 for the I-5 South/Carmenita Road Interchange project is included in Account 54001 - Subsidies to Others, in cost center 0442, under project number 460341, Task 01. The recommendation will not impact the project budget for the current fiscal year. Since this is a multi-year contract/project, the Managing Executive Officer will be accountable for budgeting the cost in future years for LACMTA's share within the updated project budget. The source of funds for this project is Measure R 20% Highway, which is not eligible for bus or rail operations.

#### B. I-5 South Segment 2 Local Advanced Construction (AC)

The funding of \$52,900,000 of Measure R 20% Highway for FY15 for the I-5 South HOV Widening project is included in Account 54001 - Subsidies to Others, in cost center 0442, under project number 460336, Task 01. The recommendation will not increase the project budget for the current fiscal year. Since this is a multi-year contract/project, the Managing Executive Officer will be accountable for budgeting the cost in future years for LACMTA's share within the updated project budget. The source of funds for this project is Measure R 20% Highway, which is not eligible for bus or rail operations.

### ALTERNATIVES CONSIDERED

#### A. I-5 South/Carmenita Road Interchange Cost Increase

The Board may choose not to approve the supplemental funds. This alternative is not recommended as the completion of the project will be further delayed and the total cost of buttoning-up the project into a safe condition for a period of suspended construction will increase the cost to Metro even further.

The Board may also elect to fund the supplemental funds request with Measure "R" Highway Capital (20%) Fund instead. This alternative is not recommended as it will prevent us from maximizing our ability to deliver other projects that might have relatively low cost and high benefits.

#### B. I-5 South Segment 2 Local Advanced Construction (AC)

If the MTA Board does not authorize this recommendation, the construction of the I-5 South Segment 2 project could be delayed for up to 6 months, triggering escalation and support cost increases not now budgeted for the project.

### NEXT STEPS

#### A. I-5 South/Carmenita Road Interchange Cost Increase

Upon Board approval of the recommendation for supplemental project funding, an amendment to the funding agreement with Caltrans will then be executed.

B. I-5 South Segment 2 Local Advanced Construction (AC)

Upon Board approval of the recommendation, the agreement will be amended with Caltrans.

**ATTACHMENTS**

Attachment A - Analysis of Unified Cost Management Process and Policy for Measure R Projects

Attachment B - Local AC Form 3-I

Attachment C -Letter from Caltrans August 21, 2015, "Informing Project Cost Increase and Recommended Course of Action for I-5 South/Carmenita Road Interchange project"

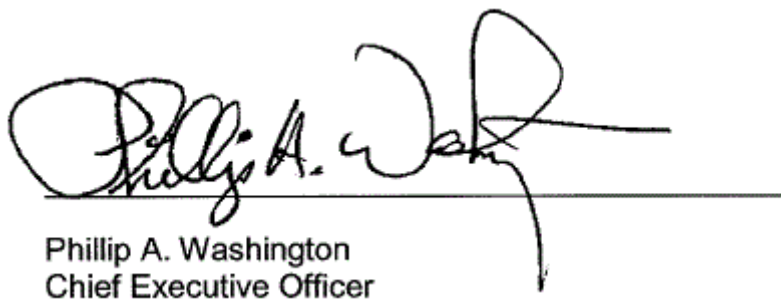
Attachment D -Letter from Caltrans September 15, 2015, "I5 South/Carmenita Road Interchange Project"

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Reviewed by:

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Phillip A. Washington  
Chief Executive Officer

## ANALYSIS OF UNIFIED COST MANAGEMENT PROCESS AND POLICY FOR MEASURE R PROJECTS

### 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 Expenditure Plan approved by voters. 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 I-5 Carmenita Road Interchange Life-of-Project budget requires an increase in cost of \$50.11 million, from \$369.77 million to \$419.88 million. This Measure R project is subject to this policy analysis. To increase the I-5 South Carmenita Road Interchange Life-of-Project budget, the Board's Policy calls for approval of an action plan to address the increase at the project level, i.e. with value engineering, scope reductions, local contributions, corridor and/or sub-regional contributions, prior to using countywide resources, as described below.

### Measure R Cost Management Policy Summary

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

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

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

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

While the I-5 Carmenita Road Interchange Project does not fall within a Regional Facility Area, the same motion requires that Measure R highway projects be considered on a case-by-case basis. This is the case analysis required by the policy and motion.

Value Engineering and/or Scope Reductions

There were a significant number of parcels that were identified as partial acquisitions that settled as full-takes due to exacerbating part-take impacts to businesses. In addition, thirty five out of thirty nine commercial parcels have to go through condemnation. Consequently, the high number of court settlements exceeded the programmed estimates.

New Local Agency Funding Resources

Per a letter dated August 21, 015, Caltrans recommended using a combination of Regional Improvement Program (RIP) Future County Share, and State Highway Account (SHA) funds to close the funding gap. Metro staff is in concurrence with this approach as it maximizes the amount of available local funds to maintain the delivery schedules for other Measure R Projects while also utilizing funds available only to Caltrans. The funding share attributable to Caltrans is the IPP and SHA funds shown below:

<b>Fund Source</b>	<b>State/Local</b>	<b>Phase</b>	<b>Amount</b>
SHA	State	PAED & PS&E	\$00.667 million
SHA	State	Construction Support	\$14.000 million
<b>Total State Contribution</b>			<b>\$14.667 million</b>

Of the \$50.111 million need to complete the project, the staff recommendation indicates that approximately \$35.444 million is needed from Metro's County Share of the STIP, (Regional Improvement Program funds) as further discussed in the Countywide Cost Reductions and/or Other Funds section below.

Shorter Segmentation

Since this project links to other projects to the immediate north and south, has completed the design phase, and is under construction, shorter segmentation is not possible.

Other Cost Reductions within the Same Highway Corridor

The I-5 South Carpool and Mixed Flow Lanes I-605 to Orange County Line is the only other project within this corridor. All segments of this project are either under

construction or are about to enter procurement. There is no feasible way to reduce project costs on the I-5 South Carpool and Mixed Flow Lanes I-605 to Orange County Line Project without jeopardizing the completion of the project, a critical link between Orange County and Los Angeles County.

#### Other Cost Reductions within the Same Sub-region

The 2015 Short Range Transportation Plan identifies the following Measure R-funded projects within the Gateway Cities sub-region in Fiscal Years 2016 and 2017: BNSF Grade Separations (\$31.5 million), I-605 Hot Spots (\$29.6 million), I-710 South (\$20 million), I-710 South Early Action Projects in Long Beach (\$35.3 million)<sup>1</sup>.

Of these projects, the BNSF Grade Separations Project is fully funded through construction. Diverting funding from this project to the I-5 Carmenita Road Interchange Project would delay a critical goods movement and safety project. For this reason, staff does not recommending delay of this project.

The remaining projects, I-605 Hot Spots, I-710 South, I-710 South Early Action Projects in Long Beach are in the planning or design phases. The Board could elect to defer all or portions of these projects to full fund the I-5 Carmenita Road Interchange Project. Staff however recommends not deferring these projects. The I-605 Hot Spots and I-710 South Early Action Projects identify and fund discreet and actionable projects as funding becomes available. Reprogramming Measure R 20% from these projects to the I-5 Carmenita Road Interchange Project would unnecessarily delay advancement of critical improvements to two major north-south freeways in Los Angeles County.

The I-710 South Project is currently in the environmental review process. It is imperative that all funding be available once this project has secured environmental clearance to advance to the design and right-of-way phases. Deferral of this project would further delay a critical project to improve regional mobility and goods movement.

Staff recommends moving to the final step, consistent with the approach recommended by Caltrans.

#### Countywide Cost Reductions and/or Other Funds

As the local agency partner, Metro can program \$35.444 million in Measure R 20% Highway Capital Subfunds. Staff does not recommend using Measure R 20% as this approach will limit our ability to deliver other highway projects in the near term.

Instead, Metro staff recommends using future County Share of Regional Improvement Program (RIP) to cover the cost increases in the Right-of-Way phase. In this situation, committing future RIP shares indicates that Metro will debit its RIP County Share when available. While the 2016 State Transportation Improvement Program (STIP) did not include any new funding, Caltrans and Metro staff are confident that future STIP cycles

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<sup>1</sup> Dollar amounts indicated here is the Measure R 20% portion of these projects.



will have sufficient programming capacity to deliver this project. Using future RIP County Share now allows Metro to preserve Measure R 20% to maintain the delivery schedule of other Measure R Highway Projects.

<b>Fund Source</b>	<b>State/Local</b>	<b>Phase</b>	<b>Amount</b>
Regional Improvement Program	Local	Right-of-Way	\$29.415 million
Regional Improvement Program	Local	Right-of-Way Support	\$06.029 million
<b>Total Metro Contribution</b>			<b>\$35.444 million</b>

**EXHIBIT 3-I REQUEST FOR LOCAL ADVANCE CONSTRUCTION AUTHORIZATION**

To: \_\_\_\_\_  
District Local Assistance Engineer

Date: \_\_\_\_\_  
FTIP/FSTIP ID: \_\_\_\_\_  
EA: \_\_\_\_\_  
Project Description: \_\_\_\_\_  
\_\_\_\_\_

Re: Request for Advance Construction Authorization for \_\_\_\_\_ for \_\_\_\_\_ at \_\_\_\_\_

Dear: \_\_\_\_\_

The \_\_\_\_\_ requests federal Advance Construction authorization for the \_\_\_\_\_ phase(s) of work for the above referenced project.

The \_\_\_\_\_ understands that currently there are insufficient federal transportation funds (and/or Obligational Authority (OA)) to obligate the appropriate funds for the proposed work.

The \_\_\_\_\_ agrees to use local funds in lieu of federal funds to finance the cost of work until such time that federal funds (and/or OA) become available for obligation and subsequent reimbursement of the federal share of work. It is understood that an FTIP amendment may be required when the Advance Construction Authorization is converted to a real obligation of federal funds. It also is understood that federal reimbursement is **not** guaranteed.

The \_\_\_\_\_ understands that work performed prior to federal authorization is ineligible for federal reimbursement and that advertising the construction contract prior to federal authorization will deem the construction and construction phases of work ineligible for federal funds

For questions regarding this request you may contact \_\_\_\_\_.

\_\_\_\_\_  
Local Agency Representative Authorized to Commit Local Funds

\_\_\_\_\_  
Title

**Distribution:** 1) DLAE 2) DLA 3) MPO

**DEPARTMENT OF TRANSPORTATION**

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August 21, 2015

Mr. Phil Washington  
Chief Executive Officer  
Metro  
1 Gateway Plaza  
Los Angeles, CA 90012

Dear Mr. Washington:

The California Department of Transportation (Caltrans) appreciates the opportunity to partner with Los Angeles County Metropolitan Transportation Authority (Metro) on the Interstate 5/ Carmenita Interchange project. We want to bring to your attention project cost increases and recommended course of action.

The Interstate 5/Carmenita Interchange project was originally programmed for \$379,700,000 per Funding Agreement Number MOU.P0006376A-02. However, due to the awarded bid being lower than the Engineering Estimate, the State construction capital funds were reduced at the time of award to reflect the bid amount. The current budget for the project is \$ 367,825,000 after the reduction.

The project is in construction, and is 68 percent complete. The anticipated cost at completion for the project is \$ 417,936,000. This is an increase of \$50,111,000 over the current budget. The cost increase by component are as follows: \$29,415,000 for right of way capital, \$6,029,000 for right of way support, \$14,000,000 for construction support, and Project Approval and Environmental Document (PAED) and Plans, Specifications and Estimates (PS&E) for \$667,000.

The increase in right of way capital is due to many parcels going to condemnation, and some parcels becoming full acquisitions, which were originally partial acquisition. The business relocations were also extremely complicated and resulted in many months of delay that impacted utility relocation. Also, there were many complicated and difficult utility relocations on this project that required much more coordination than anticipated.

The increases in right of way support and construction support were due to delays in acquiring properties and relocating businesses. These delays had a domino effect that delayed the utility relocations and the construction of the project. Also, additional geotechnical drilling had to be done during construction because access to properties were not available during design.

Mr. Phil Washington  
August 21, 2015  
Page 2

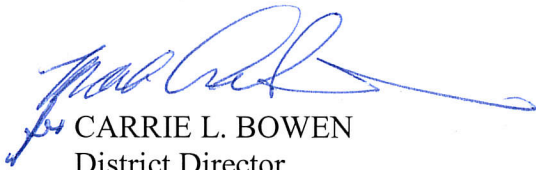
The increases in PAED and PS&E were due to underestimating the effort required to complete these phases, and inadequate contingencies to address delivery risks in these phases.

Caltrans recommends the following to address the project cost increases:

1. Fund Right of Way Capital increase of \$29,415,000 with future Regional Improvement Program (RIP) County Shares.
2. Fund Construction Support increase of \$14,000,000 with State Transportation Improvement Program (STIP).
3. Fund Right of Way Support increase of \$6,029,000 with future RIP County Shares.
4. Fund PAED and PS&E increase of \$667,000 with \$132,000 with IIP and \$535,000 with STIP.

If you have any questions regarding this matter, please contact Robert So, Deputy District Director, Program and Project Management, at (213) 897-0362.

Sincerely,



CARRIE L. BOWEN  
District Director

c: Gregg Magaziner, Metro, Executive Officer  
Robert So, Caltrans, Deputy District Director, Program/Project Management  
Mary Payyappilly, Caltrans, District Division Chief, Externally Funded Projects  
Nancy Pe, Caltrans, I-5 Corridor Project Manager

**DEPARTMENT OF TRANSPORTATION**

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September 15, 2015

Mr. Victor Gau  
Project Manager  
LAMTA  
1 Gateway Plaza  
Los Angeles, CA 90012

Subject: Interstate 5 / Carmenita Interchange Project

Dear Mr. Gau:

On August 21, 2015 Caltrans sent a letter to Metro regarding the status of the Carmenita Interchange budget. The letter stated that the current budget for the project is \$367,825,000 and the anticipated cost at completion for the project is \$417,936,000. These amounts were based on the SLPP fund of \$12,980,000 which was used to award the project.

However, since then, Caltrans HQ Programming has confirmed that the programmed amount of \$14,925,000 for SLPP will be available for the project, and only for construction capital. Therefore, we request to adjust the project current budget to \$369,770,000 and anticipated budget to \$419,881,000.

Also, we would like to clarify that the reference to STIP for item #2 and 4 in the August 21, 2015 letter should be State Highway Account (SHA).

If you have any questions regarding this matter, please contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Nancy Pe".

Nancy Pe  
Office Chief  
Project/Program Area Manager

c:

Robert So, Deputy District Director for Program/Project Management  
Mary Payyappilly, District Division Chief for Externally Funded Projects